MATANUSKA-SUSITNA BOROUGH
PLANNING COMMISSION AGENDA

Edna DeVries, Mayor

PLANNING COMMISSION
Doug Glenn, District 1
Richard Allen, District 2
C. J. Koan, District 3 – Chair
Michael Collins, District 4
Linn McCabe, District 5
Wilfred Fernandez, District 6
Curt Scoggin, District 7

Michael Brown, Borough Manager

PLANNING & LAND USE DEPARTMENT
Alex Strawn, Planning & Land Use Director
Jason Ortiz, Planning & Land Use Deputy Director
Vacant, Development Services Manager
Fred Wagner, Platting Officer
Lacie Olivieri, Planning Clerk

Assembly Chambers of the
Dorothy Swanda Jones Building
350 E. Dahlia Avenue, Palmer

February 3, 2025
REGULAR MEETING
6:00 p.m.

Ways to participate in the meeting:

IN PERSON: You will have 3 minutes to state your oral comment.

IN WRITING: You can submit written comments to the Planning Commission Clerk at msb.planning.commission@matsugov.us.

Written comments are due at noon on the Friday prior to the meeting.

TELEPHONIC TESTIMONY:

- Dial 1-855-290-3803; you will hear "joining conference" when you are admitted to the meeting.
- You will be automatically muted and able to listen to the meeting.
- When the Chair announces audience participation or a public hearing you would like to speak to, press *3; you will hear, "Your hand has been raised."
- When it is your turn to testify, you will hear, "Your line has been unmuted."
- State your name for the record, spell your last name, and provide your testimony.

OBSERVE: observe the meeting via the live stream video at:

- https://www.facebook.com/MatSuBorough
- Matanuska-Susitna Borough - YouTube

I. CALL TO ORDER, ROLL CALL, AND DETERMINATION OF QUORUM

II. APPROVAL OF AGENDA

III. PLEDGE OF ALLEGIANCE

IV. CONSENT AGENDA

A. MINUTES
Regular Meeting Minutes: January 20, 2025

B. INTRODUCTION FOR PUBLIC HEARING: QUASI-JUDICIAL MATTERS

C. INTRODUCTION FOR PUBLIC HEARING: LEGISLATIVE MATTERS

V. COMMITTEE REPORTS

VI. AGENCY/STAFF REPORTS

VII. LAND USE CLASSIFICATIONS

VIII. AUDIENCE PARTICIPATION (*Three minutes per person, for items not scheduled for public hearing*)

IX. PUBLIC HEARING: QUASI-JUDICIAL MATTERS
Commission members may not receive or engage in ex-parte contact with the applicant, other parties interested in the application, or members of the public concerning the application or issues presented in the application.

Resolution 24-31 A Conditional Use Permit In Accordance With MSB 17.30 — Conditional Use Permit For Earth Material Extraction Activities, For The Extraction Of Approximately 7,500,000 Cubic Yards Of Earth Material From An Extraction Site Of 153 Acres Within Three Parcels Totaling 235 Acres On 7955 E. Bogard Road, 3182 N. Trunk Road, 7801 E. Glade Court, Tax ID#S 18N01E27A002, 18N01E27D001, 18N01E27D002. (Applicant: Dan Steiner, P.E. For Central Gravel Products; Staff: Peggy Horton, Current Planner)

X. PUBLIC HEARING: LEGISLATIVE MATTERS

XI. CORRESPONDENCE & INFORMATION

XII. UNFINISHED BUSINESS

XIII. NEW BUSINESS

XIV. COMMISSION BUSINESS

A. Upcoming Planning Commission Agenda Items

XV. DIRECTOR AND COMMISSIONER COMMENTS

XVI. ADJOURNMENT (*Mandatory Midnight*)

Disabled persons needing reasonable accommodation in order to participate at a Planning Commission Meeting should contact the Borough ADA Coordinator at 861-8432 at least one week in advance of the meeting.

MINUTES

January 20, 2025

(Pages 5 - 8)

MATANUSKA-SUSITNA BOROUGH **REGULAR MEETING**
PLANNING COMMISSION MINUTES **January 20, 2025**

The Matanuska-Susitna Borough Planning Commission's regular meeting was held on January 20, 2025, at the Matanuska-Susitna Borough Assembly Chambers, 350 E. Dahlia Avenue, Palmer, Alaska. Commissioner Curt Scoggin filled in for the Chair and called the meeting to order at 6:00 p.m.

I. CALL TO ORDER, ROLL CALL, AND DETERMINATION OF QUORUM

Planning Commission members present and establishing a quorum:
Mr. Doug Glenn, Assembly District #1
Ms. C. J. Koan, Assembly District #3*
Mr. Michael Collins, Assembly District #4
Ms. Linn McCabe, Assembly District #5
Mr. Curt Scoggin, Assembly District #7

Planning Commission members absent and excused were:
Mr. Wilfred Fernandez, Assembly District #6
Mr. Richard Allen, Assembly District #2

Staff in attendance:
Mr. Alex Strawn, Planning and Land Use Director
Ms. Shannon Bodolay, Assistant Borough Attorney
Ms. Peggy Horton, Current Planner
Ms. Lacie Olivieri, Planning Department Admin. Specialist/Planning Commission Clerk

*Indicates that the individual attended telephonically.

II. APPROVAL OF AGENDA

Chair Scoggin inquired if there were any changes to the agenda.

GENERAL CONSENT: The agenda was approved without objection.

III. PLEDGE OF ALLEGIANCE

The pledge of allegiance was led by Lacie Olivieri.

IV. ELECTIONS

Chair Scoggin inquired if there were any nominations for Chair.

Commissioner Glenn nominated Commissioner Koan to be Chair. The nomination was seconded by Commissioner McCabe. The nomination passed without objection.

Commissioner McCabe nominated Commissioner Glenn to be Vice Chair. The nomination was Seconded by Chair Scoggin. The nomination passed without objection.

V. CONSENT AGENDA

A. Minutes Regular Meeting Minutes: December 16, 2024

B. INTRODUCTION FOR PUBLIC HEARING: QUASI-JUDICIAL MATTERS

C. INTRODUCTION FOR PUBLIC HEARING: LEGISLATIVE MATTERS

GENERAL CONSENT: The consent agenda was approved without objection.

VI. COMMITTEE REPORTS
(There were no committee reports.)

VII. AGENCY/STAFF REPORTS
Safe Streets For All Comprehensive Safety Action Plan Update

VIII. LAND USE CLASSIFICATIONS
(There were no land use classifications.)

IX. AUDIENCE PARTICIPATION (Three minutes per person.)

There being no persons to be heard Audience Participation was closed without objection.

X. PUBLIC HEARING: QUASI-JUDICIAL MATTERS

Resolution 24-33 A Conditional Use Permit In Accordance With MSB 17.17 – Denali State Park Special Land Use District For The Construction And Operation Of An RV Campground Resort Within The Park's Boundaries. The Site Is Located At Milepost 135.7, 4852 North Parks Highway, Tax ID #U04998000L02-4. (Applicant: Tim Alley, P.E. For First Colony Developers; Staff: Peggy Horton, Current Planner)

Chair Scoggin read the resolution title into the record.

Chair Scoggin read the ex-parte memo asking questions of the Planning Commissioners.

Staff, Ms. Peggy Horton, presented her staff report.

Commissioner McCabe asked how many of the comments were from the same person.

Chair Scoggin invited the applicant to add any information.

Chair Scoggin inquired if commissioners had any questions for the applicant.

Chair Scoggin opened the public hearing.

The following persons spoke in regard to Planning Commission Resolution 24-33:
Kristi Helgen, Leslie Torrence, Jeff Scheltz, Sharon Hecimovich, Joe Richardson, Ruth Wood, John Strasenburgh, Shelis Jorgensen, Clide Armitstad, Anne Houseal

There being no one else to be heard, Chair Scoggin closed the public hearing and discussion moved to the Planning Commission.

Chair Scoggin invited staff and the applicant to respond to the public comments.

MOTION: Commissioner Glenn moved to approve Planning Commission Resolution 24-33. The motion was seconded by Commissioner McCabe.

Discussion ensued

Time:
MOTION: Commissioner Glenn moved a primary amendment to remove condition number 6 on page 226. The motion was seconded by Commissioner McCabe.

VOTE: The primary amendment Passed without objection.

MOTION: Commissioner McCabe moved a secondary amendment to replace the word park with the word operation at the bottom of page 221of the packet or page 13 of the resolution, modify the second finding of fact at the top of page 222 of the packet or 14 of the resolution by removing the second sentence. Add a whereas stating that the property is owned by Yolanda D'Oyen a private individual. The motion was seconded by Commissioner Glenn.

VOTE: The secondary amendment Passed without objection.

VOTE: The main motion passed as amended without objection.

XI. PUBLIC HEARING LEGISLATIVE MATTERS

XII. CORRESPONDENCE AND INFORMATION
(There was no correspondence and information.)

XIII. UNFINISHED BUSINESS - *(There was no unfinished business.)*

XIV. NEW BUSINESS

XV. COMMISSION BUSINESS

A. Upcoming Planning Commission Agenda Items (*Staff: Alex Strawn*)

(Commission Business was presented, and no comments were noted.)

XVI. DIRECTOR AND COMMISSIONER COMMENTS

Commissioner Glenn: No Comment

Commissioner McCabe: No Comment.

Commissioner Scoggin: No Comment

Commissioner Collins: No Comment

Commissioner Koan: Thank you Commissioner Scoggin for sitting in today.

XVII. ADJOURNMENT

The regular meeting adjourned at 7:35 p.m.

C J KOAN
Planning Commission Chair

ATTEST:

LACIE OLIVIERI,
Planning Commission Clerk

Minutes approved: _____

PUBLIC HEARING QUASI-JUDICIAL

Resolution No.

24-31

Central Gravel Products

A Conditional Use Permit In Accordance With MSB 17.30 — Conditional Use Permit For Earth Material Extraction Activities, For The Extraction Of Approximately 7,500,000 Cubic Yards Of Earth Material From An Extraction Site Of 153 Acres Within Three Parcels Totaling 235 Acres On 7955 E. Bogard Road, 3182 N. Trunk Road, 7801 E. Glade Court, Tax ID#S 18N01E27A002, 18N01E27D001, 18N01E27D002. (Applicant: Dan Steiner, P.E. For Central Gravel Products; Staff: Peggy Horton, Current Planner)

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STAFF REPORT

MATANUSKA-SUSITNA BOROUGH
Planning and Land Use Department
Development Services Division
350 East Dahlia Avenue • Palmer, AK 99645
Phone (907) 861-7822
www.matsugov.us

DEVELOPMENT SERVICES DIVISION STAFF REPORT

Date:	January 27, 2025
MSB Permit Number:	10298
Applicant	Dan Steiner, P.E. for Central Gravel Products
Property Owners:	Bob Havemeister and Ralph Kircher
Request:	Planning Commission Resolution 24-31 Request for Earth Materials Extraction Conditional Use Permit in accordance with MSB Chapter 17.30 – Conditional Use Permit (CUP) for Earth Materials Extraction Activities
Location:	7955 East Bogard Road, 3182 North Trunk Road, & 7801 East Glade Court; Tax ID# 18N01E27A002, 18N01E27D001, & 18N01E27D002
Size of Property:	Approximately 235 acres
Size of Mining Site:	Approximately 153 acres
Reviewed By:	Jason Ortiz, Deputy Director, Planning and Land Use JO
Staff:	Peggy Horton, Current Planner
Staff Recommendation:	Approval with conditions

EXECUTIVE SUMMARY

The conditional use permit (CUP) will allow for the removal of approximately 7,500,000 cubic yards of earthen material through 2054. The earth material extraction activities will encompass an estimated 153 acres across three properties, with a cumulative area of 235 acres. The subject parcels are in Assembly District 1, the Bogard and South Colony Road Service Areas, and the North Lakes Community Council (NLCC) area. A CUP for earth material extraction is required under MSB 17.30 – Conditional Use Permit for Earth Materials Extraction Activities. The

Planning Commission postponed this hearing from November 18, 2024, to allow for additional details concerning access and visual screening.

The subject parcel is situated within the Borough's Core Area. The proposed operation will not produce noise in excess of MSB 17.61.080 – Noise Standards. The proposed operation will not generate traffic of more than 100 vehicles during the morning or afternoon peak hour or more than 750 vehicles per day. The proposed operation does not involve processing, manufacturing, or storing hazardous substances exceeding those thresholds described within MSB 17.61.020(A)(1) through (4). Furthermore, the operation will not generate contaminated water runoff. Therefore, based on the information provided within the application packet, a Core Area CUP is not required because the proposed use does not exceed any of the thresholds requiring a conditional use permit.

LAND USE

Existing Land Use:
The existing land use is agricultural and residential. Several residences will remain on the property, all of which are outside of the planned extraction area. Gooding Lake borders the northern boundary. Wasilla Creek traverses the southeast corner of the property. A drive-thru coffee stand currently exists along Bogard Road on the Kircher property.

Surrounding Land Uses:
Located north of the subject properties is a 43-acre residential use and Gooding Lake. To the northwest and west, there are one- to two-acre residential properties and one 14-acre industrial use property. Southwest of the properties, there are several commercial uses and a public safety building. South of the subject properties is Bogard Road, across from which is an undeveloped 38-acre parcel as well as single-family and multifamily residential uses.

To the southeast is the Trunk Road roundabout and a 131-acre industrial use property currently occupied by Central Gravel Products for earth material extraction. This site has a grandfathered permit issued in 2007. East of the subject properties, Wasilla Creek runs through a 48-acre parcel used for residential and agricultural purposes. Further east is Trunk Road, which borders an 85-acre parcel, part of which appears to be in agricultural use. To the northeast is a 146-acre parcel utilized for agriculture.

Within a one-mile radius, Colony Middle School and Colony High School are located to the east, while Pioneer Peak Elementary School is situated to the south.

REVIEW OF APPLICABLE CRITERIA AND FINDINGS

MSB 17.03 – Public Notification
Notices were mailed to all property owners within a half-mile radius of the subject property and to the North Lakes Community Council. A total of 357 notices were mailed on September 17, 2024. The Frontiersman published the public hearing notification on September 20, 2024. Planning staff posted the application material on the Borough website for public review on September 13, 2024. Planning staff emailed a request for comments to the internal borough and outside agencies, including the NLCC, on September 13, 2024.

The packet includes comments from the public received by January 27, 2025. Staff received 57 objections, 25 expressions of support, two neutral comments, and an email petition with 29 written objections and 379 listed names.

Summary of these concerns and objections:

- Property Value & Quality of Life: Concerns about declining property values and reduced quality of life due to noise, dust, and industrial visuals in a residential/agricultural area.
- Noise, Dust & Air Quality: Anticipated continuous noise and dust disrupting peace, affecting air quality, and exacerbating respiratory health issues.
- Traffic & Road Safety: Increased heavy truck traffic is expected to worsen congestion, road wear, and safety risks, particularly near school zones and Engstrom/Bogard intersection.
- Environmental Risks: There are fears of water contamination, habitat loss, and ecosystem disruption, with specific worries about impacts on salmon and local water bodies.
- Community Character & Zoning: There is frustration over industrial use in a residential area, which detracts from the scenic and agricultural character. There are also calls for zoning policies that reflect community growth and environmental concerns.
- Reclamation & Planning: Skepticism about the company's reclamation plans and calls for comprehensive impact assessments and enforceable controls on pollution and site restoration.
- Public Sentiment: Resident opposition, with calls for alternative land use options like parks or green spaces to preserve natural beauty and prioritize community welfare.

Summary of those comments in support:

- Central Gravel Products is a long-established gravel extraction business with competitive pricing and high-quality materials.
- They accommodate a wide range of customers, from small to large, and provide loading services that other gravel pits do not.
- The company is community-minded, donating materials and services to local organizations and events.
- Denying their permit could lead to increased property taxes and higher home costs, along with heavier traffic from distant gravel sources.
- Traffic concerns are addressed, with most trucks using designated routes to minimize disruption.
- Supporters emphasize the importance of keeping a gravel source local to maintain affordable pricing for residents.
- Central Gravel Products is recognized for its reliability, customer service, and commitment to local businesses and residents.
- Positive experiences from community members highlight Central Gravel's professionalism and willingness to help with small jobs.
- The company is praised for maintaining cleanliness and quiet operations at their pit.

The NLCC Resolution 24-002, dated October 29, 2024, and comments received on January 21, 2025, address the concerns raised by residents while also recognizing the rights of property owners and Central Gravel Products' positive reputation. The resolution highlights concerns about environmental impacts, noise, and traffic safety linked to the proposed operations. It emphasizes the need for rules to reduce these impacts and recommends building the South Alternative route to connect Trunk Road from Engstrom for access to the operation. NLCC supports the earth extraction development as long as specific changes are made, including:

(a) no direct access to Bogard Road
(b) driveway access from a new connector right-of-way linking Engstrom Road to Trunk Road via the South Alternative,
(c) changes to the phasing plan,
(d) additional reclamation measures,
(e) more effective visual screening,
(f) solutions for snow drifting on Engstrom Road, and
(g) additional operational measures emphasizing impact mitigation.

Section 17.30.055 Required Compliance With State And Federal Laws.

(A) All applicants for permits for earth material extraction are required to demonstrate compliance with state and federal law. Prior to final approval of the permit, the applicant or agent shall provide written documentation of compliance with the following:

(1) mining license as required by the Alaska State Department of Revenue, pursuant to A.S. 43.65;

(2) mining permit as required by the Alaska State Department of Natural Resources (ADNR) if extraction activities are to take place on state land;

(3) reclamation plan as required by ADNR, pursuant to A.S. 27.19;

(4) notice of intent (NOI) for construction general permit or multi-sector general permit and storm water pollution prevention plan (SWPPP)*, and other associated permits or plans required by the Department of Environmental Conservation (DEC) pursuant to the Alaska Pollutant Discharge Elimination System (APDES) requirements; and*

(5) United States Army Corps of Engineers (USACE) *permit pursuant to Section 404 of the Clean Water Act, 33 U.S.C. 1344, if material extraction activity is to take place within wetlands, lakes and streams.*

Findings of Fact:

1. According to the application material, Central Gravel Products will operate the proposed earth material extraction activity.
2. An Alaska State Department of Revenue mining license is not required for this operation because Alaska law was amended in 2012, and rock, sand, and gravel quarries are now exempt from the requirement.
3. An ADNR mining permit is not required for this application because the extraction activities will not occur on state land.
4. According to the application material, a reclamation plan has been developed as required by the ADNR, pursuant to A.S. 27.19.
5. The applicant provided an ADNR letter of acceptance for the reclamation plan and evidence of payment of financial assurance to the state bonding pool.

6. According to the application material, a SWPPP has been prepared, and a NOI will be filed once the project is approved.
7. According to the application material, material extraction activity will not occur within wetlands, lakes, or streams.
8. The applicant provided a USACE jurisdictional determination of a 0.47-acre wetland within one of the subject parcels. The subject wetland was determined to be non-jurisdictional.

Discussion: The applicant submitted a detailed SWPPP and indicated that the NOI will be filed once the permit is approved. Staff recommends that the NOI be submitted to Planning Staff prior to any extraction activity as a condition of approval to ensure APDES requirements.

Conclusion of Law: Based on the above findings and with conditions, the requirements to demonstrate compliance with state and federal laws have been met (MSB 17.30.055(A)).

Section 17.30.060 General Standards for Approval

(A) In granting a conditional use permit, the commission must make the following findings:

(1) that the use is not inconsistent with the applicable comprehensive plan;

Comprehensive Plan: Two adopted plans apply to the subject parcel. The plans are listed below, and excerpts from each plan are delineated after.

1. Core Area Comprehensive Plan (2007 Update)
2. Matanuska-Susitna Borough Economic Development Strategic Plan

The subject parcels are located within the Core Area planning area. The Core Area Comprehensive Plan (2007 Update) addresses sand and gravel extraction. The plan recognizes that sand and gravel are essential for borough development, and there are significant sand and gravel resources located in the Core Area. The plan addresses potential conflicts with neighboring land uses regarding traffic and public safety, visual aesthetics, dust, noise, and water quality. The plan also addresses the reclamation of extraction sites for future residential subdivisions., business parks, retail centers, and recreational facilities.

Goal 1, Land Use: "*Foster a pattern of land development that protects the appealing features of the Core Area, offers developers and consumers choices in the market place, and allows local government to provide cost-effective infrastructure and services economically."*

Policy 1-M: "*Collaborate with operators of large earth materials extraction sites to plan for site reclamation and re-use after earth material extraction activities are finished.*

Discussion: *Earth materials extraction sites – gravel and sand pits – are an extensive active interim land use in the Core Area. Several former sites have been redeveloped or await redevelopment. Earth materials extraction is expected to continue as a local industry, with additional sites being put to that interim use in the future.*

Rising land values will enhance the development potential of former sites which often become prime real estate for new uses. Redevelopment of these sites makes good use of the borough's land base and enhances the value and economic potential of nearby properties.

This policy proposes that the borough work jointly with property owners, consistent with borough ordinances, to plan for redevelopment of these sites for productive and profitable reuse. The borough can facilitate redevelopment by ensuring that earth materials extraction is managed in a manner that conserves future redevelopment options and by providing essential public infrastructure for redevelopment."

Goal 7. Environment: *"Protect and conserve the natural resources that support the well-being of residents and the region's tourism and recreation economy."*

Policy 7-A: "*Protect groundwater supplies and quality."*

"*Discussion:* *Many existing and future residences and businesses will depend on on-site groundwater resources for their water supply. Protection of the supply and quality of groundwater is vital to sustain this arrangement."*

Policy 7-B: "*Protect surface water quality."*

"*Discussion:* *The Core Area's many lakes are valuable natural and economic assets. They provide an attractive setting for residential development, enhance property values, support a variety of public and private recreational activities, and provide natural habitat, absorb runoff. These lakes are linked to streams and wetlands with similar positive values. The borough's existing program of lake management plans already provides some protection for surface water quality."*

Goal 8. Hazards*:* *"Protect life and property from harm from natural and man-made hazards such as floods, erosion, wildfire, earthquakes, air and water pollution, and hazardous materials."*

Policy 8-B. "*Reduce risk to persons and property from natural or man-made hazards and encourage natural hazard mitigation."*

"*Discussion:* *This policy proposes that the borough monitor proposed development that might be exposed to or contribute to hazards such as flooding, erosions, wildfire, and hazardous materials. The borough should discourage development in such hazard-prone areas, or encourage adoption of measures to mitigate hazards. As appropriate, mitigation measures might include floodproof construction, retention of natural vegetation to prevent rapid run-off and erosion, retention of natural drainage ways and wetlands to absorb run-off, and remediation of contaminated sites."*

Although this property is located within the Core Area Comprehensive Plan planning area, a Core Area conditional use permit is not required since the proposed use does not exceed any of the thresholds requiring a conditional use permit.

The Matanuska-Susitna Borough Economic Development Strategic Plan offers the following information beginning on page 29.

Strategy 1G, in part, states: *"Promote the sustainable development of Mat-Su's natural resources for economic development. The MSB should support sustainable natural resource development and the natural resource industries with an emphasis on meeting local needs and local value-added product manufacturing, as well as ensuring compatibility with other parts of the local economy. Indeed, natural resource development is a high priority for the Borough Assembly. The main natural resources in Mat-Su, in addition to agricultural land, include coal, gravel, timber, some gold mining, and some metallic mineral potential."*

Action 1G.3, in part, states: *"Work with the gravel mining industry to balance the need for the sector's growth with other economic development considerations, as well as environmental and resource protection. The MSB is developing gravel operations while addressing community and other economic development concerns regarding buffers from roadways, water protection, and reclamation. These regulations should balance the concerns of gravel mining businesses with the need to protect the environment and visual beauty of the Borough."*

Findings of Fact:

1. The subject parcels are located within the North Lakes Community Council planning area. The North Lakes community has not adopted a comprehensive plan.
2. The subject parcels are located within the Matanuska-Susitna Borough Core Area. The Core Area Comprehensive Plan applies to all parcels within the borough's core planning area.
3. The Core Area Comprehensive Plan Land Use Goal 1: "Foster a pattern of land development that protects the appealing features of the Core Area, offers developers and consumers choices in the market place, and allows local government to provide cost-effective infrastructure and services economically."
4. The Core Area Comprehensive Plan Land Use Policy 1-M: "Collaborate with operators of large earth materials extraction sites to plan for site reclamation and re-use after earth material extraction activities are finished."
5. The Core Area Comprehensive Plan Land Use Goal 7: "Protect and conserve the natural resources that support the well-being of residents and the region's tourism and recreation economy."
6. The Core Area Comprehensive Plan Policy 7-A: "Protect groundwater supplies and quality. Discussion: Many existing and future residences and businesses will depend on on-site groundwater resources for their water supply. Protection of the supply and quality of groundwater is vital to sustain this arrangement."
7. The Core Area Comprehensive Plan Policy 7-B: "Protect surface water quality. Discussion: The Core Area's many lakes are valuable natural and economic assets. They provide an attractive setting for residential development, enhance property values, support a variety of public and private recreational activities, and provide natural habitat, absorb runoff. These lakes are linked to streams and wetlands with similar positive values. The borough's existing program of lake management plans already provides some protection for surface water quality."
8. The Core Area Comprehensive Plan Goal 8. Hazards: "Protect life and property from harm from natural and man-made hazards such as floods, erosion, wildfire, earthquakes, air and water pollution, and hazardous materials."
9. The Core Area Comprehensive Plan Policy 8-B. "Reduce risk to persons and property from natural or man-made hazards and encourage natural hazard mitigation. Discussion: This policy proposes that the borough monitor proposed development that might be exposed to or contribute to hazards such as flooding, erosions, wildfire, and hazardous materials. The borough should discourage development in such hazard-prone areas, or encourage adoption of measures to mitigate hazards. As appropriate, mitigation measures might include floodproof construction, retention of natural vegetation to prevent rapid run-off and

erosion, retention of natural drainage ways and wetlands to absorb run-off, and remediation of contaminated sites."

10. The Economic Development Strategic Plan Strategy 1G in part: "Promote the sustainable development of Mat-Su's natural resources for economic development. The MSB should support sustainable natural resource development and the natural resource industries with an emphasis on meeting local needs and local value-added product manufacturing, as well as ensuring compatibility with other parts of the local economy. Indeed, natural resource development is a high priority for the Borough Assembly. The main natural resources in Mat-Su, in addition to agricultural land, include coal, gravel, timber, some gold mining, and some metallic mineral potential."
11. The Economic Development Strategic Plan Action 1G.3, in part: "Work with the gravel mining industry to balance the need for the sector's growth with other economic development considerations, as well as environmental and resource protection. The MSB is developing gravel regulations and guidelines to provide for continued commercial gravel operations while addressing community and other economic development concerns regarding buffers from roadways, water protection, and reclamation. These regulations should balance the concerns of gravel mining businesses with the need to protect the environment and visual beauty of the Borough."
12. According to the Rutgers Noise Technical Assistance Center, heavy trucks produce approximately 90 decibels (dB) when operating, which falls in the "very loud" category.
13. According to the Rutgers Noise Technical Assistance Center, a quiet to noisy home produces sound around 30-60 decibels (dB), which falls in the "faint" and "moderate" categories.
14. MSB 8.52.010(A) declares: "Loud noise and amplified sounds have an adverse effect on the psychological and physiological well-being of persons."
15. Earth material extraction activities are an industrial use that can cause excessive noise, dust, and heavy truck traffic.
16. According to the application material, the applicant plans to extract 7.5 million cubic yards of earth material from the subject properties.
17. According to the application material, the heavy machinery and processing/crushing equipment will be equipped with mufflers and noise dampeners to minimize noise emissions. Additional measures for noise reduction include the construction of a minimum of 10-foot-tall berms at areas around the extraction site, conducting operations at elevations below the surrounding ground level, adhering to the stated operational hours, and ensuring regular maintenance of the equipment.
18. According to the application material, the operation will conduct visual screening by constructing soil berms at least 10 feet high, utilizing existing vegetation, and positioning the operation at a lower elevation than the surrounding grade.
19. During the staff's discussion with the applicant, it was agreed that any visual screening implemented along North Engstrom Road must not exacerbate the snow drifting problem on the road or adjacent properties.

20. According to the application material, the applicant consulted the document "Controlling Blowing and Drifting Snow with Snow Fences and Road Design" (NCHRP-20-07147) when developing the visual buffer location and height.
21. According to the application material, the visual screening berm would be considered a snow fence with 0% porosity. A 0% porosity snow fence would create a snow drift that is 13 times as long as the berm is high. A berm 10 feet high would create a snow drift on the downwind side of approximately 130 feet.
22. According to the application material, the operation will place the visual screening berm 200 feet from the west property line, which will provide a safety factor of 1.5 against a snowdrift reaching Engstrom Road.
23. According to the application materials, while the visual screening is unlikely to fully prevent snow from drifting onto North Engstrom Road, it may help reduce accumulation by capturing some snow that would otherwise blow onto the road, thereby limiting the amount that settles.
24. According to the application material, the visual screening berm will be removed incrementally during the phases closest to North Engstrom Road. It will remain in place during each phase until all earth materials to the east have been fully extracted. The berm's removal will occur as the extraction of materials beneath and to the west of it begins, provided the elevation of the extraction activities is sufficiently low to render the berm unnecessary.
25. According to the application material, the proposed hours of operation are 8:00 a.m. to 5:30 p.m., Monday through Saturday.
26. According to the application material, water trucks and sweepers will be utilized to control dust during operations.
27. Alaska Department of Environmental Conservation (ADEC) produced a user manual of best management practices for owners and operators of gravel/rock extraction operations to protect surface water and groundwater quality in Alaska.
28. ADEC Best Management Practices for Gravel/Rock Aggregate Extraction Projects Manual includes the recommended drinking water buffer zones for Public Water System (PWS) sources.
29. A PWS Drinking Water Protection Area overlies the southeast section of the extraction area.
30. According to the application material, the drinking water protection area is for a public drinking water system approximately one-mile southwest of the site.
31. According to the application material, the 10-foot-tall, 40-foot-wide soil berm and vegetative buffer along Wasilla Creek, in conjunction with the existing and finished topography of the developed areas, will direct drainage away from the creek. This approach addresses ADEC's concerns regarding the potential turbidity resulting from the operation.
32. While the CIWI map designates two areas on the property where wetlands may be present, a site visit in October 2024 revealed that the smaller wetland is surrounded by a recently harvested hay field, which indicates limited wetland characteristics in that portion.

33. Alaska Department of Fish and Game (ADF&G) stated that Wasilla Creek and Gooding Lake are fish-bearing water bodies. They observed that the applicant's site plan includes a buffer to avoid both water bodies.
34. The applicant is not proposing to mine below or within four feet of the seasonal high-water table.
35. According to the application material, monitoring wells will be installed in areas of material extraction to monitor groundwater levels.
36. The application material includes information about the reclamation plan that meets the requirements of MSB 17.28.067 – Reclamation Standards.
37. According to the application material, final slopes shall not be steeper than 2H:1V or the natural stabilized angle of repose of the existing earth material.
38. According to the application material, finish slopes will be track-walked with equipment, covered with 4 inches of topsoil, and seeded.
39. According to the application material, the applicant has not specified the future use of the property following the completion of the earth material extraction. However, the reclamation plan indicates that the site will be left with a mostly level floor upon completion of the extraction activities.
40. According to the application material, the applicant is seeking approval for a conditional use permit that expires in 2054.

Discussion: Comprehensive plans are long-term formal planning documents that state the goals of a community and identify priority projects. Although comprehensive plans include land use guidelines, the comprehensive plan is not a zoning ordinance.

Visual Screening: The purpose of the visual screening is to minimize the visibility of the extraction activity, such as equipment, stockpiles, and excavation sites, from surrounding areas. This helps to preserve the aesthetic appeal and the privacy of nearby residents or businesses, reduces the potential for negative impacts on local property values, and addresses concerns about the overall quality of the environment for those who live or work in the vicinity. The berm also acts as a noise mitigation measure.

Staff recommends including a condition allowing adjustments to the visual screening berm on the west side, if needed, to mitigate potential snow drifting issues on North Engstrom Road during the life of the operation. Staff suggests any modifications to the berm require prior approval from the MSB Department of Public Works (DPW).

Staff recommends a condition of approval to address the removal of the screening berm on the west side, emphasizing its need to remain as long as necessary to screen the operation in compliance with MSB 17.28.060(A)(4).

Wetlands Buffer: Wetlands play a critical role in water quality by filtering surface water, trapping pollutants, and preventing sediments from reaching bodies of water such as Wasilla Creek. To protect these functions, wetlands are typically buffered by a minimum of 100 feet, as outlined by the USACE wetlands buffer publication included in this packet. These buffer areas protect a wetland's water quality by preventing the buffer area from serving as a source of pollution and well as processing pollutants that flow from upland areas. They also serve as a habitat for wetland-dependent species.

The CIWI identifies two potential wetland areas on the property, but a site visit in October 2024 revealed that the smaller of these areas, as previously investigated by the United States Army Corps of Engineers (USACE), is surrounded by a recently harvested hay field, which indicates limited wetland characteristics. To clarify the actual wetland boundaries, a wetland delineation should be conducted, which will provide a more accurate representation of the wetland extent and ensure that proper buffers are established for water quality and habitat protection. This approach acknowledges the CIWI map data but clarifies observed conditions, supporting a more tailored delineation of the subject properties.

The CIWI maps show wetlands surrounding Wasilla Creek are within 100 feet of the extraction area, and MSB 17.28.060(A)(7)(b) prohibits earth material extraction activities within 100 linear feet of any lake, stream, or other waterbody, including wetlands, with caveats that a USACE permit is obtained. Staff, therefore, recommends a condition of approval requiring a professional delineation of the wetlands along the western side of Wasilla Creek, as shown on the CIWI map. Following this, a licensed land surveyor shall stake the 100-foot-wide undisturbed buffer in accordance with the requirements of code.

Conclusion of Law: Based on the above findings and with conditions, the proposed use is consistent with the applicable comprehensive plans (MSB 17.30.060(A)(1)).

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(2) that the use will preserve the value, spirit, character, and integrity of the surrounding area;

Findings of Fact:

1. Located north of the subject properties is a 43-acre residential use and Gooding Lake. To the northwest and west, there are one- to two-acre residential properties and one 14-acre industrial use property. Southwest of the properties, there are several commercial uses and a public safety building. South of the subject properties is Bogard Road, across from which is an undeveloped 38-acre parcel as well as single-family and multifamily residential uses.
2. To the southeast is the Trunk Road roundabout and a 131-acre industrial use property currently occupied by Central Gravel Products for earth material extraction. This site has a grandfathered permit issued in 2007. East of the subject properties, Wasilla Creek runs through a 48-acre parcel used for residential and agricultural purposes. Further east is Trunk Road, which borders an 85-acre parcel, part of which appears to be in agricultural use. To the northeast is a 146-acre parcel utilized for agriculture.
3. According to the application material, Central Gravel Products will operate the proposed earth material extraction activity.
4. Within a one-mile radius, Colony Middle School and Colony High School are located to the east, while Pioneer Peak Elementary School is situated to the south.
5. East Bogard Road's frontage comprises a mix of public land, commercial, industrial, residential, agricultural, and recreational uses, while North Engstrom Road's frontage includes a mix of residential, industrial, vacant, and public land.
6. According to the application material, the subject properties have existing residential structures that will remain in place.

7. According to the application material, the operation will conduct visual screening by constructing soil berms at least 10 feet high, utilizing existing vegetation, and positioning the operation at a lower elevation than the surrounding grade.
8. During the staff's discussion with the applicant, it was agreed that any visual screening implemented along North Engstrom Road must not exacerbate the snow drifting problem on the road or adjacent properties.
9. According to the application material, the applicant consulted the document "Controlling Blowing and Drifting Snow with Snow Fences and Road Design" (NCHRP-20-07147) when developing the visual buffer location and height.
10. According to the application material, the visual screening berm would be considered a snow fence with 0% porosity. A 0% porosity snow fence would create a snow drift that is 13 times as long as the berm is high. A berm 10 feet high would create a snow drift on the downwind side of approximately 130 feet.
11. According to the application material, the operation will place the visual screening berm 200 feet from the west property line, which will provide a safety factor of 1.5 against a snowdrift reaching Engstrom Road.
12. According to the application materials, while the visual screening is unlikely to fully prevent snow from drifting onto North Engstrom Road, it may help reduce accumulation by capturing some snow that would otherwise blow onto the road, thereby limiting the amount that settles.
13. According to the application material, the seasonal operation will begin in May and end in November.
14. According to the application material, the proposed hours of operation are 8:00 a.m. to 5:30 p.m., Monday through Saturday.
15. According to the application material, the 10-foot-tall, 40-foot-wide soil berm and vegetative buffer along Wasilla Creek, in conjunction with the existing and finished topography of the developed areas, will direct drainage away from the creek. This approach mitigates ADEC's concerns regarding the potential turbidity resulting from the operation.
16. According to the site plan, the extraction area is located more than 150 feet from Wasilla Creek and nearly 200 feet from the shoreline of Gooding Lake.
17. The applicant is not proposing to mine below or within four feet of the seasonal high-water table.
18. According to the application material, monitoring wells will be installed in areas of material extraction to monitor groundwater levels.
19. According to the application material, the applicant has not specified the future use of the property following the completion of the earth material extraction. However, the reclamation plan indicates that the site will be left with a mostly level floor upon completion of the extraction activities.

Discussion: The purpose of the Earth Material Extraction conditional use permit code is to strike a balance between promoting public health, safety, order, prosperity, and general welfare while allowing for resource extraction. Extraction's possible negative impacts include dust, reduced air quality, vibration and noise pollution, traffic and road safety issues, and decreased property values.

The extraction of gravel on this property has the potential to provide economic benefits through the creation of job opportunities and the supply of construction materials. It will also produce a level surface for the possibility of future development in the area.

Visual Screening: The purpose of the visual screening is to minimize the visibility of the extraction activity, such as equipment, stockpiles, and excavation sites, from surrounding areas. This helps to preserve the aesthetic appeal and the privacy of nearby residents or businesses, reduces the potential for negative impacts on local property values, and addresses concerns about the overall quality of the environment for those who live or work in the vicinity. The berm also acts as a noise mitigation measure.

Staff recommends including a condition allowing adjustments to the visual screening berm on the west side, if needed, to mitigate potential snow drifting issues on North Engstrom Road during the life of the operation. Staff suggests any modifications to the berm require prior approval from the MSB Department of Public Works (DPW).

Staff recommends a condition of approval to address the removal of the screening berm on the west side, emphasizing its need to remain as long as necessary to screen the operation in compliance with MSB 17.28.060(A)(4).

Wetlands Buffer: The CIWI maps show wetlands surrounding Wasilla Creek are within 100 feet of the extraction area, and MSB 17.28.060(A)(7)(b) prohibits earth material extraction activities within 100 linear feet of any lake, stream, or other waterbody, including wetlands, with caveats that a USACE permit is obtained. Staff, therefore, recommends a condition of approval requiring a professional delineation of the wetlands along the western side of Wasilla Creek, as shown on the CIWI map. Following this, a licensed land surveyor shall stake the 100-foot-wide undisturbed buffer in accordance with the requirements of code.

Conclusion of Law: Based on the above findings and with conditions, the proposed use will not detract from the value, spirit, character, and integrity of the surrounding area (MSB 17.30.060(A)(2)).

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(3) that the applicant has met all other requirements of this chapter pertaining to the use in question;

Findings of Fact:

1. All of the site plan and site development requirements have been provided.

Conclusion of Law: Based on the above finding and with conditions, the applicant has met all the requirements of this chapter (MSB 17.30.060(A)(3)).

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(4) that granting the permit will not be harmful to the public health, safety and general welfare;

Findings of Fact:

1. According to the application material, the heavy machinery and processing/crushing equipment will be equipped with mufflers and noise dampeners to minimize noise emissions. Additional measures for noise reduction include the construction of a minimum of 10-foot-tall berms at areas around the extraction site, conducting operations at elevations

below the surrounding ground level, adhering to the stated operational hours, and ensuring regular maintenance of the equipment.

2. According to the application material, the operation will conduct visual screening by constructing soil berms at least 10 feet high, utilizing existing vegetation, and positioning the operation at a lower elevation than the surrounding grade.
3. During the staff's discussion with the applicant, it was agreed that any visual screening implemented along North Engstrom Road must not exacerbate the snow drifting problem on the road or adjacent properties.
4. According to the application material, the applicant consulted the document "Controlling Blowing and Drifting Snow with Snow Fences and Road Design" (NCHRP-20-07147) when developing the visual buffer location and height.
5. According to the application material, the visual screening berm would be considered a snow fence with 0% porosity. A 0% porosity snow fence would create a snow drift that is 13 times as long as the berm is high. A berm 10 feet high would create a snow drift on the downwind side of approximately 130 feet.
6. According to the application material, the operation will place the visual screening berm 200 feet from the west property line, which will provide a safety factor of 1.5 against a snowdrift reaching Engstrom Road.
7. According to the application materials, while the visual screening is unlikely to fully prevent snow from drifting onto North Engstrom Road, it may help reduce accumulation by capturing some snow that would otherwise blow onto the road, thereby limiting the amount that settles.
8. According to the application material, the subject properties have existing residential structures that will remain in place.
9. North Engstrom Road is classified as a Major Collector, and East Bogard Road is classified as a Principal Arterial. Both classifications are designed to accommodate commercial traffic.
10. According to the application material, the applicant's road and access plan promotes minimizing truck traffic in residential areas. The operation will ensure that trucks do not travel along North Engstrom Road after 4 p.m. Additionally, the plan highlights that frequent starts and stops in residential neighborhoods discourage large trucks from using those routes.
11. According to the application material, the proposed road and access plan includes two access points to the operation. The North Engstrom Road driveway is an in-only access. The East Bogard Road driveway will require ADOT&PF's approval of a Traffic Control Plan prior to operation.
12. The Borough issued an Authorization to Construct letter for the North Engstrom Road access point as a single-direction (in-only) driveway.
13. According to the application material, the property owners have agreed to the following changes: removal of the easternmost driveway from the Havemeister property, removal of all driveways west of Wasilla Creek on the Kircher property, and removal of the coffee stand.

14. According to a phone discussion with Matt Walsh of ADOT&PF on January 21, 2025, the ADOT&PF driveway permit application for access to East Bogard Road is currently under review. ADOT&PF anticipates issuing an Approval to Construct (ATC) letter shortly, which will include specific conditions.
15. According to emails from ADOT&PF, provided by the applicant, ADOT&PF will allow full access at the Bogard Road driveway to Bogard Road for two years, subject to special conditions, including the following:
    a. Temporary speed reductions to 45 MPH on East Bogard Road
    b. Installation of truck warning signs for both Eastbound and Westbound traffic
    c. Use of flaggers to facilitate left-turn movements
    d. Left turns at the Bogard Road driveway will be allowed for two years.
    e. At the end of two years, the applicant will be required to construct a triangular island at the East Bogard Road driveway. This modification will permanently restrict the driveway to right-in, right-out only.
16. According to the application material, the proposed hours of operation are 8:00 a.m. to 5:30 p.m., Monday through Saturday.
17. According to the application material, water trucks and sweepers will be utilized to control dust during operations.
18. An asphalt or hot mix plant is not proposed as part of this application.
19. Alaska Department of Environmental Conservation (ADEC) produced a user manual of best management practices for owners and operators of gravel/rock extraction operations to protect surface water and groundwater quality in Alaska.
20. ADEC's Best Management Practices for Gravel/Rock Aggregate Extraction Projects Manual includes the recommended drinking water buffer zones for Public Water System (PWS) sources.
21. A Drinking Water Protection Area overlies the southeast section of the extraction area.
22. According to the application material, the drinking water protection area is for a drinking water system approximately one-mile southwest of the site.
23. According to the application material, the 10-foot-tall, 40-foot-wide soil berm and vegetative buffer along Wasilla Creek, in conjunction with the existing and finished topography of the developed areas, will direct drainage away from the creek. This approach mitigates ADEC's concerns regarding the potential turbidity resulting from the operation.
24. Alaska Department of Fish and Game (ADF&G) stated that Wasilla Creek and Gooding Lake are fish-bearing water bodies. They observed that the applicant's site plan includes a buffer to avoid both water bodies.
25. According to the application material, the site does not discharge stormwater into the waters of the U.S., including jurisdictional wetlands.
26. According to the application material, all stormwater will be contained onsite.
27. According to the site plan, the extraction area is located more than 150 feet from Wasilla Creek and nearly 200 feet from the shoreline of Gooding Lake.

28. The applicant is not proposing to mine below or within four feet of the seasonal high water table.
29. According to the application material, monitoring wells will be installed in areas of material extraction to monitor groundwater levels.
30. The application material includes information about the reclamation plan that meets the requirements of MSB 17.28.067 – Reclamation Standards.
31. According to the application material, final slopes shall not be steeper than 2H:1V or the natural stabilized angle of repose of the existing earth material.
32. According to the application material, the applicant has not specified the future use of the property following the completion of the earth material extraction. However, the reclamation plan indicates that the site will be left with a mostly level floor upon completion of the extraction activities.
33. According to the application material, the applicant is seeking approval for a conditional use permit that expires in 2054.

Discussion:

Visual Screening: The purpose of the visual screening is to minimize the visibility of the extraction activity, such as equipment, stockpiles, and excavation sites, from surrounding areas. This helps to preserve the aesthetic appeal and the privacy of nearby residents or businesses, reduces the potential for negative impacts on local property values, and addresses concerns about the overall quality of the environment for those who live or work in the vicinity. The berm also acts as a noise mitigation measure.

Staff recommends including a condition allowing adjustments to the visual screening berm on the west side, if needed, to mitigate potential snow drifting issues on North Engstrom Road during the life of the operation. Staff suggests any modifications to the berm require prior approval from the MSB Department of Public Works (DPW).

Staff recommends a condition of approval to address the removal of the screening berm on the west side, emphasizing its need to remain as long as necessary to screen the operation in compliance with MSB 17.28.060(A)(4).

Wetlands Buffer: The CIWI maps show wetlands surrounding Wasilla Creek are within 100 feet of the extraction area, and MSB 17.28.060(A)(7)(b) prohibits earth material extraction activities within 100 linear feet of any lake, stream, or other waterbody, including wetlands, with caveats that a USACE permit is obtained. Staff, therefore, recommends a condition of approval requiring a professional delineation of the wetlands along the western side of Wasilla Creek, as shown on the CIWI map. Following this, a licensed land surveyor shall stake the 100-foot-wide undisturbed buffer in accordance with the requirements of code.

Bogard Road Access: The Alaska Department of Transportation and Public Facilities (ADOT&PF) has commented on the need to consolidate access points along Bogard Road, a condition the owners have agreed to. The applicant has submitted a driveway permit application to ADOT&PF, and recent communication indicated that the issuance of an Approval to Construct (ATC) is imminent. As part of the ATC approval, the operator will be required to submit a Traffic Control Plan (TCP) prior to utilizing the Bogard driveway. TCPs, according to the Alaska Highway Preconstruction Manual, are plans that identify what traffic control devices to use and show their location and operation in a work zone to ensure traffic flow.

ADOT&PF also referenced the draft Matanuska-Susitna Borough (MSB) Bogard-Seldon Corridor Access Management Plan (CAMP), which serves to outline access limitations along the corridor. Additionally, the comments highlighted ongoing ADOT&PF projects in the area, including a roundabout and other safety and capacity improvements that support reduced driveway access for safety reasons. The roundabout is roughly scheduled for construction in 2026/2027.

Conclusion of Law: Based on the above findings and with conditions, the proposed application will not be harmful to public health, safety, convenience, and welfare (MSB 17.30.060(A)(4)).

(5) that the sufficient setbacks, lot area, buffers or other safeguards are being provided to meet the conditions listed in MSB 17.30.050(B).

Findings of Fact:

1. The earth material extraction activities will encompass an estimated 153 acres across three properties, with a cumulative area of 235 acres.
2. According to the site plan, the proposed permanent and semi-permanent structures associated with the proposed use will adhere to the setback requirements of MSB 17.55.
3. According to the application material, the 10-foot-tall, 40-foot-wide soil berm and vegetative buffer along Wasilla Creek, in conjunction with the existing and finished topography of the developed areas, will direct drainage away from the creek. This approach mitigates ADEC's concerns regarding the potential turbidity resulting from the operation.
4. Alaska Department of Fish and Game (ADF&G) stated that Wasilla Creek and Gooding Lake are fish-bearing water bodies. They observed that the applicant's site plan includes a buffer to avoid both water bodies.
5. According to the application material, all stormwater will be contained onsite.
6. According to the site plan, the extraction area is located more than 150 feet from Wasilla Creek and nearly 200 feet from the shoreline of Gooding Lake.
7. The applicant is not proposing to mine below or within four feet of the seasonal high water table.
8. According to the application material, the heavy machinery and processing/crushing equipment will be equipped with mufflers and noise dampeners to minimize noise emissions. Additional measures for noise reduction include the construction of a minimum of 10-foot-tall berms at areas around the extraction site, conducting operations at elevations below the surrounding ground level, adhering to the stated operational hours, and ensuring regular maintenance of the equipment.
9. According to the application material, the operation will conduct visual screening by constructing soil berms at least 10 feet high, utilizing existing vegetation, and positioning the operation at a lower elevation than the surrounding grade.
10. During the staff's discussion with the applicant, it was agreed that any visual screening implemented along North Engstrom Road must not exacerbate the snow drifting problem on the road or adjacent properties.

11. According to the application material, the applicant consulted the document "Controlling Blowing and Drifting Snow with Snow Fences and Road Design" (NCHRP-20-07147) when developing the visual buffer location and height.
12. According to the application material, the visual screening berm would be considered a snow fence with 0% porosity. A 0% porosity snow fence would create a snow drift that is 13 times as long as the berm is high. A berm 10 feet high would create a snow drift on the downwind side of approximately 130 feet.
13. According to the application material, the operation will place the visual screening berm 200 feet from the west property line, which will provide a safety factor of 1.5 against a snowdrift reaching Engstrom Road.
14. According to the application materials, while the visual screening is unlikely to fully prevent snow from drifting onto North Engstrom Road, it may help reduce accumulation by capturing some snow that would otherwise blow onto the road, thereby limiting the amount that settles.
15. According to the application material, the visual screening berm will be removed incrementally during the phases closest to North Engstrom Road. It will remain in place during each phase until all earth materials to the east have been fully extracted. The berm's removal will occur as the extraction of materials beneath and to the west of it begins, provided the elevation of the extraction activities is sufficiently low to render the berm unnecessary.

Discussion:

Visual Screening: Staff recommends including a condition allowing adjustments to the visual screening berm on the west side, if needed, to mitigate potential snow drifting issues on North Engstrom Road during the life of the operation. Staff suggests any modifications to the berm require prior approval from the MSB Department of Public Works (DPW).

Staff recommends a condition of approval to address the removal of the screening berm on the west side, emphasizing its need to remain as long as necessary to screen the operation in compliance with MSB 17.28.060(A)(4).

Wetlands Buffer: The CIWI maps show wetlands surrounding Wasilla Creek are within 100 feet of the extraction area, and MSB 17.28.060(A)(7)(b) prohibits earth material extraction activities within 100 linear feet of any lake, stream, or other waterbody, including wetlands, with caveats that a USACE permit is obtained. Staff, therefore, recommends a condition of approval requiring a professional delineation of the wetlands along the western side of Wasilla Creek, as shown on the CIWI map. Following this, a licensed land surveyor shall stake the 100-foot-wide undisturbed buffer in accordance with the requirements of code.

Conclusion of Law: Based on the above findings and with conditions, sufficient setbacks, lot area, buffers, or other safeguards will be provided (MSB 17.30.060(A)(5)).

Section 17.28.060 Site Development Standards

(A) Standards for the earth materials extraction site development plan are as follows:

(1) identification of surrounding property owners, existing land uses, and wetlands and waterbodies within one-quarter mile of the site;

Findings of Fact:

1. The record includes maps identifying surrounding property ownership, existing land uses, wetlands, and waterbodies within one-half mile of the proposed site.
2. Located north of the subject properties is a 43-acre residential use and Gooding Lake. To the northwest and west, there are one- to two-acre residential properties and one 14-acre industrial use property. Southwest of the properties, there are several commercial uses and a public safety building. South of the subject properties is Bogard Road, across from which is an undeveloped 38-acre parcel as well as single-family and multifamily residential uses.
3. To the southeast is the Trunk Road roundabout and a 131-acre industrial use property currently occupied by Central Gravel Products for earth material extraction. This site has a grandfathered permit issued in 2007. East of the subject properties, Wasilla Creek runs through a 48-acre parcel used for residential and agricultural purposes. Further east is Trunk Road, which borders an 85-acre parcel, part of which appears to be in agricultural use. To the northeast is a 146-acre parcel utilized for agriculture.
4. According to the application material, the subject properties have existing residential structures that will remain in place.

Discussion: The CIWI maps show wetlands surrounding Wasilla Creek are within 100 feet of the extraction area, and MSB 17.28.060(A)(7)(b) prohibits earth material extraction activities within 100 linear feet of any lake, stream, or other waterbody, including wetlands, with caveats that a USACE permit is obtained. Staff, therefore, recommends a condition of approval requiring a professional delineation of the wetlands along the western side of Wasilla Creek, as shown on the CIWI map. Following this, a licensed land surveyor shall stake the 100-foot-wide undisturbed buffer in accordance with the requirements of code.

Conclusion of Law: The surrounding property ownership, existing land uses, wetlands, and water bodies within the notification area have been identified to the extent possible without a wetlands delineation (MSB 17.28.060(A)(1)).

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(2) phases of proposed mining activities including a map showing the area to be mined, a description of the topography and vegetation, approximate time sequence for mining at particular locations, and general anticipated location of semi-permanent equipment such as conveyor belts, crushers, dredges, batch plants, etc.;

Findings of Fact:

1. The record includes a topographic contour map, bare earth map, and aerial photography. These items show the topographic features and vegetation of the subject property and adjacent properties.
2. The record contains a site plan that shows the earth materials extraction area, the phases of mining within the subject parcels, and the location of the scales, scale house, and office.
3. According to the application material, all processing equipment will be moved as areas are reclaimed and additional areas are developed for extraction.
4. According to the site plan, the proposed permanent and semi-permanent structures associated with the proposed use will adhere to the setback requirements of MSB 17.55.

5. According to the application material, the estimated annual volume of extracted material is 230,000 cubic yards or less.
6. According to the application material, each phase of the operation is expected to take approximately two years.
7. According to the application material, approximately 10 acres will be worked at one time. As more areas are opened for material extraction, the previously opened areas will be reclaimed.
8. According to the application material, the applicant is seeking approval for a conditional use permit that expires in 2054.

Discussion: The CIWI maps show wetlands surrounding Wasilla Creek are within 100 feet of the extraction area, and MSB 17.28.060(A)(7)(b) prohibits earth material extraction activities within 100 linear feet of any lake, stream, or other waterbody, including wetlands, with caveats that a USACE permit is obtained. Staff, therefore, recommends a condition of approval requiring a professional delineation of the wetlands along the western side of Wasilla Creek, as shown on the CIWI map. Following this, a licensed land surveyor shall stake the 100-foot-wide undisturbed buffer in accordance with the requirements of code.

Conclusion of Law: Based on the above findings, the phases of proposed mining activities, a description of topography and vegetation, and an approximate time sequence for the duration of the mining activity are included in the application. The placement of permanent, semi-permanent, or portable equipment will adhere to the minimum setbacks (MSB 17.28.060(A)(2)).

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(3) The road and access plan shall include anticipated routes and traffic volumes, and shall be approved by the director. If the level of activity exceeds the minimum levels specified in MSB 17.61.090, traffic standards, a traffic control plan consistent with state regulations may be required

Findings of Fact:

1. North Engstrom Road is classified as a Major Collector, and East Bogard Road is classified as a Principal Arterial. Both classifications are designed to accommodate commercial traffic.
2. According to the application material, Central Gravel Products has maintained detailed records of daily truck traffic for the life of its current facility. This data was used to establish the peak-hour traffic volume. The figures provided (12 trucks in and 12 trucks out) represent the highest traffic levels recorded on their busiest days.
3. According to the application material, the peak hour traffic between 11 a.m. and 12 p.m. is estimated at 24 trips, with an equal split of 12 inbound and 12 outbound truck movements.
4. According to the application material, the proposed operation does not anticipate generating traffic in excess of 100 vehicles during the morning or afternoon peak hour or more than 750 vehicles per day.
5. According to the application material, the truck routes will begin from the driveway onto East Bogard Road. From there, trucks will head east towards North Trunk Road or west towards other locations.

6. According to the application material, the applicant's road and access plan promotes minimizing truck traffic in residential areas. The operation will ensure that trucks do not travel along North Engstrom Road after 4 p.m. Additionally, the plan highlights that frequent starts and stops in residential neighborhoods discourage large trucks from using those routes.
7. According to the application material, the proposed road and access plan includes two access points to the operation. The North Engstrom Road driveway is an in-only access. The East Bogard Road driveway will require ADOT&PF's approval of a Traffic Control Plan prior to operation.
8. The Borough issued an Authorization to Construct letter for the North Engstrom Road access point as a single-direction (in-only) driveway.
9. According to the application material, the property owners have agreed to the following changes: removal of the easternmost driveway from the Havemeister property, removal of all driveways west of Wasilla Creek on the Kircher property, and removal of the coffee stand.
10. According to a phone discussion with Matt Walsh of ADOT&PF on January 21, 2025, the ADOT&PF driveway permit application for access to East Bogard Road is currently under review. ADOT&PF anticipates issuing an Approval to Construct (ATC) letter shortly, which will include specific conditions.
11. According to emails from ADOT&PF, provided by the applicant, ADOT&PF will allow full access at the Bogard Road driveway for two years, subject to special conditions, including the following:
    a. Temporary speed reductions to 45 MPH on East Bogard Road
    b. Installation of truck warning signs for both Eastbound and Westbound traffic
    c. Use of flaggers to facilitate left-turn movements
    d. Left turns at the Bogard Road driveway will be allowed for two years.
    e. At the end of two years, the applicant will be required to construct a triangular island at the East Bogard Road driveway. This modification will permanently restrict the driveway to right-in, right-out only.
12. MSB PD&E stated the proposed plan involving flagging and speed limit reduction would appropriately mitigate left turns on Bogard Road until the construction of the roundabout and channelization.
13. MSB PD&E recommends that once the Bogard Road at Engstrom Road and Green Forest Drive intersection roundabout is constructed, the Bogard Road driveway should be right-in, right-out with the construction of a channelizing (porkchop) median.

Discussion: The Alaska Department of Transportation and Public Facilities (ADOT&PF) has commented on the need to consolidate access points along Bogard Road, a condition the owners have agreed to. The applicant has submitted a driveway permit application to ADOT&PF, and recent communication indicated that the issuance of an Approval to Construct (ATC) is imminent. As part of the ATC approval, the operator will be required to submit a Traffic Control Plan (TCP) prior to utilizing the Bogard driveway. TCPs, according to the Alaska Highway Preconstruction

Manual, are plans that identify what traffic control devices to use and show their location and operation in a work zone to ensure traffic flow.

ADOT&PF also referenced the draft Matanuska-Susitna Borough (MSB) Bogard-Seldon Corridor Access Management Plan (CAMP), which serves to outline access limitations along the corridor. Additionally, the comments highlighted ongoing ADOT&PF projects in the area, including a roundabout and other safety and capacity improvements that support reduced driveway access for safety reasons. The roundabout is roughly scheduled for construction in 2026/2027.

Conclusion of Law: Based on the findings above, the road and access plan includes anticipated routes and traffic volumes that align with the management authority of the roads used. Traffic generated from the proposed use will not exceed 100 vehicles during the morning or afternoon peak hour or more than 750 vehicles a day. (MSB 17.28.060(A)(3)).

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(4) visual screening measures shall include a detailed description of the type of visual screening to be utilized, and shall be maintained as necessary during the course of extraction activities. Visual screening may include, but is not limited to, berms, natural vegetation, solid fences, walls, evergreen hedges or other means as approved by the commission. If mining is planned to be conducted within 300 feet of the property line, berms or other visual screening methods shall be a minimum of ten feet in height. If mining is planned to be conducted greater than 300 feet from the property line, the applicant shall utilize commission-approved screening methods to minimize visual impacts of the mining operation. The commission shall adopt policies and procedures to assist applicants in developing screening plans. In its discretion, the commission may waive screening requirements where the topography of the property or the placement of natural barriers makes screening not feasible or not necessary. Screening requirements shall be required in consideration of and in accordance with existing uses of adjacent property at the time of designation of the interim materials district. An interim materials district shall not be required to screen the district from uses which arise after the designation of the interim materials district;

Finding of Fact:

1. According to the application material, the operation will conduct visual screening by constructing soil berms at least 10 feet high, utilizing existing vegetation, and positioning the operation at a lower elevation than the surrounding grade.
2. During the staff's discussion with the applicant, it was agreed that any visual screening implemented along North Engstrom Road must not exacerbate the snow drifting problem on the road or adjacent properties.
3. According to the application material, the applicant consulted the document "Controlling Blowing and Drifting Snow with Snow Fences and Road Design" (NCHRP-20-07147) when developing the visual buffer location and height.
4. According to the application material, the visual screening berm would be considered a snow fence with 0% porosity. A 0% porosity snow fence would create a snow drift that is 13 times as long as the berm is high. A berm 10 feet high would create a snow drift on the downwind side of approximately 130 feet.

5. According to the application material, the operation will place the visual screening berm 200 feet from the west property line, which will provide a safety factor of 1.5 against a snowdrift reaching Engstrom Road.
6. According to the application materials, while the visual screening is unlikely to fully prevent snow from drifting onto North Engstrom Road, it may help reduce accumulation by capturing some snow that would otherwise blow onto the road, thereby limiting the amount that settles.
7. According to the application material, the visual screening berm will be removed incrementally during the phases closest to North Engstrom Road. It will remain in place during each phase until all earth materials to the east have been fully extracted. The berm's removal will occur as the extraction of materials beneath and to the west of it begins, provided the elevation of the extraction activities is sufficiently low to render the berm unnecessary.

Discussion: The purpose of the visual screening is to minimize the visibility of the extraction activity, such as equipment, stockpiles, and excavation sites, from surrounding areas. This helps to preserve the aesthetic appeal and the privacy of nearby residents or businesses, reduces the potential for negative impacts on local property values, and addresses concerns about the overall quality of the environment for those who live or work in the vicinity. The berm also acts as a noise mitigation measure.

Staff recommends including a condition allowing adjustments to the visual screening berm on the west side, if needed, to mitigate potential snow drifting issues on North Engstrom Road during the life of the operation. Staff suggests any modifications to the berm require prior approval from the MSB Department of Public Works (DPW).

Staff recommends a condition of approval to address the removal of the screening berm on the west side, emphasizing its need to remain as long as necessary to screen the operation in compliance with MSB 17.28.060(A)(4).

Conclusion of Law: Based on the above findings with conditions, the operation has met the requirements for visual screening. The operation will utilize berms, vegetation, and below-grade excavation to provide visual screening measures as detailed on the site plan (MSB 17.28.060(A)(4)).

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(5) noise mitigation measures shall include a description of measures to be taken by the applicant to mitigate or lessen noise impacts to surrounding properties and shall include, but not be limited to, hours of operation of noise-producing equipment, erecting noise barriers (i.e., berms a minimum of ten feet in height) between noise-producing equipment and adjacent uses, location of noise-producing equipment (i.e., below grade in excavated pit areas), and measures to utilize equipment with noise reduction features.

(a) no sound resulting from the earth materials extraction activities shall create a sound level that exceeds the limits set forth for the existing receiving land use category in Table 1 when measured at or within the property boundary of the receiving land use:

Table 1. Sound Levels by Receiving Land Use

Receiving Land Use Category	***Time***	***Sound Level Limit (dB(A))***
Residential Use	*7 a.m. – 10 p.m.*	*60*
	10 p.m. – 7 a.m.	*50*
Commercial Use	*7 a.m. – 10 p.m.*	*70*
	10 p.m. – 7 a.m.	*60*
Industrial Use or Undeveloped Land	*At all times*	*80*

(b) [Repealed by Ord. 08-150, § 2, 2008]

(c) for any sound that is of short duration, between the hours of 7 a.m. and 7 p.m. the levels established in Table 1 may be increased by:

(i) five dB(A) for a total of 15 minutes in any one hour; or

(ii) ten dB(A) for a total of five minutes in any hour; or

(iii) fifteen dB(A) for a total of one and one-half minutes in any one-hour period.

(d) an interim materials district or a conditional use permit for earth materials extraction activities shall not be required to provide noise mitigation measures to mitigate or lessen noise impacts if a land use requiring lesser noise levels than for an industrial area arises on properties adjacent to earth materials extraction sites after the designation of the interim materials district or the effective date of the conditional use permit.

Findings of Fact:

1. According to the application material, the heavy machinery and processing/crushing equipment will be equipped with mufflers and noise dampeners to minimize noise emissions. Additional measures for noise reduction include the construction of a minimum of 10-foot-tall berms at areas around the extraction site, conducting operations at elevations below the surrounding ground level, adhering to the stated operational hours, and ensuring regular maintenance of the equipment.
2. According to the application material, the proposed hours of operation are 8:00 a.m. to 5:30 p.m., Monday through Saturday.
3. An asphalt or hot mix plant is not proposed as part of this application.
4. Noise levels exceeding the levels in MSB 17.28.060(A)(5)(a) are prohibited.

Conclusion of Law: Based on the above findings, noise mitigation measures, including the use of equipment mufflers and noise dampeners, construction of berms, operating below grade level, and ensuring regular maintenance of equipment, will ensure that sound generated from earth material extraction activities does not exceed sound levels set forth in MSB 17.28.060(A)(5)(a). Noise levels exceeding the levels in 17.28.060(A)(5)(a) are prohibited.

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(6) lighting standards are:

(a) exterior lighting shall be located and shielded to direct the light towards the ground, in order to minimize light spillage onto adjacent properties and upward into the night sky.
(b) illumination or other fixtures mounted higher than 20 feet or 150 watts or more shall have downward directional shielding.

Finding of Fact:
1. According to the application material, exterior lighting will be mounted on the proposed shop and scale house. These lights will be directed downward and shielded as needed to prevent light spillage on adjacent properties.

Conclusion of Law: Based on the above findings, the proposed operation meets lighting standards (MSB 17.28.060(A)(6)).

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(7) Except as permitted by MSB 17.30.037, the following restrictions shall apply: an undisturbed buffer shall be left and no earth material extraction activities shall take place within 100 linear feet from a lake, river, stream, or other water body, including wetlands (unless permitted by U.S. Army Corps of Engineers 404 Permit, MSB 17.28.040(A)(5)). This regulation shall not apply to manmade water bodies being constructed during the course of the materials extraction activities.
a. An undisturbed buffer shall be left and no earth material extraction activities shall take place within 100 linear feet from a lake, river, stream, or other water body, including wetlands (unless permitted by United States Army Corps of Engineers (USACE) *404 Permit, MSB 17.78.040(A)(5)).*
b. a four-foot vertical separation between all excavation and the seasonal high water table shall be maintained.

Findings of Fact:
1. According to the application material, USACE was asked to determine the jurisdictional status of a surface water connection between a single wetland feature measuring 0.47 acres on the property and Wasilla Creek. USACE did not review any other areas on the subject properties.
2. According to the USACE letter dated June 21, 2024, the wetlands in the review area were determined to be isolated, intrastate, non-navigable, and have no connection to interstate or foreign commerce, and not under the USACE regulatory jurisdiction.
3. The USACE report included a map that showcases the wetlands identified in the Cook Inlet Wetlands Inventory (CIWI). The map highlights possible wetland areas alongside Wasilla Creek and the surrounding wetland features reviewed by USACE.
4. While the CIWI map designates two areas on the property where wetlands may be present, a site visit in October 2024 revealed that the smaller wetland is surrounded by a recently harvested hay field, which indicates limited wetland characteristics in that portion.
5. The borough code requires the extraction activity to maintain a 100-foot undisturbed buffer from any lake, river, stream, or other waterbody, including wetlands.
6. The waterbodies and wetland sheet C0.2 provided by the applicant illustrate wetlands and waterbodies from the National Wetlands Inventory (NWI).

7. The 2012 MSB Wetlands Management Plan says that the National Wetlands Inventory (NWI) in Alaska has limited detail, accuracy, and coverage. It also mentions that USACE has provided extra funding for mapping from 2008 to now.
8. According to the MSB Environment Wetlands Cook Inlet Geographic Information Systems (GIS) map website summary, "To generate the Cook Inlet Wetland Inventory data, stereo paired aerial photos and relatively quick field visits, along with National Wetland Inventory maps and soils data were used. Wetlands that may be non-jurisdictional are also included, such as depressions, inclusions along rivers and in braided river valleys."
9. According to the site plan, the extraction area is located more than 150 feet from Wasilla Creek and nearly 200 feet from the shoreline of Gooding Lake.
10. The applicant is not proposing to mine below or within four feet of the seasonal high water table.
11. According to the application material, monitoring wells will be installed in areas of material extraction to monitor groundwater levels.

Discussion: The wetlands map provided by the applicant is based on the National Wetlands Inventory (NWI), a nationwide resource managed by the U.S. Fish and Wildlife Service (USFWS). However, the NWI is limited in detail, accuracy, and coverage, especially in Alaska. To address these limitations, the Matanuska-Susitna Borough (MSB) Planning Department, with funding from USFWS and the U.S. Army Corps of Engineers (USACE), contracted with specialists to conduct more accurate, local wetland mapping, resulting in the Cook Inlet Wetlands Inventory (CIWI).

The CIWI is based on area photo interpretation and limited ground investigations. It provides more spatially precise information than the NWI, aligning wetland boundaries more accurately with the actual ground conditions. As such, the CIWI is helpful in identifying the extent and types of wetlands in an area, but it is not sufficiently detailed to serve as an accurate wetland delineation for regulatory purposes. It typically shows areas at the boundary of wetland conditions where the water table is not close enough to the surface to qualify the entire site as a traditional wetland.

Wetlands play a critical role in water quality by filtering surface water, trapping pollutants, and preventing sediments from reaching bodies of water such as Wasilla Creek. To protect these functions, wetlands are typically buffered by a minimum of 100 feet, as outlined by the USACE wetlands buffer publication included in this packet. These buffer areas protect a wetland's water quality by preventing the buffer area from serving as a source of pollution and well as processing pollutants that flow from upland areas. They also serve as a habitat for wetland-dependent species.

The CIWI identifies two potential wetland areas on the property, but a site visit in October 2024 revealed that the smaller of these areas, as previously investigated by the United States Army Corps of Engineers (USACE), is surrounded by a recently harvested hay field, which indicates limited wetland characteristics. To clarify the actual wetland boundaries, a wetland delineation should be conducted, which will provide a more accurate representation of the wetland extent and ensure that proper buffers are established for water quality and habitat protection. This approach acknowledges the CIWI map data but clarifies observed conditions, supporting a more tailored delineation of the subject properties.

The CIWI maps show wetlands surrounding Wasilla Creek are within 100 feet of the extraction area, and MSB 17.28.060(A)(7)(b) prohibits earth material extraction activities within 100 linear feet of any lake, stream, or other waterbody, including wetlands, with caveats that a USACE permit is obtained. Staff, therefore, recommends a condition of approval requiring a professional

delineation of the wetlands along the western side of Wasilla Creek, as shown on the CIWI map. Following this, a licensed land surveyor shall stake the 100-foot-wide undisturbed buffer in accordance with the requirements of code.

Conclusion of Law: Based on the findings of fact and with conditions, the operation will not conduct earth material extraction activities within 100 linear feet of any lake, river, stream, or other waterbody, including wetlands, and the operation will not mine below or within four feet of the seasonal high water table (MSB 17.28.060(A)(7)(a – b)).

STAFF RECOMMENDATIONS

Staff recommends approval of the conditional use permit for Earth Material Extraction Activity to commercially extract approximately 7,500,000 cubic yards through 2054 from the subject parcels, 18N01E27A002, D001, & D002. The application meets the standards of MSB 17.30 and 17.28.

1. Prior to operation, the applicant will provide Planning Staff with an acknowledgment from Alaska Department of Environmental Conservation (ADEC) of the Notice of Intent (NOI) for a construction general permit or multi-sector general permit.
2. The applicant shall comply with Alaska Department of Transportation and Public Facilities (ADOT&PF) requirements for the East Bogard Road access.
3. The applicant shall comply with MSB driveway permit requirements for access to North Engstrom Road.
4. Prior to starting extraction activities within 500 feet of the wetlands indicated in the Cook Inlet Wetlands Inventory surrounding Wasilla Creek, a qualified wetland delineator shall identify the boundaries of those wetlands within the subject property along the west side of Wasilla Creek. Additionally, a licensed land surveyor shall establish and mark a 100-foot undisturbed buffer around the identified wetlands. A detailed wetland delineation report, along with a certification from the licensed land surveyor confirming the 100-foot buffer was marked, shall be submitted to the Borough Planning Staff. These markers shall remain visible for the duration of the permit. No extraction activities shall take place within the buffer zones in accordance with MSB 17.28.060(A)(7)(a).
5. Throughout the operation, the visual screening berm may need to be adjusted periodically to prevent exacerbating snow drifting on North Engstrom Road. Any adjustments to the berm's location or size will be made with approval from the Matanuska-Susitna Borough Department of Public Works (MSB DPW).
6. According to the application material, the visual screening berm will be removed incrementally during the phases closest to North Engstrom Road. It will remain in place during each phase until all earth materials to the east have been fully extracted. The berm's removal will occur as the extraction of materials beneath and to the west of it begins, provided the elevation of the extraction activities is sufficiently low to render the berm unnecessary.
7. The operation shall comply with all applicable federal, state, and local regulations, including, but not limited to, all commercial vehicle regulations.

8. Each contractor or company working at the site shall be provided with a copy of the approved conditional use permit.
9. All aspects of the operation shall comply with the description detailed in the application material, and an amendment to the Conditional Use Permit shall be required prior to any alteration or expansion of the material extraction operation.
10. Material extraction shall be limited to the approximately 153-acre area identified in the application material and depicted on the applicant's site plan dated January 16, 2025.
11. Vehicles and equipment shall be staged at designated locations, and all equipment shall be inspected for leaks at the end of each day.
12. Vehicle on-site maintenance shall be done in an area where drip pans or other discharge prevention devices can contain all leaks.
13. Any hazardous materials, drips, leaks, or spills shall be promptly attended to and properly treated.
14. Equipment will be maintained to ensure noise reduction features, such as mufflers and noise dampeners, are operating correctly.
15. All construction site exits shall comply with the standard requirements of the Alaska Pollutant Discharge Elimination System to minimize the off-site tracking of sediments and discharges to stormwater.
16. All track-out sediments from the site shall be removed from the right-of-way daily.
17. The operation shall employ dust mitigation techniques as described in the application to minimize dust impacts on the surrounding areas.
18. The operation shall comply with the maximum permissible sound level limits allowed in MSB 17.28.060 – Site Development Standards and MSB 8.52 – Noise, Amplified Sound, and Vibration.
19. All extraction activities, including all those that cause noise, dust, or traffic, shall be limited to Monday through Saturday, 8:00 a.m. to 5:30 p.m.
20. If cultural remains are found during material extraction activities, the MSB Planning Department shall be contacted immediately so the remains can be documented.
21. A four-foot vertical separation shall be maintained between the excavation and the seasonal high water table.
22. Borough staff shall be permitted to enter onto any portion of the property to monitor compliance with permit requirements. Such access will, at minimum, be allowed on demand when activity is occurring, with prior verbal or written notice, and at other times as necessary to monitor compliance. Denial of access to Borough staff shall violate this Conditional Use Permit.
23. The operation shall comply with the reclamation standards of MSB 17.28.067.
24. All junk, trash, and junk vehicles, as defined in MSB 8.50, shall be removed and properly disposed of prior to the completion of reclamation on the subject parcel.
25. Exterior lighting shall be located and shielded to direct the light towards the ground to minimize light spillage onto adjacent properties and upward into the night sky. Illumination

or other fixtures mounted higher than 20 feet or have 150 watts or more wattage shall have downward directional shielding.

26. The authorization for earth material extraction activities approved by this Conditional Use Permit expires on December 31, 2054.

If the Planning Commission chooses to deny this permit, findings for denial must be prepared by the Commission.

These figures underline how rapid growth pinches the borough's finances and its homeowner taxpayers. The borough's local revenues come almost wholly from a modest real property tax base which, in turn, consists mostly of single family homes and vacant land. In times of rapid growth, the public outlays for new infrastructure and expanded services typically start before tax revenues accrue from new private construction. In effect, established homeowners absorb part of the local public costs incurred for new residents. Meanwhile, budgets to maintain facilities and services for existing residents are compromised. All of these circumstances apply to the Core Area. The Comprehensive Plan proposes some options to diversify the borough's revenue sources and distribute the local tax burden more fairly.

Table 13. Assessed Property Valuation, by Use, 2004
Matanuska-Susitna Borough and Select Boroughs[1]

	Mat-Su Borough	Select Boroughs[1]
Single family homes	68.0%	60.4%
Vacant land	13.9%	5.7%
Commercial	9.9%	14.8%
Other residences	7.5%	10.6%
Industrial	0.4%	7.3%
Other	0.3%	1.2%
Total	100.0%	100.0%

[1]Municpality of Anchorage, Fairbanks North Star Borough, City and Borough of Juneau, Kenai Peninsula Borough.
Source: Alaska Taxable, 2004.

Table 14. Fiscal Indicators, 2005
Matanuska-Susitna Borough and Select Boroughs[1]

	Mat-Su Borough	Select Boroughs[1]
Per capita tax revenues	$925	$1,328
Per capita assessed value	$86,238	$91,861
Per capita bonded debt	$2,239	$3,210

[1]Municpality of Anchorage, Fairbanks North Star Borough, City and Borough of Juneau, Kenai Peninsula Borough.
Source: Alaska Taxable 2005.

Chapter 3. Comprehensive Plan Goals and Policies

3.1 Introduction

This Core Area Comprehensive Plan Update proposes goals and policies to guide public and private decisions about the Core Area's future development. The proposed Core Area Land Use Plan graphically represents the goals and policies that relate to land use.

The Core Area Comprehensive Plan Update is not a stand-alone plan. It is part of the borough comprehensive plan, which consists of several borough-wide plans and numerous functional and local plans. Two borough plans – the Long Range Transportation Plan and the Parks, Recreation & Open Space Plan supply the borough-wide framework to link transportation and open space planning for the Core Area with its surrounding region. Likewise, the Core Area Comprehensive Plan Update and the plans of its neighboring cities (Palmer and Wasilla) and community councils (Knik-Fairview and Meadow Lakes) should mesh where they intersect.

For purposes of this Plan Update, **goals** are brief, broad statements of the positive results the plan seeks to achieve. The goals represent the aspirations of the community. The **policies** provide more detailed guidance for public and private actions to implement the planning goals. The goals, then, are benchmarks against which more specific policies and implementation actions can be measured.

Community plans do not take shape in a vacuum. They should embody the community's prevailing values and goals. A recent borough-wide survey tells what local residents like about life in Mat-Su Borough, how they regard its development, and what they think the borough needs to do about ongoing development. According to the survey (see sidebar)[16]

- 82 percent of borough residents agree that they "like the rural, small town character of the Mat-Su Borough;"
- Many residents (57 percent) are not, on the other hand, "satisfied with the way the Borough has been developed;"
- 81 percent agree that "the Borough must do a better job of managing growth and development;"
- Substantial majorities agree the borough should adopt land use zoning (74 percent) and spend more funds for road improvements (61 percent) and open space preservation (60 percent).

Core Area Community Open House (Sandra Petal, MSB)

Surveys are only one source of information about community values and goals. The extensive, diverse spoken and written public comments given at several open houses and workshops during plan development have strongly shaped the planning goals and policies. So has the evolving history of community acceptance of the role of local planning in guiding community growth and development. The community survey shows that, while residents still prefer limited local government and low taxes, they are also open to work through their local government to improve and preserve the community features they prize in the Core Area – to "do a better job of managing growth and development." Adopting the updated comprehensive plan and land use plan is a first step in that process

[16] The percentages cited are for all borough residents; responses for Core Area community council residents are consistent with these percentages.

Question: What do your neighbors think about land use planning?

Answer: The University of Alaska Anchorage, Mat-Su College, and the Mat-Su Borough recently surveyed 2,600 borough residents for their opinions on land use planning issues, among other topics. Here's what they said.

Survey question	Agree	No Opinion	Disagree
I like the rural, small town character of the Mat-Su Borough.	**81.6%**	6.7%	11.7%
The Borough must do a better job of managing growth/development.	**81.3%**	9.6%	9.2%
I support a system of zoning that designates: residential; agricultural; and commercial/industrial (with specific regulations for each).	**74.1%**	9.5%	16.4%
Traffic congestion is a serious problem in the Borough.	**74.1%**	6.2%	19.8%
Over the next 10 years, the Borough will need to develop/preserve more park land.	**61.5%**	14.2%	24.3%
More tax money should be spent to improve Borough roads.	**60.9%**	15.3%	23.8%
Funds should be spent to preserve open spaces in the Borough.	**59.8%**	15.8%	24.5%
I support a system of zoning allowing different land uses to be located near one another, with standards for noise, traffic and other impacts.	**58.1%**	11.7%	30.2%
I support imposing an impact fee on developers for residential/commercial properties to pay for services.	**57.7%**	13.1%	29.2%
I am very concerned about water quality in the Borough.	**46.8%**	25.7%	27.4%
Funds should be spent to preserve agricultural land in the Borough.	**48.9%**	20.9%	30.2%
As of today, I am satisfied with the way the Borough has been developed.	28.2%	15.0%	**56.8%**

Source: The Matanuska-Susitna Borough Community Survey, 2006.

3.2 Goals and Policies

Each of the goals focuses on a particular plan element, but in practice the goals often interact. Similarly, each policy is listed under the primary goal it supports, even though individual policies may promote several goals. In particular, many of the land use policies affect multiple goals. Policies often work together to reinforce each other. Table 15 shows how the policies can work together in overall support of the planning goals.\

Goal 1. Land Use: Foster a pattern of land development that protects the appealing features of the Core Area, offers developers and consumers choices in the market place, and allows local government to provide cost-effective infrastructure and services economically.

Policy 1-A: Adopt and implement a land use plan.

Discussion: A land use plan is the essential foundation for effective land use planning. Previous Core Area comprehensive plans did not include a land use plan. That omission has limited their usefulness for managing growth and keeping development in harmony with the rural, small town character that residents say they value. This plan update proposes a land use plan. It is a generalized picture of land uses and densities toward which the Core Area can evolve as its population and built environment continue to grow in the coming years.

Policy 1-B: Promote an orderly land use pattern suited to the demand for attractive settings in which to live, work, shop, learn, play, and carry on other daily activities.

Discussion: As the Core Area's population grows – it is forecast to double by 2025 and absorb most of the remaining vacant land in the Core Area – the limited vacant land supply must provide a balanced supply of well-located sites for homes, businesses, private and public institutions, industry, parks and recreation, public improvements, and other purposes. The plan needs to provide a place for every permitted land use, but not all land uses go well side-by-side. Some uses such as residences and open space or retail trade and service business are usually compatible and enhance each other. Others, like heavy industrial activities and residential subdivisions, make poor neighbors and are best separated by distance or buffers. The need and place for each major land use is addressed in policies below.

Policy 1-C: Encourage density patterns that make best use of public investment in infrastructure.

Discussion: Higher-density residential, commercial, and institutional developments generally require greater investment in transportation and other public improvements and services than large-lot subdivisions or small, free-standing commercial buildings. Mixing high- and low-density land uses together usually results in under-use of some costly public infrastructure and extra infrastructure elsewhere. Clustering high-density uses with high public service requirements permits cost-effective provision of new infrastructure where it can be most productive. It can also minimize the need for new public infrastructure elsewhere. Promoting an efficient density pattern saves public dollars.

Policy 1-D: Develop and adopt land use regulations to guide private land use development.

Discussion: The assembly previously considered but did not adopt a proposed zoning ordinance for the Core Area. At present, the main ordinance governing land use in the Core Area is the Core Area Conditional Use Permit (MBC 17.61) which regulates certain features of commercial and industrial uses. The recent community survey indicates widespread support for a more comprehensive system of zones and regulations to guide land use development.

Zoning ordinances generally limit permitted uses and densities for the benefit of protecting nearby property owners and occupants against unwelcome new uses and development. Zoning ordinances vary widely in the extent to which they limit and protect property owners. Each local jurisdiction must resolve, in accord with its community values, the best balance between acceptable limits and desirable protections. The policy proposed here is that the borough re-start the process of developing a basic zoning map and code to implement the proposed land use plan.

Policy 1-E: Coordinate land use with the Long Range Transportation Plan

Discussion: The Core Area Comprehensive Plan Update and the borough-wide LRTP are matching parts of a coordinated land use and transportation planning effort. Land uses generate traffic and require transportation improvements. Conversely, the network of highways and major arterials defines high-traffic corridors and crossroads, facilitates access and circulation, influences land values, and frames the pattern of land use and development. The success of the two plans depends on their coordination in place and time. For that reason, the two plans have been developed with similar assumptions about the future population and economy of the Core Area, its future land use patterns, and its transportation requirements.

Policy 1-F: Foster an affordable mix of residential areas and housing types at suitable locations, in balance with market demand, and with appropriate public infrastructure.

Discussion: The analysis of existing land use patterns and trends indicates that homesites will remain the most extensive land use in the Core Area. Housing patterns and trends indicate that single-family homes will be the most popular type of housing. Even so, changing economic and demographic conditions, such as a diminishing land supply, rising land costs, and a growing senior population, will shift some demand toward higher-density single-family subdivisions, multi-family dwellings and senior housing with good access to support services. The plan should provide adequate opportunities for the needed mix of housing types – large-lot single family homes, full-service residential subdivisions, multi-family dwellings, special-needs housing – at suitable locations. In particular, higher residential densities can improve access to affordable housing for persons who live and work in the local community, and thereby strengthen the local economy.

Policy 1-G: Secure the stability and viability of established residential neighborhoods.

Discussion: As more of the Core Area's vacant land is built up, securing the stability and viability of established residential neighborhoods will become an increasing concern, as vital as ensuring that new subdivisions are well-located and well-designed. Several other planning policies proposed to separate or buffer incompatible uses from residential areas, conserve public open space, and promote equitable property taxes also serve to protect the viability of established residential neighborhoods.

Policy 1-H: Encourage concentration of major commercial development at central locations and along already developed major transportation corridors.

Discussion: The land use forecast underlying the LRTP anticipates that retail and non-retail job growth in the Core Area will gravitate toward the existing highway commercial corridors east of Wasilla and west of Palmer. These existing commercial corridors are expected to attract most of the new business growth in the Core Area. Overall, about three-fourths of new retail jobs are estimated to locate east of Wasilla near the Parks and Palmer Wasilla highways and Seward Meridian Road and near the Mat-Su Regional Medical Center. Non-retail jobs are distributed similarly to retail jobs, except that a major new center for professional services and other non-retail jobs is expected to emerge in the vicinity of the Medical Center/College campuses. Even so, the established sub-regional commercial centers in Wasilla and Palmer will continue to capture a major share of the Core Area's trade and services business.

The land use plan should encourage major commercial development at locations consistent with the LRTP, and discourage major commercial development at dispersed locations with inferior highway access elsewhere in the Core Area. This general policy will facilitate successful commercial development and still help protect the rural character and natural landscape of the balance of the Core Area.

Neither this plan update nor the LRTP propose development of a new sub-regional commercial center in the Core Area at the Palmer Wasilla Highway/Trunk Road intersection. That intersection is at the margin of two sub-regional trade areas centered in Wasilla and Palmer. The Parks Highway is also experiencing ongoing commercial development. In those circumstances, the competitive viability of a third sub-regional commercial center is very uncertain. Moreover, reliance on nearby established commercial centers will better retain the rural character of the Core Area.

Policy 1-I: Encourage neighborhood commercial districts at suitable locations for neighborhood-scale retail and service needs.

Discussion: Neighborhood commercial districts enable nearby residents to take care of some retail and service needs near home. This reduces the need for longer trips to larger commercial districts, thereby reducing traffic congestion at the busiest locations.

This land use policy seeks to concentrate neighborhood-serving commercial activities at several convenient, high-traffic crossroads, where they have the best chance of success. It seeks to discourage new dispersed commercial uses in predominantly residential neighborhoods and to maintain the character of residential neighborhoods situated along arterials.

This plan policy proposes neighborhood commercial districts with market areas of about 8,000 to 10,000 residents, suited for businesses that can thrive by serving market areas of that size. Typical businesses might include convenience stores, gas stations, small professional offices, day care centers, restaurants, and similar small-scale businesses. Industrial uses are not appropriate in these districts.

The land use plan identifies seven highway/arterial crossroads locations for neighborhood commercial districts:

- Glenn Highway/Inner Springer Loop Road/Hemmer Road
- Trunk Road/Palmer Fishhook Road
- Palmer Wasilla Highway/Trunk Road
- Palmer Wasilla Highway/Hyer Road
- Bogard Road/Seldon Road
- Wasilla Fishhook Road/Seldon Road
- Lucille Street/Seldon Road

Policy 1-J: Encourage light industrial parks

Discussion: The Core Area does not have and is not expected to attract much heavy industry, not including earth materials extraction sites. However, the Core Area already has pockets of light industrial uses such as outdoor storage, construction yards and shops, building materials supply, garage and outdoor vehicle storage yards, warehousing, utility buildings, miscellaneous outdoor storage, etc. These industrial uses are necessary and a good fit for the local economy, with good growth potential. Demand for sites for industrial uses will increase as the Core Area's economy matures. Even so, industry will remain a modest land use in the overall picture.

These light industrial uses are generally mutually compatible. They tend to have similar locational requirements, such a good highway access and public utilities, and separation from residential neighborhoods, schools and recreation facilities, and public institutions. Designating sufficient well-situated tracts for light industry will help create a more attractive climate for these activities by enabling them to operate efficiently and with minimal conflict with other uses. Restored earth materials extraction site with good highway access can be prime candidates for light industrial uses.

Policy 1-K: Expand the "planned unit development" ordinance (MSB 17.36) to authorize commercial, industrial, and mixed use PUDs; encourage subdivision and development of large tracts as "planned unit developments".

Discussion: The Core Area's farming and homesteading history has left a legacy of many large-acreage tracts. Some of these large tracts have potential for future subdivision and planned development for commercial, industrial, and mixed uses. At present, the borough's planning ordinance now provide for residential PUDs (MSBC 17.36) with minor non-residential uses allowed in large development.

PUDs are a flexible and innovative alternative to strict application of subdivision and zoning regulations. PUDs allow property owners and the public to take advantage of the special design opportunities and economies of scale afforded by large-scale development. For example, PUDs may facilitate shared parking, retention of natural vegetation and drainage, safer interior circulation, consistent building design, and more effective landscaping. PUDs may also be more adaptable to sites with special conditions such as unusual topography or prior uses such as earth materials extraction sites.

Policy 1-L: Develop a district plan for the Educational/Medical/Glenn Park District

Matanuska-Susitna College
(Sandra Petal, MSB)

Discussion:
The proposed Educational/Medical/Glenn Park District is bounded by the Parks Highway, Trunk Road, the Palmer Wasilla Highway, City of Palmer, and the Glenn Highway, and includes abutting properties. It encompasses the Matanuska-Susitna College and Mat-Su Regional Medical Center campuses, recreation lands in state or borough ownership, extensive undeveloped private and University of Alaska property, several large earth materials extraction sites, and the borough central landfill.

This area is poised for robust growth as the Mat-Su Valley's regional center for higher education, health services, and related professional and commercial services; as a residential community; and as a regional natural recreational area. The LRTP and this Comprehensive Plan Update both envision that the district will develop into a major employment center, residential community, and traffic destination.

University of Alaska Experimental Station
(Sandra Petal, MSB)

Construction of Mat-Su Regional Medical Center (Sandra Petal, MSB)

Several public infrastructure improvements, spurred partly by construction of the Mat-Su Regional Medical Center, will prime the district's growth. The City of Palmer has installed public water and sewer service via the Glenn Highway to the Mat-Su Regional Medical Center. Matanuska Electric Association is building a new high-voltage transmission line to the hospital. The Parks Highway was recently upgraded, and near-term upgrades are programmed for Trunk Road and the Glenn Highway. Further, the earth materials extraction sites have substantial potential for redevelopment for residential, commercial, light industrial and other uses after they are depleted.

This policy proposes that the borough initiate a joint public planning process with the University of Alaska, the City of Palmer, the State of Alaska, and private landowners to develop a concept plan for optimal realization of the Ed/Med/Glenn Park District's long-term institutional, economic, settlement, and recreational potential.

Policy 1-M: Collaborate with operators of large earth materials extraction sites to plan for site reclamation and re-use after earth materials extraction activities are finished.

Discussion: Earth materials extraction sites – gravel and sand pits – are an extensive active interim land use in the Core Area. Several former sites have been redeveloped or await redevelopment. Earth materials extraction is expected to continue as a local industry, with additional sites being put to that interim use in the future.

Rising land values will enhance the development potential of former sites which often become prime real estate for new uses. Redevelopment of these sites makes good use of the borough's land base and enhances the value and economic potential of nearby properties.

This policy proposes that the borough work jointly with property owners, consistent with borough ordinances, to plan for redevelopment of these sites for productive and profitable reuse. The borough can facilitate redevelopment by ensuring that earth materials extraction is managed in a manner that conserves future redevelopment options and by providing essential public infrastructure for redevelopment.

Policy 1-N: Initiate a joint planning effort in order to create consistency among utilities in the core area. The joint planning effort will work to identify utility corridors for future water, sewer, natural gas, and power transmission lines. All community water and sewer systems should be managed by a public or private utility provided.

Discussion: Fragmented and belated planning for major utility corridors can be inefficient, costly, excessive, and disruptive to affected property owners. Advance joint planning for future utility corridors can reserve suitably located corridor, reduce land acquisition costs, minimize conflicts, avoid delays and displacement of existing development, facilitate multiple use of shared corridors, conserve open space. Also, coordinate with planning for new road development.

Policy 1-O: Evaluate the feasibility and advisability of development impact fees.

Discussion: Development impact fees are a means to fund installation of new public infrastructure required to serve new development. Local governments charge the developer a one-time advance fee that is dedicated to defray public costs for new infrastructure. In effect, part or all of the extra costs of new development are charged back to the beneficiaries rather than shared by all local taxpayers. Development impact fees are popular in fast-growing localities as a method of financing new development without raising property taxes for established residents. Development impact fees are not an appropriate funding means to remedy deficiencies in existing development.

Development impact fees can be geared to the actual costs of providing infrastructure. In that way, they are a market incentive for cost-effective development patterns.
As development impact fees potentially affect the interests of a broad range of stakeholders, the process for evaluating impact fees should engage all stakeholders.

Policy 1-P: Coordinate implementation of the Core Area plan with other borough comprehensive plan elements and the community plans of adjacent jurisdictions.

Discussion: The Core Area is a distinct planning area, but it shares basic infrastructure, such as road systems, public utilities, and educational, health care, and recreational facilities, with its surrounding region. It also shares boundaries, service areas, and some public facilities and services with several neighboring community planning jurisdictions. As a practical matter, implementation of the Core Area plan needs to be coordinated with other borough-wide functional plans and, on issues of shared concern, with neighboring cities and community councils. For example, because the cities of Palmer and Wasilla are exclusively authorized to provide public water and sewer utilities in the Core Area, coordination is essential to plan for extensions of those utilities.

The dynamic growth of the region may also warrant periodic consideration of Core Area boundary changes via city annexations or adjustments to the boundaries of the Core Area and neighboring community councils.

Goal 2. Transportation: Provide for safe and efficient vehicular and non-motorized travel within the Core Area and between the Core Area and other destinations.

Policy 2-A: Incorporate the LRTP's recommendations for major transportation improvements in the Core Area.

Discussion: The borough-wide LRTP is designed to facilitate efficient, safe vehicular circulation throughout the borough and within Core Area. Coordination of the Core Area Plan Update and the LRTP and incorporation of its recommended improvements will

promote orderly growth patterns, facilitate efficient traffic movement between the Core Area and surrounding areas, and strengthen the link between fiscal, transportation, and land use planning. The Comprehensive Plan Update incorporates the LRTP's recommendations for improvements to these major road segments in the Core Area through 2025:

- Glenn Highway
- Parks Highway
- Palmer Wasilla Highway
- Trunk Road
- Seward Meridian Road
- Wasilla-Fishhook Road
- Bogard Road
- Seldon Road
- Hyer Road
- Hemmer Road
- Hermon Road
- Trunk Road/E. Nelson Road/Linlu Lane
- Lucille Lane

Similarly, this Plan Update incorporates the LRTP's many recommendations for collector level street improvements and trail connections in the Core Area, as listed in the previous chapter.

Future revisions to the LRTP will become part of the Borough comprehensive plan and will, in effect, also revise the Core Area Comprehensive Plan.

Policy 2-B: Improve and maintain connectivity within the arterial road network.

Discussion: Maintaining good connectivity, with multiple points of access to and from the arterial road network, contributes to safe and efficient routing of vehicular traffic, quick access for fire-fighting apparatus, good school bus service, and alternative emergency exits. In some parts of the Core Area, the topography and water bodies require thoughtful road planning and design to maintain good connectivity.

Policy 2-C: Support increased use of local transit services and of commuter service between the Core Area and Anchorage.

Discussion: The Core Area's continuing population growth will enhance the feasibility and cost-effectiveness of upgraded local transit services as a means of mobility along higher-density corridors and for special groups such as seniors, youth, and persons needing health care. Increased reliance on local transit can also help reduce local traffic congestion. Likewise, as the volume of commuter traffic between the Core Area and the Anchorage area rises, commuter transit service offers similar benefits.

Policy 2-D: Retain needed section line and utility easements.

Discussion: Public land policy governing the land survey and conveyance process has reserved an extensive network of undeveloped section line and utility easements for the borough. Many of these easements will be needed and should be retained for future road and utility system extensions. Other easements may not be useful for their intended purpose because of engineering constraints or existing development patterns. This policy recommends that the borough review existing section line and utility easements with affected utilities in order to identify those with potential public value and which should therefore be retained. This review will also identify easements that can be prudently vacated for other public or private uses, or in response to requests for vacation.

Goal 3. Parks and Open Space: Establish a permanent system of publicly owned natural open space, parklands, greenways, corridors, and habitats for the enjoyment of present and future residents.

Policy 3-A: Incorporate the borough Parks, Recreation & Open Space Plan and Recreation Trails Plan.

Discussion: The recent community survey indicates strong community support for programs and outlays to develop and conserve more parkland and for preservation of agricultural lands. The background analysis found that the Core Area is deficient in dedicated public parklands and open space. The Core Area has relatively little dedicated public open space for current and future residents. Much of the Core Area's "apparent" open space is private property that is likely to be developed in coming years. As development progresses, opportunities for public acquisition of more open space will diminish and acquisition costs will rise.

Cycling
(Frankie Barker, MSB)

The conservation of natural areas throughout the Core Area is vital to perpetuate its natural character and provide convenient access to a variety of outdoor recreation opportunities. The borough's Parks, Recreation & Open Space Plan identifies a variety of natural areas, park lands, outdoor recreation areas, trails, and wildlife habitat throughout the Core Area to meet future needs. This policy incorporates the relevant major recommendations of the Parks, Recreation & Open Space Plan and Recreational Trails Plan into the Core Area plan update.

The Comprehensive Plan incorporates these elements from the Parks, Recreation and Open Space Plan: (See Figure 11.)

- Crevasse Moraine Trails
- Wasilla Creek Corridor
- Kepler-Bradley Lakes State Recreation Area
- 7 Mile Canoe Trail Corridor
- Finger Lake State Recreation Site
- Matanuska River Corridor
- Little Susitna River Corridor
- Palmer Hay Flats State Game Refuge

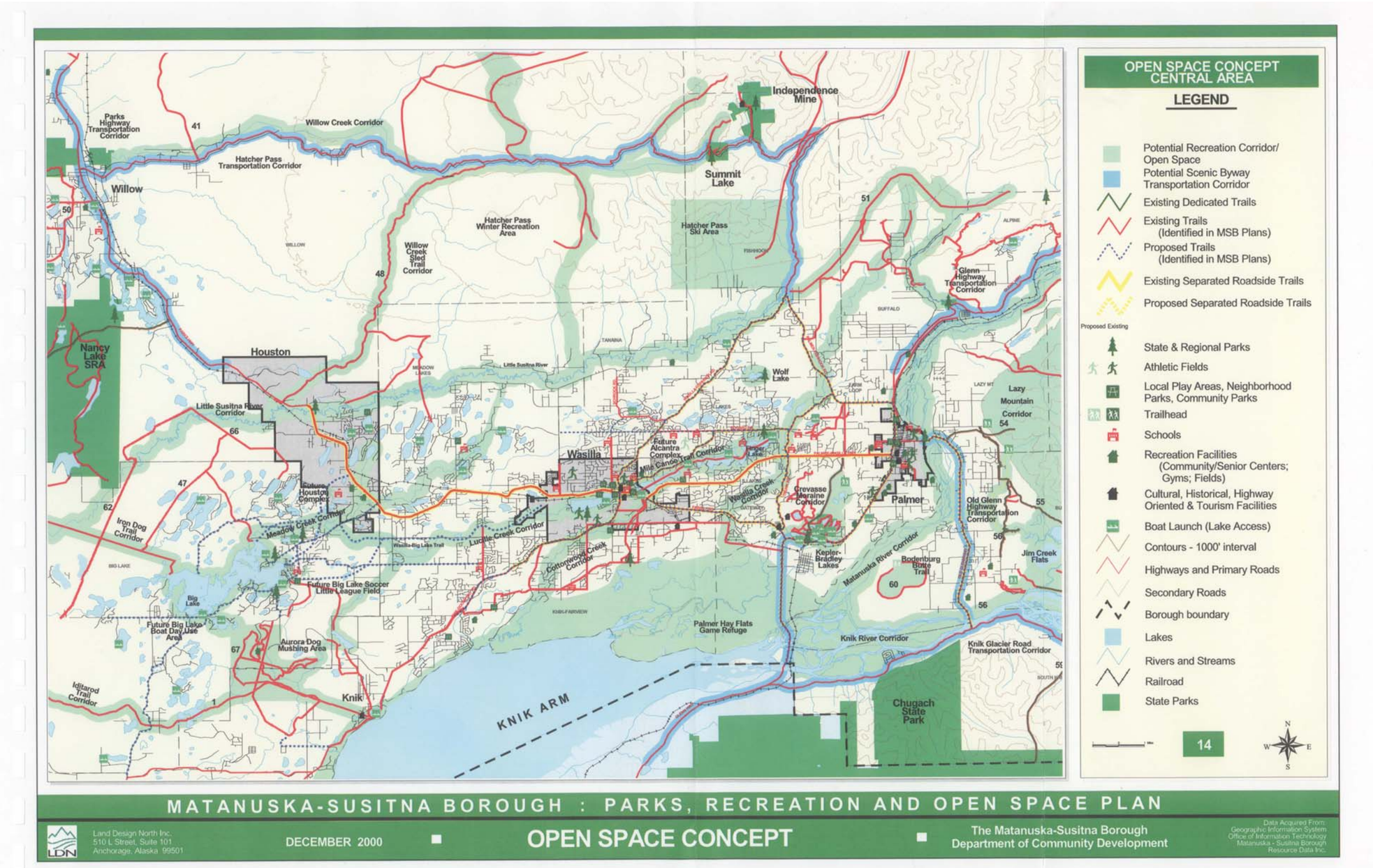


Figure 13: Matanuska-Susitna Borough Parks, Recreation, and Open Space Plan Map – Central Area

Policy 3-B: Work in partnership with private land conservancy organizations to conserve open space and natural areas.

Discussion: Private land conservancy organizations such as The Nature Conservancy, the Alaska Farmland Trust and the Great Land Trust have resources and expertise to conserve open space and natural areas. As private entities, they have great flexibility to work with willing landowners for conservation purposes. Often, they use tools such as purchase of development rights or conservation easements that retain land in private ownership and use and conserve woodlands, wetlands, stream corridors, wildlife habitat and other high-value natural areas.

Wasilla Creek Corridor (Sandra Petal. MSB)

Goal 4. Green Infrastructure: Plan, develop, and grow in a way that protects natural functions while respecting the needs and desires of the landowners and other stakeholders.

Policy 4-A: Identify and Map

Discussion: Identify and map waterways, wildlife habitat and corridors, wetlands, forests, natural hazards, erosion and fire prone areas. Mapping of outdoor recreation and trail networks is also encouraged. Identifying where green infrastructure is desired will aid in the protection of natural resources.

Policy 4-B: Proactive Planning

Discussion: Protect natural systems prior to development. By coordinating and integrating land use planning and design for roads, trails, water, electric, drainage, etc. with green infrastructure, costs to restore and repair natural systems can be avoided.

Policy 4-C: Connectivity

Discussion: Where possible, link waterways, wildlife habitat and corridors, trails, etc. to create an interconnected system of natural corridors in the Core Area. Developing interconnected green space systems benefits communities by providing areas for recreation, protecting water quality, and other public values.

based businesses such as Matanuska Creamery and local farmers markets.

- Highlight local agricultural assets and businesses as part of the economic development department's community and business outreach activities.
- Participate in *Alaska Grown* marketing initiatives and activities.
- Communicate the direct, indirect, and induced economic benefits of buying locally produced milk and produce.

1F.4: Support and promote the export of certified seed potatoes from Mat-Su to China and Taiwan. Mat-Su's agricultural sector is in a unique position to capitalize on the growing demand for seed potatoes in Taiwan and China.

- Actively support proper funding for the Plant Pathology and Biotechnology Laboratory at the University of Alaska, Fairbanks.

1F.5: Develop an Agricultural Economic Development Plan for the Borough. The MSB should work with the agricultural and business community in the Borough to develop a plan focused on fully leveraging the economic development potential of Mat-Su's agricultural base. The need for such a plan was suggested by local business focus group participants.

Strategy 1G: Promote the sustainable development of Mat-Su's natural resources for economic development. The MSB should support sustainable natural resource development and the natural resource industries with an emphasis on meeting local needs and local value-added product manufacturing, as well as ensuring compatibility with other parts of the local economy. Indeed, natural resource development is a high priority for the Borough Assembly. The main natural resources in Mat-Su, in addition to agricultural land, include coal, gravel, timber, some gold mining and some metallic mineral potential.

Alaskan Seed Potato Exports

Alaska is the only state in the country and one of the few places in world from which China and Taiwan have agreed to accept seed potatoes. It is estimated the per annum needs and value of seed potatoes in Taiwan (3,000 metric tons; $2 million) and China (1.4 million metric tons; $154 million) are the largest in the world.

Alaskan farmers have three distinct advantages regarding seed potato exports: (1) established commercial relationships with China and Taiwan, (2) certified seed potato export status, and (3) having relatively disease free potatoes. Moreover, the Chinese government mandates that only seeds tested at the Plant Pathology and Biotechnology Laboratory at the University of Alaska, Fairbanks enter their country. These factors position Alaskan farmers uniquely positioned as the primary exporters of seed potatoes to the largest consumers of seed potatoes in the world. With most of the developed agricultural land in the state, Mat-Su is well suited to reap most of the benefits of an expanded seed potato export market.

The MSB also places major emphasis on continued development of Port MacKenzie to serve as a major export facility for natural resources from Interior Alaska, as well as the Borough (see Goal 3). It is expected that most of the export potential will be related to metallic mines in the Alaska interior and other interior Alaska resource development.

A key component of the MSB economic development policy will be aligned around continued development of the port with the associated rail extension, deep draft dock, and ferry service, as well as development of port district industrial land.

Actions:

1G.1: **Ensure infrastructure access for coal mining operations.** While coal deposits are found throughout the Borough, the highest quality concentrated coal resources are located in the Sutton area. The MSB should continue working with coal companies to provide infrastructure access so that this coal might be produced compatibly with area communities and then shipped out of Port MacKenzie.

1G.2: **Support the sustainable development of forest resources through the Timber Management Plan.** Mat-Su's timber resources are mainly used to meet local needs and demand (from residential construction to firewood). Local forest products manufacturers produce valued added products such as kiln dried tongue and groove cotton wood, specialty lumber, cabin logs, firewood, and birch syrup. Borough timber is also used for a small birch bowl production industry.

In past years, Borough timber was also harvested, chipped, and shipped through Port Mackenzie to Asia. However, future chipping activities have been hindered by market volatility, higher fuel prices, and competing forest resource demands (e.g., tourism). Certain areas of Mat-Su that are used for "flight seeing" and helicopter tours are considered by many to be off limit areas for logging. Moreover,

the MSB does not own sufficient forested land to support a chipping industry on a sustainable basis on its own.

- The MSB should consider providing some sustainable timber harvest to meet local value-added manufacturing and local use needs.

- The MSB should also consider setting aside some timber area for testing wood-burning technologies for possible use in heating schools.

1G.3: Work with the gravel mining industry to balance the need for the sector's growth with other economic development considerations, as well as environmental and resource protection. Mat-Su is home to a number of sand and gravel mining operations. Four large mining operations export approximately 2 to 3 million tons of gravel a year, primarily to Anchorage. These large operations, combined with medium and small operation production, may provide as much as 2 million tons for local road and construction use in 2010. Three or four medium sized operations are partly involved in specialty gravel production for such things as asphalt production, or specific needs such as landscaping and concrete block businesses. At least 23 smaller sand and gravel operations operate in the Borough, serving specialty or local gravel market.

The MSB is developing gravel regulations and guidelines to provide for continued commercial gravel operations while addressing community and other economic development concerns regarding buffers from roadways, water protection, and reclamation. These regulations should balance the concerns of gravel mining businesses with the need to protect the environment and visual beauty of the Borough. This contribution to the visual beauty of Mat-Su will assist other economic development efforts, such as workforce recruiting efforts, tourism expansion, worker lifestyle considerations, and new business attraction.

Forest Management in Mat-Su

The public review draft (December 2009) of the *Matanuska-Susitna Borough Asset Management Plan: Natural Resource Management Units* includes the following forest management goal:

"Provide a sustained yield of forest products for commercial and personnel uses. Meet the needs for value-added, small-scale wood processors including non-extractive uses, and larger scale industries where appropriate."

1400. Highway Work Zone Safety and Traffic Control Plans

1400.1. Introduction

Works zones directly impact the safety and mobility of road users and highway workers. Addressing these safety and mobility issues starts early in the project development process and continues through project completion.

This section provides guidance and establishes procedures for developing Traffic Control Plans, Traffic Management Plans, and Traffic Operations Plans in accordance with 23 CFR 630, Subparts J & K, and P&P 05.05.015.

1400.2. Definitions

Positive Protection Devices: Traffic barriers that contain and/or redirect vehicles and meet the crashworthiness evaluation criteria contained in NCHRP Report 350, Recommended Procedures for the Safety Performance Evaluation of Highway Features, 1993, or MASH 2016.

Project: Any work in the highway right of way that may have an impact on traffic.

Public Information Plan: A communications plan to inform affected road users, the general public, area residences and businesses, and appropriate public entities of project scope, expected work zone impacts, closure details, and recommended action (if any) to avoid impacts and changing conditions during construction.

Significant Project: A significant project falls into either a Category 1 or Category 2 classification.

A Category 1 significant project occupies a location for more than three consecutive days with either intermittent or continuous lane closures on Interstate Highways within a Transportation Management Area.

A Category 2 significant project is one that, alone or in combination with other concurrent projects nearby, is anticipated to require greater than normal attention to traffic control to eliminate sustained work zone impacts greater than what would be considered acceptable.

Traffic Control Plan (TCP): A plan identifying what traffic control devices to use and showing their location and operation in a work zone to ensure traffic flow. TCPs also include phased staging and traffic routing plans where needed. TCPs may include positive protection devices or on-project law enforcement to improve worker and motorist safety.

Transportation Management Area (TMA): 1) An urbanized area with a population of over 200,000 or 2) any urbanized area for which TMA designation has been requested by the Governor and the area's metropolitan planning organization and granted by the Secretary of the United States Department of Transportation (USDOT.) Currently, Anchorage is the only TMA in Alaska. Its boundary coincides with the Anchorage Metropolitan Area Transportation System boundary. Check with Planning for any changes in TMA designations.

Transportation Management Plan (TMP): A plan to manage work zone impacts of a highway project. It includes a Traffic Control Plan and may include Transportation Operations and Public Information Plans. Neither the TMP nor its three component plans are standalone documents. Plan provisions are included in project plans, specifications, or agreements with other parties and are scaled as appropriate for the complexity of individual projects.

Transportation Operations Plan (TOP): A plan to minimize project impacts not covered under a Public Information Plan or TCP. In general, these activities consist of coordination with external agencies, events, projects and systems, and may include:

- Plans for on-project law enforcement and other activities by external agencies
- Coordination with other projects to minimize cumulative impact
- Coordination with agencies that manage signal operations
- Plans to maintain access for emergency vehicles, school buses, transit, etc.
- Plans to minimize impacts to major traffic-generating events

3.2.4 Goal 4: Make wetlands mapping data easily accessible and available to the public:

Action E-4A: Ensure wetlands information is available at the existing MSB Permit Center.

Action E-4B: Provide space at the MSB Permit Center for agency personnel (USACE) to be available to the public to provide information on the permitting process on a regularly scheduled basis.

Action E-4C: Edit or update MSB wetlands webpage so that it is user-friendly and provides comprehensive wetlands information.

3.3 Conservation and Protection

Conservation and protection are methods that promote and implement good stewardship of wetland resources. These methods involve the management of wetlands to prevent damages and losses, thus limit impacts to Mat-Su's economy, lifestyles, and environment.

3.3.1 Goal 1: Identify, conserve and protect wetlands that are important for water quality; fish and wildlife habitats; flood control; stormwater retention; and recreation opportunities to the benefit of the Mat-Su's economy, lifestyle and environment

Action CP-1A: Encourage development projects to address wetland protection and limit point and non-point sources of sedimentation and pollution to maintain water quality in wetlands, waterbodies, and groundwater.

Action CP-1B: Identify and assess wetlands for wildlife habitat to foster the health and diversity of wildlife populations as well as their related economic benefits.

Action CP-1C: Encourage the protection and conservation of riverine wetlands and woodlands and forested wetlands as they are of particular importance to salmon and fish populations.

Coordinate with groups such as the Mat-Su Salmon Partnership to prioritize and protect salmon and fish habitats including wetlands to ensure the continued health of fish populations and the positive recreational and economic impacts that the sport and commercial fishing provide the Mat-Su and region.

Action CP-1D: Institute wetland and watershed protections to limit the adverse economic costs of flooding and erosion and to enhance the retention and absorption of runoff.

Action CP-1E: Calculate the benefits and cost savings associated with incorporating wetlands into stormwater runoff management programs.

Action CP-1F: Demonstrate the importance of wetlands conservation and protection to year round outdoor recreation activities throughout

the Mat-Su and the tremendous economic and lifestyle benefits these activities bring to the Mat-Su.

Action CP-1G: Coordinate with groups like the Great Land Trust and other land trust organizations to purchase wetlands or establish conservation easements to the benefit of the Mat-Su's economy, lifestyle, and environment.

Action CP-1H: Prepare BMPs to address wetlands conservation and protection relative to water quality, fish and wildlife habitats, flood control, storm water management and recreation opportunities.

3.3.2 Goal 2: Use public outreach methods to enhance conservation and protection efforts

Action CP-2A: Identify appropriate locations to install interpretive signage about wetland functions and benefits. These signs could be installed at special or high-use wetlands complexes to let visitors know they should not travel through the area unless its soils or water are frozen. Interpretive signage could also discuss the benefits and functions of wetlands.

Action CP-2B: Establish an Adopt-A-Wetland Program that actively engages the public in wetland enhancement and increases awareness of wetland resources in the Mat-Su.

Action CP-2C: Identify present and future high-use motorized and non-motorized trails that are degrading wetlands throughout the Mat-Su. Coordinate with communities, user groups, and other interested stakeholders to protect, conserve or restore impacted areas.

Action CP-2D: Identify and promote wetland protection success stories using methods described in the Education Goal.

3.3.3 Goal 3: Work in concert with landowners and land developers to provide technical assistance to protect, conserve, enhance, and restore wetlands

Action CP-3A: Inform the landowners and developers of the importance and value of wetlands.

Action CP-3B: Conduct wetland workshops to provide landowners and developers with methods to protect and conserve wetlands on their property or within their developments.

Action CP-3C: Encourage the MSB Planning and Platting Divisions to work with developers to use Conservation or Clustered Development Subdivisions as a means to conserve wetlands as open space while allowing higher density development on the uplands.

Action CP-3F: In concert with public outreach, use volunteers and other community groups to manually remove invasive plant species.

Action CP-3G: Coordinate community creek cleanups in a Borough-wide creek cleanup program (e.g., Creek Day) as a tool to promote wetland awareness and education.

Action CP-3H: Consider establishing wetland trails and boardwalks where appropriate to minimize impacts to wetlands.

Action CP-3I: Continue to seek funds for demonstration projects to build rain gardens, construct boardwalks, enhance existing wetlands, integrate wetlands into storm water management systems, and restore streambanks and lakeshores.

3.3.4 Goal 4: Prioritize and implement protection and restoration of wetlands

Action CP-4A: Identify wetlands for priority conservation, protection, and restoration.

Action CP-4B: Identify existing practices that degrade wetlands. Identify and implement ways to change those practices

Action CP-4C: Develop management objectives with partners for specific wetlands types.

3.3.5 Goal 5: Investigate the possibility of establishing a local wetlands permitting structure for isolated and non-jurisdictional wetlands.

***Action CP-5A*:** Convene appropriate agency and MSB personnel to determine whether a local regulatory program is wanted or needed with special attention to areas currently meeting the definition of a wetland, but not under the jurisdiction of an agency. If so, determine steps for the MSB to establish this type of local regulatory program.

3.4 Science and Research

Wetlands science continually evolves as the understanding of wetlands and wetland habitats expands. This strategy recommends further research and evaluation of Mat-Su wetlands past, present, and future impacts to Mat-Su wetlands so that residents can better understand how to prevent negative impacts to wetlands.

3.4.1 Goal 1: Evaluate historic wetland changes and losses in the Mat-Su.

Action SR-1A: Create maps that show changes in wetlands over time.

Action SR-1B: Create maps that show changes in wildlife habitat, waterbodies, and wetlands functions and values.

Action SR-1C: Complete the mapping of all wetland areas in the Mat-Su to serve as a basis for future evaluations of successes and impacts.

Action SR-1D: Expand and update the Mat-Su "Status and Trends" report (Hall, JV, 2001. *Status and Trends of Wetlands in the Palmer/Wasilla*

ENGSTROM TO TRUNK ROAD CORRIDOR

Matanuska-Susitna Borough
PROJECT FACTS

Project Scope

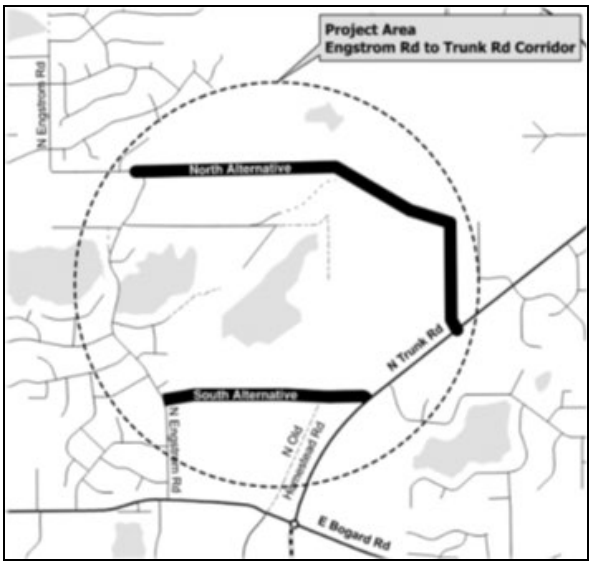
This project will provide connection from Engstrom Road to a segment of Trunk Road north of the Trunk-Bogard roundabout, reducing heavy traffic on Engstrom Road.

Benefits

Traffic Congestion Relief – New connection will provide alternative route for heavy traffic on Engstrom Road travelling to the Anchorage, Palmer and Wasilla areas for work, school and recreation.

Status

A reconnaissance engineering report has been completed. Preliminary field investigations and engineering efforts are planned for 2024. Pending the preliminary engineering results design and any needed right-of-way acquisition, utility relocation and finally construction will follow.



Project Schedule

The anticipated construction state is unknown currently.

Project Costs

Project costs are estimated at $19,200,000.

Contact Information

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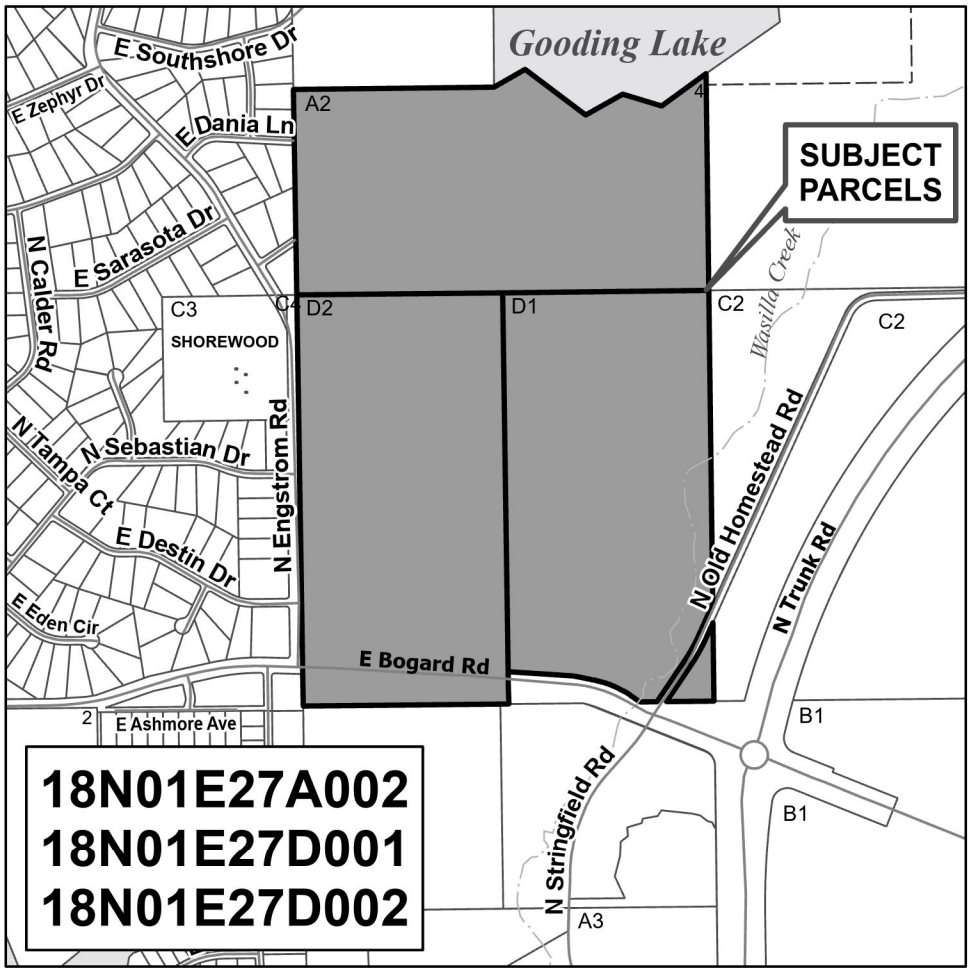
Matanuska-Susitna Borough
Public Works Department
Project Management Division
1-907-861-7711
Cole.Branham@matsugov.us

MAPS


Gooding Lake
E Southshore Dr
E Zephyr Dr
E Dania Ln
E Sarasota Dr
N Calder Rd
SHOREWOOD
C3
C4
A2
D2
D1
C2
SUBJECT PARCELS
Wasilla Creek
N Old Homestead Rd
N Trunk Rd
N Tampa Ct
N Sebastian Dr
N Engstrom Rd
E Destin Dr
E Eden Cir
E Bogard Rd
E Ashmore Ave
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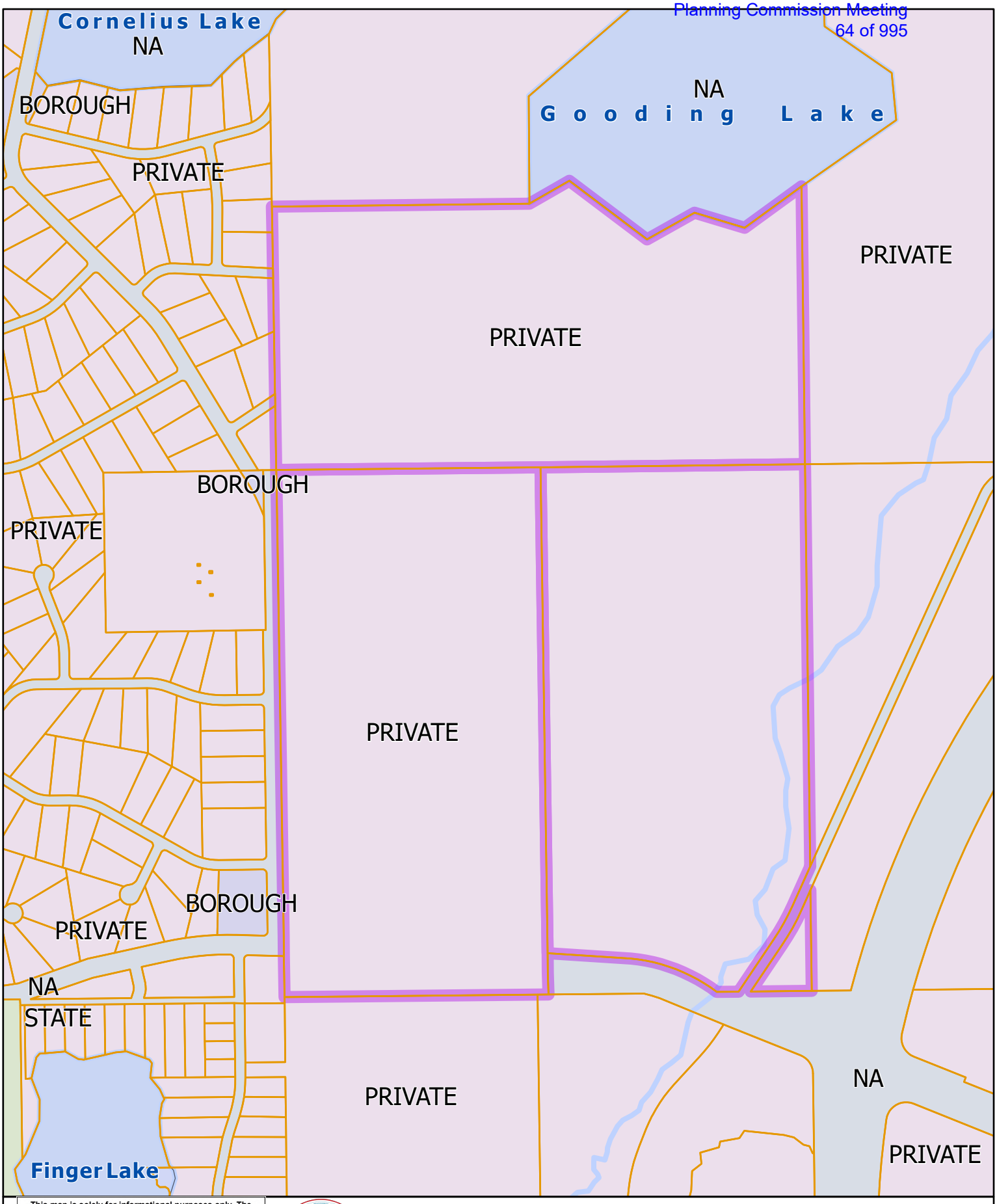
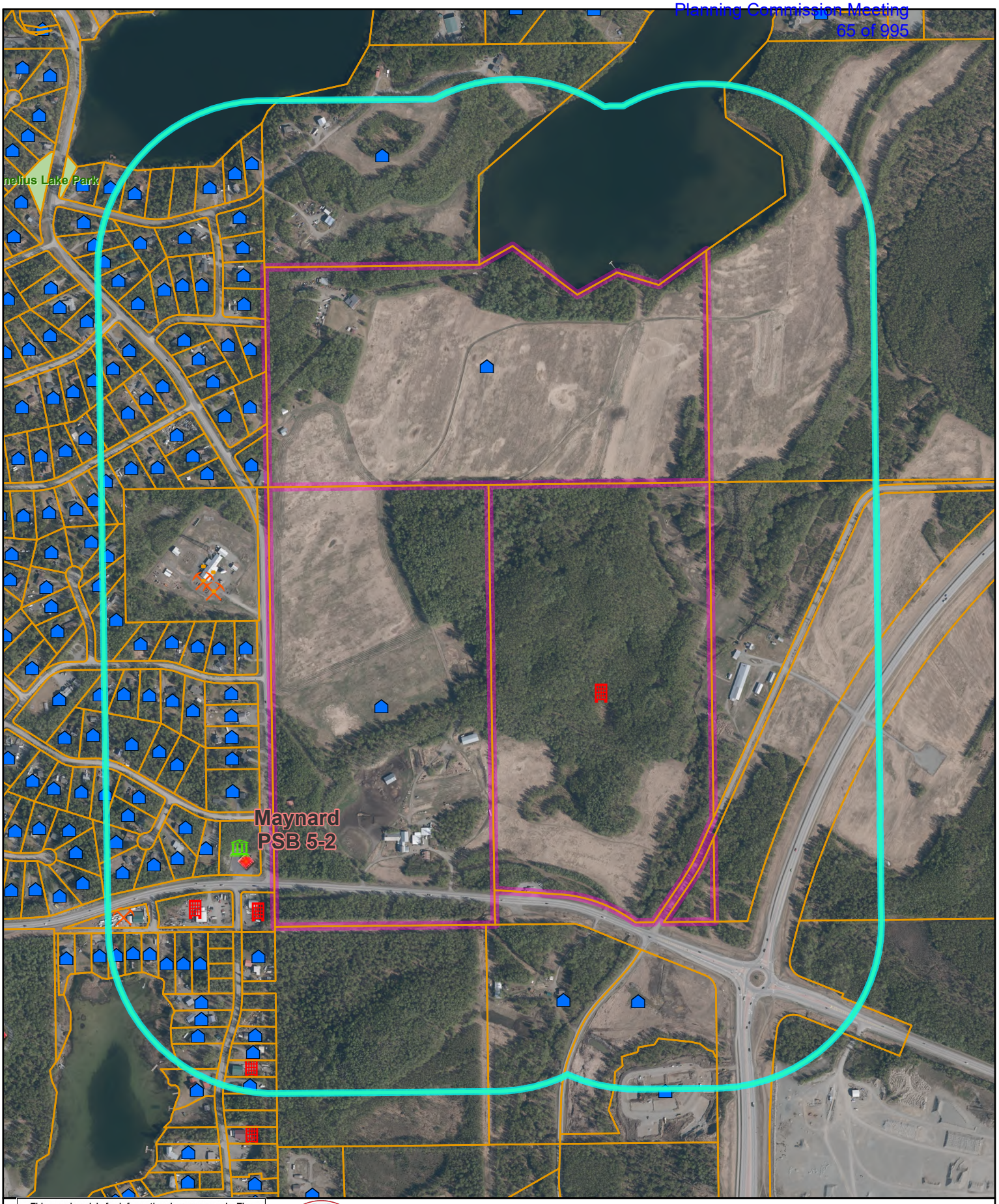


Land Ownership Map
Central Gravel Products

N
W E
S

0 500 1,000 Feet

MSB Development Services Division: 10/11/2024

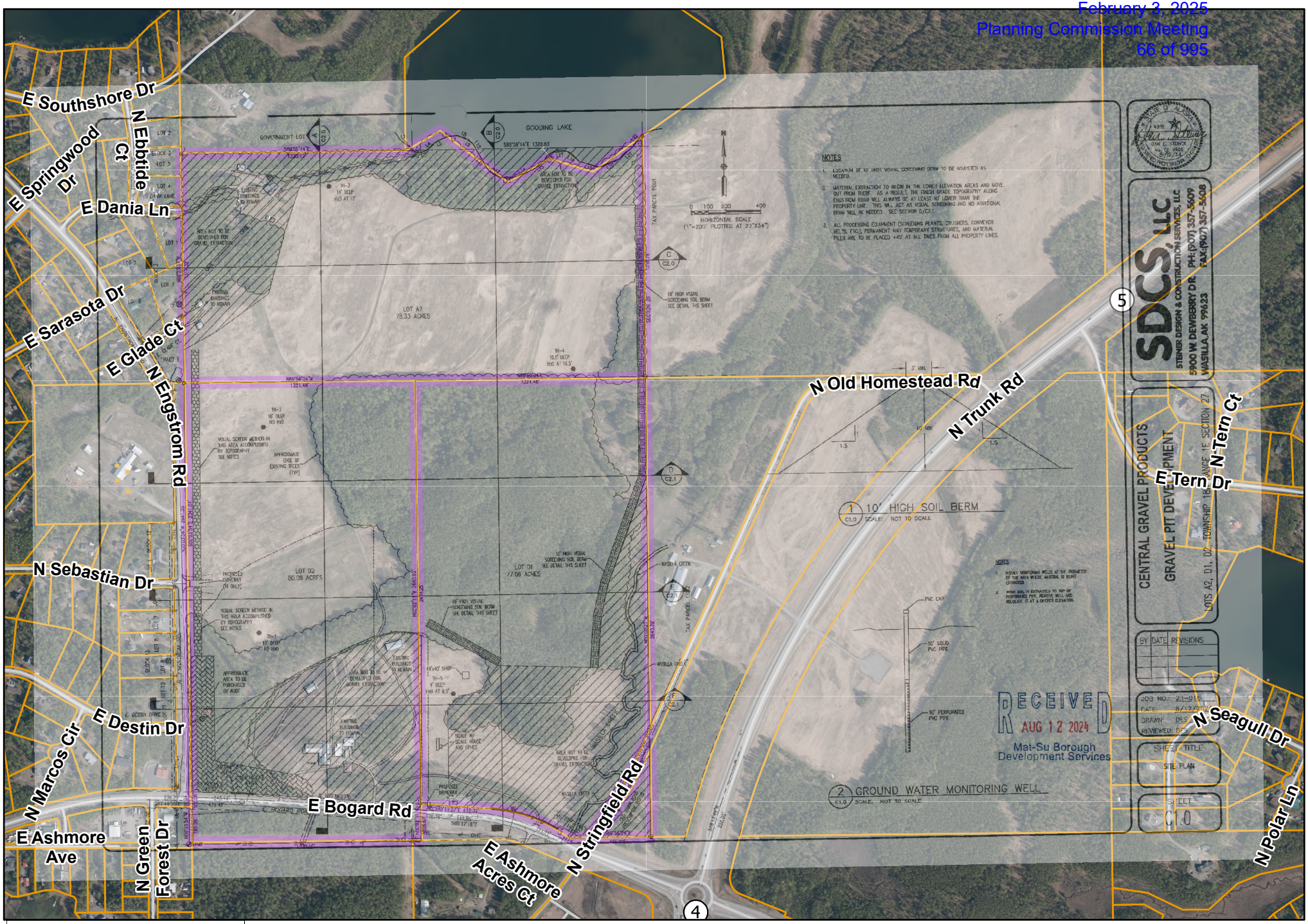


MSB Development Services Division: 10/22/2024

Land Use Map with 1000' buffer Central Gravel Products CUP

N
W E
S

0 400 800 Feet

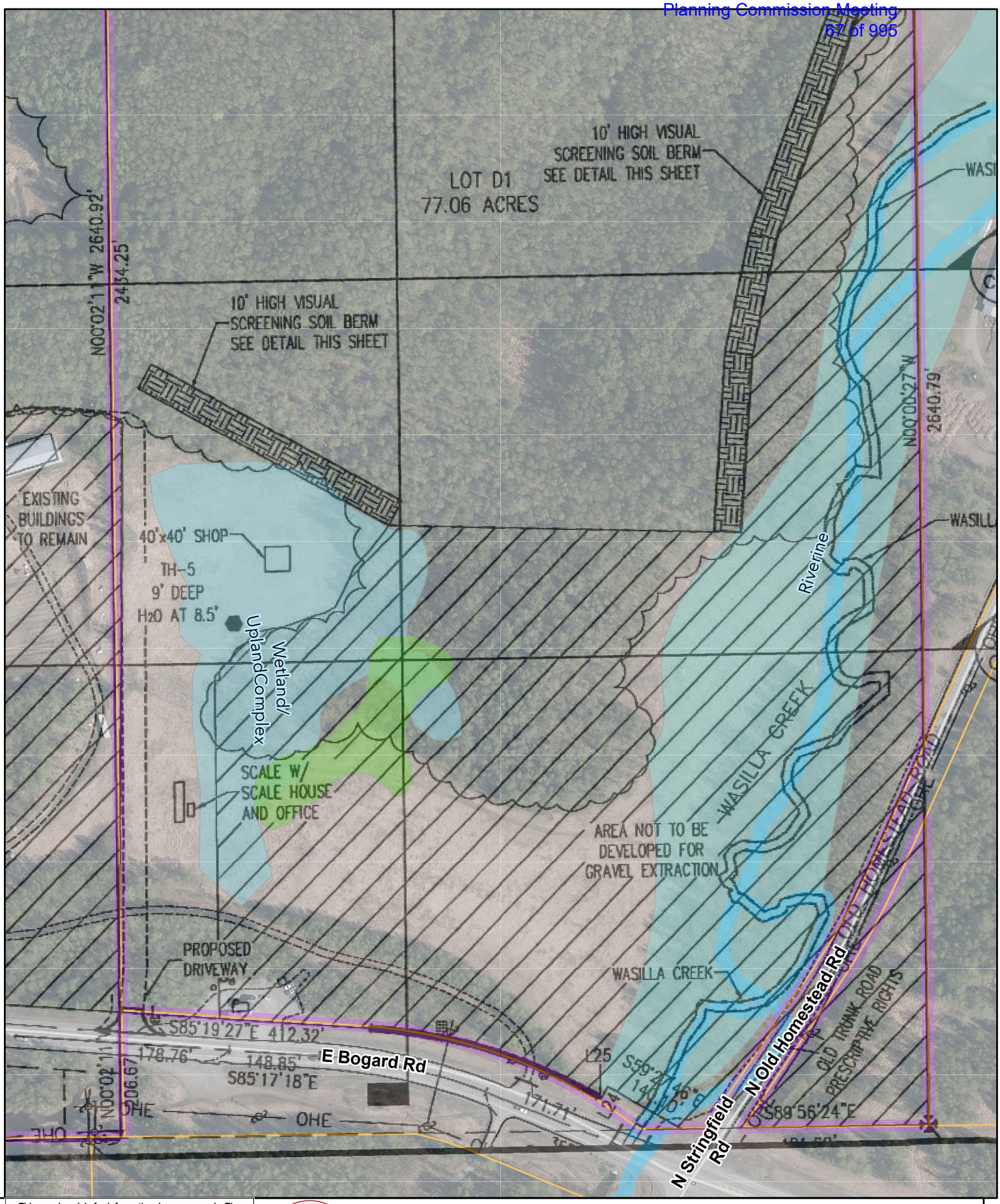


Site Plan Overlay
Central Gravel Products

MSB Development Services Division: 10/11/2024

N W E S

0 500 1,000 Feet

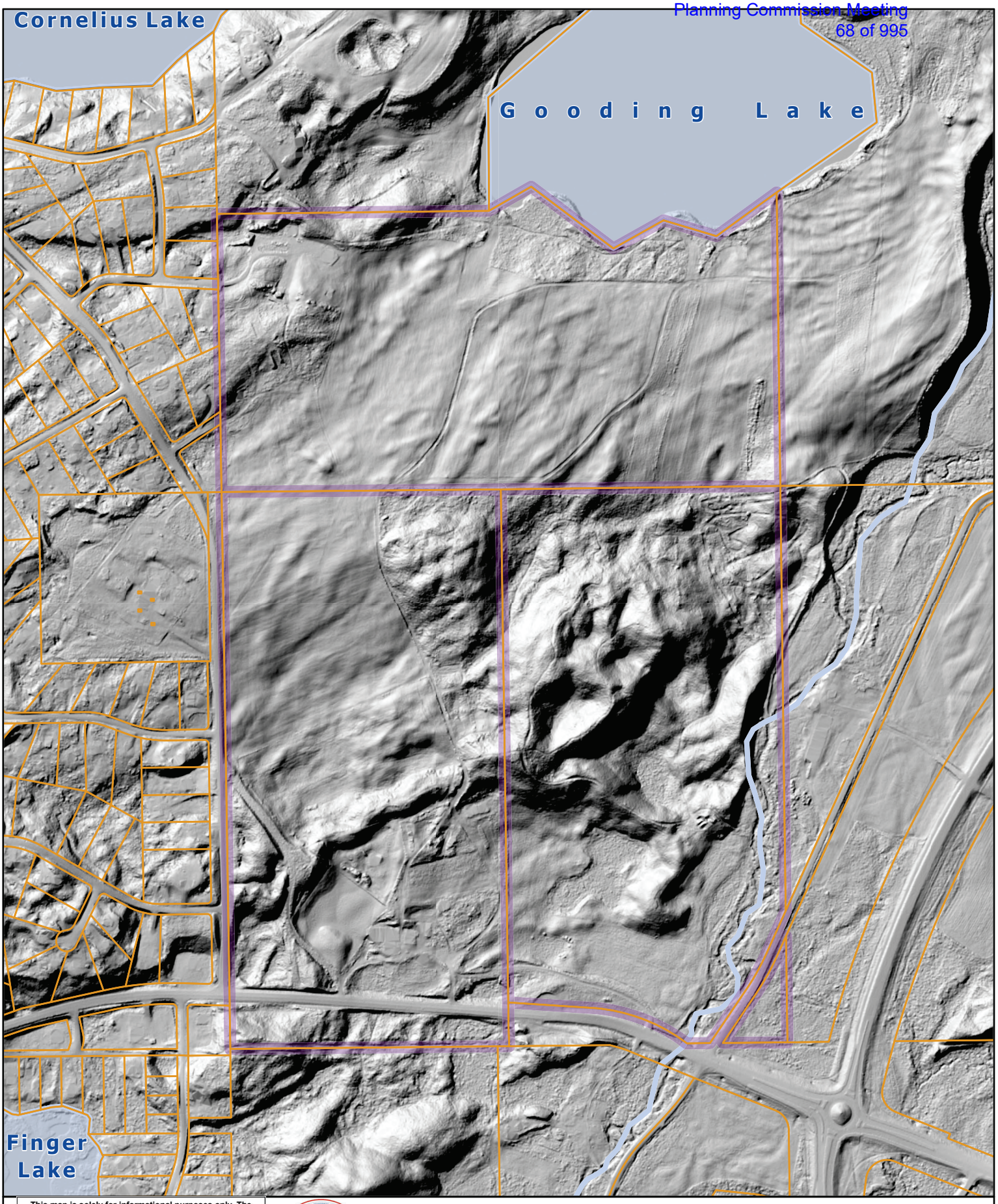


NWI & Cook Inlet Wetlands
Central Gravel Products

N
W E
S

0 150 300 Feet

MSB Development Services Division: 10/18/2024

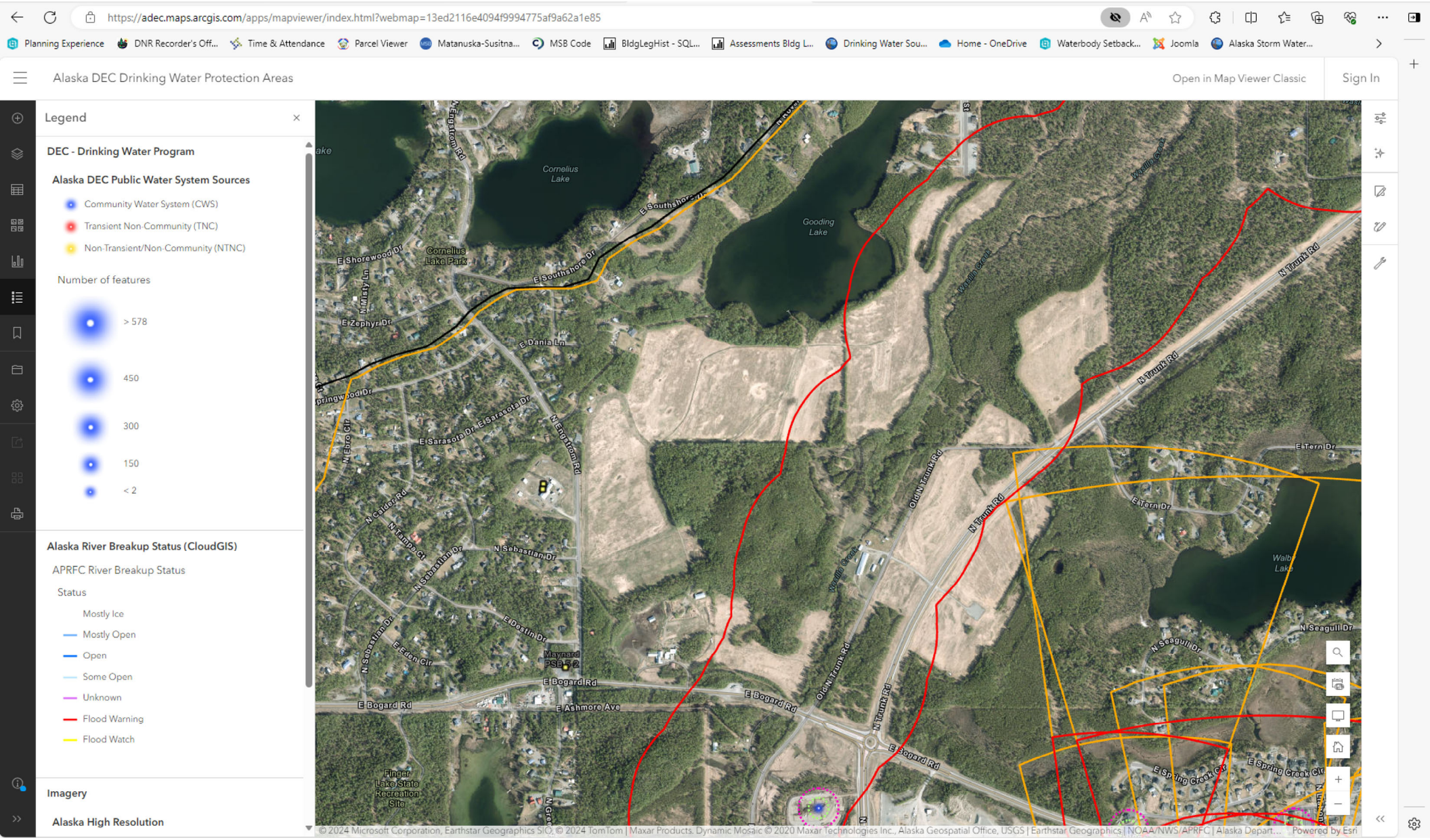


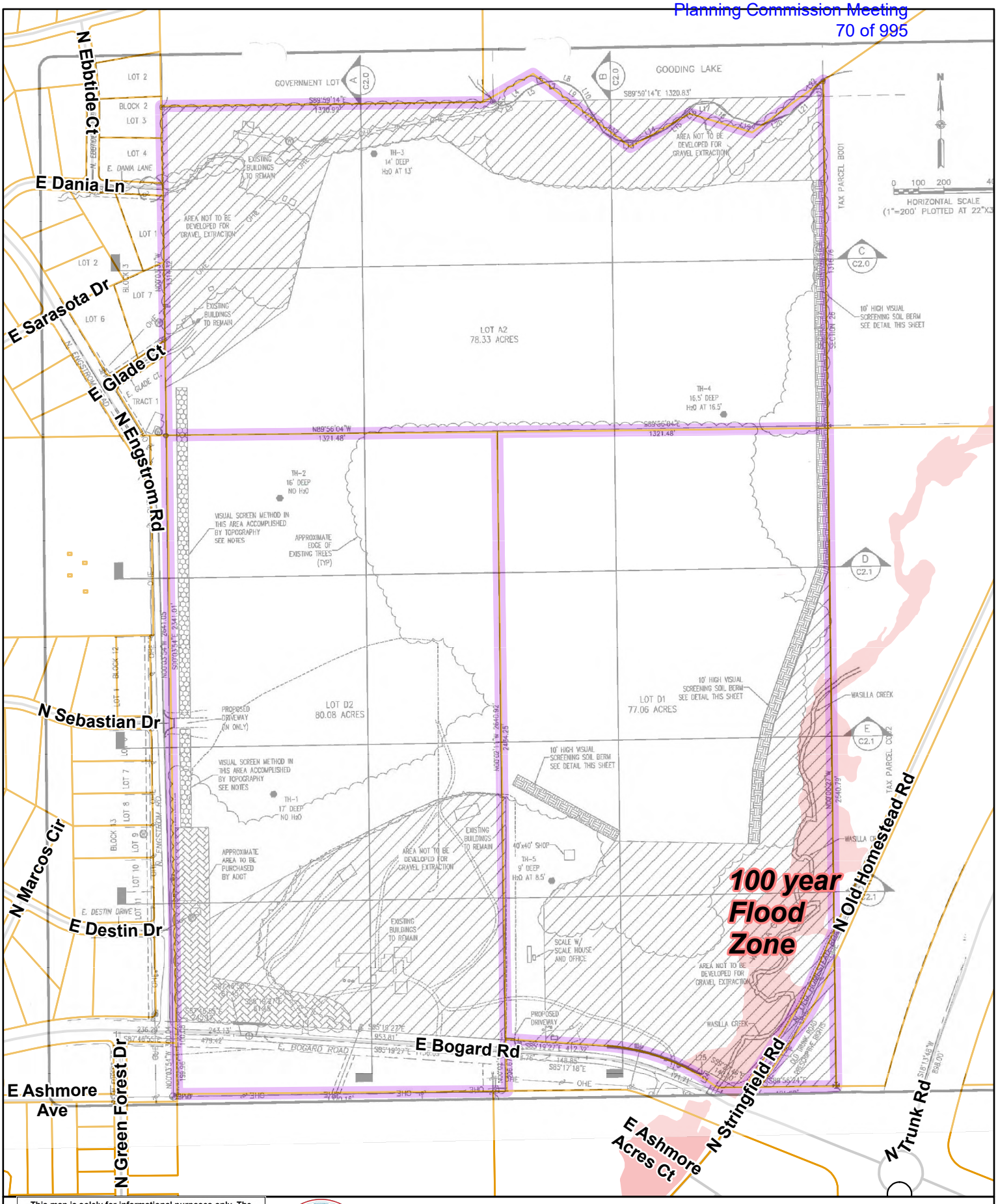
2019 Hillshade
Central Gravel Products

N
W E
S

0 390 780 Feet

MSB Development Services Division: 10/11/2024


https://adec.maps.arcgis.com/apps/mapviewer/index.html?webmap=13ed2116e4094f9994775af9a62a1e85
Planning Experience
DNR Recorder's Off...
Time & Attendance
Parcel Viewer
Matanuska-Susitna...
MSB Code
BldgLegHist - SQL...
Assessments Bldg L...
Drinking Water Sou...
Home - OneDrive
Waterbody Setback...
Joomla
Alaska Storm Water...
Alaska DEC Drinking Water Protection Areas
Open in Map Viewer Classic
Sign In
Legend
DEC - Drinking Water Program
Alaska DEC Public Water System Sources
Community Water System (CWS)
Transient Non-Community (TNC)
Non-Transient/Non-Community (NTNC)
Number of features
> 578
450
300
150
< 2
Alaska River Breakup Status (CloudGIS)
APRFC River Breakup Status
Status
Mostly Ice
Mostly Open
Open
Some Open
Unknown
Flood Warning
Flood Watch
Imagery
Alaska High Resolution
Cornelius Lake
Gooding Lake
Walby Lake
Cornelius Lake Park
E Southshore Dr
E Shorewood Dr
N Misty Ln
E Zephyr Dr
E Dania Ln
E Springwood Dr
E Sarasota Dr
N Engstrom Rd
N Ebro Cir
N Calder Rd
N Tampa Ct
N Sebastian Dr
E Destin Dr
E Eden Cir
Maynard PSB 1-2
E Bogard Rd
E Ashmore Ave
Old N Trunk Rd
N Trunk Rd
E Tern Dr
N Seagull Dr
E Spring Creek Cir
Finger Lake State Recreation Site
Wasilla Creek
© 2024 Microsoft Corporation, Earthstar Geographics SIO, © 2024 TomTom | Maxar Products, Dynamic Mosaic © 2020 Maxar Technologies Inc., Alaska Geospatial Office, USGS | Earthstar Geographics | NOAA/NWS/APRFC | Alaska Depart... Powered by Esri



Flood Hazard Area
Central Gravel Products

0 400 800 Feet

MSB Development Services Division: 10/11/2024

PUBLIC NOTICING

CENTRAL GRAVEL PRODUCTS

UNITED STATES POSTAL SERVICE®

Certificate of Bulk Mailing — Domestic

Fee for Certificate

Up to 1,000 pieces (1 certificate for total number)

For each additional 1,000 pieces, or fraction thereof

Duplicate Copy ☐

Use Current Price List (Notice 123)

Postage: Mailers must affix meter, PC Postage®, or (uncanceled) postage stamps here in payment of total fee due.

Acceptance employee affixed (by round-date

If payment of total fee due is being paid by Permit Imprint, include the *PostalOne!*® Transaction Number here: _____

Number of Identical Weight Pieces	Class of Mail	Postage for Each Mailpiece Paid	Number of Pieces to the Pound
357	1st	☐ Verified	45

Total Number of Pounds	Total Postage Paid for Mailpieces	Fee Paid
71bs 10.2oz	246.33	12.50

Mailed For	Mailed
Dev. Ser. Permits	I. Fodge

Postmaster's Certification

It is hereby certified that the number of mailpieces presented and the associated postage and fee were verified. This certificate does not provide evidence that a piece was mailed to a particular address.

(Postmaster or Designee)

PS Form **3606-D**, January 2016 PSN 7530-17-000-5548

See Reverse for Instructions

Number	Tax Account	OWNER_1	MAILING_ADDRESS_LINE_B	MAILING_A	MAILING_A	MAILING_A	Buyer_Nam	Buyer_Nam	Buyer_Mail	Buyer_Mail	Buyer_Mail	Buyer_Mail	Buyer_Mailing_Address_Zip
1	1344B09L024	HARDWICK KYLE	PO BOX 2365	PALMER	AK	99645-2365							
2	7671000L007A	HUPPERT LOGAN R	4350 N ENGSTROM RD	WASILLA	AK	99654							
3	1344B10L024	MOORE DAVIS EDWARD	3505 N PIERCE CIR	WASILLA	AK	99654-4659							
4	1344B09L041	GROTH CHRISTIN, STACKHOUSE LORI J	3200 N TALBOT CIR	WASILLA	AK	99654							
5	1344B08L008	MCLIN JASON	7400 E SPRINGWOOD DR	WASILLA	AK	99654-4664							
6	6323000L009	AYERS CASEY & JENNIFER	4428 N ENGSTROM RD	WASILLA	AK	99654							
7	18N01E26B001	KIRCHER RALPH O	27517 46TH AVE S	AUBURN	WA	98001-2010							
8	6111000L006	RICHARDSON SPENCER P & BREANA L	3601 E RUTH DR	WASILLA	AK	99654							
9	1344B10L008	MENDOZA HECTOR RUBEN	PO BOX 242643	ANCHORA(	AK	99524							
10	5489000L005	BCH PROPERTIES LLC, %BONLOE C HAMMER III	PO BOX 872941	WASILLA	AK	99687							
11	1344B09L030	BOWEN VERDIE & CATHERINE	3500 N CALDER RD	WASILLA	AK	99654							
12	7317000L002	MICHAEL RONALD J & KELLY R	PO BOX 875558	WASILLA	AK	99687-5558							
13	6111B04L010	BULL DONALD C & REBECCA J	PO BOX 4221	PALMEER	AK	99645-4221							
14	1344B03L002	SHUEY KONSTANSE K	4328 HURON AVE	CHEYENNE	WY	82001-2015							
15	3585B04L002A	LOWE ALEXANDER	PO BOX 3973	PALMER	AK	99645-3973							
16	1344B09L048	LESLIE EILEEN S	2300 N ARABIAN LN	PALMER	AK	99645							
17	1344B14L024	PRITCHETT JEFFERY, SAGE HALLI	7425 E EDEN CIR	WASILLA	AK	99654							
18	4907B01L003	GRECO PETER B & TRACY L, % RED WING SHOES OF AK IN	530 E BENSON BLVD	ANCHORA(	AK	99503-4155							
19	6111000L001	RICHARDSON SPENCER P L	3601 E RUTH DR	WASILLA	AK	99654							
20	1344B12L001	HUFFMAN JESSE A & SANDRA E	3350 N ENGSTROM RD	WASILLA	AK	99654							
21	4907B01L009	SCHOPPE MELANIE	1150 S COLONY WAY, STE 3 PMB 318	PALMER	AK	99645							
22	1344B08L017	PRATTE BURT L & DONNA M	3060 N LAZY EIGHT CT, PMB 371 STE 2	WASILLA	AK	99654-4331							
23	1344B10L010	WINN EVAN A & ARLINE R	2521 E MOUNTAIN VILLAGE D, STE B PMB 575	WASILLA	AK	99654-7336							
24	6111B02L007	MCKAY DONALD A & MIRIAM	39283 COULTER AVE	SOLDOTNA	AK	99669							
25	6111B02L005	REISNER RONALD R TR AGMT	PO BOX 1385	PALMER	AK	99645-1385							
26	6400000L017	LINDFORS SHERRI LEE	2850 N GREEN FOREST DR	PALMER	AK	99645							
27	1344B10L013	DOUGLAS CARRIE	PO BOX 873071	WASILLA	AK	99687-3071							
28	5606000L006C	CRAWFORD LOREN J & TONYA	7250 N SABASTIAN DR	WASILLA	AK	99654-4665							
29	6111B02L001	RAYMOND CHRIS A	PO BOX 876385	WASILLA	AK	99687-6385							
30	6111B01L005	BELL JANE E	7129 E FINGER COVE DR	PALMER	AK	99645							
31	6111B04L003	HILL BRETT & EMILY	PO BOX 366	PALMER	AK	99645							
32	1344000T003	KEENER JOHN & ANGIE	PO BOX 1475	PALMER	AK	99645							
33	1344B11L003	DEFREEST JAMES W & NANCY S	PO BOX 870251	WASILLA	AK	99687-0251							
34	1344B09L028	THOMAS ROBERT R JR & SARAH	3560 N CALDER RD	WASILLA	AK	99654-4644							
35	9997000U0193	AT&T MOBILITY, ATTN PROPERTY TAX DEPT	1010 PINE 9E-L-01	ST LOUIS	MO	63101							
36	1344B09L034	KAKARUK LINDA P	3400 N CALDER RD	WASILLA	AK	99654-4717							
37	1344B13L012	BARTON BETTY A	716 CLAYTON ST	DENVER	CO	80206							
38	6111B01L013	SKEEN GARY L & KAREN S	2500 KOSLOSKY CT	PALMER	AK	99645							
39	6111000L015	LEUTZINGER JOSHUA D & SARA F	PO BOX 770002	EAGLE RIVI	AK	99577							
40	1344000T007	BIXBY MARY J	7214 N SEBASTIAN DR	WASILLA	AK	99654-4665							
41	5489000L004	HAMMER BONLOE III & TONJA	PO BOX 872941	WASILLA	AK	99687-2941							
42	5572000L001	KOHLS LYLE WAYNE, ENGEBRETSON KOHLS CHERYL ANN	8367 E STORMY HILL CIR	WASILLA	AK	99654							
43	1344B07L037	ROTH JILL A, ROTH ROY A EST	7335 E SPRINGWOOD DR	WASILLA	AK	99654-4618							
44	1344B07L040	HOWARTH MICHAEL J& GINA M	3751 N BREEZE CT	WASILLA	AK	99654							
45	1344B04L004	JACKSON AALIYAH, TALERICO JACOB	PO BOX 3041	PALMER	AK	99645							
46	1344B05L040	SILVER LINING PROPERTIES LLC	1150 S COLONY WAY, SUITE 3 PMB 605	PALMER	AK	99645							
47	1344B10L002	HOBBS KIM M & MOLLY P	3630 N ENGSTROM RD	WASILLA	AK	99654-4672							
48	1344B05L014	HANSEN MARCIA	PO BOX 3865	PALMER	AK	99645-3865							
49	6111000L009	SPATAFORE MARY R	7700 E ASHMORE AVE	WASILLA	AK	99654							
50	6111000L016A	BLACK JEREMY W	2855 N GREEN FOREST DR	WASILLA	AK	99654-9390							
51	1344B14L010	HOEFFERLE TERRANCE T, BAIM VIRGINIA R	PO BOX 2921	PALMER	AK	99645-2921							
52	1344B07L019	MINCHEW STACY, MCFARLAND TYLER	1945 NORENE ST	ANCHORA(	AK	99508							
53	1344B13L003	BOWELL ROXANNE B	PO BOX 3241	PALMER	AK	99645							
54	1344B05L022	SAXTON FLORENCE	PO BOX 876748	WASILLA	AK	99687-6748							
55	1344B10L001	HARRIS ROBERT E LVG TR TRE	3600 N ENGSTROM RD	WASILLA	AK	99654-4672							
56	6323000L004	DONOHO KEVIN R & MARY J	4250 N ENGSTROM RD	WASILLA	AK	99654-4709							
57	5572000T00B	MCMAHAN CHARLES B & SANDRA L	PO BOX 110	GAKONA	AK	99586-0110							
58	6111B04L007	UKENA BRANDON JAY, UKENA HEATHER LYNNETTE	PO BOX 873663	WASILLA	AK	99687-3663							
59	6111000L004	VANASSCHE JOSHUA M	PO BOX 304	PALMER	AK	99645-0304							
60	1344B09L043	HUFSTEDLER AMY	3100 N TALBOT CIR	WASILLA	AK	99654-4639							
61	1344B09L020	BRANHAM KIRBY & MARISSAH	3585 N EBRO CIR	WASILLA	AK	99654							
62	1344B10L011	BEANS AGNES L	PO BOX 2645	PALMER	AK	99645							
63	5489000L002	NARDINI NEIL A & STACY M	2451 N LARKSPUR HILL CIR	PALMER	AK	99645							
64	1344B14L013	FLEURY LANCE T	PO BOX 2566	PALMER	AK	99645							
65	1344B11L001	POND TYLER & ANDREA	3201 N CALDER RD	WASILLA	AK	99654							
66	1344B10L021	ANDERSON KENNETH S & MARGARET	3430 N PIERCE CIR	WASILLA	AK	99654-4629							

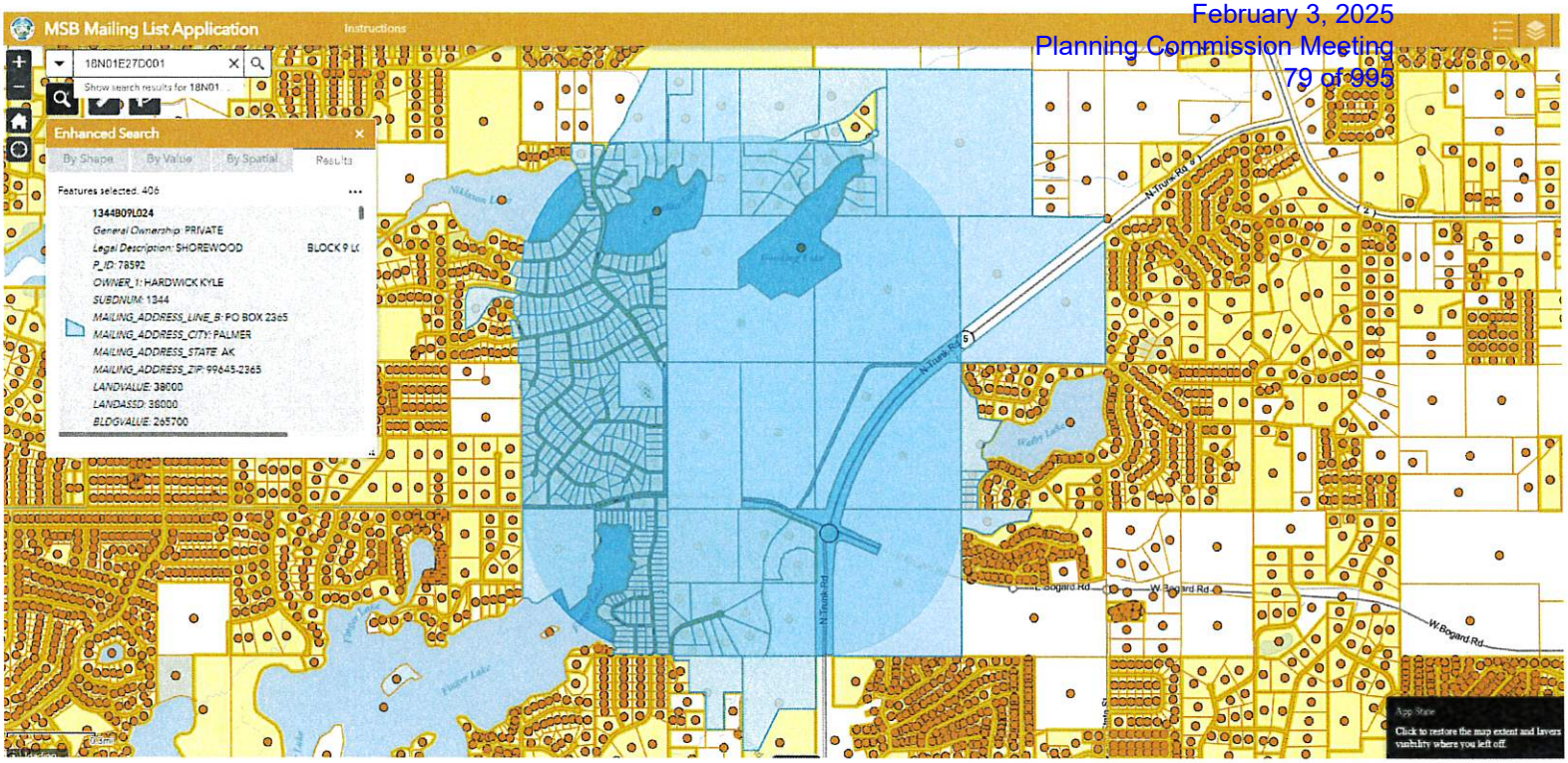
67	1344B09L012	PADILLA OLGA S	PO BOX 872465	WASILLA	AK	99687
68	1344B14L022	STANLEY CORY J & SASHA R	7480 E DESTIN DR	WASILLA	AK	99654
69	1344B04L010	FERRIS LARRY M & RHODORA P	3966 N EBBTIDE CT	WASILLA	AK	99654-4707
70	1344B09L036	LASCHEN JEREMY J A, SWENSON MIKAYLA J	3330 N CALDER RD	WASILLA	AK	99654
71	5489000L001	COFFMAN DONALD G & LEAH M	2425 N LARKSPUR HILL CIR	PALMER	AK	99645
72	6111B02L002	WHEELER ZACHARY J & HEIDI L	10820 W M AVE	KALAMAZO	MI	49009-9431
73	1344B12L002	PRITT JOSEPH & JACQUELINE	7701 N SEBASTIAN DR	WASILLA	AK	99654
74	6111000L022	LEIFER SHERMAN J	2700 N GREEN FOREST DR	PALMER	AK	99645
75	1344B11L006	STARLING PATSY A	PO BOX 2775	PALMER	AK	99645-2775
76	1344B10L004	BECKMAN JOSEPH & KATRINA	7560 E SARASOTA DR	WASILLA	AK	99654-4694
77	1344B05L017	COLLMAN BRENDA J	PO BOX 872331	WASILLA	AK	99687-2331
78	1344B07L031	BEZOLD RANDALL S	PO BOX 3258	PALMER	AK	99645-3258
79	1344B08L002	BIRKETT TERESA ANN	16259 SE 8TH ST	BELLEVUE	WA	98008
80	4907B01L005	SWIFUL CHANNING E & KATYE L	254 PRIVATE RD, 2961	GONZALES	TX	78629
81	4486000L001A	MCMULLEN RUTH	4517 N ROVER RIDGE CIR	WASILLA	AK	99654-9357
82	1344B07L013	LEUENBERGER KURINA LORAS	PO BOX 3113	PALMER	AK	99645
83	4335000L002	GASTRICH CYNTHIA A	4359 N ROVER RIDGE CIR	WASILLA	AK	99654-9340
84	7932000L002A	HALE MICHAEL J & KIM M	PO BOX 873786	WASILLA	AK	99687-3786
85	1344B05L004	RANDOL PAMELA M	7405 E ZEPHYR DR	WASILLA	AK	99654-4691
86	1344B01L001	HAHN FAMILY TR, HAHN LESSIE JANE TRE	PO BOX 875773	WASILLA	AK	99687-5773
87	6111B01L007	MARCELLUS ERIC L & LYNNETTA L	19868 STONEHILL DR	EAGLE RIVI	AK	99577-9014
88	1344B14L018	BRUECHET RICHARD D & TONYA L	7620 E DESTIN	WASILLA	AK	99654
89	1344B10L017	HENNESSY RICHARD ELGIN, RABSON MICHAEL OLIVIA	3361 N TAMPA CT	WASILLA	AK	99654-4641
90	1344B08L001	BANNON BRANDON & KATHARINE	7590 E SPRINGWOOD DR	WASILLA	AK	99654-4679
91	1344B07L035	SMITH MATTHEW P	7385 E SPRINGWOOD DR	WASILLA	AK	99654
92	1344B07L023	RON KUZINA BUILDERS LLC	4000 N SIERRA ST	WASILLA	AK	99654-4257
93	1344B01L007	SHIELDS NATHAN R & WHITNY	7551 E SOUTHSHORE DR	WASILLA	AK	99654
94	1344B09L016	NYSTROM 2014 TR, NYSTOM JOHN H TRE	PO BOX 2975	PALMER	AK	99645-2975
95	8281000T001	PALMER FAMILY ASSOCIATES II	430 E STATE ST, STE 100	EAGLE	ID	83616
96	1344B09L025	SIMASKO RILEY M	3630 N CALDER RD	WASILLA	AK	99654-4622
97	1344B13L007	KROSTEK WILLIAM W	3270 N ENGSTROM RD	WASILLA	AK	99654
98	1344B05L038	LEA SHAUN R & JACQUELINE L	3900 N MISTY LN	WASILLA	AK	99654
99	6111B02L010	KNIK TRIBE	PO BOX 871565	WASILLA	AK	99687-1565
100	1344B10L016	THOMAS AARON JOSEPH & KAYLA MARIE	PO BOX 875115	WASILLA	AK	99687
101	1344B10L006	CARROLL GWEN L	7500 E SARASOTA DR	WASILLA	AK	99654
102	18N01E34A003	LARKSPUR LLC	4150 W AVIATION AVE	WASILLA	AK	99654
103	1344B13L018	CALUGAN BRIAN L	PO BOX 2490	PALMER	AK	99645
104	5572000L005	SHERMAN RANDAL BRIAN & JENNY LYNN	PO BOX 876476	WASILLA	AK	99687-6476
105	4907B01L001	WILLIAMSON ALAN J JR, WILLIAMSON CORY C	7564 E BETTER DUCK CIR	WASILLA	AK	99654
106	1344B13L004	CLOUD JEFFREY L&BARBARA A	7650 N SEBASTIAN DR	WASILLA	AK	99654
107	1344B02L001	KUHNKE JOHN W JR & CHERYL A	7770 E SOUTHSHORE DR	WASILLA	AK	99654-2001
108	1344B02L004	TOLMAN TRAVIS	7775 E DANIA LN	WASILLA	AK	99654
109	1344B07L030	PAOLETTI GIACINTO	PO BOX 4356	PALMER	AK	99645
110	1344B11L008	LOBDELL BRADLEY T& STACEY	1061 E AGATE LN	WASILLA	AK	99654-3440
111	1344B01L006	TAYLOR LEE	PO BOX 99	PALMER	AK	99645
112	1344B05L018	CERDA CLINTON P	7455 E SHOREWOOD DR	WASILLA	AK	99654-4615
113	6111B03L001	KINNOWR CRAIG & HEATHER A	500 W SUNFLOWER CIR, #F12	WASILLA	AK	99654-1365
114	6111B03L007	ARNDT THOS MATTHEW	PO BOX 874506	WASILLA	AK	99654-4506
115	6111000L021A	TOLSON CAROLYN M	PO BOX 873933	WASILLA	AK	99687-3933
116	5489000L003	BOOTHE MICHALE L, SEARS GENOA K	PO BOX 670814	CHUGIAK	AK	99567
117	1344B13L001	CLARK RYAN J & TARA K	PO BOX 3067	PALMER	AK	99645-3067
118	1344B09L027	HENDERSON RICHARD A& CONI	3230 E PALMER-WASILLA HWY	WASILLA	AK	99654
119	1344B07L024	NESS REV LVG TR, NESS CRAIG S TRE	PO BOX 873622	WASILLA	AK	99687
120	7317000L001	PETERSEN JON-MARC	4212 N AIRFIELD ST	WASILLA	AK	99654
121	6323000L001	PREVOST DOUGLAS, MCLEOD-PREVOST MARCIE DAHN	4200 N ENGSTROM RD	WASILLA	AK	99654
122	18N01E26A003	LOHMANN-OLSON FAMILY LLLP	13379 506TH AVE	STORY CITY	IA	50248
123	6111B04L006	WERNETTE NICHOLAS	PO BOX 2211	PALMER	AK	99645-2211
124	5489000L009	ROLSTON MICHAEL T, ROLSTON BRANDI M	PO BOX 876471	WASILLA	AK	99687-6471
125	8075000L002	ASHMORE JAMES J, ASHMORE AMELITA M	PO BOX 2405	PALMER	AK	99645
126	6111000L019A	RAKOSKI GREGORY, JONES MARGOT	PO BOX 248	TALKEETNA	AK	99676-0248
127	18N01E27C003	ALASCOM INC, ATTEN PROP TAX DEPT	1010 PINE ST # 9E-L-01	SAINT LOU	MO	63101-2015
128	5489000L006	WOODS LOETTA M, STE F	3719 E MERIDIAN LOOP	WASILLA	AK	99654
129	1629000T00A-1	SHORT ALLEN E & NICHOLE A	9850 E STRAND DR	PALMER	AK	99645
130	1344B07L039	MASTNY ETHAN & PATIENCE	7141 E BREEZEWOOD RD	WASILLA	AK	99654-4608
131	18N01E22D015	MILLER LEWIS E JR & VIVIAN	PO BOX 668	PALMER	AK	99645-0668
132	1344B14L027	JAMESON PROSS FAMILY TR, JAMESON K & PROSS J TRES	PO BOX 876093	WASILLA	AK	99687
133	18N01E22D010	COCHRAN STEPHEN& M LVG TR, COCHRAN STEPHEN WM TRE COCHRAN MARY JANE	PO BOX 873124	WASILLA	AK	99687-3124

134	1344B04L005	BAKER VICKI J	3831 N ENGSTROM RD	WASILLA	AK	99654-4626
135	1344B10L026	STUART ERIC CHARLES & AMANDA	PO BOX 110115	ANCHORAI	AK	99511-0115
136	1344B12L004	HALL DIXON & LINDA	PO BOX 870056	WASILLA	AK	99687-0056
137	4611000T008A	AK RELIABLE PROPERTIES LLC	2150 N SPRUCE DR	WASILLA	AK	99654
138	1344B05L036	LOGAN DOUGLAS W	PO BOX 180	PALMER	AK	99645-0180
139	1344B07L021	VIAL STEVEN D	7300 E ZEPHYR DR	WASILLA	AK	99654-4723
140	1344B10L015	KENDALL KEITH C & KELLY D	PO BOX 1871	JULIAN	CA	92036
141	1344B09L042	MORRIS JEANEE M	3150 N TALBOT CIR	WASILLA	AK	99654
142	4588000T001	CASE REBECCA B, %REBECCA TURNER	8376 E STORMY HILL CIR	WASILLA	AK	99654-1006
143	1344B05L005	KOSYGINA MARINA	PO BOX 3817	PALMER	AK	99645
144	1344B09L014	PARAZOO DANNY & ELIZABETH	3530 N EBRO CIR	WASILLA	AK	99654
145	7372B08L006A	RUBY FRANCIS L & CAROLE J	7450 E SPRINGWOOD DR	WASILLA	AK	99654
146	1344B01L004	MATHEWSON JAMES A, GARRISON LARRY G & LYNN C DEWALT VICKI J	1600 BALLEWTOWN RD	BLUE RIDG	GA	30513-5337
147	1344B09L017	ROMINSKE KEITH A & DAWN D	3525 N EBRO CIR	WASILLA	AK	99654-4669
148	1344000T004	BAIR THERON LOGAN	PO BOX 3298	PALMER	AK	99645
149	6111B01L012	ROBERTSON HELEN E LVG TR	10701 STROGANOF DR	ANCHORAI	AK	99507
150	5606000L006A	SIKAT GEO III&CASSANDRA A	7330 E SEBASTIAN DR	WASILLA	AK	99654-4665
151	1344B08L013	KARKOWSKI PAUL R	PO BOX 1194	PALMER	AK	99645
152	6111B01L016	ATTEBERRY JOINT REV TR	705 S VIOLET CIR	PALMER	AK	99645-9351
153	6111000L007	ASHMORE LLC	3150 N SEAGULL DR	PALMER	AK	99645
154	1344B13L014	TROXELL ALEXANDRIA D	7625 E DESTIN DR	WASILLA	AK	99654
155	4606000L002	ANDERSON TIMOTHY L & MARY P	PO BOX 870854	WASILLA	AK	99687-0854
156	1344B09L035	MULLENEIX CODY W & PAOLINA	3360 N CALDER RD	WASILLA	AK	99654
157	1344B13L013	STRAUSS MICHAEL, WHEELES MACKENZIE	7655 E DESTIN DR	WASILLA	AK	99654
158	1344B07L033	WHITE RINDI L	7435 E SPRINGWOOD DR	WASILLA	AK	99654
159	1344B09L015	PETERSON JUSTIN KYLE, PMB 750	205 E DIMOND BLVD	ANCHORAI	AK	99515-1909
160	1344B14L001	JEFFREY JOSEPH J IV	7130 N SEBASTIAN DR	WASILLA	AK	99654
161	1344B09L013	APOSIK ADAM D	PO BOX 2966	PALMER	AK	99645
162	6111B04L008	LINDFORS JASON	2505 GREEN FOREST DR	PALMER	AK	99645
163	6111000L002	WANGBERG JERROLD A & LISA M	303 VALLEYWOOD DR	FOREST	VA	24551
164	6111000L014	MILLER KEVIN, MILLER MALEA	PO BOX 876124	WASILLA	AK	99687
165	1344B13L002	AGUILAR TAMRA L	7600 N SEBASTIAN DR	WASILLA	AK	99654-4638
166	1344B10L020	PEREA CARLOS O	PO BOX 1634	PALMER	AK	99645
167	1344B03L005	GALBRAITH TERRIN	PO BOX 875323	WASILLA	AK	99687
168	1344B05L020	ANDERSON CURTISS E & K	PO BOX 983	PALMER	AK	99645-0983
169	1344B07L034	WALLACE DANE & TAMARA	7405 E SPRINGWOOD DR	WASILLA	AK	99654-4664
170	6323000L005	R & K FAMILY TR	4320 NE ENGSTROM RD	WASILLA	AK	99654
171	6111B02L008	STOVALL TOBY	PO BOX 2164	PALMER	AK	99645-2164
172	6111000T005	RICHARDSON SPENCER	3601 E RUTH DR	WASILLA	AK	99654
173	6111B02L004	SONNENBERG IRRV TR	17190 E MELIN RD	PALMER	AK	99645
174	6111B03L008	DOLLICK MATTHEW	PO BOX 873331	WASILLA	AK	99687-3331
175	6111000L017A	WHITE SEVANNA JADE, GREEN DANIEL VANCE	PO BOX 671749	CHUGIAK	AK	99567-1749
176	1344B14L006	NAGARUK LUTHER D & JERRI A, MOORE ANTHONY L	64612 DIAMOND RIDGE RD	HOMER	AK	99603-9283
177	6111B01L003	MILLER LINDA S	PO BOX 876461	WASILLA	AK	99687-6461
178	1344B14L016	FAUCETT ELLEN DEE	PO BOX 876486	WASILLA	AK	99687
179	1344B12L003	SCUDDER ANDREW JAMES, BANK OF AMERICA NTSA	7661 N SEBASTIAN DR	WASILLA	AK	99654-4638
180	1344B14L004	LAPINSKAS RAYMOND C JR	7420 E EDEN CIR	WASILLA	AK	99654
181	1344B04L007	JACKSON CHAD	PO BOX 2946	PALMER	AK	99645
182	18N01E22D012	ARNESON NANETTE, ARNESON MERWIN EST	8019 E SETTLEMENT AVE	WASILLA	AK	99654
183	18N01E27A001	RILEY HELEN	PO BOX 870127	WASILLA	AK	99687-0127
184	1344B09L032	HUFFORD LOGAN & CARRIE	3450 N CALDER RD	WASILLA	AK	99654-4717
185	1344B05L039	WRUCK SCOTT M & AVERY G	4812 WHITNEY ST	BELLINGH/	WA	98229
186	1344B11L010	EARLY PATRICIA ANN	PO BOX 876224	WASILLA	AK	99687-6224
187	1344B09L039	SCHWAB ROBERT	3290 N CALDER RD	WASILLA	AK	99654
188	8075000L003	TOLSON CAROLYN & ASHMORE ROBERT, BIANCHI MICHELLE & ASHMORE ELROY	PO BOX 873933	WASILLA	AK	99687
189	7884000L001	HINCHEE RUFUS C III	PO BOX 876616	WASILLA	AK	99687-6616
190	1344B07L025	HERRING PANSY LVG TR, # 2 PMB 130	3060 LAZY 8 CT	WASILLA	AK	99654-4331
191	4907B01L006	YUNKER DONALD L, SCHOPPE MELANIE J	1150 S COLONY WAY, STE 3 PMB 318	PALMER	AK	99645-6967
192	1344B11L009	MARTZ WM R & MARILYN R	PO BOX 4101	PALMER	AK	99645-4101
193	18N01E27D002	NANNY TR, HAVEMEISTER BOB A & JEAN M TRES	PO BOX 2349	PALMER	AK	99645
194	1344B14L008	MERIDETH JASON C & AMANDA	11244 FIREBALL ST	EAGLE RIVI	AK	99577-7867
195	1344B13L006	CLEGG JAY R	128 HIGH POPLAR DR	HAYESVILL	NC	28904-4731
196	1344B05L035	FINDLEY SUSAN L TR	1200 I ST, #405	ANCHORAI	AK	99501
197	7252B13L015A	SIELER JOSHUA B & LELA E	7561 E DESTIN DR	WASILLA	AK	99654-4623
198	1630B01L035	DAVIDSON JOEL B & JOY E, MENICK DONALD R & DEBORAH A	3040 SEAGULL DR	PALMER	AK	99645-9105
199	4463000L003	DUFFIN STEPHEN M & CYDNEY	7734 E SETTLEMENT AVE	WASILLA	AK	99654
200	1344B08L011	MURRELL JENNIFER S	7451 E SARASOTA DR	WASILLA	AK	99654-4694

201	1344B13L005	SWICK LANCE & CARLA	7670 N SEBASTIAN DR	WASILLA	AK	99654-4638
202	1344B08L009	MALLICK GREGG A	3060 N LAZY EIGHT CT, PMB 49 STE 2	WASILLA	AK	99654
203	4907B01L002	WILLIAMSON ALAN J & CORY C	7564 E BETTER DUCK CIR	WASILLA	AK	99654
204	1344B09L046	BARTEL LUCAS ZACHARY & CASSANDRA	7295 N SEBASTIAN DR	WASILLA	AK	99654
205	1344B13L009	EIMAN STEVEN R & BRENDA D	3220 N ENGSTROM RD	WASILLA	AK	99654
206	5050000L001B-1	MCGILL TROY EDWARD & MARCI ANN	4457 N ROVER RIDGE CIR	WASILLA	AK	99654
207	6111000L003	WANGBERG JERROLD A & LISA	303 VALLEYWOOD DR	FOREST	VA	24551-2809
208	1344B10L022	YOUNG DALE ZACHARY	3460 N PIERCE CIR	WASILLA	AK	99654
209	1344B07L020	EGGLESTON CHRISTOPHER, EGGLESTON ADRIENNE	7250 E ZEPHYR DR	WASILLA	AK	99654
210	6111000L014A	MORSE TAMMY L	2855 N GREEN FOREST DR	WASILLA	AK	99654-9390
211	1344B01L002	MCBRIDE JOHN P & SUSAN C	PO BOX 3811	PALMER	AK	99645-3811
212	1344B10L005	BRANCH JAS L & BECKY L	7530 E SARASOTA DR	WASILLA	AK	99654-4694
213	1344B07L018	FLEURY VICTOR T & IRENE	PO BOX 2566	PALMER	AK	99645-2566
214	1344B10L012	KIBBY TEDDY P	3425 N CALDER RD	WASILLA	AK	99654
215	6111B03L005	FIELDS RAPHAEL L	7731 E FRANCES LN	PALMER	AK	99645
216	1344B14L007	HENDRICKSON JOSEPH DALLAS, HENDERICKSON KATHLEEN RILEY	7480 E EDEN CIR	WASILLA	AK	99654
217	1344B13L017	WILKERSON JACQUELINE	7531 E DESTIN DR	WASILLA	AK	99654
218	1344B02L003	BRANDR TR, RALSTON RALPH E TRE	PO BOX 2314	PALMER	AK	99645
219	1344B11L004	BARNEY DANNY L & LYDIA MARIE	3301 N CALDER RD	WASILLA	AK	99654
220	7317000L003	PIATT CHRISTOPHER M & REBECCA L	4314 N AIRFIELD ST	WASILLA	AK	99654
221	1344B05L016	BARTRON MELANIE S & PAUL E REV LVG TR	7555 E SHOREWOOD DR	WASILLA	AK	99654
222	1344B08L014	BAIR THERON L	PO BOX 3298	PALMER	AK	99645-3298
223	1344B14L011	DOWNING RANDY P & SARAH M	3135 N MARCOS CIR	WASILLA	AK	99654-4628
224	6111000L015A	BLACK JACOB L	2855 N GREEN FOREST DR	WASILLA	AK	99654-9390
225	1344B05L012	KLAUDER JAS & CYNTHIA	PO BOX 524	PALMER	AK	99645-0524
226	4606000L001	HANSEN TED R & HELLE	7920 E SETTLEMENT AVE	WASILLA	AK	99654
227	1344B03L004	HORNER MATTHEW & ANI	PO BOX 872841	WASILLA	AK	99687
228	1344B04L006	SEAGER-BOSS FRAN, BOSS JACK J EST	PO BOX 873281	WASILLA	AK	99687-3281
229	1344B08L010	VERKUILEN ADAM T	7431 E SARASOTA DR	WASILLA	AK	99654
230	5572000T00A	BECKMAN BENJAMIN M TR, ARNESON NANETTE E TRE	8019 E SETTLEMENT AVE	WASILLA	AK	99654-9343
231	1344B13L008	CAMPBELL THEODORE T, CAMPBELL BRIONNA R	3250 N ENGSTROM RD	WASILLA	AK	99654-4625
232	18N01E34B003	ALASKA STATE OF, DIV OF LANDS	550 W 7TH AVE STE 1050A	ANCHORA(	AK	99501
233	1344B14L023	GAUTHIER RAYMOND G	PO BOX 3156	PALMER	AK	99645-3156
234	8281000T002	PALMER FAMILY ASSOCIATES	430 E STATE ST, STE 100	EAGLE	ID	83616
235	1344B05L023	MCCLESKEY BRIDGET M	7205 E SHOREWOOD DR	WASILLA	AK	99654
236	1344B05L006	ADAMS COREY C & HANNAH	10100 E PUFFIN DR	PALMER	AK	99645
237	1344B14L020	THOMPSON LEE O & LAUREN M	7530 E DESTIN DR	WASILLA	AK	99654
238	6111B04L011	HIGGS JIMMY & BRENDA	2405 N GREEN FOREST DR	PALMER	AK	99645
239	1344B14L003	PHERSON DAVID J C & JENNIFER M	PO BOX 874015	WASILLA	AK	99687-4015
240	1344B01L005	ARNOLD PATRICIA J	PO BOX 99	PALMER	AK	99645
241	1344B09L018	CHILDS DONALD R & P G	PO BOX 879406	WASILLA	AK	99687-9406
242	1344B03L001	CHAIM SHAYE BEVERLY ARNOLD	7770 E DANIA LN	WASILLA	AK	99654
243	1344B14L009	KNIGHT TIMOTHY E	3100 N MARCOS CIR	WASILLA	AK	99654-4628
244	4463000L002	DUFFIN STEPHEN M & C G	7734 E SETTLEMENT AVE	WASILLA	AK	99654-9342
245	1344B09L047	HOLLIMAN BRIAN	3230 N CALDER RD	WASILLA	AK	99654-4637
246	1344B08L005	HUFSTETLER KAREN	PO BOX 1656	PALMER	AK	99645-1656
247	1344B05L011	PEDERSEN DARRELL E	PO BOX 1716	PALMER	AK	99645-1716
248	1344B10L014	MENDOZA YARIEL G & YANIRA E	3501 N CALDER RD	WASILLA	AK	99654
249	9997000U0276	ALYESKA PIPELINE SVC CO, ATTN: TAX DEPT, M.S. 504	PO BOX 196660	ANCHORA(	AK	99519-6660
250	1344B04L009	SIMPSON SEAN S & MIKALA A	3060 N LAZY EIGHT CT, STE 2 PMB 517	WASILLA	AK	99654-4331
251	1344B04L008	RAMAGE PAUL W & NINA J	3931 N ENGSTROM RD	WASILLA	AK	99654-4627
252	5050000L001B-2	WARNER JEFFREY D & NYLENE R	4447 N ROVER RIDGE CIR	WASILLA	AK	99654
253	6111B04L004	MATHER KENNETH	PO BOX 670265	CHUGIAK	AK	99567-0265
254	6111B01L006	WIRTANEN KEVIN	9925 E STRAND DR	PALMER	AK	99645-8925
255	1344B07L027	SMITH DEL & CATHY LIVING TR	19607 S MITKOF LOOP	EAGLE RIVI	AK	99577-8692
256	4907B01L008	CAITLYN JAIME LEANN	7610 E SETTLEMENT AVE	WASILLA	AK	99654
257	1344B05L003	LEWELLEN TENA	7435 E ZEPHYR DR	WASILLA	AK	99654
258	6111B01L015	MINDER PATRICK M	2450 N KOSLOSKY CT	PALMER	AK	99645
259	1344000T009-2	TEW'S ENT LLC	PO BOX 521314	BIG LAKE	AK	99652-1314
260	1344B07L029	HARTLEY GEO V & NICOLE T	3830 N ENGSTROM RD	WASILLA	AK	99654-4626
261	6111B02L006	DUNN JESSICA R, DUNN RACHEL L & DUNN MICHELLE D	PO BOX 1385	PALMER	AK	99645-1385
262	5572000T00D	STORMY HILL LANDING OWNERS ASSN	8455 E STORMY HILL CIR	WASILLA	AK	99654-1006
263	1344B05L010	PRICE MARK N	7370 E SHOREWOOD DR	WASILLA	AK	99654-4615
264	1344B05L021	ERICKSON ROBT V & DEBRA L	7305 E SHOREWOOD DR	WASILLA	AK	99654
265	1344B07L028	WEHUNT DYLAN C & RACHEL B	3860 N ENGSTROM RD	WASILLA	AK	99654
266	3585B04L003A	CALANDRI LOUIE	7631 E DANIA LN	WASILLA	AK	99654
267	6997000L001	KORTHUIS JOSHUA B & SARAHJEAN	3060 N LAZY EIGHT CT, STE 2 #155	WASILLA	AK	99654-4331

268	6111B02L003	JOHNS BELJOE K, TILTON MICHELLE	7571 E REISNER LOOP	PALMER	AK	99645
269	1344B05L001	CORTEZ JEAN M	3950 N ENGSTROM RD	WASILLA	AK	99654
270	1344B02L002	BUCK ROBERT G	3951 N EBBTIDE CT	WASILLA	AK	99654
271	5489000L008	COLE STEPHEN W & MALISSA G	2590 N LARKSPUR HILL CIR	PALMER	AK	99645
272	18N01E22D016	ARNESON NEIL P & MARGARET	7817 E SETTLEMENT AVE	WASILLA	AK	99654
273	5572000L002	GRAHAM DAN'L & KIMBERLY	8455 E STORMY HILL CIR	WASILLA	AK	99654
274	1344B05L034	RATNER DAVID W	PO BOX 876879	WASILLA	AK	99687-6879
275	1344B09L033	FISHER DAVID A	PO BOX 876704	WASILLA	AK	99687
276	1344B14L012	SHORT KELLY M	3165 N MARCOS CIR	WASILLA	AK	99654-4628
277	1344B09L026	SAMPSON JOSHUA H & BARBARA A	3600 N CALDER RD	WASILLA	AK	99654-4622
278	4611B09L044A	BARTRON SWENSON LVG TR	3105 N TALBOT CIR	WASILLA	AK	99654
279	1630B01L034	TANGLEFOOT ALDER ORCHARD TR	PO BOX 770242	EAGLE RIVI	AK	99577
280	1344B09L022	TAPANI RANDY S	3631 N EBRO CIR	WASILLA	AK	99654-4746
281	5606000L006B	VARVIL JEFFREY STEPHEN	7300 N SEBASTIAN DR	WASILLA	AK	99654
282	5534000T00A	JOHANSEN RALPH W JR, JOHANSEN JACQUELINE M	PO BOX 872161	WASILLA	AK	99687-2161
283	1344B10L025	ELLIBEE DENALI A & MAGARREN D	3465 N PIERCE CIR	WASILLA	AK	99654-4629
284	1344B03L007	RANDOLPH TARA DAWN	8226 E BYRON'S WAY	PALMER	AK	99645
285	6111B01L014	HAMMOND JONATHAN J, MCKINNEY JOSHUA W	PO BOX 476	GIRDWOOI	AK	99587-0476
286	1344B14L002	KLEIN PETER	PO BOX 872284	WASILLA	AK	99687
287	1344B09L029	VAN KAMPEN DEREK S & HEATHER A	3530 N CALDER RD	WASILLA	AK	99654-4644
288	5737000L010A	HRACHA ERIC W & DEANNA L	1150 S COLONY WAY, STE 3 PMB 392	PALMER	AK	99645
289	1344B09L019	COSTON SANDERS	3149 CASSIUS CT	ANCHORAI	AK	99508-3333
290	1344B10L018	SHORT KELLY	3165 N MARCOS CIR	WASILLA	AK	99654
291	6111000L008	MILLER KEVIN & MALEA	PO BOX 876124	WASILLA	AK	99687
292	4463000L001	ROSE DAVID A & JULIE C	7800 E SETTLEMENT AVE	WASILLA	AK	99654-9342
293	1630B01L036	GIEGERICH TERENCE D	3020 N SEAGULL DR	PALMER	AK	99645
294	1344B10L003	GROTH MARGARET W	9201 LILLY LAKE RD	WASILLA	AK	99623-4174
295	1344B03L003	THOMPSON CODY MITCHELL	1648 CARA LOOP	ANCHORAI	AK	99515
296	1344B05L007	HOWE WAYNE R, DUFRESNE-HOWE JENNY M	4001 N MISTY LN	WASILLA	AK	99654-4614
297	18N01E35A010	KLONDIKE HOMES LLC	5630 SILVERADO WAY, UNIT 3	ANCHORAI	AK	99518
298	5489000L010	MUNSELL BARRY R & MARLENE	PO BOX 876211	WASILLA	AK	99687-6211
299	1344B09L011	MORGAN JEFFREY C & KAYSIE K	3630 N EBRO CIR	WASILLA	AK	99654
300	6111B01L017	SCHOU AMANDA	199 E NELSON AVE	WASILLA	AK	99654-6462
301	1344B08L004	HOPKINS JAMES & JOYCE	7500 E SPRINGWOOD DR	WASILLA	AK	99654-4679
302	3944B05L013A	COLE WENDY L, COLE JAMES F EST	4034 N ENGSTROM RD	WASILLA	AK	99654-4627
303	6111000L018A	MORROW DAVID JOHN, MARSH JENNIFER MARIE	17130 LAOANA DR	EAGLE RIVI	AK	99577
304	1344B07L032	NELSON TEARSA	7465 E SPRINGWOOD DR	WASILLA	AK	99654
305	1344B09L010	LEOPOLD GUY A & ALTHEA V	3660 N EBRO CIR	WASILLA	AK	99654
306	1344B09L023	VENCILL BRIAN K	990 N JACK NICKLAUS DR	WASILLA	AK	99623-4123
307	6111B03L003	SCHACH VALERIE J	PO BOX 4033	PALMER	AK	99645-4033
308	1344B10L023	KNOUSE KEVIN E & GALE L	3500 N PIERCE CIR	WASILLA	AK	99654
309	4907B01L007	YUNKER DONALD, SCHOPPE MELANIE	1150 S COLONY WAY, #3-318	PALMER	AK	99645
310	18N01E22D007	JONES WAYNE C& KATHLEEN R	PO BOX 1237	PALMER	AK	99645-1237
311	18N01E27A002	HAVEMEISTER BOB G & FRANCI A	PO BOX 467	PALMER	AK	99645
312	1344B14L025	CLAY BOB GREGORY, CUMMINS SONDRA ANN	7455 E EDEN CIR	WASILLA	AK	99654-4624
313	18N01E22D017	ARNESON SHANE D	7873 E SETTLEMENT AVE	WASILLA	AK	99654-9342
314	1344B14L021	PEEK THOS D & LINDA L	7500 E DESTIN DR	WASILLA	AK	99654
315	1344B10L019	ETHRIDGE JENNIFER L	3301 N TAMPA CT	WASILLA	AK	99654
316	6111B03L009	LINDFORS JASON C	2505 N GREEN FOREST DR	PALMER	AK	99645
317	1344B09L045	KLINK JONATHAN E & JAMIE A C	3155 N TALBOT CIR	WASILLA	AK	99654
318	1344B14L019	SIMONS ERIC	PO BOX 954	PALMER	AK	99645-0954
319	1344B09L021	FORD STEVEN C	PO BOX 871533	WASILLA	AK	99687-1533
320	1344B09L031	VAN ATTA KATHERINE GRACE	2521 E MOUNTAIN VILLAGE D, STE B PMB 541	WASILLA	AK	99654
321	1344B01L008	KEENER JACK C & BETTY J	7501 E SOUTHSHORE DR	WASILLA	AK	99654-9396
322	1344B09L037	ROGERS JOHN LOYDE, SAMPSON-ROGERS ELLEN JANE	3300 N CALDER RD	WASILLA	AK	99654
323	9997000U0018	AT&T ALASCOM INC, NIKLASON LK ATTN PROP TAX DEPT	1010 PINE ST # 9E-L-01	SAINT LOU	MO	63101-2015
324	1344B04L001	WREGGLESWORTH BRIAN&DEBRA	3900 N EBBTIDE CT	WASILLA	AK	99654-4707
325	6111B01L008	PICKETT SCOTT F & ROSEANN B	PO BOX 670986	CHUGIAK	AK	99567
326	1344B07L036	UEECK ACE A & MEGAN L	7355 E SPRINGWOOD DR	WASILLA	AK	99654-4618
327	4637B13L010A	DUBOIS RH& SA TR 12/14/83, DUBOIS SALLY ANN TRE	4084 RISA CT	SAN DIEGC	CA	92124
328	1344B12L005	SMITH MARYELLEN A	7601 N SEBASTIAN DR	WASILLA	AK	99654
329	6997000L002	SUMMERS AMILE & YVONNE	4296 N ROVER RIDGE CIR	WASILLA	AK	99654
330	6111000L005	LEAHY THOS PETER	2020 IVAN DR	ANCHORAI	AK	99507
331	1630B01L037	DOHERTY EDWARD J & MARY C	3000 N SEAGULL DR	PALMER	AK	99645
332	1344B03L006	YORK MICHAEL G	PO BOX 871603	WASILLA	AK	99687
333	1344B08L012	MEAD JOSHUA C & AMANDA M	901 E COPE INDUSTRIAL WAY	PALMER	AK	99645
334	1344B10L007	MCFARLAND LORI K	1800 S EGRET BAY BLVD, APT 2102	LEAGUE CI	TX	77573-1425

335	1344B05L008	ANDERSON LUTHER B JR	7320 E SHOREWOOD DR	WASILLA	AK	99654-4615
336	1344000T009-1	LEUENBERGER LORAS D, LEUENBERGER KURINA ROSE HALE	PO BOX 786	PALMER	AK	99645
337	1344B09L040	MOORE PATRICK J & ASHLEY N	3230 N TALBOT CIR	WASILLA	AK	99654-4640
338	1344B05L037	DAU FAMILY TR, DAU CHRISTIAN P & CARLA J TRES	PO BOX 742	PALMER	AK	99645-0742
339	1344B10L009	GRAVES RYAN M	7450 E SARASOTA DR	WASILLA	AK	99654
340	1344B05L015	RIORDAN DANIEL E & MARY L	7550 E SHOREWOOD DR	WASILLA	AK	99654
341	1344B05L002	WILKEN STACEY L	3060 N LAZY EIGHT CT, STE 2-128	WASILLA	AK	99654-4331
342	5489000L007	KILBURN JOHN & KACY	PO BOX 1041	PALMER	AK	99645
343	1344B01L003	BENSON JAS R & MARIA	PO BOX 873552	WASILLA	AK	99687-3552
344	1344B14L017	LEASE DAVID A & JOAN	3140 N MARCOS CIR	WASILLA	AK	99654-4628
345	1344B05L009	FEILNER SUZANNE	7350 E SHOREWOOD DR	WASILLA	AK	99654
346	1344B07L026	MORGAN PERRY M II & C L	7430 E ZEPHYR DR	WASILLA	AK	99654-4691
347	1344B07L022	THARP BRIAN, RINEAR-THARP TRUDY	7330 E ZEPHYR DR	WASILLA	AK	99654
348	1344B11L005	LACE CRYSTAL C	PO BOX 1774	PALMER	AK	99645-1774
349	4335000L003	SHELDEN TROY & BRENDA LVG TR	4295 N ROVER RIDGE CIR	WASILLA	AK	99654-9340
350	1344B14L005	SEMON DONNA L	7440 E EDEN CIR	WASILLA	AK	99654-4624
351	1344000T010	NARDINI NEIL & STACY	2451 N LARKSPUR HILL CIR	PALMER	AK	99645
352	6997000L003	GH TRUST	3060 N LAZY EIGHT STE 2, PMB 255	WASILLA	AK	99654-4319
353	1344B08L003	BENNETT RONALD J & NANETTE L	PO BOX 3690	PALMER	AK	99645-3690
354	4907B01L004	WILLIAMSON TYLER KENT, WILLIAMSON LINDSAY CHRISTINE	6636 WOODLAND HILLS LN	PLANO	TX	75024
355	1344B14L026	KIRCHNER ALESHIA M	7475 E EDEN CIR	WASILLA	AK	99654
356	1344000T001	CLARK TERRY, WEGLEITNER KRISTEN	PO BOX 1808	PALMER	AK	99645-1808
357		GATEWAY COMMUNITY COUNCIL	PO BOX 578	PALMER	AK	99645


MSB Mailing List Application
Instructions
18N01E27D001
Show search results for 18N01...
Enhanced Search
By Shape
By Value
By Spatial
Results
Features selected: 406
1344B09L024
General Ownership: PRIVATE
Legal Description: SHOREWOOD
BLOCK 9 LO
P_ID: 78592
OWNER_1: HARDWICK KYLE
SUBDNUM: 1344
MAILING_ADDRESS_LINE_S: PO BOX 2365
MAILING_ADDRESS_CITY: PALMER
MAILING_ADDRESS_STATE: AK
MAILING_ADDRESS_ZIP: 99645-2365
LANDVALUE: 38000
LANDASSD: 38000
BLDGVALUE: 265700
N Trunk Rd
E Bogard Rd
W Bogard Rd
App State
Click to restore the map extent and layers visibility where you left off.

Matanuska-Susitna Borough
Development Services Division
350 E. Dahlia Avenue
Palmer, Alaska 99645

«NAME»
«ADDRESS_1»
«ADDRESS_2»
«ADDRESS_3»

The Matanuska-Susitna Borough Planning Commission will consider the following:

Dan Steiner, P.E., acting for Central Gravel Products, submitted an application for an Earth Material Extraction Conditional Use Permit under MSB 17.30 – Conditional Use Permit (CUP) for Earth Material Extraction Activities for the extraction of 230,000 cubic yards annually through 2054. The site is located on 153 acres within three properties totaling 235 acres, at 7955 E Bogard Rd., 3182 N. Trunk Rd., 7801 E Glade Ct., Tax ID #s 18N01E27A002, 18N01E27D001, and 18N01E27D002.

The Matanuska-Susitna Borough Planning Commission will conduct a public hearing concerning the application on ***Monday, November 18, 2024*****,** at 6:00 p.m. in the Borough Assembly Chambers located at 350 E. Dahlia Avenue in Palmer. This may be the only presentation of this item before the Planning Commission, and you are invited to attend. Planning Commission members may not receive or engage in ex-parte contact with the applicant, other interested parties in the application, or members of the public concerning the application or issues presented in the application.

Application materials may be viewed online at www.matsugov.us by clicking on "All Public Notices & Announcements." For additional information, you may contact Peggy Horton, Current Planner, by phone: 907-861-7862. Provide written comments by e-mail to peggy.horton@matsugov.us or by mail to MSB Development Services Division, 350 E. Dahlia Avenue, Palmer, AK 99645.

The public may provide verbal testimony at the meeting or telephonically by calling 1-855-290-3803. In order to be eligible to file an appeal from a decision of the Planning Commission, a person must be designated an interested party. See MSB 15.39.010 for the definition of an interested party. The procedures governing appeals to the Board of Adjustment and Appeals are contained in MSB 15.39.010-250, which is available on the Borough home page: www.matsugov.us, in the Borough Clerk's office, and at various libraries within the borough.

Comments are due on or before ***October 28, 2024*****,** and will be included in the Planning Commission packet. Please be advised that comments received from the public after that date will not be included in the staff report but will be provided to the Commission at the meeting.

Name:_____ ***Mailing Address:***_____

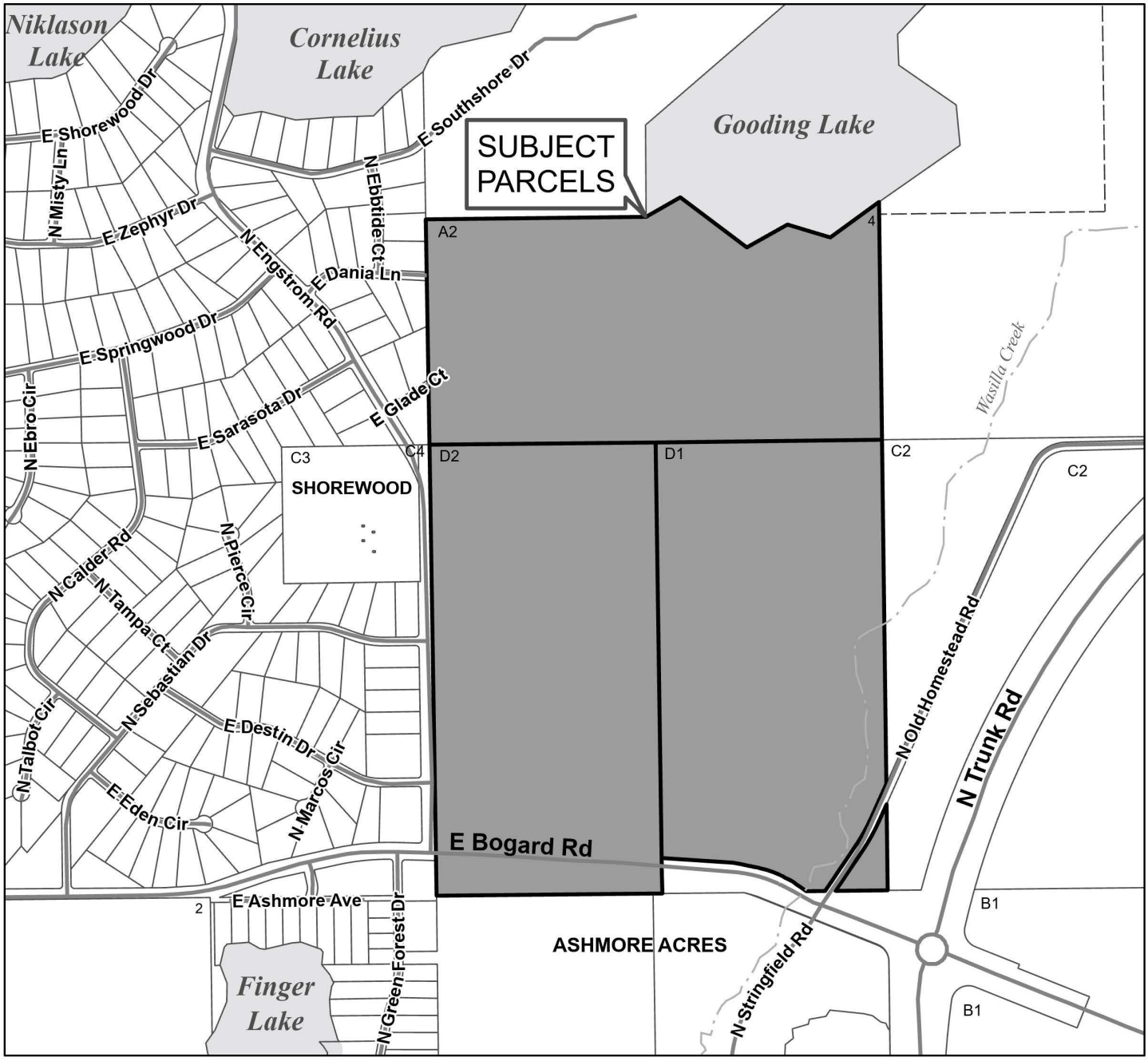
Location/Legal Description of your property:_____

Comments:_____

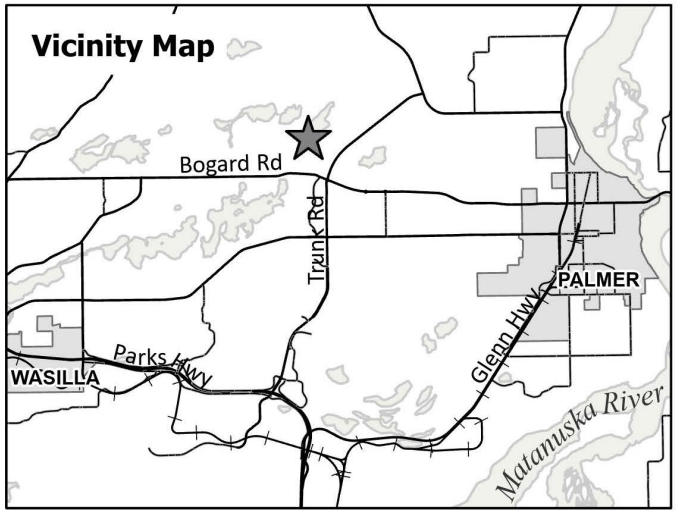
_____

_____

Note: Vicinity Map Located on Reverse Side



18N01E27A002
18N01E27D001
18N01E27D002



N

This map is solely for informational purposes only. The Borough makes no express or implied warranties with respect to the character, function, or capabilities of the map or the suitability of the map for any particular purpose beyond those originally intended by the Borough. For information regarding the full disclaimer and policies related to acceptable uses of this map, please contact the Matanuska-Susitna Borough GIS Division at 907-861-7858.

MSB Information Technology/GIS
May 17, 2024

0 1,000 Feet

ADVERTISEMENT ORDER

MATANUSKA-SUSITNA BOROUGH

350 East Dahlia Avenue
Palmer, Alaska 99645

PUBLISHER	MANDATORY PUBLICATION DATES {By MSB Code}	PREFERRED PUB. DATES	DATES FOR FILLER ADS (space permitting)
FRONTIERSMAN (contract)	September 20, 2024		
Anchorage Daily News			
Talkeetna Good Times {publishes once a month)			

[X] Borough Page [ ] Classified/Legal [ ] Display Ad Acct #(100.120.113.422.000)

THE ATTACHED MATERIAL MUST BE PRINTED IN ITS ENTIRETY ON THE DATES SHOWN ABOVE. AN AFFIDAVIT OF PUBLICATION IS REQUIRED PRIOR TO PAYMENT.

A PROOF IS REQUESTED ON DISPLAY ADS FOR APPROVAL, PRIOR TO PUBLICATION.

Please email display ad proof to Attn: Peggy Horton Email: peggy.horton@matsugov.us
and Corinne Lindfors Email: clindfors@matsugov.us

See attached Advertisement

Emailed: ___X__

Date:
____9/13/2024_____






Matanuska-Susitna Borough

www.matsugov.us

MATANUSKA-SUSITNA BOROUGH
NOTICE OF PUBLIC MEETINGS

All meetings of recognized boards, committees, and commissions of the Borough are open to the public and are held at Borough offices, 350 E. Dahlia Ave., Palmer, AK, unless specified otherwise. Three or more Assembly Members may be present at advertised public meetings of federal, state, and local governments or other entities. Meetings are scheduled as follows:

BOARD	DATE	TIME	LOCATION
Transportation Advisory Board	09/20/24	11:00 am	Conference Room 203 & Teams ID: 244 388 588 195 Passcode: jRvtLX
MSB Fish & Wildlife Commission, Board Of Fisheries Work Group	09/23/24	10:00 am	Conference Room 110 & Teams ID: 272 180 196 453 Passcode: 4ErQL8
Fairview RSA No. 14 Board of Supervisors	09/24/24	4:00 pm	Fairview Loop Baptist Church
Abbreviated Plat	09/25/24	8:30 am	Assembly Chambers
MSB Fish & Wildlife Commission	09/26/24	4:00 pm	Assembly Chambers & Teams ID: 266 680 706 600 Passcode: qCjBUL
Assembly Special Meeting Re: Filling The Assembly District 4 Vacancy (To Provide Public Comment Telephonically Call 855-225-2326)	10/01/24	4:00 pm	Assembly Chambers
Assembly Regular Meeting (To Provide Public Comment Telephonically Call 855-225-2326)	10/01/24	6:00 pm	Assembly Chambers
Abbreviated Plat	10/02/24	8:30 am	Assembly Chambers
Talkeetna Sewer & Water SSA No. 36 Board of Supervisors	10/02/24	1:00 pm	Talkeetna Library Conference Room
Platting Board (To Participate Telephonically Call 855-290-3803)	10/03/24	1:00 pm	Assembly Chambers
Assembly Special Meeting Re: Filling The Assembly District 4 Vacancy-Candidate Interviews (To Provide Public Comment 855-225-2326)	10/03/24	6:00 pm	Assembly Chambers

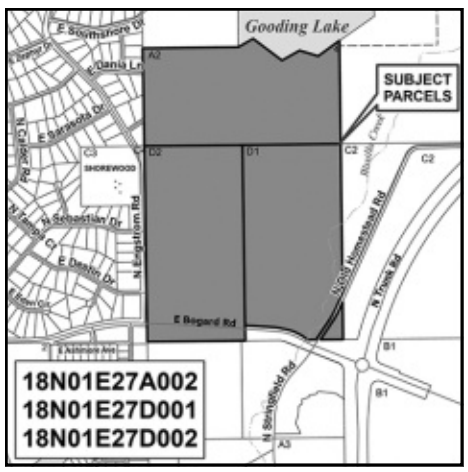
If you would like further information on any of these meetings or are interested in serving on any of the advisory boards, please call the Borough Clerk's Office at 907-861-8683, Monday through Friday, 8 a.m. to 5 p.m. The Borough's website address is: **https://www.matsugov.us/publicmeetings**

Disabled persons needing reasonable accommodation in order to participate at a Borough Board/ Commission meeting should contact the Borough ADA Coordinator at 907-861-8432 at least one week in advance of the meeting.

The Community Council meetings scheduled are: (Community Councils are not agencies or subgroups of the Borough. There may be a quorum of Mat-Su Borough advisory boards in attendance at community council meetings.)

North Lakes Community Council Road & Traffic Safety Committee	09/22/24	3:00 pm	Karma Kafe
Big Lake Community Council Board	09/24/24	6:00 pm	Big Lake Family Restaurant
Tanaina Community Council	09/24/24	7:00 pm	Sleepy Hollow Golf Course
Sutton Community Council	09/25/24	7:00 pm	Sutton Public Library & Zoom ID: 938 1463 4307 Passcode: 614331
Glacier View Community Council	09/26/24	6:00 pm	Glacier View School
North Lakes Community Council (nlakes.cc)	09/26/24	7:00 pm	Boys & Girls Club & Zoom ID: 896 0473 7544 Passcode: 982374
Willow Area Community Organization	10/02/24	7:00 pm	Willow Community Center
Susitna Community Council	10/03/24	7:00 pm	Upper Susitna Senior Center

Publish Date: September 20, 2024 0924-27



PUBLIC HEARING

Dan Steiner, P.E., acting for Central Gravel Products, submitted an application for an Earth Material Extraction Conditional Use Permit under MSB 17.30 – Conditional Use Permit (CUP) for Earth Material Extraction Activities for the extraction of 230,000 cubic yards annually through 2054. The site is located within 153 acres within three properties, totaling 235 acres, at 7955 E Bogard Rd., 3182 N. Trunk Rd., and 7801 E Glade Ct., Tax ID #s 18N01E27A002, 18N01E27D001, & 18N01E27D002.

The Matanuska-Susitna Borough Planning Commission will conduct a public hearing concerning the application on ***Monday, November 18, 2024,*** at 6:00 p.m. in the Borough Assembly Chambers located at 350 E. Dahlia Avenue in Palmer. This may be the only presentation of this item before the Planning Commission, and you are invited to attend. Planning Commission members may not receive or engage in ex-parte contact with the applicant, other interested parties in the application, or members of the public concerning the application or issues presented in the application.

Application materials may be viewed online at www.matsugov.us by clicking on "All Public Notices & Announcements." For additional information, you may contact Peggy Horton, Current Planner, by phone: 907-861-7862. Provide written comments by e-mail to peggy.horton@matsugov.us or by mail to MSB Development Services Division, 350 E. Dahlia Avenue, Palmer, AK 99645.

The public may provide verbal testimony at the meeting or telephonically by calling 1-855-290-3803. In order to be eligible to file an appeal from a decision of the Planning Commission, a person must be designated an interested party. See MSB 15.39.010 for the definition of an interested party. The procedures governing appeals to the Board of Adjustment and Appeals are contained in MSB 15.39.010-250, which is available on the Borough home page: www.matsugov.us, in the Borough Clerk's office, and at various libraries within the borough.

Comments are due on or before ***October 28, 2024,*** and will be included in the Planning Commission packet. Please be advised that comments received from the public after that date will not be included in the staff report but will be provided to the Commission at the meeting.

Publish Date: September 20, 2024 0924-26

MATANUSKA-SUSITNA BOROUGH
PUBLIC HEARING NOTICE

The Matanuska-Susitna Borough Assembly will hold a regular Assembly meeting on Tuesday, October 1, at 6 p.m. in the Assembly Chambers, 350 East Dahlia Avenue, Palmer, Alaska. A public hearing will be held on the following items, please see below for instructions for calling into the meeting to provide testimony:

OR 24-079: An Ordinance Creating Homestead Drive Natural Gas Local Improvement District No. 667, Approving The Improvement Plan For The District, Authorizing The Manager To Proceed With The Improvement, And Assessing Equally Among The Properties Within The District The Costs Of The Improvement.
IM 24-145

OR 24-093: An Ordinance Accepting And Appropriating Additional January 2022 Mat-Su Windstorms Disaster Relief Funds In The Amount Of $658.49 From The Federal Emergency Management Agency; And $219.50 From The Alaska State Division Of Homeland Security And Emergency Management.
RS 24-092: A Resolution Approving The Amended Budget For The January 2022 Mat-Su Windstorms Disaster.
IM 24-172

OR 24-094: An Ordinance Accepting And Appropriating $11,000 From The Mat-Su Trails And Parks Foundation.
RS 24-094: A Resolution Approving The Scope Of Work And Budget And Authorizing The Manager To Enter Into The Grant Agreement Amendment For A Sutter 500 Trail Dozer.
IM 24-174

OR 24-095: An Ordinance Accepting And Appropriating $1,440,340 From The Environmental Protection Agency's Solid Waste Infrastructure For Recycling Grants For Communities.
RS 24-095: A Resolution Approving The Scope Of Work And Budget For The Solid Waste Division's Sustainable Organic Materials Compost Program And Infrastructure Development.
IM 24-175

IN WRITING: You can submit written comments to leg.com@matsugov.us

TELEPHONIC TESTIMONY:

- Dial 1-855-225-2326; You will hear "Joining conference" when you are admitted to the meeting.
- You will be automatically muted and able to listen to the meeting.
- When the Mayor announces audience participation or a public hearing you would like to speak to, press *3; you will hear "Your hand has been raised."
- When it is your turn to testify you will hear "Your line has been unmuted."
- State your name for the record, spell your last name, and provide your testimony.

OBSERVE: observe the meeting via the live stream video at:

- https://matanuska.legistar.com/Calendar.aspx
- https://www.facebook.com/MatSuBorough
- Matanuska-Susitna Borough - YouTube

Please call the Borough Clerk's Office at 907-861-8683 with questions.

LONNIE R. McKECHNIE, CMC, Borough Clerk

Publish Date: September 20, 2024 0924-28

NOTICE OF VACANCY
ASSEMBLY DISTRICT 4

Assembly District 4 is vacant, and the Assembly will appoint a person to fill the seat until the next regular election, in November 2025.

Candidate Qualifications: A person is eligible to be an assembly member if the person is a qualified borough voter and has been a borough resident and a resident in the territory embraced with the assembly district for which they file for one year immediately prior to the appointment.

District 4 includes the city of Wasilla and the greater Wasilla area (from Seward Merdian to the east, to Sylvan Road in the west, to Spruce Avenue to the North, and runs along part of the north side of Knik Goose Bay Road). If you are unsure if you reside in Assembly District 4, please contact the Clerk's Office at the number below or go to the following website and search your address: https://msb.maps.arcgis.com/apps/MapSeries/index.html?appid=1843d2e279c64ca0adadce8af7724372

For the Assembly to consider you as a candidate to fill the vacancy in Assembly District 4, you will need to fill out an application and return it to the Clerk's Office. You can find the application at www.matsugov.us, or you can contact the Clerk's Office at the number below for an application to be emailed, or come to the Clerk's Office at 350 E. Dahlia Avenue to pick up an application.

The successful candidate will be required to file a Financial Disclosure Form with the Alaska Public Offices Commission within 30 days of appointment.

Application deadline is 5 p.m. on Friday, September 27, 2024.

If you have any questions, please contact the Clerk's Office at (907) 861-8683 or in person at 350 E. Dahlia Avenue, Palmer.

Publish Date: September 20, 2024 0924-17

-ABANDONED VEHICLES SUBJECT TO DISPOSAL-

The following abandoned vehicles are subject to disposal by the Matanuska-Susitna Borough's Solid Waste Division. The vehicles were tagged as abandoned in the Matanuska-Susitna Borough right-of-way at the listed locations. You have the right to appeal pursuant to MSB 10.12.090.

Impound#: 3142
Vehicle Description: LIC: DRE967
VIN: 1HGCF8643XA120031
MSB ROW Location: Roca Rd, Wasilla, Alaska
Place of Impoundment: 1201 N 49th State St, Palmer, AK 99645

Impound#: 3802
Vehicle Description: Black dodge Stratus **LIC:** Not Available
VIN: 1B3EL36X04N146301
MSB ROW Location: N Barbi Dr, Wasilla, Alaska
Place of Impoundment: 1201 N 49th State St, Palmer, AK 99645

Impound#: 3757
Vehicle Description: Black Ford Explorer **LIC:** Not Available
VIN: 1FMCU9DG5BKB26886
MSB ROW Location: Rojon Cir, Wasilla, Alaska
Place of Impoundment: 1201 N 49th State St, Palmer, AK 99645

The vehicles will be disposed of by auction or auto wrecker on or after, October 20th, 2024.

FOR MORE INFORMATION, call the MSB Solid Waste Division at (907) 861-7600.

Publish Date: September 20, 2024 0924-30

Public Notice > MSB 17.30 - Conditional Use Permit for Earth Materials Extraction

Notice Type Public Notice

Dan Steiner, P.E., acting for Central Gravel Products, submitted an application for an Earth Material Extraction Conditional Use Permit under MSB 17.30—Conditional Use Permit (CUP) for Earth Material Extraction Activities for the extraction of 230,000 cubic yards annually through 2054. The site is located on 153 acres within three properties totaling 235 acres, on 7955 E Bogard Rd., 3182 N. Trunk Rd., 7801 E Glade Ct., Tax ID #s 18N01E27A002, 18N01E27D001, and 18N01E27D002.

The Matanuska-Susitna Borough Planning Commission will conduct a public hearing concerning the application on ***Monday, November 18, 2024,*** at 6:00 p.m. in the Borough Assembly Chambers located at 350 E. Dahlia Avenue in Palmer. This may be the only presentation of this item before the Planning Commission, and you are invited to attend. Planning Commission members may not receive or engage in ex-parte contact with the applicant, other interested parties in the application, or members of the public concerning the application or issues presented in the application.

Application materials may be viewed online at www.matsugov.us by clicking on "All Public Notices & Announcements." For additional information, you may contact Peggy Horton, Current Planner, by phone: 907-861-7862. Provide written comments by e-mail to peggy.horton@matsugov.us or by mail to MSB Development Services Division, 350 E. Dahlia Avenue, Palmer, AK 99645.

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Comments are due on or before ***October 28, 2024,*** and will be included in the Planning

Effective Date

Sep 13, 2024

Tax IDs

18N01E27D002

Documents

Application Material

Vicinity Map

From: Peggy Horton
Bcc: White, Ben M (DOT); Huling, Kristina N (DOT); Kyler Hylton (kyler.hylton@alaska.gov); dnr.scro@alaska.gov; James Walker (james.walker2@alaska.gov); colton.percy@alaska.gov; Sarah Myers (sarah.myers@alaska.gov); dec.agencyreviews@alaska.gov; msb.hpc@gmail.com; MEA ROW - MEA (mearow@mea.coop); Right of Way Dept.; Enstar ROW (row@enstarnaturalgas.com); GCI ROW (ospdesign@gci.com); Brian Davis; Fire Code; Land Management; regpagemaster@usace.army.mil; Tom Adams; Brad Sworts; Daniel Dahms; Tammy Simmons; Jamie Taylor; Katrina Kline; MSB Farmers; Alex Strawn; Planning; Fred Wagner; Permit Center; Jason Ortiz; Corinne Lindfors; Michelle Olsen; Taunnie Boothby; John Aschenbrenner; timhaledistrict1@gmail.com; Gateway Community Council; Tim Alley (talley@tbcak.com); sandytraini@hotmail.com; mdemp1776ctzn@gmail.com; carol.fowler@alaska.gov; erik.johnson@alaska.gov
Subject: Request for Comments for the Central Gravel Products Earth Materials Extraction Conditional Use Permit
Date: Friday, September 13, 2024 3:45:00 PM

Greetings,

Dan Steiner, P.E., acting for Central Gravel Products, submitted an application for an Earth Material Extraction Conditional Use Permit under MSB 17.30—Conditional Use Permit (CUP) for Earth Material Extraction Activities for the extraction of 230,000 cubic yards annually through 2054. The site is located on 153 acres within three properties totaling 235 acres, on 7955 E Bogard Rd., 3182 N. Trunk Rd., 7801 E Glade Ct., Tax ID #s 18N01E27A002, 18N01E27D001, and 18N01E27D002. RSA: 16 & 25

The Planning Commission will conduct a public hearing on this request on November 18, 2024.

Application materials may be viewed online at www.matsugov.us by clicking on 'All Public Notices & Announcements'. A direct link to the application material is here: Matanuska-Susitna Borough - MSB 17.30 - Conditional Use Permit for Earth Materials Extraction (matsugov.us)

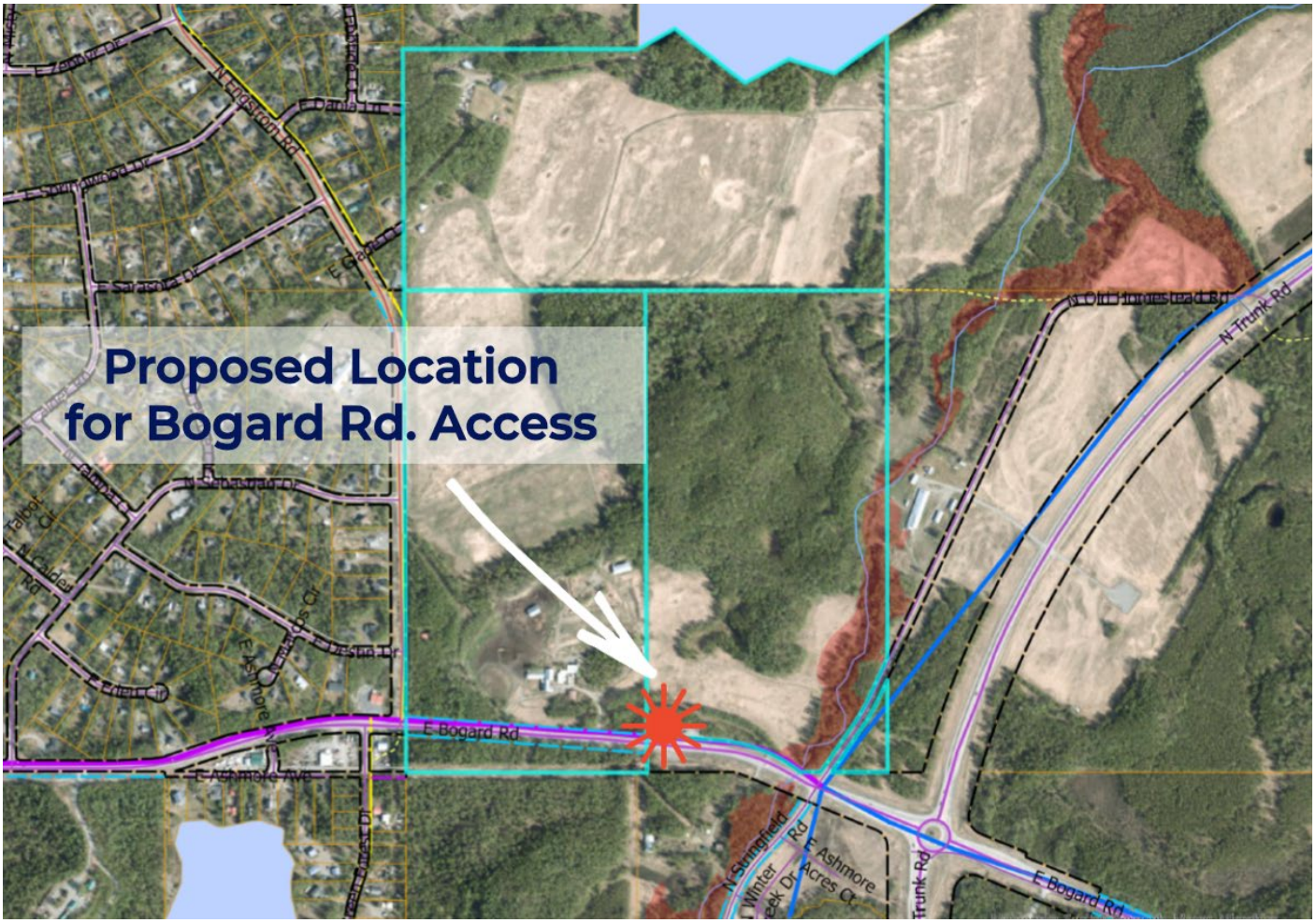
Comments are due on or before October 28, 2024, and will be included in the Planning Commission packet for the Commissioner's review and information. Please be advised that comments received after that date will not be included in the staff report to the Planning Commission. Thank you for your review.

Regards,

Peggy Horton
Matanuska-Susitna Borough
Development Services Division
Current Planner
907-861-7862

Site Visit Photos

Site Visit 10/25/2024 - Imagery Captured between 2:00 - 4:00 pm



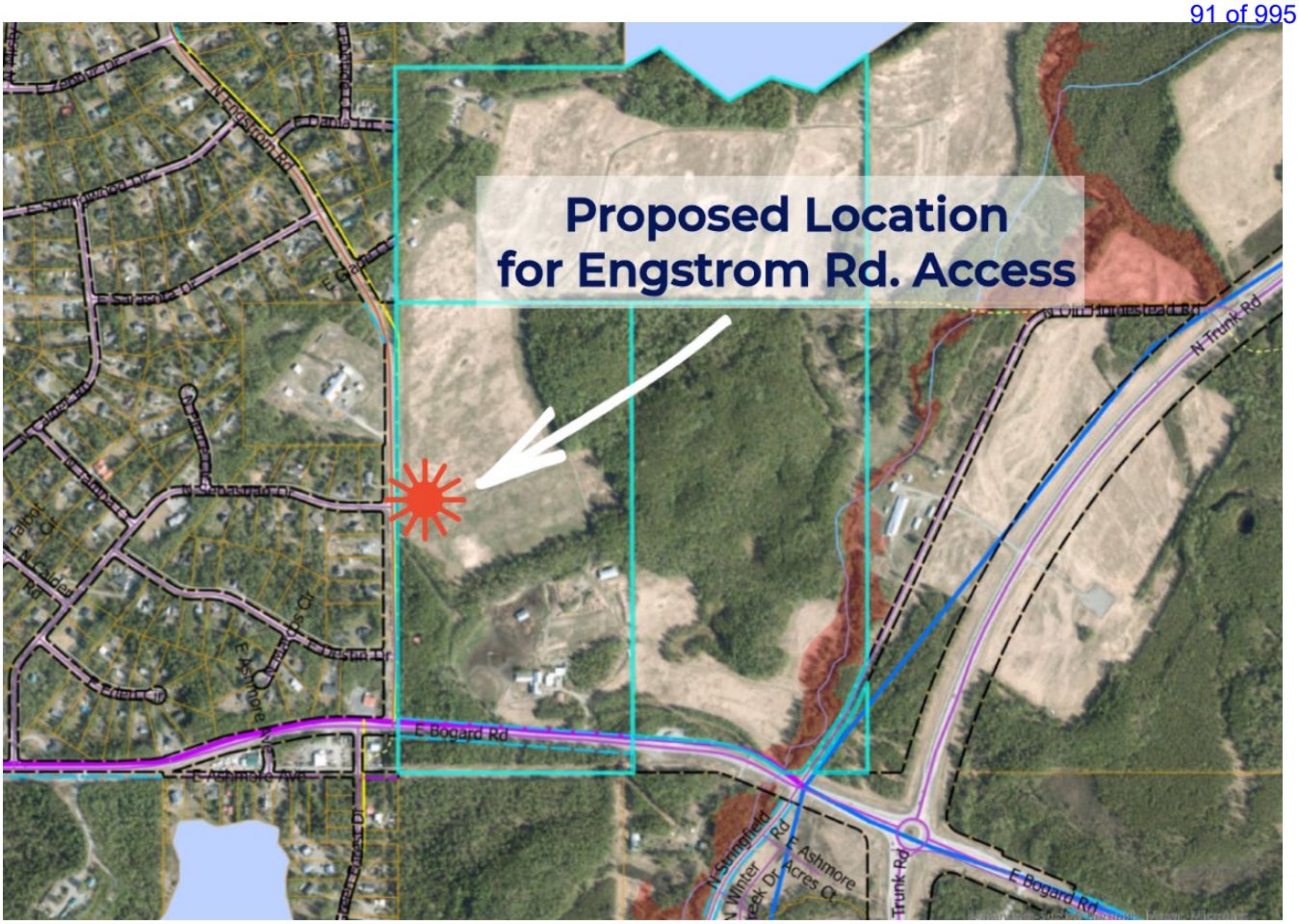

Engstrom Rd.
Bogard Rd.


E


Approximate location of
proposed driveway to Bogard Rd.


↑ W


Engstrom Rd.
Bogard Rd.


Proposed Location
for Engstrom Rd. Access
E Bogard Rd
N Trunk Rd
E Ashmore Ave
N Springfield Rd
Trunk Rd


Sebastian Dr.
Engstrom Rd.
Approximate location of
proposed driveway to Engstrom Rd.


Approximate location of
proposed driveway to Engstrom Rd.


N


↑ NE


↑ E

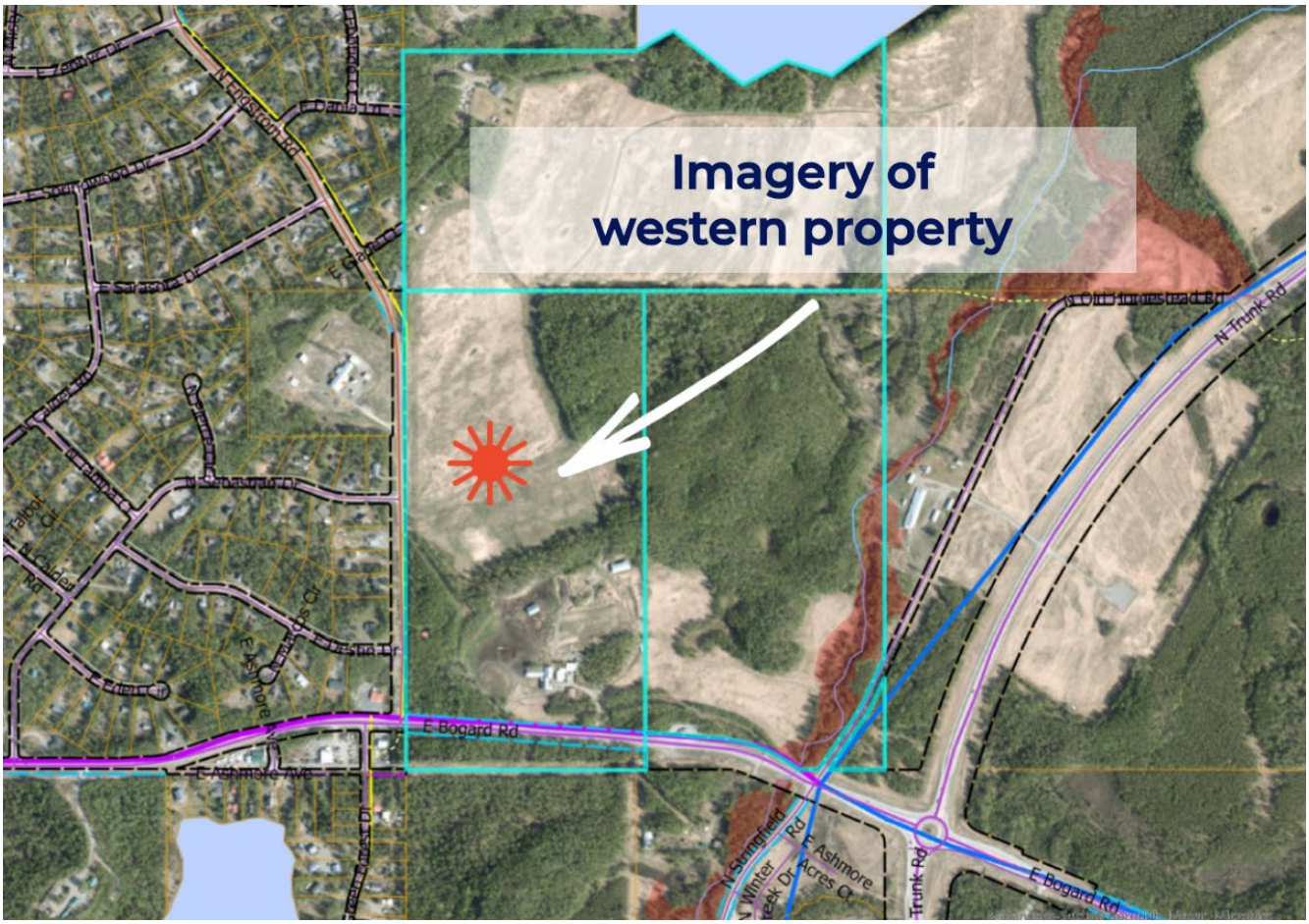

↑ SE


↑ S


↑ SW


↑ W


↑ NW


Imagery of
western property
E Bogard Rd
N Trunk Rd
E Ashmore Ave


W


NW

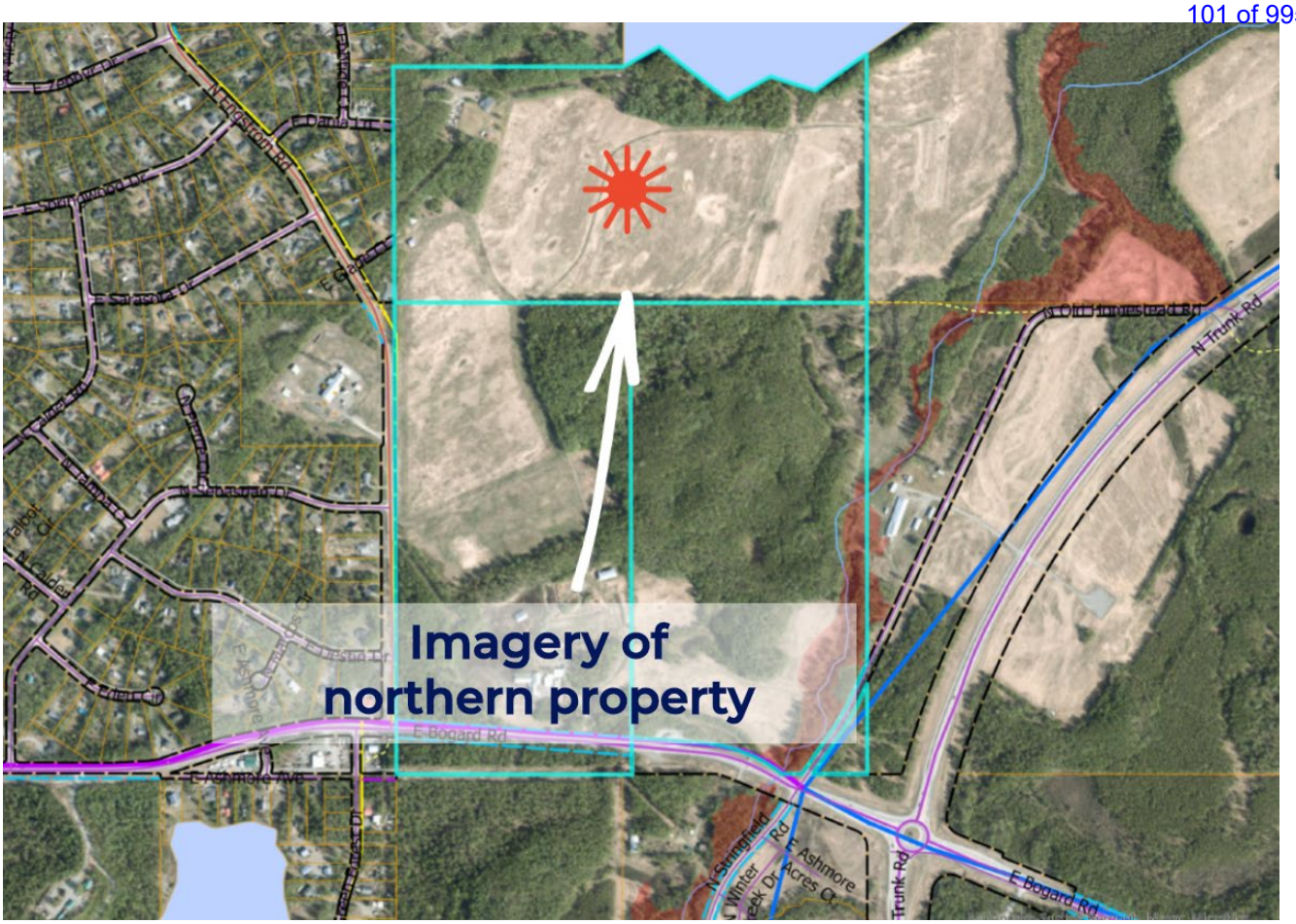
NW

NW

SW W


↑ S


↑ SE


Imagery of
northern property
E Bogard Rd
N Trunk Rd
E Ashmore Acres Ct
N Springfield Rd
Trunk Rd


N


↑ NE


↑ NE


E


SE


↑ S


↑ SW

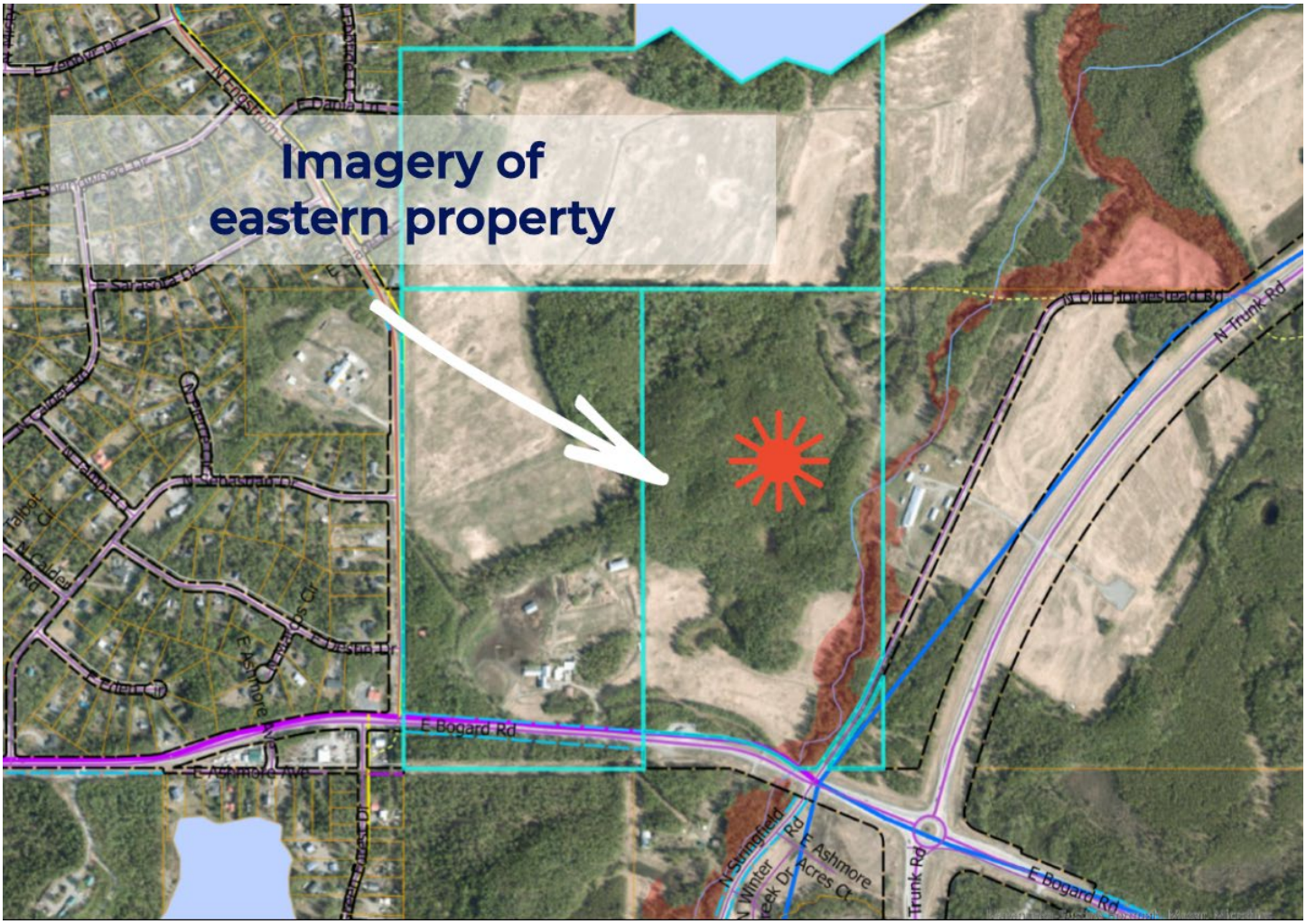

↑ NW


↑ N


↑ NE

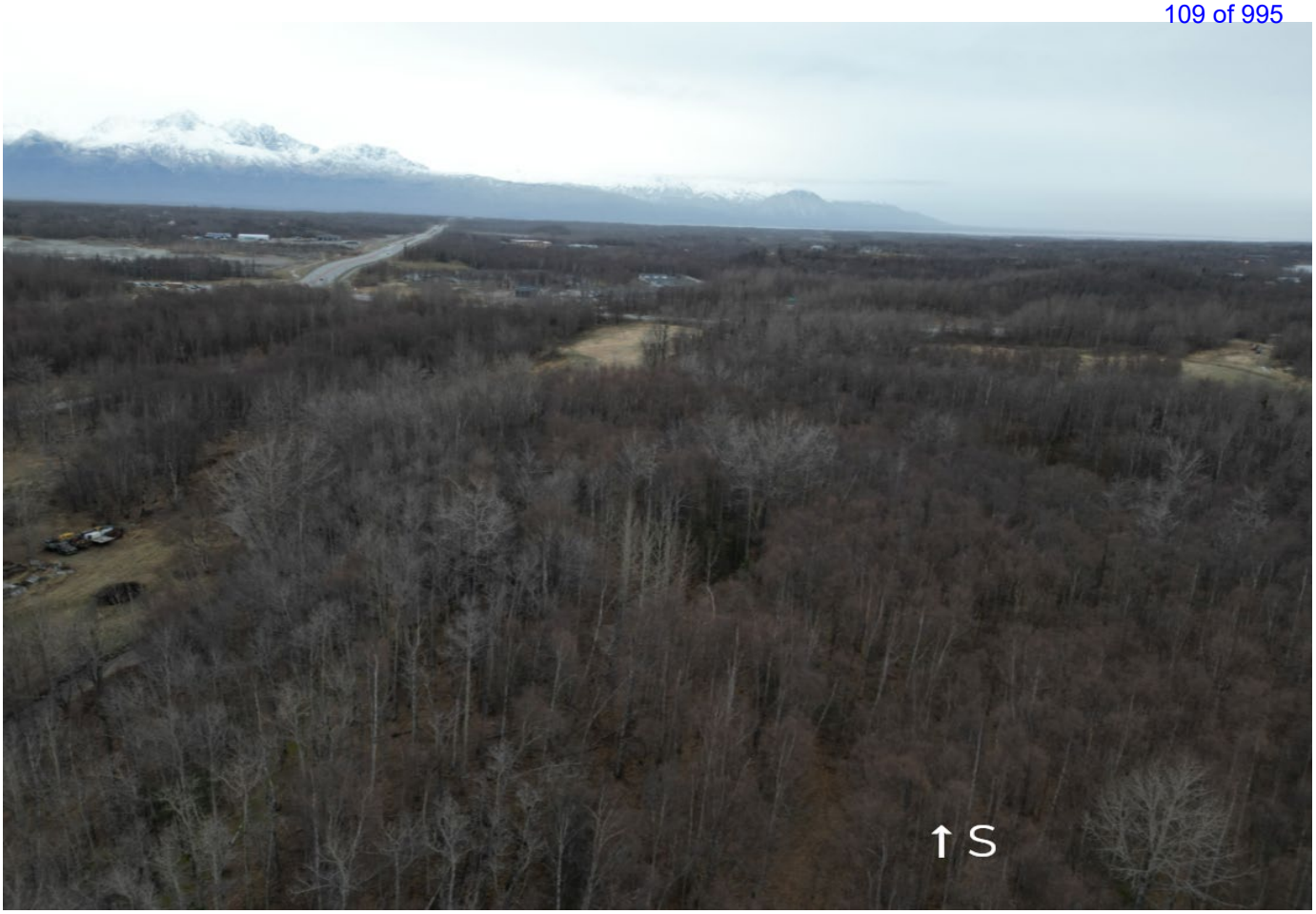

↑ E


↑ SE


Imagery of
eastern property
E Bogard Rd
N Trunk Rd
E Ashmore Ave
N Springfield Rd
Trunk Rd


NE

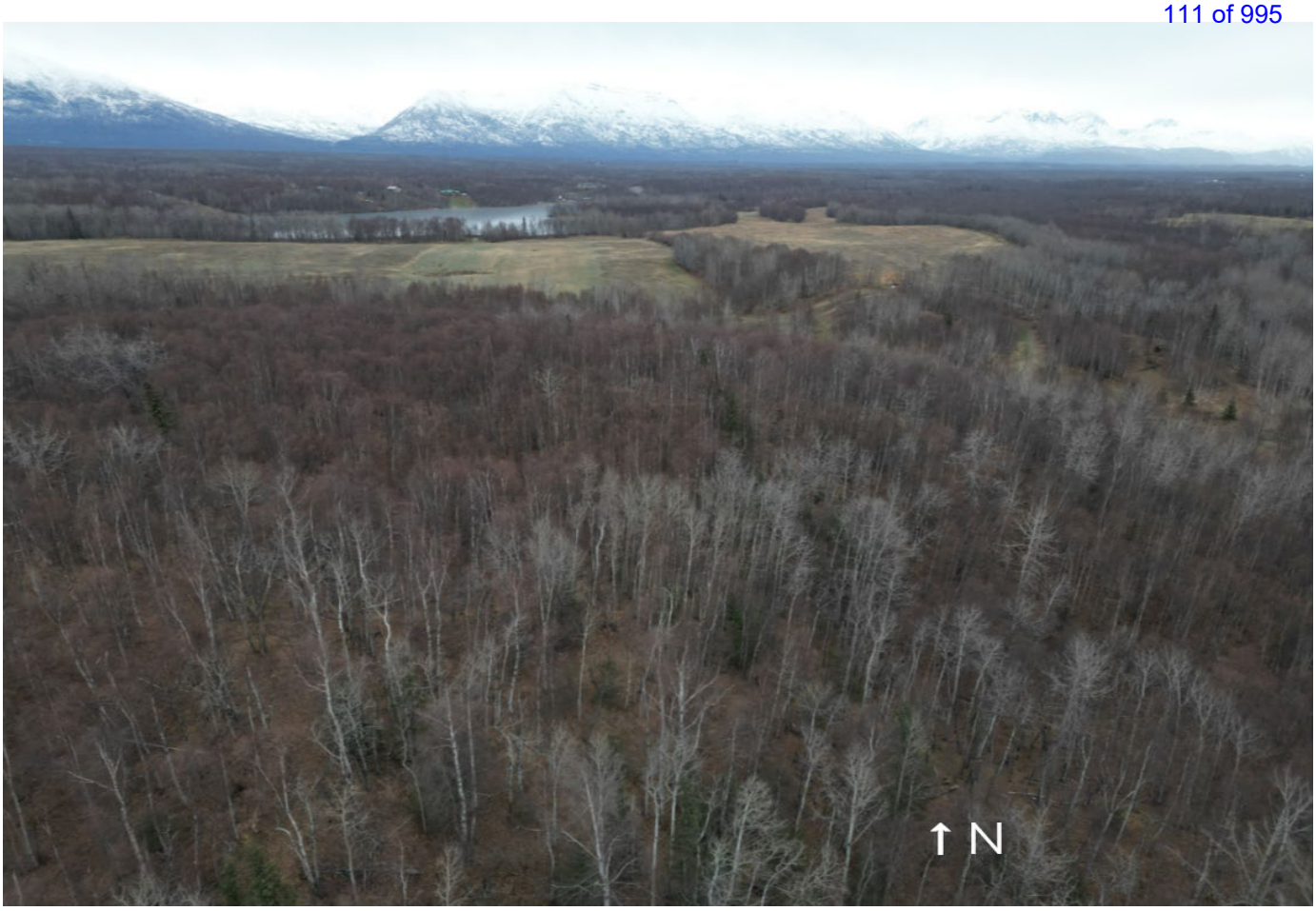

SE


S


SW


W


NW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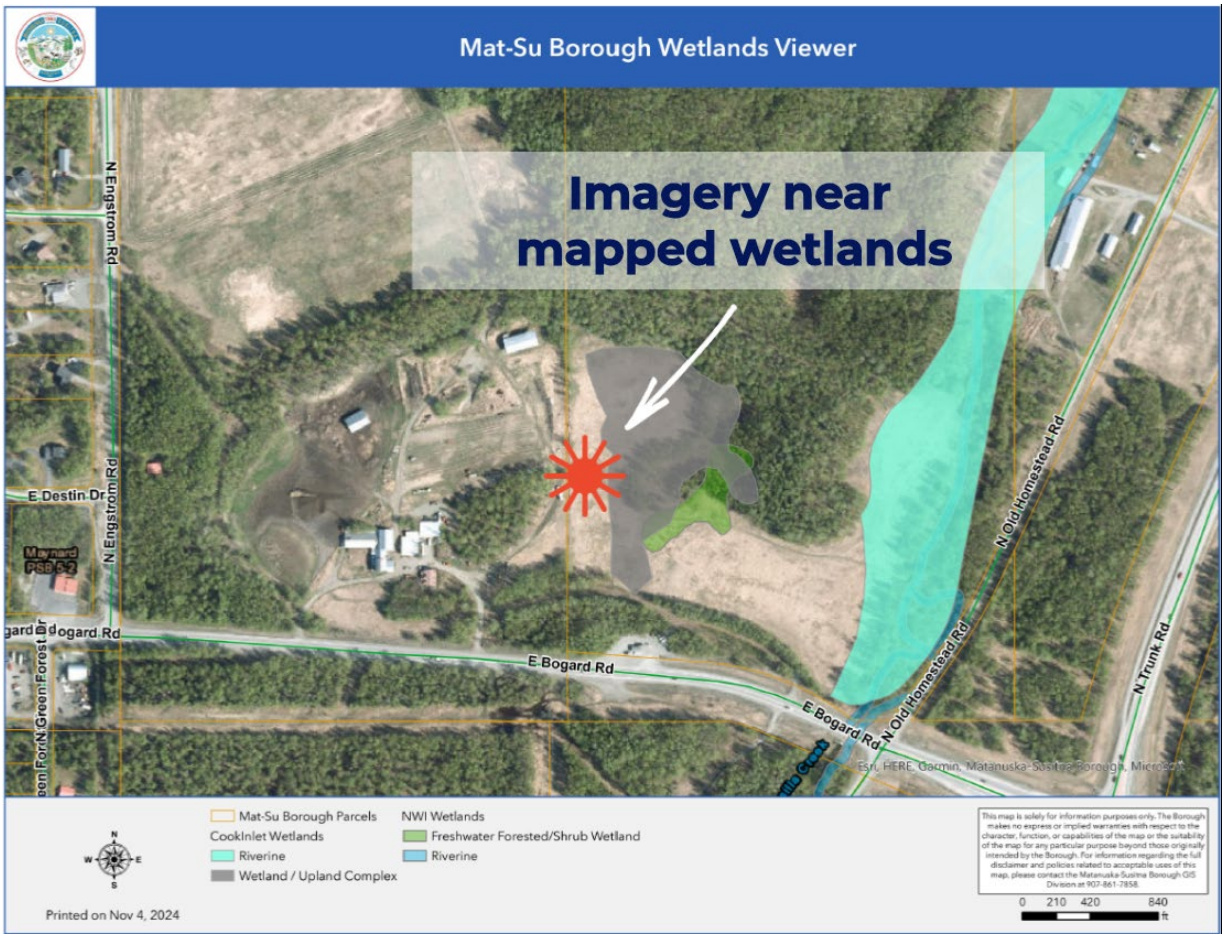
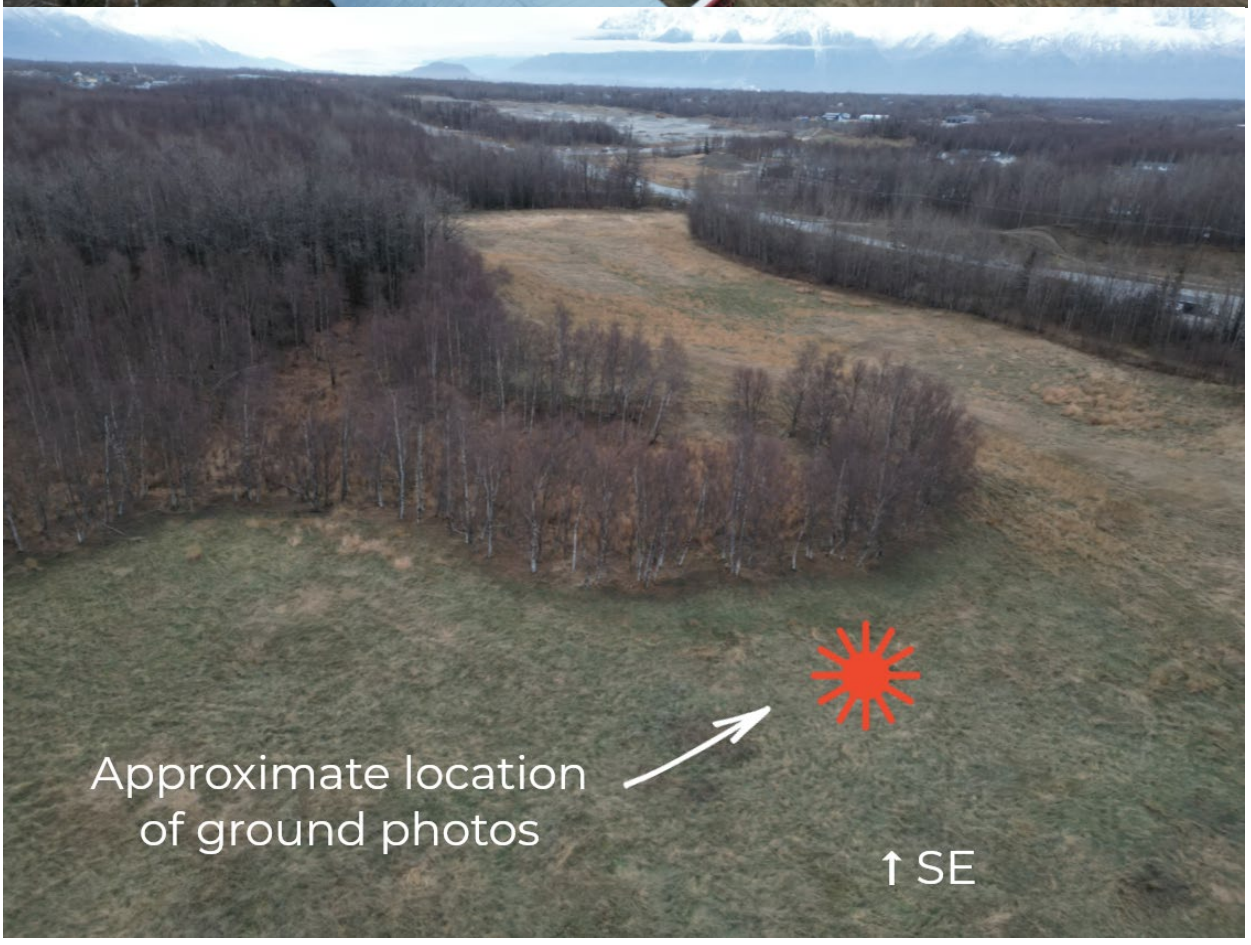

Mat-Su Borough Wetlands Viewer
Imagery near mapped wetlands
N Engstrom Rd
E Destin Dr
Maynard
E Bogard Rd
N Old Homestead Rd
N Trunk Rd
Mat-Su Borough Parcels
CookInlet Wetlands
Riverine
Wetland / Upland Complex
NWI Wetlands
Freshwater Forested/Shrub Wetland
Riverine
Printed on Nov 4, 2024
0 210 420 840


↑ SE


Approximate location
of ground photos
↑ SE

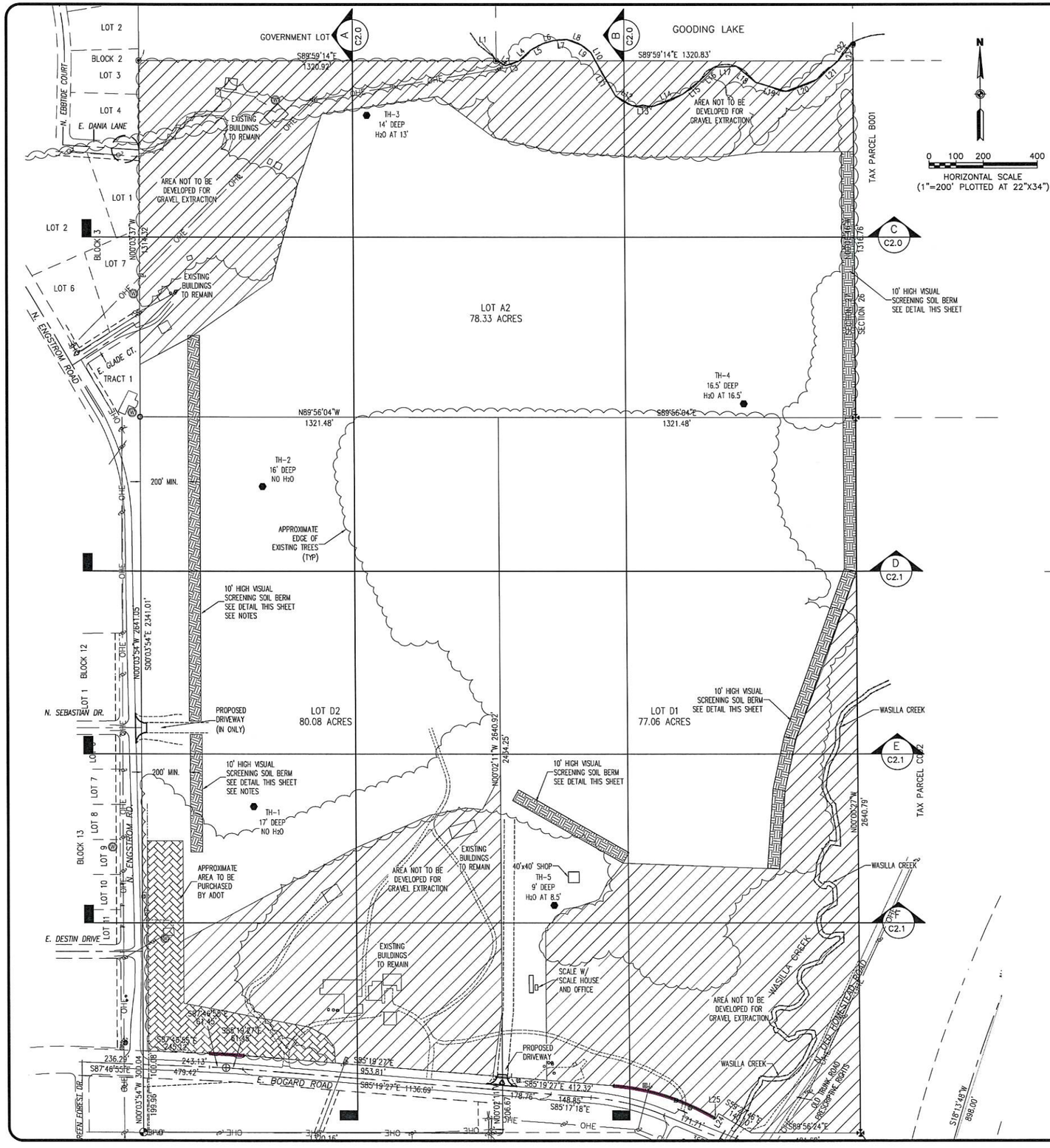

NE


NE


E

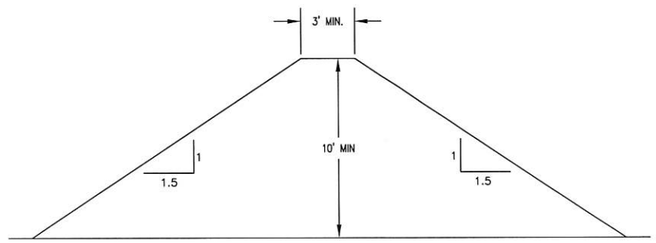

SE

SITE PLAN



NOTES

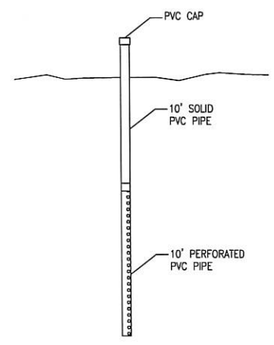
1. LOCATION OF 10' HIGH VISUAL SCREENING BERM TO BE ADJUSTED AS NEEDED.
2. MATERIAL EXTRACTION TO BEGIN IN THE LOWER ELEVATION AREAS AND MOVE OUT FROM THERE.
3. ALL PROCESSING EQUIPMENT (SCREENING PLANTS, CRUSHERS, CONVEYOR BELTS, ETC.), PERMANENT AND TEMPORARY STRUCTURES, AND MATERIAL PILES ARE TO BE PLACED +40' AT ALL TIMES FROM ALL PROPERTY LINES.
4. THE VISUAL SCREENING BERM ALONG ENGSTROM ROAD CAN BE REMOVED WHEN EXTRACTION ACTIVITIES ARE AT A LOW ENOUGH ELEVATION THAT THE BERM IS NO LONGER NEEDED.



1 C1.0 10' HIGH SOIL BERM
SCALE: NOT TO SCALE

NOTES

1. INSTALL MONITORING WELLS AT THE PERIMETER OF THE AREA WHERE MATERIAL IS BEING EXTRACTED.
2. WHEN SOIL IS EXTRACTED TO TOP OF PERFORATED PIPE, REMOVE WELL AND RELOCATE IT AT A DEEPER ELEVATION.



2 C1.0 GROUND WATER MONITORING WELL
SCALE: NOT TO SCALE

RECEIVED
JAN 16 2025
Mat-Su Borough
Development Services

STATE OF ALASKA
49TH
DAN E. STEINER
No. CE 9505
1/16/25
REGISTERED PROFESSIONAL ENGINEER

SDCS, LLC
STEINER DESIGN & CONSTRUCTION SERVICES, LLC
5900 W. DEWBERRY DR. PH:(907) 357-5609
WASILLA,AK 99623 FAX:(907) 357-5608

CENTRAL GRAVEL PRODUCTS
GRAVEL PIT DEVELOPMENT
LOTS A2, D1, D2, TOWNSHIP 18N RANGE 1E SECTION 27

BY	DATE	REVISIONS

JOB NO.: 23-016
DATE: 1/16/2025
DRAWN: DES
REVIEWED: DES

SHEET TITLE
SITE PLAN

SHEET
C1.0

APPLICATION MATERIAL

MATANUSKA-SUSITNA BOROUGH
Planning and Land Use Department
Development Services Division
350 East Dahlia Avenue • Palmer, AK 99645
Phone (907) 861-7822
Email: permitcenter@matsugov.us

APPLICATION FOR A CONDITIONAL USE PERMIT FOR EARTH MATERIALS EXTRACTION – MSB 17.30

NOTE: *Carefully read instructions and applicable borough code. Fill out forms completely. Attach information as needed. Borough staff will not process incomplete applications.*

Application fee must be attached, check one:

____ $1000 for Administrative Permit (Less than two years ***or*** less than 7,000cy annually)

_X_ $1,500 for Conditional Use Permit (More than two years ***and*** more than 7,000cy annually)

Required Attachments:

_X_ Site plan as detailed on Page 2

_X_ Narrative with operational details and all information required on Page 2

_X_ Reclamation Plan

Subject Property:

MSB Tax Account ID#(s): 118N01E27D002, 118N01E27D001, 118N01E27A002

Street Address: 7955 E Bogard Rd., 3182 N. Trunk Rd., 7801 E Glade Ct., Palmer, AK

Facility/Business Name: Central Gravel Products

Name of Property Owner
See Owner's Document (attached)

Mailing:

Phone: Cell

Wk Hm

E-mail:

Name of Agent / Contact for application
Dan Steiner, PE

Mailing: 5900 W. Dewberry Dr.
Wasilla, AK 99623

Phone: Cell 907-715-7704

Wk 907-357-5609 Hm

E-mail: dsteiner@mtaonline.net

Attach a narrative describing the proposed extraction activities.	**Attached**
Describe the types of material being extracted.	✔
Provide total acreage of all parcels on which the activity will occur.	✔
Provide total acreage of earth material extraction activity.	✔
Provide total cubic yards to be extracted.	✔
Provide the estimated final year extraction will occur.	✔
Provide seasonal start and end dates.	✔
Provide hours of operation.	✔
Provide days of the week operations will take place.	✔
Provide proposed peak hour and traffic volume at the peak hour	✔
Provide estimated end date of extraction.	✔
Provide estimated end date of reclamation.	✔
Describe all other uses occurring on the site.	✔
Describe methods used to prevent problems on adjacent properties, such as lateral support (steep slopes), water quality, drainage, flooding, dust control, and maintenance of roads.	✔
Describe how the operation will monitor the seasonal high water table.	✔
Provide quantity estimates and topographical information such as cross section drawings depicting depth of excavation, slopes, and estimated final grade.	✔
Provide Reclamation Plan in accordance with MSB 17.28.063 and 17.28.067.	✔

Submit a detailed site plan, *drawn to scale*. Drawings under the seal of an engineer or surveyor are recommended but not required.	**Attached**
Identify location of permanent and semi-permanent structures on the site for verification of setback requirements. Include wells and septic systems.	✔
Depict buffer areas, driveways, dedicated public access easements, noise buffers (such as fences, berms or retained vegetated areas), and drainage control such as ditches, settling ponds, etc.	✔
Identify the entire area intended for gravel/material extraction activity.	✔
Identify the property boundary containing the operation.	✔
Identify ADEC Drinking Water Protection Areas wherever proposed project area boundaries fall within drinking water protection area buffer zones.	✔ See Narrative
Identify areas used for past and future phases of the activity.	✔
Provide road and access plan that includes anticipated vehicle routes and traffic volumes. If the level of activity exceeds the minimum levels specified in MSB 17.61.090, Traffic Standards, a traffic control plan consistent with state regulations may be required.	✔
Provide detailed description of the proposed visual screening.	✔ See Narrative
Provide measures to mitigate or lessen noise impacts on surrounding properties.	✔ See Narrative
Provide proposed lighting plan.	✔ See Narrative

Submit documentation showing compliance with borough, state, and federal laws.	**Applied for (list file #)**	**Attached (list file #) or N/A**
Submit mining permit as required by the Alaska State Department of Natural Resources (ADNR) if extraction activities are to take place on state land.		N/A
Provide reclamation plan as required by ADNR, pursuant to AS 27.19. Provide copy of reclamation financial assurance filed with the State of Alaska (If exempt, provide qualifying documents for exemption).	A reclamation plan has been submitted to ADNR. It is included with this submittal. Also included is the financial assurance information.	
Provide Notice of Intent (NOI) for construction general permit or multi-sector general permit and storm water pollution prevention plan, and other associated permits or plans required by the Environmental Protection Agency (EPA) pursuant to the National Pollutant Discharge Elimination System (NPDES) requirements.	SWPPP has been prepared and is included with this submittal. An NOI will be filed once the project is approved.	
Provide United States Army Corps of Engineers permit pursuant to Section 404 of the Clean Water Act, 33 U.S.C. 1344, if material extraction activity is to take place within wetlands, lakes, and streams.	See Narrative	N/A - See narrative.
Provide any other applicable permits, such as driveway/access permits; list as appropriate.	See narrative.	

Prior to the public hearing, the applicant must also pay the mailing and advertising fees associated with the application. Staff will provide applicant with a statement of advertising and mailing charges. Payment must be made **prior** to the application presentation at the public hearing.

OWNER'S STATEMENT: I am owner or authorized agent of the following property:

MSB Tax Account ID #(s)_____ and, I hereby apply for approval of conditional use permit for earth material extraction activities on the property as described in this application.

I understand all activity must be conducted in compliance with all applicable standards of MSB 17.28, MSB 17.30, and with all other applicable borough, state, and federal laws, including but not limited to, air quality, water quality, and use and storage of hazardous materials, waste and explosives, per MSB 17.30.055.

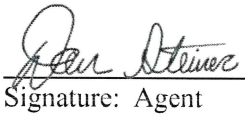
I understand that other rules such as local, state, and federal regulations, covenants, plat notes, and deed restrictions may be applicable and other permits or authorizations may be required. I understand that the borough may also impose conditions and safeguards designed to protect the public's health, safety, and welfare, and ensure the compatibility of the use with other adjacent uses.

I understand that it is my responsibility to identify and comply with all applicable rules and conditions, covenants, plat notes, and deed restrictions, including changes that may occur in such requirements.

I understand that this permit may transfer to subsequent owners of this land and that it is my responsibility to disclose the requirements of this status to operators on this property, and to the buyer when I sell the land. Additionally, I agree to comply with MSB 17.30.120, Transfer of Conditional Use Permit, in the event this permit is transferred to a subsequent property owner.

I grant permission for borough staff members to enter onto the property as needed to process this application and monitor compliance. Such access will at a minimum, be allowed when the activity is occurring and, with prior notice, and at other times necessary to monitor compliance.

The information submitted in this application is accurate and complete to the best of my knowledge.

Signature: Property Owner	Printed Name	Date
See Attached		
Signature: Agent	Printed Name	Date
	Dan Steiner	5/10/2024

MATANUSKA-SUSITNA BOROUGH
Planning and Land Use Department
Development Services Division

APPLICATION FOR A CONDITIONAL USE PERMIT FOR EARTH MATERIALS EXTRACTION – MSB 17.30

Facility/Business Name: Central Gravel Products

NAME OF PROPERTY OWNER:

Lot A2 and Lot D2, Section 27 T18N, R1E Seward Meridian

Name: Bob Havemeister

Address: P.O. Box 467 Palmer, AK 99645

Phone Number: 907-232-0628

Email: Havemeistertrucking@gmail.com

OWNER'S STATEMENT: I am owner or authorized agent of the following property:

MSB Tax Account ID #(s) Lot A2 and Lot D2, Section 27 T18N, R1E Seward Meridian and, I hereby apply for approval of conditional use permit for earth material extraction activities on the property as described in this application.

I understand all activity must be conducted in compliance with all applicable standards of MSB 17.28, MSB 17.30, and with all other applicable borough, state, and federal laws, including but not limited to, air quality, water quality, and use and storage of hazardous materials, waste and explosives, per MSB 17.30.055.

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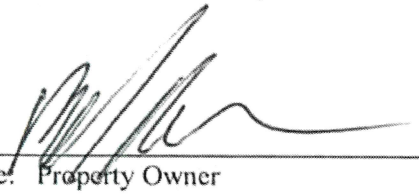

Signature: Property Owner | Bob Havemeister Printed Name | 5/2/24 Date

MATANUSKA-SUSITNA BOROUGH
Planning and Land Use Department
Development Services Division

APPLICATION FOR A CONDITIONAL USE PERMIT FOR EARTH MATERIALS EXTRACTION – MSB 17.30

Facility/Business Name: Central Gravel Products

NAME OF PROPERTY OWNER:

Lot D1, Section 27, T18N, R1E, Seward Meridian

Name: Ralph Kircher

Address: 3182 N. Trunk Road Palmer, AK 99645

Phone Number: 253-850-9570

Email: preciousralph@AOL.com

OWNER'S STATEMENT: I am owner or authorized agent of the following property:

MSB Tax Account ID #(s) Lot D1, Section 27, T18N, R1E, Seward Meridian and, I hereby apply for approval of conditional use permit for earth material extraction activities on the property as described in this application.

I understand all activity must be conducted in compliance with all applicable standards of MSB 17.28, MSB 17.30, and with all other applicable borough, state, and federal laws, including but not limited to, air quality, water quality, and use and storage of hazardous materials, waste and explosives, per MSB 17.30.055.

I understand that other rules such as local, state, and federal regulations, covenants, plat notes, and deed restrictions may be applicable and other permits or authorizations may be required. I understand that the borough may also impose conditions and safeguards designed to protect the public's health, safety, and welfare, and ensure the compatibility of the use with other adjacent uses.

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I grant permission for borough staff members to enter onto the property as needed to process this application and monitor compliance. Such access will at a minimum, be allowed when the activity is occurring and, with prior notice, and at other times necessary to monitor compliance. The information submitted in this application is accurate and complete to the best of my knowledge.

Ralph O. Kircher	RALPH O. KIRCHER	5/2/2024
Signature: Property Owner	Printed	Name Date

5900 W. Dewberry Dr
Wasilla, AK 99623

SDCS, LLC
STEINER DESIGN & CONSTRUCTION SERVICES, LLC

Phone: (907) 357-5609
Fax: (907) 357-5608

January 21, 2025

Planning and Land Use Department
Development Services Division
Matanuska-Susitna Borough (MSB)
350 E. Dahlia Ave.
Palmer, AK 99645-6488

Re: Central Gravel Products (CGP) – Gravel Pit - Application for Condition Use
T18N, R1E, Section 27, Lots D1, D2, and A2
Engineering Narrative

To Whom it May Concern,

As part of the MSB "Earth Materials Extraction" application, the following information is provided as required on the **"APPLICATION FOR A CONDITIONAL USE PERMIT FOR EARTH MATERIALS EXTRACTION – MSB 17.30"**:

Narrative Describing the Proposed Extraction Activities

- Types of material being extracted: This gravel pit will extract sand and gravel material to be used in construction. Some of the material will be processed and/or crushed to be used as sewer rock and road section material. Also, there will be stockpiles of processed topsoil.
- Total acreage of gravel pit (all three parcels): 235 acres.
- Total acreage of earth material extraction activity: 153 acres.
- Total cubic yards to be extracted: 7,500,000 CY (This volume can change based on where groundwater is detected.) Approximately 230,000 CY will be extracted annually.
- Estimated final year extraction will occur: 2054
- Seasonal Start and End dates: Start on May 1 and end on November 1.
- Hours of operation: 8:00 am – 5:30 pm. The hours of operation are so the gravel pit can avoid rush hour traffic and traffic associated with Colony High School and Middle School starting in the morning.

- Days of operation: Monday – Saturday

- Proposed peak hour and traffic volume at the peak hour: Peak hour – 11:00 AM 24 (12 trips in, 12 trips out).

- Estimated End Date of Extraction: November 1, 2054

- Estimated End Date of Reclamation: November 1, 2055

- Other uses occurring on site: There are areas of the three parcels that will not be developed for material extraction. There are existing residential structures on the site. These structures will remain and the areas around them will be unchanged.

- Problem prevention:

  Lateral Support: Final slopes will be 3h:1v or flatter.

  Water Quality: A SWPPP has been prepared. It will be implemented by CGP as part of this project.

  Drainage: This action will create a low spot on the site. No runoff is anticipated to leave the site.

  Dust Control: Site vegetative buffers will block a lot of the dust from leaving the site. A water truck to sprinkle water at the site will be used if needed. If a water truck is needed, a filling pit will be excavated and groundwater near the surface will be pumped to fill the truck. If this is needed, the appropriate Alaska Department of Natural Resources (AK-DNR) permits will be obtained. Sweepers will be used to remove any soil tracked onto adjacent roads.

  Maintenance of Road: Site operators have the equipment needed to maintain on site roads.

  Flooding: No part of the soil extraction area is within the 100-year flood zone. No flooding is anticipated.

  Fuel Spills: The only two sources of fuel spills are fuel tanks on equipment and an on-site fuel tank. All trucks and equipment will be monitored to identify any fuel spills and address immediately. The on-site fuel tank will be an above ground 500-gallon tank. The fuel tank will be placed in a containment pond to catch any spilled fuel.

- Monitoring of the Seasonal High-Water Table: Monitoring wells be will installed in the areas where material extraction is taking place. The wells will be lowered as the soil is extracted to ensure that extraction is not closer than 4' to groundwater. See detail for well on sheet C1.0.

Detailed Site Plan

- Identify ADEC Drinking Water Protection Areas: There is one drinking water protection area near this project. It is for a site that obtains its drinking water adjacent to Wasilla Creek. This site is approximately one mile southwest of this site.

  I have discussed this project with ADEC. The only contaminate that they were concerned with was turbidity. Since the project will maintain a large vegetative buffer along the creek and the existing and finish topography of the developed areas drain away from the creek, ADEC is not concerned and has stated that no action is required.

- Visual Screening: Visual screening will be provided by either a 10' high soil berm, existing vegetation, existing buildings, or topography. See the included plans for locations of all the visual screening.

  If it is determined that the existing buildings, existing vegetation, and the proposed screening berms do not meet the MSB requirements, additional screening berms will be constructed.

- Noise Mitigation: Noise mitigation will be provided by the hours of operation and by maintaining equipment used on site. All the heavy equipment (excavators, loaders, etc.) and processing/crushing equipment will maintain all required mufflers and noise dampeners. Material extraction will also start near the middle of the site and at a lower elevation from the surrounding property. As work progresses, the extraction will continue to be at a lower level. This type of production also has strict OSHA regulations for noise levels that are stringently followed.

- Permanent and Semi-Permanent Structures: All permanent structures are shown on Sheet C1.0. All the processing equipment will be moved as areas are reclaimed and additional areas developed for extraction. All processing equipment (screening plants, crushers, conveyor belts, etc.), permanent and temporary structures, and material piles are to be always placed at least 40' from all perimeter property lines. See notes on Sheet C1.0.

It is planned to have 10 acres disturbed at a time. Once the 10 acres is done, an additional 10 acres will be developed, and the previous 10 acres will be reclaimed. The processing equipment will be moved to the new 10 acres each time. Each 10-acre "phase" will be approximately two years.

- Lighting Plan: The only exterior lights will be mounted on the proposed shop and scale house. These lights will be directed downward and will include shields, as needed, to prevent light spillage on to adjacent properties.

- Ditches, Settling Ponds, Wash Pit Ponds, etc.: There will be no washed products at this pit. No ditches, ponds, etc. will be needed.

Borough, State, and Federal Laws

- AK-DNR Reclamation Plan: A reclamation plan has been submitted to and approved by the AK-DNR. A copy of the plan has been sent to the MSB.

- Reclamation Financial Assurance: A copy of the reclamation financial assurance that was filed with the State of Alaska will be delivered to the MSB as soon as DNR determines what the fee will be and it has been paid.

- United States Army Corps of Engineers: There is a small area that has been identified as a wetland within the project parcels (see Sheet C0.2). No material extraction will take place in or near this area and the wetland will not be disturbed. As a precaution, a Jurisdictional Determination (JD) has been requested from the United States Army Corps of Engineers. Their response is that these wetlands do not require are Department of Army (DA) permit. A copy of the response has been sent to the MSB.

Additional Information

<u>Drifting Snow Along Engstrom Road</u>

The MSB has expressed concern about drifting snow along Engstrom Road and the increase in drifting that a 10' high soil berm would create. Based on calculations, a 10' high soil berm would produce a snowdrift that is approximately 130' long from the berm. As a result, the berm will be placed 200' from the Engstrom Road right-of-way. This would provide a factor of safety of 1.5 with regard to a snowdrift, created by the visual screening berms, reaching Engstrom Road.

The placement of this visual screening berm will most likely not prevent drifting snow onto Engstrom Road. Once the snow drift adjacent to the visual screening berm "matures" snow will continue past this drift toward Engstrom Road. However, the berm should not increase the drifting.

In fact, there is a good chance that this berm may decrease the volume of snow that drifts on to Engstrom Road since a portion of the snow that would usually reach Engstrom Road will now be stored behind the visual screening berm

See Sheet C1.0 for the location and detail of the visual screening berms.

Site Access

There will be two access points into the gravel pit. A driveway off Engstrom Road and a driveway off Bogard Road. The driveway from Engstrom Road will be an in-only driveway. Engstrom Road is MSB right-of-way. A MSB driveway permit has been obtained for this driveway.

Bogard Road is State of Alaska right-of-way. An Alaska Department of Transportation (ADOT) driveway permit has been applied for. At the time of this narrative, ADOT has provided verbal approval of the driveway permit. ADOT is currently preparing the "approval to construct" (ATC) for the appropriate signatures. A copy of the executed ATC will be provided to the MSB as soon as it is available. A special condition will be part of the ATC. Left turns out of the driveway onto Bogard Road will be allowed for two years. For left turns onto Bogard Road, CGP must provide a traffic control plan (TCP), including flaggers, to assist with the left turns. At the end of two years, CGP will be required to build an island at the driveway making the driveway a "right in, right out" only approach.

ADOT is planning to construct a roundabout at the intersection of Bogard Road and Engstrom Road. It should be completed when the Bogard Road driveway becomes a right out only driveway. At that time, trucks wanting to travel east on Bogard Road will turn right out of the driveway, make a u-turn at the roundabout, and then move east on Bogard Road.

Central Gravel Products has kept detailed records of how many trucks per day they serve for the life of their current pit. They plan on operating the proposed gravel pit in the same manner. This information was used to determine the peak hour traffic volume. The number that was submitted (12 in and 12 out) is from the busiest days they have recorded. With a peak hourly traffic volume of 12 trucks per hour (12 in, 12 out), no other mitigation is needed to provide access to and from the proposed gravel pit.

Traffic Routes

The gravel pit has no control over the route that the trucks of their customers take, but they anticipate that most trucks will travel along Bogard Road and Trunk Road to and from the gravel pit. Some traffic will be on Engstrom Road, but it is anticipated that this will be minimal traffic. Trucks will be encouraged to avoid residential areas as much as possible. Central Gravel Products has three vehicles that it uses to deliver gravel products. They always have their drivers

use main roads to their destination and will not send trucks along Engstrom Road later than 4:00 PM.

With the location of this gravel pit, most traffic should be able to use the higher volume roads to get close to their destinations (Bogard, Trunk, Palmer Fishhook, Wasilla-Fishhook, Palmer-Wasilla Highway).

Please note that the start and stop movements through residential areas discourage large trucks from traveling through residential areas. The starts and stops take a lot longer and even if that route is a shorter distance, it is usually much better for trucks to take the main roads.

Proposed End Use after Extraction

The use of the property after extraction has not been finalized.

Demand for Gravel Pits

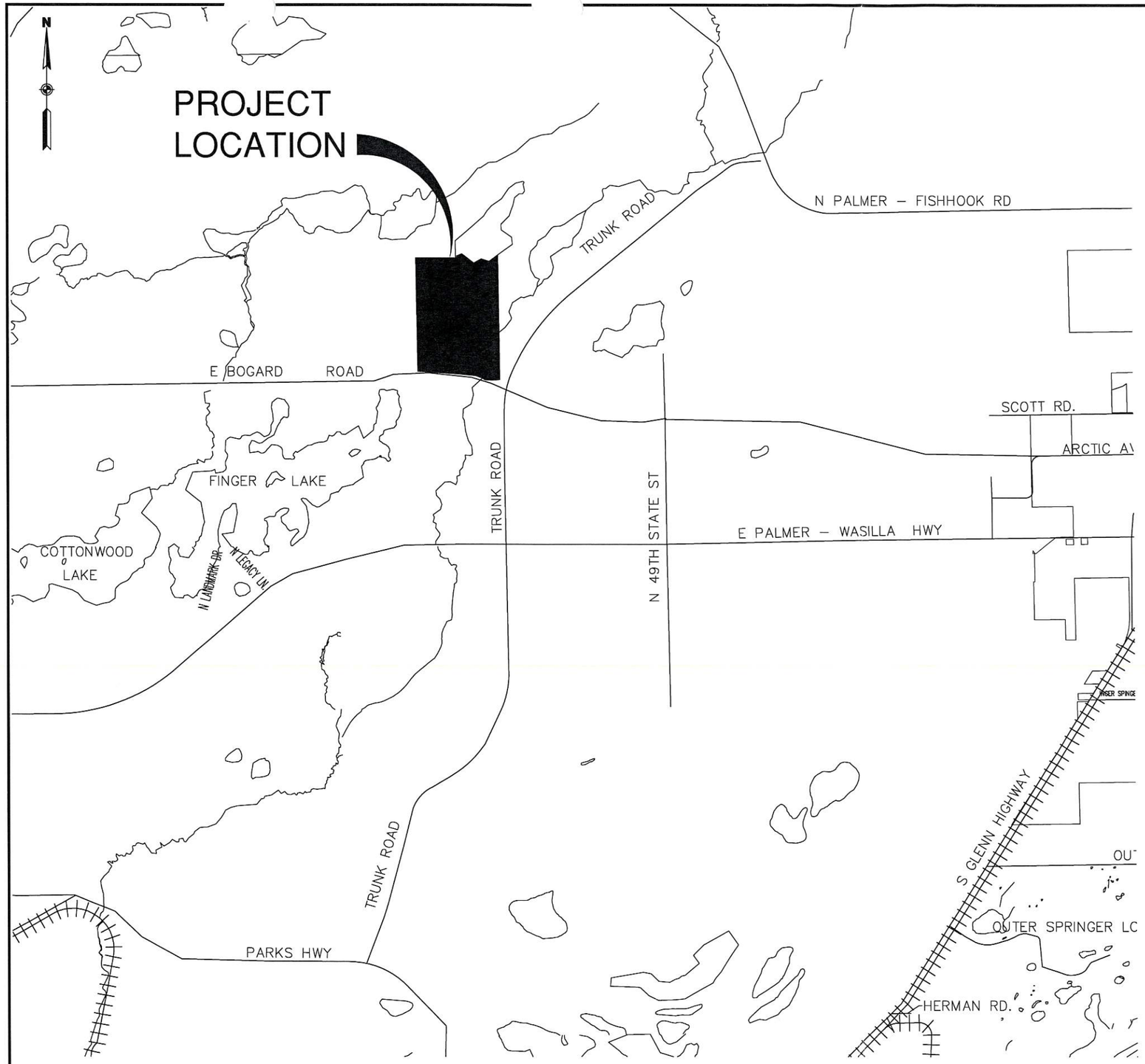
Central Gravel Products is anxious for this new gravel pit to be developed. There is a high demand for the soil products that it will provide. Central Gravel Products is concerned about the depletion of gravel pits in the Matanuska-Susitna Valley and knows that this proposed gravel pit will help meet the demand for gravel for many years to come.

Please let us know if you have any questions or need additional information.

Sincerely,

Dan Steiner, P.E.
Manager

des
encl.



VICINITY MAP

CENTRAL GRAVEL PRODUCTS
GRAVEL PIT DEVELOPMENT

LOTS A2, D1, D2,
TOWNSHIP 18N RANGE 1E SECTION 27
PALMER, AK

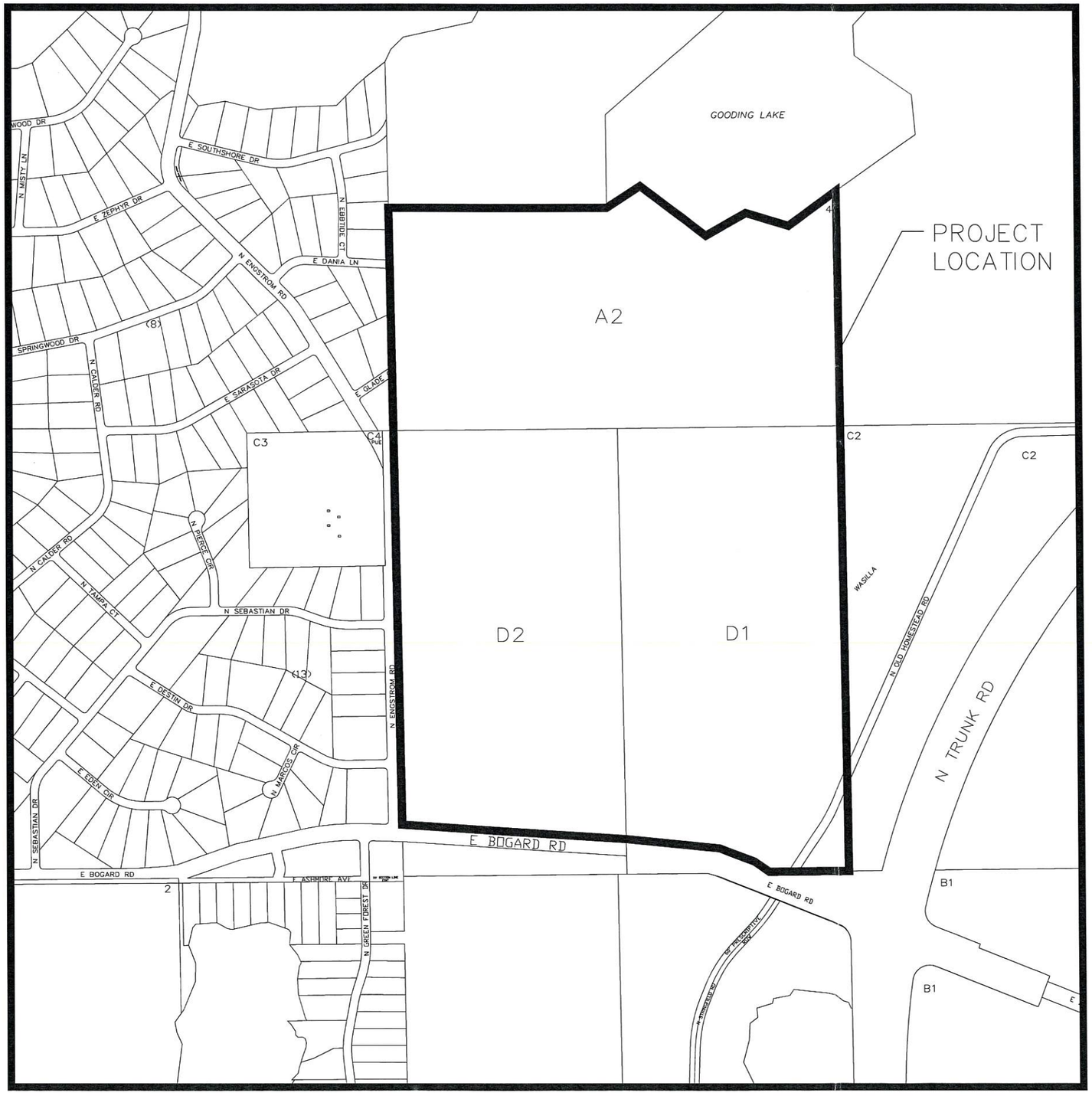
SHEET INDEX

RECEIVED
AUG 9 2024
Mat-Su Borough
Development Services

SDCS, LLC
STEINER DESIGN & CONSTRUCTION SERVICES, LLC
5900 W. DEWBERRY DR. PH: (907) 357-5609
WASILLA, AK 99623 FAX: (907) 357-5608

PLAN SET DATE: 8/9/2024

February 3, 2025
Planning Commission Meeting
131 of 195



LOCATION MAP

LEGEND

- PROPERTY LINE
- EASEMENT LINE
- EDGE OF VEGETATION
- EDGE OF GRAVEL DRIVEWAY
- EDGE OF PAVED DRIVEWAY
- CMP CULVERT WITH END SECTIONS
- AREA TO REMAIN UNDEVELOPED
- 10' HIGH SOIL BERM
- AREA WHERE 10' HIGH SOIL BERM IS NOT NEEDED

RECEIVED
AUG 19 2024
Mat-Su Borough
Development Services

SURVEY NOTES

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE POSITION OF THE HORIZONTAL AND VERTICAL CONTROL USED.
2. SURVEY PERFORMED BY KEYSTONE SURVEYING.

CALL BEFORE YOU DIG

The Contractor shall notify all area utility companies prior to commencement of excavation. The following is a partial list:

ALASKA DIG LINE (907) 278-3121, (800) 478-3121

STATE OF ALASKA
DAN E. STEINER
No. CE 9505
8/9/24
REGISTERED PROFESSIONAL ENGINEER

SDCS, LLC
STEINER DESIGN & CONSTRUCTION SERVICES, LLC
5900 W. DEWBERRY DR. PH:(907) 357-5609
WASILLA, AK 99623 FAX:(907) 357-5608

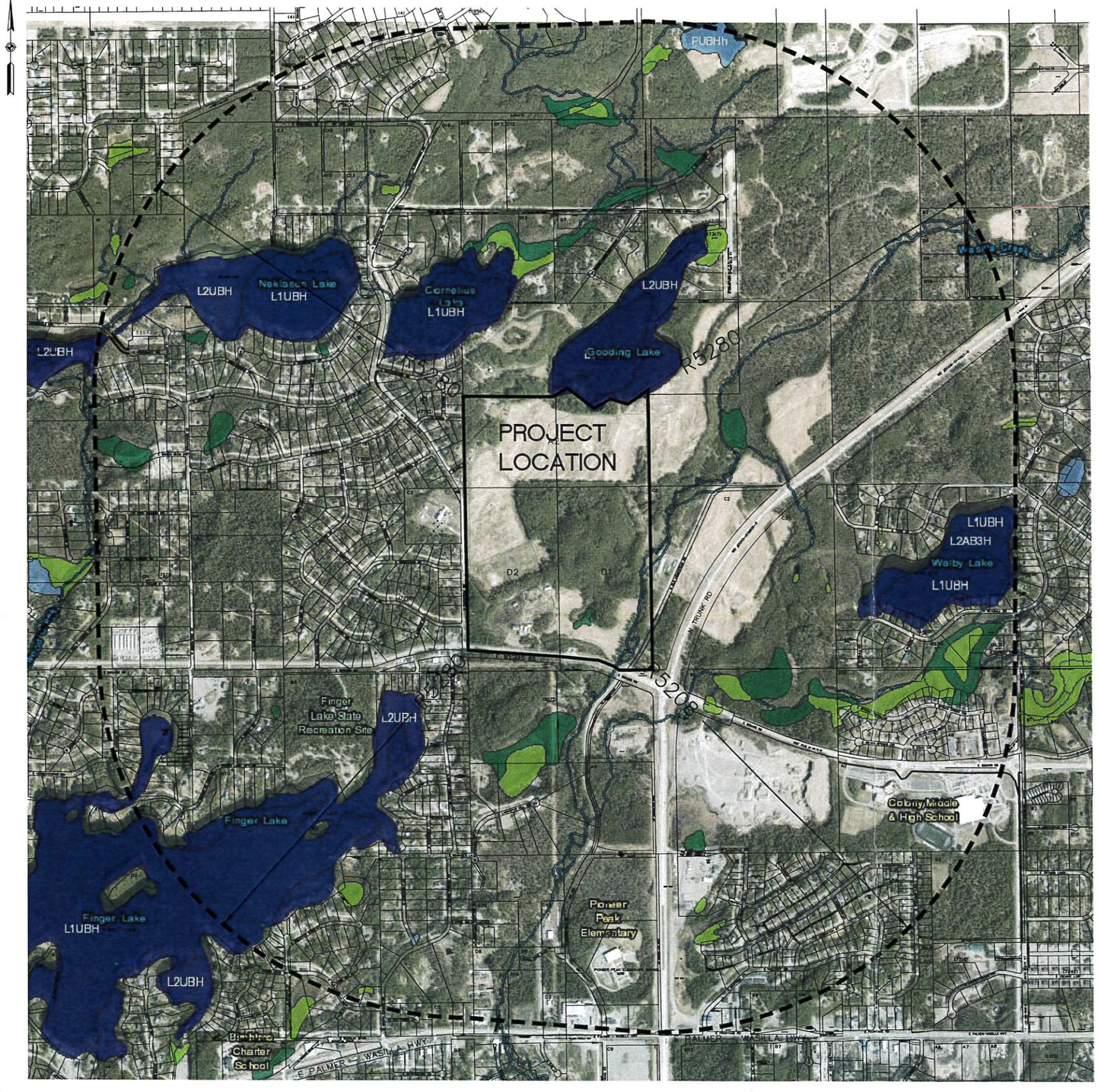
CENTRAL GRAVEL PRODUCTS
GRAVEL PIT DEVELOPMENT
LOTS A2, D1, D2, TOWNSHIP 18N RANGE 1E SECTION 27

BY	DATE	REVISIONS

JOB NO.: 23-016
DATE: 8/9/2024
DRAWN: DES
REVIEWED: DES

SHEET TITLE
LOCATIONS MAP
LEGEND
CONSTRUCTION NOTES

SHEET
C0.1



- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

RECEIVED
AUG 12 9 2024
Mat-Su Borough
Development Services

STATE OF ALASKA
DAN E. STEINER
No. CE 9505
8/9/24
REGISTERED PROFESSIONAL ENGINEER

SDCS, LLC
STEINER DESIGN & CONSTRUCTION SERVICES, LLC
5900 W. DEWBERRY DR. PH:(907) 357-5609
WASILLA, AK 99623 FAX:(907) 357-5608

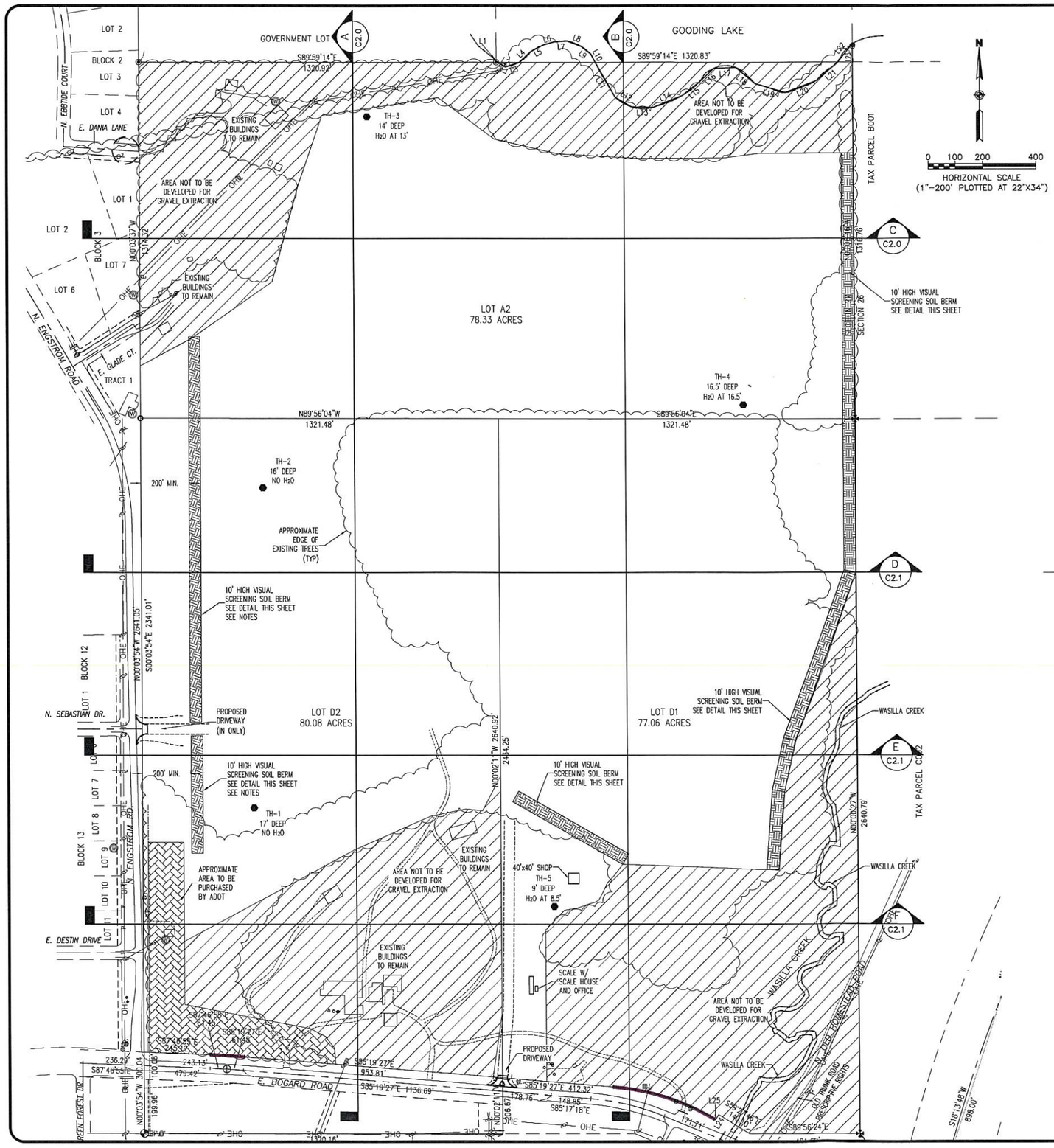
CENTRAL GRAVEL PRODUCTS
GRAVEL PIT DEVELOPMENT
LOTS A2, D1, D2, TOWNSHIP 18N RANGE 1E SECTION 27

BY	DATE	REVISIONS

JOB NO.: 23-016
DATE: 8/9/2024
DRAWN: DES
REVIEWED: DES

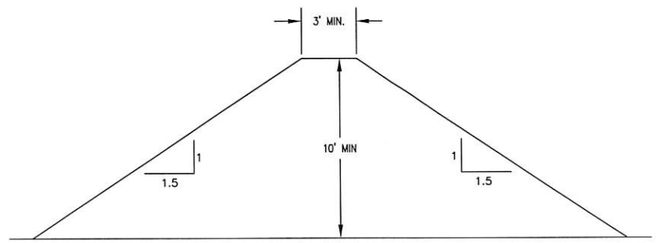
SHEET TITLE
WATERBODIES AND WETLANDS

SHEET
C0.2

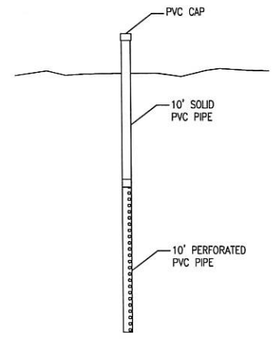


NOTES

1. LOCATION OF 10' HIGH VISUAL SCREENING BERM TO BE ADJUSTED AS NEEDED.
2. MATERIAL EXTRACTION TO BEGIN IN THE LOWER ELEVATION AREAS AND MOVE OUT FROM THERE.
3. ALL PROCESSING EQUIPMENT (SCREENING PLANTS, CRUSHERS, CONVEYOR BELTS, ETC.), PERMANENT AND TEMPORARY STRUCTURES, AND MATERIAL PILES ARE TO BE PLACED +40' AT ALL TIMES FROM ALL PROPERTY LINES.
4. THE VISUAL SCREENING BERM ALONG ENGSTROM ROAD CAN BE REMOVED WHEN EXTRACTION ACTIVITIES ARE AT A LOW ENOUGH ELEVATION THAT THE BERM IS NO LONGER NEEDED.



1 C1.0 10' HIGH SOIL BERM
SCALE: NOT TO SCALE



NOTES

1. INSTALL MONITORING WELLS AT THE PERIMETER OF THE AREA WHERE MATERIAL IS BEING EXTRACTED.
2. WHEN SOIL IS EXTRACTED TO TOP OF PERFORATED PIPE, REMOVE WELL AND RELOCATE IT AT A DEEPER ELEVATION.

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2 C1.0 GROUND WATER MONITORING WELL
SCALE: NOT TO SCALE

STATE OF ALASKA
49TH
DAN E. STEINER
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CENTRAL GRAVEL PRODUCTS
GRAVEL PIT DEVELOPMENT
LOTS A2, D1, D2, TOWNSHIP 18N RANGE 1E SECTION 27

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SHEET TITLE
SITE PLAN

SHEET
C1.0

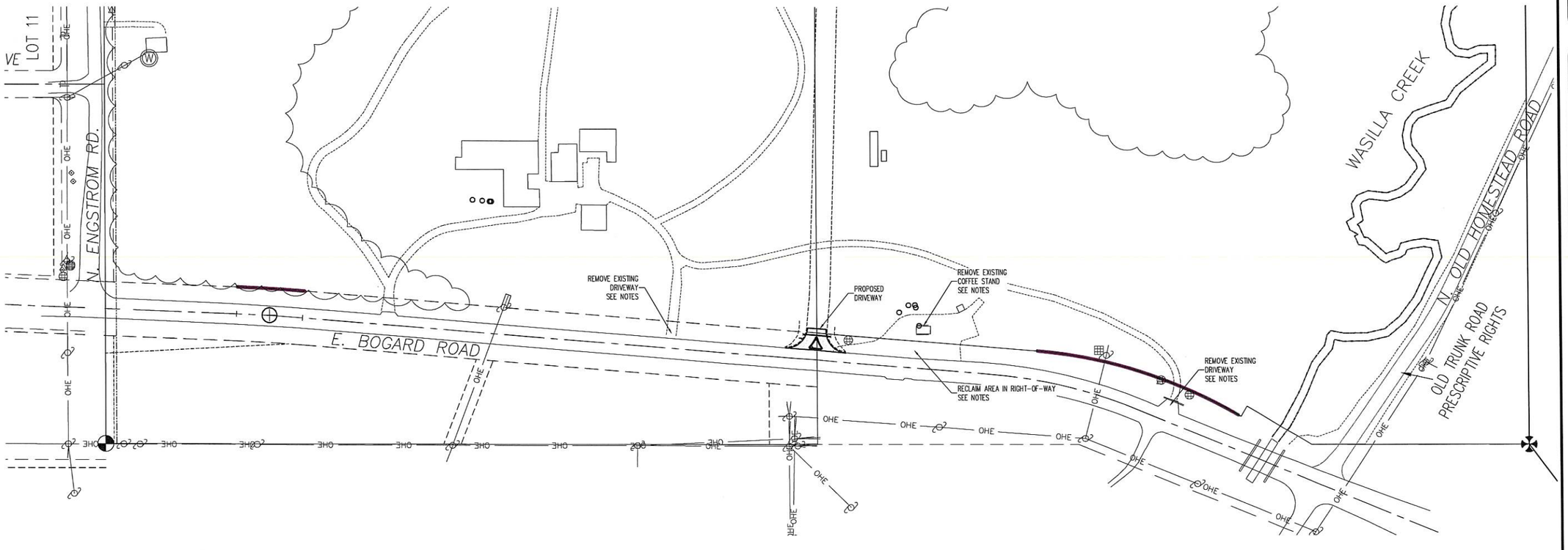
N

0 100 200 400

HORIZONTAL SCALE
(1"=200' PLOTTED AT 22"X34")

NOTES

1. REMOVE EXISTING DRIVEWAYS AS SHOWN.
2. EXISTING COFFEE STAND TO BE REMOVED AND RELOCATED TO A DIFFERENT LOCATION.
3. REMOVING DRIVEWAYS AND RECLAIMING THE AREAS IN THE RIGHT-OF-WAY INCLUDES THE FOLLOWING:
   - REMOVE ANY AC PAVEMENT NOT ASSOCIATED WITH BOGARD ROAD. ANY AC PAVEMENT TO BE REMOVED MUST BE VERTICALLY SAW-CUT.
   - REMOVE EXISTING SOIL USED FOR DRIVEWAYS OR COFFEE SHOP AREA AS NEEDED TO RESHAPE ROAD SHOULDER. MATCH EXISTING ROAD SHOULDER IN WIDTH, SLOPE, AND DEPTH.
   - SALVAGE ANY EXISTING CULVERTS TO ADOT. IF ADOT DOES NOT WANT EXISTING CULVERTS, CONTRACTOR TO DISPOSE OF CULVERT AND END SECTIONS.
   - ALL RESHAPED MATERIAL TO BE COMPACTED TO 95% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D1557.
   - TOPSOIL AND SEED ALL DISTURBED AREAS WITHIN ADOT AND MSB RIGHT OF WAY. SEE TO BE CERTIFIED WEED FREE AND CONSISTS OF PLANTS NATIVE TO SOUTH CENTRAL ALASKA. CONTRACTOR TO GET APPROVAL FROM ENGINEER FOR SEED MIX BEFORE SEEDING.



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SHEET TITLE
DEMOLITION PLAN

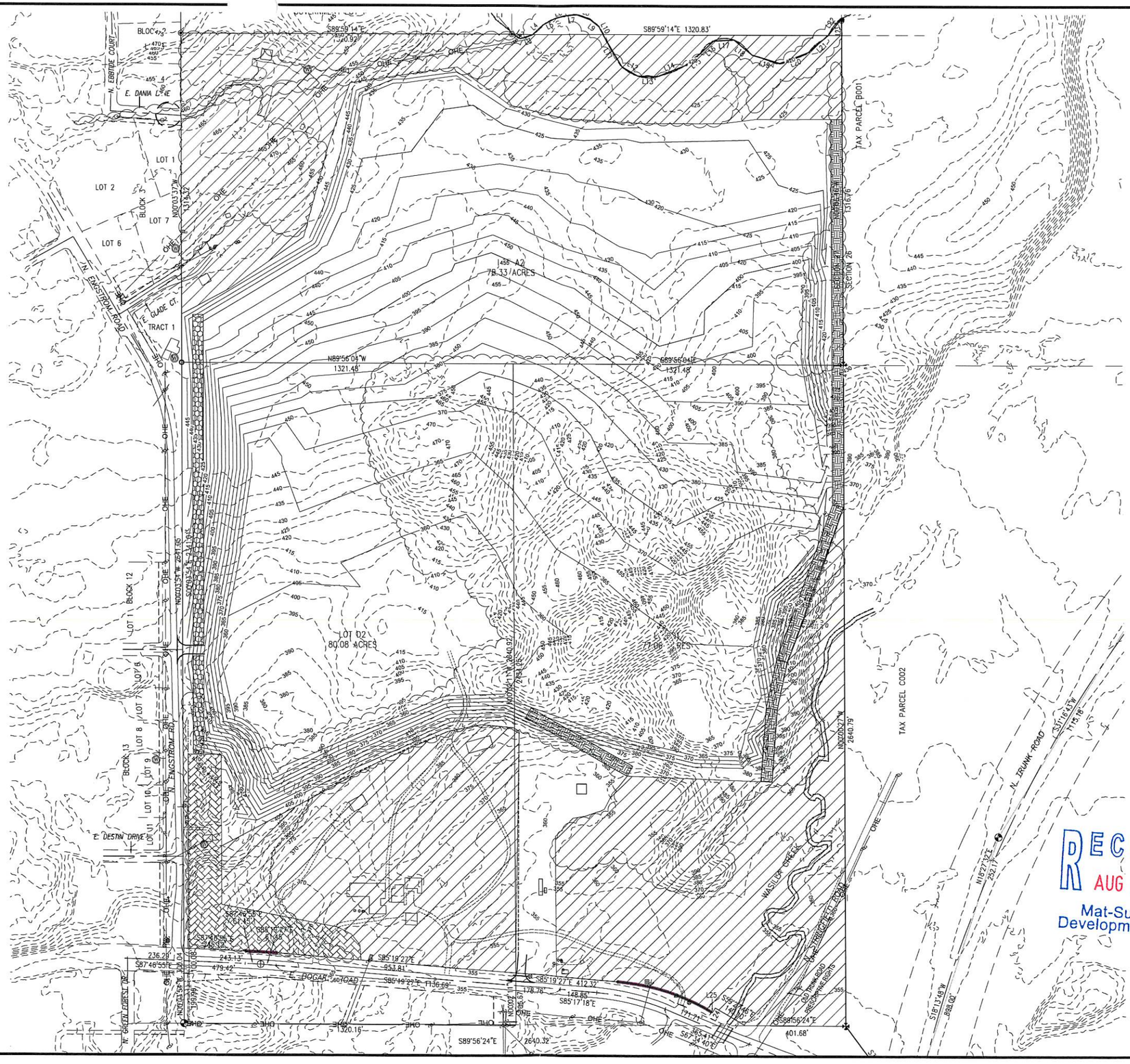
SHEET
C1.0.1

N

0 100 200 400
HORIZONTAL SCALE
(1"=200' PLOTTED AT 22"X34")

NOTES

1. FINISH GRADE IS SHOWN WITH FINAL CONTOURS. FINAL FINISH GRADE MAY CHANGE DEPENDING ON WHAT SOILS AND GROUNDWATER IS ENCOUNTERED AS MATERIAL EXTRACTION TAKES PLACE.



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STATE OF ALASKA 49TH
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CENTRAL GRAVEL PRODUCTS
GRAVEL PIT DEVELOPMENT

LOTS A2, D1, D2, TOWNSHIP 18N RANGE 1E SECTION 27

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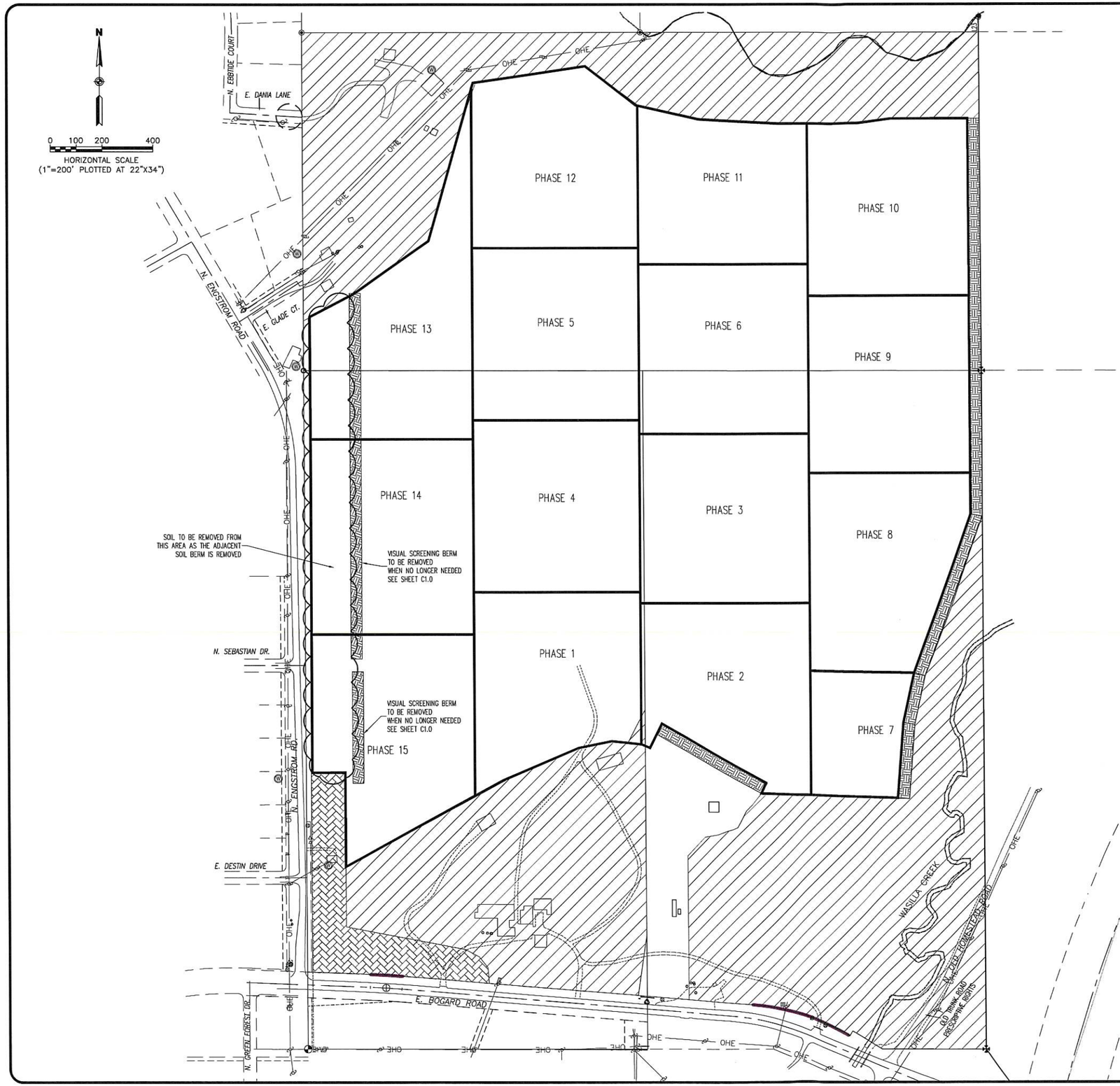
SHEET TITLE
TOPO PLAN

SHEET
C1.1



NOTES

1. THE PHASES SHOWN ARE 10 ACRES OR LESS.
2. NO MORE THAN 10 ACRES ARE DEVELOPED AT ONE TIME FOR MATERIAL EXTRACTION.
3. AS MORE ADDITIONAL AREA IS DEVELOPED, PREVIOUS DEVELOPED AREAS WILL BE RECLAIMED SO THAT NO MORE THAN 10 ACRES AT A TIME ARE DEVELOPED.
4. PHASES SHOWN ARE AN ESTIMATE. FUTURE EVENTS WILL IMPACT THE PHASING, BUT THE AREA DEVELOPED WILL ALWAYS BE 10 ACRES OR LESS.

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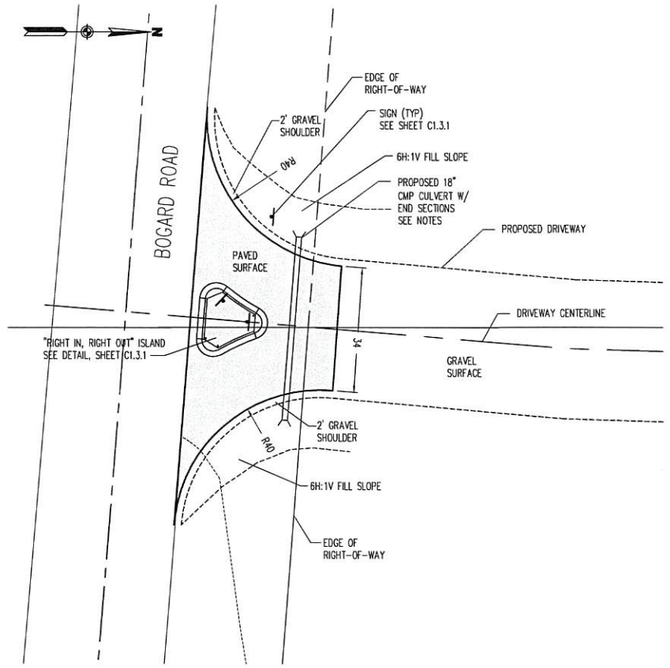
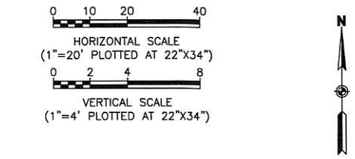
SHEET TITLE
PHASING PLAN

SHEET
C1.2

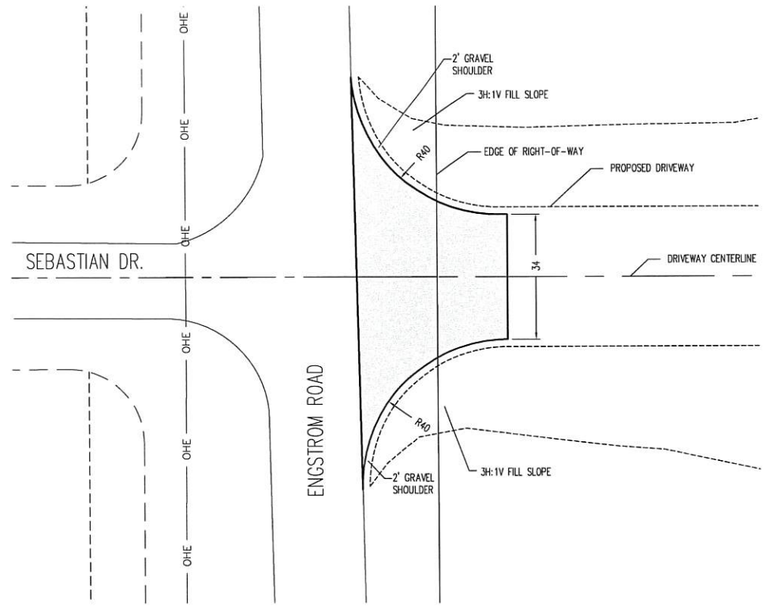


PLAN VIEW
BOGARD ROAD DRIVEWAY
(STATE OF ALASKA)

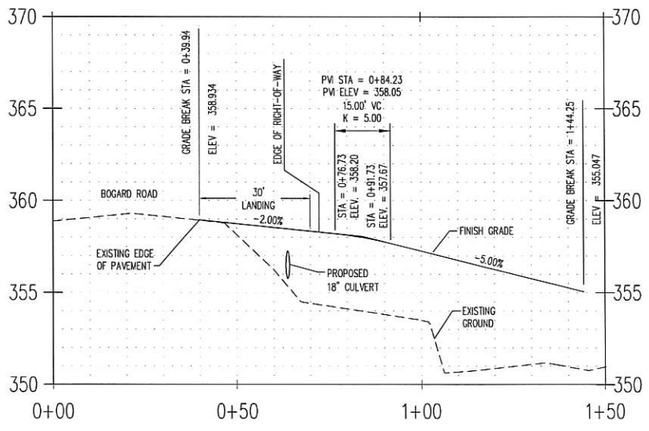


NOTES

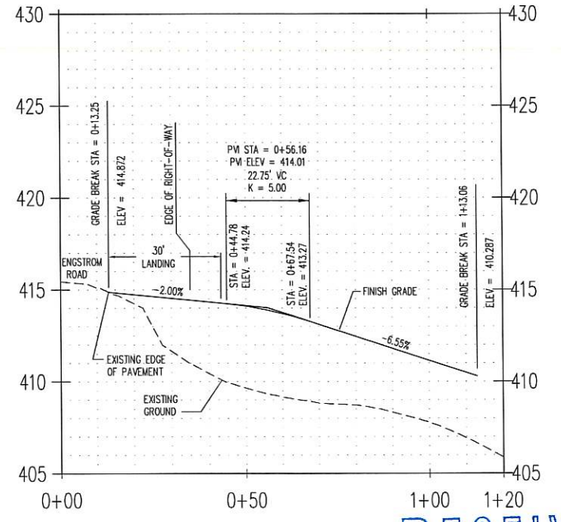
1. ALL WORK IN STATE OF ALASKA RIGHT-OF-WAY TO CONFORM TO THE ADOT DRIVEWAY PERMIT.
2. ALL WORK IN MSB RIGHT-OF-WAY TO CONFORM TO THE MSB DRIVEWAY PERMIT. .
3. ALL DRIVEWAYS TO BE PAVED WITHIN PUBLIC RIGHT-OF-WAY.
4. ENGSTROM ROAD DRIVEWAY TO BE "IN" ONLY.
5. DUE TO EXISTING TOPOGRAPHY, CULVERT NOT NEEDED AT ENGSTROM DRIVEWAY.
6. FILED LOCATED CULVERT AT BOGARD ROAD DRIVEWAY.



PLAN VIEW
ENGSTROM ROAD DRIVEWAY
(MSB)



PROFILE VIEW
BOGARD ROAD DRIVEWAY
(STATE OF ALASKA)



PROFILE VIEW
ENGSTROM ROAD DRIVEWAY
(MSB)

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LOTS A2, D1, D2, TOWNSHIP 18N RANGE 1E SECTION 27

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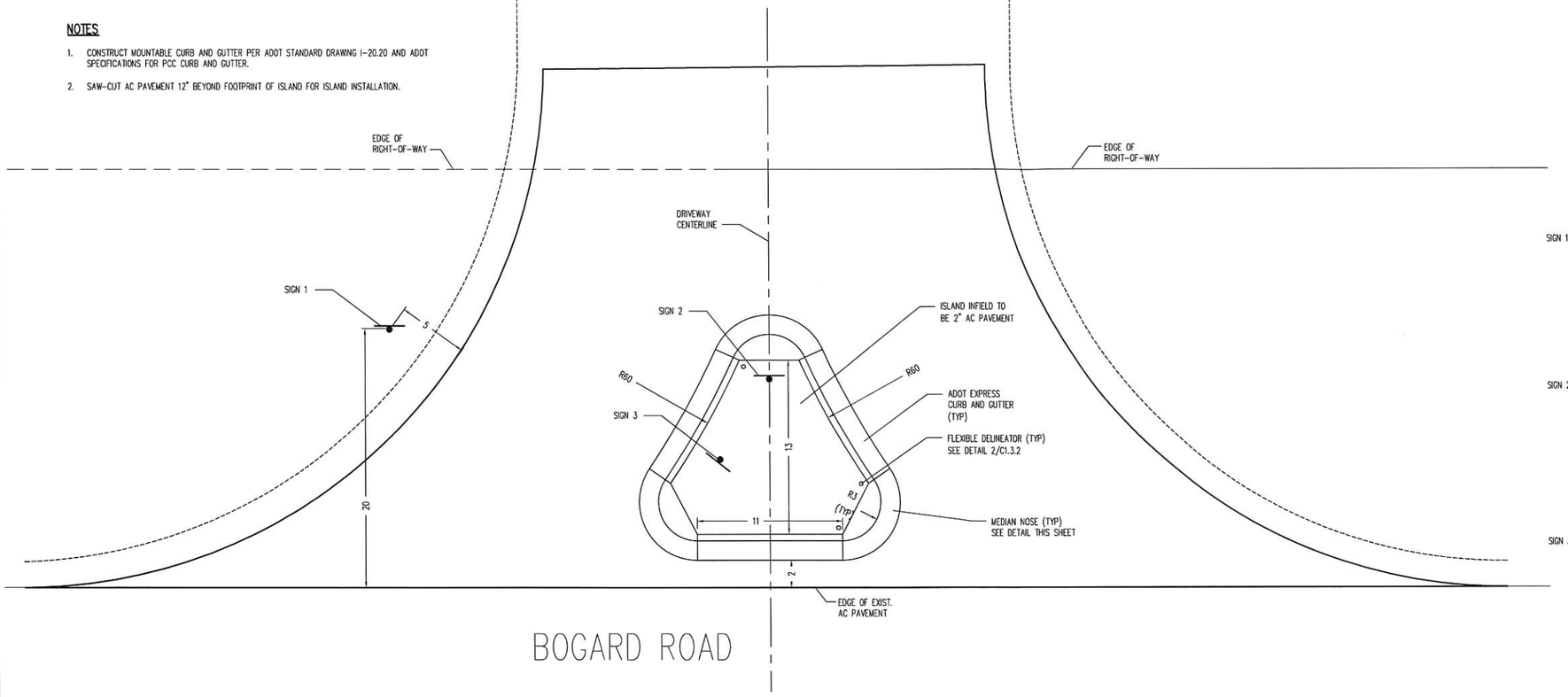
SHEET TITLE
DRIVEWAY
PLAN & PROFILE

SHEET
C1.3

NOTES

1. CONSTRUCT MOUNTABLE CURB AND GUTTER PER ADOT STANDARD DRAWING I-20.20 AND ADOT SPECIFICATIONS FOR PCC CURB AND GUTTER.
2. SAW-CUT AC PAVEMENT 12" BEYOND FOOTPRINT OF ISLAND FOR ISLAND INSTALLATION.



BOGARD ROAD

SIGN NOTES AND SCHEDULE

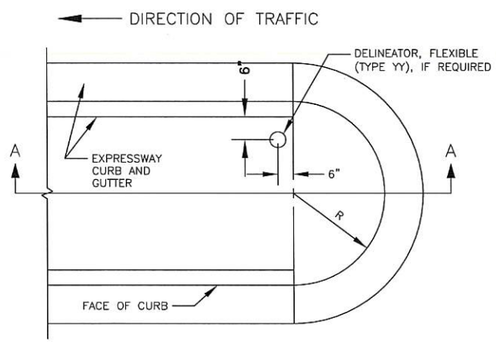
1. CONSTRUCT SIGNS PER ADOT REQUIREMENTS.
2. ALL SIGNS TO HAVE 3" STEEL POST WITH FRANGIBLE COUPLINGS AND BASES PER ADOT STANDARD DETAILS S-31.02.
3. SIGNS TO BE INSTALLED PER ADOT STANDARD DETAILS S-05.02.
4. SEE ADDITIONAL SIGN DETAILS ON SHEETS C1.3.2 AND C1.3.3.
5. CONSTRUCT SIGNS FACING AS SHOWN IN DETAIL, THIS SHEET.

SIGN 1 – R1-1 "STOP SIGN" 24"X24"

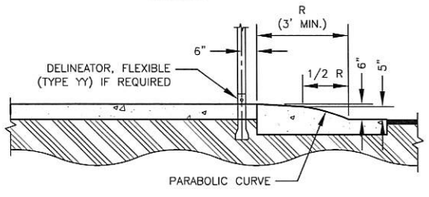
SIGN 2 – R3-5R "RIGHT TURN ONLY 18"X24"

SIGN 3 – R5-1 "DO NOT ENTER" 24"X24"

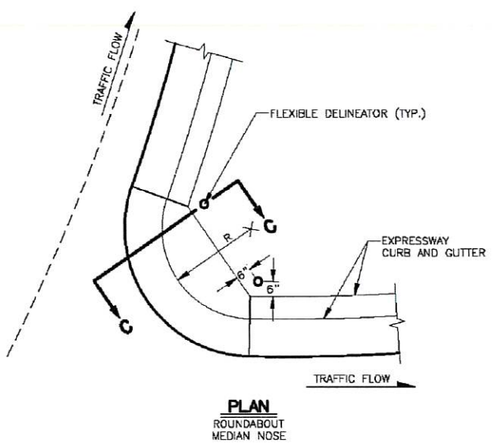
RIGHT IN, RIGHT OUT, ISLAND AND SIGNS



PLAN



SECTION A–A, C–C

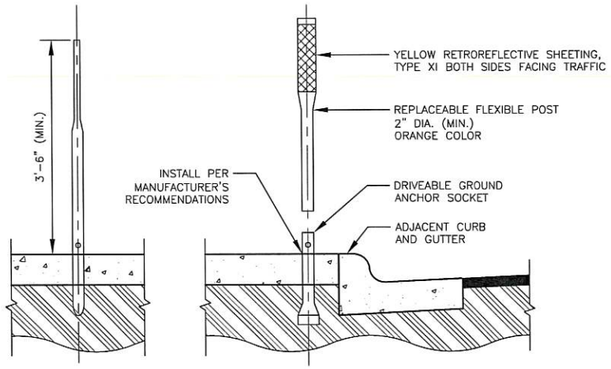


PLAN
ROUNDABOUT MEDIAN NOSE

SLOPED MEDIAN NOTES:

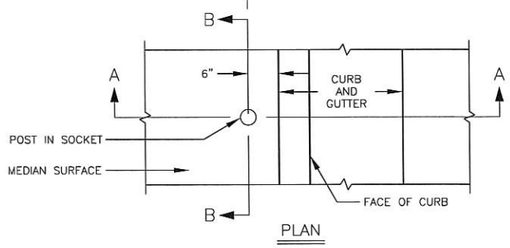
1. PAINT ALL SLOPED MEDIAN NOSES WITH YELLOW REFLECTORIZED PAINT. PAINT FOR NOSES IS SUBSIDIARY TO 670 ITEMS.

SLOPED MEDIAN NOSE



SECTION B–B

SECTION A–A



PLAN

DELINEATOR NOTES:

1. INSTALL DELINEATORS WHERE SHOWN IN THE SUMMARY TABLE, OR AS DIRECTED BY THE ENGINEER.
2. CENTER POINT OF THE DELINEATOR SHALL BE 6 INCHES FROM THE BACK OF CURB.
3. WHERE DELINEATORS ARE SET IN CONCRETE PAVEMENT, PLACE THEM IN EXPANSION JOINTS.

FLEXIBLE DELINEATOR

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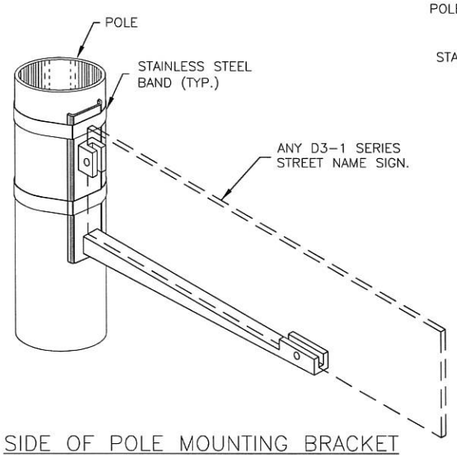
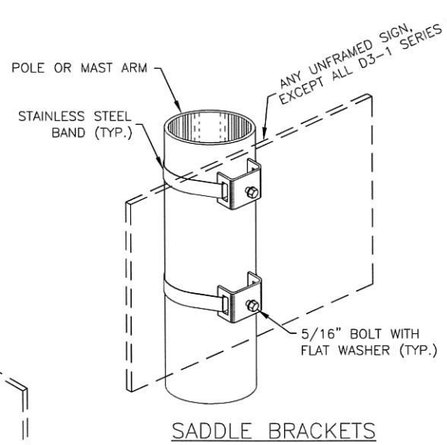
SHEET TITLE
BOGARD ROAD DRIVEWAY ISLAND AND SIGN DETAILS

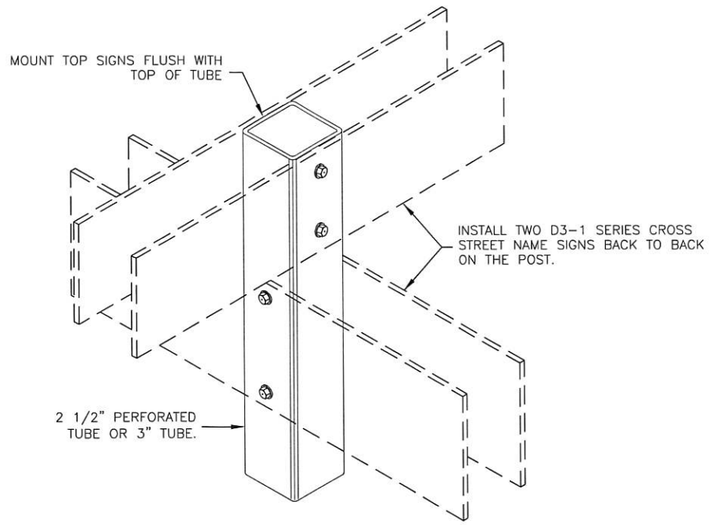
SHEET
C1.3.1



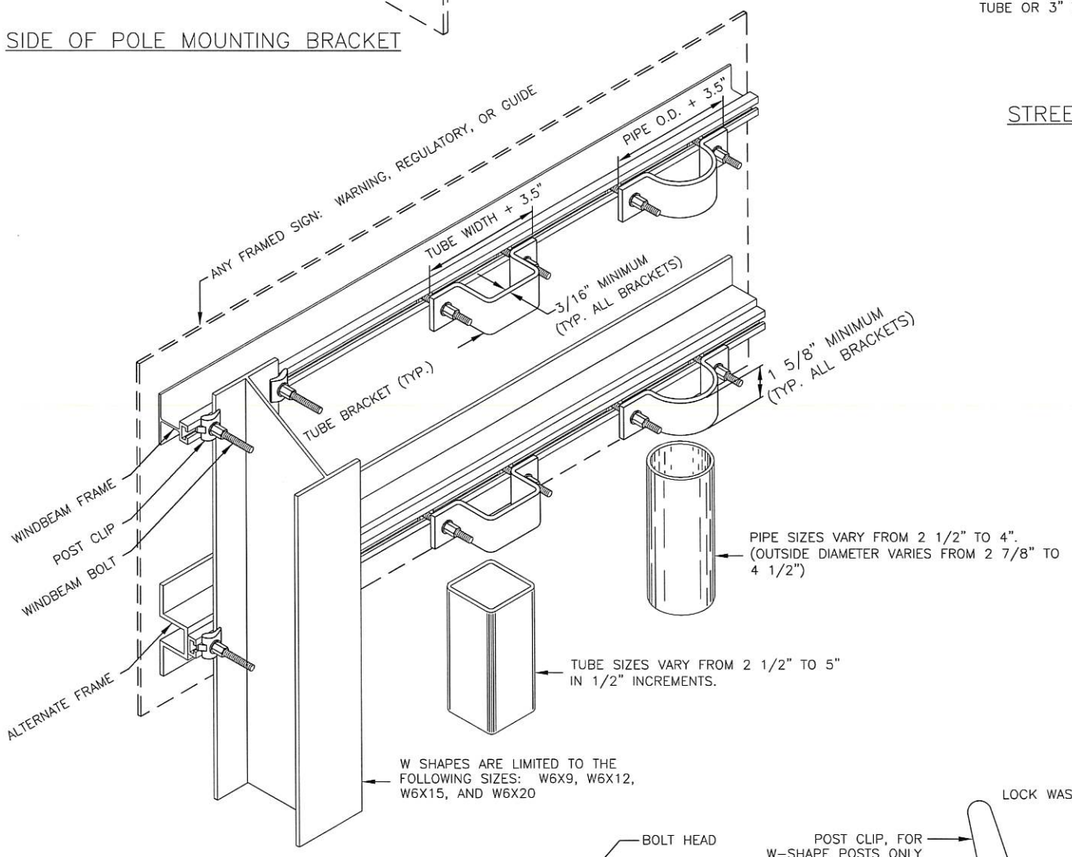
SIDE OF POLE MOUNTING BRACKET



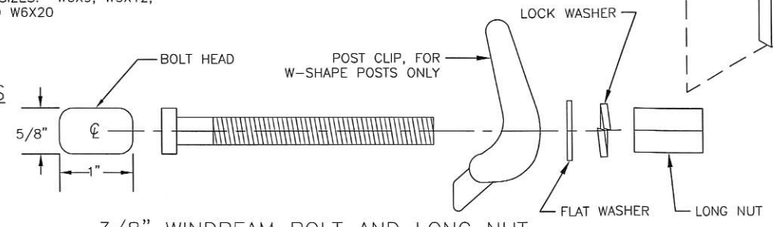
SADDLE BRACKETS



STREET NAME SIGN INSTALLATION



FRAMED SIGN ATTACHMENT BRACKETS



3/8" WINDBEAM BOLT AND LONG NUT

ROUTE MARKER TREE

NOTES:

1. EXCEPT FOR POLES AND MAST ARMS, ONLY USE TUBES TO SUPPORT SIGNS MOUNTED ON ONE POST.
2. ATTACH SIGNS, FRAMED AND UNFRAMED TO THEIR SUPPORTS WITH ZINC PLATED 3/8" BOLTS, EXCEPT ATTACH UNFRAMED SIGNS TO PERFORATED TUBES WITH ACCESSORY DRIVE RIVETS AND TO SADDLES WITH 5/16" BOLTS.
3. BOLT UNFRAMED SIGNS DIRECTLY TO TUBES IN TWO LOCATIONS, NEAR TOP AND NEAR BOTTOM OF MATING SURFACE. ATTACH THEM TO POLES AND MAST ARMS WITH TWO SADDLES.
4. ATTACH BRACKETS TO POLES AND MAST ARMS WITH DOUBLE WRAPS OF 3/4" WIDE BY 0.020" THICK STAINLESS STEEL BANDING MATERIAL. TIGHTEN EACH BAND UNTIL IT STOPS MOVING THROUGH THE BUCKLE.
5. ATTACH FRAMED SIGNS TO POSTS WHEREVER THE FRAMES CROSS THE POSTS. AT EACH CROSSING, ATTACH THE SIGN USING TWO POST CLIPS ON W-SHAPE POSTS, A U-SHAPED BRACKET ON PIPES, AND A BRACKET WITH SQUARE CORNERS ON TUBES.
6. THE TUBE BRACKETS USED ON EVEN INCH SIZE TUBES MAY ALSO BE USED ON TUBES 1/2" SMALLER IN SIZE.
7. ONLY USE THE SPECIAL WINDBEAM BOLTS TO ATTACH SIGNS FRAMED WITH THE WINDBEAM FRAMING MATERIAL.
8. ATTACH FRAMED SIGNS TO POLES AND MAST ARMS USING POLE PLATES INSTALLED ACCORDING TO ALASKA STANDARD PLAN S-23.
9. FOR ROUTE MARKER TREES, CUT PERFORATED TUBES TO ENSURE TIGHT FITTING JOINTS. ASSEMBLE THE PIECES WITH ACCESSORY ELL-SHAPED ANGLE BRACKETS.
10. INSTALL THE TOP EDGE OF SIGNS 1" ABOVE THE TOPS OF POSTS, EXCEPT FOR THE D3-1 STREET NAME SIGNS.
11. INSTALL THE TOP EDGE OF SIGNS 3" BELOW THE TOP OF POST, WHENEVER THEY ARE MOUNTED BELOW SIGNS SECURED BY POST TOP MOUNTING BRACKETS.
12. THE BRACKET DETAILS SHOWN INDICATE GENERAL DESIGNS ONLY. DESIGNS MAY VARY BY MANUFACTURER.
13. INSTALL WEATHER TIGHT CAPS ON ALL PIPE AND TUBE POSTS, EXCEPT PERFORATED TUBING.

FASTENER SPECIFICATION TABLE

FASTENERS	ALUMINUM	STEEL	STAINLESS STEEL
BOLTS	ASTM F468 2024-T4	ASTM A307	ASTM F593
NUTS	ASTM F467 2024-T4	ASTM A563	ASTM F594
WASHERS	ANSI B18.22.1	ASTM F844	ANSI B18.22.1
POST CLIPS	ASTM B179 356-T6	N/A	N/A

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SHEET TITLE
SIGN ATTACHMENT DETAILS

SHEET
C1.3.2

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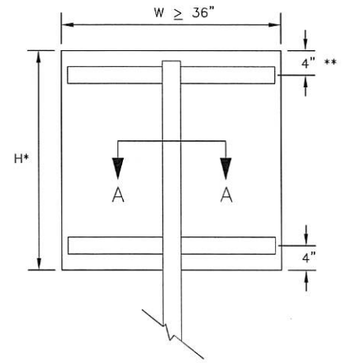
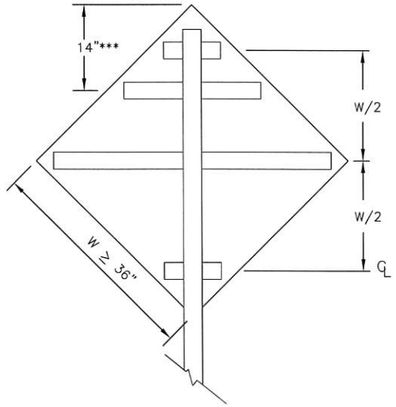
Mat-Su Borough
Development Services



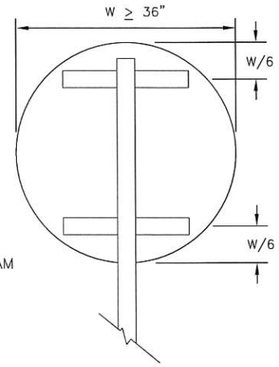
RECTANGLES AND TRAPEZOIDS

* WHEN H > 42 INCHES, INSTALL A 3RD WINDBEAM CENTERED ON THE SIGN.

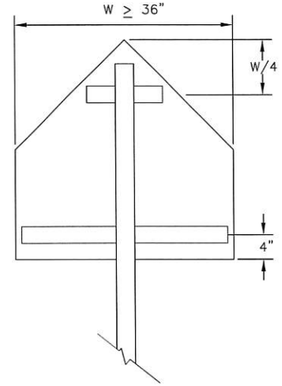
** FOR S5-1 SIGNS MOUNTED ON FLASHING BEACON POSTS, USE A 10" OFFSET. OTHERWISE, USE 4".

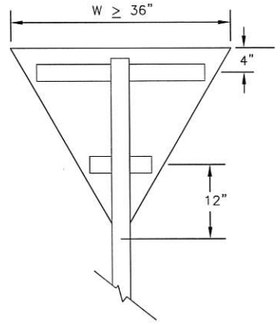


*** FOR WARNING SIGNS MOUNTED ON FLASHING BEACON POSTS, USE THE 14" OFFSET. OTHERWISE, USE W/2.



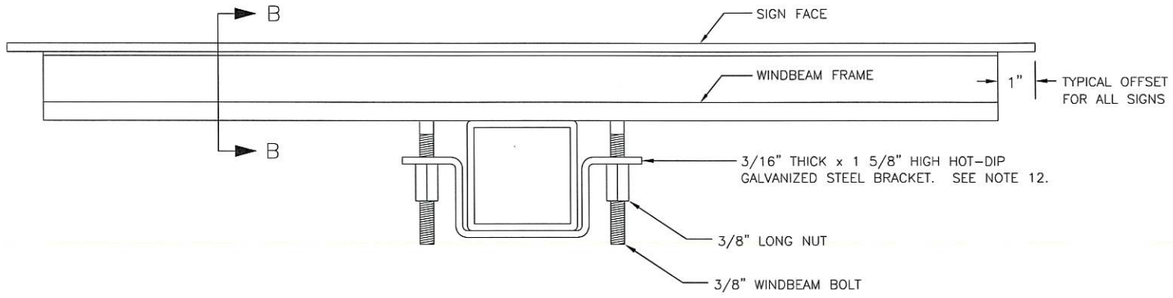
ROUNDS AND OCTAGONS



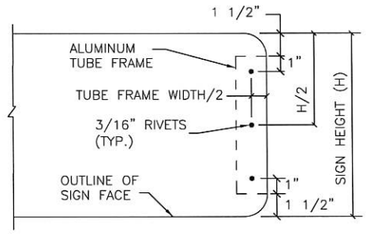


WINDBEAM LOCATIONS FOR EACH SIGN SHAPE

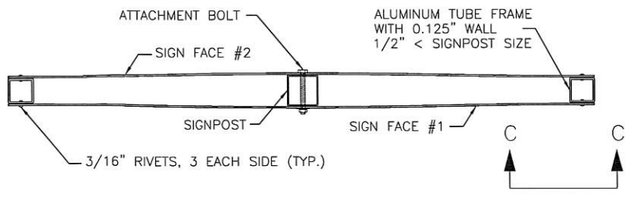
ELEVATION VIEW



SECTION A – A TYPICAL SIGN ATTACHMENT DETAILS AT EACH WINDBEAM

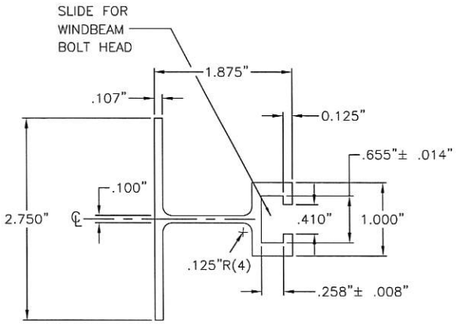


VIEW C – C

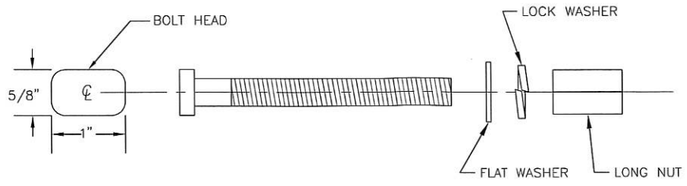


D3-1 STREET NAME SIGN FRAMING DETAIL

PLAN VIEW



SECTION B – B WINDBEAM CROSS SECTION



3/8" WINDBEAM BOLT AND LONG NUT

NOTES:

1. EXCEPT FOR POLES AND MAST ARMS, ONLY USE SQUARE STEEL TUBES TO SUPPORT SIGNS MOUNTED ON SINGLE POSTS.
2. INSTALL WINDBEAM OR ZEE SHAPED FRAMING MEMBERS ON DIAMOND SHAPED SIGNS 36 INCHES AND LONGER ON A SIDE AND ON OTHER SIGNS 36 INCHES WIDE AND WIDER.
3. IN HIGH WIND AREAS, THE PLANS MAY REQUIRE SIGNS SMALLER THAN THOSE LISTED IN NOTE 2 BE FRAMED AS SHOWN HERE IN.
4. THIS DRAWING DEPICTS THE WINDBEAM FRAMING AND ATTACHMENT SYSTEM. ATTACH SIGNS FRAMED WITH ZEE SHAPED FRAMING ACCORDING TO REGIONAL DRAWING "SIGN ATTACHMENT DETAILS", USING "U" SHAPED BRACKETS AND TWO BOLTS WITH NUTS.
5. THE ENGINEER MAY APPROVE OTHER FRAMING MEMBERS. SUBMIT DOCUMENTS THAT DETAIL THE FRAME'S CROSS SECTION AND STRENGTH, AND METHOD OF ATTACHING THE FRAME TO A POST.
6. USE FRAMING MEMBERS MADE FROM ALUMINUM ALLOY 6061-T6.
7. EACH FRAMING MEMBER SHALL BE ONE CONTINUOUS PIECE.
8. ATTACH FRAMING MEMBERS TO THE SIGN PANELS WITH RIVETS OR AN ENGINEER APPROVED, DOUBLE SIDED, HIGH STRENGTH, ADHESIVE TAPE.
9. WITH THE ADHESIVE TAPE, INSTALL TWO RIVETS IN BOTH ENDS OF EACH FRAMING MEMBER, AND ATTACH THE FRAMING MEMBERS TO THE SIGN PANELS ACCORDING TO THE TAPE MANUFACTURER'S WRITTEN INSTRUCTIONS, INCLUDING:
   A. THE CLEANING AND HANDLING OF THE SIGN PANELS AND FRAMING MEMBERS.
   B. THE APPLICATION OF THE ADHESIVE TAPE.
10. WHEN RIVETS ARE USED TO ATTACH FRAMING MEMBERS, INSTALL 2 RIVETS IN EACH END AND THE BALANCE ON 8" MAXIMUM CENTERS.
11. USE 3/16" DIAMETER RIVETS CONFORMING TO ALUMINUM ALLOY 6061-T6 FOR COLD DRIVEN RIVETS, OR ALUMINUM ALLOY 6061-T43 FOR HOT DRIVEN RIVETS.
12. THE BRACKETS USED ON EVEN INCH SIZE TUBES MAY ALSO BE USED ON TUBES 1/2" SMALLER IN SIZE.

STATE OF ALASKA
DAN E. STEINER
No. CE 9505
1/14/25
REGISTERED PROFESSIONAL ENGINEER

SDCS, LLC
STEINER DESIGN & CONSTRUCTION SERVICES, LLC
5900 W. DEWBERRY DR. PH:(907) 357-5609
WASILLA, AK 99623 FAX:(907) 357-5608

CENTRAL GRAVEL PRODUCTS
GRAVEL PIT DEVELOPMENT
LOTS A2, D1, D2, TOWNSHIP 18N RANGE 1E SECTION 27

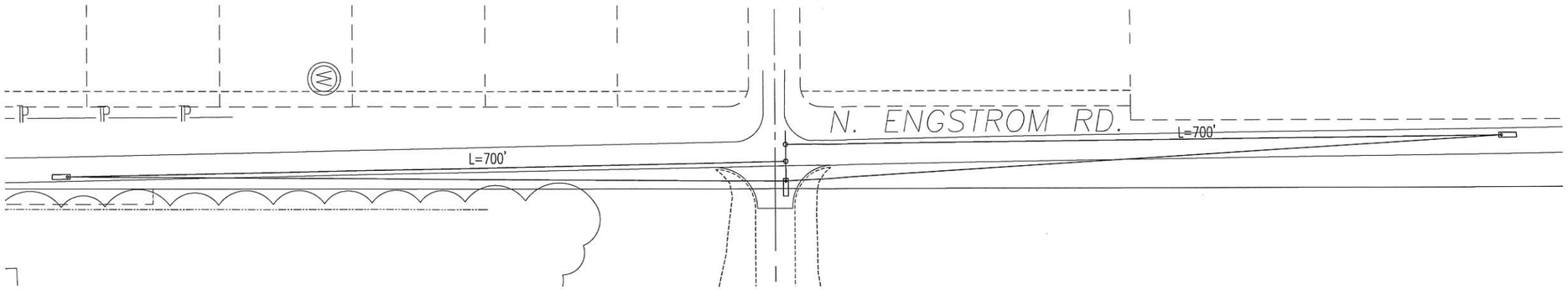
BY	DATE	REVISIONS

JOB NO.: 23-016
DATE: 1/14/2025
DRAWN: DES
REVIEWED: DES

SHEET TITLE
SIGN ATTACHMENT DETAILS

SHEET
C1.3.3

0 30 60 120
HORIZONTAL SCALE
(1"=60' PLOTTED AT 22"X34")

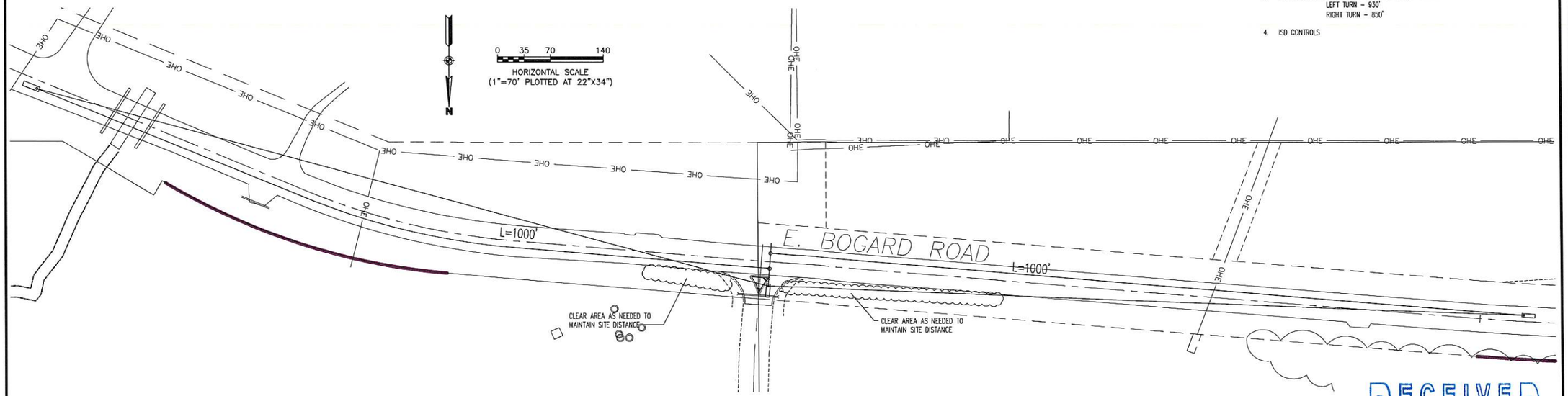


SITE DISTANCE
ENGSTROM ROAD DRIVEWAY
(MSB)

NOTES

1. POSTED SPEED LIMIT IS 35 MPH. DESIGN SPEED IS 40 MPH.
2. MINIMUM SITE DISTANCE PER MSB IS 595 FEET.
3. MINIMUM SSD PER ADOT = 305 FEET.
4. MINIMUM ISD PER ADOT = 680' (BOTH DIRECTIONS)
5. ISD CONTROLS.

0 35 70 140
HORIZONTAL SCALE
(1"=70' PLOTTED AT 22"X34")



SITE DISTANCE
BOGARD ROAD DRIVEWAY
(STATE OF ALASKA)

NOTES

1. POSTED SPEED LIMIT IS 50 MPH. DESIGN SPEED IS 55 MPH
2. MINIMUM STOPING SIGHT DISTANCE (SSD) PER ADOT IS 495 FEET.
3. MINIMUM INTERSECTION SIGHT DISTANCE (ISD) PER ADOT:
   LEFT TURN – 930'
   RIGHT TURN – 850'
4. ISD CONTROLS

RECEIVED
JAN 16 2025
Mat-Su Borough
Development Services

STATE OF ALASKA
49TH
DAN E. STEINER
No. CE 9505
1/14/25
REGISTERED PROFESSIONAL ENGINEER

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CENTRAL GRAVEL PRODUCTS
GRAVEL PIT DEVELOPMENT
LOTS A2, D1, D2, TOWNSHIP 18N RANGE 1E SECTION 27

BY	DATE	REVISIONS

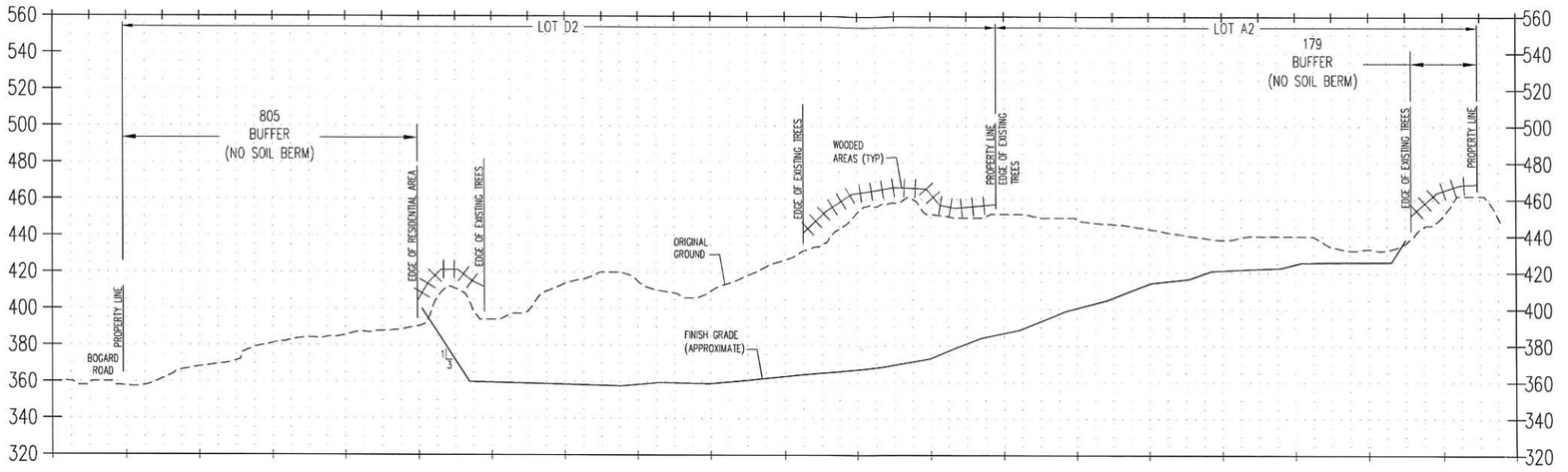
JOB NO.: 23-016
DATE: 1/14/2025
DRAWN: DES
REVIEWED: DES

SHEET TITLE
DRIVEWAY
SITE DISTANCE

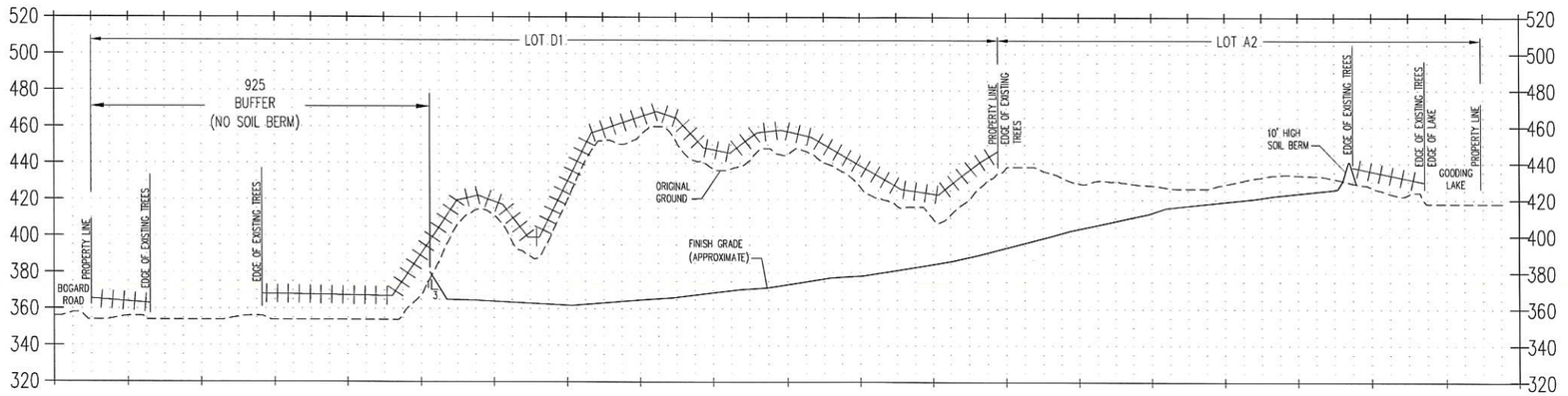
SHEET
C1.4

0 100 200 400
HORIZONTAL SCALE
(1"=200' PLOTTED AT 22"X34")

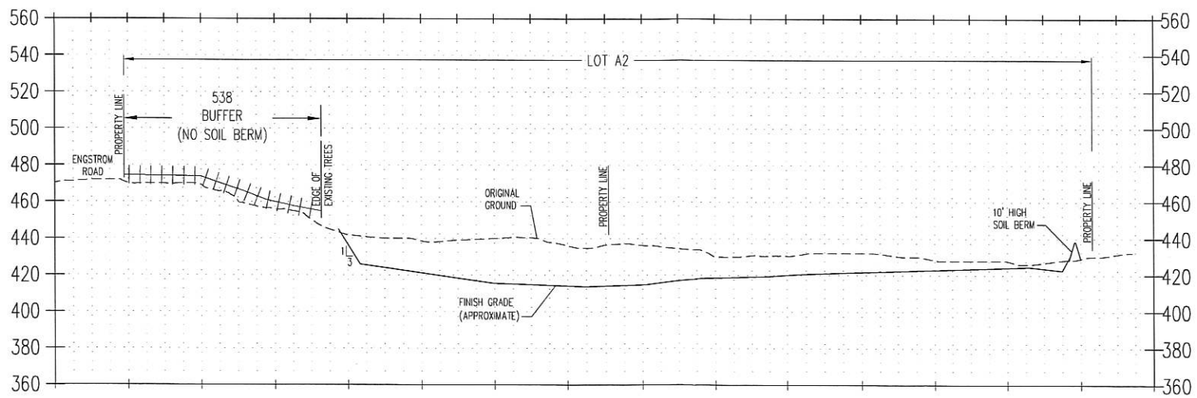
0 20 40 80
VERTICAL SCALE
(1"=40' PLOTTED AT 22"X34")



SECTION A



SECTION B



SECTION C

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STATE OF ALASKA
DAN E. STEINER
No. CE 9505
8/9/24
REGISTERED PROFESSIONAL ENGINEER

SDCS, LLC
STEINER DESIGN & CONSTRUCTION SERVICES, LLC
5900 W. DEWBERRY DR. PH:(907) 357-5609
WASILLA, AK 99623 FAX:(907) 357-5608

CENTRAL GRAVEL PRODUCTS
GRAVEL PIT DEVELOPMENT
LOTS A2, D1, D2, TOWNSHIP 18N RANGE 1E SECTION 27

BY	DATE	REVISIONS

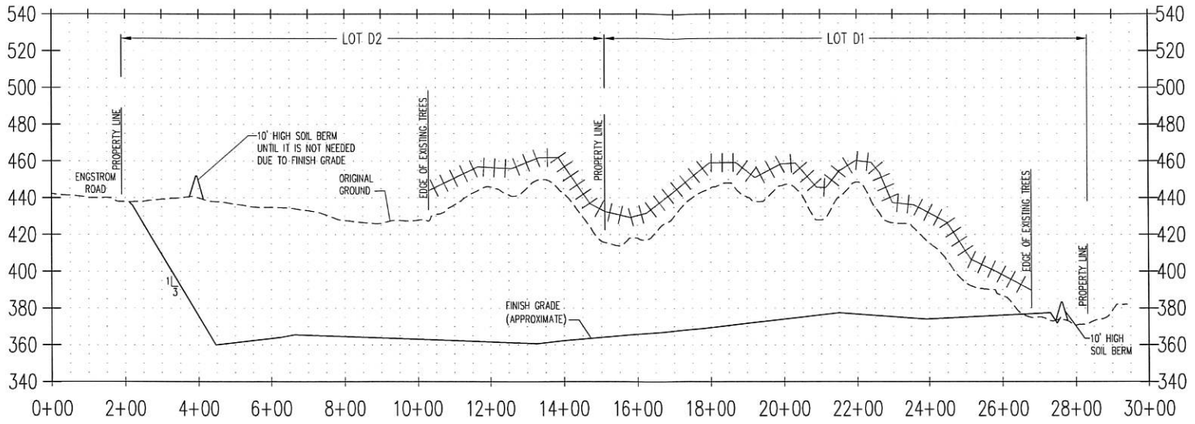
JOB NO.: 23-016
DATE: 8/9/2024
DRAWN: DES
REVIEWED: DES

SHEET TITLE
SITE SECTIONS
A, B, C

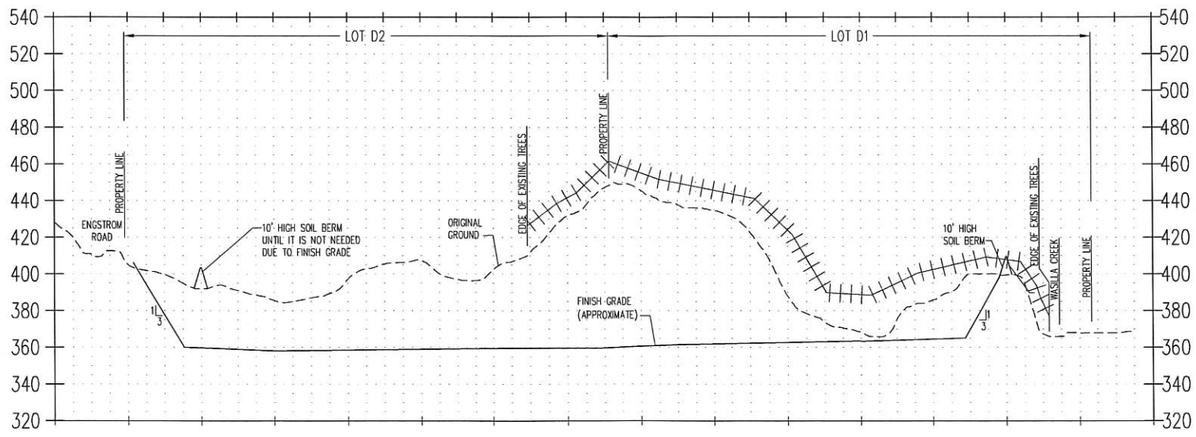
SHEET
C2.0

0 100 200 400
HORIZONTAL SCALE
(1"=200' PLOTTED AT 22"X34")

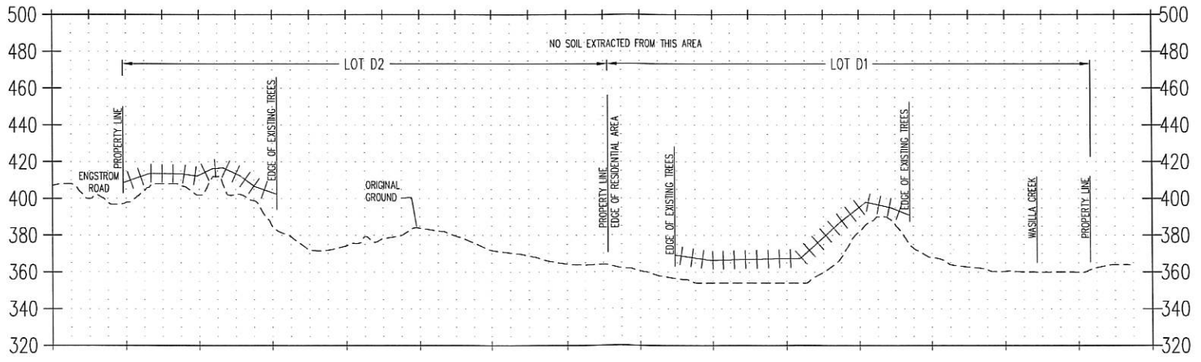
0 20 40 80
VERTICAL SCALE
(1"=40' PLOTTED AT 22"X34")



SECTION D



SECTION E



SECTION F

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JAN 16 2025
Mat-Su Borough
Development Services

STATE OF ALASKA
DAN E. STEINER
No. CE 9505
1/16/25
REGISTERED PROFESSIONAL ENGINEER

SDCS, LLC
STEINER DESIGN & CONSTRUCTION SERVICES, LLC
5900 W. DEWBERRY DR. PH: (907) 357-5609
WASILLA, AK 99623 FAX: (907) 357-5608

CENTRAL GRAVEL PRODUCTS
GRAVEL PIT DEVELOPMENT
LOTS A2, D1, D2, TOWNSHIP 18N RANGE 1E SECTION 27

BY	DATE	REVISIONS

JOB NO.: 23-016
DATE: 1/16/2025
DRAWN: DES
REVIEWED: DES

SHEET TITLE
SITE SECTIONS
D, E, F

SHEET
C2.1

February 3, 2025
Planning Commission Meeting
144 of 305

N

0 100 200 400
HORIZONTAL SCALE
(1"=200' PLOTTED AT 22"X34")

NOTES

1. THE PLAN IS TO HAVE APPROXIMATELY 10 ACRES BEING WORKED AT ONE TIME. AS MORE AREA IS OPENED FOR MATERIAL EXTRACTION, THE PREVIOUSLY OPENED AREAS WILL BE RECLAIMED.
2. FINISH SLOPES WILL BE TRACK WALKED WITH TRACK EQUIPMENT AND COVERED WITH 4" OF TOPSOIL AND SEEDED.
3. ROOT/ORGANIC DEBRIS WILL EITHER BE BURNED, BURIED, OR LEVELED AND COVERED WITH TOPSOIL.
4. RECLAMATION PLAN MAY CHANGE AS OTHER DEVELOPMENT OPPORTUNITIES BECOME AVAILABLE. THE OWNER WILL UPDATE THE RECLAMATION PLAN AS NEEDED TO REPRESENT ANY CHANGES TO THE PLAN.
5. JUNK VEHICLES, JUNK VEHICLE PARTS, AND TRASH SHALL BE REMOVED IN ACCORDANCE WITH MSB 8.50.
6. SLOPES SHALL NOT BE STEEPER THAN 2H:1V OR THE NATURAL STABILIZED ANGLE OF REPOSE OF THE EXISTING EARTH MATERIAL.
7. SITE SOILS MORE SUSCEPTIBLE TO EROSION OR LIQUEFACTION REQUIRE A SLOPE ADEQUATE TO ENSURE STABILIZATION.
8. SLOPES SHALL BE GRADED TO BLEND WITH THE SURROUNDING UNDISTURBED TOPOGRAPHY.
9. SURFACE WATER QUALITY SHALL BE PROTECTED BY IMPLEMENTING APPLICABLE BEST MANAGEMENT PRACTICES DESCRIBED IN THE CURRENT PUBLICATION OF THE STATE OF ALASKA'S USER MANUAL BEST MANAGEMENT PRACTICES FOR GRAVEL PITS.
10. ALL DISTURBED AREAS SHALL BE COVERED WITH A MINIMUM COMPACTION DEPTH OF FOUR INCHES OF TOPSOIL STRIPPED AND STOCKPILED DURING INITIAL DEVELOPMENT ACTIVITIES. IN CASES WHERE THERE IS INSUFFICIENT TOPSOIL ON SITE TO PROVIDE THIS MINIMUM COVERAGE, ALL AVAILABLE TOPSOIL SHALL BE RETAINED FOR RECLAMATION.
11. NATURAL SUBSTANCES AND ORGANIC MATERIALS THAT HAVE WATER AND NUTRIENT HOLDING CAPACITY CONDUCIVE TO PLANT GROWTH MAY BEUSED AS A SUBSTITUTE FOR TOPSOIL.
12. ALL SURFACE AREAS SHALL BE STABILIZED AND PROTECTED AGAINST EROSION.
13. A VEGETATIVE COVER SHALL BE ESTABLISHED AND MAINTAINED OVER ALL DISTURBED AREAS ON THE MATERIAL EXTRACTION SITE IN CONFORMANCEWITH THE CURRENT ALASKA STATE DEPARTMENT OF NATURAL RESOURCES, DIVISION OF AGRICULTURE, REVEGETATION MANUAL FOR ALASKA.
14. SIXTY PERCENT LIVE PLANT COVER OF THE ENTIRE RESTORED AREA SHALL BE ACHIEVED BY THE END OF THE FOURTH GROWING SEASON AFTER THEPHASE IS COMPLETED.
15. RESEEDING OF RECLAIMED AREAS SHALL UTILIZE CERTIFIED SEED SUITABLE FOR ALASKA CONDITIONS THAT IS FREE OF NOXIOUS WEEDS OR UNDESIRABLEPLANT SPECIES IDENTIFIED IN 11 AAC 34.020, PROHIBITED AND RESTRICTED NOXIOUS WEEDS.
16. AREAS COVERED BY BUILDINGS, PAVED DRIVEWAYS, PAVED ROADS, AND PAVED PARKING LOTS AND AREAS WHERE FUTURE UTILITY EASEMENTS AND SEPTIC SYSTEMS WILL EXIST ARE EXEMPT FROM THE RECLAMATION STANDARDS OUTLINED IN SUBSECTIONS (F) THROUGH (H) OF THIS SECTION.

STATE OF ALASKA
49TH
DAN E. STEINER
No. CE 9505
8/12/24
REGISTERED PROFESSIONAL ENGINEER

SDCS, LLC
STEINER DESIGN & CONSTRUCTION SERVICES, LLC
5900 W. DEWBERRY DR. PH: (907) 357-5609
WASILLA, AK 99623 FAX: (907) 357-5608

CENTRAL GRAVEL PRODUCTS
GRAVEL PIT DEVELOPMENT

LOTS A2, D1, D2, TOWNSHIP 18N RANGE 1E SECTION 27

BY	DATE	REVISIONS

JOB NO.: 23-016
DATE: 8/12/2024
DRAWN: DES
REVIEWED: DES

SHEET TITLE
RECLAMATION PLAN

SHEET
C3.0

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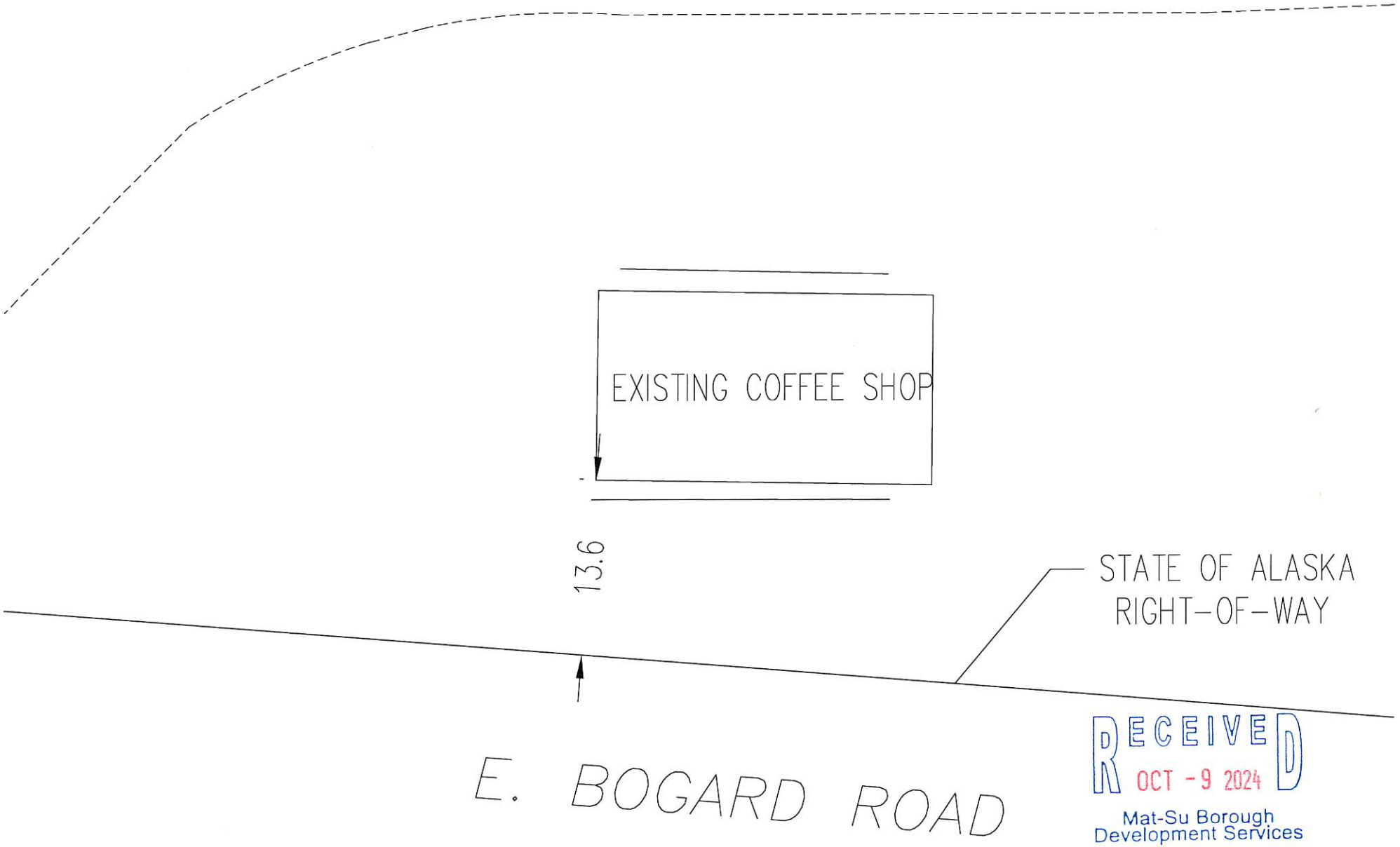
AUG 12 2024
Mat-Su Borough
Development Services



From: dsteiner@mtaonline.net
To: Peggy Horton; Tom Adams
Cc: Jade Laughlin; "Gary LoRusso"
Subject: Central Gravel Products - CUP Permit - Updates
Date: Thursday, January 16, 2025 1:55:06 PM
Attachments: C2.1.pdf
C1.0.pdf
C1.2.pdf
CGP - MSB - Snowdrifting Memo.pdf

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]

Peggy,

It has been determined that a visual screening berm will be placed adjacent to Engstrom Road. To keep the berm from increasing the problem with snow drifting on Engstrom Road, it will be placed 200' from the right-of-way line.

Attached are updated drawings that show the placement of the berm. Once soil extraction activities are at a low enough elevation that the berm is not warranted, the berm can be removed. This is also indicated on the plans.

Attached are updated plan sheets that show the proposed berm adjacent to Engstrom Road. This includes a new site plan, updated site sections, and an updated phasing plan. The phasing plan has been adjusted so that the last parts of this gravel pit to be utilized is the area adjacent to Engstrom Road.

Also attached is a memo that shows how it was determined how far the berm needed to be from Engstrom Road, so it did not exacerbate the snow drifting problem.

Please contact me if you have any questions or need additional information.

Dan Steiner, PE
SDCS, LLC
(wk) 907-357-5609
(cell) 907-715-7704

5900 W. Dewberry Dr.
Wasilla, AK 99622

SDCS, LLC

Phone: (907) 357-5609
Fax: (907) 357-5608

STEINER DESIGN & CONSTRUCTION SERVICES, LLC

Memorandum

To:	Tom Adams, PE MSB DPW Director	Company:	MSB – DPW	Date	1/16/2025
From:	Dan Steiner, PE				
Subject:	Central Gravel Products – New Gravel Pit Permitting – Concern about snow drifting on Engstrom Road caused by visual screening berms.				

As part of the above referenced project, a visual screening berm is needed to parallel Engstrom Road. Engstrom Road currently has snow drifting issues. The MSB has expressed concern that a visual screening berm could increase the problem of snow drifting in Engstrom Road.

The document "Controlling Blowing and Drifting Snow with Snow Fences and Road Design" (NCHRP-20-07147) was consulted regarding "snow drifting". The visual screening berm would be considered a snow fence with 0% porosity. Figure 5.17, on page 126, indicates that a 0% porosity snow fence would create a snow drift that is 13 times as long as the berm is high.

The proposed visual screening berms will be 10' high and would create a snow drift on the downwind side of approximately 130'. As a result, it is proposed that the visual screening berm be placed 200' from the west property line. This would provide a safety factor of 1.5 with regard to a snowdrift created by the visual screening berms reaching Engstrom Road.

The placement of this visual screening berm will most likely not prevent drifting snow onto Engstrom Road. Once the snow drift adjacent to the visual screening berm "matures" snow will continue past this drift toward Engstrom Road. However, the berm should not increase the drifting. In fact, there is a good chance that this berm may decrease the volume of snow that drifts on to Engstrom Road since a portion of the snow that would usually reach Engstrom Road will now be stored behind the visual screening berm.

From: dsteiner@mtaonline.net
To: Peggy Horton
Subject: FW: Central Gravel Products- DOT&PF ARR 33504
Date: Tuesday, January 21, 2025 3:58:34 PM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Sorry, I forgot to include you in the reply.

Dan Steiner, PE
SDCS, LLC
(wk) 907-357-5609
(cell) 907-715-7704

From: dsteiner@mtaonline.net <dsteiner@mtaonline.net>
Sent: Tuesday, January 21, 2025 3:54 PM
To: 'Walsh, Matthew H (DOT)' <matthew.walsh@alaska.gov>; 'Jade Laughlin' <Centralgravelproducts@hotmail.com>; 'Gary LoRusso' <garyl@keystonesurveyak.com>
Cc: 'Beckwith, Morris R (DOT)' <morris.beckwith@alaska.gov>; 'Adler, Clint J (DOT)' <clint.adler@alaska.gov>; 'Bosin, Anna D (DOT)' <anna.bosin@alaska.gov>; 'Bentz, Chris L (DOT)' <chris.bentz@alaska.gov>; 'Baski, Sean M (DOT)' <sean.baski@alaska.gov>
Subject: RE: Central Gravel Products- DOT&PF ARR 33504

Matt,

As the engineering working for CGP, I acknowledge the special condition regarding flagging prior to operation of the proposed driveway. I have invited CGP to do the same.

Dan Steiner, PE
SDCS, LLC
(wk) 907-357-5609
(cell) 907-715-7704

From: Walsh, Matthew H (DOT) <matthew.walsh@alaska.gov>
Sent: Tuesday, January 21, 2025 3:22 PM
To: dsteiner@mtaonline.net; 'Jade Laughlin' <Centralgravelproducts@hotmail.com>; 'Gary LoRusso' <garyl@keystonesurveyak.com>
Cc: Beckwith, Morris R (DOT) <morris.beckwith@alaska.gov>; Adler, Clint J (DOT) <clint.adler@alaska.gov>; Bosin, Anna D (DOT) <anna.bosin@alaska.gov>; Bentz, Chris L (DOT) <chris.bentz@alaska.gov>; Baski, Sean M (DOT) <sean.baski@alaska.gov>
Subject: RE: Central Gravel Products- DOT&PF ARR 33504

Dan,

ROW received approval that the attached have been approved to include in the Approval to

Construct.

Prior to moving forward, I want to confirm that DOT&PF will be including the below Special Condition regarding flagging prior to operations in the Approval to Construct. Please let me know if you have any concerns regarding the Special Condition.

Matt

Matt Walsh
ROW Property Management Supervisor, Central Region
Alaska Department of Transportation & Public Facilities
Office: 907-269-0700 • Direct: 907-269-0677 • matthew.walsh@alaska.gov
Keep Alaska Moving *through service and infrastructure.*

From: dsteiner@mtaonline.net <dsteiner@mtaonline.net>
Sent: Friday, January 17, 2025 2:43 PM
To: Walsh, Matthew H (DOT) <matthew.walsh@alaska.gov>; 'Jade Laughlin' <Centralgravelproducts@hotmail.com>; 'Gary LoRusso' <garyl@keystonesurveyak.com>
Cc: Beckwith, Morris R (DOT) <morris.beckwith@alaska.gov>; Adler, Clint J (DOT) <clint.adler@alaska.gov>; Bosin, Anna D (DOT) <anna.bosin@alaska.gov>; Bentz, Chris L (DOT) <chris.bentz@alaska.gov>; Baski, Sean M (DOT) <sean.baski@alaska.gov>
Subject: RE: Central Gravel Products- DOT&PF ARR 33504

Matt,

Thank you for the response. We really appreciate all your help with this.

Dan Steiner, PE
SDCS, LLC
(wk) 907-357-5609
(cell) 907-715-7704

From: Walsh, Matthew H (DOT) <matthew.walsh@alaska.gov>
Sent: Friday, January 17, 2025 2:40 PM
To: dsteiner@mtaonline.net; 'Jade Laughlin' <Centralgravelproducts@hotmail.com>; 'Gary LoRusso' <garyl@keystonesurveyak.com>
Cc: Beckwith, Morris R (DOT) <morris.beckwith@alaska.gov>; Adler, Clint J (DOT) <clint.adler@alaska.gov>; Bosin, Anna D (DOT) <anna.bosin@alaska.gov>; Bentz, Chris L (DOT) <chris.bentz@alaska.gov>; Baski, Sean M (DOT) <sean.baski@alaska.gov>
Subject: RE: Central Gravel Products- DOT&PF ARR 33504

Hi Dan,

It is not necessary that the TCP be in place and approved before the ATC but that the TCP is approved prior to operations. We are looking for acceptance and understanding of the special condition listed below.

There are other requirements for flagging operations including a temporary speed reduction to 45 MPH (down from 55 MPH) on Bogard as well as truck warning signs both Eastbound and Westbound. DOT&PF is aware of the January 21st deadline.

Matt

Matt Walsh
ROW Property Management Supervisor, Central Region
Alaska Department of Transportation & Public Facilities
Office: 907-269-0700 • Direct: 907-269-0677 • matthew.walsh@alaska.gov
Keep Alaska Moving *through service and infrastructure.*

From: dsteiner@mtaonline.net <dsteiner@mtaonline.net>
Sent: Friday, January 17, 2025 2:34 PM
To: Walsh, Matthew H (DOT) <matthew.walsh@alaska.gov>; 'Jade Laughlin' <Centralgravelproducts@hotmail.com>; 'Gary LoRusso' <garyl@keystonesurveyak.com>
Cc: Beckwith, Morris R (DOT) <morris.beckwith@alaska.gov>; Adler, Clint J (DOT) <clint.adler@alaska.gov>; Bosin, Anna D (DOT) <anna.bosin@alaska.gov>; Bentz, Chris L (DOT) <chris.bentz@alaska.gov>; Baski, Sean M (DOT) <sean.baski@alaska.gov>
Subject: RE: Central Gravel Products- DOT&PF ARR 33504

Matt,

Attached is a set of plans that have been submitted to ADOT with all the latest page updates.

It is going to take a little bit of time to put a traffic control plan together. Monday is a holiday. Will you be able to provide an email to Peggy Horton by January 21 that ADOT will allow access onto to Bogard Road even though we are still working out some of the final details?

Dan Steiner, PE
SDCS, LLC
(wk) 907-357-5609
(cell) 907-715-7704

From: Walsh, Matthew H (DOT) <matthew.walsh@alaska.gov>
Sent: Friday, January 17, 2025 2:06 PM
To: dsteiner@mtaonline.net; 'Jade Laughlin' <Centralgravelproducts@hotmail.com>; 'Gary LoRusso'

<garyl@keystonesurveyak.com>
Cc: Beckwith, Morris R (DOT) <morris.beckwith@alaska.gov>; Adler, Clint J (DOT) <clint.adler@alaska.gov>; Bosin, Anna D (DOT) <anna.bosin@alaska.gov>; Bentz, Chris L (DOT) <chris.bentz@alaska.gov>; Baski, Sean M (DOT) <sean.baski@alaska.gov>
Subject: RE: Central Gravel Products- DOT&PF ARR 33504

Hi Dan,

DOT&PF is continuing to move forward in our process in the driveway review. We are awaiting final approval of your submitted design comments. I will touch base with Chris on Tuesday when he returns. Can you please resend an updated plan set with all the changes?

ROW did receive one additional comment regarding the designs and turning movements; DOT&PF is requesting the following condition be including the in the Approval to Construct until the driveway becomes a right in/right out.

Prior to the initiation of trucking operations, a traffic control plan will need to be submitted and approved by DOT&PF for flagging operations associated with a left-hand turning movement. This traffic control plan will remain in effect until the improvements approved by DOT&PF in in the Central Gravel Products Gravel Development plan attached to this Approval to Construct are constructed limiting the access to a right in/right out turning movements.

Thanks,
Matt

Matt Walsh
ROW Property Management Supervisor, Central Region
Alaska Department of Transportation & Public Facilities
Office: 907-269-0700 • Direct: 907-269-0677 • matthew.walsh@alaska.gov
Keep Alaska Moving *through service and infrastructure.*

From: dsteiner@mtaonline.net <dsteiner@mtaonline.net>
Sent: Thursday, January 16, 2025 4:42 PM
To: Walsh, Matthew H (DOT) <matthew.walsh@alaska.gov>; 'Jade Laughlin' <Centralgravelproducts@hotmail.com>; 'Gary LoRusso' <garyl@keystonesurveyak.com>
Cc: Beckwith, Morris R (DOT) <morris.beckwith@alaska.gov>; Adler, Clint J (DOT) <clint.adler@alaska.gov>; Bosin, Anna D (DOT) <anna.bosin@alaska.gov>; Bentz, Chris L (DOT) <chris.bentz@alaska.gov>; Baski, Sean M (DOT) <sean.baski@alaska.gov>
Subject: RE: Central Gravel Products- DOT&PF ARR 33504

Matt,

I talked to Peggy Horton at the MSB today. Just to let you know, we don't need the permit to be issued by next Tuesday, she just needs something as simple as an email that states that ADOT is going to grant access on to Bogard road, even if there are still some design issues that we are working out.

Peggy also said that if there are conditions that ADOT will need to be part of the MSB permit, to let her know. Even if it is "the owner must comply with all conditions of the ADOT driveway permit" she can include that. They don't need anything, she just asked that I let you know, so I am letting you know.

Thank you for your help.

Dan Steiner, PE
SDCS, LLC
(wk) 907-357-5609
(cell) 907-715-7704

From: dsteiner@mtaonline.net <dsteiner@mtaonline.net>
Sent: Tuesday, January 14, 2025 11:33 AM
To: 'Walsh, Matthew H (DOT)' <matthew.walsh@alaska.gov>; 'Jade Laughlin' <Centralgravelproducts@hotmail.com>; 'Gary LoRusso' <garyl@keystonesurveyak.com>
Cc: 'Beckwith, Morris R (DOT)' <morris.beckwith@alaska.gov>; 'Adler, Clint J (DOT)' <clint.adler@alaska.gov>; 'Bosin, Anna D (DOT)' <anna.bosin@alaska.gov>; 'Bentz, Chris L (DOT)' <chris.bentz@alaska.gov>; 'Baski, Sean M (DOT)' <sean.baski@alaska.gov>
Subject: RE: Central Gravel Products- DOT&PF ARR 33504

See my responses below in red.

Please let me know if you need any other changes.

Dan Steiner, PE
SDCS, LLC
(wk) 907-357-5609
(cell) 907-715-7704

From: Walsh, Matthew H (DOT) <matthew.walsh@alaska.gov>
Sent: Monday, January 13, 2025 2:36 PM
To: dsteiner@mtaonline.net; 'Jade Laughlin' <Centralgravelproducts@hotmail.com>; 'Gary LoRusso' <garyl@keystonesurveyak.com>
Cc: Beckwith, Morris R (DOT) <morris.beckwith@alaska.gov>; Adler, Clint J (DOT) <clint.adler@alaska.gov>; Bosin, Anna D (DOT) <anna.bosin@alaska.gov>; Bentz, Chris L (DOT) <chris.bentz@alaska.gov>; Baski, Sean M (DOT) <sean.baski@alaska.gov>

Subject: RE: Central Gravel Products- DOT&PF ARR 33504

Dan,

To move towards your deadlines, I am providing the following comments made by our Highway Design section at this time instead of waiting for a complete review by all functional groups.

1. Sheet C1.0.1: Add note No. 4 to include topsoil and seed of all disturbed ground within DOT & MSB right of way. Seed is required to be weed free certified and be native plants to south central AK.
   Note added. Updated C1.0.1 attached.
2. Sheet C1.4: Please check/evaluate Stopping Sight Distance (SSD) and Intersection Sight Distance (ISD) as 5 MPH higher than posted (55 MPH for Bogard and 40 MPH for Engstrom). This is consistent with original design intent of the roads and accounts for some speeding which happens regularly on these roads. Both SSD and ISD are required to be met and shall be shown on the plans. Combination truck should be used for time gap (sec) for all maneuvers to and from the approaches per AASHTO A Policy on Geometric Design of Highways and Streets, 7th Edition 2018. Time gap does not need adjusted for grade as most of the grades up and downstream within ISD window are less than ±3%.
   SSD and ISD checked at both intersections. No adjustment needed or Enstrom road.
   Bogard road updated. Updated C1.4 attached
3. Sheet C1.3.1:
   a. All median noses are to be bullnosed per DOT details to mitigate plow strikes. Each Bullnose is required to be marked with a Flexible Delineator per attached Details. No sharp angles allowed at bullnose radiuses.
   b. All median curb shall be expressway curb and gutter not the mountable as shown on the plans.
   c. Median island is required to be paved or concrete.
   d. Note No. 1 shall be deleted and access is recommended to be constructed as right in right out with full median as shown on the plans. (this is recommended, plans indicate intent to do so only when roundabout is constructed. As the exact timing of that cannot be certain, design highly recommends there be no condition tied to the roundabouts construction.)
   e. All signs shall be installed with frangible couplings and bases for DOT Standard Plan S-31.02. Signs shall be mounted per Central Region Light Sign Framing and Attachment Details (see attached). Signs shall be installed per DOT Standard Plan S-05.02 for height and offset conditions. Signs posts should be checked for wind loading and sized appropriately with galvanized steel tube only (3” steel tube will likely suffice).

   All changes made. See updated/added sheets C1.3.1, C1.3.2, C1.3.3
4. Sheet C1.3:
   a. Vertical curves with a K value greater than or equal to 5 need to be added in the

profile grade.

b. Full 30' at ±2% grade is required prior to start of the vertical curve is required.

All changes made. Updated C1.3 Attached.

Note that additional comments could still be generated by our other functional groups review that could require reconciliation.

Matt

Matt Walsh
ROW Property Management Supervisor, Central Region
Alaska Department of Transportation & Public Facilities
Office: 907-269-0700 • Direct: 907-269-0677 • matthew.walsh@alaska.gov
Keep Alaska Moving *through service and infrastructure.*

From: Walsh, Matthew H (DOT)
Sent: Monday, January 6, 2025 11:20 AM
To: dsteiner@mtaonline.net; 'Jade Laughlin' <Centralgravelproducts@hotmail.com>; 'Gary LoRusso' <garyl@keystonesurveyak.com>
Cc: Beckwith, Morris R (DOT) <morris.beckwith@alaska.gov>; Adler, Clint J (DOT) <clint.adler@alaska.gov>; Bosin, Anna D (DOT) <anna.bosin@alaska.gov>; Bentz, Chris L (DOT) <chris.bentz@alaska.gov>; Baski, Sean M (DOT) <sean.baski@alaska.gov>
Subject: RE: Central Gravel Products- DOT&PF ARR 33504

Dan,

Thank you for providing revised documents and follow up to our questions sent in the November 21st email. We will circulate the revised plans with your responses for internal review. DOT&PF does recognize the February 3 MSB Planning Commission Meting, however, beware that DOT&PF has many additional projects that require review of our functional groups and cannot guarantee an Approval to Construct by January 21st.

Thanks,
Matt

Matt Walsh
ROW Property Management Supervisor, Central Region
Alaska Department of Transportation & Public Facilities
Office: 907-269-0700 • Direct: 907-269-0677 • matthew.walsh@alaska.gov
Keep Alaska Moving *through service and infrastructure.*

From: dsteiner@mtaonline.net <dsteiner@mtaonline.net>
Sent: Monday, January 6, 2025 10:32 AM
To: Walsh, Matthew H (DOT) <matthew.walsh@alaska.gov>; 'Jade Laughlin' <Centralgravelproducts@hotmail.com>; 'Gary LoRusso' <garyl@keystonesurveyak.com>
Cc: Beckwith, Morris R (DOT) <morris.beckwith@alaska.gov>; Adler, Clint J (DOT) <clint.adler@alaska.gov>; Bosin, Anna D (DOT) <anna.bosin@alaska.gov>; Bentz, Chris L (DOT) <chris.bentz@alaska.gov>; Baski, Sean M (DOT) <sean.baski@alaska.gov>
Subject: RE: Central Gravel Products- DOT&PF ARR 33504

Matt,

Attached are updated drawings addressing the ADOT comments.

Please note a couple of things. Traffic counts have been obtained for the coffee shop. However, since then, It has been decided that the coffee stand will be removed from this site. The peak hour for the coffee shop included 40 vehicle trips. When the coffee shop is removed, the peak hour for the gravel pit will be approximately half of that.
Also, two driveways will be removed. With that and the coffee shop removal, four driveway access points will be reduced to one access point, the driveway to the gravel pit.

The paperwork (easements, power of attorney, etc.) are in the process of getting signatures.

We are trying to get things ready for he MSB Planning Commission Meeting on February 3. To do this, we need to get information to the MSB by January 21, including ADOT approval for the Bogard Road driveway. We respectfully request a review of the attached plans and any review comments within 10 calendar days. This would hopefully give us enough time to respond to comments and re-submit plans for approval by January 21.

Please let me know if you have any questions.

To be able to precede with our review, DOT&PF requests the following information:
-

- Traffic counts for the current coffee stand Fresh Start Expresso. N/A – Coffee shop to be relocated. See Demolition Sheet - C1.0.1
- Revised design plans with a demolition sheet showing the removal of the discussed access points. See Demolition Sheet - C1.0.1
- Revised design plans with the proposed design elements for a right-in/right-out driveway. See Sheets – C1.3 and C1.3.1

Specific design comments for the previously submitted design plans that require reconciliation are the following:

- C1.4 sight distance shown for Bogard Rd does not appear to use proper offset. The figure appears to show some unknown offset distance from what appears to be the center of travel lane. The offset distance must be 14.4-17.8' from the edge of travel way (fog line). Show all obstructions in the area and or plans for removal of obstructions, for example there are tress in close currently but not shown. Site Distance Sheet updated. Sheet - C1.4
- C1.3 note 5 states topography negates need for culvert. Would need to see a ditch profile to confirm this, else a cross culvert should be installed per standard. A culvert has been added. See Sheet – C1.3

Dan Steiner, PE
SDCS, LLC
(wk) 907-357-5609
(cell) 907-715-7704

Peggy Horton

From: dsteiner@mtaonline.net
Sent: Thursday, September 12, 2024 12:46 PM
To: Peggy Horton
Subject: FW: LAS35179 Reclamation Bond/Application

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Peggy,

This is to let you know that they have completed the DNR stuff for the gravel pit.

Dan Steiner, PE
SDCS, LLC
(wk) 907-357-5609
(cell) 907-715-7704

From: Newcomb, Grace R (DNR) <grace.newcomb@alaska.gov>
Sent: Thursday, September 12, 2024 12:32 PM
To: Central Gravel <centralgravelproducts@hotmail.com>
Cc: 'Dan Steiner (dsteiner@mtaonline.net)' <dsteiner@mtaonline.net>; Micelotta, Cinnamon A (DNR) <cinnamon.micelotta@alaska.gov>
Subject: RE: LAS35179 Reclamation Bond/Application

Hello,

Thank you, we have received your signed bond document, and your letter of approval is now under review.

Best,

Grace Newcomb
Natural Resource Specialist

Department of Natural Resources
Division of Mining, Land, and Water
Material Sales Program
550 W 7th Ave Ste 900c
Anchorage, AK 99501-3577

Ph: (907) 269-8560
F: (907) 269-8913

From: Central Gravel <centralgravelproducts@hotmail.com>
Sent: Wednesday, September 11, 2024 12:27 PM
To: Newcomb, Grace R (DNR) <grace.newcomb@alaska.gov>
Cc: 'Dan Steiner (dsteiner@mtaonline.net)' <dsteiner@mtaonline.net>; Micelotta, Cinnamon A (DNR) <cinnamon.micelotta@alaska.gov>
Subject: LAS35179 Reclamation Bond/Application

Grace,

I just spoke with Lyncoln regarding payment.

Attached please find the bond paperwork and most recent Bienniel Report confirming my status as 50/50 member of the LLC that owns our gravel pit business.

If you have any questions please don't hesitate to contact me via email or on my cell (907) 223-5306.

Central Gravel Products
(907) 745-4044
https://www.facebook.com/Central-Gravel-Products-1399354943638372/

5900 W. Dewberry Dr
Wasilla, AK 99623

SDCS, LLC
STEINER DESIGN & CONSTRUCTION SERVICES, LLC

Phone: (907) 357-5609
Fax: (907) 357-5608

May 10, 2024

Colleen Lowe
State of Alaska Department of Natural Resources
Division of Mining, Land, and Water
550 West 7th Ave., Suite 900C
Anchorage, AK 99501-3577

Re: Central Gravel Products – Gravel Pit – Reclamation Plan for a New Gravel Pit
T18N, R1E, Section 27, Lots D1, D2, and A2
Reclamation Plan Narrative

Ms. Lowe,

Central Gravel Products is developing portions of the above referenced lots into a gravel pit. This gravel pit will produce pit run material and some processed soil (leveling course, sewer rock, etc.). The total acreage of these lots is 230 acres. There are some existing residential structures on these lots. These areas will not be developed as part of the gravel pit. The area that will be used for soil extraction is approximately 150 acres.

This letter is to serve as supplement information to the Material Site Reclamation Plan. The sections where the following information applies will be listed.

4. Description of the Reclamation Operation

a. The current plan is to develop 10 acres at a time. When additional areas are opened up for material extraction, previous areas will be reclaimed.

b. The following type of equipment will be used on site and as part of the reclamation process:

- Track type excavator.
- Large rubber wheeled loader.
- Skid-steer type loader.
- Track type dozer.
- Motor grader.
- Rock Truck
- Dump Truck

Time Schedule for Reclamation Measures - The initial 10 acres will be developed for soil extraction. When these 10 acres near depletion, a portion of the area will be reclaimed and additional area developed so that no more than 10 acres is disturbed at one time.

There will not be a stream channel diversion as part of this project.

No part of this development is in a flood plain.

6. Attachments

Central Gravel Products is leasing the land from the owners. They are:

Lot A2, Section 27, T18N, R1E, Seward Meridian
Name: Bob and Franci Havemeister
Address: P.O. Box 467 Palmer, AK 99645
Phone Number: 907-232-0628

Lot D1, Section 27, T18N, R1E, Seward Meridian
Name: Ralph Kircher
Address: 3182 N. Trunk Road Palmer, AK 99645
Phone Number:

Lot D1, Section 27, T18N, R1E, Seward Meridian
Name: Bob and Jean Havemeister
Address: P.O. Box 2349 Palmer, AK 99645
Phone Number:

Attached are maps showing the location of the parcels to be developed. They are not USGS maps but have more detail than the USGS maps would have.

Attached are plans for the development, however, it is us unknown right now where stockpiles, overburden disposal sites, etc. will be located.

The following equipment will be used for reclamation:

- Track type excavators. (1)
- Large rubber wheeled loader. (1)
- Skid-steer type loader. (1)
- Track type dozer. (1)
- Motor grader. (1)
- Rock Truck. (1)
- Dump Truck. (1)

- The exact dates for reclamation are not yet known.

- Included with this submittal are notarized letters from the owners authorizing developer (Central Gravel Products) to proceed with this work.

- An annual reclamation statement will be provided each year.

- The reclamation measures listed will be used.

Please let me know if you have any questions or need additional information. Thank you for your help with this project.

Sincerely,

Dan Steiner, P.E.
Manager

des
encl.

THE STATE of ALASKA
GOVERNOR MIKE DUNLEAVY

Department of Natural Resources
DIVISION OF MINING, LAND & WATER
Southcentral Regional Land Office
550 West 7th Avenue, Suite 900C
Anchorage, Alaska 99501-3577
Main: 907.269.8503
TTY: 711 or 800-770-8973
Fax: 907.269.8913

September 18, 2024

Central Gravel Products
P.O. Box 800 Palmer
Palmer, AK 99645

Re: LAS 35179 – Non-State Land Reclamation Plan Approval

Dear Kelly Heck, and Jade Laughlin,

The Department of Natural Resources (DNR), Division of Mining, Land and Water (DMLW), Southcentral Regional Office (SCRO), received your Non-State Reclamation Plan (NSRP) for the reclamation of 150 acres total, after extracting 230,000 cubic yards of material annually. According to the application, the subject site is located on private lands of Bob and Jean Havemeister, Ralph Kircher, and Bob and Franci Havemeister within Section 27 of Township 18 North, Range 1 East, Seward Meridian.

Thank you for submitting a NSRP for extraction activities taking place from 2024 through 2054. After reviewing the reclamation plan we have determined that the plan is complete as submitted. The proposed reclamation measures are appropriate provided that the operation is conducted in a manner that will prevent unnecessary and undue degradation of land and water resources, and the operation shall be reclaimed using current reclamation methods so that the site is left in a stable and safe condition.

Per Alaska Statute (AS) 27.19.040(a) financial assurance is required. Development of the proposed 150-acre material site requires $750 of financial assurance per acre of mined area. 11 AAC 97.420 (b) states *"(b) If a miner shows to the commissioner's satisfaction that the reasonable and probable costs of reclamation under an approved reclamation plan are less than $750 per acre, the commissioner will reduce the bond to those costs. The miner's showing must be submitted along with the proposed reclamation plan and must include an estimate of the labor and equipment costs that would be incurred to hire a third-party contractor to perform the reclamation in accordance with the plan. In evaluating a miner's proposal for reduction of the bond amount, the commissioner will consider the nature of the surface, its uses, improvements in the vicinity of the land, the degree of risk involved in the mining operation, and all other relevant factors. The commissioner will make a determination on this request of bond reduction in the time schedules set out in 11 AAC 97.300."*

Due to the mining area being disturbed 10-acres at a time, per year, and being reclaimed at the same rate, a reclamation bond is only required for the 10-acres disturbed annually, for a total bond of $7,500.00.

This acceptance letter does not alleviate the necessity to obtain authorizations required by other agencies and entities for this activity. If you have any questions, please feel free to contact Grace Newcomb at (907) 269-8560 or at grace.newcomb@alaska.gov.

Sincerely,

Joni Sweetman
Natural Resource Manager 2 Southcentral Regional Land Office

STATE OF ALASKA

DEPARTMENT OF NATURAL RESOURCES

Division of Mining, Land and Water

Northern Regional Land Office
3700 Airport Way
Fairbanks, AK 99709-4699
(907) 451-2740
nro.lands@alaska.gov

Southcentral Regional Land Office
550 West 7th Ave, Suite 900C
Anchorage, AK 99501-3577
(907) 269-8503
dnr.pic@alaska.gov

Southeast Regional Land Office
P. O. Box 111020
Juneau, AK 99811-1020
(907) 465-3400
sero@alaska.gov

Statewide TTY – 771 for Alaska Relay or 1-800-770-8973

MATERIAL SITE RECLAMATION PLAN OR LETTER OF INTENT/ANNUAL RECLAMATION STATEMENT AS 27.19.030 – 27.19.050

In accordance with Alaska Statute 27.19, reclamation is required of all mining operations, including sand and gravel extraction. Completion of this form will meet the law's requirements for a **reclamation plan** (see below for filing requirements; due date: at least 45 days before mining is proposed to begin; requires approval by the Division of Mining, Land and Water). Completion of this form will also serve as a **letter of intent** for operations exempt from the plan requirement (due date: before mining begins). No approval is required for a letter of intent, but a miner who files a letter of intent must, before December 31, file an **annual reclamation statement** (Section 8 of this form).
Check applicable box:

☒ A. RECLAMATION PLAN (REQUIRED if the operation will disturb five or more acres this year, OR 50,000 cubic yards, OR if the operation has a cumulative disturbed area of five or more acres)

☐ B. RECLAMATION PLAN-VOLUNTARY (for an operation below the limits shown in Box A but wanting to qualify for the statewide bonding pool)

☐ C. LETTER OF INTENT (less than five acres to be disturbed AND less than 50,000 cubic yards AND less than five acres unreclaimed area) NOTE: A miner who files a letter of intent is also required to file an annual reclamation statement at the end of the year.

THIS RECLAMATION PLAN/LETTER OF INTENT IS FOR CALENDAR YEAR 2024-2054
(If you checked either box a or b above and propose a multi-year plan, state all years covered.)

1. **MINER INFORMATION** (If there is more than one miner, attach a list of the names, addresses, and telephone numbers of all other owners, operators, or leaseholders of the mining operation)

Jade Laughlin and Kelly Heck
Name of miner who will serve as agent for notice purposes

Mailing = P.O. Box 800 Palmer, AK 99645 Home/Office = 2151 N Hemmer Road Palmer, AK
Address (notify the department of any later change of address)

Palmer	AK	99645	907-841-7270
City	State	Zip code	Telephone

See attched information for property owners.
Name of landowner (if other than miner) or public land management agency

Attached are notarized signatures of the owners of the three lots being developed.
Federal or state casefile number (if any) assigned to the site

2. **LEGAL DESCRIPTION OF PROPOSED MINING SITE**

Lots D1, D2, and A2 of Section 27	18N	1E	Seward
Legal Subdivision/Section/Quarter-Section	Township	Range	Meridian

3. **DESCRIPTION OF THE MINING OPERATION** (if you checked box a or b on p. 1 of this form and are proposing a multi-year reclamation plan, attach separate sheets as needed showing acreage to be mined, volume to be mined, and existing acreage of mined area for each year covered by the plan)

   a. 10 Total acreage to be mined or disturbed during the year.

   b. 230,000 CY Estimated total volume to be mined or disturbed, including overburden.

   c. sand, gravel, topsoil Type of material (sand, gravel, peat, etc.).

   d. 0 Existing acreage of mined area (disturbed area that has not yet been reclaimed, but counting only acreage disturbed after October 15, 1991).

4. **DESCRIPTION OF THE RECLAMATION OPERATION**

   a. The total acreage that will be reclaimed during the year (or each year, if for a multi-year reclamation plan) is: 10 acres

   b. Provide a list of equipment (type and quantity) to be used during the reclamation operation.

   c. A time schedule of reclamation measures shall be included as part of the plan.

The following measures must be considered in preparing and implementing the reclamation plan. Please mark those measures appropriate to your reclamation activity:

☒ Topsoil that is not promptly redistributed to an area being reclaimed will be separated and stockpiled for future use. This material will be protected from erosion and contamination by acidic or toxic materials and preserved in a condition suitable for later use.

☒ The area will be backfilled, graded and recontoured using strippings, overburden, and topsoil to a condition that allows for the reestablishment of renewable resources on the site within a reasonable period of time. It will be stabilized to a condition that will allow sufficient moisture to be retained for natural revegetation.

☒ Stockpiled topsoil will be spread over the reclaimed area to promote natural plant growth that can reasonably be expected to revegetate the area within five years.

☐ Stream channel diversions will be relocated to a stable location in the flood plain.

☒ Exploration trenches or pits will be backfilled. Brush piles, vegetation, topsoil, and other organics will be spread on the backfilled surface to inhibit erosion and promote natural revegetation.

☒ All buildings and structures constructed, used, or improved on land owned by the State of Alaska will be removed, dismantled, or otherwise properly disposed of at the completion of the mining operation.

☒ Any roads, airstrips or other facilities constructed to provide access to the mining operation shall be reclaimed (unless otherwise authorized) and included in the reclamation plan.

☒ Peat and topsoil mine operations shall ensure a minimum of two inches of suitable growing medium is left or replaced on the site upon completion of the reclamation activity.

☐ If extraction occurs within a flood plain, the reclamation activity shall reestablish a stable bed and bank profile such that river currents will not be altered and erosion and deposition patterns will not change.

NOTE: If you propose to use reclamation measures other than those shown above, or if the private landowner or public land manager of the site requires you to use stricter reclamation measures than those shown above, attach a list of those measures to this plan.

5. **ALTERNATE POST-MINING LAND USE**

☐ The mining site is public land. The land management agency's land use plan (if any) for post-mining land use is:
N/A

☐ The mining site is public land. As allowed by AS 27.19.030(b), I propose to reclaim it to the following post-mining land use:
N/A

☒ The mining site is private property. The private landowner plans to use it for the following post-mining land use:
Residential Subdivision

6. **ATTACHMENTS**

☒ If the mining operation has additional owners, operators, or leaseholders not shown on p. 1 of this form, attach a list of their names, addresses, and telephone numbers.

☒ Attach a USGS map at a scale no smaller than 1:63,360 (inch to the mile) showing the general vicinity of the mining operation and the specific property to be mined. Option: If you checked Box C on the first page of this form and the mining site is adjacent to an airport or public highway, state the name of the airport or the name and milepost of the public highway.

☒ Attach a diagram of the mined area (this term includes the extraction site, stockpile sites, overburden disposal sites, stream diversions, settling ponds, etc.) and the mining operation as a whole (this term includes the roads you plan to build, your power lines, support facilities, etc.). Show and state the number of acres to be mined during the year. (If you checked Box A or B on the first page of this form and your plan covers more than one year, show each year's work.) Show the location corners or property boundaries of the site in relation to the reclamation work and any other areas affected by the operation.

☒ Attach a list of the equipment (type and quantity) to be used during the reclamation activity.

☒ A time schedule of events must be attached that includes dates and activities related to this reclamation plan.

☒ If the site is private land not owned by the miner, attach a signed, notarized statement from the landowner indicating the landowner's consent to the operation. The landowner may also use the consent statement to notify the department that the landowner plans a post-mining land use incompatible with natural revegetation and therefore believes that reclamation to the standard of AS 27.19.020 is not feasible.

☒ For those miners that are required to file an annual reclamation statement, attach photographs and/or videotapes dated and described as to location of the reclamation activity that was completed.

☒ If you propose to use reclamation measures other than those listed on this form, or if the private landowner or public land manager of the site requires you to use stricter reclamation measures, attach a list of those measures.

7. **RECLAMATION BONDING** (REQUIRED **ONLY** IF YOU CHECKED BOX A or B ON THE FIRST PAGE OF THIS FORM)

The total acreage of my mining operation that is subject to the bonding requirement for the current year is 10 acres (add acreages stated in Section 3(a) and 3(d) of this form).

The per-acre bond amount is $750/acre or a total bond amount of $ 7,500

Please check the appropriate bonding method that you will apply toward this reclamation plan:

- ☐ Participation in the statewide bonding pool.
- ☐ Posting a corporate surety bond.
- ☒ Posting a personal bond accompanied by a letter of credit, certificate of deposit, or a deposit of cash or gold.
- ☐ Posting a bond or financial guarantee with another government agency that has jurisdiction over the mining operation, as allowed by a cooperative management agreement between that agency and the Division of Mining, Land and Water.
- ☐ Posting a general performance bond with a state agency that meets the requirements of 11 AAC 97.400(4).

The above reclamation plan/letter of intent and all attachments are correct and complete to the best of my knowledge.

Signature of Miner

5/10/2024
Date

AS 27.19.030 and AS 27.19.050 require a miner either to file a reclamation plan for approval or to file a letter of intent followed by an annual reclamation statement. AS 38.05.035(a) authorizes the director to decide what information is needed to process an application for the sale or use of state land and resources. This information is made a part of the state public land records and becomes public information under AS 40.25.110 and 40.25.120 (unless the information qualifies for confidentiality under AS 38.05.035(a)(8) and confidentiality is requested, AS 43.05.230, or AS 45.48). Public information is open to inspection by you or any member of the public. A person who is the subject of the information may challenge its accuracy or completeness under AS 44.99.310, by giving a written description of the challenged information, the changes needed to correct it, and a name and address where the person can be reached. False statements made in an application for a benefit are punishable under AS 11.56.210. In submitting this form, the applicant agrees with the Department to use "electronic" means to conduct "transactions" (as those terms are used in the Uniform Electronic Transactions Act, AS 09.80.010 – AS 09.80.195) that relate to this form and that the Department need not retain the original paper form of this record: the department may retain this record as an electronic record and destroy the original. In submitting this form, the applicant certifies that he or she has not changed the original text of the form or any attached documents provided by the Division.

State of Alaska Department of Natural Resources
Division of Mining, Land, and Water

MATERIAL SITE RECLAMATION PLAN

AUTHORIZATION OF PROPERTY OWNER FOR GRAVEL PIT DEVELOPMENT

NAME OF PROPERTY OWNER:

Lot D1, Section 27, T18N, R1E, Seward Meridian
Name: Bob and Jean Havemeister
Address: P.O. Box 2349 Palmer, AK 99645
Phone Number: 907-232-0628
Email: Havemeisertrucking@gmail.com

We, Bob or Jean Havemeister, owners of the above referenced property, authorized Central Gravel Products to develop the above referenced property as needed for material extraction (gravel pit). Central Gravel Products is responsible for following all federal, state, and local regulations including the reclamation plan associated with this submittal as required by the Alaska Department of Natural Resources, AS 27.19-030 – 27.19-050.

Signature: Property Owner | Bob Havemeister | 5/2/24
Printed Name | Date

This is to certify that on the 2nd day of MAY 2024, before me, the undersigned, a Notary Public, duly commissioned and sworn as such, personally appeared

Bob Havemeister and acknowledged the above instrument
(Printed Name of signer)
was signed and sealed as their free and voluntary act and deed, for the uses and purposes therein mentioned.

Witnees my hand and official seal.

CYNTHIA BELGARDE
Notary Public
State of Alaska
My Commission Expires Feb 14, 2028

Notary Public in and for Alaska

My Commision Expires Feb. 14, 2028

State of Alaska Department of Natural Resources
Division of Mining, Land, and Water

MATERIAL SITE RECLAMATION PLAN

AUTHORIZATION OF PROPERTY OWNER FOR GRAVEL PIT DEVELOPMENT

NAME OF PROPERTY OWNER:

Lot D1, Section 27, T18N, R1E, Seward Meridian
Name: Ralph Kircher
Address: 3182 N. Trunk Road Palmer, AK 99645
Phone Number: 253-850-9570
Email: PRECIOUSRALPH@AOL.COM

We, Ralph Kircher, owner of the above referenced property, authorized Central Gravel Products to develop the above referenced property as needed for material extraction (gravel pit). Central Gravel Products is responsible for following all federal, state, and local regulations including the reclamation plan associated with this submittal as required by the Alaska Department of Natural Resources, AS 27.19-030 – 27.19-050.

Ralph O. Kircher RALPH O. KIRCHER 5/2/2024

Signature: Property Owner Printed Name Date

This is to certify that on the 02 day of May, before me, the undersigned, a Notary Public, duly commissioned and sworn as such, personally appeared

Ralph O. Kircher and acknowledged the above instrument
(Printed Name of signer)
was signed and sealed as their free and voluntary act and deed, for the uses and purposes therein mentioned.

Witnees my hand and official seal.

Notary Public
State of Washington
TUAN LE
LICENSE # 23012376
MY COMMISSION EXPIRES
APRIL 18, 2027

Notary Public in and for ~~Alaska~~ WASHINGTON

My Commision Expires 04/18/2027

State of Alaska Department of Natural Resources
Division of Mining, Land, and Water

MATERIAL SITE RECLAMATION PLAN

AUTHORIZATION OF PROPERTY OWNER FOR GRAVEL PIT DEVELOPMENT

NAME OF PROPERTY OWNER:
Lot A2, Section 27, T18N, R1E, Seward Meridian
Name: Bob and Franci Havemeister
Address: P.O. Box 467 Palmer, AK 99645
Phone Number: 907-232-0628
Email: Havemeistertrucking@gmail.com

We, Bob or Franci Havemeister, owners of the above referenced property, authorized Central Gravel Products to develop the above referenced property as needed for material extraction (gravel pit). Central Gravel Products is responsible for following all federal, state, and local regulations including the reclamation plan associated with this submittal as required by the Alaska Department of Natural Resources, AS 27.19-030 – 27.19-050.

Signature: Property Owner | Bob Havemeister (Printed Name) | 5/24/24 (Date)

This is to certify that on the 2 day of May, 2024, before me, the undersigned, a Notary Public, duly commissioned and sworn as such, personally appeared

Bob G. Havemeister and acknowledged the above instrument
(Printed Name of signer)
was signed and sealed as their free and voluntary act and deed, for the uses and purposes therein mentioned.

Witnees my hand and official seal.

HOLLY M. KRAMER
Notary Public
State of Alaska
My Commission Expires Jan 18, 2026

Holly M. Kramer
Notary Public in and for Alaska

My Commision Expires 01/18/2026

Storm Water Pollution Prevention Plan

for:

Central Gravel Products
7955 E. Bogard Road
Palmer, AK 99645
907-745-4044

SWPPP Contact(s):

Jade Laughlin
7955 E. Bogard Road
Palmer, AK 99645
907-745-4044
centralgravelproducts@hotmail.com

SWPPP Preparation Date:

05/11/2024

APDES Permit Tracking Number: AKR_____

Contents

SECTION 1: FACILITY DESCRIPTION AND CONTACT INFORMATION

1.1 Facility Information

Facility Information

Name of Facility: Central Gravel Products

Street: 7955 E. Bogard Road

City: Palmer State: AK ZIP Code: 99645

Borough or Similar Government Subdivision: Matanuska Susitna Borough

Permit Tracking Number: No previous permit (if covered under a previous permit)

Latitude/Longitude (Use one of three possible formats, and specify method)

Latitude: Longitude:

3. 61.61629° N (decimal) 3. 149.24632° W (decimal)

Method for determining latitude/longitude (check one):

___USGS topographic map (specify scale:_____) ___ EPA Web site ___ GPS

X Other (please specify): Mat-Su Borough Parcel Viewer

Is the facility located in Indian Country? ___ Yes X No

If yes, name of Reservation, or if not part of a Reservation, indicate "not applicable." N/A

Is this facility considered a Federal Facility? ___ Yes X No

Estimated area of industrial activity at site exposed to storm water: 230 (acres)*

*Approximately 10 acres or less at a time will be disturbed.

Discharge Information

Does this facility discharge storm water into an MS4? ___ Yes X No

If yes, name of MS4 operator: N/A

Name(s) of water(s) that receive storm water from your facility: Wasilla Creek

Are any of your discharges directly into any segment of an "impaired" water? ___ Yes X No

If Yes, identify name of the impaired water (and segment, if applicable): N/A

Identify the pollutant(s) causing the impairment: N/A

For pollutants identified, which do you have reason to believe will be present in your discharge? N/A

For pollutants identified, which have a completed TMDL? N/A

Are any of your storm water discharges subject to effluent guidelines? ____ Yes X No

If Yes, which guidelines apply? N/A

Primary SIC Code or 2-letter Activity Code (refer to Appendix D of the 2020 MSGP): 1311

Identify your applicable sector and subsector: Sector J, Subsector J1

1.2 Contact Information/Responsible Parties

Facility Operator (s):

Name: Jade Laughlin
Title: Owner
Address: 7955 E. Bogard Road
City, State, Zip Code: Palmer , AK 99645
Telephone Number: 907-745-4044
Email address: centralgravelproducts@hotmail.com

Facility Owner (s):

Name: Jade Laughlin
Title: Owner
Address: 7955 E. Bogard Road
City, State, Zip Code: Palmer , AK 99645
Telephone Number: 907-745-4044
Email address: centralgravelproducts@hotmail.com

SWPPP Contact:
Name: Jade Laughlin
Telephone number: 907-745-4044
Email address: centralgravelproducts@hotmail.com

1.3 Storm Water Pollution Prevention Team

Staff Names	Individual Responsibilities
	Assisting the facility manager in developing and revising the facility's SWPPP.
	Implementing and maintaining control measures/BMPs, and taking corrective actions where required.
	Inspection and completing inspection reports.

1.4 Activities at the Facility

This facility will produce sand and gravel products for sale. This includes excavation of existing soil, sorting materials, and processing materials into usable sand and gravel products.

1.5 General Location Map

A copy of the general location map for this facility is in Appendix A.

1.6 Site Map(s)

A copy of the site map for this facility is in Appendix B.

SECTION 2: POTENTIAL POLLUTANT SOURCES

2.1 Industrial Activity and Associated Pollutants

Industrial Activity	Associated Pollutants
Fueling equipment.	Diesel and gasoline.
Processing Sand and Gravel	Hydraulic Fluid from machinery.
Servicing equipment.	Fuel, motor oil, antifreeze, other lubricants, grease.

2.2 Spills and Leaks

Areas of Site Where Potential Spills/Leaks Could Occur

Location	Outfalls
Fuel tanks (see site map)	None *
Maintenance Shop (fuel, motor oil, antifreeze, other lubricants, grease)	None*
*Wasilla Creek is at the southeast corner of this site. However, due to the vegetative buffer and the topography at the site, it would be virtually impossible for runoff from the site to reach the creek.	

Description of Past Spills/Leaks

This is a new facility. There are no past spills or leaks.

2.3 Non-Storm Water Discharges Documentation

This is a new facility. This section is not applicable.

2.4 Salt Storage

None.

2.5 Sampling Data Summary

N/A

SECTION 3: STORM WATER CONTROL MEASURES

3.1 Minimize Exposure

Though this site is 230 acres, approximately only ten acres at a time will be disturbed. As material extraction is completed in an area, the land will be reclaimed as additional area is opened for extraction. This will minimize the total area that is disturbed and exposed at one time.

3.2 Good Housekeeping

Due to the type of activities at this site, there will be very little chance for the accumulation of waste on the site. A visual inspection of the site will take place every two working days to see if there is garbage that needs to be collected and placed in garbage cans. Garbage cans will be emptied as needed. Garbage cans will have lids to prevent waste from being blown out of the cans.

Any fuel / oil containers will be visually inspected daily to check for any leaks.

3.3 Maintenance

The equipment that will be on site includes loader(s), excavator(s), screening and crushing equipment, other earth moving equipment, and trucks. All equipment will be inspected weekly to make sure there are no leaking fluids and is in operational condition.

3.4 Spill Prevention and Response

The only "tanks" that are anticipated to be on site will be a fuel tank(s) storing fuel for the equipment. However, if there are any other storage tanks on site, it is anticipated that all tanks will be property labeled and appropriately protected.

In the case of a release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 Code of Federal Regulations (CFR) Part 110, 40 CFR Part 117, or 40 CFR Part 302, occurs during a 24-hour period:

- The CONTRACTOR will call 911 and provide notice to the ADEC (269-3063) and the National Response Center at 800–424–8802 in accordance with the requirements of 40 CFR Part 110, 40 CFR Part 117, and 40 CFR Part 302 as soon as site staff have knowledge of the discharge.

3.5 Erosion and Sediment Controls

With the topography of the site, runoff will not leave the areas where soil extraction is taking place. There will also be a vegetative buffer consisting of existing vegetation and / or a 10' high soil berm surrounding the site. This buffer will remain in place during the life of the gravel pit and prevent erosion from leaving the site or entering water bodies.

3.6 Management of Runoff

With the topography of the site, runoff will not leave the areas where soil extraction is taking place. The existing soils are very permeable gravely sand. All rain, runoff, and snow melt will be absorbed into the ground.

3.7 Salt Storage Piles or Piles Containing Salt

No salt will be stored on site.

3.8 MSGP Sector-Specific Non-Numeric Effluent Limits

This project is a "Sector J" activity. There are no Sector-specific effluent limits that apply to Sector J activities.

3.9 Employee Training

All full-time employees will be trained on this SWPPP and their role in fulfilling the SWPPP requirements. This will take place at the time of hiring.

A review of the SWPPP and any changes will take place with full-time employees at least annually. An employee training log is located in the appendix.

3.10 Non-Storm Water Discharges

With the topography of the site, runoff will not leave the areas where soil extraction is taking place. As a result, there will be no non-storm water discharges as part of this project.

3.11 Waste, Garbage and Floatable Debris

There will be a garbage can on site that is maintained by the site owner. A portable toilet may also be on site and will be maintained by the company who provides the toilet. There is no control point for these items.

3.12 Dust Generation and Vehicle Tracking of Industrial Materials

If needed, dust will be controlled on the site by use of a water truck sprinkling the area. Any vehicle tracking soil onto the adjacent road will be cleaned with hand brooms or street sweeper.

SECTION 4: SCHEDULES AND PROCEDURES FOR MONITORING

Wasilla Creek is at the southeast corner of this site. However, due to the vegetative buffer and the topography at the site, it would be virtually impossible for runoff from the site to reach the creek. As a result, no monitoring will be needed.

SECTION 5: INSPECTIONS

For the routine facility inspection and the comprehensive site inspection to be performed at your site:

- The names of the person(s), or the positions of the person(s), responsible for inspection: Jade Laughlin or an appointed representative (add name here) .
- The schedule to be used for conducting the inspections. A comprehensive site inspection will take place on May 20, o each year.
-
- Specific areas of the facility to be inspected, including schedules for specific outfalls: No outfalls are anticipated. No inspection schedule is needed.

For the quarterly visual assessments to be performed at this site:

- The names of the person(s), or the positions of the person(s), responsible for inspection: Jade Laughlin or an appointed representative = .
- The schedules to be used for conducting inspections. Include here any tentative schedule that will be used for facilities in climates with irregular storm water runoff discharges (2020 MSGP, Part 6.2.3): No outfalls are anticipated. No inspection schedule is needed.

- Specific areas of the facility to be inspected, including schedules for specific outfalls: No outfalls are anticipated. No inspection schedule is needed.

Inactive and Unstaffed sites exception

This site will closed from November 2 to April 30. The site will have no one on site. No material will be excavated or processed during this time. No inspections will be needed during this time.

SECTION 6: SWPPP CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: _____ Title: _____

Signature: _____ Date: _____

SECTION 7: SWPPP MODIFICATIONS

- This SWPPP is a "living" document and is required to be modified and updated, as necessary, in response to corrective actions.
    - If you need to modify the SWPPP in response to a corrective action the certification statement in section 7 of this SWPPP

For any other SWPPP modification, you should keep a log with a description of the modification, the name of the person making it, and the date and signature of that person.

RECORD OF SWPPP AMENDMENTS

Date of Revision	Section	Description

RECORD OF SWPPP AMENDMENTS

Date of Revision	Section	Description

SWPPP APPENDICES

Attach the following documentation to the SWPPP:

Appendix A: General Location Map

Appendix B: Site Map

Appendix C: 2020 MSGP

Appendix D: NOI and Acknowledgement Letter from EPA/State

Appendix E: Corrective Action Log

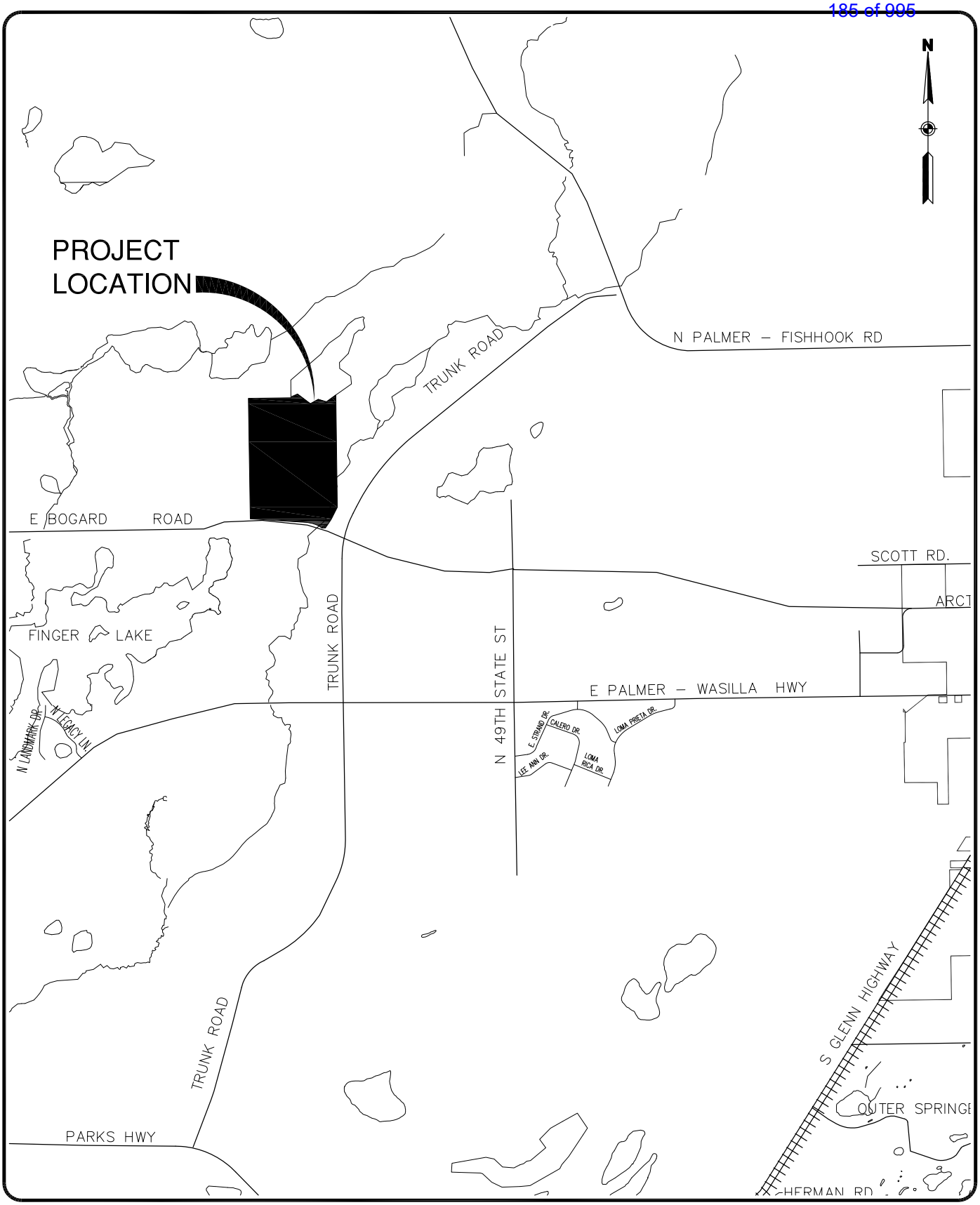
Appendix F: Employee Training Log

Appendix G: Stormwater Industrial Routine Facility Inspection Report

Appendix H: Quarterly Visual Assessment Reports

Appendix I: eNOI Instructions

Appendix A:
General Location Map



SDCS, LLC
STEINER DESIGN & CONSTRUCTION SERVICES, LLC
5900 W. DEWBERRY DR. PH: (907) 357-5609
WASILLA, AK 99623 FAX: (907) 357-5608

CENTRAL GRAVEL PRODUCTS
GRAVEL PIT DEVELOPMENT
MSGP – STORM WATER POLLUTION PREVENTION PLAN

VICINITY MAP

FIGURE 1A

SDCS, LLC
STEINER DESIGN & CONSTRUCTION SERVICES, LLC
5900 W. DEWBERRY DR. PH: (907) 357-5609
WASILLA, AK 99623 FAX: (907) 357-5608

CENTRAL GRAVEL PRODUCTS
GRAVEL PIT DEVELOPMENT
MSGP – STORM WATER POLLUTION PREVENTION PLAN

LOCATION MAP

FIGURE 1B

Appendix B:
Site Map

CENTRAL GRAVEL PRODUCTS
GRAVEL PIT DEVELOPMENT
MSGP - SWPPP

SHEET TITLE
SITE PLAN

SHEET
2

Appendix C:
2020 MSGP

ALASKA POLLUTANT DISCHARGE ELIMINATION SYSTEM

MULTI-SECTOR GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY (MSGP)

Permit Number: AKR060000 – **Final**

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Wastewater Discharge Authorization Program
555 Cordova Street
Anchorage, AK 99501

In compliance with the provisions of the Clean Water Act (CWA), 33 U.S.C. §1251 *et seq*., as amended by the Water Quality Act of 1987, P.L. 100-4, this permit is issued under provisions of Alaska Statutes (AS) 46.03; the Alaska Administrative Code (AAC) as amended; and other applicable State laws and regulations. Operators of storm water discharges associated with industrial activity located in an area identified in Part 1.1 where the Alaska Department of Environmental Conservation (DEC) is the permitting authority are authorized to discharge to waters of the United States in accordance with the eligibility and Notice of Intent (NOI) requirements, effluent limitations, inspection requirements, and other conditions set forth in this permit. This permit is structured as follows:

- General requirements that apply to all facilities are found in Parts 1 through 10, and
- Industry sector-specific requirements are found in Part 11.

The Appendices (A through F) contain additional permit conditions that apply to all operators covered under this permit.

This permit becomes effective on April 1, 2020.

This permit and the authorization to discharge expire at midnight, March 31, 2025.

Signature	February 20, 2020 Date
Gene McCabe Printed Name	Program Manager Title

APDES MULTI-SECTOR GENERAL PERMITS FOR STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY

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Appendix A – Standard Conditions
Appendix B – Abbreviations and Acronyms
Appendix C – Definitions
Appendix D – Facilities and Activities Covered
Appendix E – Calculating Hardness in Receiving Waters for Hardness Dependent Metals
Appendix F – MSGP Forms

SCHEDULE OF SUBMISSIONS

The Schedule of Submissions summarizes some of the required submissions and activities the permittee must complete and/or submit to the Alaska Department of Environmental Conservation (DEC) during the term of this permit. The permittee is responsible for all submissions and activities even if they are not summarized below.

Table: Schedule of Submissions

Permit Part	Submittal or Completion	Frequency	Due Date	Submit to [a]
1.3	No Exposure Certification	Once, depending on facility status	Once every five years	Permitting Program
2.1.3, 5.2	Storm Water Pollution Prevention Plan (SWPPP)	Once at beginning of coverage	At filing of NOI	Permitting Program
2.1.5, 2.2	Notice of Intent (NOI)	Once at beginning of coverage	Once per permit cycle	Permitting Program
2.7	NOI Modification	As needed	As needed	Permitting Program
7.2.1.2, 7.2.2.1	Monitoring	Quarterly during first year	the 15th day of the following month	Compliance and Enforcement Program
9.3	Noncompliance Notification Form	Upon exceedance of effluent limit	the 15th day of the following month	Compliance and Enforcement Program
8.4	Corrective Action Report	Upon exceedance (See Part 8.1 and 8.2)	Submit with Annual Report	Compliance and Enforcement Program
9.2	Annual Report	Annually	By Feb 15th of the year following the reporting year	Compliance and Enforcement Program
9.4	Additional Reporting	See Section for details	See Section for details	Compliance and Enforcement Program
10.1	Notice of Termination	Once	At end of permit coverage	Permitting Program

Notes:
a. See Part 9.6 Addresses for Reports

Summary of Permit Required On-Site Documentation

Permit Part	Document Name or Title	Frequency	Purpose of Document
1.3	No Exposure Certification	Once every five years	To demonstrate facility has reviewed the permit and facility to determine they do not need to file for permit coverage
2.1.3, 5.2	SWPPP	Developed prior to submitting the NOI. Updated as necessary	To describe the project and the control measures to minimize the discharge of pollutants into waters of the U.S. Documents installation, maintenance, inspections, corrective actions, and reporting.
2.1.5, 2.2	NOI	Once at start of coverage	Applicant request for authorization to discharge under permit coverage
2.4	DEC NOI Reply Letter	Once at start of coverage	To provide permittee with DEC permit tracking number indicating project is covered by MSGP
2.7	NOI Modification	As needed	To modify the original NOI if facility conditions or lead personnel change
5.8.3	Copy of Permit Part 1-10 and Sector specific section	Include in SWPPP	To provide reference during permit period
6.1, 6.3.2	Inspection Reports	Conducted at frequency specified in MSGP and SWPPP	To monitor compliance with SWPPP and MSGP
7.2, 7.2.2.1 7.2.1.2	Monitoring Reports	Conducted at frequency specified in MSGP	To monitor compliance with MSGP
7.2.2.3, 9.3	Noncompliance Notification	As needed	To report any exceedances found during monitoring
8.4	Corrective Action Report	As needed	To report the corrective actions taken at the facility
9.2	Annual Report	Annually	To report annual results of inspections
9.4	Additional Reporting	As required	To provide additional information
10.1	Notice of Termination	Once	To close coverage by the permit.

1. Coverage under this Permit.

1.1 Permit Area.

This general permit covers waters of the United States (U.S.) located in the State of Alaska, except the Indian Reservation of Metlakatla and the Denali National Park and Preserve.

1.2 Eligibility.

1.2.1 **Facilities Covered**. To be eligible to discharge under this permit, a permittee must (1) have a storm water discharge associated with industrial activity from the permittee's primary industrial activity, as defined in Appendix C, provided their primary industrial activity is included in Appendix D, or (2) be notified by DEC that the permittee is eligible for coverage under Sector AD of this permit.

1.2.2 **Allowable Storm Water Discharges**. Unless otherwise made ineligible under Part 1.2.4, the following discharges are eligible for coverage under this permit:

1.2.2.1 Storm water discharges associated with industrial activity for any primary industrial activities and co-located industrial activities, as defined in Appendix C;

1.2.2.2 Discharges designated by DEC as needing a storm water permit as provided in Sector AD;

1.2.2.3 Discharges that are not otherwise required to obtain APDES permit authorization but are commingled with discharges that are authorized under this permit (i.e., allowable non-storm water discharges commingled with allowable storm water discharges); and

1.2.2.4 Discharges subject to any of the national storm water-specific effluent limitations guidelines listed in Table 1-1.

(Table 1-1: Storm Water-Specific Effluent Limitations Guidelines located on following page.)

Table 1-1: Storm Water-Specific Effluent Limitations Guidelines

Regulated Discharge	40 CFR Section	MSGP Sector	New Source Performance Standard (NSPS)	New Source Date
Discharges resulting from spray down or intentional wetting of logs at wet deck storage areas	Part 429, Subpart I	A	Yes	1/26/81
Runoff from phosphate fertilizer manufacturing facilities that comes into contact with any raw materials, finished product, by-products or waste products (SIC 2874)	Part 418, Subpart A	C	Yes	4/8/74
Runoff from asphalt emulsion facilities	Part 443, Subpart A	D	Yes	7/28/75
Runoff from material storage piles at cement manufacturing facilities	Part 411, Subpart C	E	Yes	2/20/74
Mine dewatering discharges at crushed stone, construction sand and gravel, or industrial sand mining facilities	Part 436, Subparts B, C, and D	J	No	N/A
Runoff from hazardous waste and non-hazardous waste landfills	Part 445, Subparts A and B	K, L	Yes	2/2/00
Runoff from coal storage piles at steam electric generating facilities	Part 423	O	Yes	11/19/82 (10/8/74)[1]
Existing and new primary airports with 1,000 or more annual jet departures that discharge wastewater associated with airfield pavement deicing that contains urea commingled with stormwater	Part 449, Subpart A	S	Yes	6/15/12

1.2.3 **Allowable Non-Storm Water Discharges**. The following are the non-storm water discharges authorized under this permit, provided the non-storm water component of the permittees discharge is in compliance with Part 4.2.10:

- Discharges from emergency/unplanned fire-fighting activities;
- Fire hydrant flushings;
- Potable water, including water line flushings;
- Uncontaminated condensate from air conditioners, coolers, and other compressors and from the outside storage of refrigerated gases or liquids;
- Irrigation drainage;
- Landscape watering provided all pesticides, herbicides, and fertilizer have been applied in accordance with the approved labeling;

[1] NSPS promulgated in 1974 were not removed via the 1982 regulation; therefore wastewaters generated by Part 423-applicable sources that were New Sources under the 1974 regulations are subject to the 1974 NSPS.

- Pavement wash waters where no detergents or hazardous cleaning products are used (e.g., bleach, hydrofluoric acid, muriatic acid, sodium hydroxide, nonylphenols), and the wash waters do not come into contact with oil and grease deposits or any other toxic or hazardous materials (unless cleaned up using dry clean-up methods). The permittee is prohibited from directing any authorized pavement wash waters directly into any surface water or storm drain inlet unless the permittee has implemented appropriate control measures that meet the non-numeric effluent limits in Part 4.2. Where appropriate control measures are not in place, wash water runoff must first undergo treatment prior to discharge such as filtration, detention, or settlement;

- Routine external building washdown / power washwater that does not remove significant amount of building paint or use detergents or hazardous cleaning products, (such as those containing bleach, hydrofluoric acid, muriatic acid, sodium hydroxide, nonylphenols);

- Uncontaminated ground water or spring water;

- Foundation or footing drains where flows are not contaminated with process materials;

- Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of the facility, but not intentional discharges from the cooling tower (e.g., "piped" cooling tower blowdown or drains);

- Discharges from the spray down of lumber and wood product storage yards where no chemical additives are used in the spray-down waters and no chemicals are applied to the wood during storage (applicable only to Sector A facilities provided the non-stormwater component of the discharge is in compliance with the non-numeric effluent limits requirements in Part 4.2).

- Other uncontaminated discharges meeting water quality criteria that the Department approves on a case-by-case basis.

1.2.3.1 Also allowed for all sectors are discharges of stormwater listed above in Parts 1.2.2 or authorized non-stormwater discharges in Part 1.2.3, mixed with a discharge authorized by a different APDES permit and/or a discharge that does not require APDES permit authorization. All other non-stormwater discharges requiring APDES permit coverage except those specifically listed in Part 1.2.3 are not authorized by this permit. If non-stormwater discharges requiring APDES permit coverage other than those specifically authorized in Part 1.2.3, including sector-specific non-stormwater discharges that are listed in Part 11 as prohibited (a non-exclusive list provided to raise awareness of contaminants or sources of contaminants characteristic of certain sectors), will be discharged, such non-stormwater discharges are not authorized by this permit and must either be eliminated or covered under another APDES permit.

1.2.4 **Limitations on Coverage**.

1.2.4.1 **Discharges Mixed with Non-Storm Water.** Storm water discharges that are mixed with non-storm water, other than those non-storm water discharges listed in Part 1.2.3, are not eligible for coverage under this permit.

1.2.4.2 **Discharges Associated with Construction Activity**. Storm water discharges associated with construction activity disturbing one acre or more, or that are part of a larger common plan of development or sale if the larger common plan will ultimately disturb one acre or more, are not eligible for coverage under this permit, unless in conjunction with mining activities or certain oil and gas extraction activities as specified in Sectors G, H, I, and J of this permit.

1.2.4.3 **Discharges Currently or Previously Covered by another Permit.** Unless the permittee received written notification from DEC specifically allowing these discharges to be covered under this permit, the permittee is not eligible for coverage under this permit for any of the following:

- Storm water discharges associated with industrial activity that are currently covered under an individual APDES permit or an alternative APDES general permit;
- Discharges covered within five years prior to the effective date of this permit by an individual permit or alternative general permit where that permit established site-specific numeric water quality-based limitations developed for the storm water component of the discharge; or
- Discharges from facilities where any APDES permit has been or is in the process of being denied, terminated, or revoked by EPA (this does not apply to the routine reissuance of permits every five years).

1.2.4.4 **Discharges Subject to Effluent Limitations Guidelines.** For discharges subject to storm water effluent limitation guidelines under 40 CFR, Subchapter N, only those storm water discharges identified in Table 1-1 are eligible for coverage under this permit.

1.2.4.5 **Eligibility for New Dischargers: Based on Water Quality Standards**. A new discharger (as defined in Appendix C), is not eligible for coverage under this permit for discharges that DEC, prior to authorization under this permit, determines will not meet WQS. Where such a determination is made prior to authorization, DEC may notify the applicant that an individual or other general permit APDES application is necessary in accordance with Part 2.8. However, DEC may authorize coverage under this permit after the applicant has included appropriate controls and implementation procedures designed to ensure the discharge meets WQS. In the absence of information demonstrating otherwise, DEC expects that compliance with the storm water control requirements of this permit, including the requirements applicable to such discharges in Part 4, will meet WQS.

1.2.4.6 **New Discharges to Water Quality Impaired Waters**.[2] If the permittee is a new discharger they are not eligible for coverage under this permit to discharge to an "impaired water", as defined in Appendix C unless they:

- Prevent all exposure to storm water of the pollutant(s) for which the waterbody is impaired, and retain documentation of procedures taken to prevent exposure onsite with the SWPPP; or

- Prior to submitting the permittee's NOI, provide to the Department technical information or other documentation that the pollutant(s) for which the waterbody is impaired is not present at the site, and retain documentation of this finding with their SWPPP; or

- Prior to submitting the permittee's NOI, provide to the Department data or other technical documentation to support a conclusion that the discharge is not expected to cause or contribute to an exceedance of a water quality standard (WQS), and retain such data onsite with the SWPPP. To do this, the permittee must provide data and other technical information to the Department sufficient to demonstrate:

  - For discharges to waters without an EPA approved or established Total Maximum Daily Load (TMDL), that the discharge of the pollutant for which the water is impaired will meet in-stream water quality criteria at the point of discharge to the waterbody; or

  - For discharges to waters with an EPA approved or established TMDL, that there are sufficient remaining wasteload allocations in an EPA approved or established TMDL to allow the permittees discharge and that existing dischargers to the waterbody are subject to compliance schedules designed to bring the waterbody into attainment with WQS. The permittee must also evaluate the recommendations in the Implementation Section of the EPA approved or established TMDL and incorporate applicable measures into their operations.

A permittee is eligible under Part 1.2.4.6 if they receive an affirmative determination from the Department that their discharge will not contribute to the existing impairment, in which case the permittee must maintain such determination onsite with the SWPPP, or if the Department fails to respond within 30 days of submission of data to the Department.

[2] The project will be considered to discharge to an impaired water if the first water of the U.S. to which the discharge enters is identified by the Department pursuant to Section 303(d) of the CWA as not meeting a WQS, or is included in an EPA-approved or established total maximum daily load (TMDL). For discharges that enter a storm sewer system prior to discharge, the first water of the U.S. to which the discharge is the waterbody that receives the stormwater discharge from the storm sewer system.

1.3 Conditional Exclusion for No Exposure.

If the permittee is covered by this permit, and becomes eligible for a no exposure exclusion from permitting under 40 CFR 122.26(g), the permittee may file a No Exposure Certification. The permittee is no longer required to have a permit upon submission of a complete and accurate no exposure certification to DEC. If the permittee is no longer required to have permit coverage because of a no exposure exclusion and has submitted a No Exposure Certification form to DEC, they are required to submit a Notice of Termination (NOT) to terminate permit coverage before being covered by the No Exposure Certification. The permittee must submit a No Exposure Certification to DEC once every five years from the initial date of filing.

Facilities which have multiple industrial sectors covered under one permit can not use the No Exposure Certification form to remove those individual sectors from permit coverage. Upon a thorough evaluation to determine some sectors have no exposure to storm water, those areas must be noted in the facility wide SWPPP and inspected annually during the comprehensive site inspections to ensure no exposure exists. If inspections reveal those individual sectors eligible for coverage under this permit have exposure, the SWPPP must be updated to include those sectors and all permit requirements applied to those areas. The No Exposure Certification for Exclusion applies to an entire facility and not individual outfalls or areas located within the facility covered under a single permit.

2. Authorization under this Permit.

2.1 How to Obtain Authorization.

To obtain authorization under this permit, the permittee must:

2.1.1 Be located in the area where DEC is the permitting authority;

2.1.2 Meet the Part 1.2 eligibility requirements;

2.1.3 Develop a SWPPP according to the requirements in Part 5 of this permit. The permittee must submit a copy of the SWPPP to DEC as specified in Part 9.6;

2.1.4 Select, design, install, and implement control measures in accordance with Part 4.2 to meet numeric and non-numeric effluent limits;

2.1.5 Submit a complete and accurate Notice of Intent (NOI) either using DEC's electronic Notice of Intent (eNOI) system (accessible at http://dec.alaska.gov/water/wastewater/stormwater/apdesenoi/ or using a paper form (included in Appendix F of this permit) and then submitting that paper form to the address listed in Part 2.2.2; and

2.1.6 Pay the general permit authorization fee in accordance with 18 AAC 72. Existing permittees when renewing permit coverage do not need to pay two permit authorization fees in one calendar year;

2.1.7 DEC will post on the Internet, at http://dec.alaska.gov/Applications/Water/WaterPermitSearch/Search.aspx, all authorizations issued. Late NOIs will be accepted but authorization to discharge will not be retroactive.

2.1.8 If the information on the NOI is incorrect or is missing, the NOI will be deemed incomplete and permit authorization will not be granted. A complete NOI shall include the following information, at a minimum:

2.1.8.1 The operator information includes: Organization name, contact person, complete mailing address, telephone number and fax number and email address if available;

2.1.8.2 The billing contact information includes: organization name, contact person, complete mailing address, telephone number and fax number and email address if available. If the billing contact information is the same as the operator information, check the box on the NOI indicating that it is the same;

2.1.8.3 The industrial facility information includes: facility name, physical location, the city and zip code, the borough, latitude and longitude, how the latitude and longitude were determined, an estimate of the area of industrial activity exposed to storm water, if the facility storm water discharges have been previously permitted under an APDES permit, a brief description of activity(ies) carried out on-site;

2.1.8.4 The discharge information includes: does the facility discharge to a municipal separate storm sewer system (MS4), and if so the name of the MS4 operator, outfall(s) location (latitude/longitude), the name(s) of the water bodies to which the facility discharges, does the facility discharge to a water body that is impaired or have a TMDL, if it is the discharge is consistent with the assumptions and requirements of the TMDL, and is any storm water discharge subject to federal effluent limitation guideline and sector-specific requirements, and if so which affected MSGP Sector;

2.1.8.5 The additional information includes: the four-digit Standard Industrial Classification (SIC) code or two-letter Activity Code that best represents the products or services rendered by the facility in which it is primarily engaged in and applicable sector and subsectors of industry activity, including co-located industrial activity for which coverage is requested, and is the facility presently inactive or unstaffed and if so for how long;

2.1.8.6 The SWPPP information includes: SWPPP contact name, phone, email, and URL for SWPPP (if applicable) (the SWPPP does not need to be reposted on the internet each time it is updated);

2.1.8.7 The signatory information in compliance with Appendix A, Part 1.12

2.2 How to Submit an NOI.

2.2.1 Electronically (strongly encouraged) at http://dec.alaska.gov/water/wastewater/stormwater/apdesenoi/ . Operators who submit an eNOI must pay the general permit authorization fee during a step in the eNOI process where payment is required.

2.2.2 Through use of a paper form (available at the above web site) and then submit that paper form to Permitting Program address in Appendix A, Part 1.1.1.

2.2.3 Each operator submitting the NOI via paper form[3] must include a check payable to the "State of Alaska" for the amount of the General Permit Authorization Fee, in accordance with 18 AAC 72.

(Submission Deadlines continued on next page.)

[3] Note: Electronic submittal of an NOI will likely be processed more quickly and result in faster receipt of an authorization to discharge.

2.3 Submission Deadlines.

Timeframes for discharge authorization are contained in Table 2-1.

Table 2-1: NOI Submittal Deadlines/Discharge Authorization Dates

Category	NOI Submission Deadline	Discharge Authorization Date[1]	Fee
Existing Dischargers – in operation as of March 31, 2020 and authorized for coverage under 2015 MSGP.	Existing Dischargers must submit new NOI and SWPPP no later than one hundred twenty (120) calendar days after the effective date of this permit.	The date specified in the DEC authorization letter. The permittees authorization under the 2015 MSGP is automatically continued until they have been granted coverage under this permit or an alternative permit, or coverage is otherwise terminated.	Existing Dischargers pay annual fee based on invoice from DEC
New Dischargers or New Sources - who commence discharging one hundred twenty (120) calendar days after the effective date of this permit.	A minimum of thirty (30) calendar days prior to commencing discharge.	The date specified in the DEC authorization letter.	New Discharges pay fee at time of submitting NOI
New Owner/Operator of Existing Discharger - transfer of ownership and/or operation of a facility whose discharge is authorized under this permit	New Owner shall submit a new NOI no later than thirty (30) calendar days after the date that the transfer will take place to the new owner/operator.	The date specified in the DEC authorization letter.	New Owner pays fee upon reciept of invoice from DEC
Other Eligible Dischargers - in operation prior to March 31, 2020, but not covered under the 2015 MSGP or another APDES permit.	Immediately, to minimize the time discharges from the facility will continue to be unauthorized.	The date specified in the DEC authorization letter.	New Discharges pay fee at time of submitting NOI

Note:
1. Based on a review of the permittees NOI or other information, DEC may delay their authorization for further review, notify the permittee that additional effluent limitations or control measures are necessary, or may deny coverage under this permit and require submission of an application for an individual or other APDES general permit, as detailed in Part 2.8. In these instances, DEC will notify the permittee in writing of the delay, of the need for additional effluent limits or control measures, or of the request for submission of an individual APDES permit application.
2. If the permittee has missed the deadline to submit the NOI, any and all discharges from the industrial activities will continue to be unauthorized under the CWA until they are covered by this or a different APDES permit. DEC may take enforcement action for any unpermitted discharges that occur between the commencement of discharging and discharge authorization.
3. Discharges are not authorized if the NOI is incomplete or inaccurate or if the permittee was never eligible for permit coverage.

2.4 Date of Authorization to Begin Discharge.

An operator is authorized to discharge industrial storm water under the terms and conditions of this permit upon the date specified in the issuance of the DEC authorization letter, which is posted to the DEC's website (http://dec.alaska.gov/Applications/Water/WaterPermitSearch/Search.aspx). Once the authorization is granted by the Department the applicant is then considered a permittee covered by this permit.

2.5 Continuation of Expired General Permit.

2.5.1 If this permit is not reissued or replaced prior to the expiration date, it will be administratively continued in accordance with 18 AAC 83.155 and remain in force and effect for discharges that were covered prior to expiration. The permittee is required to abide by all limitations, monitoring, and reporting included herein if the permit enters administrative extension until such time a permit is reissued authorizing the discharge or an NOT is submitted by the permittee. If a permittee is authorized to discharge under this permit prior to the expiration date, any discharges authorized under this permit will automatically remain covered by this permit until the earliest of:

2.5.1.1 Authorization for coverage under a reissued permit or a replacement of this permit following a permittee's timely and appropriate submittal of a complete NOI requesting authorization to discharge under the new permit and compliance with the requirements of the new permit;

2.5.1.2 Submittal of a NOT;

2.5.1.3 Issuance or denial of an individual permit for the facility's discharges; or

2.5.1.4 A formal decision by DEC not to reissue this general permit or not cover a particular discharger previously covered by the general permit, at which time DEC will identify a reasonable time period for covered dischargers to seek coverage under an alternative general permit or an individual permit. Coverage under this permit will cease at the end of this time period.

2.5.2 Any permittee with a discharge covered under the 2015 MSGP that the Department determines shall transition to a different APDES permit for that discharge that filed a timely and complete NOI and was granted administrative extension of the 2015 MSGP, the administrative extension (i.e., continued permit coverage) from the 2015 MSGP survives the effective date of the 2020 MSGP until the facility receives coverage under the new APDES permit.

2.6 Permit Compliance.

Any noncompliance with any of the requirements of this permit constitutes a violation of the CWA. As detailed in Part 8 (Corrective Actions) of this permit, failure to take any required corrective actions constitute an independent, additional violation of this permit and the CWA. Any actions and time periods specified for remedying noncompliance do not absolve parties of the initial underlying noncompliance. Where corrective action is triggered by an event that does not itself constitute permit noncompliance, such as an exceedance of an applicable benchmark, there is no permit violation provided the permittee takes the required corrective action within the relevant deadlines established in Part 8.3.

2.7 Submittal of Modification to Original NOI.

2.7.1 For an existing permittee, if any of the information supplied on the NOI form changes such as name of receiving waterbody, acreage of industrial area exposed to storm water, addition or deletion of industrial sectors, and facility contact information, the permittee must submit an NOI Modification form within thirty (30) calendar days after the change. See Appendix F for the modification form.

2.7.2 At facilities where there is a transfer of ownership and/or a new operator takes over operational control at an existing facility the new operator shall submit an NOI no later than thirty (30) calendar days after a change in owner/operator. The previous owner/operator must submit a NOT no later than thirty (30) calendar days after DEC authorization of the new operator. The new operator does not need to pay a permit authorization fee if the facility has paid for the year in which the transfer occurs.

2.8 Alternative Permits.

2.8.1 **DEC Requiring Coverage under an Alternative Permit**.
DEC may require a permittee to apply for and/or obtain authorization to discharge under an alternative permit, i.e., either an individual APDES permit or an alternative APDES general permit in accordance with 40 CFR 122.64 and 124.5. Any interested person may petition DEC to take action under this paragraph. If DEC requires the permittee to apply for an alternative APDES permit, DEC will notify the permittee in writing that a permit application is required. This notification will include a brief statement of the reasons for this decision and will contain alternative permit application requirements, including deadlines for completing the application.

In addition, if the permittee is an existing discharger authorized to discharge under this permit, the notice will set a deadline to file the permit application, and will include a statement that on the effective date of the individual APDES permit, or the alternative general permit as it applies to the permittee, coverage under this general permit will terminate. DEC may grant additional time to submit the application if the permittee requests it. If the permittee is covered under this permit and fails to submit an alternative APDES permit application as required by DEC, then the applicability of this permit to the permittee is terminated at the end of the day specified by DEC as the deadline for application submittal. DEC may take appropriate enforcement action for any unpermitted discharge.

2.8.2 **Permittee Requesting Coverage under an Alternative Permit**.
A permittee may request to be excluded from coverage under this general permit by applying for an individual permit. In such a case, the permittee must submit an individual permit application in accordance with the requirements of 18 AAC 83.305 – 83.385 with reasons supporting the request, to DEC at the address listed in Part 9.6 of this permit. The request may be granted by issuance of an individual permit or authorization of coverage under an alternative general permit if the permittees reasons are adequate to support the request.

When an individual APDES permit is issued to a permittee or a permittee is authorized to discharge under an alternative APDES general permit, the permittees authorization to discharge under this permit is terminated on the effective date of the individual permit or the date of authorization of coverage under the alternative general permit.

3. Compliance with Standards and Limits.

3.1 Requirements for all Facilities.

3.1.1 A permittee must select, install, implement, and maintain control measures (described in Part 4) at the facility that minimize pollutants in the discharge as necessary to meet WQS (18 AAC 70). A permittee must comply with all permit conditions with respect to installation and maintenance of control measures, inspections, monitoring, corrective actions, reporting, and recordkeeping.

3.1.2 In general, except in situations explained in part 3.1.3, the storm water controls planned, developed, implemented, maintained, and updated by the permittee that are consistent with the provisions of Parts 3 through 9 and Part 11 are considered to meet the requirements of this permit to ensure that the discharges do not cause or contribute to an excursion above any WQS (18 AAC 70).

3.1.3 At any time after authorization, upon a DEC determination that the permittee's storm water discharges will cause, have a reasonable potential to cause, or contribute to an excursion above any WQS, DEC may require the permittee to:

3.1.3.1 Take corrective actions and modify storm water controls in accordance with Part 8 to adequately address the identified water quality concerns;

3.1.3.2 Submit valid and verifiable data and information that are representative of ambient conditions and indicate that the receiving water is attaining WQS; or

3.1.3.3 Minimize discharges of storm water from the facility or activity, implement corrective actions, and submit an individual permit application in accordance with Part 2.8.

3.1.4 All written responses required under Part 3.1 must include a signed certification consistent with Appendix A, Part 1.12.

3.2 Water Quality-Based Effluent Limitations.

3.2.1 **Water Quality Standards (WQS).**

3.2.1.1 A permittee's discharge must be controlled as necessary to meet a WQS (18 AAC 70) in relation to the pollutants of concern.

3.2.1.2 DEC expects that compliance with the other conditions in this permit will control discharges as necessary to meet a WQS. If at any time the permittee becomes aware, or DEC determines, that the permittee's discharge causes or contributes to an exceedance of a WQS in the receiving water, the permittee must:

- Take corrective action as required in Part 8.1;
- Document the corrective actions as required in Parts 8.4 and 5.8; and
- Report the corrective actions to DEC as required in Part 9.2.

3.2.1.3 Additionally, DEC may impose additional permit stipulations on a site-specific basis, or require the permittee to obtain coverage under an individual permit, if information in a permittees NOI, required reports, or from other sources indicates that their discharges are not controlled as necessary to meet a WQS in the receiving water.

3.2.2 **Discharges to Water Quality Impaired Waters**.[4]

3.2.2.1 ***Existing Discharge to an Impaired Water with an EPA Approved or Established TMDL.*** If the permittee discharges to an impaired water with an EPA approved or established TMDL, DEC will inform the permittee if any additional limits or controls are necessary for their discharge to be consistent with the assumptions of any available wasteload allocation in the TMDL, or if coverage under an individual permit is necessary in accordance with Part 2.8.1.

3.2.2.2 ***Existing Discharge to an Impaired Water without an EPA Approved or Established TMDL***. If the permittee discharges to an impaired water without an EPA approved or established TMDL, they are required to comply with Part 3.2.1 and the monitoring requirement of Part 7.2.3. Note that this provision also applies to situations where DEC determines that the permittees discharge is not controlled as necessary to meet WQS in a downstream water segment, even if their discharge is to a receiving water that is not specifically identified on a Section 303(d) list.

3.2.2.3 ***New Discharge to an Impaired Water***. If a permittees authorization to discharge under this permit relied on Part 1.2.4.6 for a new discharge to an impaired water, the permittee must implement and maintain any control measures or conditions at the facility that enabled the permittee to become eligible under Part 1.2.4.6, and modify such measures or conditions as necessary pursuant to any Part 5 corrective actions. The permittee is also required to comply with Part 3.2.1 and the monitoring requirements of Parts 7.2.3.

[4] The project will be considered to discharge to an impaired water if the first water of the U.S. to which the discharge enters is identified by the Department pursuant to Section 303(d) of the CWA as not meeting an WQS, or is included in an EPA-approved or established total maximum daily load (TMDL). For discharges that enter a storm sewer system prior to discharge, the first water of the U.S. to which the discharge is the waterbody that receives the stormwater discharge from the storm sewer system.

4. Control Measures.

A permittee must select, design, install, and implement control measures (including best management practices) to address the selection and design considerations in Part 4.1, meet the non-numeric effluent limits in Part 4.2, and meet limits contained in applicable effluent limitations guidelines in Part 4.3. The selection, design, installation, and implementation of these control measures must be in accordance with good engineering practices and manufacturer's specifications. Note that the permittee may deviate from such manufacturer's specifications where the permittee provides justification for such deviation and includes documentation of their rationale in the part of the SWPPP that describes the permittees control measures, consistent with Part 5.2.5. If the permittee finds that their control measures are not achieving their intended effect of minimizing pollutant discharges, the permittee must modify these control measures in accordance with the corrective action requirements set forth in Part 8. Regulated storm water discharges from the permittees facility include storm water run-on that commingles with storm water discharges associated with industrial activity at the permittees facility.

In the technology-based limits included in Part 4.2 and in Part 11, the term "minimize" means reduce and/or eliminate to the extent achievable using control measures (including best management practices) that are technologically available and economically practicable and achievable in light of best industry practice.

4.1 Control Measure Selection and Design Considerations.

A permittee must use the following considerations when selecting and designing control measures:

- Preventing storm water from coming into contact with polluting materials is generally more effective, and less costly, than trying to remove pollutants from storm water;
- Using control measures in combination is more effective than using control measures in isolation for minimizing pollutants in the storm water discharge;
- Using technologically available and economically practicable and achievable in light of best industry practice;
- Assessing the type and quantity of pollutants, including their potential to impact receiving water quality, is critical to designing effective control measures that will achieve the limits in this permit;
- Minimizing impervious areas at the permittees facility and infiltrating runoff onsite (including bioretention cells, green roofs, and pervious pavement, among other approaches) can reduce runoff and improve groundwater recharge and stream base flows in local streams, although care must be taken to avoid ground water contamination;
- Attenuating flow using open vegetated swales and natural depressions can reduce in-stream impacts of erosive flows;

- Conserving and/or restoring of riparian buffers will help protect streams from storm water runoff and improve water quality; and
- Using treatment interceptors (e.g., swirl separators and sand filters) may be appropriate in some instances to minimize the discharge of pollutants.

4.2 Non-Numeric Technology-Based Effluent Limits.

In addition to complying with the non-numeric technology-based effluent limits in Part 11, the permittee must also:

4.2.1 **Minimize Exposure**.

A permittee must evaluate the facility regarding exposure of manufacturing, processing, and material storage areas (including loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations) to rain, snow, snowmelt, and runoff and minimize exposure by either locating these industrial materials and activities inside or protecting them with storm resistant coverings (although significant enlargement of impervious surface area is not recommended). In minimizing exposure, the permittee should pay particular attention to the following:

- Use grading, berming, or curbing to prevent runoff of contaminated flows and divert run-on away from these areas;
- Locate materials, equipment, and activities so that leaks are contained in existing containment and diversion systems (confine the storage of leaky or leak-prone vehicles and equipment awaiting maintenance to protected areas);
- Clean up spills and leaks promptly using dry methods (e.g., absorbents) to prevent the discharge of pollutants;
- Use drip pans and absorbents under or around leaky vehicles and equipment or store indoors where feasible;
- Use spill/overflow protection equipment;
- Drain fluids from equipment and vehicles that will be decommissioned or will remain unused for extended periods of time;
- Perform all cleaning operations indoors, under cover, or in bermed areas that prevent runoff and run-on and also that capture any overspray; and
- Ensure that all washwater, with the exception of discharges from pavement wash water and routine building washdown described in Part 1.2.3 drains to a sanitary sewer, sump, or other proper collection system (i.e., not the storm water drainage system).

The discharge of vehicle and equipment washwater, including tank cleaning operations, is not authorized by this permit. These wastewaters must be covered under a separate APDES permit, discharged to a sanitary sewer in accordance with applicable industrial pretreatment requirements, or disposed of otherwise in accordance with applicable law.

4.2.2 **Good Housekeeping**. A permittee must keep clean all exposed areas that are potential sources of pollutants, including but not limited to: using such measures as sweeping at regular intervals, keeping materials orderly and labeled, keeping all dumpster lids closed when not in use, and storing materials in appropriate containers.

4.2.3 **Maintenance**. A permittee must regularly inspect, test, maintain, and repair all industrial equipment and systems to avoid situations that may result in leaks, spills, and other releases of pollutants in storm water discharged to receiving waters. This includes performing inspections and preventive maintainance of storm water control measures and cleaning catch basins when the depth of debris reaches one-half (1/2) of the sump depth and keeping the debris surface at least six inches below the lowest outlet pipe. The permittee must maintain all control measures that are used to achieve the effluent limits required by this permit in effective operating condition. Record of routine maintainance to be kept onsite and made available upon request (it does not need to be stored with the SWPPP). Nonstructural control measures must also be diligently maintained (e.g., spill response supplies available, personnel appropriately trained). If the permittee finds that their control measures need to be replaced or repaired, the permittee must make the necessary repairs or modifications within 14 days or as expeditiously as practicable.

4.2.4 **Spill Prevention and Response Procedures**. A permittee must minimize the potential for leaks, spills and other releases that may be exposed to storm water and develop plans for effective response to such spills if or when they occur. At a minimum, the permittee must implement:

4.2.4.1 Procedures for plainly labeling containers (e.g., “Used Oil,” “Spent Solvents,” “Fertilizers and Pesticides,” etc.) that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response if spills or leaks occur;

4.2.4.2 Procedures for material storage and handling, including the use of secondary containment and barriers between material storage and traffic areas, or a similarly effective means designed to prevent the discharge of pollutants from these areas;

4.2.4.3 Procedures for expeditiously stopping, containing, and cleaning up leaks, spills, and other releases. Employees who may cause, detect, or respond to a spill or leak must be trained in these procedures and have necessary spill response equipment available. If possible, one of these individuals should be a member of the permittees storm water pollution prevention team (see Part 5.1.1); and

4.2.4.4 Procedures for notification of appropriate facility personnel, emergency response agencies, and regulatory agencies. Where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117, 40 CFR Part 302, AS 75.300 and 18 AAC 75 Article 3 occurs, the permittee must notify the National Response Center (NRC) at (800) 424-8802. During normal business hours call the nearest DEC Area Response Team Office – Southeast (Juneau) 465-5340; Central (Anchorage) 269-3063; or Northern (Fairbanks) 451-2121. Outside of normal business hours, the permittee must call (800) 478-9300 as soon as the permittee has knowledge of the discharge. State or local requirements may necessitate reporting spills or discharges to local emergency response, public health, or drinking water supply agencies. Contact information must be posted, where practicable, in locations that are readily accessible and available.

4.2.4.5 The permittee must provide a description of the release, the circumstances leading to the release, and the date of the release to the nearest DEC Area Response Team Office, in accordance to AS 75.300 (See Part 4.2.4.4). The permittee must also implement measures to prevent the reoccurrence of such releases and to respond to such releases.

4.2.5 **Erosion and Sediment Controls**. A permittee must stabilize exposed areas and contain runoff using structural and/or non-structural control measures to minimize onsite erosion and sedimentation, and the resulting discharge of pollutants. Among other actions the permittee must take to meet this limit, the permittee must place flow velocity dissipation devices at discharge locations and within outfall channels where necessary to reduce erosion and/or settle out pollutants. In selecting, designing, installing, and implementing appropriate control measures, the permittee is encouraged to consult with EPA's internet-based resources relating to BMPs for erosion and sedimentation, including the sector-specific Industrial Stormwater Fact Sheet Series, (https://www.epa.gov/npdes/final-2015-msgp-documents), National Menu of Stormwater BMPs (https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater#edu), and National Management Measures to Control Nonpoint Source Pollution from Urban Areas (https://www.epa.gov/nps/urban-runoff-national-management-measures), and any similar State or Tribal publications such as the Alaska Storm Water guide (http://dec.alaska.gov/water/wastewater/stormwater/guidance/) and the Best Management Practices Manual for Gravel Quarries found at http://dec.alaska.gov/water/wastewater/stormwater/gravel/ .

4.2.6 **Management of Runoff**. A permittee must divert, infiltrate, reuse, contain, or otherwise reduce storm water runoff, to minimize pollutants in their discharges. In selecting, designing, installing, and implementing appropriate control measures, permittees are encouraged to consult with EPA's internet-based resources relating to runoff management, including the sector-specific Industrial Storm Water Fact Sheet Series, (https://www.epa.gov/npdes/stormwater-discharges-industrial-activities#factsheet), National Menu of Storm Water BMPs (https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater#edu), and National Management Measures to Control Nonpoint Source Pollution from Urban Areas (https://www.epa.gov/nps/urban-runoff-national-management-measures), and any similar State or Tribal publications.

4.2.7 **Salt Storage Piles or Piles Containing Salt**. A permittee must enclose or cover storage piles of salt, or piles containing salt, used for deicing or other commercial or industrial purposes, including maintenance of paved surfaces. A permittee must also implement appropriate measures (e.g., good housekeeping, diversions, containment) to minimize exposure resulting from adding to or removing materials from the pile.

4.2.8 **Sector Specific Technology-Based Effluent Limits**. A permittee must achieve any additional non-numeric limits stipulated in the relevant sector-specific section(s) of Part 11.

4.2.9 **Employee Training**. A permittee must train all employees who work in areas where industrial materials or activities are exposed to storm water, or who are responsible for implementing activities necessary to meet the conditions of this permit (e.g., inspectors, maintenance personnel), including all members of the permitttee's Pollution Prevention Team. Training must cover both the specific control measures used to achieve the effluent limits in this Part, and monitoring, inspection, planning, reporting, and documentation requirements in other parts of this permit. Training shall be conducted at least annually (or more often if employee turnover is high) and documented in the SWPPP (See Part 5.8.5).

4.2.10 **Non-Storm Water Discharges**. A permittee must eliminate non-storm water discharges not authorized by an APDES permit. See Part 1.2.3 for a list of non-storm water discharges authorized by this permit.

4.2.11 **Waste, Garbage and Floatable Debris**. A permittee must ensure that waste, garbage, and floatable debris are not discharged to receiving waters by keeping exposed areas free of such materials or by intercepting them before they are discharged.

4.2.12 **Dust Generation and Vehicle Tracking of Industrial Materials**. A permittee must minimize generation of dust and off-site tracking of raw, final, or waste materials. Appropriate BMPs to minimize tracking include the establishment of stabilized access and exit points.

4.3 Numeric Effluent Limitations Based on Effluent Limitations Guidelines.

If the permittee is in an industrial category subject to one of the effluent limitations guidelines identified in Table 7-1 (see Part 7.2.2.1), the permittee must meet the effluent limits referenced in Table 4-1 below:

Table 4-1: Applicable Effluent Limitations Guidelines

Regulated Activity	40 CFR Part/Subpart	Effluent Limit
Discharges resulting from spray down or intentional wetting of logs at wet deck storage areas	Part 429, Subpart I	See Part 11.A.7
Runoff from phosphate fertilizer manufacturing facilities that comes into contact with any raw materials, finished product, by-products or waste products (SIC 2874)	Part 418, Subpart A	See Part 11.C.4
Runoff from asphalt emulsion facilities	Part 443, Subpart A	See Part 11.D.4
Runoff from material storage piles at cement manufacturing facilities	Part 411, Subpart C	See Part 11.E.5
Mine dewatering discharges at crushed stone, construction sand and gravel, or industrial sand mining facilities	Part 436, Subparts B, C, or D	See Part 11.J.9
Runoff from hazardous waste landfills	Part 445, Subpart A	See Part 11.K.6
Runoff from non-hazardous waste landfills	Part 445, Subpart B	See Part 11.L.10
Runoff from coal storage piles at steam electric generating facilities	Part 423	See Part 11.O.8
Existing and new primary airports with 1,000 or more annual jet departures that discharge wastewater associated with airfield pavement deicing that contains urea commingled with stormwater	Part 449	See Part 11.S.9

4.4 Plan Approval for Nondomestic Wastewater Treatment Works.

For all new facilities operators who construct, install or operate any part of a nondomestic wastewater treatment works shall submit a copy of the engineering plans to DEC for review at the address in Part 9.6, and pay an engineering plan review fee (see 18 AAC 72.600 and 18 AAC 72.955). Engineering plan approval must be obtained from DEC prior to construction. Nondomestic wastewater includes storm water runoff. All permanent storm water treatment devices shall receive engineering plan approval per 18 AAC 72.600. (For the purposes of Part 4.4 "permanent storm water treatment device" means a treatment device with a design life longer than two years.)

4.5 Projects near a Public Water System (PWS)

4.5.1 Where the facility intersects a PWS drinking water protection area (DWPA) (see Part 5.2.3.3), notify the PWS contact. PWS contact information can be obtained using the online application, Drinking Water Watch, http://dec.alaska.gov:8080/DWW by entering the appropriate 6-digit PWS ID (e.g., 225025).

4.5.2 Within the identified DWPA, restrict project activities that could significantly change the natural surface water drainage or groundwater gradient.

4.5.3 Immediately notify the nearby PWS of any identified potential contamination, such as reportable spills or excess erosion that intersects their PWS drinking water protection area.

5. Storm Water Pollution Prevention Plan (SWPPP).

A permittee must prepare a SWPPP for their facility before submitting their Notice of Intent (NOI) for permit coverage. If a permittee prepared a SWPPP for coverage under a previous APDES permit, the permittee must review and update the SWPPP to implement all provisions of this permit prior to submitting their NOI. The SWPPP does not contain effluent limitations; the limitations are contained in Part 4 of the permit, and for some sectors, Parts 11 of the permit. The SWPPP is intended to document the selection, design, and installation of control measures. As distinct from the SWPPP, the additional documentation requirements (see Part 5.8) are intended to document the implementation (including inspection, maintenance, monitoring, and corrective action) of the permit requirements.

5.1 Storm Water Pollution Prevention Plan (SWPPP).

For coverage under this permit, the SWPPP must contain all of the following elements:

5.1.1 Storm water pollution prevention team (see Part 5.2.2);

5.1.2 Site description (see Part 5.2.3);

5.1.3 Summary of potential pollutant sources (see Part 5.2.4);

5.1.4 Description of control measures (see Part 5.2.5);

5.1.5 Schedules and procedures (see Part 5.2.6); and

5.1.6 Signature requirements (see Part 5.2.7).

Where the SWPPP refers to procedures in other facility documents, such as a Spill Prevention, Control and Countermeasure (SPCC) Plan or an Environmental Management System (EMS) developed for a National Environmental Performance Track facility, copies of the relevant portions of those documents must be kept with the SWPPP.

5.2 Contents of the SWPPP.

5.2.1 **Permittee.**
Identify the permittee for the facility.

5.2.2 **Storm Water Pollution Prevention Team**.
Identify the staff members (by name or title) that comprise the facility's storm water pollution prevention team as well as their individual responsibilities. The storm water pollution prevention team is responsible for assisting the facility manager in developing and revising the facility's SWPPP as well as maintaining control measures and taking corrective actions where required. Each member of the storm water pollution prevention team must have ready

access to either an electronic or paper copy of applicable portions of this permit and the SWPPP.

5.2.3 **Site Description**.
The SWPPP must include the following:

5.2.3.1 **Activities at the Facility**. Provide a description of the nature of the industrial activities at the facility.

5.2.3.2 **General location map**. Provide a general location map (e.g., U.S. Geological Survey (USGS) quadrangle map) with enough detail to identify the location of the facility and all receiving waters for the storm water discharges.

5.2.3.3 **Site map**. Provide a map showing:

- the size of the property in acres;
- the boundaries of the facility or activity;
- the location and extent of significant structures and impervious surfaces;
- directions of storm water flow (use arrows);
- locations of all existing structural control measures;
- locations of all receiving waters (including wetlands) in the immediate vicinity of the permittees facility, indicating if any of the waters are impaired and, if so, whether the waters have TMDLs established for them;
- locations of all storm water conveyances including ditches, pipes, and swales;
- locations of potential pollutant sources identified under Part 5.2.4.2;
- locations where significant spills or leaks identified under Part 5.2.4.3 have occurred;
- locations of all storm water monitoring points;
- locations of storm water inlets and outfalls, with a unique identification code for each outfall (e.g., Outfall No. 1, No. 2, etc), indicating if permittees are treating one or more outfalls as “substantially identical” under Parts 6.2.3, 5.2.6.2, and 7.1.1, and an approximate outline of the areas draining to each outfall;
- areas of designated critical habitat for endangered or threatened species located within 2,000 feet, if applicable;
- municipal separate storm sewer systems, where the facilities storm water discharges to them;
- locations and descriptions of all non-storm water discharges identified under Part 4.2.10;
- Location of existing public water system (PWS) drinking water protection areas (DWPA) for PWS sources (e.g. springs, wells, or surface water intakes) that intersect the boundary of the proposed project/permit area. The DWPAs can be found using the

interactive web map application, "*Alaska DEC Drinking Water Protection Areas*", located at http://dec.alaska.gov/das/GIS/apps.htm ;

- locations of the following activities where such activities are exposed to precipitation:
  - fueling stations;
  - vehicle and equipment maintenance and/or cleaning areas;
  - loading/unloading areas;
  - locations used for the treatment, storage, or disposal of wastes;
  - liquid storage tanks;
  - processing and storage areas;
  - immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility;
  - transfer areas for substances in bulk; and
  - machinery; and
- locations and sources of run-on to the facility from adjacent property that contains significant quantities of pollutants.

5.2.4 **Summary of Potential Pollutant Sources**.

A permittee must document areas at their facility where industrial materials or activities are exposed to storm water and from which allowable non-storm water discharges are released. Industrial materials or activities include, but are not limited to: material handling equipment or activities; industrial machinery; raw materials; industrial production and processes; and intermediate products, by-products, final products, and waste products. Material handling activities include, but are not limited to: the storage, loading and unloading, transportation, disposal, or conveyance of any raw material, intermediate product, final product or waste product. For each area identified, the description must include:

5.2.4.1 Activities in the Area. A list of the industrial activities exposed to storm water (e.g., material storage; equipment fueling, maintenance, and cleaning; cutting steel beams).

5.2.4.2 Pollutants. A list of the pollutant(s) or pollutant constituents (e.g., crankcase oil, zinc, sulfuric acid, and cleaning solvents) associated with each identified activity, which could be exposed to rainfall or snowmelt and could be discharged from the facility. The pollutant list must include all significant materials that have been handled, treated, stored, or disposed, and that have been exposed to storm water in the three years prior to the date the permittee prepared or amended the SWPPP.

5.2.4.3 ***Spills and Leaks.*** A permittee must document where potential spills and leaks could occur that could contribute pollutants to storm water discharges, and the corresponding outfall(s) that would be affected by such spills and leaks. The permittee must document all significant spills and leaks[5] of oil or toxic or hazardous pollutants that occurred in the three years prior to the date the permittee prepared the SWPPP for this permit term. Specifically, include spills or leaks that occurred in areas exposed to storm water or that drained to a storm water conveyance. The spill or leak history must be maintained in the SWPPP throughout this permit term. The permit term goes from the permit effective date to the permit expiration date.

5.2.4.4 ***Non-Storm Water Discharges.*** A permittee must document that they have evaluated for the presence of non-storm water discharges and that all unauthorized discharges have been eliminated. Documentation of the evaluation must include:

- The date of any evaluation;
- A description of the evaluation criteria used;
- A list of the outfalls or onsite drainage points that were directly observed during the evaluation;
- The different types of non-storm water discharge(s) and source locations; and
- The action(s) taken, such as a list of control measures used to eliminate unauthorized discharge(s), if any were identified. For example, a floor drain was sealed, a sink drain was re-routed to sanitary, or an APDES permit application was submitted for an unauthorized cooling water discharge.

5.2.4.5 ***Salt Storage***. A permittee must document the location of any storage piles containing salt used for deicing or other commercial or industrial purposes.

5.2.4.6 ***Sampling Data***. A permittee must summarize all storm water discharge sampling data collected at their facility during the previous permit term. The summary shall include a narrative description (and may include data tables/figures) that adequately summarizes the collected sampling data to support identification of potential pollution sources at the facility.

[5] Significant spills and leaks include, but are not limited to, releases of oil or hazardous substances in excess of quantities that are reportable under CWA Section 311 (see 40 CFR 110.6 and 40 CFR 117.21) or Section 102 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 USC §9602. This permit does not relieve the permittee of the reporting requirements of 40 CFR 110, 40 CFR 117, 40 CFR 302, Alaska Statute 46.04 and Section 18 AAC Chapter 75 (i.e. 18 AAC 75.300) relating to spills or other releases of oils or hazardous substances. (See 4.2.4)

5.2.5 **Description of Control Measures**.

5.2.5.1 ***Control Measures to Meet Technology-Based and Water Quality-Based Effluent Limits***. A permittee must document the location and type of control measures installed and implemented at the facility to achieve the non-numeric effluent limits in Part 4.2, and where applicable in Part 11, the effluent limitations guidelines-based limits in Part 4.3, the water quality-based effluent limits in Part 3.2, and describe how the permittee addressed the control measure selection and design considerations in Part 4.1. This documentation must describe how the control measures at the facility address both the pollutant sources identified in Part 5.2.4, and any storm water run-on that commingles with any discharges covered under this permit.

5.2.6 **Schedules and Procedures.**

5.2.6.1 ***Pertaining to Control Measures Used to Comply with the Effluent Limits in Part 4***. The following must be documented in the SWPPP:

- *Good Housekeeping* (See Part 4.2.2) – A schedule for regular pickup and disposal of waste materials, along with routine inspections for leaks and conditions of drums, tanks and containers;

- *Maintenance* (See Part 4.2.3) – Preventative maintenance procedures, including regular inspections, testing, maintenance, and repair of all industrial equipment and systems, and control measures, to avoid situations that may result in leaks, spills, and other releases, and any back-up practices in place should a runoff event occur while a control measure is off-line. The SWPPP shall include the schedule or frequency for maintaining all control measures used to comply with the effluent limits in Part 4;

- *Spill Prevention and Response Procedures* (See Part 4.2.4) – Procedures for preventing and responding to spills and leaks. The permittee may reference the existence of other plans for Spill Prevention Control and Countermeasure (SPCC) developed for the facility under Section 311 of the CWA or BMP programs otherwise required by an APDES permit for the facility, provided that the permittee keeps a copy of that other plan onsite and makes it available for review consistent with Part 5.7; and

- *Employee Training* (Part 4.2.9) – The elements of the employee training plan shall include, but not be limited to, the requirements set forth in Part 4.2.9 and also the following:

    - The content of the training to include site, facility and sector-specifc details;

- The frequency/schedule of training for employees who work in areas where industrial materials or activities are exposed to storm water, or who are responsible for implementing activities necessary to meet the conditions of this permit; and
- A log of the dates on which specific employees received training (to be maintained in the SWPPP)

5.2.6.2 ***Pertaining to Monitoring and Inspection***. A permittee must document in the SWPPP procedures for conducting the four types of analytical monitoring specified by this permit, where applicable to the facility, including:

- Benchmark monitoring (see Part 7.2.1);
- Effluent limitations guidelines monitoring (see Part 7.2.2);
- Impaired waters monitoring (see Part 7.2.3); and
- Other monitoring as required by DEC (see Part 7.2.4).

For each type of monitoring, the SWPPP must document:

- Locations where samples are collected, including any determination that two or more outfalls are substantially identical;
- Parameters for sampling and the frequency of sampling for each parameter;
- Schedules for monitoring at the facility, including schedule for alternate monitoring periods for climates with irregular storm water runoff (see Part 7.1.6);
- Any numeric control values (benchmarks, effluent limitations guidelines, TMDL-related requirements, or other requirements) applicable to discharges from each outfall; and
- Procedures (e.g., responsible staff, logistics, laboratory to be used, etc.) for gathering storm event data, as specified in Part 7.1.
- If a permittee is invoking the exception for inactive and unstaffed sites for benchmark monitoring, the permittee must include in the SWPPP the information to support this claim as required by Part 7.2.1.6.

A permittee must document the following in the SWPPP if they plan to use the substantially identical outfall exception for quarterly visual assessment requirements in Part 6.2 or benchmark monitoring requirements in Part 7.2.1:

- Location of each of the substantially identical outfalls;
- Description of the general industrial activities conducted in the drainage area of each outfall;
- Description of the control measures implemented in the drainage area of each outfall;
- Description of the exposed materials located in the drainage area of each outfall that are likely to be significant contributors of pollutants to storm water discharges;
- An estimate of the runoff coefficient of the drainage areas (low = under 40%; medium = 40 to 65%; high = above 65%); and
- Why the outfalls are expected to discharge substantially identical effluents.

A permittee must document in the SWPPP their procedures for performing, as appropriate, the three types of inspections specified by this permit, including:

- Routine facility inspections (see Part 6.1);
- Quarterly visual assessment of storm water discharges (see Part 6.2); and
- Comprehensive site inspections (see Part 6.3).

For each type of inspection performed, the SWPPP must identify:

- Person(s) or positions of person(s) responsible for inspection;
- Schedules for conducting inspections, including tentative schedule for facilities in climates with irregular storm water runoff discharges (see Part 6.2.3); and
- Specific items to be covered by the inspection, including schedules for specific outfalls.

If the permittee is invoking the exception for inactive and unstaffed sites relating to routine facility inspections and quarterly visual assessments, the permittee must include in the SWPPP the information to support this claim as required by Parts 6.1.3and 6.2.3.

5.2.7 **Signature Requirements.**

A permittee must sign and date the SWPPP in accordance with Appendix A, Subsection 1.12, including the date of signature.

5.3 Inspections.

5.3.1 The SWPPP must document the procedures for performing facility inspections specified by this permit in Part 6, and where necessary, taking corrective actions, in accordance with Part 8. At a minimum the SWPPP must document the following:

5.3.1.1 Person(s) or position of person(s) responsible for conducting facility inspections;

5.3.1.2 Schedules to be followed for conducting inspections;

5.3.1.3 Any inspection checklist or form that will be used; and

5.3.1.4 How conditions that require corrective action will be addressed.

5.3.2 A record of each inspection and of any corrective actions taken in accordance with Parts 6 and 8 must be retained with the SWPPP for at least three (3) years from the date permit coverage expires or is terminated.

5.3.3 If a permittee is invoking the exception for inactive and unstaffed sites relating to routine facility inspections and quarterly visual assessments, the permittee must include in the SWPPP the information to support this claim as required by Parts 6.1.3 and 6.2.3.

5.4 Monitoring.

5.4.1 The SWPPP must document the procedures for performing facility monitoring specified by this permit in Part 7, and where necessary, taking corrective actions, in accordance with Part 8. At a minimum, the SWPPP must document the following:

5.4.1.1 Person(s) or position of person(s) responsible for conducting facility monitoring;

5.4.1.2 Schedules to be followed for conducting monitoring;

5.4.1.3 Any monitoring checklist or form that will be used; and

5.4.1.4 How conditions that require corrective action will be addressed.

5.4.2 A record of each monitoring event and of any corrective actions taken in accordance with Parts 7 and 8 must be retained with the SWPPP for at least three (3) years from the date permit coverage expires or is terminated.

5.5 Documentation of Permit Eligibility Related to a Total Maximum Daily Load.

The SWPPP must include documentation supporting determination of permit eligibility with regards to waters that have an EPA-established or approved TMDL. See Part 3.2.2 for additional information to determine permit eligibility related to a TMDL. The SWPPP must include the following:

5.5.1 Identification of whether the discharge is identified, either specifically or generally, in an EPA – established or approved TMDL and any associated allocations, requirements, and assumptions identified for the discharge;

5.5.2 Summaries of consultation with state or federal TMDL authorities on consistency of SWPPP conditions with the approved TMDL; and

5.5.3 Measures taken by the permittee to ensure that the discharge of pollutants from the facility is consistent with the assumptions and requirements of the EPA – established or approved TMDL, including any specific wasteload or load allocation that has been established that would apply to the discharge.

5.6 Maintaining and Updated SWPPP.

5.6.1 A permittee must modify the SWPPP whenever necessary to address any of the triggering conditions for corrective action in Part 8.1 and to ensure that they do not reoccur, or to reflect changes implemented when a review following the triggering conditions in Part 8.2 indicates that changes to the control measures are necessary to meet the effluent limits in this permit. Changes to the SWPPP document must be made in accordance with the corrective action deadlines in Parts 8.3 and 8.4, and must be signed and dated in accordance with Appendix A, Subsection 1.12.

5.6.2 A permittee must modify the SWPPP if inspections or investigations by facility staff or by state, federal, local or tribal officials determine that SWPPP modifications are necessary for compliance with this permit.

5.6.3 A permittee must modify the SWPPP to reflect any revisions to applicable state, federal, local or tribal law or regulations that affect the control measures implemented at the facility.

5.6.4 A permittee must keep a log showing dates, name of person authorizing the change, and a brief summary of changes for all significant SWPPP modifications (e.g. adding a new control measure, changes in facility layout or design, or significant storm events that cause for replacement of control measures).

5.6.5 A permittee must amend the SWPPP within thirty (30) calendar days whenever there is a change in design, construction, operation, or maintenance, which has a significant effect on the potential for the discharge of pollutants to waters of the U.S., or if the SWPPP proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified in the SWPPP, or in otherwise achieving the general objectives of controlling pollutants in storm water discharges associated with industrial activity. The SWPPP must be updated at least annually.

5.7 SWPPP Availability.

A permittee must retain a copy of the current complete SWPPP required by this permit at the facility, and it must be immediately available to DEC or EPA at the time of an onsite inspection or upon request.

If the facility is inactive the SWPPP must be retained at a readily available location or the office of the operator. DEC may provide access to portions of the SWPPP to a member of the public upon request. Confidential Business Information (CBI) may be withheld from the public, but may not be withheld from those staff cleared for CBI review within DEC, EPA, USFWS, or NMFS.

DEC will allow electronic storage and accessibility of the SWPPP and all documents (inspection reports, training records, DMRs, and all additional documentation required by Part 5.8) where facility infrastructure supports immediate access, as long as the following conditions are met:

5.7.1 All permit required signatures must be signed by the appropriate official in accordance with Appendix A, Part 1.12. If an electronic signature is used it must be a certified electronic signature;

5.7.2 Modifications to the SWPPP must be documented with dated revision pages;

5.7.3 ALL supporting documents (required by Part 5.8) must meet permit requirements; and

5.7.4 The electronic SWPPP and all supporting documents must be available for review by a DEC or EPA inspector during a facility Inspection.

DEC encourages permittees to post their SWPPP online and provide the website address on the NOI (the SWPPP does not need to be reposted on the internet each time it is updated).

5.8 Additional Documentation Requirements.

A permittee is required to keep up-to-date copies of the following inspection, monitoring, corrective action, additional documentation, and certification records with the SWPPP:

5.8.1 A copy of the NOI submitted to DEC along with any correspondence exchanged between the permittee and DEC specific to coverage under this permit;

5.8.2 A copy of the acknowledgment letter the permittee receives from DEC or eNOI system assigning the permittees permit tracking number;

5.8.3 A copy of this permit (an electronic copy easily available to SWPPP personnel is also acceptable);

5.8.4 Descriptions and dates of any incidences of significant spills, leaks, or other releases that resulted in discharges of pollutants to waters of the U.S., through storm water or otherwise; the circumstances leading to the release and actions taken in response to the release; and measures taken to prevent the recurrence of such releases (see Part 4.2.4);

5.8.5 Records of employee training, including date training received (see Part 4.2.9);

5.8.6 Documentation of maintenance and repairs of control measures, including the date(s) of regular maintenance, date(s) of discovery of areas in need of repair/replacement, and for repairs, date(s) that the control measure(s) returned to full function, and the justification for any extended maintenance/repair schedules (see Part 4.2.3);

5.8.7 Log of SWPPP modifications;

5.8.8 All inspection reports, including the Routine Facility Inspection Reports (see Part 6.1), the Quarterly Visual Assessment Reports (see Part 6.2), and the Comprehensive Site Inspection Reports (see Part 6.3);

5.8.9 Description of any deviations from the schedule for visual assessments and/or monitoring, and the reason for the deviations (e.g., adverse weather or it was impracticable to collect samples within the first 30 minutes of discharge from a measurable storm event) (see Parts 6.2.1, 7.1.4, and 7.2.1.2);

5.8.10 Description of any corrective action taken at the permittees site shall be listed in a corrective action log, including triggering event and dates when problems were discovered and modifications occurred (see Part 8.4);

5.8.11 Documentation of any benchmark exceedances and how they were responded to, including either (1) corrective action taken, (2) a finding that the exceedence was due to natural background pollutant levels, or (3) a finding that no further pollutant reductions were technologically available and economically practicable and achievable in light of best industry practice consistent with Part 7.2.1.2;

5.8.12 Documentation of any effluent limitation exceedances and how they were responded to, including any corrective action;

5.8.13 Documentation to support any determination that pollutants of concern are not expected to be present above natural background levels if the permittee discharges directly to impaired waters, and that such pollutants were not detected in their discharge or were solely attributable to natural background sources (see Part 7.2.3.2); and

5.8.14 Documentation to support the permittees claim that the permittees facility has changed its status from active to inactive and unstaffed with respect to the requirements to conduct routine facility inspections (see Part 6.1.3), quarterly visual assessments (see Part 6.2.3), and/or benchmark monitoring (see Part 7.2.1.6).

6. Inspections.

A permittee must conduct the inspections in Parts 6.1, 6.2, and 6.3 at their facility.

6.1 Routine Facility Inspections.

6.1.1 **Routine Facility Inspection Procedures**.
During normal facility operating hours, the permittee must conduct inspections of areas of the facility covered by the requirements in this permit, including the following:

- Areas where industrial materials or activities are exposed to storm water.
- Areas identified in the SWPPP and those that are potential pollutant sources (see Part 5.1.3).
- Areas where spills and leaks have occurred in the past 3 years.
- Discharge points.
- Control measures used to comply with the effluent limits contained in this permit.

Inspections must be conducted at least quarterly (i.e., once each permit quarter), or in some instances more frequently (e.g., monthlyfor facilities that operate seasonally), as appropriate. Increased frequency may be appropriate for some types of equipment, processes, and stormwater control measures, or areas of the facility with significant activities and materials exposed to stormwater. At least one of the routine inspections must be conducted during a period when a stormwater discharge is occurring (in arid areas of the state this requirement is to be met as practicable). The permittee must specify the relevant inspection schedules in their SWPPP document as required in Part 5.2.6.

Inspections must be performed by qualified personnel (as defined in Appendix C) with at least one member of the permittee's stormwater pollution prevention team participating. Inspector(s) must consider the results of visual and analytical monitoring (if any) for the past year when planning and conducting inspections.

During the inspection the inspectors must examine or look out for the following:

- Industrial materials, residue or trash that may have or could come into contact with stormwater.
- Leaks or spills from industrial equipment, drums, tanks, and other containers.
- Offsite tracking of industrial or waste materials, or sediment where vehicles enter or exit the site.
- Tracking or blowing of raw, final or waste materials from areas of no exposure to exposed areas.
- Control measures needing replacement, maintenance, or repair.

During an inspection occurring during a stormwater discharge, control measures implemented to comply with effluent limits must be observed to ensure they are functioning correctly. Discharge points must also be observed during this inspection. If such discharge locations are inaccessible, nearby downstream locations must be inspected.

6.1.2 **Routine Facility Inspection Documentation**.

A permittee must document the findings of each routine facility inspection performed and maintain this documentation onsite with the SWPPP as required in Part 5.8. The permittee is not required to submit their routine facility inspection findings to DEC, unless specifically requested to do so. At a minimum, the permittees documentation of each routine facility inspection must include:

- The inspection date and time;
- The name(s) and signature(s) of the inspector(s);
- Weather information;
- All observations relating to the implementation of control measures at the facility, including:
  - A description of any discharges occurring at the time of the inspection;
  - Any previously unidentified discharges of pollutants from the site;
  - Any evidence of, or the potential for, pollutants entering the drainage system;
  - Observations regarding the physical condition of and around all outfalls including any flow dissipation devices, and evidence of pollutants in discharges and/or the receiving water;
  - Any control measures needing maintenance, repairs; or replacement;
- Any additional control measures needed to comply with the permit requirements; and
- Any incidents of noncompliance observed.

The inspection report must be signed and certified in accordance with Appendix A, Subsection 1.12 of the permit.

Any corrective action required as a result of a routine facility inspection must be performed consistent with Part 8 of this permit.

6.1.3 **Exceptions to Routine Facility Inspections**.

Inactive and Unstaffed Sites: The requirement to conduct routine facility inspections on a quarterly basis does not apply at a facility that is inactive and unstaffed, as long as there are no industrial materials or activities exposed to storm water. Such a facility is only required to conduct an annual comprehensive site inspection in accordance with the requirements of Part 6.3. To invoke this exception, the permittee must maintain a statement in the SWPPP pursuant to Part 5.2.6.2 indicating that the site is inactive and unstaffed, and that there are no industrial materials or activities exposed to precipitation, in accordance with the substantive requirements in 40 CFR 122.26(g)(4)(iii). The statement must be signed and certified in accordance with Appendix A, Subsection 1.12. If circumstances change and industrial materials or activities become exposed to storm water or the facility becomes active and/or staffed, this exception no longer applies and the permittee must immediately resume quarterly facility inspections. If the permittee is not qualified for this exception at the time of authorization under this permit, but during the permit term becomes qualified because their facility is inactive and unstaffed, and there are no industrial materials or activities that are

exposed to storm water, then the permittee must include the same signed and certified statement as above and retain it with the facility records pursuant to Part 5.8.

Inactive and unstaffed facilities or those undergoing winter shutdown covered under Sectors G (Metal Mining), H (Coal Mines and Coal Mining-Related Facilities), and J (Non-Metallic Mineral Mining and Dressing), are not required to meet the "no industrial materials or activities exposed to storm water" standard to be eligible for this exception from routine inspections, consistent with the requirements established in Parts 11.G.8.4, 11.H.8.1, and 11.J.8.1.

6.2 Quarterly Visual Assessment of Storm Water Discharges.

6.2.1 **Quarterly Visual Assessment Procedures**.

Once each calendar quarter for the entire permit term, the permittee must collect a storm water sample from each outfall (except as noted in Part 6.2.3) and conduct a visual assessment of each of these samples. These samples are not required to be collected consistent with 40 CFR Part 136 procedures but should be collected in such a manner that the samples are representative of the storm water discharge. If no discharge occurs during the quarterly visual assessment period, the permittee must still report no discharge for this monitoring period and follow the requirements of Part 7.1.6.

The visual assessment must be made:

- Of a sample in a clean, clear glass, or plastic container, and examined in a well-lit area;
- On samples collected within the first 30 minutes of an actual discharge from a measurable storm event. If it is not possible to collect the sample within the first 30 minutes of discharge, the sample must be collected as soon as practicable after the first 30 minutes. The permittee must document in the SWPPP why it was not possible to take samples within the first 30 minutes and document in the SWPPP their alternative method/order for collecting samples. In the case of snowmelt, samples must be taken during a period with a measurable discharge from the permittees site; and
- For storm events, on discharges that occur at least 72 hours (3 days) from the previous discharge. The 72-hour (3-day) storm interval does not apply if the permittee documents that less than a 72-hour (3-day) interval is representative for local storm events during the sampling period.

A permittee must visually inspect the sample for the following water quality characteristics:

- Color;
- Odor;
- Clarity (dimished);
- Floating solids;

- Settled solids;
- Suspended solids;
- Foam;
- Oil sheen; and
- Other obvious indicators of storm water pollution.

6.2.2 **Quarterly Visual Assessment Documentation**.
A permittee must document the results of their visual assessments and maintain this documentation onsite with the SWPPP as required in Part 6.2.3. The permittee is not required to submit their visual assessment findings to DEC, unless specifically requested to do so. At a minimum, the permittees documentation of the visual assessment must include:

- Sample location(s)
- Sample collection date and time, and visual assessment date and time for each sample;
- Personnel collecting the sample and performing visual assessment, and their signatures;
- Nature of the discharge (i.e., runoff or snowmelt);
- Results of observations of the storm water discharge;
- Photographs of sample and sample location;
- Probable sources of any observed storm water contamination, and
- If applicable, why it was not possible to take samples within the first 30 minutes.
- Quarterly Visual Assessment Documentation must be signed and certified in accordance with Appendix A, Subsection 1.12 of the permit.

Any corrective action required as a result of a quarterly visual assessment must be performed consistent with Part 8 of this permit.

6.2.3 **Exceptions to Quarterly Visual Assessments**.
Adverse Weather Conditions: When adverse weather conditions prevent the collection of samples during the quarter, the permittee must take a substitute sample during the next qualifying storm event. Documentation of the rationale for no visual assessment for the quarter must be included with the SWPPP records as described in Part 5.8. Adverse conditions are those that are dangerous or create inaccessibility for personnel, such as local flooding, high winds, or electrical storms, or situations that otherwise make sampling impractical, such as drought or extended frozen conditions.

Climates with Irregular Storm Water Runoff: If the facility is located in an area where limited rainfall occurs during many parts of the year (e.g., arid or semi-arid climate) or in an area where freezing conditions exist that prevent runoff from occurring for extended periods, then the samples for the quarterly visual assessments may be distributed during seasons when precipitation runoff occurs. (See Part 7.1.6)

Areas Subject to Snow: In areas subject to snow, at least one quarterly visual assessment must capture snowmelt discharge, as described in Part 7.1.3, taking into account the exception described above for climates with irregular storm water runoff.

Inactive and Unstaffed Sites: The requirement for a quarterly visual assessment does not apply at a facility that is inactive and unstaffed, as long as there are no industrial materials or activities exposed to storm water. To invoke this exception, the permittee must maintain a statement in the SWPPP as required in Part 5.2.6.2 indicating that the site is inactive and unstaffed, and that there are no industrial materials or activities exposed to precipitation, in accordance with the substantive requirements in 40 CFR 122.26(g)(4)(iii). The statement must be signed and certified in accordance with Appendix A, Subsection 1.12. If circumstances change and industrial materials or activities become exposed to storm water or the facility becomes active and/or staffed, this exception no longer applies and the permittee must immediately resume quarterly visual assessments. If the permittee is not qualified for this exception at the time they are authorized under this permit, but during the permit term they become qualified because their facility is inactive and unstaffed, and there are no industrial materials or activities that are exposed to storm water, then the permittee must include the same signed and certified statement as above and retain it with their records pursuant to Part 5.8.

Inactive and unstaffed facilities covered under Sectors G (Metal Mining), H (Coal Mines and Coal Mining-Related Facilities), and J (Non-Metallic Mineral Mining and Dressing), are not required to meet the "no industrial materials or activities exposed to storm water" standard to be eligible for this exception from quarterly visual assessment, consistent with the requirements established in Parts 11.G.8.4, 11.H.8.1, and 11.J.8.1.

Substantially Identical Outfalls: If a permittees facility has two or more outfalls that discharge substantially identical effluents, as documented in Part 5.2.6.2, the permittee may conduct quarterly visual assessments of the discharge at just one of the outfalls and report that the results also apply to the substantially identical outfall(s) provided that the permittee performs visual assessments on a rotating basis of each substantially identical outfall throughout the period of coverage under this permit.

If storm water contamination is identified through visual assessment performed at a substantially identical outfall, the permittee must assess and modify their control measures as appropriate for each outfall represented by the monitored outfall.

6.3 Comprehensive Site Inspections.

6.3.1 **Comprehensive Site Inspection Procedures**.

A permittee must conduct annual comprehensive site inspections while covered under this permit. Annual, as defined in this Part, means once during each of the following inspection periods beginning with the period the permittee is authorized to discharge under this permit:

Year 1:	Permit Effective Date	–	December 31, 2020
Year 2:	January 1, 2021	–	December 31, 2021
Year 3:	January 1, 2022	–	December 31, 2022
Year 4:	January 1, 2023	–	December 31, 2023
Year 5:	January 1, 2024	–	December 31, 2024

A permittee is waived from having to perform a comprehensive site inspection for an inspection period, as defined above, if authorization to discharge is obtained less than three months before the end of that inspection period.

Should a permittees coverage be administratively continued after the expiration date of this permit, the permittee must continue to perform these inspections annually until they are no longer covered.

Comprehensive site inspections must be conducted by qualified personnel with at least one member of the storm water pollution prevention team participating in the comprehensive site inspections.

The comprehensive site inspections must cover all areas of the facility affected by the requirements in this permit, including the areas identified in the SWPPP as potential pollutant sources (see Part 5.2.4) where industrial materials or activities are exposed to storm water, any areas where control measures are used to comply with the effluent limits in Part 3, and areas where spills and leaks have occurred in the past 3 years. If the permittee has documented in the SWPPP that some industrial sector sites within the facility have no exposure to storm water the comprehensive site inspection should include those sector areas as well to verify no exposure still exists. The inspections must also include a review of monitoring data collected in accordance with Part 7.2. Inspectors must use the results of the past year's visual and analytical monitoring when planning and conducting inspections. Inspectors must examine the following:

- Industrial materials, residue, or trash that may have or could come into contact with storm water;
- Leaks or spills from industrial equipment, drums, tanks, and other containers;
- Offsite tracking of industrial or waste materials, or sediment where vehicles enter or exit the site;
- Tracking or blowing of raw, final, or waste materials from areas of no exposure to exposed areas; and
- Control measures needing replacement, maintenance, or repair.

Storm water control measures required by this permit must be observed to ensure that they are functioning correctly. If discharge locations are inaccessible, nearby downstream locations must be inspected.

The annual comprehensive site inspection may also be used as one of the routine inspections, as long as all components of both types of inspections are included.

6.3.2 **Comprehensive Site Inspection Documentation**.
A permittee must document the findings of each comprehensive site inspection and maintain this documentation onsite with the SWPPP as required in Part 5.8. In addition, the permittee must submit this documentation in an annual report as required in Part 9.2. At a minimum, the permittees documentation of the comprehensive site inspection must include (see the Annual Reporting Form included in Appendix F):

- The date of the inspection;
- The name(s) and title(s) of the personnel making the inspection;
- Findings from the examination of areas of the facility identified in Part 6.3.1 including inspections of the individual industrial sectors within a facility under a single permit which have been noted as having no exposure in the SWPPP;
- All observations relating to the implementation of the permittees control measures including:
    - previously unidentified discharges from the site,
    - previously unidentified pollutants in existing discharges,
    - evidence of, or the potential for, pollutants entering the drainage system;
    - evidence of pollutants discharging to receiving waters at all facility outfall(s), and the condition of and around the outfall, including flow dissipation measures to prevent scouring, and
    - additional control measures needed to address any conditions requiring corrective action identified during the inspection.
- Any required revisions to the SWPPP resulting from the inspection;
- Any incidents of noncompliance observed or a certification stating the facility is in compliance with this permit (if there is no noncompliance); and
- A statement, signed and certified in accordance with Appendix A, Subsection 1.12 of the permit.

Any corrective action required as a result of the comprehensive site inspection must be performed consistent with Part 8 of this permit.

7. Monitoring.

A permittee must collect and analyze storm water samples and document monitoring activities consistent with the procedures described in Part 7 and Appendix A, Subsections 3.0, and any additional sector-specific requirements in Part 11. Refer to Part 9 for reporting and recordkeeping requirements.

7.1 Monitoring Procedures.

7.1.1 **Monitored Outfalls**.

Applicable monitoring requirements apply to each outfall authorized by this permit, except as otherwise exempt from monitoring as a "substantially identical outfall." If the permittees facility has two or more outfalls that they believe discharge substantially identical effluents, based on the similarities of the general industrial activities and control measures, exposed materials that may significantly contribute pollutants to storm water, and runoff coefficients of their drainage areas, they may monitor the effluent of just one of the outfalls and report that the results also apply to the substantially identical outfall(s). As required in Part 5.2.6.2, the SWPPP must identify each outfall authorized by this permit and describe the rationale for any substantially identical outfall determinations. The allowance for monitoring only one of the substantially identical outfalls is not applicable to any outfalls with numeric effluent limitations. The permittee is required to monitor each outfall covered by a numeric effluent limit as identified in Part 7.2.2.

7.1.2 **Commingled Discharges**.

If discharges authorized by this permit commingle with discharges not authorized under this permit, any required sampling of the authorized discharges must be performed at a point before they mix with other waste streams.

7.1.3 **Measurable Storm Events**.

All required monitoring must be performed on a storm event that results in an actual discharge from the facility ("measurable storm event") that follows the preceding measurable storm event by at least 72 hours (three days). The 72-hour (three-day) storm interval does not apply if the permittee is able to document that less than a 72-hour (three-day) interval is representative for local storm events during the sampling period. In the case of snowmelt, the monitoring must be performed at a time when a measurable discharge occurs at the facility.

For each monitoring event, except snowmelt monitoring, the permittee must identify the date and duration (in hours) of the rainfall event, rainfall total (in inches) for that rainfall event, and time (in days) since the previous measurable storm event. For snowmelt monitoring, the permittee must identify the date of the sampling event.

7.1.4 **Sample Type**.

A permittee must take a minimum of one grab sample from a discharge resulting from a measurable storm event as described in Part 7.1.3. Samples must be collected within the first 30 minutes of a discharge produced from a measurable storm event. If it is not possible to

collect the sample within the first 30 minutes of discharge, the sample must be collected as soon as practicable after the first 30 minutes and documentation must be kept with the SWPPP explaining why it was not possible to take samples within the first 30 minutes. In the case of snowmelt, samples must be taken during a period with a measurable discharge.

For facilities covered by Subparts 11.G, 11.H, and 11.J, they are exempt from the 30 minute requirement. These facilities must sample as soon as practical after a storm event. The SWPPP must contain a list and map of the monitoring locations and the order in which sample collection occurs.

7.1.5 **Adverse Weather Conditions**.
When adverse weather conditions as described in Part 6.2.3 prevent the collection of samples according to the relevant monitoring schedule, the permittee must take a substitute sample during the next qualifying storm event. Adverse weather does not exempt a permittee from having to file a benchmark monitoring report in accordance with their sampling schedule. The permittee must report any failure to monitor as specified in Part 9.1 indicating the basis for not sampling during the usual reporting period.

7.1.6 **Climates with Irregular Storm Water Runoff**.
If a permittees facility is located in areas where limited rainfall occurs during parts of the year (e.g., arid or semi-arid climates) or in areas where freezing conditions exist that prevent runoff from occurring for extended periods, required monitoring events may be distributed during seasons when precipitation occurs, or when snowmelt results in a measurable discharge from the facility. The permittee must still collect the required number of samples.

7.1.7 **Monitoring Periods**.
Monitoring requirements in this permit begin in the first full quarter following either April 1, 2020 or the permittees date of discharge authorization, whichever date comes later. If the permittees monitoring is required on a quarterly basis (e.g., benchmark monitoring), the permittee must monitor at least once in each of the following three-month intervals:

- **Quarter 1**: January 1 - March 31;
- **Quarter 2**: April 1 – June 30;
- **Quarter 3**: July 1 – September 30;
- **Quarter 4**: October 1 – December 31.

For example, if permit coverage was obtained on June 2, 2020, then the permittees first monitoring quarter is July 1 - September 30, 2020. This monitoring schedule may be modified in accordance with Part 7.1.6 if the revised schedule is documented with the SWPPP and provided to DEC with the first monitoring report.

7.1.8 **Monitoring for Allowable Non-Storm Water Discharges.**
The permittee is only required to monitor allowable non-storm water discharges (as delineated in Part 1.2.3) when they are commingled with storm water discharges associated with industrial activity.

7.2 Required Monitoring.

This permit includes four types of required analytical monitoring, one or more of which may apply to the permittees discharge:

- Quarterly benchmark monitoring (see Part 7.2.1)
- Annual effluent limitations guidelines monitoring (see Part 7.2.2);
- Impaired waters monitoring (see Part 7.2.3); and
- Other monitoring as required by DEC (see Part 7.2.4).

When more than one type of monitoring for the same parameter at the same outfall applies (e.g., total suspended solids once per year for an effluent limit and once per quarter for benchmark monitoring at a given outfall), the permittee may use a single sample to satisfy both monitoring requirements (i.e., one sample satisfying both the annual effluent limit sample and one of the four quarterly benchmark monitoring samples).

All required monitoring must be conducted in accordance with the procedures described in Appendix A, Subsection 3.0.

7.2.1 **Benchmark Monitoring**.
This permit stipulates pollutant benchmark concentrations that may be applicable to certain sectors / subsectors. Benchmark monitoring data are primarily for the permittees use to determine the overall effectiveness of the permittees control measures and to assist the permittee in knowing when additional corrective action(s) may be necessary to comply with the effluent limitations in Part 4.

The benchmark concentrations are not effluent limitations; a benchmark exceedance, therefore, is not a permit violation. However, if corrective action is required as a result of a benchmark exceedance, failure to conduct required corrective action is a permit violation.

At the permittee's discretion, more than four samples may be taken during separate runoff events and used to determine the average benchmark parameter concentration for facility discharges. These extra samples may be taken in any quarter of the permittees' choice.

7.2.1.1 ***Applicability of Benchmark Monitoring***. A permittee must monitor for any benchmark parameters specified for the industrial sector(s), both primary industrial activity and any co-located industrial activities, applicable to the permittees discharge. The industry-specific benchmark concentrations are listed in the sector-specific sections of Part 11. If the facility is in one of the industrial sectors subject to benchmark concentrations that are hardness-dependent, the permittee is required to submit to DEC with their first benchmark report a hardness value, established consistent with the procedures in Appendix E, which is representative of the receiving water.

Samples must be analyzed consistent with 40 CFR Part 136 analytical methods and using test procedures with quantitation limits at or below benchmark values for all benchmark parameters for which the permittee is required to sample.

7.2.1.2 ***Benchmark Monitoring Schedule***. Benchmark monitoring must be conducted quarterly, as identified in Part 7.1.7, for the permittees first four full consecutive quarters of permit coverage commencing no earlier than April 1, 2020. Facilities in climates with irregular storm water runoff, as described in Part 7.1.6, may modify this quarterly schedule provided that this revised schedule is reported to DEC when the first benchmark sample is collected and reported, and that this revised schedule is kept with the facility's SWPPP as specified in Part 5.2.6. When conditions prevent the obtaining of four samples in four consecutive quarters, continue monitoring until achieving the four samples required for calculating the benchmark monitoring average.

7.2.1.3 ***Data Not Exceeding Benchmarks.*** After collection of four quarterly samples, if the average of the four monitoring values for any parameter does not exceed the benchmark, the permittee has fulfilled their monitoring requirements for that parameter for the permit term. For averaging purposes, use a value of zero for any individual sample parameter, analyzed using procedures consistent with Part 7.2.1.1, which is determined to be less than the method detection limit. For sample values that fall between the method detection level and the quantitation limit (i.e., a confirmed detection but below the level that can be reliably quantified), use a value halfway between zero and the quantitation limit.

7.2.1.4 ***Data Exceeding Benchmarks.*** After collection of four quarterly samples, if the average of the four monitoring values for any parameter exceeds the benchmark, the permittee must, in accordance with Part 8.2, review the selection, design, installation, and implementation of their control measures to determine if modifications are necessary to meet the benchmarks in this permit, and either:

- Make the necessary modifications and continue quarterly monitoring until the permittee has completed four additional quarters of monitoring for which the average does not exceed the benchmark; or

- Make a determination that no further pollutant reductions are technologically available and economically practicable and achievable in light of best industry

practice to meet the technology-based effluent limits or are necessary to meet the water-quality-based effluent limitations in Part 3 of this permit, in which case the permittee must continue monitoring once per year. The permittee must also document their rationale for concluding that no further pollutant reductions are achievable, and retain all records related to this documentation with their SWPPP. The permittee must also notify DEC of this determination in their next benchmark monitoring report.

In accordance with Part 8.2, the permittee must review its control measures and perform any required corrective action immediately (or document why no corrective action is required), without waiting for the full four quarters of monitoring data, if an exceedance of the four quarter average is mathematically certain. If after modifying the permittees control measures and conducting four additional quarters of monitoring, their average still exceeds the benchmark (or if an exceedance of the benchmark by the four quarter average is mathematically certain prior to conducting the full four additional quarters of monitoring), the permittee must again review its control measures and take one of the two actions above.

7.2.1.5 ***Natural Background Pollutant Levels.*** Following the first four quarters of benchmark monitoring (or sooner if the exceedance is triggered by less than four quarters of data, see above), if the average concentration of a pollutant exceeds a benchmark value, and the permittee determines that exceedance of the benchmark is attributable solely to the presence of that pollutant in the natural background, the permittee is not required to perform corrective action or additional benchmark monitoring provided that:

- The average concentration of the permittees benchmark monitoring results is less than or equal to the concentration of that pollutant in the natural background;
- The permittee must document and maintain with the SWPPP, as required in Part 5.8, the supporting rationale for concluding that benchmark exceedances are in fact attributable solely to natural background pollutant levels. The permittee must include in their supporting rationale any data previously collected by the permittee or others (including literature studies) that describe the levels of natural background pollutants in their storm water discharge; and
- The permittee must notify DEC on their final quarterly benchmark monitoring report that the benchmark exceedances are attributable solely to natural background pollutant levels.

Natural background pollutants include those substances that are naturally occurring in soils or groundwater. Natural background pollutants do not include legacy pollutants from earlier activity at the facility, or pollutants in run-on from neighboring sources which are not naturally occurring.

7.2.1.6 ***Exception for Inactive and Unstaffed Sites***[6]. The requirement for benchmark monitoring does not apply at a facility that is inactive and unstaffed, as long as there are no industrial materials or activities exposed to storm water. To invoke this exception, the permittee must do the following:

- Maintain a statement onsite with the SWPPP stating that the site is inactive and unstaffed, and that there are no industrial materials or activities exposed to storm water in accordance with the substantive requirements in 40 CFR 122.26(g) and sign and certify the statement in accordance with Appendix A, Subsection 1.12; and

- If circumstances change and industrial materials or activities become exposed to storm water or the facility becomes active and/or staffed, this exception no longer applies and the permittee must immediately begin complying with the applicable benchmark monitoring requirements under Part 7.2 as if they were in their first year of permit coverage. The permittee must indicate in their first benchmark monitoring report that their facility has materials or activities exposed to storm water or has become active and/or staffed.

- If the permittee is not qualified for this exception at the time they are authorized under this permit, but during the permit term they become qualified because their facility is inactive and unstaffed, and there are no industrial materials or activities that are exposed to storm water, then the permittee must notify DEC of this change in their next benchmark monitoring report. A permittee may discontinue benchmark monitoring once they have notified DEC, and prepared and signed the certification statement described above concerning their facility's qualification for this special exception.

7.2.2 **Effluent Limitations Monitoring**.

7.2.2.1 ***Monitoring Based on Effluent Limitations Guidelines***. Table 7-1 identifies the storm water discharges subject to effluent limitation guidelines that are authorized for coverage under this permit. Beginning in the first full quarter following April 1, 2020 or the permittees date of discharge authorization, whichever date comes later, the permittee must monitor once per year at each outfall containing the discharges identified in Table 7-1 for the parameters specified in the sector-specific section of Part 11.

[6] This exception has different requirements for Sectors G, H, and J (see Part 11).

Table 7-1: Required Monitoring for Effluent Limits Based on Effluent Limitations Guidelines

Regulated Activity	Effluent Limit	Monitoring Frequency	Sample Type
Discharges resulting from spray down or intentional wetting of logs at wet deck storage areas	See Part 11.A.7	1/year	Grab
Runoff from phosphate fertilizer manufacturing facilities that comes into contact with any raw materials, finished product, by-products or waste products (SIC 2874)	See Part 11.C.4	1/year	Grab
Runoff from asphalt emulsion facilities	See Part 11.D.4	1/year	Grab
Runoff from material storage piles at cement manufacturing facilities	See Part 11.E.5	1/year	Grab
Mine dewatering discharges at crushed stone, construction sand and gravel, or industrial sand mining facilities	See Part 11.J.9	1/year	Grab
Runoff from hazardous waste landfills	See Part 11.K.6	1/year	Grab
Runoff from non-hazardous waste landfills	See Part 11.L.10	1/year	Grab
Runoff from coal storage piles at steam electric generating facilities	See Part 11.O.8	1/year	Grab
Existing and new primary airports with 1,000 or more annual jet departures that discharge wastewater associated with airfield pavement deicing that contains urea commingled with stormwater	See Part 11.S.8	1/year	Grab

7.2.2.2 ***Substantially Identical Outfalls***. A permittee must monitor each outfall discharging runoff from any regulated activity identified in Table 7-1. The substantially identical outfall monitoring provisions are not available for numeric effluent limits monitoring.

7.2.2.3 **Follow-up Actions if Discharge Exceeds Numeric Effluent Limit**. The permittee must follow-up monitoring within 30 calendar days (or during the next qualifying runoff event, should none occur within 30 days) of implementing corrective action(s) taken pursuant to Part 8 in response to exceedance of a numeric effluent limit contained in this permit. Monitoring must be performed for any pollutant(s) that exceeds the effluent limit. If this follow-up monitoring exceeds the applicable effluent limitation, you must:

- **Submit a Noncompliance Notification Form**: The permittee must submit an Noncompliance Notification Form no later than the 15th day of the following month after they have received all the lab results; and

- **Continue to Monitor**: the permittee must monitor, at least quarterly, until the discharge is in compliance with the effluent limit or until DEC waives the requirement for additional monitoring.

7.2.3 **Discharges to Impaired Waters Monitoring**.

7.2.3.1 ***Permittees Required to Monitor Discharges to Impaired Waters***. If a permittee discharges to an impaired water, the permittee must monitor for all pollutants for which the waterbody is impaired and for which a standard analytical method exists (see 40 CFR Part 136).

If the pollutant for which the waterbody is impaired is suspended solids, turbidity or sediment/sedimentation, the permittee must monitor for Total Suspended Solids (TSS) and turbidity. If the pollutant for which the waterbody is impaired is expressed in the

form of an indicator or surrogate pollutant, the permittee must monitor for that indicator or surrogate pollutant. No monitoring is required when a waterbody's biological communities are impaired but no pollutant, including indicator or surrogate pollutants, is specified as causing the impairment, or when a waterbody's impairment is related to hydrologic modifications, impaired hydrology, or other pollutant.

7.2.3.2 ***Impaired Waters Monitoring Schedule***.

Discharges to impaired waters without an EPA approved or established TMDL: Beginning in the first full calendar quarter following April 1, 2020 or the permittees date of discharge authorization, whichever date comes later, the permittee must monitor once per year at each outfall (except substantially identical outfalls) discharging storm water to impaired waters without an EPA approved or established TMDL. This monitoring requirement does not apply after one year if the pollutant for which the waterbody is impaired is not detected above natural background levels in their storm water discharge, and the permittee must document, as required in Part 5.8 (Additional Documentation Requirements), that this pollutant is not expected to be present above natural background levels in the permittees discharge.

If the pollutant for which the water is impaired is not present and not expected to be present in the permittee's discharge, or it is present but the permittee has determined that its presence is caused solely by natural background sources, they should include a notification to this effect in their first monitoring report, after which they may discontinue annual monitoring. To support a determination that the pollutant's presence is caused solely by natural background sources, the permittee must keep the following documentation with their SWPPP records:

- An explanation of why the permittee believes that the presence of the pollutant causing the impairment in their discharge is not related to the activities at their facility; and
- Data and/or studies that tie the presence of the pollutant causing the impairment in their discharge to natural background sources in the watershed.

Natural background pollutants include those substances that are naturally occurring as a result of native soils, vegetation, wildlife, or groundwater. Natural background pollutants do not include legacy pollutants from earlier activity on the site, or pollutants in run-on from neighboring sources which are not naturally occurring.

Discharges to impaired waters with an EPA approved or established TMDL WLA: For storm water discharges to waters for which there is an EPA approved or established TMDL waste load allocation (WLA), the permittee is not required to monitor for the pollutant for which the TMDL was written unless DEC informs the permittee, upon examination of the applicable TMDL and/or WLA, that they are subject to such a requirement consistent with the assumptions of the applicable TMDL and/or WLA.

DEC's notice will include specifications on which pollutant to monitor and the required monitoring frequency during the first year of permit coverage. Following the first year of monitoring:

- If the TMDL pollutant is not detected in any of the permittees first year samples, they may discontinue further sampling, unless the TMDL has specific instructions to the contrary, in which case the permittee must follow those instructions. The permittee must keep records of this finding onsite with their SWPPP.
- If the permittee detects the presence (above background levels) of the pollutant causing the impairment in their storm water discharge for any of the samples collected in the first year, the permittee must continue monitoring annually throughout the term of this permit, unless the TMDL specifies more frequent monitoring, in which case the permittee must follow the TMDL requirements.

7.2.4 **Additional Monitoring Required by DEC**.
DEC may notify the permittee of additional discharge monitoring requirements. Any such notice will briefly state the reasons for the monitoring, locations, and parameters to be monitored, frequency and period of monitoring, sample types, and reporting requirements.

8. Corrective Actions.

8.1 Conditions Requiring Review and Revision to Eliminate Problem.

If any of the following conditions occur, the permittee must review and revise the selection, design, installation, and implementation of their control measures to ensure that the condition is eliminated and will not be repeated in the future:

8.1.1 An unauthorized release or discharge (e.g., spill, leak, or discharge of non-storm water not authorized by this or another APDES permit) occurs at the permittees facility;

8.1.2 A discharge violates a numeric effluent limit;

8.1.3 The permittee becomes aware, or DEC determines, that the permittee's control measures are not stringent enough for the discharge to meet a WQS in the receiving water;

8.1.4 An inspection or evaluation of the permittees facility by an DEC or EPA official determines that modifications to the control measures are necessary to meet the non-numeric effluent limits in this permit; or

8.1.5 The permittee finds in their routine operation, facility inspection, quarterly visual assessment, or comprehensive site inspection that their control measures are not being properly installed, operated and maintained.

8.2 Conditions Requiring Review to Determine if Modifications Are Necessary.

If any of the following conditions occur, the permittee must review the selection, design, installation, and implementation of their control measures to determine if modifications are necessary to meet the effluent limits in this permit:

8.2.1 Construction or a change in design, operation, or maintenance at a permittees facility significantly changes the nature of pollutants discharged in storm water from their facility, or significantly increases the quantity of pollutants discharged; or

8.2.2 The average of four quarterly sampling results exceeds an applicable benchmark. If less than four benchmark samples have been taken, but the results are such that an exceedence of the four quarter average is mathematically certain (i.e., if the sum of quarterly sample results to date is more than four times the benchmark level) this is considered a benchmark exceedence, triggering this review.

8.3 Corrective Action Deadlines.

A permittee must document their discovery of any of the conditions listed in Parts 8.1 and 8.2 within 24 hours of making such discovery. Subsequently, the permittee must comply with Appendix A Part 3.4 to document any corrective action(s) to be taken to eliminate or further investigate the deficiency, or if no corrective action is needed, the basis for that determination. Specific documentation required is detailed in Part 8.4. If a permittee determines that changes are necessary following their review, any modifications to their control measures must be made before the next storm event if possible, or as soon as practicable following that storm event. These time intervals are not grace periods, but are schedules considered reasonable for documenting a permittees findings and for making repairs and improvements. They are included in this permit to ensure that the conditions prompting the need for these repairs and improvements are not allowed to persist indefinitely.

8.4 Corrective Action Report.

8.4.1 Comply with Appendix A Part 3.4 upon discovery of any condition listed in Parts 8.1 and 8.2, the permittee must document the following information (i.e., questions 3-5 of the Corrective Actions section in the Annual Reporting Form, provided in Appendix F):

8.4.1.1 Identification of the condition triggering the need for corrective action review;

8.4.1.2 Description of the problem identified; and

8.4.1.3 Date the problem was identified.

8.4.2 Comply with Appendix A Part 3.4 upon discovery of any condition listed in Parts 8.1 and 8.2, the permittee must document the following information (i.e., questions 7-11 of the Corrective Actions section in the Annual Reporting Form, provided in Appendix F):

8.4.2.1 Summary of corrective action taken or to be taken (or, for triggering events identified in Part 8.2 where the permittee determines that corrective action is not necessary, the basis for this determination);

8.4.2.2 Notice of whether SWPPP modifications are required as a result of this discovery or corrective action;

8.4.2.3 Date corrective action initiated; and

8.4.2.4 Date corrective action completed or expected to be completed.

8.4.3 A permittee must submit this documentation in an annual report as required in Part 9.2 and retain a copy onsite with the SWPPP as required in Part 5.8.

8.5 Effect of Corrective Action.

If the event triggering the review is a permit violation (e.g., non-compliance with an effluent limit), it must be documented using the Noncompliance Notification Form (see http://dec.alaska.gov/water/compliance/permittee/). Furthermore, correcting it does not remove the original violation. Additionally, failing to take corrective action in accordance with this section is an additional permit violation.

8.6 Substantially Identical Outfalls.

If the event triggering corrective action is linked to an outfall that represents other substantially identical outfalls, the permittees review must assess the need for corrective action for each outfall represented by the outfall that triggered the review. Any necessary changes to control measures that affect these other outfalls must also be made before the next storm event if possible, or as soon as practicable following that storm event.

9. Reporting and Recordkeeping.

9.1 Reporting Monitoring Data to DEC.

All monitoring data collected pursuant to Parts 7.2 must be submitted to DEC using the NetDMR system (Part 9.8.1 E-Reporting Rule for DMR (Phase I)) (unless a waiver from electronic reporting has been granted, in which case you may submit a paper DMR form) no later than the 15th day of the following month after the permittee has received the complete laboratory results for all monitored outfalls for the reporting period. If a waiver from electronic reporting has been granted, paper reporting forms (DMR as provided in Appendix F) must be submitted by the deadline to the appropriate address identified in Part 9.6.

For benchmark monitoring, note that the permittee is required to submit sampling results to DEC no later than the 15th day of the following month after receiving all laboratory results for each quarter that are required to collect benchmark samples, in accordance with Part 7.2.1.2. If a permittee collects multiple samples in a single quarter (e.g., due to adverse weather conditions, climates with irregular storm water runoff, or areas subject to snow), they are required to submit all sampling results to DEC no

later than the 15th day of the following month after receiving all the laboratory results. If no discharge occurs during the benchmark monitoring period, the permittee must still report no discharge for this monitoring period.

9.2 Annual Report.

A permittee must submit an annual report to DEC that includes the findings from their Part 6.3 comprehensive site inspection and any corrective action documentation as required in Part 8.4. If corrective action is not yet completed at the time of submission of this annual report, the permittee must describe the status of any outstanding corrective action(s). In addition to the information required in Parts 8.4 (Corrective Action Report) and 6.3.2 (Comprehensive Site Inspection Documentation), the permittee must include the following information with their annual report:

- Facility name;
- APDES permit tracking number;
- Facility physical address; and
- Contact person name, title, and phone number.

DEC requires the permittee submit this report using the Annual Report provided as Appendix F. The Annual Report may be submited electronically through the DEC Online Application System (OASys) located at http://www.dec.alaska.gov/water/oasys/index.html. By February 15th of the year following the reporting year, the permittee must submit the annual report to DEC to the address identified in Part 9.6 or via OASys.

9.3 Noncompliance Notification for Numeric Effluent Limits.

If follow-up monitoring pursuant to Part 7.2.2.3 exceeds a numeric effluent limit, the permittee must submit a Noncompliance Notification Form (see http://dec.alaska.gov/water/compliance/permittee/) to DEC no later than the 15th day of the following month after they have received all their lab results. The permittees report must include the following:

- APDES permit tracking number;
- Facility name, physical address and location;
- Name of receiving water;
- Monitoring data from this and the preceding monitoring event(s);
- An explanation of the situation; what the permittee has done and intend to do (should their corrective actions not yet be complete) to correct the violation; and
- An appropriate contact name and phone number.

9.4 Additional Reporting.

9.4.1 A permittee is subject to the standard permit reporting provisions of Appendix A, Subsection 3.0.

9.4.2 Where applicable, the permittee must submit, and DEC must receive, the following reports at the appropriate address in Part 9.6. If the facility discharges through an MS4, the permittee must also submit these reports to the MS4 operator (identified pursuant to Part 5.2.3).

9.4.2.1 24-hour reporting (see Appendix A, Subsection 3.4) - A permittee must report any noncompliance which may endanger health or the environment. Any information must be provided orally within 24 hours from the time the permittee becomes aware of the circumstances;

9.4.2.2 Five (5)-day follow-up reporting to the 24 hour reporting (see Appendix A, Subsection 3.4) - A written submission must also be provided within five days of the time the permittee becomes aware of the circumstances;

9.4.2.3 Reportable quantity spills (see Part 4.2.4) - A permittee must provide notification, as required under Part 4.2.4, as soon as they have knowledge of a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity.

9.4.3 Where applicable, the permittee must submit, and DEC must receive, the following reports at the appropriate address in Part 9.6:

9.4.3.1 Planned changes (see Appendix A, Subsection 2.1) – A Permittee must give notice to DEC as soon as possible of any planned physical alterations or additions to the permitted facility that qualify the facility as a new source or that could significantly change the nature or significantly increase the quantity of pollutants discharged;

9.4.3.2 Anticipated noncompliance (see Appendix A, Subsection 2.2) – A Permittee must give advance notice to DEC of any planned changes in the permitted facility or activity which they anticipate will result in noncompliance with permit requirements;

9.4.3.3 Transfer of ownership and/or operation – The new permittee must submit a complete and accurate NOI in accordance with the requirements of Appendix F of this permit and by the deadlines specified in Table 2-1;

9.4.3.4 Compliance schedules (see Appendix A, Subsection 2.4) – Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit must be submitted no later than 14 days following each schedule date;

9.4.3.5 Other noncompliance (see Appendix A, Subsection 3.5) - A permittee must report all instances of noncompliance not reported in their monitoring report (pursuant to Part 9.1), compliance schedule report, or 24-hour report at the time monitoring reports are submitted; and

9.4.3.6 Other information (see Appendix A, Subsection 2.5) – A permittee must promptly submit facts or information if they become aware that they failed to submit relevant facts in their NOI, or that they submitted incorrect information in their NOI or in any report.

9.5 Recordkeeping.

A permittee must retain copies of their SWPPP (including any modifications made during the term of this permit), additional documentation requirements pursuant to Part 5.8 (including documentation related to corrective actions taken pursuant to Part 5), all reports and certifications required by this permit, monitoring data, and records of all data used to complete the NOI to be covered by this permit, for a period of at least 3 years from the date that the permittees coverage under this permit expires or is terminated.

9.6 Addresses for Reports.

Notice of Intent, Notice of Intent modification, Notice of Termination, No Exposure Certificate, and SWPPP's should be submitted using DEC's eNOI system (http://dec.alaska.gov/water/wastewater/stormwater/apdesenoi/) or sent to the Permitting Program address in Appendix A, Part 1.1.1.

Paper copies of any reports required in Parts 7 through 9, not otherwise submitted electronically via DEC's eNOI system (http://dec.alaska.gov/water/wastewater/stormwater/apdesenoi/) must be sent to the Compliance and Enforcement Program address in Appendix A, Part 1.1.2.

9.7 Request for Submittal of Records.

The Department may request copies of all or a portion of the information collected and maintained in the SWPPP. A permittee must provide a response to written request for records to the Department within thirty (30) calendar days of receipt of a written request.

9.8 Electronic Reporting (E-Reporting) Rule

9.8.1 E-Reporting Rule for DMR (Phase I)

The Permittee must submit DMR data electronically through Network Discharge Monitoring Report (NetDMR) per Phase I of the E-Reporting Rule (40 CFR §127) upon the effective date of the Permit. Authorized persons may access permit information by logging into the NetDMR Portal (cdxnodengn.epa.gov/oeca-netdmr-web/action/login). DMRs submitted in compliance with the E-Reporting Rule are not required to be submitted as described in Appendix – A-Standard Conditions unless requested or approved by the Department. Any DMR data required by the Permit that cannot be reported in a NetDMR field (e.g., mixing zone receiving water data, etc.), shall be included as an attachment to the NetDMR submittal. DEC has established a website at dec.alaska.gov/water/compliance/electronic-reporting-rule/ that contains general information about this new reporting format. Training materials and webinars for NetDMR can be found at netdmr.zendesk.com/home/.

9.8.2 E-Reporting Rule for Other Reports (Phase II).

Phase II of the E-Reporting rule will integrate electronic reporting for all other reports required by the Permit (e.g., Annual Reports and Certifications) and implementation is expected to begin December 2020. Permittees should monitor DEC's E-Reporting Information website (dec.alaska.gov/water/compliance/electronic-reporting-rule) for updates on Phase II of the E-Reporting Rule and will be notified when they must begin submitting all other reports electronically. Until such time, other reports required by the Permit may be submitted in accordance with Appendix A – Standard Conditions.

9.9 Standard Conditions Applicable to Recording and Reporting

9.9.1 The permittee must comply with the following recording and reporting requirements, as described in Appendix A, Standard Conditions unless specified in the body of the permit:

9.9.1.1 Retention of Records, Part 1.11.2;

9.9.1.2 Records Contents, Part 1.11.3;

9.9.1.3 Special Reporting Obligations, Part 2.0; and

9.9.1.4 Monitoring, Recording, and Reporting Requirements, Part 3.0.

10. Terminating Coverage.

10.1 Submitting a Notice of Termination (NOT).

10.1.1 To terminate permit coverage, a permittee must submit a complete and accurate NOT (see Appendix F) to the Permitting Program address listed in Part 9.6. *(If a permittee submits a NOT without meeting one or more of the conditions identified in Part 10.1.2, then a permitttees NOT is not valid.)* The permittee is responsible for meeting the terms of this permit until their authorization is terminated.

10.1.2 A permittee must submit a NOT within 30 calendar days after one or more of the following conditions have been met:

10.1.2.1 A new owner or operator has taken over responsibility for the facility;

10.1.2.2 The permittee has ceased operations at the facility, there are not or no longer will be discharges of storm water associated with industrial activity from the facility, and has already implemented necessary sediment and erosion controls as required by Part 4.2.5;

10.1.2.3 The permittee is a Sector G, H, or J facility and has met the applicable termination requirements; or

10.1.2.4 The permittee has obtained coverage under an individual or alternative general permit for all discharges required to be covered by an APDES permit, unless DEC has required that they obtain such coverage under authority of Part 2.8.1, in which case coverage under this permit will terminate automatically.

10.1.3 All required reports (including DMR if applicable) and certifications have been submitted to DEC.

10.1.4 Termination is effective upon receiving written notification from the Department.

11. Sector-Specific Requirements for Industrial Activity.

11. Subpart A – Sector A – Timber Products.

A permittee must comply with Part 11 sector-specific requirements associated with their primary industrial activity and any co-located industrial activities, as defined in Appendix C. The sector-specific requirements apply to those areas of the permittees facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

11.A.1 Covered Storm Water Discharges.

The requirements in Subpart A apply to storm water discharges associated with industrial activity from Timber Products facilities as identified by the SIC Codes specified under Sector A in Table D-1 of Appendix D of the permit.

11.A.2 Limitation on Coverage.

11.A.2.1 *Prohibition of Discharges.* (See also Part 1.2.4) Not covered by this permit: storm water discharges from areas where there may be contact with the chemical formulations sprayed to provide surface protection. These discharges must be covered by a separate APDES permit.

11.A.2.2 *Authorized Non-Storm Water Discharges.* (See also Part 1.2.3) Also authorized by this permit, provided the non-storm water component of the discharge is in compliance with the requirements in Part 4.2 (Non-Numeric Effluent Limits): discharges from the spray down of lumber and wood product storage yards where no chemical additives are used in the spray-down waters and no chemicals are applied to the wood during storage.

11.A.3 Additional Technology-Based Effluent Limits.

11.A.3.1 *Good Housekeeping.* (See also Part 4.2.2) In areas where storage, loading and unloading, and material handling occur, perform good housekeeping to limit the discharge of wood debris, minimize the leachate generated from decaying wood materials, and minimize the generation of dust.

11.A.4 Additional SWPPP Requirements.

11.A.4.1 *Drainage Area Site Map.* (See also Part 5.2.3) The permittee must document in their SWPPP where any of the following may be exposed to precipitation or surface runoff: processing areas, treatment chemical storage areas, treated wood and residue storage areas, wet decking areas, dry decking areas, untreated wood and residue storage areas, and treatment equipment storage areas.

11.A.4.2 Inventory of Exposed Materials. (See also Part 5.2.4.2) Document in the SWPPP areas where contaminated soils, treatment equipment, and stored materials still remain and the management practices employed to minimize the contact of these materials with storm water runoff if the facility has used chlorophenolic, creosote, or chromium-copper-arsenic formulations for wood surface protection or preserving

11.A.4.3 Description of Storm Water Management Controls. (See also Part 5.2.5) Document measures implemented to address the following activities and sources: log, lumber, and wood product storage areas; residue storage areas; loading and unloading areas; material handling areas; chemical storage areas; and equipment and vehicle maintenance, storage, and repair areas. If the permittees facility performs wood surface protection and preservation activities, address the specific control measures, including any BMPs, for these activities.

11.A.5 Additional Inspection Requirements.

See also Part 6.1. If the permittees facility performs wood surface protection and preservation activities, inspect processing areas, transport areas, and treated wood storage areas monthly to assess the usefulness of practices to minimize the deposit of treatment chemicals on unprotected soils and in areas that will come in contact with storm water discharges.

11.A.6 Sector-Specific Benchmarks.

Table 11.A.6-1 identifies benchmarks that apply to the specific subsectors of Sector A. These benchmarks apply to both the permittees primary industrial activity and any co-located industrial activities.

(Table 11.A.6-1: Sector – Specific Benchmarks – Sector A located on following page.)

Table 11.A.6-1: Sector – Specific Benchmarks – Sector A

Subsector (Permittees may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector A1. General Sawmills and Planing Mills (SIC 2421)	Chemical Oxygen Demand (COD)	120.0 mg/L
	Total Suspended Solids (TSS)	100 mg/L
	Total Zinc (saltwater)[1] Total Zinc (freshwater)[2]	0.09 mg/L Hardness Dependent
Subsector A2. Wood Preserving (SIC 2491)	Total Arsenic (saltwater)[1] Total Arsenic (freshwater)[2]	0.069 mg/L 0.15 mg/L
	Total Copper (saltwater)[1] Total Copper (freshwater)[2]	0.0048 mg/L Hardness Dependent
Subsector A3. Log Storage and Handling (SIC 2411)	Total Suspended Solids (TSS)	100 mg/L
Subsector A4. Hardwood Dimension and Flooring Mills; Special Products Sawmills, not elsewhere classified; Millwork, Veneer, Plywood, and Structural Wood; Wood Pallets and Skids; Wood Containers, not elsewhere classified; Wood Buildings and Mobile Homes; Reconstituted Wood Products; and Wood Products Facilities not elsewhere classified (SIC 2426, 2429, 2431-2439 (except 2434), 2441, 2448, 2449, 2451, 2452, 2493, and 2499)	Chemical Oxygen Demand (COD)	120.0 mg/L
	Total Suspended Solids (TSS)	100.0 mg/L

Note:

1. Saltwater benchmark values apply to storm water discharges into saline waters where indicated.
2. The freshwater benchmark values of some metals are dependent on water hardness. For these parameters, permittees must determine the hardness of the receiving water (see Appendix E, "Calculating Hardness in Receiving Waters for Hardness Dependent Metals," for methodology), in accordance with Part 7.2.1.1, to identify the applicable 'hardness range' for determining their benchmark value applicable to their facility. The ranges occur in 25 mg/L increments. Hardness Dependent Benchmarks follow in the table below:

Water Hardness Range (mg/L)	Copper (mg/L)	Zinc (mg/L)
0 – < 25	0.0038	0.04
25 – < 50	0.0056	0.05
50 – < 75	0.0090	0.08
75 – < 100	0.0123	0.11
100 – < 125	0.0156	0.13
125 – < 150	0.0189	0.16
150 – < 175	0.0221	0.18
175 – < 200	0.0253	0.20
200 – < 225	0.0285	0.23
225 – < 250	0.0316	0.25
250+	0.0332	0.26

11.A.7 Effluent Limitations Based on Effluent Limitations Guidelines. (See also Part 7.2.2.1 of the permit.)

Table 11.A.7-1 identifies effluent limits that apply to the industrial activities described below. Compliance with these effluent limits is to be determined based on discharges from these industrial activities independent of commingling with any other wastestreams that may be covered under this permit.

Table 11.A.7-1: **Effluent Limitations Based on Effluent Limitations Guidelines**[1]

Industrial Activity	Parameter	Effluent Limit
Discharges resulting from spray down or intentional wetting of logs at wet deck storage areas	pH	6.5 - 8.5 standard pH (s.u.)
	Debris (woody material such as bark, twigs, branches, heartwood, or sapwood)	No discharge of debris that will not pass through a 2.54-cm (1-in.) diameter round opening

Note:
1. Monitor annually.

11. Subpart B – Sector B – Paper and Allied Products.

A permittee must comply with Part 11 sector-specific requirements associated with their primary industrial activity and any co-located industrial activities, as defined in Appendix C. The sector-specific requirements apply to those areas of the permittees facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

11.B.1 Covered Storm Water Discharges.

The requirements in Subpart B apply to storm water discharges associated with industrial activity from Paper and Allied Products Manufacturing facilities, as identified by the SIC Codes specified under Sector B in Table D-1 of Appendix D of the permit.

11.B.2 Sector-Specific Benchmarks. (See also Part 7 of the permit.)

Table 11.B.2-1: Sector – Specific Benchmarks – Sector B

Subsector (Permittees may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector B1. Paperboard Mills (SIC Code 2631)	Chemical Oxygen Demand (COD)	120 mg/L

11. Subpart C – Sector C – Chemical and Allied Products Manufacturing, and Refining.

A permittee must comply with Part 11 sector-specific requirements associated with their primary industrial activity and any co-located industrial activities, as defined in Appendix C. The sector-specific requirements apply to those areas of the permittees facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

11.C.1 Covered Storm Water Discharges.

The requirements in Subpart C apply to storm water discharges associated with industrial activity from Chemical and Allied Products Manufacturing, and Refining facilities, as identified by the SIC Codes specified under Sector C in Table D-1 of Appendix D of the permit.

11.C.2 Limitations on Coverage.

11.C.2.1 Prohibition of Non-Storm Water Discharges. (See also Part 1.2.4) The following are not covered by this permit: non-storm water discharges containing inks, paints, or substances (hazardous, nonhazardous, etc.) resulting from an onsite spill, including materials collected in drip pans; washwater from material handling and processing areas; and washwater from drum, tank, or container rinsing and cleaning.

11.C.3 Sector-Specific Benchmarks.

Table 11.C.3-1 identifies benchmarks that apply to the specific subsectors of Sector C. These benchmarks apply to both the permittees primary industrial activity and any co-located industrial activities.

(Table 11.C.3-1: Sector – Specific Benchmarks – Sector C located on following page.)

Table 11.C.3-1: Sector – Specific Benchmarks – Sector C		
Subsector (Permittees may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector C1. Agricultural Chemicals (SIC 2873-2879)	Nitrate plus Nitrite Nitrogen	0.68 mg/L
	Total Lead (saltwater)[1] Total Lead (freshwater)[2]	0.21 mg/L Hardness Dependent
	Total Iron	1.0 mg/L
	Total Zinc (saltwater)[1] Total Zinc (freshwater)[2]	0.09 mg/L Hardness Dependent
	Phosphorus	2.0 mg/L
Subsector C2. Industrial Inorganic Chemicals (SIC 2812-2819)	Total Aluminum	0.75 mg/ L
	Total Iron	1.0 mg/L
	Nitrate plus Nitrite Nitrogen	0.68 mg/L
Subsector C3. Soaps, Detergents, Cosmetics, and Perfumes (SIC 2841-2844)	Nitrate plus Nitrite Nitrogen	0.68 mg/L
	Total Zinc (saltwater)[1] Total Zinc (freshwater)[2]	0.09 mg/L Hardness Dependent
Subsector C4. Plastics, Synthetics, and Resins (SIC 2821-2824)	Total Zinc (saltwater)[1] Total Zinc (freshwater)[2]	0.09 mg/L Hardness Dependent

Notes:

1. Saltwater benchmark values apply to storm water discharges into saline waters where indicated.
2. The freshwater benchmark values of some metals are dependent on water hardness. For these parameters, permittees must determine the hardness of the receiving water (see Appendix E, "Calculating Hardness in Receiving Waters for Hardness Dependent Metals," for methodology), in accordance with Part 7.2.1.1, to identify the applicable 'hardness range' for determining their benchmark value applicable to their facility. The ranges occur in 25 mg/L increments. Hardness Dependent Benchmarks follow in the table below:

Water Hardness Range (mg/L)	Lead (mg/L)	Zinc (mg/L)
0 – < 25	0.014	0.04
25 – < 50	0.023	0.05
50 – < 75	0.045	0.08
75 – < 100	0.069	0.11
100 – < 125	0.095	0.13
125 – < 150	0.122	0.16
150 – < 175	0.151	0.18
175 – < 200	0.182	0.20
200 – < 225	0.213	0.23
225 – < 250	0.246	0.25
250+	0.262	0.26

11.C.4 Effluent Limitations Based on Effluent Limitations Guidelines. (See also Part 7.2.2.1 of the permit.)

Table 11.C.4-1 identifies effluent limits that apply to the industrial activities described below. Compliance with these effluent limits is to be determined based on discharges from these industrial activities independent of commingling with any other wastestreams that may be covered under this permit.

Table 11.C.4-1: **Effluent Limitations Based on Effluent Limitations Guidelines**[1]

Industrial Activity	Parameter	Effluent Limit
Runoff from phosphate fertilizer manufacturing facilities that comes into contact with any raw materials, finished product, by-products or waste products (SIC 2874)	Total Phosphorus (as P)	105.0 mg/L, daily maximum
		35 mg/L, 30-day avg.
	Fluoride	75.0 mg/L, daily maximum
		25.0 mg/L, 30-day avg.

1 Monitor annually.

11. Subpart D – Sector D – Asphalt Paving and Roofing Materials and Lubricant Manufacturing.

A permittee must comply with Part 11 sector-specific requirements associated with their primary industrial activity and any co-located industrial activities, as defined in Appendix C. The sector-specific requirements apply to those areas of the permittees facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

11.D.1 Covered Storm Water Discharges.

The requirements in Subpart D apply to storm water discharges associated with industrial activity from Asphalt Paving and Roofing Materials and Lubricant Manufacturing facilities, as identified by the SIC Codes specified under Sector D in Table D-1 of Appendix D of the permit.

11.D.2 Limitations on Coverage.

The following storm water discharges associated with industrial activity are not authorized by this permit (See also Part 1.2.4)

11.D.2.1 *Discharges from petroleum refining facilities*, including those that manufacture asphalt or asphalt products, that are subject to nationally established effluent limitation guidelines found in 40 CFR Part 419 (Petroleum Refining); or

11.D.2.2 *Discharges from oil recycling facilities;* or

11.D.2.3 *Discharges associated with fats and oils rendering.*

11.D.3 Sector-Specific Benchmarks.

Table 11.D.3-1 identifies benchmarks that apply to the specific subsectors of Sector D. These benchmarks apply to both the permittees primary industrial activity and any co-located industrial activities, which describe their facility activities.

Table 11.D.3-1: Sector – Specific Benchmarks – Sector D

Subsector	Parameter	Benchmark Monitoring Concentration
Subsector D1. Asphalt Paving and Roofing Materials (SIC 2951, 2952)	Total Suspended Solids (TSS)	100 mg/L

11.D.4 Effluent Limitations Based on Effluent Limitations Guidelines. (See also Part 7.2.2.1 of the permit.)

Table 11.D.4-1 identifies effluent limits that apply to the industrial activities described below. Compliance with these effluent limits is to be determined based on discharges from these industrial activities independent of commingling with any other wastestreams that may be covered under this permit.

Table 11.D.4-1:**Effluent Limitations Based on Effluent Limitations Guidelines**[1]

Industrial Activity	Parameter	Effluent Limit
Discharges from asphalt emulsion facilities.	Total Suspended Solids (TSS)	23.0 mg/L, daily maximum 15.0 mg/L, 30-day avg.
	pH	6.5 - 8.5 s.u.
	Oil and Grease	15.0 mg/L, daily maximum
		10 mg/L, 30-day avg.

1. Monitor annually.

11. Subpart E – Sector E – Glass, Clay, Cement, Concrete, and Gypsum Products.

A permittee must comply with Part 11 sector-specific requirements associated with their primary industrial activity and any co-located industrial activities, as defined in Appendix C. The sector-specific requirements apply to those areas of the permittees facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

11.E.1 Covered Storm Water Discharges.

The requirements in Subpart E apply to storm water discharges associated with industrial activity from Glass, Clay, Cement, Concrete, and Gypsum Products facilities, as identified by the SIC Codes specified under Sector E in Table D-1 of Appendix D of the permit.

11.E.2 Additional Technology-Based Effluent Limits.

11.E.2.1 *Good Housekeeping Measures.* (See also Part 4.2.2) With good housekeeping, prevent or minimize the discharge of spilled cement, aggregate (including sand or gravel), kiln dust, fly ash, settled dust, or other significant material in storm water from paved portions of the site that are exposed to storm water. Sweep regularly or use other equivalent measures to minimize the presence of these materials. Indicate in the SWPPP the frequency of sweeping or equivalent measures. Determine the frequency based on the amount of industrial activity occurring in the area and the frequency of precipitation, but it must be performed at least once a week if cement, aggregate, kiln dust, fly ash, or settled dust are being handled or processed. Permittee must also prevent the exposure of fine granular solids (cement, fly ash, kiln dust, etc.) to storm water, where practicable, by storing these materials in enclosed silos, hoppers, buildings, or under other covering.

11.E.3 Additional SWPPP Requirements.

11.E.3.1 *Drainage Area Site Map.* (See also Part 5.2.3) Document in the SWPPP the locations of the following, as applicable: bag house or other dust control device; recycle/sedimentation pond, clarifier, or other device used for the treatment of process wastewater; and the areas that drain to the treatment device.

11.E.3.2 *Certification.* (See also Part 5.2.4.4) For facilities producing ready-mix concrete, concrete block, brick, or similar products, include in the non-storm water discharge certification a description of measures that ensure that process waste waters resulting from washing trucks, mixers, transport buckets, forms, or other equipment are discharged in accordance with APDES requirements or are recycled.

11.E.4 Sector-Specific Benchmarks.

Table 11.E.4-1 identifies benchmarks that apply to the specific subsectors of Sector E. These benchmarks apply to both the permittees primary industrial activity and any co-located industrial activities, which describe their facility activities.

Table 11.E.4-1: Sector – Specific Benchmarks – Sector E

Subsector (Permittees may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Cutoff Concentration
Subsector E1. Clay Product Manufacturers (SIC 3251-3259, 3261-3269)	Total Aluminum	0.75 mg/L
Subsector E2. Concrete and Gypsum Product Manufacturers (SIC 3271-3275)	Total Suspended Solids (TSS)	100 mg/L
	Total Iron	1.0 mg/L

11.E.5 Effluent Limitations Based on Effluent Limitations Guidelines. (See also Part 7.2.2.1 of the permit.)

Table 11.E.5-1 identifies effluent limits that apply to the industrial activities described below. Compliance with these limits is to be determined based on discharges from these industrial activities independent of commingling with any other wastestreams that may be covered under this permit.

Table 11.E.5-1:Effluent Limitations Based on Effluent Limitations Guidelines[1]

Industrial Activity	Parameter	Effluent Limit
Discharges from material storage piles at cement manufacturing facilities	Total Suspended Solids (TSS)	50 mg/L, daily maximum
	pH	6.5 - 8.5 s.u.

1. Monitor annually.

11. Subpart F – Sector F – Primary Metals.

A permittee must comply with Part 11 sector-specific requirements associated with their primary industrial activity and any co-located industrial activities, as defined in Appendix C. The sector-specific requirements apply to those areas of the permittees facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

11.F.1 Covered Storm Water Discharges.

The requirements in Subpart F apply to storm water discharges associated with industrial activity from Primary Metals facilities, as identified by the SIC Codes specified under Sector F in Table D-1 of Appendix D of the permit.

11.F.2 Additional Technology-Based Effluent Limits.

11.F.2.1 *Good Housekeeping Measures.* (See also Part 4.2.2) As part of the permittees good housekeeping program, include a cleaning and maintenance program for all impervious areas of the facility where particulate matter, dust, or debris may accumulate, especially areas where material loading and unloading, storage, handling, and processing occur; and, where practicable, the paving of areas where vehicle traffic or material storage occur but where vegetative or other stabilization methods are not practicable (institute a sweeping program in these areas too). For unstabilized areas where sweeping is not practicable, use storm water management devices such as sediment traps, vegetative buffer strips, filter fabric fence, sediment filtering boom, gravel outlet protection, or other equivalent measures that effectively trap or remove sediment and debris.

11.F.3 Additional SWPPP Requirements.

11.F.3.1 *Drainage Area Site Map.* (See also Part 5.2.3) Identify in the SWPPP where any of the following activities may be exposed to precipitation or surface runoff: storage or disposal of wastes such as spent solvents and baths, sand, slag and dross; liquid storage tanks and drums; processing areas including pollution control equipment (e.g., baghouses); and storage areas of raw material such as coal, coke, scrap, sand, fluxes, refractories, or metal in any form. In addition, indicate where an accumulation of significant amounts of particulate matter could occur from such sources as furnace or oven emissions, pollution control devices, losses from coal and coke handling operations, etc., and could result in a discharge of pollutants to waters of the United States.

11.F.3.2 *Inventory of Exposed Material.* (See also Part 5.2.4.2) Include in the inventory of materials handled at the site that potentially may be exposed to precipitation or runoff, areas where deposition of particulate matter from process air emissions or losses during material-handling activities are possible

11.F.4 Additional Inspection Requirements. (See also Part 6.1) As part of conducting the permittees quarterly routine facility inspections (Part 6.1), address all potential sources of pollutants, including (if applicable) air pollution control equipment (e.g., baghouses, electrostatic precipitators, scrubbers, and cyclones), for any signs of degradation (e.g., leaks, corrosion, or improper operation) that could limit their efficiency and lead to excessive emissions. Monitor air flow at inlets and outlets (or use equivalent measures) to check for leaks (e.g., particulate deposition) or blockage in ducts. Also inspect all process and material handling equipment (e.g., conveyors, cranes, and vehicles) for leaks, drips, or the potential loss of material; and material storage areas (e.g., piles, bins, or hoppers for storing coke, coal, scrap, or slag, as well as chemicals stored in tanks and drums) for signs of material losses due to wind or storm water runoff.

11.F.5 Sector-Specific Benchmarks. (See also Part 7 of the permit.)

(Table 11.F.5-1: Sector – Specific Benchmarks –Sector F located on following page.)

Table 11.F.5-1: Sector – Specific Benchmarks –Sector F		
Subsector (Permittees may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector F1. Steel Works, Blast Furnaces, and Rolling and Finishing Mills (SIC 3312-3317)	Total Aluminum	0.75 mg/L
	Total Zinc (saltwater)[1] Total Zinc (freshwater)[2]	0.09 mg/L Hardness Dependent
Subsector F2. Iron and Steel Foundries (SIC 3321-3325)	Total Aluminum	0.75 mg/L
	Total Suspended Solids (TSS)	100 mg/L
	Total Copper (saltwater)[1] Total Copper (freshwater)[2]	0.0048 Mg/L Hardness Dependent
	Total Iron	1.0 mg/L
	Total Zinc (saltwater)[1] Total Zinc (freshwater)[2]	0.09 mg/L Hardness Dependent
Subsector F3. Rolling, Drawing, and Extruding of Nonferrous Metals (SIC 3351-3357)	Total Copper (saltwater)[1] Total Copper (freshwater)[2]	0.0048 mg/L Hardness Dependent
	Total Zinc (saltwater)[1] Total Zinc (freshwater)[2]	0.09 mg/L Hardness Dependent
Subsector F4. Nonferrous Foundries (SIC 3363-3369)	Total Copper (saltwater)[1] Total Copper (freshwater)[2]	0.0048 mg/L Hardness Dependent
	Total Zinc (saltwater)[1] Total Zinc (freshwater)[2]	0.09 mg/L Hardness Dependent

Notes:

1. Saltwater benchmark values apply to storm water discharges into saline waters where indicated.
2. The freshwater benchmark values of some metals are dependent on water hardness. For these parameters, permittees must determine the hardness of the receiving water (see Appendix E, "Calculating Hardness in Receiving Waters for Hardness Dependent Metals," for methodology), in accordance with Part 7.2.1.1, to identify the applicable 'hardness range' for determining their benchmark value applicable to their facility. The ranges occur in 25 mg/L increments. Hardness Dependent Benchmarks follow in the table below:

Water Hardness Range (mg/L)	Copper (mg/L)	Zinc (mg/L)
0 – < 25	0.0038	0.04
25 – < 50	0.0056	0.05
50 – < 75	0.0090	0.08
75 – < 100	0.0123	0.11
100 – < 125	0.0156	0.13
125 – < 150	0.0189	0.16
150 – < 175	0.0221	0.18
175 – < 200	0.0253	0.20
200 – < 225	0.0285	0.23
225 – < 250	0.0316	0.25
250+	0.0332	0.26

11. Subpart G – Sector G – Metal Mining.

A permittee must comply with Part 11 sector-specific requirements associated with their primary industrial activity and any co-located industrial activities, as defined in Appendix C. The sector-specific requirements apply to those areas of the permittees facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

11.G.1 Covered Storm Water Discharges.

The requirements in Subpart G apply to storm water discharges associated with industrial activity from Metal Mining facilities, including mines abandoned on Federal lands, as identified by the SIC Codes specified under Sector G in Table D-1 of Appendix D. Coverage is required for metal mining facilities that discharge storm water contaminated by contact with, or that has come into contact with, any overburden, raw material, intermediate product, finished product, byproduct, or waste product located on the site of the operation.

11.G.1.1 Covered Discharges from Inactive Facilities. All storm water discharges.

11.G.1.2 Covered Discharges from Active and Temporarily Inactive Facilities. Only the storm water discharges from the following areas are covered:

- Waste rock and overburden piles if composed entirely of storm water and not combining with mine drainage;
- Topsoil piles;
- Offsite haul and access roads;
- Onsite haul and access roads constructed of waste rock, overburden, or spent ore if composed entirely of storm water and not combining with mine drainage;
- Onsite haul and access roads not constructed of waste rock, overburden, or spent ore except if mine drainage is used for dust control;
- Runoff from tailings dams or dikes when not constructed of waste rock or tailings and no process fluids are present;
- Runoff from tailings dams or dikes when constructed of waste rock or tailings and no process fluids are present, if composed entirely of storm water and not combining with mine drainage;
- Concentration building if no contact with material piles;
- Mill site if no contact with material piles;

- Office or administrative building and housing if mixed with storm water from industrial area;
- Chemical storage area;
- Docking facility if no excessive contact with waste product that would otherwise constitute mine drainage;
- Explosive storage;
- Fuel storage;
- Vehicle and equipment maintenance area and building;
- Parking areas if mixed with industrial areas;
- Power plant;
- Truck wash areas if no excessive contact with waste product that would otherwise constitute mine drainage;
- Unreclaimed, disturbed areas outside of active mining area;
- Reclaimed areas released from reclamation requirements prior to December 17, 1990; and
- Partially or inadequately reclaimed areas or areas not released from reclamation requirements.

11.G.1.3 Covered Discharges from Exploration and Construction of Metal Mining and/or Ore Dressing Facilities. All storm water discharges.

11.G.1.4 Covered Discharges from Facilities Undergoing Reclamation. All storm water discharges.

11.G.2 Limitations on Coverage.

11.G.2.1 Prohibition of Storm Water Discharges. Storm water discharges not authorized by this permit include discharges from active metal mining facilities that are subject to effluent limitation guidelines for the Ore Mining and Dressing Point Source Category (40 CFR Part 440).

Note: Storm water runoff from these sources are subject to 40 CFR Part 440 if they are mixed with other discharges subject to Part 440. In this case, they are not eligible for coverage under this permit.

Discharges from overburden/waste rock and overburden/waste rock-related areas are not subject to 40 CFR Part 440 unless they:

(1) drain naturally (or are intentionally diverted) to a point source; and

(2) combine with "mine drainage" that is otherwise regulated under the Part 440 regulations.

For such sources, coverage under this permit would be available if the discharge composed entirely of storm water does not combine with other sources of mine drainage that are not subject to 40 CFR Part 440, and meets the other eligibility criteria contained in Part 1.2 of the permit.

Permit applicants bear the initial responsibility for determining if they are eligible for coverage under this permit, or must seek coverage under another APDES permit. DEC recommends that permit applicants contact the DEC for assistance to determine the nature and scope of the "active mining area" on a mine-by-mine basis, as well as to determine the appropriate permitting mechanism for authorizing such discharges.

11.G.2.2 Prohibition of Non-Storm Water Discharges. Not authorized by this permit: adit drainage, and contaminated springs or seeps discharging from waste rock dumps that do not directly result from precipitation events (see also the standard Limitations on Coverage in Part 1.2.4).

11.G.3 Definitions.

The following definitions are not intended to supersede the definitions of active and inactive mining facilities established by 40 CFR 122.26(b)(14)(iii).

11.G.3.1 Mining Operation - Consists of the active and temporarily inactive phases, and the reclamation phase, but excludes the exploration and construction phases.

11.G.3.2 Exploration Phase - Entails exploration and land disturbance activities to determine the financial viability of a site. The exploration phase is not considered part of “mining operations.”

11.G.3.3 Construction Phase - Includes the building of site access roads, facilities, and removal of overburden and waste rock to expose mineable minerals. The construction phase is not considered part of “mining operations.”

11.G.3.4 Active Phase - Activities including the extraction, removal or recovery of metal ore. For surface mines, this definition does not include any land where grading has returned the earth to a desired contour and reclamation has begun. This definition is derived from the definition of “active mining area” found at 40 CFR 440.132(a). The active phase is considered part of “mining operations.”

11.G.3.5 *Reclamation Phase* - Activities undertaken, in compliance with applicable mined land reclamation requirements, following the cessation of the "active phase", intended to return the land to an appropriate post-mining land use in order to meet applicable Federal and State reclamation requirements. The reclamation phase is considered part of "mining operations."

11.G.3.6 *Active Metal Mining Facility* - A place where work or other activity related to the extraction, removal, or recovery of metal ore is being conducted. For surface mines, this definition does not include any land where grading has returned the earth to a desired contour and reclamation has begun. This definition is derived from the definition of "active mining area" found at 40 CFR 440.132(a).

11.G.3.7 *Inactive Metal Mining Facility* - A site or portion of a site where metal mining and/or milling occurred in the past but is not an active facility as defined above, and where the inactive portion is not covered by an active mining permit issued by the applicable State or Federal agency. An inactive metal mining facility has an identifiable owner / operator. Sites where mining claims are being maintained prior to disturbances associated with the extraction, beneficiation, or processing of mined materials and sites where minimal activities are undertaken for the sole purpose of maintaining a mining claim are not considered either active or inactive mining facilities and do not require an APDES industrial storm water permit.

11.G.3.8 *Temporarily Inactive Metal Mining Facility* - A site or portion of a site where metal mining and/or milling occurred in the past but currently are not being actively undertaken, and the facility is covered by an active mining permit issued by the applicable State or Federal agency.

11.G.4 Technology-Based Effluent Limits for Clearing, Grading, and Excavation Activities.

Clearing, grading, and excavation activities being conducted as part of the exploration and construction phase of mining activities are covered under this permit.

11.G.4.1 *Erosion Control Measures.* A permittee must comply with the erosion control measures in this Part to minimize soil exposure on the site during construction.

11.G.4.1.1 *Delineation of Site.* A permittee must generally delineate (e.g., with flagging, stakes, signs, silt fence, etc.,) the location of specific areas that will be left undisturbed such as trees, boundaries of sensitive areas, or buffers established under Part 11.G.4.1.3.

11.G.4.1.2 *Minimize the Amount of Soil Exposed during Construction Activity.* A permittee must include the following considerations in the selection of control measures and the sequence of project construction as they apply to the project site:

- Preserve areas of native topsoil on the site, unless infeasible; and

- Sequence or phase construction activities to minimize the extent and duration of exposed soils to the extent practicable.

11.G.4.1.3 Maintain Natural Buffer Areas.

The permittee must maintain natural buffer areas at stream crossings and around the edge of any waters of the U.S. that are located within or immediately adjacent to the property where the construction activity will take place in accordance with the following:

- The buffer must be a minimum of twenty-five (25) feet wide, unless infeasible based on site dimensions, or the width as required by local ordinance.
- Exceptions are allowed for water dependent activities, specific water access activities, or necessary water crossings.
- A permittee should, to the extent practicable, use perimeter controls adjacent to buffers, and direct storm water sheet flow to buffer areas to increase sediment removal and maximize storm water infiltration, unless infeasible.

11.G.4.1.4 Control Storm Water Discharges and Flow Rates. A permittee must include the following control measures to handle storm water and total storm water volume discharges as they apply to the site:

- Divert storm water around the site so that it does not flow onto the project site and cause erosion of exposed soils;
- Slow down or contain storm water that may collect and concentrate within a site and cause erosion of exposed soils;
- Avoid placement of structural control measures in active floodplains to the degree technologically and economically practicable and achievable;
- Place velocity dissipation devices (e.g., check dams, sediment traps, or riprap) along the length of any conveyance channel to provide a non-erosive flow velocity. Also place velocity dissipation devices where discharges from the conveyance channel or structure join a water course to prevent erosion and to protect the channel embankment, outlet, adjacent stream bank slopes, and downstream waters; and
- Install permanent storm water management controls, if present at a site and where practical, so that they must be functional prior to construction of site improvements (e.g., impervious surfaces).

11.G.4.1.5 Protect Steep Slopes. A permittee must include the following considerations in the selection of control measures as they apply to the project site:

- Design and construct cut-and-fill slopes in a manner that will minimize erosion. Applicable practices include, but are not limited to, reducing continuous length of slope with terracing and diversions, reducing slope steepness, and roughening slope surfaces (e.g., track walking);

- Divert concentrated flows of storm water away from and around the disturbed portion of the slope. Applicable practices include, but are not limited to interceptor dikes and swales, grass-lined channels, pipe slope drains, subsurface drains, check dams; and

- Stabilize exposed areas of the slope in accordance with Part 11.G.4.4.

11.G.4.2 Sediment Control Measures. Sediment control measures (e.g. sediment ponds, traps, filters, etc.) must be constructed as one of the first steps in grading. These control measures must be functional before other land disturbing activities take place. A permittee must install, establish and use any of the following control measures that apply to the project site.

11.G.4.2.1 Storm Drain Inlet Protection Meaures. A permittee must install appropriate protection measures (e.g. filter berms, perimeter controls, temporary diversion dikes, etc.) to minimize the discharge of sediment prior to entry into the inlet for storm drain inlets located on site or immediately downstream of the site. Inlet protection measures must be cleaned or removed and replaced when sediment has filled one-third of the available storage.

11.G.4.2.2 Water Body Protection Measures. A permittee must install appropriate protection measures (Part 11.G.4.1.4) to minimize the discharge of sediment prior to entry into the water body for water bodies located on site or immediately downstream of the site. Protection measures must be cleaned or removed and replaced when sediment has filled one-third of the available storage.

11.G.4.2.3 Down-Slope Sediment Controls. A permittee must establish and use down-slope sediment controls (e.g., silt fence, temporary diversion dike, etc.) for any portion of the down-slope and side-slope perimeter where storm water will be discharged from disturbed areas of the site.

11.G.4.2.4 Stabilized Construction Vehicle Access and Exit Points. A permittee must establish construction vehicle access and exit points which must be stabilized. Access and exit points should be limited to one route, if possible. If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize off-site impacts.

11.G.4.2.5 *Dust Generation and Track-Out from Vehicles.* A permittee must minimize the generation of dust through the application of water or other dust suppression techniques and prior to vehicle exit. A permittee must provide an effective way of minimizing off-site vehicle tracking of sediment from wheels to prevent track-out onto paved surfaces.

11.G.4.2.6 *Soil Stockpiles.* A permittee must stabilize or cover soil stockpiles, protect with sediment trapping measures, and where possible, locate soil stockpiles away from storm drain inlets, water bodies, and conveyance channels.

11.G.4.2.7 *Authorized Non-Storm Water Discharges.* A permittee must minimize any non-storm water authorized by this permit.

11.G.4.2.8 *Sediment Basins*, where applicable:

- For common drainage locations that serve an area with ten (10) or more acres disturbed at one time, a temporary (or permanent) sediment basin that provides storage for a calculated volume of runoff from the drainage area from a 2-year, 24-hour storm, or equivalent sediment control measures, must be installed, maintained, and used where practicable until final stabilization of the site. Where no such calculation has been performed, a temporary (or permanent) sediment basin providing 3,600 cubic feet of storage per acre drained, or equivalent sediment control measures, must be installed and used where practicable until final stabilization of the site. When computing the number of acres draining into a common location, it is not necessary to include flows from offsite areas and flows from on-site areas that are either undisturbed or have undergone final stabilization where such flows are diverted around both the disturbed area and the sediment basin. In determining whether installing a sediment basin is practicable, the permittee may consider factors such as site soils, slope, available area on-site, etc. In any event, the permittee must consider public safety, especially as it relates to children, as a design factor for the sediment basin, and alternative sediment control measures must be used where site limitations would preclude a safe design.

- For drainage locations which serve ten (10) or more disturbed acres at one time and where a temporary sediment basin or equivalent controls is not practicable, smaller sediment basins and/or sediment traps should be used. Silt fences, vegetative buffer strips, or equivalent sediment control measures are required for all down slope boundaries (and for those side slope boundaries deemed appropriate as dictated by individual site conditions).

- For drainage locations serving less than ten (10) acres, smaller sediment basins and/or sediment traps should be used. Silt fences, vegetative buffer strips, or equivalent sediment control measures are required for all down slope

boundaries (and for those side slope boundaries deemed appropriate as dictated by individual site conditions) of the construction area unless a sediment basin providing storage for a calculated volume of runoff from a 2-year, 24-hour storm event or 3,600 cubic feet of storage per acre drained is provided.

- When discharging from basins and impoundments, utilize outlet structures that withdraw water from the surface where practicable.
- Note: installing sediment basins in the presence of permafrost is challenging and might not be practicable in some instances because permafrost creates poor surface drainage that hinders the infiltration of runoff. Also, the excavation of permafrost in summer can trigger thawing and instability.

11.G.4.3 Dewatering.

11.G.4.3.1 If a construction activity includes excavation dewatering and has a discharge that could adversely impact a local drinking water well, an DEC-identified contaminated site, or a waters of the U.S., the permittee must review the DEC Excavation Dewatering General Permit (AKG002000, or most current version) for specific requirements the permittee may have to comply with in addition to the conditions of this permit.

11.G.4.3.2 A discharge from eligible dewatering activities, including discharges from dewatering of trenches and excavations are prohibited unless treated by appropriate control measures. Appropriate control measures include, but are not limited to, sediment basins or traps, dewatering tanks, weir tanks, or filtration systems designed to remove sediment.

11.G.4.4 Soil Stabilization.

11.G.4.4.1 Minimum Requirements for Soil Stabilization. A permittee must stabilize all disturbed areas of the site to minimize on-site erosion and sedimentation and the resulting discharge of pollutants according to the requirements of this Part. A permittee must ensure that existing vegetation is preserved wherever possible and that disturbed portions of the site are stabilized. Applicable stabilization control measures include, but are not limited to: temporary and permanent seeding, sodding, mulching, rolled erosion control product, compost blanket, soil application of polyacrylamide (PAM), the early application of gravel base on areas to be paved, and dust control. A permittee should avoid using impervious surfaces for stabilization. See the Alaska Plant Materials Center's A Revegetation Manual for Alaska at http://plants.alaska.gov for help in efforts to select appropriate seed mixes and some information on methods for revegetation. Also see the manual for coastal Alaska, Coastal Revegetation & Erosion Control Guide at http://plants.alaska.gov.

11.G.4.5 Treatment Chemicals. The use of treatment chemicals to reduce turbidity in a storm water discharge is allowed provided that all of the requirements of this Part are met.

11.G.4.5.1 Use of conventional sediment controls before and after the application of treatment chemicals. Chemicals may only be applied where storm water is treated upstream and is directed to a sediment control (e.g., sediment trap, sediment basin) before discharge.

11.G.4.5.2 Select appropriate treatment chemicals. Chemicals must be appropriately suited to the types of soils likely to be exposed during construction and present in the discharges being treated (i.e., the expected turbidity, pH, and flow rate of storm water flowing into the chemical treatment system or area, etc.)

11.G.4.5.3 Minimize discharge risk from stored chemicals. Store all treatment chemicals in leak-proof containers that are kept under storm-resistant cover and surrounded by secondary containment structures (e.g., spill berms, decks, spill containment pallets), with adequate spill kits available on-site to respond if the event of a discharge of treatment chemicals occurs.

11.G.4.5.4 Use chemicals in accordance with good engineering practices and specifications of the chemical provider/supplier, and with dosing specifications and sediment removal design specifications provided by the provider/supplier of the applicable chemicals, or document in your SWPPP specific departures from these specifications and how they reflect good engineering practice.

11.G.4.5.5 Application of treatment chemicals through the use of manufactured products (e.g., gel bars, gel logs, floc blocks, etc.) must be used in combination with adequate ditch check dams, sediment traps, sediment basins, or physical control measure designed to settle out chemically treated storm water and minimize the presence of treatment chemicals before discharges reach waters of the U.S.. At a minimum there must be adequate ditch length downstream of the last manufactured product prior to reaching the discharge point into a water of the U.S. to provide a place for sedimentation to occur.

11.G.4.5.6 Ensure proper training. Ensure that all persons who handle and use treatment chemicals at the construction site are provided with appropriate, product-specific training. Among other things, the training must cover proper dosing requirements.

11.G.4.5.7 Perform additional measures specified by the Department for the authorized use of cationic treatment chemicals. If the permittee plans to add “cationic treatment chemicals” (as defined in Appendix C) to storm water and/or authorized non-storm water prior to discharge, they must submit a request to the Department fourteen (14) calendar days in advance of proposed usage. The request must include the following:

- Operator Name, mailing address, phone number, and email address;

- Project/Site name, physical address, contact name, phone number, email address and MSGP permit authorization number;
- Site Map with all receiving waterbodies, proposed location of chemical treatment system, and proposed point of discharge into receiving waterbodies;
- Schematic drawing of the proposed treatment system; and
- Description of the proposed treatment system including; type of system being used, type of cationic chemicals being used, estimated start and finish date, sampling and recordkeeping schedule and reporting, and name of treatment system operator or company.

The permittee must perform all additional measures as conditioned by the Department authorization to ensure that the use of such chemicals will not cause an exceedance of water quality standards.

11.G.4.6 Prohibited Discharge. A permittee is prohibited from discharging the following from the site:

11.G.4.6.1 Wastewater from concrete washout, unless managed by an appropriate control measure;

11.G.4.6.2 Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;

11.G.4.6.3 Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and

11.G.4.6.4 Soaps or solvents used in vehicle and equipment washing.

11.G.4.7 Good Housekeeping Measures. A permittee must design, install, implement, and maintain effective good housekeeping measures to prevent and/or minimize the discharge of pollutants. A permittee must include appropriate measures for any of the following activities that are used at the site.

11.G.4.7.1 Washing of Equipment and Vehicles and Wheel Wash-Down. If a permittee conducts washing of equipment or vehicles and/or wheel wash-down at the site the permittee must comply with the following requirements:

- Designate areas to be used for washing of equipment and vehicles and/or wheel wash-down and conduct such activities only in these areas;
- Locate such activities, to the extent practicable, away from storm water conveyance channels, storm drain inlets, and waters of the U.S.;

- Treat all wash water in a sediment basin or use alternative control measures that provide equivalent or better treatment prior to discharge; and
- To comply with the prohibition in Part 11.G.4.6.4, the discharge of soaps and solvents used in equipment and vehicle washing and/or wheel wash-down is strictly prohibited.

11.G.4.7.2 Fueling and Maintenance Areas. If a permittee conducts fueling and/or maintenance activities for equipment and vehicles at the site the permittee must comply with the following requirements:

- Designate areas to be used for fueling and/or maintenance of equipment and vehicles and conduct such activities only in these areas (the designated area may move from one location to another on linear projects);
- Locate such activities, to the extent practicable, away from storm water conveyance channels, storm drain inlets and waters of the U.S.;
- Minimize the exposure to precipitation and storm water or use secondary containment structures designed to eliminate the potential for spills or leaked chemicals; and
- To comply with the prohibition in Part 11.G.4.6.3, a permittee must:
    - Clean up spills or contaminated surfaces immediately;
    - Ensure adequate clean up supplies are available at all times to handle spills, leaks, and disposal of used liquids;
    - Use drip pans or absorbents under or around leaky equipment and vehicles; and
    - Dispose of liquid wastes or materials used for fueling and maintenance in accordance with Part 11.G.4.11.

11.G.4.8 Staging and Material Storage Areas. If a permittee maintains staging and material storage areas at the site the permittee must comply with the following requirements:

- Designate areas to be used for staging and material storage areas;
- Locate such activities, to the extent practicable, away from storm water conveyance channels, storm drain inlets, and waters of the U.S; and
- Minimize the exposure to precipitation and storm water and vandalism for all chemicals, treatment chemicals, liquid products, petroleum products, and other materials that have the potential to pose a threat to human health or the environment.

11.G.4.9 Washout of Applicators/Containers used for Paint, Concrete, and Other Materials. If a permittee conducts washing of applicators and/or containers used for paint, concrete, and other materials at the site, the permittee must comply with the following requirements:

- Designate areas to be used for washout;
- Locate such activities, to the extent practicable, away from storm water conveyance channels, storm drain inlets, and waters of the U.S.;
- Direct all concrete, paint, and other material washout activities into a lined, water-tight container or pit to ensure there is no discharge into the underlying soil and onto the surrounding areas;
- Dispose of liquid wastes in accordance with Part 11.G.4.11; and
- For concrete washout areas, remove hardened concrete waste when it has reached one-half (½) the height of the container or pit and dispose of in accordance with Part 11.G.4.11.

11.G.4.10 Fertilizer or Pesticide Use. If a permittee uses fertilizers or pesticides the permittee must comply with the following requirements:

- Application of fertilizers and pesticides in a manner and at application rates that will minimize the loss of chemical to storm water runoff. Manufacturers' label requirements for application rates and disposal requirements must be followed; and
- Use pesticides in compliance with federal, state and local requirements.

11.G.4.11 Storage, Handling, and Disposal of Construction Waste. If a permittee stores, handles and/or disposes of construction waste at the site, the permittee must comply with the following requirements:

- Locate areas dedicated for management or disposal of construction waste, to the extent practicable, away from storm water conveyance channels, storm drain inlets, and waters of the U.S.;
- Dispose of all collected sediment, asphalt and concrete millings, floating debris, paper, plastic, fabric, construction and demolition debris and other domestic wastes according to federal, state and local requirements;
- Store hazardous or toxic waste in appropriate sealed containers and dispose of these wastes in accordance with manufactures recommended method of disposal or federal, state or local requirements; and

- Provide containment of sanitation facilities (e.g., portable toilets) to prevent discharges of pollutants to the storm water drainage system or receiving water. Clean or replace sanitation facilities and inspect them regularly for leaks and spills.

11.G.4.12 Winter Considerations.

11.G.4.12.1 Winter Shutdown. A permittee who temporarily ceases construction for the winter and plans to resume construction the next summer must plan for winter shutdown. The permittee must identify the anticipated dates of fall freeze-up and spring thaw (see Appendix C) for their site and use these dates to plan for winter shutdown. For the purpose of planning ahead frozen ground by itself is not considered an acceptable control measure for stabilization. A permittee must provide for the following prior to, during, and at the conclusion of winter shutdown:

- Temporary or permanent stabilization for conveyance channels;
- Temporary or permanent stabilization for disturbed slopes, disturbed soils, and soil stockpiles; and
- Erosion and sediment control measures in anticipation of spring thaw.

11.G.4.12.2 Winter Construction. In several areas of Alaska, winter construction provides opportunities for construction not available during summer months. Permit coverage is not required for the construction of ice roads or the placement of sand or gravel on frozen tundra with no excavation or potential to pollute waters of the U.S. This permit does address those construction activities that have the potential for erosion or sediment runoff during spring thaw and summer rainfall. A permittee operating winter construction activities must plan for using appropriate control measures to minimize erosion or sediment runoff during spring thaw and summer rainfall. The Alaska Storm Water Guide, Chapters 3 and 4, provide guidance on the selection, design, and installation of winter construction practices and controls.

11.G.4.12.3 Late Winter Clearing. Cutting of trees and brush while the ground is frozen, without disturbing the vegetative mat, for the purpose of clearing in accordance with the U.S. Fish & Wildlife Service "Recommended Time Periods for Avoiding Vegetation Clearing" is allowed prior to the submittal of a project NOI. If the cutting occurs after the onset of spring thaw (as defined in Appendix C), conditions that consist of above freezing temperatures that cause melting of snow, then the permittee must develop a SWPPP and file an NOI, and receive authorization for coverage under this permit from DEC, and otherwise comply with the terms of this permit prior to such clearing.

11.G.4.13 Maintenance of Control Measures. A permittee must maintain all control measures, good housekeeping measures, and other protective measures in effective operating condition. If site inspections required by Part 6 identify control measures, good housekeeping measures, or other protective measures that are not operating effectively, the permittee must implement corrective actions in accordance with Part 8.

If existing control measures need to be modified or if additional control measures are necessary for any reason, the permittee must complete any corrective action in accordance with Part 8.3.

A permittee must remove sediment from silt fences, check dams, berms or other controls before the accumulated sediment reaches one-half (½) the distance up the above-ground height (or it reaches a lower height based on manufacturer's specifications) of the control measure. For sediment traps or sediment ponds, the permittee must remove accumulated sediment when the design capacity has been reduced by fifty (50%) percent.

11.G.4.14 Inspection of Clearing, Grading, and Excavation Activities. (See also Part 6)

11.G.4.14.1 Inspection Frequency. Inspections must be conducted at one of the following: at least once every 7 calendar days; or at least once every 14 calendar days and within 24 hours of the end of a storm event that resulted in a discharge from the site; or for areas of the state where the mean annual precipitation is forty (40) inches or greater, or relatively continuous precipitation or sequential storm events, inspect at least once every seven (7) calendar days. If the entire site is temporarily stabilized, inspection frequency may be reduced to at least once every month and within two business days of the end of a measurable storm event at actively staffed sites which resulted in a discharge from the site (pursuant to Part 11.G.4.15.2). Once active mining has begun, those areas comply with inspections according to 11.G.7. A permittee must specify in the SWPPP which schedule will be followed.

11.G.4.14.2 Winter Shutdown. If the exploration and construction phase is undergoing winter shutdown the permittee may stop inspections fourteen (14) calendar days after the anticipated fall freeze-up and must resume inspections at least twenty-one (21) calendar days prior to the anticipated spring thaw. The permittee shall identify the winter shutdown period in their SWPPP based upon the definitions of fall freeze-up and spring thaw.

11.G.4.14.3 Location of Inspections. Inspections must include all areas of the site disturbed by clearing, grading, and/or excavation activities and areas used for storage of materials that are exposed to precipitation. Sedimentation and erosion control measures must be observed to ensure proper operation. Discharge locations must be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to waters of the United States, where accessible. Where discharge locations are inaccessible, nearby downstream locations must be inspected to the extent that

such inspections are practicable. Locations where vehicles enter or exit the site must be inspected for evidence of significant off-site sediment tracking.

11.G.4.14.4 Inspection Reports. (See also Part 6.1) For each inspection required above, the permittee must complete an inspection report. At a minimum, the inspection report must include the information required in Part 6.1.

11.G.4.15 Requirements for Cessation of Clearing, Grading, and Excavation Activities.

11.G.4.15.1 Inspections and Maintenance. Inspections and maintenance of control measures, including BMPs, associated with clearing, grading, and/or excavation activities being conducted as part of the exploration and construction phase of a mining operation must continue until final stabilization has been achieved on all portions of the disturbed area, or until the commencement of the active mining phase for those areas that have been temporarily stabilized as a precursor to mining.

11.G.4.15.2 Temporary Stabilization of Disturbed Areas. Stabilization measures should be initiated immediately in portions of the site where clearing, grading and/or excavation activities have temporarily ceased, but in no case more than 14 days after the clearing, grading and/or excavation activities in that portion of the site have temporarily ceased. In arid, semi-arid, and drought-stricken areas, or in areas subject to snow or freezing conditions, where initiating perennial vegetative stabilization measures is not possible within 14 days after exploration, and/or construction activity has temporarily ceased, temporary vegetative stabilization measures must be initiated as soon as practicable.

The permittee must identify the anticipated dates of fall freeze-up and spring thaw (see Appendix C) for the site and use those dates to plan for winter shutdown. For the purpose of planning ahead frozen ground by itself is not considered an acceptable control measure for stabilization. Where temporary stabilization by the 14th day is precluded by snow cover or frozen ground conditions, stabilization measures must be initiated as soon as practicable following the actual spring thaw.

Until temporary vegetative stabilization is achieved, interim measures (e.g., surface roughening or a surface cover, including but not limited to, establishment of ground vegetation, application of mulch, or surface tackifiers with an appropriate seed base) must be employed. In areas of the site, where exploration and/or construction has permanently ceased prior to active mining, temporary stabilization measures must be implemented to minimize mobilization of sediment or other pollutants until such time as the active mining phase commences.

11.G.4.15.3 Final Stabilization of Disturbed Areas. Stabilization measures should be initiated immediately in portions of the site where mining, exploration, and/or construction activities have permanently ceased, but in no case more than 14 days after the exploration and/or construction activity in that portion of the site has permanently ceased. In arid, semi-arid, and drought-stricken areas, or in areas subject to snow or freezing conditions, where initiating perennial vegetative stabilization measures is not possible within 14 days after mining, exploration, and/or construction activity has permanently ceased, final vegetative stabilization measures must be initiated as soon as possible. Until final stabilization is achieved, temporary stabilization measures must be used.

11.G.5 Additional Technology-Based Effluent Limits.

11.G.5.1 Employee Training. (See also Part 4.2.9) Conduct employee training at least annually at active and temporarily inactive sites.

11.G.5.2 Good Housekeeping Measures. (See also Part 4.2.2) As part of the permittees good housekeeping program, implement the following, as practicable: use sweepers and covered storage, watering haul roads to minimize dust generation, and conserving vegetation (where possible) to minimize erosion.

11.G.5.3 Preventive Maintenance. (See also Part 4.2.3) Perform inspections or other equivalent measures of storage tanks and pressure lines of fuels, lubricants, hydraulic fluid, and slurry to prevent leaks due to deterioration or faulty connections.

11.G.5.4 Storm Water Controls. Apart from the control measures implemented to meet the Part 4 control measures, implement the following control measures at the facility, as practicable. The potential pollutants identified in Part 11.G.6.3 shall determine the priority and appropriateness of the control measures selected. If the permittee selects or develops a storm water control other than one described below, the permittee shall describe it in the SWPPP.

11.G.5.4.1 Storm Water Diversions. Divert storm water away from potential pollutant sources. Implement the following options, as practicable: interceptor or diversion controls (e.g., dikes, swales, curbs, or berms); pipe slope drains; subsurface drains; conveyance systems (e.g., channels or gutters, open-top box culverts, and waterbars; rolling dips and road sloping; roadway surface water deflector and culverts); or their equivalents.

11.G.5.4.2 Velocity Dissipation Devices. Place velocity dissipation devices (e.g., check dams, sediment traps, or riprap) as practicable, along the length of any conveyance channel to provide a non-erosive flow velocity. Also place velocity dissipation devices where discharges from the conveyance channel or structure join a water course to prevent erosion and to protect the channel embankment, outlet, adjacent stream bank slopes, and downstream waters.

11.G.5.4.3 Down-Slope Sediment Controls. Establish and use down-slope sediment controls (e.g., silt fence or temporary diversion dike) for any portion of the down-slope and side-slope perimeter where storm water will be discharged from disturbed areas of the site.

11.G.5.4.4 Stabilized Construction Vehicle Access and Exit Points. Establish stabilized vehicle access and exit points. Off-site accumulations of sediment must be removed at a frequency sufficient to minimize off-site impacts.

11.G.5.4.5 Capping. When capping is necessary to minimize pollutant discharges in storm water, identify the source being capped and the material used to construct the cap.

11.G.5.4.6 Treatment. If treatment of storm water (e.g., chemical or physical systems, oil and water separators, artificial wetlands) is necessary to protect water quality, describe the type and location of treatment used. All permanent storm water treatment devices shall receive engineering plan approval per 18 AAC 72.600. Passive and/or active treatment of storm water runoff is encouraged where practicable. Treated runoff may be discharged as a storm water source regulated under this permit provided the discharge is not combined with discharges subject to effluent limitation guidelines for the Ore Mining and Dressing Point Source Category (40 CFR Part 440).

11.G.5.5 Certification of Discharge Testing. (See also Part 5.2.4.4) Test or evaluate all outfalls covered under this permit for the presence of specific mining-related non-storm water discharges such as seeps or adit discharges, or discharges subject to effluent limitations guidelines (e.g., 40 CFR Part 440), such as mine drainage or process water. Alternatively (if applicable), the permittee may keep a certification with the SWPPP consistent with Part 11.G.6.6.

11.G.5.6 Overburden, Waste Rock, and Raw Material Piles. Overburden, topsoil, and waste rock, as well as raw material and intermediate and final product stockpiles, shall be located a minimum of 25 feet away from surface water, other sources of water, and from geologically unstable areas as practicable.

11.G.6 Additional SWPPP Requirements.

11.G.6.1 *Nature of Industrial Activities.* (See also Part 5.2.3) Document in the SWPPP the mining and associated activities that can potentially affect the storm water discharges covered by this permit, including a general description of the location of the site relative to major transportation routes and communities.

11.G.6.2 *Site Map.* (See also Part 5.2.3) The permittee must document in the SWPPP the locations of the following (as appropriate): mining or milling site boundaries; access and haul roads; outline of the drainage areas of each storm water outfall within the facility with indications of the types of discharges from the drainage areas; location(s) of all permitted discharges covered under an individual APDES permit, outdoor equipment storage, fueling, and maintenance areas; materials handling areas; outdoor manufacturing, outdoor storage, and material disposal areas; outdoor chemicals and explosives storage areas; overburden, materials, soils, or waste storage areas; location of mine drainage (where water leaves mine) or other process water; tailings piles and ponds (including proposed ones); heap leach pads; off-site points of discharge for mine drainage and process water; surface waters; boundary of tributary areas that are subject to effluent limitations guidelines; and location(s) of reclaimed areas.

11.G.6.3 *Potential Pollutant Sources.* (See also Part 5.2.4) For each area of the mine or mill site where storm water discharges associated with industrial activities occur, identify the types of pollutants (e.g., heavy metals, sediment) likely to be present in significant amounts. Monitor these factors, as relevant: the mineralogy of the ore and waste rock (e.g., acid forming); toxicity and quantity of chemicals used, produced, or discharged; the likelihood of contact with storm water; vegetation of site (if any); and history of significant leaks or spills of toxic or hazardous pollutants. Also include a summary of any existing ore or waste rock or overburden characterization data and test results for potential generation of acid rock. If any new data is acquired due to changes in ore type being mined, update the SWPPP with this information.

11.G.6.4 *Documentation of Control Measures.* Document all control measures that the permittee implements consistent with Part 11.G.5.4. If control measures are implemented or planned but are not listed in Part 11.G.5.4 (e.g., substituting a less toxic chemical for a more toxic one), include descriptions of them in the SWPPP.

11.G.6.5 *Employee Training.* To the extent practical, all supervisory personnel involved in directing the maintenance of storm water control measures shall be trained and qualified in the principles and practices of erosion and sediment control. All employee training(s) must be documented in the SWPPP.

11.G.6.6 Certification of Permit Coverage for Commingled Non-Storm Water Discharges. If a permittee determines that they are able to certify, consistent with Part 11.G.5.5, that a particular discharge composed of commingled storm water and non-storm water is covered under a separate APDES permit, and that permit subjects the non-storm water portion to effluent limitations prior to any commingling, retain such certification with the SWPPP. This certification must identify the non-storm water discharges, the applicable APDES permit(s), the effluent limitations placed on the non-storm water discharge by the permit(s), and the points at which the limitations are applied.

11.G.6.7 SWPPP Submittal. At least 45 calendar days prior to the start of initial construction of a new facility the permittee shall submit the construction phase SWPPP to DEC.

11.G.6.8 SWPPP Meeting. At least 20 calendar days before the start of initial construction for a new facility, representatives of the permittee and the prime site construction contractor shall meet with DEC in a pre-construction conference to discuss the details of storm water management during construction.

11.G.7 Additional Inspection Requirements.

(See also Part 6.1 and 11.G.4.14.) Except for areas of the site subject to clearing, grading, and/or excavation activities conducted as part of the exploration and construction phase, which are subject to Part 11.G.4.14.1, the permittee must inspect sites at least quarterly unless adverse weather conditions make the site inaccessible. Sites which discharge to waters designated as outstanding waters or waters which are impaired for sediment or nitrogen must be inspected monthly. See Part 11.G.8.4 for inspection requirements for inactive and unstaffed sites.

11.G.8 Sector-Specific Benchmarks. (See also Part 7 of the permit.)

Note: There are no Part 11.G.8 monitoring and reporting requirements for inactive and unstaffed sites.

11.G.8.1 Benchmark Monitoring for Active Copper Ore Mining and Dressing Facilities. Active copper ore mining and dressing facilities, the permittee must sample and analyze storm water discharges for the pollutants listed in Table 11.G.8-1.

Table 11.G.8-1: Benchmark Monitoring for Active Copper Ore Mining and Dressing Facilities

Subsector (Permittees may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector G1. Active Copper Ore Mining and Dressing Facilities (SIC 1021)	Total Suspended Solids (TSS)	100 mg/L
	Nitrate plus Nitrite Nitrogen	0.68 mg/L
	Chemical Oxygen Demand (COD)	120 mg/L

11.G.8.2 Benchmark Monitoring Requirements for Discharges from Waste Rock and Overburden Piles at Active Metal Mining Facilities. For discharges from waste rock and overburden piles, perform benchmark monitoring once in the first year for the parameters listed in Table 11.G.8-2, and twice annually in all subsequent years of coverage under this permit for any parameters for which the benchmark has been exceeded. The permittee is also required to conduct analytic monitoring for the parameters listed in Table 11.G.8-3 in accordance with the requirements in Part 11.G.8.3. The Department may also notify the permittee that the permittee must perform additional monitoring to accurately characterize the quality and quantity of pollutants discharged from their waste rock and overburden piles.

(Table 11.G.8-2: Benchmark Monitoring Requirements for Discharges from Waste Rock and Overburden Piles at Active Metal Mining Facilities located on following page.)

Table 11.G.8-2: Benchmark Monitoring Requirements for Discharges from Waste Rock and Overburden Piles at Active Metal Mining Facilities

Subsector (Permittees may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector G2. Iron Ores; Copper Ores; Lead and Zinc Ores; Gold and Silver Ores; Ferroalloy Ores, Except Vanadium; and Miscellaneous Metal Ores (SIC Codes 1011, 1021, 1031, 1041, 1044, 1061, 1081, 1094, 1099) (Note: when analyzing hardness for a suite of metals, it is more cost effective to add analysis of calcium and magnesium, and have hardness calculated than to require hardness analysis separately)	Total Suspended Solids (TSS)	100 mg/L
	Turbidity	See Note 1
	pH	6.5 - 8.5 s.u.
	Hardness (as CaCO3; calc. from Ca, Mg)[2]	no benchmark value
	Total Antimony	0.64 mg/L
	Total Arsenic (saltwater)[2] Total Arsenic (freshwater)	0.069 mg/L 0.15 mg/ L
	Total Beryllium	0.13 mg/L
	Total Cadmium (saltwater)[2] Total Cadmium (freshwater)[3]	0.04 mg/L Hardness Dependent
	Total Copper (saltwater)[2] Total Copper (freshwater)[3]	0.0048 mg/L Hardness Dependent
	Total Iron	1.0 mg/L
	Total Lead (saltwater)[2] Total Lead (freshwater)[3]	0.21 mg/L Hardness Dependent
	Total Mercury (saltwater)[2] Total Mercury (freshwater)[3]	0.0018 mg/L 0.0014 mg/L
	Total Nickel(saltwater)[2] Total Nickel (freshwater)[3]	0.074 mg/L Hardness Dependent
	Total Selenium	0.005 mg/L
	Total Silver (saltwater)[2] Total Silver (freshwater)[3]	0.0019 mg/L Hardness Dependent
	Total Zinc (saltwater)[2] Total Zinc (freshwater)[3]	0.09 mg/L Hardness Dependent

Note:

1. Turbidity in fresh water may not exceed 5 nephelometric turbidity units (NTU) above natural conditions when the natural turbidity is 50 NTU or less, and may not have more than 10% increase in turbidity when the natural turbidity is more than 50 NTU, not to exceed a maximum increase of 25 NTU. See 18 AAC 70.020(b)(12)(A)(i).
2. Saltwater benchmark values apply to storm water discharges into saline waters where indicated.
3. The freshwater benchmark values of some metals are dependent on water hardness. For these parameters, permittees must determine the hardness of the receiving water (see Appendix E, "Calculating Hardness in Receiving Waters for Hardness Dependent Metals," for methodology), in accordance with Part 7.2.1.1, to identify the applicable 'hardness range' for determining their benchmark value applicable to their facility. The ranges occur in 25 mg/L increments. Hardness Dependent Benchmarks follow in the table below:

Water Hardness Range (mg/L)	Cadmium (mg/L)	Copper (mg/L)	Lead (mg/L)	Nickel (mg/L)	Silver (mg/L)	Zinc (mg/L)
0 – < 25	0.0005	0.0038	0.014	0.15	0.0007	0.04
25 – < 50	0.0008	0.0056	0.023	0.20	0.0007	0.05
50 – < 75	0.0013	0.0090	0.045	0.32	0.0017	0.08
75 – < 100	0.0018	0.0123	0.069	0.42	0.0030	0.11
100 – < 125	0.0023	0.0156	0.095	0.52	0.0046	0.13
125 – < 150	0.0029	0.0189	0.122	0.61	0.0065	0.16
150 – < 175	0.0034	0.0221	0.151	0.71	0.0087	0.18
175 – < 200	0.0039	0.0253	0.182	0.80	0.0112	0.20
200 – < 225	0.0045	0.0285	0.213	0.89	0.0138	0.23
225 – < 250	0.0050	0.0316	0.246	0.98	0.0168	0.25
250+	0.0053	0.0332	0.262	1.02	0.0183	0.26

11.G.8.3 Additional Analytic Monitoring Requirements for Discharges from Waste Rock and Overburden Piles at Active Metal Mining Facilities. In addition to the monitoring required in Part 11.G.8.2 for discharges from waste rock and overburden piles, the permittee must also conduct monitoring for additional parameters based on the type of ore they mine at their facility. Where a parameter in Table 11.G.8-3 is the same as a pollutant the permittee is required to monitor for in Table 11.G.8-2 (i.e., for all of the metals, the permittee must use the corresponding benchmark in Table 11.G.8-2 and they may use any monitoring results conducted for Part 11.G.8.2 to satisfy the monitoring requirement for that parameter for Part 11.G.6.3. For radium and uranium, which do not have corresponding benchmarks in Table 11.G.8-2, there are no applicable benchmarks.) The frequency and schedule for monitoring for these additional parameters is the same as that specified in Part 7.2.1.2.

Table 11.G.8-3: Additional Monitoring Requirements for Discharges from Waste Rock and Overburden Piles

Supplemental Requirements			
Type of Ore Mined	Pollutants of Concern		
	Total Suspended Solids (TSS)	pH	Metals, Total
Tungsten Ore	X	X	Arsenic, Cadmium (H), Copper (H), Lead (H), Zinc (H)
Nickel Ore	X	X	Arsenic, Cadmium (H), Copper (H), Lead (H), Zinc (H)
Aluminum Ore	X	X	Iron
Mercury Ore	X	X	Nickel (H)
Iron Ore	X	X	Iron (Dissolved)
Platinum Ore			Cadmium (H), Copper (H), Mercury, Lead (H), Zinc (H)
Titanium Ore	X	X	Iron, Nickel (H), Zinc (H)
Vanadium Ore	X	X	Arsenic, Cadmium (H), Copper (H), Lead (H), Zinc (H)
Molybdenum	X	X	Arsenic, Cadmium (H), Copper (H), Lead (H), Mercury, Zinc (H)
Uranium, Radium, and Vanadium Ore	X	X	Chemical Oxygen Demand, Arsenic, Radium (Dissolved and Total), Uranium, Zinc (H)

Note: An "X" indicated for TSS and/or pH means that permittees are required to monitor for those parameters. (H) indicates that hardness must also be measured when this pollutant is measured.

11.G.8.4 Inactive and Unstaffed Sites – Conditional Exemption from No Exposure Requirements for Quarterly Visual Assessments and Routine Facility Inspections. As a Sector G facility, if the permittee is seeking to exercise a waiver from the quarterly visual assessment and routine facility inspection requirements for inactive and unstaffed sites (including temporarily inactive sites), they are conditionally exempt from the requirement to certify that "there are no industrial materials or activities exposed to storm water" in Part 6.2.3 and 7.2.1.6, respectively. Additionally, if the permittee is seeking to reduce their required quarterly routine inspection frequency to a once annual comprehensive inspection, as is allowed under Part 6.1.3, the permittee is also conditionally exempt from the requirement to certify that "there are no industrial materials or activities exposed to storm water." This exemption is conditioned on the following:

- If circumstances change and the permittees facility becomes active and/or staffed, this exception no longer applies and the permittee must immediately begin complying with the quarterly visual assessment requirements; and
- DEC retains the authority to revoke this exemption and/or the monitoring waiver where it is determined that the discharge causes, has a reasonable potential to cause, or contributes to an instream excursion above a WQS, including designated uses.

Subject to the two conditions above, if the permittees facility is inactive and unstaffed, they are waived from the requirement to conduct quarterly visual assessments and routine facility inspections. The permittee is not waived from conducting the Part 6.3 comprehensive site inspection. They are encouraged to inspect their site more frequently where they have reason to believe that severe weather or natural disasters may have damaged control measures or increased discharges.

(Table 11.G.8-4: Applicability of the Multi-Sector General Permit to Storm Water Runoff from Active Mining and Dressing Sites, Temporarily Inactive Sites, and Sites Undergoing Reclamation located on the following page.)

Table 11.G.8-4: Applicability of the Multi-Sector General Permit to Storm Water Runoff from Active Mining and Dressing Sites, Temporarily Inactive Sites, and Sites Undergoing Reclamation

Discharge/Source of Discharge	Note/Comment
Piles	
Waste rock/overburden	If composed entirely of storm water and not combining with mine drainage. See note below.
Topsoil	—
Roads Constructed of Waste Rock or Spent Ore	
Onsite haul roads	If composed entirely of storm water and not combining with mine drainage. See note below.
Offsite haul and access roads	—
Roads Not Constructed of Waste Rock or Spent Ore	
Onsite haul roads	Except if mine drainage is used for dust control
Offsite haul and access roads	—
Milling/Concentrating	
Runoff from tailings dams and dikes when constructed of waste rock/tailings	Except if process fluids are present and only if composed entirely of storm water and not combining with mine drainage. See Note below.
Runoff from tailings dams/dikes when not constructed of waste rock and tailings	Except if process fluids are present
Concentration building	If storm water only and no contact with piles
Mill site	If storm water only and no contact with piles
Ancillary Areas	
Office and administrative building and housing	If mixed with storm water from the industrial area
Chemical storage area	—
Docking facility	Except if excessive contact with waste product that would otherwise constitute mine drainage
Explosive storage	—
Fuel storage (oil tanks/coal piles)	—
Vehicle and equipment maintenance area/building	—
Parking areas	But coverage unnecessary if only employee and visitor-type parking
Power Plant	
Truck wash area	Except when excessive contact with waste product that would otherwise constitute mine drainage
Reclamation-Related Areas	
Any disturbed area (unreclaimed)	Only if not in active mining area
Reclaimed areas released from reclamation requirements prior to Dec. 17, 1990	—
Partially/inadequately reclaimed areas or areas not released from reclamation requirements	—

Note: Storm water runoff from these sources are subject to the APDES program for storm water unless mixed with discharges subject to 40 CFR Part 440 that are regulated by another permit prior to mixing. Non-storm water discharges from these sources are subject to APDES permitting and may be subject to the effluent limitation guidelines under 40 CFR Part 440. Discharges from overburden/waste rock and overburden/waste rock-related areas are not subject to 40 CFR Part 440 unless:

(1) it drains naturally (or is intentionally diverted) to a point source; and

(2) combines with "mine drainage" that is otherwise regulated under the Part 440 regulations. For such sources, coverage under this permit would be available if the discharge composed entirely of storm water does not combine with other sources of mine drainage that are not subject to 40 CFR Part 440, as well as meeting other eligibility criteria contained in Part 1.2 of the permit. Permittees bear the initial responsibility for determining the applicable technology-based standard for such discharges. DEC recommends that permittees contact the Department for assistance to determine the nature and scope of the "active mining area" on a mine-by-mine basis, as well as to determine the appropriate permitting mechanism for authorizing such discharges.

11.G.9 Termination of Permit Coverage.

11.G.9.1 Termination of Permit Coverage for Sites Reclaimed After December 17, 1990. A site or a portion of a site that has been released from applicable state or federal reclamation requirements after December 17, 1990, is no longer required to maintain coverage under this permit. If the site or portion of a site reclaimed after December 17, 1990, was not subject to reclamation requirements, the site or portion of the site is no longer required to maintain coverage under this permit if the site or portion of the site has been reclaimed as defined in Part 11.G.3.5.

11.G.9.2 Termination of Permit Coverage for Sites Reclaimed Before December 17, 1990. A site or portion of a site that was released from applicable state or federal reclamation requirements before December 17, 1990, or that was otherwise reclaimed before December 17, 1990, is no longer required to maintain coverage under this permit if the site or portion of the site has been reclaimed. A site or portion of a site is considered to have been reclaimed if: (1) storm water runoff that comes into contact with raw materials, intermediate byproducts, finished products, and waste products does not have the potential to cause or contribute to violations of state WQS, (2) soil disturbing activities related to mining at the sites or portion of the site have been completed, (3) the site or portion of the site has been stabilized to minimize soil erosion, and (4) as appropriate depending on location, size, and the potential to contribute pollutants to storm water discharges, the site or portion of the site has been revegetated, will be amenable to natural revegetation, or will be left in a condition consistent with the post-mining land use.

11. Subpart H – Sector H – Coal Mines and Coal Mining-Related Facilities.

A permittee must comply with Part 11 sector-specific requirements associated with their primary industrial activity and any co-located industrial activities, as defined in Appendix C. The sector-specific requirements apply to those areas of the permittees facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

11.H.1 Covered Storm Water Discharges.

The requirements in Subpart H apply to storm water discharges associated with industrial activity from Coal Mines and Coal Mining-Related facilities as identified by the SIC Codes specified under Sector H in Table D-1 of Appendix D.

11.H.2 Limitations on Coverage.

11.H.2.1 *Prohibition of Non-Storm Water Discharges.* (See also Part 1.2.4) Not covered by this permit: discharges from pollutant seeps or underground drainage from inactive coal mines, adit discharges and refuse disposal areas that do not result from precipitation events, and discharges from floor drains in maintenance buildings and other similar drains in mining and preparation plant areas. These unauthorized discharges should be covered under a separate APDES discharge permit.

11.H.2.2 *Discharges Subject to Storm Water Effluent Guidelines.* (See also Part 1.2.4.4) Not authorized by this permit: storm water discharges subject to an existing effluent limitation guideline at 40 CFR Part 434.

11.H.3 Definitions.

The following definitions are not intended to supersede the definitions of active and inactive mining facilities established by 40 CFR 122.26(b)(14)(iii).

11.H.3.1 *Mining Operation* - Consists of the active and temporarily inactive phases, and the reclamation phase, but excludes the exploration and construction phases.

11.H.3.2 *Exploration Phase* - Entails exploration and land disturbance activities to determine the financial viability of a site. The exploration phase is not considered part of “mining operations.”

11.H.3.3 *Construction Phase* - Includes the building of site access roads, facilities, and removal of overburden and waste rock to expose mineable coal. The construction phase is not considered part of “mining operations.”

11.H.3.4 *Active Phase* - Activities including the extraction, removal or recovery of coal. For surface mines, this definition does not include any land where grading has returned the earth to a desired contour and reclamation has begun. This definition is derived from the definition of "active mining area" found at 40 CFR 434.11(b). The active phase is considered part of "mining operations."

11.H.3.5 *Reclamation Phase* - Activities undertaken, in compliance with applicable mined land reclamation requirements, following the cessation of the "active phase", intended to return the land to an appropriate post-mining land use. The reclamation phase is considered part of "mining operations."

11.H.3.6 *Active Coal Mining Facility* - A place where work or other activity related to the extraction, removal, or recovery of coal is being conducted. For surface mines, this definition does not include any land where grading has returned the earth to a desired contour and reclamation has begun. This definition is derived from the definition of "active mining area" found at 40 CFR 434.11(b).

11.H.3.7 *Inactive Coal Mining Facility* - A site or portion of a site where coal mining and/or milling occurred in the past but is not an active facility as defined above, and where the inactive portion is not covered by an active mining permit issued by the applicable State or Federal agency. An inactive coal mining facility has an identifiable owner / operator. Sites where mining claims are being maintained prior to disturbances associated with the extraction, beneficiation, or processing of mined materials and sites where minimal activities are undertaken for the sole purpose of maintaining a mining claim are not considered either active or inactive mining facilities and do not require an APDES industrial storm water permit.

11.H.3.8 *Temporarily Inactive Coal Mining Facility* - A site or portion of a site where coal mining and/or milling occurred in the past but currently are not being actively undertaken, and the facility is covered by an active mining permit issued by the applicable State or Federal agency.

11.H.4 Technology-Based Effluent Limits for Clearing, Grading, and Excavation Activities.

Clearing, grading, and excavation activities being conducted as part of the exploration and construction phase of mining activities are covered under this permit.

11.H.4.1 *Erosion Control Measures.* A permittee must comply with the erosion control measures in this Part to minimize soil exposure on the site during construction.

11.H.4.1.1 *Delineation of Site.* A permittee must generally delineate (e.g., with flagging, stakes, signs, silt fence, etc.,) the location of specific areas that will be left undisturbed such as trees, boundaries of sensitive areas, or buffers established under Part 11.H.4.1.3.

11.H.4.1.2 Minimize the Amount of Soil Exposed during Construction Activity. A permittee must include the following considerations in the selection of control measures and the sequence of project construction as they apply to the project site:

- Preserve areas of native topsoil on the site, unless infeasible; and
- Sequence or phase construction activities to minimize the extent and duration of exposed soils to the extent practicable.

11.H.4.1.3 Maintain Natural Buffer Areas.

The permittee must maintain natural buffer areas at stream crossings and around the edge of any waters of the U.S. that are located within or immediately adjacent to the property where the construction activity will take place in accordance with the following:

- The buffer must be a minimum of twenty-five (25) feet wide, unless infeasible based on site dimensions, or the width as required by local ordinance.
- Exceptions are allowed for water dependent activities, specific water access activities, or necessary water crossings.
- A permittee should, to the extent practicable, use perimeter controls adjacent to buffers, and direct storm water sheet flow to buffer areas to increase sediment removal and maximize storm water infiltration, unless infeasible.

11.H.4.1.4 Control Storm Water Discharges and Flow Rates. A permittee must include the following control measures to handle storm water and total storm water volume discharges as they apply to the site:

- Divert storm water around the site so that it does not flow onto the project site and cause erosion of exposed soils;
- Slow down or contain storm water that may collect and concentrate within a site and cause erosion of exposed soils;
- Avoid placement of structural control measures in active floodplains to the degree technologically and economically practicable and achievable;
- Place velocity dissipation devices (e.g., check dams, sediment traps, or riprap) along the length of any conveyance channel to provide a non-erosive flow velocity. Also place velocity dissipation devices where discharges from the conveyance channel or structure join a water course to prevent erosion and to protect the channel embankment, outlet, adjacent stream bank slopes, and downstream waters; and

- Install permanent storm water management controls, if present at a site and where practical, so that they must be functional prior to construction of site improvements (e.g., impervious surfaces).

11.H.4.1.5 Protect Steep Slopes. A permittee must include the following considerations in the selection of control measures as they apply to the project site:

- Design and construct cut-and-fill slopes in a manner that will minimize erosion. Applicable practices include, but are not limited to, reducing continuous length of slope with terracing and diversions, reducing slope steepness, and roughening slope surfaces (e.g., track walking);

- Divert concentrated flows of storm water away from and around the disturbed portion of the slope. Applicable practices include, but are not limited to interceptor dikes and swales, grass-lined channels, pipe slope drains, subsurface drains, check dams; and

- Stabilize exposed areas of the slope in accordance with Part 11.H.4.4.

11.H.4.2 Sediment Control Measures. Sediment control measures (e.g. sediment ponds, traps, filters, etc.) must be constructed as one of the first steps in grading. These control measures must be functional before other land disturbing activities take place. A permittee must install, establish and use any of the following control measures that apply to the project site.

11.H.4.2.1 Storm Drain Inlet Protection Meaures. A permittee must install appropriate protection measures (e.g. filter berms, perimeter controls, temporary diversion dikes, etc.) to minimize the discharge of sediment prior to entry into the inlet for storm drain inlets located on site or immediately downstream of the site. Inlet protection measures must be cleaned or removed and replaced when sediment has filled one-third of the available storage.

11.H.4.2.2 Water Body Protection Measures. A permittee must install appropriate protection measures (Part 11.H.4.1.4) to minimize the discharge of sediment prior to entry into the water body for water bodies located on site or immediately downstream of the site. Protection measures must be cleaned or removed and replaced when sediment has filled one-third of the available storage.

11.H.4.2.3 Down-Slope Sediment Controls. A permittee must establish and use down-slope sediment controls (e.g., silt fence, temporary diversion dike, etc.) for any portion of the down-slope and side-slope perimeter where storm water will be discharged from disturbed areas of the site.

11.H.4.2.4 *Stabilized Construction Vehicle Access and Exit Points.* A permittee must establish construction vehicle access and exit points which must be stabilized. Access and exit points should be limited to one route, if possible. If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize off-site impacts.

11.H.4.2.5 *Dust Generation and Track-Out from Vehicles.* A permittee must minimize the generation of dust through the application of water or other dust suppression techniques and prior to vehicle exit. A permittee must provide an effective way of minimizing off-site vehicle tracking of sediment from wheels to prevent track-out onto paved surfaces.

11.H.4.2.6 *Soil Stockpiles.* A permittee must stabilize or cover soil stockpiles, protect with sediment trapping measures, and where possible, locate soil stockpiles away from storm drain inlets, water bodies, and conveyance channels.

11.H.4.2.7 *Authorized Non-Storm Water Discharges.* A permittee must minimize any non-storm water authorized by this permit.

11.H.4.2.8 *Sediment Basins*, where applicable:

- For common drainage locations that serve an area with ten (10) or more acres disturbed at one time, a temporary (or permanent) sediment basin that provides storage for a calculated volume of runoff from the drainage area from a 2-year, 24-hour storm, or equivalent sediment control measures, must be installed, maintained, and used where practicable until final stabilization of the site. Where no such calculation has been performed, a temporary (or permanent) sediment basin providing 3,600 cubic feet of storage per acre drained, or equivalent sediment control measures, must be installed and used where practicable until final stabilization of the site. When computing the number of acres draining into a common location, it is not necessary to include flows from offsite areas and flows from on-site areas that are either undisturbed or have undergone final stabilization where such flows are diverted around both the disturbed area and the sediment basin. In determining whether installing a sediment basin is practicable, the permittee may consider factors such as site soils, slope, available area on-site, etc. In any event, the permittee must consider public safety, especially as it relates to children, as a design factor for the sediment basin, and alternative sediment control measures must be used where site limitations would preclude a safe design.

- For drainage locations which serve ten (10) or more disturbed acres at one time and where a temporary sediment basin or equivalent controls is not practicable, smaller sediment basins and/or sediment traps should be used. Silt fences, vegetative buffer strips, or equivalent sediment control measures are

required for all down slope boundaries (and for those side slope boundaries deemed appropriate as dictated by individual site conditions).

- For drainage locations serving less than ten (10) acres, smaller sediment basins and/or sediment traps should be used. Silt fences, vegetative buffer strips, or equivalent sediment control measures are required for all down slope boundaries (and for those side slope boundaries deemed appropriate as dictated by individual site conditions) of the construction area unless a sediment basin providing storage for a calculated volume of runoff from a 2-year, 24-hour storm event or 3,600 cubic feet of storage per acre drained is provided.

- When discharging from basins and impoundments, utilize outlet structures that withdraw water from the surface where practicable.

- Note: installing sediment basins in the presence of permafrost is challenging and might not be practicable in some instances because permafrost creates poor surface drainage that hinders the infiltration of runoff. Also, the excavation of permafrost in summer can trigger thawing and instability.

11.H.4.3 Dewatering.

11.H.4.3.1 If a construction activity includes excavation dewatering and has a discharge that could adversely impact a local drinking water well, an DEC-identified contaminated site, or a waters of the U.S., the permittee must review the DEC Excavation Dewatering General Permit (AKG002000, or most current version) for specific requirements the permittee may have to comply with in addition to the conditions of this permit.

11.H.4.3.2 A discharge from eligible dewatering activities, including discharges from dewatering of trenches and excavations are prohibited unless treated by appropriate control measures. Appropriate control measures include, but are not limited to, sediment basins or traps, dewatering tanks, weir tanks, or filtration systems designed to remove sediment.

11.H.4.4 Soil Stabilization.

11.H.4.4.1 Minimum Requirements for Soil Stabilization. A permittee must stabilize all disturbed areas of the site to minimize on-site erosion and sedimentation and the resulting discharge of pollutants according to the requirements of this Part. A permittee must ensure that existing vegetation is preserved wherever possible and that disturbed portions of the site are stabilized. Applicable stabilization control measures include, but are not limited to: temporary and permanent seeding, sodding, mulching, rolled erosion control product, compost blanket, soil application of polyacrylamide (PAM), the early application of gravel base on areas to be paved,

and dust control. A permittee should avoid using impervious surfaces for stabilization. See the Alaska Plant Materials Center's A Revegetation Manual for Alaska at http://plants.alaska.gov for help in efforts to select appropriate seed mixes and some information on methods for revegetation. Also see the manual for coastal Alaska, Coastal Revegetation & Erosion Control Guide at http://plants.alaska.gov.

11.H.4.5 Treatment Chemicals. The use of treatment chemicals to reduce turbidity in a storm water discharge is allowed provided that all of the requirements of this Part are met.

11.H.4.5.1 Use of conventional sediment controls before and after the application of treatment chemicals. Chemicals may only be applied where storm water is treated upstream and is directed to a sediment control (e.g., sediment trap, sediment basin) before discharge.

11.H.4.5.2 Select appropriate treatment chemicals. Chemicals must be appropriately suited to the types of soils likely to be exposed during construction and present in the discharges being treated (i.e., the expected turbidity, pH, and flow rate of storm water flowing into the chemical treatment system or area, etc.)

11.H.4.5.3 Minimize discharge risk from stored chemicals. Store all treatment chemicals in leak-proof containers that are kept under storm-resistant cover and surrounded by secondary containment structures (e.g., spill berms, decks, spill containment pallets), with adequate spill kits available on-site to respond if the event of a discharge of treatment chemicals occurs.

11.H.4.5.4 Use chemicals in accordance with good engineering practices and specifications of the chemical provider/supplier, and with dosing specifications and sediment removal design specifications provided by the provider/supplier of the applicable chemicals, or document in your SWPPP specific departures from these specifications and how they reflect good engineering practice.

11.H.4.5.5 Application of treatment chemicals through the use of manufactured products (e.g., gel bars, gel logs, floc blocks, etc.) must be used in combination with adequate ditch check dams, sediment traps, sediment basins, or physical control measure designed to settle out chemically treated storm water and minimize the presence of treatment chemicals before discharges reach waters of the U.S.. At a minimum there must be adequate ditch length downstream of the last manufactured product prior to reaching the discharge point into a water of the U.S. to provide a place for sedimentation to occur.

11.H.4.5.6 Ensure proper training. Ensure that all persons who handle and use treatment chemicals at the construction site are provided with appropriate, product-specific training. Among other things, the training must cover proper dosing requirements.

11.H.4.5.7 Perform additional measures specified by the Department for the authorized use of cationic treatment chemicals. If the permittee plans to add "cationic treatment chemicals" (as defined in Appendix C) to storm water and/or authorized non-storm water prior to discharge, they must submit a request to the Department fourteen (14) calendar days in advance of proposed usage. The request must include the following:

- Operator Name, mailing address, phone number, and email address;
- Project/Site name, physical address, contact name, phone number, email address and MSGP permit authorization number;
- Site Map with all receiving waterbodies, proposed location of chemical treatment system, and proposed point of discharge into receiving waterbodies;
- Schematic drawing of the proposed treatment system; and
- Description of the proposed treatment system including; type of system being used, type of cationic chemicals being used, estimated start and finish date, sampling and recordkeeping schedule and reporting, and name of treatment system operator or company.

The permittee must perform all additional measures as conditioned by the Department authorization to ensure that the use of such chemicals will not cause an exceedance of water quality standards.

11.H.4.6 Prohibited Discharge. A permittee is prohibited from discharging the following from the site:

11.H.4.6.1 Wastewater from concrete washout, unless managed by an appropriate control measure;

11.H.4.6.2 Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;

11.H.4.6.3 Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and

11.H.4.6.4 Soaps or solvents used in vehicle and equipment washing.

11.H.4.7 Good Housekeeping Measures. A permittee must design, install, implement, and maintain effective good housekeeping measures to prevent and/or minimize the discharge of pollutants. A permittee must include appropriate measures for any of the following activities that are used at the site.

11.H.4.7.1 Washing of Equipment and Vehicles and Wheel Wash-Down. If a permittee conducts washing of equipment or vehicles and/or wheel wash-down at the site the permittee must comply with the following requirements:

- Designate areas to be used for washing of equipment and vehicles and/or wheel wash-down and conduct such activities only in these areas;
- Locate such activities, to the extent practicable, away from storm water conveyance channels, storm drain inlets, and waters of the U.S.;
- Treat all wash water in a sediment basin or use alternative control measures that provide equivalent or better treatment prior to discharge; and
- To comply with the prohibition in Part 11.H.4.6.4, the discharge of soaps and solvents used in equipment and vehicle washing and/or wheel wash-down is strictly prohibited.

11.H.4.7.2 Fueling and Maintenance Areas. If a permittee conducts fueling and/or maintenance activities for equipment and vehicles at the site the permittee must comply with the following requirements:

- Designate areas to be used for fueling and/or maintenance of equipment and vehicles and conduct such activities only in these areas (the designated area may move from one location to another on linear projects);
- Locate such activities, to the extent practicable, away from storm water conveyance channels, storm drain inlets and waters of the U.S.;
- Minimize the exposure to precipitation and storm water or use secondary containment structures designed to eliminate the potential for spills or leaked chemicals; and
- To comply with the prohibition in Part 11.H.4.6.3, a permittee must:
    - Clean up spills or contaminated surfaces immediately;
    - Ensure adequate clean up supplies are available at all times to handle spills, leaks, and disposal of used liquids;
    - Use drip pans or absorbents under or around leaky equipment and vehicles; and
    - Dispose of liquid wastes or materials used for fueling and maintenance in accordance with Part 11.H.4.11.

11.H.4.8 Staging and Material Storage Areas. If a permittee maintains staging and material storage areas at the site the permittee must comply with the following requirements:

- Designate areas to be used for staging and material storage areas;

- Locate such activities, to the extent practicable, away from storm water conveyance channels, storm drain inlets, and waters of the U.S; and
- Minimize the exposure to precipitation and storm water and vandalism for all chemicals, treatment chemicals, liquid products, petroleum products, and other materials that have the potential to pose a threat to human health or the environment.

11.H.4.9 Washout of Applicators/Containers used for Paint, Concrete, and Other Materials. If a permittee conducts washing of applicators and/or containers used for paint, concrete, and other materials at the site, the permittee must comply with the following requirements:

- Designate areas to be used for washout;
- Locate such activities, to the extent practicable, away from storm water conveyance channels, storm drain inlets, and waters of the U.S.;
- Direct all concrete, paint, and other material washout activities into a lined, water-tight container or pit to ensure there is no discharge into the underlying soil and onto the surrounding areas;
- Dispose of liquid wastes in accordance with Part 11.H.4.11; and
- For concrete washout areas, remove hardened concrete waste when it has reached one-half (½) the height of the container or pit and dispose of in accordance with Part 11.H.4.11.

11.H.4.10 Fertilizer or Pesticide Use. If a permittee uses fertilizers or pesticides the permittee must comply with the following requirements:

- Application of fertilizers and pesticides in a manner and at application rates that will minimize the loss of chemical to storm water runoff. Manufacturers' label requirements for application rates and disposal requirements must be followed; and
- Use pesticides in compliance with federal, state and local requirements.

11.H.4.11 Storage, Handling, and Disposal of Construction Waste. If a permittee stores, handles and/or disposes of construction waste at the site, the permittee must comply with the following requirements:

- Locate areas dedicated for management or disposal of construction waste, to the extent practicable, away from storm water conveyance channels, storm drain inlets, and waters of the U.S.;

- Dispose of all collected sediment, asphalt and concrete millings, floating debris, paper, plastic, fabric, construction and demolition debris and other domestic wastes according to federal, state and local requirements;

- Store hazardous or toxic waste in appropriate sealed containers and dispose of these wastes in accordance with manufactures recommended method of disposal or federal, state or local requirements; and

- Provide containment of sanitation facilities (e.g., portable toilets) to prevent discharges of pollutants to the storm water drainage system or receiving water. Clean or replace sanitation facilities and inspect them regularly for leaks and spills.

11.H.4.12 Winter Considerations.

11.H.4.12.1 Winter Shutdown. A permittee who temporarily ceases construction for the winter and plans to resume construction the next summer must plan for winter shutdown. The permittee must identify the anticipated dates of fall freeze-up and spring thaw (see Appendix C) for their site and use these dates to plan for winter shutdown. For the purpose of planning ahead frozen ground by itself is not considered an acceptable control measure for stabilization. A permittee must provide for the following prior to, during, and at the conclusion of winter shutdown:

- Temporary or permanent stabilization for conveyance channels;

- Temporary or permanent stabilization for disturbed slopes, disturbed soils, and soil stockpiles; and

- Erosion and sediment control measures in anticipation of spring thaw.

11.H.4.12.2 Winter Construction. In several areas of Alaska, winter construction provides opportunities for construction not available during summer months. Permit coverage is not required for the construction of ice roads or the placement of sand or gravel on frozen tundra with no excavation or potential to pollute waters of the U.S. This permit does address those construction activities that have the potential for erosion or sediment runoff during spring thaw and summer rainfall. A permittee operating winter construction activities must plan for using appropriate control measures to minimize erosion or sediment runoff during spring thaw and summer rainfall. The Alaska Storm Water Guide, Chapters 3 and 4, provide guidance on the selection, design, and installation of winter construction practices and controls.

11.H.4.12.3 Late Winter Clearing. Cutting of trees and brush while the ground is frozen, without disturbing the vegetative mat, for the purpose of clearing in accordance with the U.S. Fish & Wildlife Service "Recommended Time Periods for Avoiding Vegetation Clearing" is allowed prior to the submittal of a project NOI. If the cutting occurs after the onset of spring thaw (as defined in Appendix C), conditions that consist of above freezing temperatures that cause melting of snow, then the permittee must develop a SWPPP and file an NOI, and receive authorization for coverage under this permit from DEC, and otherwise comply with the terms of this permit prior to such clearing.

11.H.4.13 Maintenance of Control Measures. A permittee must maintain all control measures, good housekeeping measures, and other protective measures in effective operating condition. If site inspections required by Part 6 identify control measures, good housekeeping measures, or other protective measures that are not operating effectively, the permittee must implement corrective actions in accordance with Part 8.

If existing control measures need to be modified or if additional control measures are necessary for any reason, the permittee must complete any corrective action in accordance with Part 8.3.

A permittee must remove sediment from silt fences, check dams, berms or other controls before the accumulated sediment reaches one-half (½) the distance up the above-ground height (or it reaches a lower height based on manufacturer's specifications) of the control measure. For sediment traps or sediment ponds, the permittee must remove accumulated sediment when the design capacity has been reduced by fifty (50%) percent.

11.H.4.14 Inspection of Clearing, Grading, and Excavation Activities. (See also Part 6)

11.H.4.14.1 Inspection Frequency. Inspections must be conducted at one of the following: at least once every 7 calendar days; or at least once every 14 calendar days and within 24 hours of the end of a storm event that resulted in a discharge from the site; or for areas of the state where the mean annual precipitation is forty (40) inches or greater, or relatively continuous precipitation or sequential storm events, inspect at least once every seven (7) calendar days. If the entire site is temporarily stabilized, inspection frequency may be reduced to at least once every month and within two business days of the end of a measurable storm event at actively staffed sites which resulted in a discharge from the site (pursuant to Part 11.G.4.15.2). Once active mining has begun, those areas comply with inspections according to 11.G.7. A permittee must specify in the SWPPP which schedule will be followed.

11.H.4.14.2 Winter Shutdown. If the exploration and construction phase is undergoing winter shutdown the permittee may stop inspections fourteen (14) calendar days after the anticipated fall freeze-up and must resume inspections at least twenty-one (21) calendar days prior to the anticipated spring thaw. The permittee shall identify the winter shutdown period in their SWPPP based upon the definitions of fall freeze-up and spring thaw.

11.H.4.14.3 Location of Inspections. Inspections must include all areas of the site disturbed by clearing, grading, and/or excavation activities and areas used for storage of materials that are exposed to precipitation. Sedimentation and erosion control measures must be observed to ensure proper operation. Discharge locations must be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to waters of the United States, where accessible. Where discharge locations are inaccessible, nearby downstream locations must be inspected to the extent that such inspections are practicable. Locations where vehicles enter or exit the site must be inspected for evidence of significant off-site sediment tracking.

11.H.4.14.4 Inspection Reports. (See also Part 6.1) For each inspection required above, the permittee must complete an inspection report. At a minimum, the inspection report must include the information required in Part 6.1.

11.H.4.15 Requirements for Cessation of Clearing, Grading, and Excavation Activities.

11.H.4.15.1 Inspections and Maintenance. Inspections and maintenance of control measures, including BMPs, associated with clearing, grading, and/or excavation activities being conducted as part of the exploration and construction phase of a mining operation must continue until final stabilization has been achieved on all portions of the disturbed area or until the commencement of the active mining phase for those areas that have been temporarily stabilized as a precursor to mining.

11.H.4.15.2 Temporary Stabilization of Disturbed Areas. Stabilization measures should be initiated immediately in portions of the site where clearing, grading and/or excavation activities have temporarily ceased, but in no case more than 14 days after the clearing, grading and/or excavation activities in that portion of the site have temporarily ceased. In arid, semi-arid, and drought-stricken areas, or in areas subject to snow or freezing conditions, where initiating perennial vegetative stabilization measures is not possible within 14 days after exploration, and/or construction activity has temporarily ceased, temporary vegetative stabilization measures must be initiated as soon as practicable.

The permittee must identify the anticipated dates of fall freeze-up and spring thaw (see Appendix C) for the site and use those dates to plan for winter shutdown. For the purpose of planning ahead frozen ground by itself is not considered an acceptable control measure for stabilization. Where temporary stabilization by the 14th day is

precluded by snow cover or frozen ground conditions, stabilization measures must be initiated as soon as practicable following the actual spring thaw.

Until temporary vegetative stabilization is achieved, interim measures (e.g., surface roughening or a surface cover, including but not limited to, establishment of ground vegetation, application of mulch, or surface tackifiers with an appropriate seed base) must be employed. In areas of the site, where exploration and/or construction has permanently ceased prior to active mining, temporary stabilization measures must be implemented to minimize mobilization of sediment or other pollutants until such time as the active mining phase commences.

11.H.4.15.3 Final Stabilization of Disturbed Areas. Stabilization measures should be initiated immediately in portions of the site where mining, exploration, and/or construction activities have permanently ceased, but in no case more than 14 days after the exploration and/or construction activity in that portion of the site has permanently ceased. In arid, semi-arid, and drought-stricken areas, or in areas subject to snow or freezing conditions, where initiating perennial vegetative stabilization measures is not possible within 14 days after mining, exploration, and/or construction activity has permanently ceased, final vegetative stabilization measures must be initiated as soon as possible. Until final stabilization is achieved, temporary stabilization measures must be used.

11.H.5 Additional Technology-Based Effluent Limits.

11.H.5.1 Employee Training. (See also Part 4.2.9) Conduct employee training at least annually at active and temporarily inactive sites.

11.H.5.2 Good Housekeeping Measures. (See also Part 4.2.2) As part of the permittees good housekeeping program, implement the following, as practicable: use sweepers and covered storage, watering haul roads to minimize dust generation, and conserving vegetation (where possible) to minimize erosion.

11.H.5.3 Preventive Maintenance. (See also Part 4.2.3) Perform inspections or other equivalent measures of storage tanks and pressure lines of fuels, lubricants, hydraulic fluid, and slurry to prevent leaks due to deterioration or faulty connections.

11.H.5.4 Storm Water Controls. Apart from the control measures implemented to meet the Part 4 control measures, implement the following control measures at the facility, as practicable. The potential pollutants identified in Part 11.H.6.3 shall determine the priority and appropriateness of the control measures selected. If the permittee selects or develops a storm water control other than one described below, the permittee shall describe it in the SWPPP.

11.H.5.4.1 Storm Water Diversions. Diverting storm water away from potential pollutant sources. Implement the following options, as practicable: interceptor or diversion controls (e.g., dikes, swales, curbs, or berms); pipe slope drains; subsurface drains; conveyance systems (e.g., channels or gutters, open-top box culverts, and waterbars; rolling dips and road sloping; roadway surface water deflector and culverts); or their equivalents.

11.H.5.4.2 Velocity Dissipation Devices. Place velocity dissipation devices (e.g., check dams, sediment traps, or riprap) as practicable, along the length of any conveyance channel to provide a non-erosive flow velocity. Also place velocity dissipation devices where discharges from the conveyance channel or structure join a water course to prevent erosion and to protect the channel embankment, outlet, adjacent stream bank slopes, and downstream waters.

11.H.5.4.3 Down-Slope Sediment Controls. Establish and use down-slope sediment controls (e.g., silt fence or temporary diversion dike) for any portion of the down-slope and side-slope perimeter where storm water will be discharged from disturbed areas of the site.

11.H.5.4.4 Stabilized Construction Vehicle Access and Exit Points. Establish stabilized vehicle access and exit points. Off-site accumulations of sediment must be removed at a frequency sufficient to minimize off-site impacts.

11.H.5.4.5 Capping. When capping is necessary to minimize pollutant discharges in storm water, identify the source being capped and the material used to construct the cap.

11.H.5.4.6 Treatment. If treatment of storm water (e.g., chemical or physical systems, oil and water separators, artificial wetlands) is necessary to protect water quality, describe the type and location of treatment used. All permanent storm water treatment devices shall receive engineering plan approval per 18 AAC 72.600. Passive and/or active treatment of storm water runoff is encouraged where practicable. Treated runoff may be discharged as a storm water source regulated under this permit provided the discharge is not combined with discharges subject to effluent limitation guidelines for the Coal Mining Point Source Category (40 CFR Part 434).

11.H.5.5 Certification of Discharge Testing. (See also Part 5.2.4.4) Test or evaluate all outfalls covered under this permit for the presence of specific mining-related non-storm water discharges such as discharges subject to effluent limitations guidelines (e.g., 40 CFR Part 434). Alternatively (if applicable), the permittee may keep a certification with the SWPPP consistent with Part 11.H.6.6.

11.H.5.6 Overburden, Waste Rock, and Raw Material Piles. Overburden, topsoil, and waste rock, as well as raw material and intermediate and final product stockpiles, should be located a minimum of 25 feet away from surface water, other sources of water, and from geologically unstable areas as practicable.

11.H.6 Additional SWPPP Requirements.

11.H.6.1 Other Applicable Regulations. Most active coal mining-related areas (SIC Codes 1221-1241) are subject to sediment and erosion control regulations of the U.S. Office of Surface Mining (OSM) that enforces the Surface Mining Control and Reclamation Act (SMCRA). OSM has granted authority to most coal-producing states to implement SMCRA through State SMCRA regulations. All SMCRA requirements regarding control of storm water-related pollutant discharges must be addressed and then documented with the SWPPP (directly or by reference).

11.H.6.2 Site Map. (See also Part 5.2.3) The permittee must document in their SWPPP where any of the following may be exposed to precipitation or surface runoff: haul and access roads; railroad spurs, sliding, and internal hauling lines; conveyor belts, chutes, and aerial tramways; equipment storage and maintenance yards; coal handling buildings, areas, and structures; and inactive mines and related areas; acidic spoil, refuse, or unreclaimed disturbed areas; and liquid storage tanks containing pollutants such as caustics, hydraulic fluids, and lubricants.

11.H.6.3 Potential Pollutant Sources. (See also Part 5.2.4) The permittee must document in their SWPPP the following sources and activities that have potential pollutants associated with them: truck traffic on haul roads and resulting generation of sediment subject to runoff and dust generation; fuel or other liquid storage; pressure lines containing slurry, hydraulic fluid, or other potential harmful liquids; and loading or temporary storage of acidic refuse or spoil.

11.H.6.4 Employee Training. To the extent practical, all supervisory personnel involved in directing the maintenance of storm water control measures shall be trained and qualified in the principles and practices of erosion and sediment control. All employee training(s) must be documented in the SWPPP.

11.H.6.5 Certification of Permit Coverage for Commingled Non-Storm Water Discharges. If a permittee determines that they are able to certify, consistent with Part 11.G.5.5, that a particular discharge composed of commingled storm water and non-storm water is covered under a separate APDES permit, and that permit subjects the non-storm water portion to effluent limitations prior to any commingling, retain such certification with the SWPPP. This certification must identify the non-storm water discharges, the applicable APDES permit(s), the effluent limitations placed on the non-storm water discharge by the permit(s), and the points at which the limitations are applied.

11.H.6.6 SWPPP Submittal. At least 45 calendar days prior to the start of initial construction of a new facility the permittee shall submit the construction phase SWPPP to DEC for review.

11.H.6.7 SWPPP Meeting. At least 20 calendar days before the start of initial construction for a new facility, representatives of the permittee and the prime site construction contractor shall meet with DEC in a pre-construction conference to discuss the details of storm water management during construction.

11.H.7 Active Mining Additional Inspection Requirements.

11.H.7.1 Inspections of Active Mining-Related Areas. (See also Part 6) Except for areas of the site subject to clearing, grading, and/or excavation activities conducted as part of the exploration and construction phase, which are subject to Part 11.H.4.14.1 perform quarterly inspections of active mining areas covered by this permit, corresponding with the inspections as performed by SMCRA inspectors, of all mining-related areas required by SMCRA. Also maintain the records of the SMCRA authority representative. See Part 11.H.8.1 for inspection requirements for inactive and unstaffed sties.

11.H.7.2 Sediment and Erosion Control. (See also Part 4.2.5) As indicated in Part 11.H.6.1, SMCRA requirements regarding sediment and erosion control measures must be complied with for those areas subject to SMCRA authority, including inspection requirements.

11.H.7.3 Comprehensive Site Inspections. (See also Part 6.3) The permittees inspection program must include inspections for pollutants entering the drainage system from activities located on or near coal mining-related areas. Among the areas to be inspected are haul and access roads; railroad spurs, sliding, and internal hauling lines; conveyor belts, chutes, and aerial tramways; equipment storage and maintenance yards; coal handling buildings, areas, and structures; and inactive mines and related areas.

11.H.8 Sector-Specific Benchmarks. (See also Part 7 of the permit.)

Table 11.H.8-1: Sector – Specific Benchmarks – Sector H

Subsector (Permittees may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector H1. Coal Mines and Related Areas (SIC 1221-1241)	Total Aluminum	0.75 mg/L
	Total Iron	1.0 mg/L
	Total Suspended Solids (TSS)	100 mg/L

11.H.8.1 Inactive and Unstaffed Sites – Conditional Exemption from No Exposure Requirement for Routine Inspections, Quarterly Visual Assessments, and Benchmark Monitoring. As a Sector H facility, if the permittee is seeking to exercise a waiver from either the quarterly visual assessment or the benchmark monitoring requirements for inactive and unstaffed sites (including temporarily inactive sites), they are conditionally exempt from the requirement to certify that "there are no industrial materials or activities exposed to storm water" in Parts 6.2.3 and 7.2.1.6, respectively. Additionally, if the permittee is seeking to reduce their required quarterly routine inspection frequency to a once annual comprehensive inspection, as is allowed under Part 6.1.3, the permittee is also conditionally exempt from the requirement to certify that "there are no industrial materials or activities exposed to storm water." These conditional exemptions are based on the following requirements:

- If circumstances change and the permittees facility becomes active and/or staffed, this exception no longer applies and the permittee must immediately begin complying with the applicable benchmark monitoring requirements as if the permittee was in their first year of permit coverage, and the quarterly visual assessment requirements; and

- DEC retains the authority to revoke this exemption and/or the monitoring waiver where it is determined that the discharge causes, has a reasonable potential to cause or contribute to an instream excursion above a WQS, including designated uses.

Subject to the two conditions above, if the permittees facility is inactive and unstaffed, they are waived from the requirement to conduct quarterly visual assessments and routine facility inspections. The permittee is not waived from conducting the Part 6.3 comprehensive site inspection. The permittee is encouraged to inspect their site more frequently where they have reason to believe that severe weather or natural disasters may have damaged control measures or increased discharges.

11.H.9 Termination of Permit Coverage.

11.H.9.1 Termination of Permit Coverage for Sites Reclaimed After December 17, 1990. A site or a portion of a site that has been released from applicable state or federal reclamation requirements after December 17, 1990, is no longer required to maintain coverage under this permit. If the site or portion of a site reclaimed after December 17, 1990, was not subject to reclamation requirements, the site or portion of the site is no longer required to maintain coverage under this permit if the site or portion of the site has been reclaimed as defined in Part 11.H.3.5.

11.H.9.2 Termination of Permit Coverage for Sites Reclaimed Before December 17, 1990. A site or portion of a site that was released from applicable state or federal reclamation requirements before December 17, 1990, or that was otherwise reclaimed before December 17, 1990, is no longer required to maintain coverage under this permit if the site or portion of the site has been reclaimed. A site or portion of a site is considered to have been reclaimed if: (1) storm water runoff that comes into contact with raw materials, intermediate byproducts, finished products, and waste products does not have the potential to cause or contribute to violations of state WQS, (2) soil disturbing activities related to mining at the sites or portion of the site have been completed, (3) the site or portion of the site has been stabilized to minimize soil erosion, and (4) as appropriate depending on location, size, and the potential to contribute pollutants to storm water discharges, the site or portion of the site has been revegetated, will be amenable to natural revegetation, or will be left in a condition consistent with the post-mining land use.

11. Subpart I – Sector I – Oil and Gas Extraction.

A permittee must comply with Part 11 sector-specific requirements associated with their primary industrial activity and any co-located industrial activities, as defined in Appendix C. The sector-specific requirements apply to those areas of the permittees facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

11.I.1 Covered Storm Water Discharges.

The requirements in Subpart I apply to storm water discharges associated with industrial activity from Oil and Gas Extraction facilities as identified by the SIC Codes specified under Sector I in Table D-1 of Appendix D of the permit.

Discharges of storm water runoff from field activities or operations associated with oil and gas exploration, production, processing, or treatment operations or transmission facilities are exempt from APDES permit coverage unless, in accordance with 40 CFR 122.26(c)(1)(iii), the facility:

- Has had a discharge of storm water resulting in the discharge of a reportable quantity for which notification is or was required pursuant to 40 CFR 117.21 or 40 CFR 302.6 at anytime since November 16, 1987; or
- Has had a discharge of storm water resulting in the discharge of a reportable quantity for which notification is or was required pursuant to 40 CFR 110.6 at any time since November 16, 1987; or
- Contributes to a violation of a WQS.

Any storm water discharges that require permit coverage as a result of meeting one of the conditions of 40 CFR 122.26(c)(1)(iii) may be covered under this permit unless otherwise required to obtain coverage under an alternative APDES general permit or an individual APDES permit as specified in Part 2.8.1

Oil and Gas Facilities in the North Slope Borough with industrial storm water discharges to waters of the U.S. or directly to the tundra must file under APDES permit AKG331000 rather than this permit.

11.I.2 Limitations on Coverage.

11.I.2.1 *Storm Water Discharges Subject to Effluent Limitation Guidelines.* (See also Part 1.2.4.4) This permit does not authorize storm water discharges from petroleum drilling operations that are subject to nationally established effluent limitation guidelines found at 40 CFR Part 435, respectively.

11.I.2.2 *Non-Storm Water Discharges.* Discharges of vehicle and equipment washwater, including tank cleaning operations, are not authorized by this permit. Alternatively, washwater discharges must be authorized under a separate APDES permit, or be discharged to a sanitary sewer in accordance with applicable industrial pretreatment requirements.

11.I.3 Additional Technology-Based Effluent Limits.

11.I.3.1 *Storm Water Controls.* Apart from the control measures implemented to meet Part 4 control measures, implement the following control measures at the facility, as practicable. The potential pollutants identified in Part 11.I.4.2 shall determine the priority and appropriateness of the control measures selected. If the permittee selects or develops a storm water control other than one described below, the permittee shall describe it in the SWPPP.

11.I.3.1.1 *Vegetative Controls.* Implement vegetative practices designed to preserve existing vegetation, where attainable, and revegetate open areas as soon as practicable after grade drilling. Use one or more of the following (or equivalent measures), as practicable: temporary or permanent seeding, mulching, sod stabilization, vegetative buffer strips, and tree protection practices. Begin implementing appropriate vegetative practices on all disturbed areas within 14 days following the last activity in that area.

11.I.3.1.2 *Storm Water Diversions.* Divert storm water away from potential pollutant sources. Implement the following options, as practicable: interceptor or diversion controls (e.g., dikes, swales, curbs, or berms); pipe slope drains; subsurface drains; conveyance systems (e.g., channels or gutters, open-top box culverts, and waterbars; rolling dips and road sloping; roadway surface water deflector and culverts); or their equivalents.

11.I.3.1.3 *Velocity Dissipation Devices.* (e.g., check dams, sediment traps, or riprap) along the length of any conveyance channel to provide a non-erosive flow velocity. Also place velocity dissipation devices where discharges from the conveyance channel or structure join a water course to prevent erosion and to protect the channel embankment, outlet, adjacent stream bank slopes, and downstream waters.

11.I.3.1.4 *Down-Slope Sediment Controls.* Establish and use down-slope sediment controls (e.g., silt fence or temporary diversion dike) for any portion of the down-slope and side-slope perimeter where storm water will be discharged from disturbed areas of the site.

11.I.3.1.5 *Stabilized Vehicle Access and Exit Points.* Establish stabilized vehicle access and exit points. Off-site accumulations of sediment must be removed at a frequency sufficient to minimize off-site impacts.

11.I.4 Additional SWPPP Requirements.

11.I.4.1 *Drainage Area Site Map.* (See also Part 5.2.3) Document in the SWPPP where any of the following may be exposed to precipitation or surface runoff: Reportable Quantity (RQ) releases; locations used for the treatment, storage, or disposal of wastes; processing areas and storage areas; chemical mixing areas; construction and drilling areas; all areas subject to the effluent guidelines requirements for "No Discharge" in accordance with 40 CFR 435.32; and the structural controls to achieve compliance with the "No Discharge" requirements.

11.I.4.2 *Potential Pollutant Sources.* (See also Part 5.2.4) Also document in the SWPPP the following sources and activities that have potential pollutants associated with them: chemical, cement, mud, or gel mixing activities; drilling or mining activities; and equipment cleaning and rehabilitation activities. In addition, include information about the reportable quantity (RQ) release that triggered the permit application requirements: the nature of the release (e.g., spill of oil from a drum storage area), amount of oil or hazardous substance released, amount of substance recovered, date of the release, cause of the release (e.g., poor handling techniques and lack of containment in the area), areas affected by the release (i.e., land and water), procedure to clean up release, actions or procedures implemented to prevent or improve response to a release, and remaining potential contamination of storm water from release (taking into account human health risks, the control of drinking water intakes, and the designated uses of the receiving water).

11.I.4.3 *Erosion and Sedimentation Control.* (See also Part 4.2.5) The additional documentation requirements for sediment and erosion controls for well drillings and sand/shale mining areas include the following:

11.I.4.3.1 *Site Description.* Also include a description in the SWPPP of the nature of the exploration activity, estimates of the total area of site and area disturbed due to exploration activity, an estimate of runoff coefficient of the site, a site drainage map, including approximate slopes, and the names of all receiving waters.

11.I.4.3.2 *Vegetative Controls.* Document vegetative practices used consistent with Part 11.I.3.1 in the SWPPP.

11.I.5 Additional Inspection Requirements.

11.I.5.1 All erosion and sedimentation control measures must be inspected either: 1) every 7 days; or 2) once every 14 calendar days and within 24 hours of a storm event.

11. Subpart J – Sector J – Non-Metallic Mineral Mining and Dressing.

A permittee must comply with Part 11 sector-specific requirements associated with their primary industrial activity and any co-located industrial activities, as defined in Appendix C. The sector-specific requirements apply to those areas of the permittees facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

11.J.1 Covered Storm Water Discharges.

The requirements in Subpart J apply to storm water discharges associated with industrial activity from Active, Inactive, or Non-Traditional Non-Metallic Mineral Mining and Dressing facilities as identified by the SIC Codes specified under Sector J in Table D-1 of Appendix D of the permit.

11.J.1.1 *Covered Discharges from Inactive Facilities.* All storm water discharges.

11.J.1.2 *Covered Discharges from Active and Temporarily Inactive Facilities.* All storm water discharges, except for most storm water discharges subject to the existing effluent limitation guideline at 40 CFR Part 436. Mine dewatering discharges composed entirely of storm water or uncontaminated ground water seepage from: construction sand and gravel, industrial sand, and crushed stone mining facilities is covered by this permit.

11.J.1.3 *Covered Discharges from Exploration and Construction of Non-Metallic Mineral Mining Facilities.* All storm water discharges.

11.J.1.4 *Covered Discharges from Sites Undergoing Reclamation.* All storm water discharges.

11.J.2 Limitations on Coverage.

Most storm water discharges subject to an existing effluent limitation guideline at 40 CFR Part 436 are not authorized by this permit. The exceptions to this limitation, which are covered by this permit, are mine dewatering discharges composed entirely of storm water or uncontaminated ground water seepage from construction sand and gravel, industrial sand, and crushed stone mining facilities.

11.J.3 Definitions.

The following definitions are not intended to supersede the definitions of active and inactive mining facilities established by 40 CFR 122.26(b)(14)(iii).

11.J.3.1 *Mining Operations* - Consists of the active and temporarily inactive phases, and the reclamation phase, but excludes the exploration and construction phases.

11.J.3.2 *Exploration Phase* - Entails exploration and land disturbance activities to determine the financial viability of a site. The exploration phase is not considered part of “mining operations.”

11.J.3.3 *Construction Phase* - Includes the building of site access roads, facilities, and removal of overburden and waste rock to expose mineable minerals. The construction phase is not considered part of "mining operations".

11.J.3.4 *Active Phase* - Activities including the extraction, removal or recovery of minerals. For surface mines, this definition does not include any land where grading has returned the earth to a desired contour and reclamation has begun. This definition is derived from the definition of "active mining area" found at 40 CFR 440.132(a). The active phase is considered part of "mining operations."

11.J.3.5 *Reclamation Phase* - Activities undertaken, in compliance with applicable mined land reclamation requirements, following the cessation of the "active phase", intended to return the land to an appropriate post-mining land use. The reclamation phase is considered part of "mining operations".

11.J.3.6 *Non-Traditional Non-Metallic Mineral Mining Facility* - Consists of non-metallic mineral mining facilities which conduct mineral mining and dressing for the sale or distribution of aggregate materials from a non-commercial establishment to be used on multiple unrelated projects. These facilities consist of operations without any permanent sales offices, scales, or other facilities being operated by a commercial establishment that would otherwise clearly fit within one of the Standard Industrial Classification (SIC) codes found in Sector J of Appendix D of the permit. These non-traditional facilities are managed by an operator, who oversees the removal of aggregate from the site, with either written contracts for specified aggregate quantities or an informal notice approving the distribution of material. The operator of these facilities who executes the contracts or provides the authority for individuals or parties to remove aggregate would meet the definition of an operator under this permit and be the sole party responsible to obtain permit coverage, maintain a SWPPP, maintain BMPs, conduct inspections and monitoring, and submit reports.

NOTE: The following definitions are not intended to supersede the definitions of active and inactive mining facilities established by 40 CFR 122.26(b)(14)(iii).

11.J.3.7 *Active Mineral Mining Facility* - A place where work or other activity related to the extraction, removal, or recovery of minerals is being conducted. For surface mines, this definition does not include any land where grading has returned the earth to a desired contour and reclamation has begun. This definition is derived from the definition of "active mining area" found at 40 CFR 440.132(a).

11.J.3.8 *Inactive Mineral Mining Facility* - A site or portion of a site where mineral mining and/or milling occurred in the past but is not an active facility as defined above, and where the inactive portion is not covered by an active mining permit issued by the applicable State or Federal agency. An inactive mineral mining facility has an identifiable owner / operator. Sites where mining claims are being maintained prior to disturbances associated with the extraction, beneficiation, or processing of mined materials, and sites where minimal activities are undertaken for the sole purpose of maintaining a mining claim are not considered either active or inactive mining facilities and do not require an APDES industrial storm water permit.

11.J.3.9 *Temporarily Inactive Mineral Mining Facility* - A site or portion of a site where mineral mining and/or milling occurred in the past but currently are not being actively undertaken, and the facility is covered by an active mining permit issued by the applicable State or Federal agency. A temporarily inactive facility includes sites that are temporarily stabilized and have small stockpiles of non-metallic mineral mining material (less than 250 cubic yards/year) for local use or road maintenance during the temporarily inactive phase.

11.J.4 Technology-Based Effluent Limits for Clearing, Grading, and Excavation Activities.

Clearing, grading, and excavation activities being conducted as part of the exploration and construction phase of mining activities are covered under this permit.

11.J.4.1 *Erosion Control Measures.* A permittee must comply with the erosion control measures in this Part to minimize soil exposure on the site during construction.

11.J.4.1.1 *Delineation of Site.* A permittee must generally delineate (e.g., with flagging, stakes, signs, silt fence, etc.,) the location of specific areas that will be left undisturbed such as trees, boundaries of sensitive areas, or buffers established under Part 11.J.4.1.3.

11.J.4.1.2 *Minimize the Amount of Soil Exposed during Construction Activity.* A permittee must include the following considerations in the selection of control measures and the sequence of project construction as they apply to the project site:

- Preserve areas of native topsoil on the site, unless infeasible; and
- Sequence or phase construction activities to minimize the extent and duration of exposed soils to the extent practicable.

11.J.4.1.3 *Maintain Natural Buffer Areas.*

The permittee must maintain natural buffer areas at stream crossings and around the edge of any waters of the U.S. that are located within or immediately adjacent to the property where the construction activity will take place in accordance with the following:

- The buffer must be a minimum of twenty-five (25) feet wide, unless infeasible based on site dimensions, or the width as required by local ordinance.
- Exceptions are allowed for water dependent activities, specific water access activities, or necessary water crossings.
- A permittee should, to the extent practicable, use perimeter controls adjacent to buffers, and direct storm water sheet flow to buffer areas to increase sediment removal and maximize storm water infiltration, unless infeasible.

11.J.4.1.4 Control Storm Water Discharges and Flow Rates. A permittee must include the following control measures to handle storm water and total storm water volume discharges as they apply to the site:

- Divert storm water around the site so that it does not flow onto the project site and cause erosion of exposed soils;
- Slow down or contain storm water that may collect and concentrate within a site and cause erosion of exposed soils;
- Avoid placement of structural control measures in active floodplains to the degree technologically and economically practicable and achievable;
- Place velocity dissipation devices (e.g., check dams, sediment traps, or riprap) along the length of any conveyance channel to provide a non-erosive flow velocity. Also place velocity dissipation devices where discharges from the conveyance channel or structure join a water course to prevent erosion and to protect the channel embankment, outlet, adjacent stream bank slopes, and downstream waters; and
- Install permanent storm water management controls, if present at a site and where practical, so that they must be functional prior to construction of site improvements (e.g., impervious surfaces).

11.J.4.1.5 Protect Steep Slopes. A permittee must include the following considerations in the selection of control measures as they apply to the project site:

- Design and construct cut-and-fill slopes in a manner that will minimize erosion. Applicable practices include, but are not limited to, reducing continuous length of slope with terracing and diversions, reducing slope steepness, and roughening slope surfaces (e.g., track walking);
- Divert concentrated flows of storm water away from and around the disturbed portion of the slope. Applicable practices include, but are not limited to

interceptor dikes and swales, grass-lined channels, pipe slope drains, subsurface drains, check dams; and

- Stabilize exposed areas of the slope in accordance with Part 11.J.4.4.

11.J.4.2 Sediment Control Measures. Sediment control measures (e.g. sediment ponds, traps, filters, etc.) must be constructed as one of the first steps in grading. These control measures must be functional before other land disturbing activities take place. A permittee must install, establish and use any of the following control measures that apply to the project site.

11.J.4.2.1 Storm Drain Inlet Protection Measures. A permittee must install appropriate protection measures (e.g. filter berms, perimeter controls, temporary diversion dikes, etc.) to minimize the discharge of sediment prior to entry into the inlet for storm drain inlets located on site or immediately downstream of the site. Inlet protection measures must be cleaned or removed and replaced when sediment has filled one-third of the available storage.

11.J.4.2.2 Water Body Protection Measures. A permittee must install appropriate protection measures (Part 11.J.4.1.4) to minimize the discharge of sediment prior to entry into the water body for water bodies located on site or immediately downstream of the site. Protection measures must be cleaned or removed and replaced when sediment has filled one-third of the available storage.

11.J.4.2.3 Down-Slope Sediment Controls. A permittee must establish and use down-slope sediment controls (e.g., silt fence, temporary diversion dike, etc.) for any portion of the down-slope and side-slope perimeter where storm water will be discharged from disturbed areas of the site.

11.J.4.2.4 Stabilized Construction Vehicle Access and Exit Points. A permittee must establish construction vehicle access and exit points which must be stabilized. Access and exit points should be limited to one route, if possible. If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize off-site impacts.

11.J.4.2.5 Dust Generation and Track-Out from Vehicles. A permittee must minimize the generation of dust through the application of water or other dust suppression techniques and prior to vehicle exit. A permittee must provide an effective way of minimizing off-site vehicle tracking of sediment from wheels to prevent track-out onto paved surfaces.

11.J.4.2.6 Soil Stockpiles. A permittee must stabilize or cover soil stockpiles, protect with sediment trapping measures, and where possible, locate soil stockpiles away from storm drain inlets, water bodies, and conveyance channels.

11.J.4.2.7 Authorized Non-Storm Water Discharges. A permittee must minimize any non-storm water authorized by this permit.

11.J.4.2.8 Sediment Basins, where applicable:

- For common drainage locations that serve an area with ten (10) or more acres disturbed at one time, a temporary (or permanent) sediment basin that provides storage for a calculated volume of runoff from the drainage area from a 2-year, 24-hour storm, or equivalent sediment control measures, must be installed, maintained, and used where practicable until final stabilization of the site. Where no such calculation has been performed, a temporary (or permanent) sediment basin providing 3,600 cubic feet of storage per acre drained, or equivalent sediment control measures, must be installed and used where practicable until final stabilization of the site. When computing the number of acres draining into a common location, it is not necessary to include flows from offsite areas and flows from on-site areas that are either undisturbed or have undergone final stabilization where such flows are diverted around both the disturbed area and the sediment basin. In determining whether installing a sediment basin is practicable, the permittee may consider factors such as site soils, slope, available area on-site, etc. In any event, the permittee must consider public safety, especially as it relates to children, as a design factor for the sediment basin, and alternative sediment control measures must be used where site limitations would preclude a safe design.

- For drainage locations which serve ten (10) or more disturbed acres at one time and where a temporary sediment basin or equivalent controls is not practicable, smaller sediment basins and/or sediment traps should be used. Silt fences, vegetative buffer strips, or equivalent sediment control measures are required for all down slope boundaries (and for those side slope boundaries deemed appropriate as dictated by individual site conditions).

- For drainage locations serving less than ten (10) acres, smaller sediment basins and/or sediment traps should be used. Silt fences, vegetative buffer strips, or equivalent sediment control measures are required for all down slope boundaries (and for those side slope boundaries deemed appropriate as dictated by individual site conditions) of the construction area unless a sediment basin providing storage for a calculated volume of runoff from a 2-year, 24-hour storm event or 3,600 cubic feet of storage per acre drained is provided.

- When discharging from basins and impoundments, utilize outlet structures that withdraw water from the surface where practicable.

- Note: installing sediment basins in the presence of permafrost is challenging and might not be practicable in some instances because permafrost creates poor surface drainage that hinders the infiltration of runoff. Also, the excavation of permafrost in summer can trigger thawing and instability.

11.J.4.3 Dewatering.

11.J.4.3.1 If a construction activity includes excavation dewatering and has a discharge that could adversely impact a local drinking water well, an DEC-identified contaminated site, or a waters of the U.S., the permittee must review the DEC Excavation Dewatering General Permit (AKG002000, or most current version) for specific requirements the permittee may have to comply with in addition to the conditions of this permit.

11.J.4.3.2 A discharge from eligible dewatering activities, including discharges from dewatering of trenches and excavations are prohibited unless treated by appropriate control measures. Appropriate control measures include, but are not limited to, sediment basins or traps, dewatering tanks, weir tanks, or filtration systems designed to remove sediment.

11.J.4.4 Soil Stabilization.

11.J.4.4.1 Minimum Requirements for Soil Stabilization. A permittee must stabilize all disturbed areas of the site to minimize on-site erosion and sedimentation and the resulting discharge of pollutants according to the requirements of this Part. A permittee must ensure that existing vegetation is preserved wherever possible and that disturbed portions of the site are stabilized. Applicable stabilization control measures include, but are not limited to: temporary and permanent seeding, sodding, mulching, rolled erosion control product, compost blanket, soil application of polyacrylamide (PAM), the early application of gravel base on areas to be paved, and dust control. A permittee should avoid using impervious surfaces for stabilization. See the Alaska Plant Materials Center's *A Revegetation Manual for Alaska* at http://plants.alaska.gov for help in efforts to select appropriate seed mixes and some information on methods for revegetation. Also see the manual for *Coastal Alaska, Coastal Revegetation & Erosion Control Guide* at http://plants.alaska.gov.

11.J.4.5 Treatment Chemicals. The use of treatment chemicals to reduce turbidity in a storm water discharge is allowed provided that all of the requirements of this Part are met.

11.J.4.5.1 Use of conventional sediment controls before and after the application of treatment chemicals. Chemicals may only be applied where storm water is treated upstream and is directed to a sediment control (e.g., sediment trap, sediment basin) before discharge.

11.J.4.5.2 Select appropriate treatment chemicals. Chemicals must be appropriately suited to the types of soils likely to be exposed during construction and present in the discharges being treated (i.e., the expected turbidity, pH, and flow rate of storm water flowing into the chemical treatment system or area, etc.)

11.J.4.5.3 Minimize discharge risk from stored chemicals. Store all treatment chemicals in leak-proof containers that are kept under storm-resistant cover and surrounded by secondary containment structures (e.g., spill berms, decks, spill containment pallets), with adequate spill kits available on-site to respond if the event of a discharge of treatment chemicals occurs.

11.J.4.5.4 Use chemicals in accordance with good engineering practices and specifications of the chemical provider/supplier, and with dosing specifications and sediment removal design specifications provided by the provider/supplier of the applicable chemicals, or document in your SWPPP specific departures from these specifications and how they reflect good engineering practice.

11.J.4.5.5 Application of treatment chemicals through the use of manufactured products (e.g., gel bars, gel logs, floc blocks, etc.) must be used in combination with adequate ditch check dams, sediment traps, sediment basins, or physical control measure designed to settle out chemically treated storm water and minimize the presence of treatment chemicals before discharges reach waters of the U.S.. At a minimum there must be adequate ditch length downstream of the last manufactured product prior to reaching the discharge point into a water of the U.S. to provide a place for sedimentation to occur.

11.J.4.5.6 Ensure proper training. Ensure that all persons who handle and use treatment chemicals at the construction site are provided with appropriate, product-specific training. Among other things, the training must cover proper dosing requirements.

11.J.4.5.7 Perform additional measures specified by the Department for the authorized use of cationic treatment chemicals. If the permittee plans to add “cationic treatment chemicals” (as defined in Appendix C) to storm water and/or authorized non-storm water prior to discharge, they must submit a request to the Department fourteen (14) calendar days in advance of proposed usage. The request must include the following:

- Operator Name, mailing address, phone number, and email address;
- Project/Site name, physical address, contact name, phone number, email address and MSGP permit authorization number;
- Site Map with all receiving waterbodies, proposed location of chemical treatment system, and proposed point of discharge into receiving waterbodies;
- Schematic drawing of the proposed treatment system; and

- Description of the proposed treatment system including; type of system being used, type of cationic chemicals being used, estimated start and finish date, sampling and recordkeeping schedule and reporting, and name of treatment system operator or company.

The permittee must perform all additional measures as conditioned by the Department authorization to ensure that the use of such chemicals will not cause an exceedance of water quality standards.

11.J.4.6 Prohibited Discharge. A permittee is prohibited from discharging the following from the site:

11.J.4.6.1 Wastewater from concrete washout, unless managed by an appropriate control measure;

11.J.4.6.2 Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;

11.J.4.6.3 Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and

11.J.4.6.4 Soaps or solvents used in vehicle and equipment washing.

11.J.4.7 Good Housekeeping Measures. A permittee must design, install, implement, and maintain effective good housekeeping measures to prevent and/or minimize the discharge of pollutants. A permittee must include appropriate measures for any of the following activities that are used at the site.

11.J.4.7.1 Washing of Equipment and Vehicles and Wheel Wash-Down. If a permittee conducts washing of equipment or vehicles and/or wheel wash-down at the site the permittee must comply with the following requirements:

- Designate areas to be used for washing of equipment and vehicles and/or wheel wash-down and conduct such activities only in these areas;
- Locate such activities, to the extent practicable, away from storm water conveyance channels, storm drain inlets, and waters of the U.S.;
- Treat all wash water in a sediment basin or use alternative control measures that provide equivalent or better treatment prior to discharge; and
- To comply with the prohibition in Part 11.J.4.6.4, the discharge of soaps and solvents used in equipment and vehicle washing and/or wheel wash-down is strictly prohibited.

11.J.4.7.2 Fueling and Maintenance Areas. If a permittee conducts fueling and/or maintenance activities for equipment and vehicles at the site the permittee must comply with the following requirements:

- Designate areas to be used for fueling and/or maintenance of equipment and vehicles and conduct such activities only in these areas (the designated area may move from one location to another on linear projects);
- Locate such activities, to the extent practicable, away from storm water conveyance channels, storm drain inlets and waters of the U.S.;
- Minimize the exposure to precipitation and storm water or use secondary containment structures designed to eliminate the potential for spills or leaked chemicals; and
- To comply with the prohibition in Part 11.J.4.6.3, a permittee must:
    - Clean up spills or contaminated surfaces immediately;
    - Ensure adequate clean up supplies are available at all times to handle spills, leaks, and disposal of used liquids;
    - Use drip pans or absorbents under or around leaky equipment and vehicles; and
    - Dispose of liquid wastes or materials used for fueling and maintenance in accordance with Part 11.J.4.11.

11.J.4.8 Staging and Material Storage Areas. If a permittee maintains staging and material storage areas at the site the permittee must comply with the following requirements:

- Designate areas to be used for staging and material storage areas;
- Locate such activities, to the extent practicable, away from storm water conveyance channels, storm drain inlets, and waters of the U.S; and
- Minimize the exposure to precipitation and storm water and vandalism for all chemicals, treatment chemicals, liquid products, petroleum products, and other materials that have the potential to pose a threat to human health or the environment.

11.J.4.9 Washout of Applicators/Containers used for Paint, Concrete, and Other Materials. If a permittee conducts washing of applicators and/or containers used for paint, concrete, and other materials at the site, the permittee must comply with the following requirements:

- Designate areas to be used for washout;

- Locate such activities, to the extent practicable, away from storm water conveyance channels, storm drain inlets, and waters of the U.S.;
- Direct all concrete, paint, and other material washout activities into a lined, water-tight container or pit to ensure there is no discharge into the underlying soil and onto the surrounding areas;
- Dispose of liquid wastes in accordance with Part 11.J.4.11; and
- For concrete washout areas, remove hardened concrete waste when it has reached one-half (½) the height of the container or pit and dispose of in accordance with Part 11.J.4.11.

11.J.4.10 Fertilizer or Pesticide Use. If a permittee uses fertilizers or pesticides the permittee must comply with the following requirements:

- Application of fertilizers and pesticides in a manner and at application rates that will minimize the loss of chemical to storm water runoff. Manufacturers' label requirements for application rates and disposal requirements must be followed; and
- Use pesticides in compliance with federal, state and local requirements.

11.J.4.11 Storage, Handling, and Disposal of Construction Waste. If a permittee stores, handles and/or disposes of construction waste at the site, the permittee must comply with the following requirements:

- Locate areas dedicated for management or disposal of construction waste, to the extent practicable, away from storm water conveyance channels, storm drain inlets, and waters of the U.S.;
- Dispose of all collected sediment, asphalt and concrete millings, floating debris, paper, plastic, fabric, construction and demolition debris and other domestic wastes according to federal, state and local requirements;
- Store hazardous or toxic waste in appropriate sealed containers and dispose of these wastes in accordance with manufactures recommended method of disposal or federal, state or local requirements; and
- Provide containment of sanitation facilities (e.g., portable toilets) to prevent discharges of pollutants to the storm water drainage system or receiving water. Clean or replace sanitation facilities and inspect them regularly for leaks and spills.

11.J.4.12 Winter Considerations.

11.J.4.12.1 Winter Shutdown. A permittee who temporarily ceases construction for the winter and plans to resume construction the next summer must plan for winter shutdown. The permittee must identify the anticipated dates of fall freeze-up and spring thaw (see Appendix C) for their site and use these dates to plan for winter shutdown. For the purpose of planning ahead frozen ground by itself is not considered an acceptable control measure for stabilization. A permittee must provide for the following prior to, during, and at the conclusion of winter shutdown:

- Temporary or permanent stabilization for conveyance channels;
- Temporary or permanent stabilization for disturbed slopes, disturbed soils, and soil stockpiles; and
- Erosion and sediment control measures in anticipation of spring thaw.

11.J.4.12.2 Winter Construction. In several areas of Alaska, winter construction provides opportunities for construction not available during summer months. Permit coverage is not required for the construction of ice roads or the placement of sand or gravel on frozen tundra with no excavation or potential to pollute waters of the U.S. This permit does address those construction activities that have the potential for erosion or sediment runoff during spring thaw and summer rainfall. A permittee operating winter construction activities must plan for using appropriate control measures to minimize erosion or sediment runoff during spring thaw and summer rainfall. The Alaska Storm Water Guide, Chapters 3 and 4, provide guidance on the selection, design, and installation of winter construction practices and controls.

11.J.4.12.3 Late Winter Clearing. Cutting of trees and brush while the ground is frozen, without disturbing the vegetative mat, for the purpose of clearing in accordance with the U.S. Fish & Wildlife Service "Recommended Time Periods for Avoiding Vegetation Clearing" is allowed prior to the submittal of a project NOI. If the cutting occurs after the onset of spring thaw (as defined in Appendix C), conditions that consist of above freezing temperatures that cause melting of snow, then the permittee must develop a SWPPP and file an NOI, and receive authorization for coverage under this permit from DEC, and otherwise comply with the terms of this permit prior to such clearing.

11.J.4.13 Maintenance of Control Measures. A permittee must maintain all control measures, good housekeeping measures, and other protective measures in effective operating condition. If site inspections required by Part 6 identify control measures, good housekeeping measures, or other protective measures that are not operating effectively, the permittee must implement corrective actions in accordance with Part 8.

If existing control measures need to be modified or if additional control measures are necessary for any reason, the permittee must complete any corrective action in accordance with Part 8.3.

A permittee must remove sediment from silt fences, check dams, berms or other controls before the accumulated sediment reaches one-half (½) the distance up the above-ground height (or it reaches a lower height based on manufacturer's specifications) of the control measure. For sediment traps or sediment ponds, the permittee must remove accumulated sediment when the design capacity has been reduced by fifty (50%) percent.

11.J.4.14 Inspection of Clearing, Grading, and Excavation Activities. (See also Part 6)

11.J.4.14.1 Inspection Frequency. Inspections must be conducted at one of the following: at least once every 7 calendar days; or at least once every 14 calendar days and within 24 hours of the end of a storm event that resulted in a discharge from the site; or for areas of the state where the mean annual precipitation is forty (40) inches or greater, or relatively continuous precipitation or sequential storm events, inspect at least once every seven (7) calendar days. If the entire site is temporarily stabilized, inspection frequency may be reduced to at least once every month and within two business days of the end of a measurable storm event at actively staffed sites which resulted in a discharge from the site (pursuant to Part 11.G.4.15.2). Once active mining has begun, those areas comply with inspections according to 11.G.7. A permittee must specify in the SWPPP which schedule will be followed.

11.J.4.14.2 Winter Shutdown. If the exploration and construction phase is undergoing winter shutdown the permittee may stop inspections fourteen (14) calendar days after the anticipated fall freeze-up and must resume inspections at least twenty-one (21) calendar days prior to the anticipated spring thaw. The permittee shall identify the winter shutdown period in their SWPPP based upon the definitions of fall freeze-up and spring thaw.

11.J.4.14.3 Location of Inspections. Inspections must include all areas of the site disturbed by clearing, grading, and/or excavation activities and areas used for storage of materials that are exposed to precipitation. Sedimentation and erosion control measures must be observed to ensure proper operation. Discharge locations must be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to waters of the United States, where accessible. Where discharge locations are inaccessible, nearby downstream locations must be inspected to the extent that such inspections are practicable. Locations where vehicles enter or exit the site must be inspected for evidence of significant off-site sediment tracking.

11.J.4.14.4 Inspection Reports. (See also Part 6.1) For each inspection required above, the permittee must complete an inspection report. At a minimum, the inspection report must include the information required in Part 6.1.

11.J.4.15 ***Requirements for Cessation of Clearing, Grading, and Excavation Activities***.

11.J.4.15.1 Inspections and Maintenance. Inspections and maintenance of control measures, including any BMPs, associated with clearing, grading, and/or excavation activities being conducted as part of the exploration and construction phase of a mining operation must continue until final stabilization has been achieved on all portions of the disturbed area or until the commencement of the active mining phase for those areas that have been temporarily stabilized as a precursor to mining.

11.J.4.15.2 Temporary Stabilization of Disturbed Areas. Stabilization measures should be initiated immediately in portions of the site where clearing, grading and/or excavation activities have temporarily ceased, but in no case more than 14 days after the clearing, grading and/or excavation activities in that portion of the site have temporarily ceased. In arid, semi-arid, and drought-stricken areas, or in areas subject to snow or freezing conditions, where initiating perennial vegetative stabilization measures is not possible within 14 days after exploration and/or construction activity has temporarily ceased, temporary vegetative stabilization measures must be initiated as soon as practicable.

The permittee must identify the anticipated dates of fall freeze-up and spring thaw (see Appendix C) for the site and use those dates to plan for winter shutdown. For the purpose of planning ahead frozen ground by itself is not considered an acceptable control measure for stabilization. Where temporary stabilization by the 14th day is precluded by snow cover or frozen ground conditions, stabilization measures must be initiated as soon as practicable following the actual spring thaw.

Until temporary vegetative stabilization is achieved, interim measures (e.g., surface roughening or a surface cover, including but not limited to, establishment of ground vegetation, application of mulch, or surface tackifiers with an appropriate seed base) must be employed. In areas of the site, where exploration and/or construction has permanently ceased prior to active mining, temporary stabilization measures must be implemented to minimize mobilization of sediment or other pollutants until such time as the active mining phase commences.

11.J.4.15.3 Final Stabilization of Disturbed Areas. Stabilization measures should be initiated immediately in portions of the site where mining, exploration, and/or construction activities have permanently ceased, but in no case more than 14 days after the exploration and/or construction activity in that portion of the site has permanently ceased. In arid, semi-arid, and drought-stricken areas, or in areas subject to snow or freezing conditions, where initiating perennial vegetative stabilization measures is not possible within 14 days after mining, exploration, and/or construction activity has permanently ceased, final vegetative stabilization measures must be initiated as soon as possible. Until final stabilization is achieved, temporary stabilization measures must be used.

11.J.5 Additional Technology-Based Effluent Limits.

11.J.5.1 *Employee Training.* (See also Part 4.2.9) Conduct employee training at least annually at active and temporarily inactive sites.

11.J.5.2 *Good Housekeeping Measures.* (See also Part 4.2.2) As part of the permittees good housekeeping program, implement the following, as practicable: use sweepers and covered storage, watering haul roads to minimize dust generation, and conserving vegetation (where possible) to minimize erosion.

11.J.5.3 *Preventive Maintenance.* (See also Part 4.2.3) Perform inspections or other equivalent measures of storage tanks and pressure lines of fuels, lubricants, and hydraulic fluid to prevent leaks due to deterioration or faulty connections.

11.J.5.4 *Storm Water Controls.* Apart from the control measures implemented to meet the Part 4 control measures, implement the following control measures at the facility as practicable. The potential pollutants identified in Part 11.J.5.5 shall determine the priority and appropriateness of the control measures selected. . If the permittee selects or develops a storm water control other than one described below, the permittee shall describe it in the SWPPP.

11.J.5.4.1 *Storm Water Diversions.* Divert storm water away from potential pollutant sources. Implement the following options, as practicable: interceptor or diversion controls (e.g., dikes, swales, curbs, or berms); pipe slope drains; subsurface drains; conveyance systems (e.g., channels or gutters, open-top box culverts, and waterbars; rolling dips and road sloping; roadway surface water deflector and culverts); or their equivalents.

11.J.5.4.2 *Velocity Dissipation Devices.* Place velocity dissipation devices (e.g., check dams, sediment traps, or riprap) as practicable, along the length of any conveyance channel to provide a non-erosive flow velocity. Also place velocity dissipation devices where discharges from the conveyance channel or structure join a water course to prevent erosion and to protect the channel embankment, outlet, adjacent stream bank slopes, and downstream waters.

11.J.5.4.3 *Down-Slope Sediment Controls.* Establish and use down-slope sediment controls (e.g., silt fence or temporary diversion dike) for any portion of the down-slope and side-slope perimeter where storm water will be discharged from disturbed areas of the site.

11.J.5.4.4 *Stabilized Construction Vehicle Access and Exit Points.* Establish stabilized vehicle access and exit points. Off-site accumulations of sediment must be removed at a frequency sufficient to minimize off-site impacts.

11.J.5.4.5 Capping. When capping is necessary to minimize pollutant discharges in storm water, identify the source being capped and the material used to construct the cap.

11.J.5.4.6 Treatment. If treatment of storm water (e.g., chemical or physical systems, oil and water separators, artificial wetlands) is necessary to protect water quality, describe the type and location of treatment used. All permanent storm water treatment devices shall receive engineering plan approval per 18 AAC 72.600. Passive and/or active treatment of storm water runoff is encouraged where practicable. Treated runoff may be discharged as a storm water source regulated under this permit provided the discharge is not combined with discharges subject to effluent limitation guidelines for the Mineral Mining and Processing Point Source Category (40 CFR Part 436).

11.J.5.5 Certification of Discharge Testing. (See also Part 5.2.4.4) Test or evaluate all outfalls covered under this permit for the presence of specific mining-related non-storm water discharges such as discharges subject to effluent limitations guidelines (e.g., 40 CFR Part 436). Alternatively (if applicable), the permittee may keep a certification with the SWPPP consistent with 11.J.6.5.

11.J.5.6 Overburden, Waste Rock, and Raw Material Piles. Overburden, topsoil, and waste rock, as well as raw material and intermediate and final product stockpiles, should be located a minimum of 25 feet away from surface water, other sources of water, and from geologically unstable areas as practicable.

11.J.6 Additional SWPPP Requirements.

The requirements in Part 11.J.6 are applicable for sites undergoing exploration and construction, active mineral mining facilities, temporarily inactive mineral mining facilities, and sites undergoing reclamation. The requirements in Part 11.J.6 are not applicable to inactive mineral mining facilities.

11.J.6.1 Nature of Industrial Activities. (See also Part 5.2.3) Document in the SWPPP the mining and associated activities that can potentially affect the storm water discharges covered by this permit, including a general description of the location of the site relative to major transportation routes and communities.

11.J.6.2 *Site Map.* (See also Part 5.2.3) The permittee must document in the SWPPP the locations of the following (as appropriate): mining or milling site boundaries; access and haul roads; outline of the drainage areas of each storm water outfall within the facility with indications of the types of discharges from the drainage areas; location(s) of all permitted discharges covered under an individual APDES permit, outdoor equipment storage, fueling, and maintenance areas; materials handling areas; outdoor manufacturing, outdoor storage, and material disposal areas; outdoor chemicals and explosives storage areas; overburden, materials, soils, or waste storage areas; location of mine drainage dewatering or other process water; heap leach pads; off-site points of discharge for mine dewatering and process water; surface waters; boundary of tributary areas that are subject to effluent limitations guidelines; and location(s) of reclaimed areas.

11.J.6.3 *Potential Pollutant Sources.* (See also Part 5.2.4) For each area of the mine or mill site where storm water discharges associated with industrial activities occur, document in the SWPPP the types of pollutants (e.g., heavy metals, sediment) likely to be present in significant amounts. For example, phosphate mining facilities will likely need to document pollutants such as selenium, which can be present in significant amounts in their discharges. Consider these factors: the mineralogy of the waste rock (e.g., acid forming); toxicity and quantity of chemicals used, produced, or discharged; the likelihood of contact with storm water; vegetation of site (if any); and history of significant leaks or spills of toxic or hazardous pollutants. Also include a summary of any existing waste rock or overburden characterization data and test results for potential generation of acid rock drainage.

11.J.6.4 *Storm Water Controls.* To the extent that a permittee uses any of the control measures in Part 11.J.5.4, document them in the SWPPP pursuant to Part 5.2.5. If control measures are implemented or planned but are not listed here (e.g., substituting a less toxic chemical for a more toxic one), include descriptions of them in the SWPPP.

11.J.6.5 *Certification of Permit Coverage for Commingled Non-Storm Water Discharges.* If a permittee determines that they are able to certify, consistent with Part 11.J.5.5, that a particular discharge composed of commingled storm water and non-storm water is covered under a separate APDES permit, and that permit subjects the non-storm water portion to effluent limitations prior to any commingling, the permittee must retain such certification with their SWPPP. This certification must identify the non-storm water discharges, the applicable APDES permit(s), the effluent limitations placed on the non-storm water discharge by the permit(s), and the points at which the limitations are applied.

11.J.6.6 Dewatering. Mine dewatering discharges composed entirely of storm water or ground water seepage from mines located within fifteen hundred feet of a DEC-identified contaminated site are required to have additional discharge authorization under the DEC Excavation Dewatering General Permit (AKG002000), or most current version. The Notice of Intent, NOI, application for authorization to discharge mine dewatering which may influence a contaminated area can be completed through the DEC's online application system at *http://www.dec.alaska.gov/water/oasys/index.html*.

11.J.7 Additional Inspection Requirements.

Except for areas of the site subject to clearing, grading, and/or excavation activities conducted as part of the exploration and construction phase, which are subject to Part 11.J.4.14.1, the permittee must inspect sites at least quarterly unless adverse weather conditions make the site inaccessible. Sites which discharge to waters which are designated as outstanding waters or waters which are impaired for sediment or nitrogen must be inspected monthly. See Part 11.J.8.1 for inspection requirements for inactive and unstaffed sites. (See also Part 6.1 and 11.J.4.14.)

11.J.8 Sector-Specific Benchmarks.

Table 11.J.8-1 identifies benchmarks that apply to the specific subsectors of Sector J. These benchmarks apply to both the permittees primary industrial activity and any co-located industrial activities, which describe their site activities.

Table 11.J.8-1: Sector – Specific Benchmarks – Sector J

Subsector (Permittees may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector J1. Sand and Gravel Mining (SIC 1442, 1446)	Nitrate plus Nitrite Nitrogen	0.68 mg/L
	Total Suspended Solids (TSS)	100 mg/L
Subsector J2. Dimension and Crushed Stone and Nonmetallic Minerals (except fuels) (SIC 1411, 1422-1429, 1481, 1499)	Total Suspended Solids (TSS)	100 mg/L

11.J.8.1 Inactive and Unstaffed Sites – Conditional Exemption from No Exposure Requirement for Routine Inspections, Quarterly Visual Assessments, and Benchmark Monitoring. As a Sector J facility, if the permittee is seeking to exercise a waiver from either the routine inspection, quarterly visual assessment or the benchmark monitoring requirements for inactive and unstaffed sites (including temporarily inactive sites), they are conditionally exempt from the requirement to certify that "there are no industrial materials or activities exposed to storm water" in Parts 6.2.3 and 7.2.1.6, respectively. Additionally, if the permittee is seeking to reduce their required quarterly routine inspection frequency to a once annual comprehensive inspection, as is allowed under Part 6.1.3, the permittee is also conditionally exempt from the requirement to certify that "there are no industrial materials or activities exposed to storm water." This exemption is conditioned on the following:

- If circumstances change and the permittees facility becomes active and/or staffed, this exception no longer applies and the permittee must immediately begin complying with the applicable benchmark monitoring requirements as if they were in their first year of permit coverage, and the quarterly visual assessment requirements; and

- DEC retains the authority to revoke this exemption and/or the monitoring waiver where it is determined that the discharge causes, has a reasonable potential to cause, or contributes to an instream excursion above a WQS, including designated uses.

Subject to the two conditions above, if the permittees facility is inactive and unstaffed, they are waived from the requirement to conduct quarterly visual assessments and routine facility inspections. The permittee is not waived from conducting the Part 6.3 comprehensive site inspection. The permittee is encouraged to inspect their site more frequently where they have reason to believe that severe weather or natural disasters may have damaged control measures or increased discharges.

11.J.9 Effluent Limitations Based on Effluent Limitations Guidelines. (See also Part 7.2.2.1 of the permit)

Table 11.J.9-1 identifies effluent limits that apply to the industrial activities described below. Compliance with these effluent limits is to be determined based on discharges from these industrial activities independent of commingling with any other wastestreams that may be covered under this permit.

Table 11.J.9-1: Effluent Limitations Based on Effluent Limitations Guidelines

Industrial Activity	Parameter	Effluent Limit[1]
Mine dewatering discharges at crushed stone mining facilities (SIC 1422 - 1429)	pH	6.5 – 8.5[2]
Mine dewatering discharges at construction sand and gravel mining facilities (SIC 1442)	pH	6.5 – 8.5[2]
Mine dewatering discharges at industrial sand mining facilities (SIC 1446)	Total Suspended Solids (TSS)	25 mg/L, monthly avg.
		45 mg/L, daily maximum
	pH	6.5 – 8.5[2]

Note:
1. Monitor annually.
2. pH shall be within the limits specified above.

11.J.10 Termination of Permit Coverage.

11.J.10.1 Termination of Permit Coverage for Sites Reclaimed After December 17, 1990. A site or a portion of a site that has been released from applicable state or federal reclamation requirements after December 17, 1990, is no longer required to maintain coverage under this permit. If the site or portion of a site reclaimed after December 17, 1990, was not subject to reclamation requirements, the site or portion of the site is no longer required to maintain coverage under this permit if the site or portion of the site has been reclaimed as defined in Part 11.J.3.5.

11.J.10.2 Termination of Permit Coverage for Sites Reclaimed Before December 17, 1990. A site or portion of a site that was released from applicable state or federal reclamation requirements before December 17, 1990, or that was otherwise reclaimed before December 17, 1990, is no longer required to maintain coverage under this permit if the site or portion of the site has been reclaimed. A site or portion of a site is considered to have been reclaimed if: (1) storm water runoff that comes into contact with raw materials, intermediate byproducts, finished products, and waste products does not have the potential to cause or contribute to violations of state WQS, (2) soil disturbing activities related to mining at the sites or portion of the site have been completed, (3) the site or portion of the site has been stabilized to minimize soil erosion, and (4) as appropriate depending on location, size, and the potential to contribute pollutants to storm water discharges, the site or portion of the site has been revegetated, will be amenable to natural revegetation, or will be left in a condition consistent with the post-mining land use.

11. Subpart K – Sector K – Hazardous Waste Treatment, Storage, or Disposal Facilities.

A permittee must comply with Part 11 sector-specific requirements associated with their primary industrial activity and any co-located industrial activities, as defined in Appendix C. The sector-specific requirements apply to those areas of the permittees facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

11.K.1 Covered Storm Water Discharges.

The requirements in Subpart K apply to storm water discharges associated with industrial activity from Hazardous Waste Treatment, Storage, or Disposal facilities (TSDFs) as identified by the Activity Code specified under Sector K in Table D-1 of Appendix D of the permit.

11.K.2 Industrial Activities Covered by Sector K.

This permit authorizes storm water discharges associated with industrial activity from facilities that treat, store, or dispose of hazardous wastes, including those that are operating under interim status or a permit under subtitle C of Resource Conservation and Recovery Act (RCRA).

Disposal facilities that have been properly closed and capped, and have no significant materials exposed to storm water, are considered inactive and do not require permits.

11.K.3 Limitations on Coverage.

11.K.3.1 Prohibition of Non-Storm Water Discharges. (See also Part 1.2.4) The following are not authorized by this permit: leachate, gas collection condensate, drained free liquids, contaminated ground water, laboratory-derived wastewater, and contact washwater from washing truck and railcar exteriors and surface areas that have come in direct contact with solid waste at the landfill facility.

11.K.4 Definitions.

11.K.4.1 Contaminated Storm Water - Storm water that comes into direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater as defined in Part 11.K.4.5. Some specific areas of a landfill that may produce contaminated storm water include (but are not limited to) the open face of an active landfill with exposed waste (no cover added); the areas around wastewater treatment operations; trucks, equipment, or machinery that has been in direct contact with the waste; and waste dumping areas.

11.K.4.2 Drained Free Liquids - Aqueous wastes drained from waste containers (e.g., drums) prior to landfilling.

11.K.4.3 *Landfill* - An area of land or an excavation in which wastes are placed for permanent disposal, but that is not a land application or land treatment unit, surface impoundment, underground injection well, waste pile, salt dome formation, salt bed formation, underground mine, or cave as these terms are defined in 40 CFR 257.2, 258.2, and 260.10.

11.K.4.4 *Landfill Wastewater* - As defined in 40 CFR Part 445 (Landfills Point Source Category), all wastewater associated with, or produced by, landfilling activities except for sanitary wastewater, non-contaminated storm water, contaminated groundwater, and wastewater from recovery pumping wells. Landfill wastewater includes, but is not limited to, leachate, gas collection condensate, drained free liquids, laboratory derived wastewater, contaminated storm water, and contact washwater from washing truck, equipment, and railcar exteriors and surface areas that have come in direct contact with solid waste at the landfill facility.

11.K.4.5 *Leachate* - Liquid that has passed through or emerged from solid waste and contains soluble, suspended, or miscible materials removed from such waste.

11.K.4.6 *Non-Contaminated Storm Water* - Storm water that does not come into direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater as defined in Part 11.K.4.4. Non-contaminated storm water includes storm water that flows off the cap, cover, intermediate cover, daily cover, and/or final cover of the landfill.

11.K.5 Sector-Specific Benchmarks.

Table 11.K.5-1 identifies benchmarks that apply to the specific subsectors of Sector K. These benchmarks apply to both the permittees primary industrial activity and any co-located industrial activities, which describe their site activities.

(Table 11.K.5-1: Sector – Specific Benchmarks – Sector K located on following page.)

Table 11.K.5-1: Sector – Specific Benchmarks – Sector K

Subsector (Permittees may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector K1. ALL - Industrial Activity Code "HZ" (Note: permit coverage limited in some States). Benchmarks only applicable to discharges not subject to effluent limitations in 40 CFR Part 445 Subpart A (see below).	Ammonia	2.14 mg/L
	Total Magnesium	0.064 mg/L
	Chemical Oxygen Demand (COD)	120 mg/L
	Total Arsenic (saltwater)[1] Total Arsenic (freshwater)[2]	0.069 mg/L 0.15 mg/L
	Total Cadmium (saltwater)[1] Total Cadmium (freshwater)[2]	0.04 mg/L Hardness Dependent
	Total Cyanide (saltwater)[1] Total Cyanide (freshwater)[2]	0.001 mg/L 0.022 mg/ L
	Total Lead (saltwater)[1] Total Lead (freshwater)[2]	0.21 mg/L Hardness Dependent
	Total Mercury (saltwater)[1] Total Mercury (freshwater)[2]	0.0018 mg/L 0.0014 mg/ L
	Total Selenium (saltwater)[1] Total Selenium (freshwater)[2]	0.29 mg/L 0.005 mg/L
	Total Silver (saltwater)[1] Total Silver (freshwater)[2]	0.0019 mg/L Hardness Dependent

Note:

1. Saltwater benchmark values apply to storm water discharges into saline waters where indicated.
2. The freshwater benchmark values of some metals are dependent on water hardness. For these parameters, permittees must determine the hardness of the receiving water (see Appendix E, "Calculating Hardness in Receiving Waters for Hardness Dependent Metals," for methodology), in accordance with Part 7.2.1.1, to identify the applicable 'hardness range' for determining their benchmark value applicable to their facility. The ranges occur in 25 mg/L increments. Hardness Dependent Benchmarks follow in the table below:

Water Hardness Range (mg/L)	Cadmium (mg/L)	Lead (mg/L)	Silver (mg/L)
0 – < 25	0.0005	0.014	0.0007
25 – < 50	0.0008	0.023	0.0007
50 – < 75	0.0013	0.045	0.0017
75 – < 100	0.0018	0.069	0.0030
100 – < 125	0.0023	0.095	0.0046
125 – < 150	0.0029	0.122	0.0065
150 – < 175	0.0034	0.151	0.0087
175 – < 200	0.0039	0.182	0.0112
200 – < 225	0.0045	0.213	0.0138
225 – < 250	0.0050	0.246	0.0168
250+	0.0053	0.262	0.0183

11.K.6 Effluent Limitations Based on Effluent Limitations Guidelines. (See also Part 7.2.2.1 of the permit.)

Table 11.K.6-1 identifies effluent limits that apply to the industrial activities described below. Compliance with these effluent limits is to be determined based on discharges from these industrial activities independent of commingling with any other wastestreams that may be covered under this permit.

Table 11.K.6-1: Effluent Limitations Based on Effluent Limitations Guidelines

Industrial Activity	Parameter	Effluent Limit
Discharges from hazardous waste landfills subject to effluent limitations in 40 CFR Part 445 Subpart A (see footnote).	Biochemical Oxygen Demand (BOD_5)	220 mg/L, daily maximum
		56 mg/L, monthly avg. maximum
	Total Suspended Solids (TSS)	88 mg/L, daily maximum
		27 mg/L, monthly avg. maximum
	Ammonia	10 mg/L, daily maximum
		4.9 mg/L, monthly avg. maximum
	Alpha Terpineol	0.042 mg/L, daily maximum
		0.019 mg/L, monthly avg. maximum
	Aniline	0.024 mg/L, daily maximum
		0.015 mg/L, monthly avg. maximum
	Benzoic Acid	0.119 mg/L, daily maximum
		0.073 mg/L, monthly avg. maximum
	Naphthalene	0.059 mg/L, daily maximum
		0.022 mg/L, monthly avg. maximum
	p-Cresol	0.024 mg/L, daily maximum
		0.015 mg/L, monthly avg. maximum
	Phenol	0.048 mg/L, daily maximum
		0.029 mg/L, monthly avg. maximum
	Pyridine	0.072 mg/L, daily maximum
		0.025 mg/L, monthly avg. maximum
	Total Arsenic	1.1 mg/L, daily maximum
		0.54 mg/L, monthly avg. maximum
	Total Chromium	1.1 mg/L, daily maximum
		0.46 mg/L, monthly avg. maximum
	Total Zinc	0.535 mg/L, daily maximum
		0.296 mg/L, monthly avg. maximum
	pH	6.5 - 8.5 s.u. and within 0.5 s.u. of background level

Note:

1. Monitor annually. As set forth at 40 CFR Part 445 Subpart A, these numeric limitations apply to contaminated storm water discharges from hazardous waste landfills subject to the provisions of RCRA Subtitle C at 40 CFR Parts 264 (Subpart N) and 265 (Subpart N) except for any of the following facilities:
   a. Landfills operated in conjunction with other industrial or commercial operations when the landfill receives only wastes generated by the industrial or commercial operation directly associated with the landfill;
   b. Landfills operated in conjunction with other industrial or commercial operations when the landfill receives wastes generated by the industrial or commercial operation directly associated with the landfill and also receives other wastes, provided that the other wastes received for disposal are generated by a facility that is subject to the same provisions in 40 CFR Subchapter N as the industrial or commercial operation or that the other wastes received are of similar nature to the wastes generated by the industrial or commercial operation;
   c. Landfills operated in conjunction with Centralized Waste Treatment (CWT) facilities subject to 40 CFR Part 437, so long as the CWT facility commingles the landfill wastewater with other non-landfill wastewater for discharge. A landfill directly associated with a CWT facility is subject to this part if the CWT facility discharges landfill wastewater separately from other CWT wastewater or commingles the wastewater from its landfill only with wastewater from other landfills; or
   d. Landfills operated in conjunction with other industrial or commercial operations when the landfill receives wastes from public service activities, so long as the company owning the landfill does not receive a fee or other remuneration for the disposal service.

11. Subpart L – Sector L – Landfills, Land Application Sites, and Open Dumps.

A permittee must comply with Part 11 sector-specific requirements associated with their primary industrial activity and any co-located industrial activities, as defined in Appendix C. The sector-specific requirements apply to those areas of the permittees facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

11.L.1 Covered Storm Water Discharges.

The requirements in Subpart L apply to storm water discharges associated with industrial activity from Landfills and Land Application Sites and Open Dumps as identified by the Activity Code specified under Sector L in Table D-1 of Appendix D of the permit.

11.L.2 Industrial Activities Covered by Sector L.

This permit may authorize storm water discharges for Sector L facilities associated with waste disposal at landfills, land application sites, and open dumps that receive or have received industrial waste, including sites subject to regulation under Subtitle D of Resource Conservation and Recovery Act (RCRA). This permit does not cover discharges from landfills that receive only municipal wastes.

11.L.3 Limitations on Coverage.

11.L.3.1 *Prohibition of Non-Storm Water Discharges.* (See also Part 1.2.4) The following discharges are not authorized by this permit: leachate, gas collection condensate, drained free liquids, contaminated ground water, laboratory wastewater, and contact washwater from washing truck and railcar exteriors and surface areas that have come in direct contact with solid waste at the landfill facility. Discharges from open dumps as defined under RCRA are also not authorized under this permit.

11.L.4 Definitions.

11.L.4.1 *Contaminated Storm Water* - Storm water that comes into direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater. Some areas of a landfill that may produce contaminated storm water include (but are not limited to) the open face of an active landfill with exposed waste (no cover added); the areas around wastewater treatment operations; trucks, equipment, or machinery that has been in direct contact with the waste; and waste dumping areas.

11.L.4.2 *Drained Free Liquids* - Aqueous wastes drained from waste containers (e.g., drums) prior to landfilling.

11.L.4.3 *Landfill Wastewater* - As defined in 40 CFR Part 445 (Landfills Point Source Category) all wastewater associated with, or produced by, landfilling activities except for sanitary wastewater, non-contaminated storm water, contaminated groundwater, and wastewater from recovery pumping wells. Landfill process wastewater includes, but is not limited to, leachate; gas collection condensate; drained free liquids; laboratory-derived wastewater; contaminated storm water; and contact washwater from washing truck, equipment, and railcar exteriors and surface areas that have come in direct contact with solid waste at the landfill facility.

11.L.4.4 *Leachate* - Liquid that has passed through or emerged from solid waste and contains soluble, suspended, or miscible materials removed from such waste.

11.L.4.5 *Non-Contaminated Storm Water* - Storm water that does not come into direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater. Non-contaminated storm water includes storm water that flows off the cap, cover, intermediate cover, daily cover, and/or final cover of the landfill.

11.L.5 Additional Technology-Based Effluent Limits.

11.L.5.1 *Preventive Maintenance Program.* (See also Part 4.2.3) As part of a permittees preventive maintenance program, maintain the following: all elements of leachate collection and treatment systems, to prevent commingling of leachate with storm water; the integrity and effectiveness of any intermediate or final cover (including repairing the cover as necessary), to minimize the effects of settlement, sinking, and erosion.

11.L.5.2 *Erosion and Sedimentation Control.* (See also Part 4.2.5) Provide temporary stabilization (e.g., temporary seeding, mulching, and placing geotextiles on the inactive portions of stockpiles) for the following: materials stockpiled for daily, intermediate, and final cover; inactive areas of the landfill or open dump; landfills or open dump areas that have gotten final covers but where vegetation has yet to establish itself; and land application sites where waste application has been completed but final vegetation has not yet been established.

11.L.5.3 *Storm Water Diversions.* Divert storm water away from potential pollutant sources. Implement the following options, as practicable: interceptor or diversion controls (e.g., dikes, swales, curbs, or berms); pipe slope drains; subsurface drains; conveyance systems (e.g., channels or gutters, open-top box culverts, and waterbars; rolling dips and road sloping; roadway surface water deflector and culverts); or their equivalents.

11.L.5.4 *Place Velocity Dissipation Devices:* (e.g., check dams, sediment traps, or riprap) along the length of any conveyance channel to provide a non-erosive flow velocity. Also place velocity dissipation devices where discharges from the conveyance channel or structure join a water course to prevent erosion and to protect the channel embankment, outlet, adjacent stream bank slopes, and downstream waters.

11.L.5.5 Unauthorized Discharge Test Certification. (See also Part 5.2.4.4) The discharge test and certification must also be conducted for the presence of leachate and vehicle washwater.

11.L.6 Additional SWPPP Requirements.

11.L.6.1 Drainage Area Site Map. (See also Part 5.2.3) The permittee must document in their SWPPP where any of the following may be exposed to precipitation or surface runoff: active and closed landfill cells or trenches, active and closed land application areas, locations where open dumping is occurring or has occurred, locations of any known leachate springs or other areas where uncontrolled leachate may commingle with runoff, and leachate collection and handling systems.

11.L.6.2 Summary of Potential Pollutant Sources. (See also Part 5.2.4) Document in the permittees SWPPP the following sources and activities that have potential pollutants associated with them: fertilizer, herbicide, and pesticide application; earth and soil moving; waste hauling and loading or unloading; outdoor storage of significant materials, including daily, interim, and final cover material stockpiles as well as temporary waste storage areas; exposure of active and inactive landfill and land application areas; uncontrolled leachate flows; and failure or leaks from leachate collection and treatment systems.

11.L.7 Additional Inspection Requirements. (See also Part 6)

11.L.7.1 Inspections of Active Sites. Except in arid and semi-arid climates, inspect operating landfills, open dumps, and land application sites at least once every seven (7) days. Focus on areas of landfills that have not yet been finally stabilized; active land application areas, areas used for storage of material and wastes that are exposed to precipitation, stabilization, and structural control measures; leachate collection and treatment systems; and locations where equipment and waste trucks enter and exit the site. Ensure that sediment and erosion control measures are operating properly. For stabilized sites and areas where land application has been completed, or where the climate is arid or semi-arid, conduct inspections at least once every month.

11.L.7.2 Inspections of Inactive Sites. Inspect inactive landfills, open dumps, and land application sites at least quarterly. Qualified Personnel must inspect landfill (or open dump) stabilization and structural erosion control measures, leachate collection and treatment systems, and all closed land application areas.

11.L.8 Additional Post-Authorization Documentation Requirements.

11.L.8.1 Recordkeeping and Internal Reporting. Keep records with the SWPPP of the types of wastes disposed of in each cell or trench of a landfill or open dump. For land application sites, track the types and quantities of wastes applied in specific areas.

11.L.9 Sector-Specific Benchmarks.

Table 11.L.9-1 identifies benchmarks that apply to the specific subsectors of Sector L. These benchmarks apply to both the permittees primary industrial activity and any co-located industrial activities. If the results of four quarters of benchmark monitoring exceeds the benchmark monitoring concentration specified in Table 11.L.9-1, then the permittee must take samples to monitor compliance with the concentrations specified in Table 11.L.10-1.

Table 11.L.9-1: Sector – Specific Benchmarks – Sector L

Subsector (Permittees may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration[1]
Subsector L1. All Landfill, Land Application Sites and Open Dumps (Industrial Activity Code "LF")	Total Suspended Solids (TSS)	100 mg/L
Subsector L2. All Landfill, Land Application Sites and Open Dumps, except Municipal Solid Waste Landfill (MSWLF) Areas Closed in Accordance with 40 CFR 258.60 (Industrial Activity Code "LF")	Total Iron	1.0 mg/L

Note:
1. Benchmark monitoring required only for discharges not subject to effluent limitations in 40 CFR Part 445 Subpart B (see Table 11.L 10-1).

11.L.10 Effluent Limitations Based on Effluent Limitations Guidelines. (See also Part 7.2.2.1 of the permit.)

Table 11.L.10-1 identifies effluent limits that apply to the industrial activities described below. Compliance with these effluent limits is to be determined based on discharges from these industrial activities independent of commingling with any other wastestreams that may be covered under this permit.

(Table 11.L.10-1: Effluent Limitations Based on Effluent Limitations Guidelines located on following page.)

Table 11.L.10-1: Effluent Limitations Based on Effluent Limitations Guidelines[1]

Industrial Activity	Parameter	Effluent Limit
Discharges from non-hazardous waste landfills subject to effluent limitations in 40 CFR Part 445 Subpart B.	Biochemical Oxygen Demand (BOD_5)	140 mg/L, daily maximum
		37 mg/L, monthly avg. maximum
	Total Suspended Solids (TSS)	88 mg/L, daily maximum
		27 mg/L, monthly avg. maximum
	Ammonia	10 mg/L, daily maximum
		4.9 mg/L, monthly avg. maximum
	Alpha Terpineol	0.033 mg/L, daily maximum
		0.016 mg/L monthly avg. maximum
	Benzoic Acid	0.12 mg/L, daily maximum
		0.071 mg/L, monthly avg. maximum
	p-Cresol	0.025 mg/L, daily maximum
		0.014 mg/L, monthly avg. maximum
	Phenol	0.026 mg/L, daily maximum
		0.015 mg/L, monthly avg. maximum
	Total Zinc	0.20 mg/L, daily maximum
		0.11 mg/L, monthly avg. maximum
	pH	6.5 - 8.5 s.u.

Note:

1. Monitor annually. As set forth at 40 CFR Part 445 Subpart B, these numeric limitations apply to contaminated storm water discharges from MSWLFs that have not been closed in accordance with 40 CFR 258.60, and to contaminated storm water discharges from those landfills that are subject to the provisions of 40 CFR Part 257 except for discharges from any of the following facilities:
   a. Landfills operated in conjunction with other industrial or commercial operations, when the landfill receives only wastes generated by the industrial or commercial operation directly associated with the landfill;
   b. Landfills operated in conjunction with other industrial or commercial operations, when the landfill receives wastes generated by the industrial or commercial operation directly associated with the landfill and also receives other wastes, provided that the other wastes received for disposal are generated by a facility that is subject to the same provisions in 40 CFR Subchapter N as the industrial or commercial operation, or that the other wastes received are of similar nature to the wastes generated by the industrial or commercial operation;
   c. Landfills operated in conjunction with Centralized Waste Treatment (CWT) facilities subject to 40 CFR Part 437, so long as the CWT facility commingles the landfill wastewater with other non-landfill wastewater for discharge. A landfill directly associated with a CWT facility is subject to this part if the CWT facility discharges landfill wastewater separately from other CWT wastewater or commingles the wastewater from its landfill only with wastewater from other landfills; or
   d. Landfills operated in conjunction with other industrial or commercial operations when the landfill receives wastes from public service activities, so long as the company owning the landfill does not receive a fee or other remuneration for the disposal service.

11. Subpart M – Sector M – Automobile Salvage Yards.

A permittee must comply with Part 11 sector-specific requirements associated with their primary industrial activity and any co-located industrial activities, as defined in Appendix C. The sector-specific requirements apply to those areas of the permittees facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

11.M.1 Covered Storm Water Discharges.

The requirements in Subpart M apply to storm water discharges associated with industrial activity from Automobile Salvage Yards as identified by the SIC Code specified under Sector M in Table D-1 of Appendix D of this permit.

11.M.2 Additional Technology-Based Effluent Limits.

11.M.2.1 Spill and Leak Prevention Procedures. (See also Part 4.2.4) Drain vehicles intended to be dismantled of all fluids upon arrival at the site (or as soon thereafter as feasible), or employ some other equivalent means to prevent spills and leaks. Collected automotive fluids should be containerized, labeled, and stored to minimize exposure to storm water. Salvage yard operators should develop and implement a mercury switch removal and disposal procedure to remove mercury as a potential pollutant source. All facilities should be provided with a nearby spill containment kit and fluids managed in accordance with all applicable state and federal regulations.

11.M.2.2 Employee Training. (See also Part 4.2.9) If applicable to the facility, address the following areas (at a minimum) in the permittees employee training program: proper handling (collection, storage, and disposal) of oil, used mineral spirits, anti-freeze, mercury switches, and solvents.

11.M.2.3 Management of Runoff. (See also Part 4.2.6) Use the following management practices, as practicable: berms or drainage ditches on the property line (to help prevent run-on from neighboring properties); berms for uncovered outdoor storage of oily parts, engine blocks, and above-ground liquid storage; installation of detention ponds; and installation of filtering devices and oil and water separators.

11.M.2.4 Vehicle Crushing Activities. If a crusher is used on-site provide timely maintenance and inspection of the crusher to prevent any fluid leaks and document in the SWPPP. The crusher should be provided with a device to capture any automotive fluids generated during crushing.

11.M.3 Additional SWPPP Requirements.

11.M.3.1 Drainage Area Site Map. (See also Part 5.2.3) Identify locations used for dismantling, storage, and maintenance of used motor vehicle parts. Also identify where any of the following may be exposed to precipitation or surface runoff: dismantling areas, parts (e.g., engine blocks, tires, hub caps, batteries, hoods, mufflers) storage areas, and liquid storage tanks and drums for fuel and other fluids.

11.M.3.2 Potential Pollutant Sources. (See also Part 5.2.4) Assess the potential for the following to contribute pollutants to storm water discharges: vehicle storage areas, dismantling areas, parts storage areas (e.g., engine blocks, tires, hub caps, batteries, hoods, mufflers), and fueling stations.

11.M.4 Additional Inspection Requirements.

(See also Part 6.1) Immediately (or as soon thereafter as feasible) inspect vehicles arriving at the site for leaks and inspect area designated for the draining and collecting of automotive fluids. Inspect quarterly for signs of leakage of all equipment containing oily parts, hydraulic fluids, any other types of fluids, or mercury switches. Also, inspect quarterly for signs of leakage of all vessels and areas where hazardous materials and general automotive fluids are stored, including, but not limited to, mercury switches, brake fluid, transmission fluid, radiator water, and antifreeze.

(Table 11.M.5-1: Sector – Specific Benchmarks – Sector M located on the following page.)

11.M.5 Sector-Specific Benchmarks. (See also Part 7 of the permit.)

Table 11.M.5-1: Sector – Specific Benchmarks – Sector M

Subsector (Permittees may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector M1. Automobile Salvage Yards (SIC 5015)	Total Suspended Solids (TSS)	100 mg/L
	Total Aluminum	0.75 mg/L
	Total Iron	1.0 mg/L
	Total Lead (saltwater)[1] Total Lead (freshwater)[2]	0.21 mg/L Hardness Dependent

Note:

1. Saltwater benchmark values apply to storm water discharges into saline waters where indicated.
2. The freshwater benchmark values of some metals are dependent on water hardness. For these parameters, permittees must determine the hardness of the receiving water (see Appendix E, "Calculating Hardness in Receiving Waters for Hardness Dependent Metals," for methodology), in accordance with Part 7.2.1.1, to identify the applicable 'hardness range' for determining their benchmark value applicable to their facility. The ranges occur in 25 mg/L increments. Hardness Dependent Benchmarks follow in the table below:

Water Hardness Range (mg/L)	Lead (mg/L)
0 – < 25	0.014
25 – < 50	0.023
50 – < 75	0.045
75 – < 100	0.069
100 – < 125	0.095
125 – < 150	0.122
150 – < 175	0.151
175 – < 200	0.182
200 – < 225	0.213
225 – < 250	0.246
250+	0.262

11. Subpart N – Sector N – Scrap Recycling and Waste Recycling Facilities.

A permittee must comply with Part 11 sector-specific requirements associated with their primary industrial activity and any co-located industrial activities, as defined in Appendix C. The sector-specific requirements apply to those areas of the permittees facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

11.N.1 Covered Storm Water Discharges.

The requirements in Subpart N apply to storm water discharges associated with industrial activity from Scrap Recycling and Waste Recycling facilities as identified by the SIC Code specified under Sector N in Table D-1 of Appendix D of the permit.

11.N.2 Limitation on Coverage.

Separate permit requirements have been established for recycling facilities that only receive source-separated recyclable materials primarily from non-industrial and residential sources (i.e., common consumer products including paper, newspaper, glass, cardboard, plastic containers, and aluminum and tin cans). This includes recycling facilities commonly referred to as material recovery facilities (MRF). See Part 11.N.3.3

11.N.2.1 Prohibition of Non-Storm Water Discharges. (See also Part 1.2.4) Non-storm water discharges from turnings containment areas are not covered by this permit (see also Part 11.N.3.2.3). Discharges from containment areas as well as all others in the absence of a storm event are prohibited unless covered by a separate APDES permit.

11.N.3 Additional Technology-Based Effluent Limits.

11.N.3.1 Scrap and Waste Recycling Facilities (Non-Source Separated, Nonliquid Recyclable Materials). Requirements for facilities that receive, process, and do wholesale distribution of nonliquid recyclable wastes (e.g., ferrous and nonferrous metals, plastics, glass, cardboard, and paper). These facilities may receive both nonrecyclable and recyclable materials. This section is not intended for those facilities that accept recyclables only from primarily non-industrial and residential sources.

11.N.3.1.1 Inbound Recyclable and Waste Material Control Program. Minimize the chance of accepting materials that could be significant sources of pollutants by conducting inspections of inbound recyclables and waste materials. Following are some control measure options: (a) provide information and education to suppliers of scrap and recyclable waste materials on draining and properly disposing of residual fluids (e.g., from vehicles and equipment engines, radiators and transmissions, oil filled transformers, and individual containers or drums) and removal of mercury switches from vehicles before delivery to the facility; (b) establish procedures to minimize the potential of any residual fluids from coming into contact with precipitation or runoff; (c) establish procedures for accepting scrap lead-acid batteries (additional requirements for the handling, storage, and disposal or recycling of batteries are contained in the scrap lead-acid battery program provisions in Part 11.N.3.1.6); (d) provide training targeted for those personnel engaged in the inspection and acceptance of inbound recyclable materials; and (e) establish procedures to ensure that liquid wastes, including used oil, are stored in materially compatible and non-leaking containers and are disposed of or recycled in accordance with the Resource Conservation and Recovery Act (RCRA).

11.N.3.1.2 Scrap and Waste Material Stockpiles and Storage (Outdoor). Minimize contact of storm water runoff with stockpiled materials, processed materials, and nonrecyclable wastes. Following are some control measure options: (a) permanent or semi-permanent covers; (b) sediment traps, vegetated swales and strips, catch basin filters, and sand filters to facilitate settling or filtering of pollutants; (c) dikes, berms, containment trenches, culverts, and surface grading to divert runoff from storage areas; (d) silt fencing; and (e) oil and water separators, sumps, and dry absorbents for areas where potential sources of residual fluids are stockpiled (e.g., automobile engine storage areas).

11.N.3.1.3 Stockpiling of Turnings Exposed to Cutting Fluids (Outdoor Storage). Minimize contact of surface runoff with residual cutting fluids by: (a) storing all turnings exposed to cutting fluids under some form of permanent or semi-permanent cover, or (b) establishing dedicated containment areas for all turnings that have been exposed to cutting fluids. Any containment areas must be constructed of concrete, asphalt, or other equivalent types of impermeable material and include a barrier (e.g., berms, curbing, elevated pads) to prevent contact with storm water run-on. Storm Water runoff from these areas can be discharged, provided that any runoff is first collected and treated by an oil and water separator or its equivalent. The permittee must regularly maintain the oil and water separator (or its equivalent) and properly dispose of or recycle collected residual fluids.

11.N.3.1.4 Scrap and Waste Material Stockpiles and Storage (Covered or Indoor Storage). Minimize contact of residual liquids and particulate matter from materials stored indoors or under cover with surface runoff. Following are some control measure options: (a) good housekeeping measures, including the use of dry absorbents or wet vacuuming to contain, dispose of, or recycle residual liquids originating from recyclable containers, or mercury spill kits for spills from storage of mercury switches; (b) not allowing washwater from tipping floors or other processing areas to discharge to the storm sewer system; and (c) disconnecting or sealing off all floor drains connected to the storm sewer system.

11.N.3.1.5 Scrap and Recyclable Waste Processing Areas. Minimize surface runoff from coming in contact with scrap processing equipment. Pay attention to operations that generate visible amounts of particulate residue (e.g., shredding) to minimize the contact of accumulated particulate matter and residual fluids with runoff (i.e., through good housekeeping, preventive maintenance, etc.). Following are some control measure options: (a) regularly inspect equipment for spills or leaks and malfunctioning, worn, or corroded parts or equipment; (b) establish a preventive maintenance program for processing equipment; (c) use dry-absorbents or other cleanup practices to collect and dispose of or recycle spilled or leaking fluids or use mercury spill kits for spills from storage of mercury switches; (d) on unattended hydraulic reservoirs over 150 gallons in capacity, install protection devices such as low-level alarms or equivalent devices, or secondary containment that can hold the entire volume of the reservoir; (e) containment or diversion structures such as dikes, berms, culverts, trenches, elevated concrete pads, and grading to minimize contact of storm water runoff with outdoor processing equipment or stored materials; (f) oil and water separators or sumps; (g) permanent or semi-permanent covers in processing areas where there are residual fluids and grease; (h) retention or detention ponds or basins; sediment traps, and vegetated swales or strips (for pollutant settling and filtration); (i) catch basin filters or sand filters.

11.N.3.1.6 Scrap Lead-Acid Battery Program. Properly handle, store, and dispose of scrap lead-acid batteries. Following are some control measure options (a) segregate scrap lead-acid batteries from other scrap materials; (b) properly handle, store, and dispose of cracked or broken batteries; (c) collect and dispose of leaking lead-acid battery fluid; (d) minimize or eliminate (if possible) exposure of scrap lead-acid batteries to precipitation or runoff; and (e) provide employee training for the management of scrap batteries.

11.N.3.1.7 Spill Prevention and Response Procedures. (See also Part 4.2.4) Install alarms and/or pump shutoff systems on outdoor equipment with hydraulic reservoirs exceeding 150 gallons in the event of a line break. Alternatively, a secondary containment system capable of holding the entire contents of the reservoir plus room for precipitation can be used. Use a mercury spill kit for any release of mercury from switches, anti-lock brake systems, and switch storage areas.

11.N.3.1.8 Supplier Notification Program. As appropriate, notify major suppliers which scrap materials will not be accepted at the facility or will be accepted only under certain conditions.

11.N.3.2 Waste Recycling Facilities (Liquid Recyclable Materials).

11.N.3.2.1 Waste Material Storage (Indoor). Minimize or eliminate contact between residual liquids from waste materials stored indoors and from surface runoff. The plan may refer to applicable portions of other existing plans, such as Spill Prevention, Control, and Countermeasure (SPCC) plans required under 40 CFR Part 112. Following are some control measure options (a) procedures for material handling (including labeling and marking); (b) clean up spills and leaks with dry absorbent materials, a wet vacuum system; (c) appropriate containment structures (trenching, curbing, gutters, etc.); and (d) a drainage system, including appurtenances (e.g., pumps or ejectors, manually operated valves), to handle discharges from diked or bermed areas. Drainage should be discharged to an appropriate treatment facility or sanitary sewer system, or otherwise disposed of properly. These discharges may require coverage under a separate APDES wastewater permit or industrial user permit under the pretreatment program.

11.N.3.2.2 Waste Material Storage (Outdoor). Minimize contact between stored residual liquids and precipitation or runoff. The plan may refer to applicable portions of other existing plans, such as SPCC plans required under 40 CFR Part 112. Discharges of precipitation from containment areas containing used oil must also be in accordance with applicable sections of 40 CFR Part 112. Following are some control measure options (a) appropriate containment structures (e.g., dikes, berms, curbing, pits) to store the volume of the largest tank, with sufficient extra capacity for precipitation; (b) drainage control and other diversionary structures; (c) corrosion protection and/or leak detection systems for storage tanks; and (d) dry-absorbent materials or a wet vacuum system to collect spills.

11.N.3.2.3 Trucks and Rail Car Waste Transfer Areas. Minimize pollutants in discharges from truck and rail car loading and unloading areas. Include measures to clean up minor spills and leaks resulting from the transfer of liquid wastes. Following are two control measure options: (a) containment and diversionary structures to minimize contact with precipitation or runoff, and (b) dry clean-up methods, wet vacuuming, roof coverings, or runoff controls.

11.N.3.3 Recycling Facilities (Source-Separated Materials). The following identifies considerations for facilities that receive only source-separated recyclables, primarily from non-industrial and residential sources.

11.N.3.3.1 Inbound Recyclable Material Control. Minimize the chance of accepting nonrecyclables (e.g., hazardous materials) that could be a significant source of pollutants by conducting inspections of inbound materials. Following are some control measure options: (a) providing information and education measures to inform suppliers of recyclables about acceptable and non-acceptable materials, (b) training drivers responsible for pickup of recycled material, (c) clearly marking public drop-off containers regarding which materials can be accepted, (d) rejecting nonrecyclable wastes or household hazardous wastes at the source, and (e) establishing procedures for handling and disposal of nonrecyclable material.

11.N.3.3.2 Outdoor Storage. Minimize exposure of recyclables to precipitation and runoff. Use good housekeeping measures to prevent accumulation of particulate matter and fluids, particularly in high traffic areas. Following are some control measure options (a) provide totally enclosed drop-off containers for the public; (b) install a sump and pump with each container pit and treat or discharge collected fluids to a sanitary sewer system; (c) provide dikes and curbs for secondary containment (e.g., around bales of recyclable waste paper); (d) divert surface water runoff away from outside material storage areas; (e) provide covers over containment bins, dumpsters, and roll-off boxes; and (f) store the equivalent of one day's volume of recyclable material indoors.

11.N.3.3.3 Indoor Storage and Material Processing. Minimize the release of pollutants from indoor storage and processing areas. Following are some control measure options (a) schedule routine good housekeeping measures for all storage and processing areas, (b) prohibit tipping floor washwater from draining to the storm sewer system, and (c) provide employee training on pollution prevention practices.

11.N.3.3.4 Vehicle and Equipment Maintenance. Following are some control measure options for areas where vehicle and equipment maintenance occur outdoors (a) prohibit vehicle and equipment washwater from discharging to the storm sewer system, (b) minimize or eliminate outdoor maintenance areas whenever practicable, (c) establish spill prevention and clean-up procedures in fueling areas, (d) avoid topping off fuel tanks, (e) divert runoff from fueling areas, (f) store lubricants and hydraulic fluids indoors, and (g) provide employee training on proper handling and storage of hydraulic fluids and lubricants.

11.N.4 Additional SWPPP Requirements.

11.N.4.1 Drainage Area Site Map. (See also Part 5.2.3) The permittee must document in the SWPPP the locations of any of the following activities or sources that may be exposed to precipitation or surface runoff: scrap and waste material storage, outdoor scrap and waste processing equipment; and containment areas for turnings exposed to cutting fluids.

11.N.4.2 Maintenance Schedules/Procedures for Collection, Handling, and Disposal or Recycling of Residual Fluids at Scrap and Waste Recycling Facilities. If the permittee is subject to Part 11.N.3.1.3, the SWPPP must identify any applicable maintenance schedule and the procedures to collect, handle, and dispose of or recycle residual fluids.

11.N.5 Additional Inspection Requirements.

11.N.5.1 Inspections for Waste Recycling Facilities. The inspections must be performed quarterly, pursuant to Part 6.1, and include, at a minimum, all areas where waste is generated, received, stored, treated, or disposed of and that are exposed to either precipitation or storm water runoff.

11.N.6 Sector-Specific Benchmarks. (See also Part 7 of the permit.)

(Table 11.N.6-1: Sector – Specific Benchmarks – Sector N located on following page.)

Table 11.N.6-1: Sector – Specific Benchmarks – Sector N

Subsector (Permittees may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector N1. Scrap Recycling and Waste Recycling Facilities except Source-Separated Recycling (SIC 5093)	Chemical Oxygen Demand (COD)	120 mg/L
	Total Suspended Solids (TSS)	100 mg/L
	Total Recoverable Aluminum	0.75 mg/L
	Total Copper (saltwater)[1] Total Copper (freshwater)[2]	0.0048 mg/L Hardness Dependent
	Total Recoverable Iron	1.0 mg/L
	Total Lead (saltwater)[1] Total Lead (freshwater)[2]	0.21 mg/L Hardness Dependent
	Total Zinc (saltwater)[1] Total Zinc (freshwater)[2]	0.09 mg/L Hardness Dependent

Note:

1. Saltwater benchmark values apply to storm water discharges into saline waters where indicated.
2. The freshwater benchmark values of some metals are dependent on water hardness. For these parameters, permittees must determine the hardness of the receiving water (see Appendix E, "Calculating Hardness in Receiving Waters for Hardness Dependent Metals," for methodology), in accordance with Part 7.2.1.1, to identify the applicable 'hardness range' for determining their benchmark value applicable to their facility. The ranges occur in 25 mg/L increments. Hardness Dependent Benchmarks follow in the table below:

Water Hardness Range (mg/L)	Copper (mg/L)	Lead (mg/L)	Zinc (mg/L)
0 – < 25	0.0038	0.014	0.04
25 – < 50	0.0056	0.023	0.05
50 – < 75	0.0090	0.045	0.08
75 – < 100	0.0123	0.069	0.11
100 – < 125	0.0156	0.095	0.13
125 – < 150	0.0189	0.122	0.16
150 – < 175	0.0221	0.151	0.18
175 – < 200	0.0253	0.182	0.20
200 – < 225	0.0285	0.213	0.23
225 – < 250	0.0316	0.246	0.25
250+	0.0332	0.262	0.26

11. Subpart O – Sector O – Steam Electric Generating Facilities.

A permittee must comply with Part 11 sector-specific requirements associated with their primary industrial activity and any co-located industrial activities, as defined in Appendix C. The sector-specific requirements apply to those areas of the permittees facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

11.O.1 Covered Storm Water Discharges.

The requirements in Subpart O apply to storm water discharges associated with industrial activity from Steam Electric Power Generating Facilities as identified by the Activity Code specified under Sector O in Table D-1 of Appendix D.

11.O.2 Industrial Activities Covered by Sector O.

This permit authorizes storm water discharges from the following industrial activities at Sector O facilities:

11.O.2.1 Steam electric power generation using coal, natural gas, oil, nuclear energy, etc., to produce a steam source, including coal handling areas;

11.O.2.2 Coal pile runoff, including effluent limitations established by 40 CFR Part 423; and

11.O.2.3 Dual fuel facilities that could employ a steam boiler.

11.O.3 Limitations on Coverage.

11.O.3.1 Prohibition of Non-Storm Water Discharges. Non-storm water discharges subject to effluent limitations guidelines are not covered by this permit.

11.O.3.2 Prohibition of Storm Water Discharges. Storm water discharges from the following are not covered by this permit:

11.O.3.2.1 Ancillary Facilities (e.g., fleet centers and substations) that are not contiguous to a stream electric power generating facility;

11.O.3.2.2 Gas Turbine Facilities (providing the facility is not a dual-fuel facility that includes a steam boiler), and combined-cycle facilities where no supplemental fuel oil is burned (and the facility is not a dual-fuel facility that includes a steam boiler); and

11.O.3.2.3 Cogeneration (combined heat and power) facilities utilizing a gas turbine.

11.O.4 Additional Technology-Based Effluent Limits. The following good housekeeping measures are required in addition to Part 4.2.2:

11.O.4.1 Fugitive Dust Emissions. Minimize fugitive dust emissions from coal handling areas. To minimize the tracking of coal dust offsite, adopt, as practicable, procedures such as installing specially designed tires or washing vehicles in a designated area before they leave the site and controlling the wash water.

11.O.4.2 Delivery Vehicles. Minimize contamination of storm water runoff from delivery vehicles arriving at the plant site. Adopt procedures to inspect delivery vehicles arriving at the plant site and ensure overall integrity of the body or container and procedures to deal with leakage or spillage from vehicles or containers.

11.O.4.3 Fuel Oil Unloading Areas. Minimize contamination of precipitation or surface runoff from fuel oil unloading areas. Use containment curbs in unloading areas, have personnel familiar with spill prevention and response procedures present during deliveries to ensure that any leaks or spills are immediately contained and cleaned up, and use spill and overflow protection devices (e.g., drip pans, drip diapers, or other containment devices placed beneath fuel oil connectors to contain potential spillage during deliveries or from leaks at the connectors).

11.O.4.4 Chemical Loading and Unloading. Minimize contamination of precipitation or surface runoff from chemical loading and unloading areas. Use containment curbs at chemical loading and unloading areas to contain spills, have personnel familiar with spill prevention and response procedures present during deliveries to ensure that any leaks or spills are immediately contained and cleaned up, and loading and unloading in covered areas and storing chemicals indoors.

11.O.4.5 Miscellaneous Loading and Unloading Areas. Minimize contamination of precipitation or surface runoff from loading and unloading areas. Use the following, as practicable, cover the loading area; grade, berm, or curb around the loading area to divert run-on; locate the loading and unloading equipment and vehicles so that leaks are contained in existing containment and flow diversion systems; or equivalent procedures.

11.O.4.6 Liquid Storage Tanks. Minimize contamination of surface runoff from above-ground liquid storage tanks. Use the following, as practicable, protective guards around tanks, containment curbs, spill and overflow protection, dry cleanup methods, or equivalent measures.

11.O.4.7 Large Bulk Fuel Storage Tanks. Minimize contamination of surface runoff from large bulk fuel storage tanks. Use containment berms (or their equivalent) as required by applicable State and Federal Laws. The permittee must also comply with applicable State and Federal laws, including Spill Prevention, Control and Countermeasure (SPCC) Plan requirements.

11.O.4.8 Spill Reduction Measures. Minimize the potential for an oil or chemical spill, or reference the appropriate part of the permittees SPCC plan. Visually inspect as part of the routine facility inspection the structural integrity of all above-ground tanks, pipelines, pumps, and related equipment that may be exposed to storm water, and make any necessary repairs immediately.

11.O.4.9 Oil-Bearing Equipment in Switchyards. Minimize contamination of surface runoff from oil-bearing equipment in switchyard areas. Use level grades and gravel surfaces to retard flows and limit the spread of spills, or collect runoff in perimeter ditches.

11.O.4.10 Residue-Hauling Vehicles. Inspect all residue-hauling vehicles for proper covering over the load, adequate gate sealing, and overall integrity of the container body. Repair vehicles without load covering or adequate gate sealing, or with leaking containers or beds.

11.O.4.11 Ash Loading Areas. Reduce or control the tracking of ash and residue from ash loading areas. Clear the ash building floor and immediately adjacent roadways of spillage, debris, and excess water before departure of each loaded vehicle.

11.O.4.12 Areas Adjacent to Disposal Ponds or Landfills. Minimize contamination of surface runoff from areas adjacent to disposal ponds or landfills. Reduce ash residue that may be tracked on to access roads traveled by residue handling vehicles, and reduce ash residue on exit roads leading into and out of residue handling areas.

11.O.4.13 Landfills, Scrap yards, Surface Impoundments, Open Dumps, General Refuse Sites. Minimize the potential for contamination of runoff from these areas.

11.O.5 Additional SWPPP Requirements.

11.O.5.1 Drainage Area Site Map. (See also Part 5.2.3) The permittee must document in the SWPPP the locations of any of the following activities or sources that may be exposed to precipitation or surface runoff: storage tanks, scrap yards, and general refuse areas; short- and long-term storage of general materials (including but not limited to supplies, construction materials, paint equipment, oils, fuels, used and unused solvents, cleaning materials, paint, water treatment chemicals, fertilizer, and pesticides); landfills and construction sites; and stock pile areas (e.g., coal or limestone piles).

11.O.5.2 Documentation of Good Housekeeping Measures. The permittee must document in the SWPPP the good housekeeping measures implemented to meet the effluent limits in Part 11.O.4.

11.O.6 Additional Inspection Requirements.

11.O.6.1 Comprehensive Site Compliance Inspection. (See also Part 6.3) As part of the permittees inspection, inspect the following areas monthly: coal handling areas, loading or unloading areas, switchyards, fueling areas, bulk storage areas, ash handling areas, areas adjacent to disposal ponds and landfills, maintenance areas, liquid storage tanks, and long term and short term material storage areas.

11.O.7 Sector-Specific Benchmarks

Table 11.O.7-1 identifies benchmarks that apply to the specific subsectors of Sector O. These benchmarks apply to both the permittees primary industrial activity and any co-located industrial activities, which describe their facility activities.

Table 11.O.7-1: Sector – Specific Benchmarks – Sector O

Subsector (Permittees may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector O1. Steam Electric Generating Facilities (Industrial Activity Code "SE")	Total Iron	1.0 mg/L

11.O.8 Effluent Limitations Based on Effluent Limitations Guidelines. (See also Part 7.2.2.1 of the permit.)

Table 11.O.8-1 identifies effluent limits that apply to the industrial activities described below. Compliance with these effluent limits is to be determined based on discharges from these industrial activities independent of commingling with any other wastestreams that may be covered under this permit.

Table 11.O.8-1: Effluent Limitations Based on Effluent Limitations Guidelines[1]

Industrial Activity	Parameter	Effluent Limit
Discharges from coal storage piles at Steam Electric Generating Facilities	TSS	50 mg/l [2]
	pH	6.5 - 8.5 s.u.

Notes:
1. Monitor annually.
2. If the permittees facility is designed, constructed, and operated to treat the volume of coal pile runoff that is associated with a 10-year, 24-hour rainfall event, any untreated overflow of coal pile runoff from the treatment unit is not subject to the 50 mg/L limitation for total suspended solids.

11. Subpart P – Sector P – Land Transportation and Warehousing.

A permittee must comply with Part 11 sector-specific requirements associated with their primary industrial activity and any co-located industrial activities, as defined in Appendix C. The sector-specific requirements apply to those areas of the permittees facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

11.P.1 Covered Storm Water Discharges.

The requirements in Subpart P apply to storm water discharges associated with industrial activity from Land Transportation and Warehousing facilities as identified by the SIC Codes specified under Sector P in Table D-1 of Appendix D of the permit.

11.P.2 Limitation on Coverage.

11.P.2.1 Prohibited Discharges. (See also Part 1.2.4) This permit does not authorize the discharge of vehicle/equipment/surface washwater, including tank cleaning operations. Such discharges must be authorized under a separate APDES permit, discharged to a sanitary sewer in accordance with applicable industrial pretreatment requirements, or recycled on-site.

11.P.3 Additional Technology-Based Effluent Limits.

11.P.3.1 Good Housekeeping Measures. (See also Part 4.2.2) In addition to the Good Housekeeping requirements in Part 4.2.2, the permittee must do the following. Recommended control measures are discussed as indicated:

11.P.3.1.1 Vehicle and Equipment Storage Areas. Minimize the potential for storm water exposure to leaky or leak-prone vehicles/equipment awaiting maintenance. Implement the following (or other equivalent measures), as practicable: use of drip pans under vehicles/equipment, indoor storage of vehicles and equipment, installation of berms or dikes, use of absorbents, roofing or covering storage areas, and cleaning pavement surfaces to remove oil and grease.

11.P.3.1.2 Fueling Areas. Minimize contamination of storm water runoff from fueling areas. Implement the following (or other equivalent measures), as practicable: Covering the fueling area; using spill/overflow protection and cleanup equipment; minimizing storm water run-on/runoff to the fueling area; using dry cleanup methods; and treating and/or recycling collected storm water runoff.

11.P.3.1.3 Material Storage Areas. Maintain all material storage vessels (e.g., for used oil/oil filters, spent solvents, paint wastes, hydraulic fluids) to prevent contamination of storm water and plainly label them (e.g., "Used Oil," "Spent Solvents," etc.). Implement the following (or other equivalent measures), as practicable: storing the materials indoors; installing berms/dikes around the areas; minimizing runoff of storm water to the areas; using dry cleanup methods; and treating and/or recycling collected storm water runoff.

11.P.3.1.4 Vehicle and Equipment Cleaning Areas. Minimize contamination of storm water runoff from all areas used for vehicle/equipment cleaning. Implement the following (or other equivalent measures), as practicable: performing all cleaning operations indoors; covering the cleaning operation, ensuring that all washwater drains to a proper collection system (i.e., not the storm water drainage system); treating and/or recycling collected washwater, or other equivalent measures.

11.P.3.1.5 Vehicle and Equipment Maintenance Areas. Minimize contamination of storm water runoff from all areas used for vehicle/equipment maintenance. Implement the following (or other equivalent measures), as practicable: performing maintenance activities indoors; using drip pans; keeping an organized inventory of materials used in the shop; draining all parts of fluid prior to disposal; prohibiting wet clean up practices if these practices would result in the discharge of pollutants to storm water drainage systems; using dry cleanup methods; treating and/or recycling collected storm water runoff, minimizing run on/runoff of storm water to maintenance areas.

11.P.3.1.6 Locomotive Sanding (Loading Sand for Traction) Areas. Implement the following (or other equivalent measures), as practicable: covering sanding areas; minimizing storm water run on/runoff; or appropriate sediment removal practices to minimize the offsite transport of sanding material by storm water.

11.P.3.2 Employee Training. (See also Part 4.2.9) Train personnel at least once a year and address the following activities, as applicable: used oil and spent solvent management; fueling procedures; general good housekeeping practices; proper painting procedures; and used battery management.

11.P.4 Additional SWPPP Requirements.

11.P.4.1 Drainage Area Site Map. (See also Part 5.2.3) The permittee must document in the SWPPP the following areas of the facility and indicate whether activities occurring there may be exposed to precipitation/surface runoff: Fueling stations; vehicle/equipment maintenance or cleaning areas; storage areas for vehicle/equipment with actual or potential fluid leaks; loading/unloading areas; areas where treatment, storage or disposal of wastes occur; liquid storage tanks; processing areas; and storage areas.

11.P.4.2 Potential Pollutant Sources. (See also Part 5.2.4) Assess the potential for the following activities and facility areas to contribute pollutants to storm water discharges: Onsite waste storage or disposal; dirt/gravel parking areas for vehicles awaiting maintenance; illicit plumbing connections between shop floor drains and the storm water conveyance system(s); and fueling areas. Describe these activities in the SWPPP.

11.P.4.3 Description of Good Housekeeping Measures. The permittee must document in the SWPPP the good housekeeping measures they implement consistent with Part 11.P.3.

11.P.4.4 Vehicle and Equipment Washwater Requirements. If applicable, attach to or reference in the SWPPP, a copy of the APDES permit issued for vehicle/ equipment washwater; if an APDES permit has not been issued, a copy of the pending application. If an industrial user permit is issued under a local pretreatment program, attach a copy to the SWPPP. In any case, implement all non-storm water discharge permit conditions or pretreatment conditions in the SWPPP. If washwater is handled in another manner (e.g., hauled offsite), describe the disposal method and attach all pertinent documentation/ information (e.g., frequency, volume, destination, etc.) in the plan.

11.P.5 Additional Inspection Requirements.

(See also Part 6.1) Inspect all the following areas/activities: storage areas for vehicles/equipment awaiting maintenance, fueling areas, indoor and outdoor vehicle/equipment maintenance areas, material storage areas, vehicle/equipment cleaning areas, loading/unloading areas, and any petroleum bulk fuel storage areas. Quarterly visual assessment of the bulk fuel storage areas should focus on identifying any potential leaks in tanks, pipelines, valves, etc. and implementing temporary spill containment measures until permanent corrective actions can be made.

11. Subpart Q – Sector Q – Water Transportation.

A permittee must comply with Part 11 sector-specific requirements associated with their primary industrial activity and any co-located industrial activities, as defined in Appendix C. The sector-specific requirements apply to those areas of the permittees facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

11.Q.1 Covered Storm Water Discharges.

The requirements in Subpart Q apply to storm water discharges associated with industrial activity from Water Transportation facilities as identified by the SIC Codes specified under Sector Q in Table D-1 of Appendix D of the permit.

11.Q.2 Limitations on Coverage.

11.Q.2.1 Prohibition of Non-Storm Water Discharges. (See also Part 1.2.4) Not covered by this permit: bilge and ballast water, sanitary wastes, pressure wash water, and cooling water originating from vessels.

11.Q.3 Additional Technology-Based Effluent Limits.

11.Q.3.1 Good Housekeeping Measures. A permittee must implement the following good housekeeping measures in addition to the requirements of Part 4.2.2:

11.Q.3.1.1 Pressure Washing Area. If pressure washing is used to remove marine growth from vessels, the discharge water must be permitted by a separate APDES permit. Collect or contain the discharges from the pressure washing areas so that they are not co-mingled with storm water discharges authorized by this permit.

11.Q.3.1.2 Blasting and Painting Area. Minimize the potential for spent abrasives, paint chips, and overspray to discharge into receiving waters or the storm sewer systems. Contain all blasting and painting activities or use other measures to minimize the discharge of contaminants (e.g., hanging plastic barriers or tarpaulins during blasting or painting operations to contain debris). When necessary, regularly clean storm water conveyances of deposits of abrasive blasting debris and paint chips.

11.Q.3.1.3 Material Storage Areas. Store and plainly label all containerized materials (e.g., fuels, paints, solvents, waste oil, antifreeze, batteries) in a protected, secure location away from drains. Minimize the contamination of precipitation or surface runoff from the storage areas. Specify which materials are stored indoors, and consider containment or enclosure for those stored outdoors. If abrasive blasting is performed, discuss the storage and disposal of spent abrasive materials generated at the facility. Implement an inventory control plan to limit the presence of potentially hazardous materials onsite.

11.Q.3.1.4 Engine Maintenance and Repair Areas. Minimize the contamination of precipitation or surface runoff from all areas used for engine maintenance and repair. Implement the following (or their equivalents), as practicable: performing all maintenance activities indoors, maintaining an organized inventory of materials used in the shop, draining all parts of fluid prior to disposal, prohibiting the practice of hosing down the shop floor, using dry cleanup methods, and treating and/or recycling storm water runoff collected from the maintenance area.

11.Q.3.1.5 Material Handling Area. Minimize the contamination of precipitation or surface runoff from material handling operations and areas (e.g., fueling, paint and solvent mixing, disposal of process wastewater streams from vessels). Implement the following (or their equivalents), as practicable: covering fueling areas, using spill and overflow protection, mixing paints and solvents in a designated area (preferably indoors or under a shed), and minimizing runoff of storm water to material handling areas.

11.Q.3.1.6 Drydock Activities. Routinely maintain and clean the drydock to minimize pollutants in storm water runoff. Address the cleaning of accessible areas of the drydock prior to flooding, and final cleanup following removal of the vessel and raising the dock. Include procedures for cleaning up oil, grease, and fuel spills occurring on the drydock. Implement the following (or their equivalents), as practicable: sweeping rather than hosing off debris and spent blasting material from accessible areas of the drydock prior to flooding and making absorbent materials and oil containment booms readily available to clean up or contain any spills.

11.Q.3.2 Storm Water Diversions. Divert storm water away from potential pollutant sources. Implement the following options, as practicable: interceptor or diversion controls (e.g., dikes, swales, curbs, or berms); pipe slope drains; subsurface drains; conveyance systems (e.g., channels or gutters, open-top box culverts, and waterbars; rolling dips and road sloping; roadway surface water deflector and culverts); or their equivalents.

11.Q.3.3 Velocity Dissipation Devices. (e.g., check dams, sediment traps, or riprap) Place velocity dissipation devices, as practicable, along the length of any conveyance channel to provide a non-erosive flow velocity. Also place velocity dissipation devices where discharges from the conveyance channel or structure join a water course to prevent erosion and to protect the channel embankment, outlet, adjacent stream bank slopes, and downstream waters.

11.Q.3.4 Employee Training. (See also Part 4.2.9) As part of the permittees employee training program, address, at a minimum, the following activities (as practicable): used oil management, spent solvent management, disposal of spent abrasives, disposal of vessel wastewaters, spill prevention and control, fueling procedures, general good housekeeping practices, painting and blasting procedures, and used battery management.

11.Q.3.5 Preventive Maintenance. (See also Part 4.2.3) As part of the permittees preventive maintenance program, perform timely inspection and maintenance of storm water management devices (e.g., cleaning oil and water separators and sediment traps to ensure that spent abrasives, paint chips, and solids will be intercepted and retained prior to entering the storm drainage system), as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters.

11.Q.4 Additional SWPPP Requirements.

11.Q.4.1 Drainage Area Site Map. (See also Part 5.2.3) The permittee must document in the SWPPP where any of the following may be exposed to precipitation or surface runoff: fueling; engine maintenance and repair; vessel maintenance and repair; pressure washing; painting; sanding; blasting; welding; metal fabrication; loading and unloading areas; locations used for the treatment, storage, or disposal of wastes; liquid storage tanks; liquid storage areas (e.g., paint, solvents, resins); and material storage areas (e.g., blasting media, aluminum, steel, scrap iron).

11.Q.4.2 Summary of Potential Pollutant Sources. (See also Part 5.2.4) The permittee must document in the SWPPP the following additional sources and activities that have potential pollutants associated with them: outdoor manufacturing or processing activities (e.g., welding, metal fabricating) and significant dust or particulate generating processes (e.g., abrasive blasting, sanding, and painting.)

11.Q.5 Additional Inspection Requirements.

(See also Part 6.1) Include the following in all quarterly routine facility inspections: pressure washing area; blasting, sanding, and painting areas; material storage areas; engine maintenance and repair areas; material handling areas; drydock area; and general yard area.

11.Q.6 Sector-Specific Benchmarks.

(See also Part 7 of the permit.)

(Table 11.N.6-1: Sector – Specific Benchmarks – Sector N located on following page.)

Table 11.Q.6-1: Sector – Specific Benchmarks – Sector Q

Subsector (Permittees may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector Q1. Water Transportation Facilities (SIC 4412-4499)	Total Aluminum	0.75 mg/L
	Total Iron	1.0 mg/L
	Total Lead (saltwater)[1]	0.21 mg/L
	Total Lead (freshwater)[2]	Hardness Dependent
	Total Zinc (saltwater)[1]	0.09 mg/L
	Total Zinc (freshwater)[2]	Hardness Dependent

Note:

1. Saltwater benchmark values apply to storm water discharges into saline waters where indicated.
2. The freshwater benchmark values of some metals are dependent on water hardness. For these parameters, permittees must determine the hardness of the receiving water (see Appendix E, "Calculating Hardness in Receiving Waters for Hardness Dependent Metals," for methodology), in accordance with Part 7.2.1.1, to identify the applicable 'hardness range' for determining their benchmark value applicable to their facility. The ranges occur in 25 mg/L increments. Hardness Dependent Benchmarks follow in the table below:

Water Hardness Range (mg/L)	Lead (mg/L)	Zinc (mg/L)
0 – < 25	0.014	0.04
25 – < 50	0.023	0.05
50 – < 75	0.045	0.08
75 – < 100	0.069	0.11
100 – < 125	0.095	0.13
125 – < 150	0.122	0.16
150 – < 175	0.151	0.18
175 – < 200	0.182	0.20
200 – < 225	0.213	0.23
225 – < 250	0.246	0.25
250+	0.262	0.26

11. Subpart R – Sector R – Ship and Boat Building and Repair Yards.

A permittee must comply with Part 11 sector-specific requirements associated with their primary industrial activity and any co-located industrial activities, as defined in Appendix C. The sector-specific requirements apply to those areas of the permittees facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

11.R.1 Covered Storm Water Discharges.

The requirements in Subpart R apply to storm water discharges associated with industrial activity from Ship and Boat Building and Repair Yards as identified by the SIC Codes specified under Sector R in Table D-1 of Appendix D of the permit.

11.R.2 Limitations on Coverage.

11.R.2.1 Prohibition of Non-Storm Water Discharges. (See also Part 1.2.4) Discharges containing bilge and ballast water, sanitary wastes, pressure wash water, and cooling water originating from vessels are not covered by this permit.

11.R.3 Additional Technology-Based Effluent Limits.

11.R.3.1 Good Housekeeping Measures. (See also Part 4.2.2)

11.R.3.1.1 Pressure Washing Area. If pressure washing is used to remove marine growth from vessels, the discharged water must be permitted as a process wastewater by a separate APDES permit.

11.R.3.1.2 Blasting and Painting Area. Minimize the potential for spent abrasives, paint chips, and overspray to discharging into the receiving water or the storm sewer systems. To the extent practicable contain all blasting and painting activities, or use other measures to prevent the discharge of the contaminants (e.g., hanging plastic barriers or tarpaulins during blasting or painting operations to contain debris). When necessary, regularly clean storm water conveyances of deposits of abrasive blasting debris and paint chips.

11.R.3.1.3 Material Storage Areas. Store and plainly label all containerized materials (e.g., fuels, paints, solvents, waste oil, antifreeze, batteries) in a protected, secure location away from drains. Minimize the contamination of precipitation or surface runoff from the storage areas. If abrasive blasting is performed, discuss the storage and disposal of spent abrasive materials generated at the facility. Implement an inventory control plan to limit the presence of potentially hazardous materials onsite.

11.R.3.1.4 Engine Maintenance and Repair Areas. Minimize the contamination of precipitation or surface runoff from all areas used for engine maintenance and repair. Implement the following (or their equivalents), as practicable: perform all maintenance activities indoors, maintain an organized inventory of materials used in the shop, drain all parts of fluid prior to disposal, prohibit the practice of hosing down the shop floor, use dry cleanup methods, and treat and/or recycle storm water runoff collected from the maintenance area.

11.R.3.1.5 Material Handling Area. Minimize the contamination of precipitation or surface runoff from material handling operations and areas (e.g., fueling, paint and solvent mixing, disposal of process wastewater streams from vessels). Implement the following (or their equivalents), as practicable: cover fueling areas, use spill and overflow protection, mix paints and solvents in a designated area (preferably indoors or under a shed), and minimize storm water run-on to material handling areas.

11.R.3.1.6 Drydock Activities. Routinely maintain and clean the drydock to minimize pollutants in storm water runoff. Clean accessible areas of the drydock prior to flooding and final cleanup following removal of the vessel and raising the dock. Include procedures for cleaning up oil, grease, or fuel spills occurring on the drydock. Implement the following (or their equivalents), as practicable: sweep rather than hosing off debris and spent blasting material from accessible areas of the drydock prior to flooding, and have absorbent materials and oil containment booms readily available to clean up and contain any spills.

11.R.3.2 Storm Water Diversions. Divert storm water away from potential pollutant sources. Implement the following options, as practicable: interceptor or diversion controls (e.g., dikes, swales, curbs, or berms); pipe slope drains; subsurface drains; conveyance systems (e.g., channels or gutters, open-top box culverts, and waterbars; rolling dips and road sloping; roadway surface water deflector and culverts); or their equivalents.

11.R.3.3 Velocity Dissipation Devices. (e.g., check dams, sediment traps, or riprap) Place along the length of any conveyance channel to provide a non-erosive flow velocity. Also place velocity dissipation devices where discharges from the conveyance channel or structure join a water course to prevent erosion and to protect the channel embankment, outlet, adjacent stream bank slopes, and downstream waters.

11.R.3.4 Employee Training. (See also Part 4.2.9) As part of the permittees employee training program, address, at a minimum, the following activities (as applicable): used oil management, spent solvent management, disposal of spent abrasives, disposal of vessel wastewaters, spill prevention and control, fueling procedures, general good housekeeping practices, painting and blasting procedures, and used battery management.

11.R.3.5 Preventive Maintenance. (See also Part 4.2.3) As part of the permittees preventive maintenance program, perform timely inspection and maintenance of storm water management devices (e.g., cleaning oil and water separators and sediment traps to ensure that spent abrasives, paint chips, and solids will be intercepted and retained prior to entering the storm drainage system), as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters.

11.R.4 Additional SWPPP Requirements.

11.R.4.1 Drainage Area Site Map. (See also Part 5.2.3) The permittee must document in the SWPPP where any of the following may be exposed to precipitation or surface runoff: fueling; engine maintenance or repair; vessel maintenance or repair; pressure washing; painting; sanding; blasting; welding; metal fabrication; loading and unloading areas; treatment, storage, and waste disposal areas; liquid storage tanks; liquid storage areas (e.g., paint, solvents, resins); and material storage areas (e.g., blasting media, aluminum, steel, scrap iron).

11.R.4.2 Potential Pollutant Sources. (See also Part 5.2.4) The Permittee must document in the SWPPP the following additional sources and activities that have potential pollutants associated with them (if applicable): outdoor manufacturing or processing activities (e.g., welding, metal fabricating) and significant dust or particulate generating processes (e.g., abrasive blasting, sanding, and painting).

11.R.4.3 Documentation of Good Housekeeping Measures. The permittee must document in the SWPPP any good housekeeping measures implemented to meet the effluent limits in Part 11.R.3.

11.R.4.3.1 Blasting and Painting Areas. The permittee must document in the SWPPP any standard operating practices relating to blasting and painting (e.g., prohibiting uncontained blasting and painting over open water or prohibiting blasting and painting during windy conditions, which can render containment ineffective).

11.R.4.3.2 Storage Areas. Specify in the permittees SWPPP which materials are stored indoors, anddescribe containment or enclosure practices for those stored outdoors.

11.R.5 Additional Inspection Requirements.

(See also Part 6.1) Include the following in all quarterly routine facility inspections: pressure washing area; blasting, sanding, and painting areas; material storage areas; engine maintenance and repair areas; material handling areas; drydock area; and general yard area.

11. Subpart S – Sector S – Air Transportation.

A permittee must comply with Part 11 sector-specific requirements associated with their primary industrial activity and any co-located industrial activities, as defined in Appendix C. The sector-specific requirements apply to those areas of the permittees facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

11.S.1 Covered Storm Water Discharges.

The requirements in Subpart S apply to storm water discharges associated with industrial activity from Air Transportation facilities identified by the SIC Codes specified under Sector S in Table D-1 of Appendix D of the permit at primary airports.

11.S.2 Limitation on Coverage.

11.S.2.1 *Limitations on Coverage.* This permit authorizes storm water discharges from only those portions of the air transportation facility that are involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling and lubrication), equipment cleaning operations or deicing operations.

Note: "deicing" will generally be used to imply both deicing (removing frost, snow or ice) and anti-icing (preventing accumulation of frost, snow or ice) activities, unless specific mention is made regarding anti-icing and/or deicing activities.

11.S.2.2 *Prohibition of Non-Storm Water Discharges.* (See also Part 1.2.4 and Part 11.S.3) This permit does not authorize the discharge of aircraft, ground vehicle, runway and equipment washwaters; nor the dry weather discharge of deicing chemicals. Such discharges must be covered by separate APDES permit(s). Note that a discharge resulting from snowmelt is not a dry weather discharge.

11.S.3 Multiple Operators at Air Transportation Facilities

Air transportation facilities often have more than one operator who could discharge stormwater associated with industrial activity. Operators include the airport authority and airport tenants, including air passenger or cargo companies, fixed based operators, and other parties who routinely perform industrial activities on airport property.

11.S.3.1 *Permit Coverage/Submittal of NOIs.* Where an airport transportation facility has multiple industrial operators that discharge stormwater, each individual operator must obtain coverage under an APDES stormwater permit. To obtain coverage under the MSGP, all such operators must meet the eligibility requirements in Part 1.2 and must submit an NOI, per Part 2.2 (or, if appropriate, a no exposure certification per Part 1.3).

11.S.3.2 *MSGP Implementation Responsibilities for Airport Authority and Tenants.* The airport authority, in collaboration with its tenants, may choose to implement certain MSGP requirements on behalf of its tenants in order to increase efficiency and eliminate redundancy or duplication of effort. Options available to the airport authority and its tenants for implementation of MSGP requirements include:

11.S.3.2.1 The airport authority performs certain activities on behalf of itself and its tenants and reports on its activities*;*

11.S.3.2.2 Tenants provide the airport authority with relevant inputs about tenants' activities, including deicing chemical usage*, and the airport authority compiles and reports on tenants' and its own activities; or

11.S.3.2.3 Tenants independently perform, document and submit required information on their activities*.*

**Tenants who report their deicing chemical usage to the airport authority and rely on the airport authority to perform monitoring should not check the glycol and urea use box on their NOI forms.*

11.S.3.3 SWPPP Requirements. A SWPPP must be developed for all stormwater discharges associated with industrial activity at the airport before submittal of any NOIs. The airport authority, in collaboration with its tenants, may choose to develop a single comprehensive SWPPP, or they may choose to develop individual SWPPP. The comprehensive SWPPP should be developed collaboratively by the airport authority and tenants. If any operator develops a SWPPP for discharges from its own areas of the airport, that SWPPP must be coordinated and integrated with the comprehensive SWPPP. All operators and their separate SWPPP contributions and compliance responsibilities must be clearly identified in the comprehensive SWPPP, which all operators must sign and certify per Part 5.2.7. As applicable, the comprehensive SWPPP must clearly specify the MSGP requirements to be complied with by*:*

- The airport authority for itself;
- The airport authority on behalf of its tenants;
- Tenants for themselves.

For each activity that an operator (e.g., the airport authority) conducts on behalf of another operator (e.g., a tenant), the comprehensive SWPPP must describe a process for reporting results to the latter operator and for ensuring appropriate follow-up, if necessary, by all affected operators. This is to ensure all actions are taken to correct any potential deficiencies or permit violations. For example, where the airport authority is conducting monitoring for itself and its tenants, the comprehensive SWPPP must identify how the airport authority will share the monitoring results with its tenants, and then follow-up with its tenants where there are any exceedances of benchmarks, effluent limits, or water quality standards. In turn, the comprehensive SWPPP must describe how the tenants will also follow-up to ensure permit compliance. If the airport authority and its tenants choose to use a comprehensive SWPPP, they have one hundred eighty (180) days after the effective date of this permit to develop a comprehensive SWPPP and file the NOI according to Part 2.1.

11.S.3.4 *Duty to Comply.* All individual operators are responsible for implementing their assigned portion of the comprehensive SWPPP, and operators must ensure that their individual activities do not render another operator's stormwater controls ineffective. In addition, the standard permit conditions found in Appendix A apply to each individual operator, including 1.2 Duty to Comply (which states, in part, "A permittee [each individual operator] shall comply with all conditions of the permittee's APDES permit."). For multiple operators at an airport this means that each individual operator remains responsible for ensuring all requirements of its own MSGP are met regardless of whether the comprehensive SWPPP allocates the actual implementation of any of those responsibilities to another entity. That is, the failure of the entity allocated responsibility in the SWPPP to implement an MSGP requirement on behalf of other operators does not negate the other operators' ultimate liability.

11.S.4 Additional Technology-Based Effluent Limits.

11.S.4.1 *Good Housekeeping Measures.* (See also Part 4.2.2) Implement control measures (as described in 11.S.4.1.1 through 11.S.4.1.7–each list is not exclusive) where determined to be practicable and that accommodate considerations of safety, space, operational constraints, and flight considerations.

11.S.4.1.1 *Aircraft, Ground Vehicle and Equipment Maintenance Areas.* Minimize the contamination of storm water runoff from all areas used for aircraft, ground vehicle and equipment maintenance (including the maintenance conducted on the terminal apron and in dedicated hangers). Consider the following control measures: performing maintenance activities indoors; maintaining an organized inventory of material used in the maintenance areas; draining all parts of fluids prior to disposal; prohibiting the practice of hosing down the apron or hanger floor; using dry cleanup methods; and collecting the storm water runoff from the maintenance area and providing treatment or recycling.

11.S.4.1.2 Aircraft, Ground Vehicle and Equipment Cleaning Areas. Clearly demarcate these areas on the ground using signage or other appropriate means. Minimize the contamination of storm water runoff from cleaning areas.

11.S.4.1.3 Aircraft, Ground Vehicle and Equipment Storage Areas. Store all aircraft, ground vehicles and equipment awaiting maintenance in designated areas only and minimize the contamination of storm water runoff from these storage areas. Consider the following control measures, including any BMPs: store aircraft and ground vehicles indoors; use drip pans for the collection of fluid leaks; and perimeter drains, dikes or berms surrounding the storage areas.

11.S.4.1.4 Material Storage Areas. Maintain the vessels of stored materials (e.g., used oils, hydraulic fluids, spent solvents, and waste aircraft fuel) in good condition, to prevent or minimize contamination of storm water. Also plainly label the vessels (e.g., "used oil," "Contaminated Jet A," etc.). Minimize contamination of precipitation/runoff from these areas. Consider the following control measures: store materials indoors; store waste materials in a centralized location; and install berms/dikes around storage areas.

11.S.4.1.5 Airport Fuel System and Fueling Areas. Minimize the discharge of fuel to the storm sewer/surface waters resulting from fuel servicing activities or other operations conducted in support of the airport fuel system. Consider the following control measures: implement spill and overflow practices; use only dry cleanup methods; and collect storm water runoff.

11.S.4.1.6 Source Reduction. Minimize, and where practicable, eliminate the use of urea and glycol-based deicing chemicals, in order to reduce the aggregate amount of deicing chemicals used and/or lessen the environmental impact. Chemical options to replace ethylene glycol, propylene glycol and urea include: potassium acetate; magnesium acetate; calcium acetate; and anhydrous sodium acetate.

- *Runway Deicing Operation:* Minimize contamination of storm water runoff from runways as a result of deicing operations. Evaluate whether over-application of deicing chemicals occurs by analyzing application rates, and adjust as necessary, consistent with considerations of flight safety. Consider these control measure options: metered application of chemicals; pre-wetting dry chemical constituents prior to application; install a runway ice detection system; implement anti-icing operations as a preventive measure against ice buildup.

- *Aircraft Deicing Operations.* Minimize contamination of storm water runoff from aircraft deicing operations. Determine whether excessive application of deicing chemicals occurs and adjust as necessary, consistent with considerations of flight safety. Evaluate using alternative deicing/anti-icing

agents as well as containment measures for all applied chemicals. Consider these control measure options for reducing deicing fluid use: forced-air deicing systems, computer-controlled fixed-gantry systems, infrared technology, hot water, varying glycol content to air temperature, enclosed-basket deicing trucks, mechanical methods, solar radiation, hangar storage, aircraft covers, and thermal blankets for MD-80s and DC-9s. Also consider using ice-detection systems and airport traffic flow strategies and departure slot allocation systems. The evaluations and determinations required by this Part should be carried out by the personnel most familiar with the particular aircraft and flight operations and related systems in question (versus an outside entity such as the airport authority).

11.S.4.1.7 Management of Runoff.

(See also 4.2.6) Where deicing operations occur, implement a program to control or manage contaminated runoff to minimize the amount of pollutants being discharged from the site. Consider these control measure options: a dedicated deicing facility with a runoff collection/recovery system; using vacuum/collection trucks; storing contaminated storm water/deicing fluids in tanks and releasing controlled amounts to a publicly owned treatment works; collecting contaminated runoff in a wet pond for biochemical decomposition (be aware of attracting wildlife that may prove hazardous to flight operations); or directing runoff into vegetative swales or other infiltration measures. Also consider recovering deicing materials when these materials are applied during non-precipitation events (e.g., covering storm sewer inlets, using booms, installing absorptive interceptors in the drains, etc.) to prevent these materials from later becoming a source of storm water contamination. Deicing operations should be developed with an emphasis on using a combination of the BMPs listed above to contain, capture, and reuse deicing materials. Used deicing fluid should be recycled whenever practicable.

11.S.4.2 Deicing Season. (See also Part 11.S.7.) The permittee must determine the seasonal timeframe (e.g., December- February, October - March, etc.) during which deicing activities typically occur at the facility. Implementation of control measures, including any BMPs, facility inspections and monitoring must be conducted with particular emphasis throughout the defined deicing season. If the permittee meets the deicing chemical usage thresholds of 100,000 gallons glycol and/or 100 tons of urea, the deicing season they identified is the timeframe during which the permittee must obtain the four required benchmark monitoring event results for deicing-related parameters, i.e., BOD, COD, ammonia and pH.

11.S.5 Additional SWPPP Requirements.

An airport authority and tenants of the airport are encouraged to work in partnership in the development of a SWPPP. If an airport tenant obtains authorization under this permit and develops a SWPPP for

discharges from his or her own areas of the airport, prior to authorization, that SWPPP must be coordinated and integrated with the SWPPP for the entire airport. Tenants of the airport facility include air passenger or cargo companies, fixed based operators and other parties who have contracts with the airport authority to conduct business operations on airport property and whose operations result in storm water discharges associated with industrial activity.

11.S.5.1 Drainage Area Site Map. (See also Part 5.2.3) The permittee must document in the SWPPP the following areas of the facility and indicate whether activities occurring there may be exposed to precipitation/surface runoff: aircraft and runway deicing operations; fueling stations; aircraft, ground vehicle and equipment maintenance/cleaning areas; storage areas for aircraft, ground vehicles and equipment awaiting maintenance.

11.S.5.2 Potential Pollutant Sources. (See also Part 5.2.4) In the permittees inventory of exposed materials, describe in the SWPPP the potential for the following activities and facility areas to contribute pollutants to storm water discharges: aircraft, runway, ground vehicle and equipment maintenance and cleaning; aircraft and runway deicing operations (including apron and centralized aircraft deicing stations, runways, taxiways and ramps). If the permittee uses deicing chemicals, they must maintain a record of the types (including the Material Safety Data Sheets [MSDS]) used and the monthly quantities, either as measured or, in the absence of metering, as estimated to the best of the permittees knowledge. This includes all deicing chemicals, not just glycols and urea (e.g., potassium acetate), because large quantities of these other chemicals can still have an adverse impact on receiving waters. Tenants or other fixed-based operations that conduct deicing operations must provide the above information to the airport authority for inclusion with any comprehensive airport SWPPPs.

11.S.5.3 Vehicle and Equipment Washwater Requirements. Attach to or reference in the SWPPP, a copy of the APDES permit issued for vehicle/equipment washwater or, if an APDES permit has not been issued, a copy of the pending application. If an industrial user permit is issued under a local pretreatment program, include a copy in the SWPPP. In any case, if the permittee is subject to another permit, describe the control measures for implementing all non-storm water discharge permit conditions or pretreatment requirements in the SWPPP. If washwater is handled in another manner (e.g., hauled offsite, retained onsite), describe the disposal method and attach all pertinent documentation/information (e.g., frequency, volume, destination, etc.) in the SWPPP.

11.S.5.4 Documentation of Control Measures Used for Management of Runoff. Document in the SWPPP the control measures used for collecting or containing contaminated melt water from collection areas used for disposal of contaminated snow.

11.S.6 Additional Inspection Requirements.

11.S.6.1 Inspections. (See also Part 6.1) At a minimum, conduct routine facility inspections at least monthly during the deicing season (e.g., October through April for most airports). If a permittees facility needs to deice before or after this period, expand the monthly inspections to include all months during which deicing chemicals may be used. The Department may specifically require the permittee to increase inspection frequencies.

11.S.6.2 Comprehensive Site Inspections. (See also Part 6.3) Using only qualified personnel, conduct the annual site inspection during periods of actual deicing operations, if possible. If not practicable during active deicing because of weather, conduct the inspection during the season when deicing operations occur and the materials and equipment for deicing are in place.

11.S.7 Sector-Specific Benchmarks. (See also Part 7 of the permit.)

Monitor per the requirements in Table 11.S.7-1.

Table 11.S.7-1: Sector – Specific Benchmarks – Sector S

Subsector (Permittees may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
For airports where a single permittee, or a combination of permitted facilities use more than 100,000 gallons of pure glycol in glycol-based deicing fluids and/or 100 tons or more of urea on an average annual basis, monitor the first four parameters in ONLY those outfalls that collect runoff from areas where deicing activities occur (SIC 4512-4581).	Biochemical Oxygen Demand (BOD_5)[1]	30 mg/L
	Chemical Oxygen Demand (COD)[1]	120 mg/L
	Ammonia[1, 2]	2.14 mg/L
	pH[1]	6.5 – 8.5 s.u.

Note:
1. These are deicing-related parameters. Collect the four benchmark samples, and any required follow-up benchmark samples, during the timeframe defined in Part 11.S.4.2 when deicing activities are occurring.
2. If a permittee certifies annually that it does not use airfield deicing products that contain urea, then the permittee does not need to sample for ammonia.

11.S.8 Sector-Specific Effluent Limitation Guideline.

There shall be no discharge of airfield pavement deicers containing urea, unless there is monitoring. To comply with this limitation, any existing point source must certify annually that it does not use airfield deicing products that contain urea or alternatively, airfield pavement discharges at every discharge point must achieve the numeric limitations for ammonia in Table 11.S.8-1, prior to any dilution or commingling with any non-deicing discharge. The certification statement shall be maintained in the SWPPP and signed in accordance with Appendix A, Part 1.12. Monitor per the requirements in Table 11.S.8-1.

Table 11.S.8-1: Effluent Limitations Based on 40 CFR Part 449 BAT Limitations

Wastestream	Paramter	Daily Maximum
Runoff containing urea from airfield pavement deicing at existing primary airports with 1,000 or more annual non-propeller aircraft[1] departures.	Ammonia as Nitrogen[2]	14.7 mg/l

Note:
1. Annual non-propellar aircraft is the average annual aircraft departures of commercial turbine-engine aircraft that are propelled by jet, i.e., turbojet or turbofan as tabulated by the Federal Aviation Administration.
2. Monitor twice a deicing season during the timeframe defined in Part 11.S.4.2 when deicing activities are occuring.

11.S.9 Technology Based – Effluent Limits for New Sources with At Least 1,000 Annual Non-Propellar Aircraft Departures.

A new airport with at least 1,000 annual non-propeller aircraft departures must apply for an individual APDES permit.

11. Subpart T – Sector T – Treatment Works.

A permittee must comply with Part 11 sector-specific requirements associated with their primary industrial activity and any co-located industrial activities, as defined in Appendix C. The sector-specific requirements apply to those areas of the permittees facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

11.T.1 Covered Storm Water Discharges.

The requirements in Subpart T apply to storm water discharges associated with industrial activity from Treatment Works as identified by the Activity Code specified under Sector T in Table D-1 of Appendix D of the permit.

11.T.2 Industrial Activities Covered by Sector T.

The requirements listed under this part apply to all existing point source storm water discharges associated with the following activities:

11.T.2.1 *Treatment works treating domestic sewage,* or any other sewage sludge or wastewater treatment device or system used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge; that are located within the confines of a facility with a design flow of 1.0 million gallons per day (MGD) or more; or are required to have an approved pretreatment program under 40 CFR Part 403.

11.T.2.2 *The following are not required to have permit coverage:* farm lands, domestic gardens or lands used for sludge management where sludge is beneficially reused and which are not physically located within the facility, or areas that are in compliance with Section 405 of the CWA.

11.T.3 Limitations on Coverage.

11.T.3.1 *Prohibition of Non-Storm Water Discharges.* (See also Part 1.2.4) Sanitary and industrial wastewater and equipment and vehicle washwater are not authorized by this permit.

11.T.4 Additional Technology-Based Effluent Limits.

11.T.4.1 *Control Measures.* (See also the non-numeric effluent limits in Part 4.2) In addition to the other control measures, implement the following, as practicable: routing storm water to the treatment works; or covering exposed materials (i.e., from the following areas: grit, screenings, and other solids handling, storage, or disposal areas; sludge drying beds; dried sludge piles; compost piles; and septage or hauled waste receiving station).

11.T.4.2 Employee Training. (See also Part 4.2.9) At a minimum, training must address the following areas when applicable to a facility: petroleum product management; process chemical management; spill prevention and controls; fueling procedures; general good housekeeping practices; and proper procedures for using fertilizer, herbicides, and pesticides.

11.T.5 Additional SWPPP Requirements.

11.T.5.1 Site Map. (See also Part 5.2.3) The permittee must document in the SWPPP where any of the following may be exposed to precipitation or surface runoff: grit, screenings, and other solids handling, storage, or disposal areas; sludge drying beds; dried sludge piles; compost piles; septage or hauled waste receiving station; and storage areas for process chemicals, petroleum products, solvents, fertilizers, herbicides, and pesticides.

11.T.5.2 Potential Pollutant Sources. (See also Part 5.2.4) Document in the SWPPP the following additional sources and activities that have potential pollutants associated with them, as applicable: grit, screenings, and other solids handling, storage, or disposal areas; sludge drying beds; dried sludge piles; compost piles; septage or hauled waste receiving station; and access roads and rail lines.

11.T.5.3 Wastewater and Washwater Requirements. Keep a copy of all the permittees current APDES permits issued for wastewater and industrial, vehicle and equipment washwater discharges or, if an APDES permit has not yet been issued, a copy of the pending application(s) with the SWPPP. If the washwater is handled in another manner, the disposal method must be described and all pertinent documentation must be retained onsite.

11.T.6 Additional Inspection Requirements.

(See also Part 6.1) Include the following areas in all inspections: access roads and rail lines; grit, screenings, and other solids handling, storage, or disposal areas; sludge drying beds; dried sludge piles; compost piles; and septage or hauled waste receiving station.

11. Subpart U – Sector U – Food and Kindred Products.

A permittee must comply with Part 11 sector-specific requirements associated with their primary industrial activity and any co-located industrial activities, as defined in Appendix C. The sector-specific requirements apply to those areas of the permittees facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

11.U.1 Covered Storm Water Discharges.

The requirements in Subpart U apply to storm water discharges associated with industrial activity from Food and Kindred Products facilities as identified by the SIC Codes specified in Table D-1 of Appendix D of the permit.

11.U.2 Limitations on Coverage.

11.U.2.1 Prohibition of Non-Storm Water Discharges. (See also Part 1.2.4) The following discharges are not authorized by this permit: discharges containing boiler blowdown, cooling tower overflow and blowdown, ammonia refrigeration purging, and vehicle washing and clean-out operations.

11.U.3 Additional Technology-Based Limitations.

11.U.3.1 Employee Training. (See also Part 4.2.9) Address pest control in the permittees employee training program.

11.U.4 Additional SWPPP Requirements.

11.U.4.1 Drainage Area Site Map. (See also Part 5.2.3) The permittee must document in the SWPPP the locations of the following activities if they are exposed to precipitation or runoff: vents and stacks from cooking, drying, and similar operations; dry product vacuum transfer lines; animal holding pens; spoiled product; and broken product container storage areas.

11.U.4.2 Potential Pollutant Sources. (See also Part 5.2.4) The permittee must document in the SWPPP, in addition to food and kindred products processing-related industrial activities, application and storage of pest control chemicals (e.g., rodenticides, insecticides, fungicides) used on plant grounds.

11.U.5 Additional Inspection Requirements.

(See also Part 6.1) Inspect on a quarterly basis, at a minimum, the following areas where the potential for exposure to storm water exists: loading and unloading areas for all significant materials; storage areas, including associated containment areas; waste management units; vents and stacks emanating from industrial activities; spoiled product and broken product container holding areas; animal holding pens; staging areas; and air pollution control equipment.

11.U.6 Sector-Specific Benchmarks. (See also Part 7 of the permit.)

Table 11.U.6-1: Sector – Specific Benchmarks – Sector U

Subsector (Permittees may be subject to requirements for more than one Sector / Subsector)	Parameter	Benchmark Monitoring Concentration
Subsector U1. Grain Mill Products (SIC 2041-2048)	Total Suspended Solids (TSS)	100 mg/L
Subsector U2. Fats and Oils Products (SIC 2074-2079)	Biochemical Oxygen Demand (BOD_5)	30 mg/L
	Chemical Oxygen Demand (COD)	120 mg/L
	Nitrate plus Nitrite Nitrogen	0.68 mg/L
	Total Suspended Solids (TSS)	100 mg/L

11. Subpart V – Sector V – Textile Mills, Apparel, and Other Fabric Products.

A permittee must comply with Part 11 sector-specific requirements associated with their primary industrial activity and any co-located industrial activities, as defined in Appendix C. The sector-specific requirements apply to those areas of the permittees facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

11.V.1 Covered Storm Water Discharges.

The requirements in Subpart V apply to storm water discharges associated with industrial activity from Textile Mills, Apparel, and Other Fabric Product manufacturing as identified by the SIC Codes specified under Sector V in Table D-1 of Appendix D of the permit.

11.V.2 Limitations on Coverage.

11.V.2.1 Prohibition of Non-Storm Water Discharges. (See also Part 1.2.4) The following are not authorized by this permit: discharges of wastewater (e.g., wastewater resulting from wet processing or from any processes relating to the production process), reused or recycled water, and waters used in cooling towers. If the permittee has these types of discharges from the facility, the permittee must cover them under a separate APDES permit.

11.V.3 Additional Technology-Based Limitations.

11.V.3.1 Good Housekeeping Measures. (See also Part 4.2.2)

11.V.3.1.1 Material Storage Areas. Plainly label and store all containerized materials (e.g., fuels, petroleum products, solvents, and dyes) in a protected area, away from drains. Minimize contamination of the storm water runoff from such storage areas. Implement an inventory control plan to prevent excessive purchasing of potentially hazardous substances. For storing empty chemical drums or containers, ensure that the drums and containers are clean (consider triple-rinsing) and that there is no contact of residuals with precipitation or runoff. Collect and dispose of washwater from these cleanings properly.

11.V.3.1.2 Material Handling Areas. Minimize contamination of storm water runoff from material handling operations and areas. Implement the following (or their equivalents), as practicable: use of spill and overflow protection; cover fueling areas; and cover or enclose areas where the transfer of material may occur. When applicable, address the replacement or repair of leaking connections, valves, transfer lines, and pipes that may carry chemicals, dyes, or wastewater.

11.V.3.1.3 Fueling Areas. Minimize contamination of storm water runoff from fueling areas. Implement the following (or their equivalents), as practicable: cover the fueling area, use of spill and overflow protection, minimize run-on of storm water to the fueling areas, use of dry cleanup methods, and treating and/or recycling storm water runoff collected from the fueling area.

11.V.3.1.4 Above-Ground Storage Tank Area. Minimize contamination of the storm water runoff from above-ground storage tank areas, including the associated piping and valves. Implement the following (or their equivalents), as practicable: regular cleanup of these areas; include measures for tanks, piping and valves explicitly in the permittees SPCC program; minimize runoff of storm water from adjacent areas; restrict access to the area; insert filters in adjacent catch basins; provide absorbent booms in unbermed fueling areas; use dry cleanup methods; and permanently sealing drains within critical areas that may discharge to a storm drain.

11.V.3.2 Employee Training. (See also Part 4.2.9) As part of the permittees employee training program, address, at a minimum, the following activities (as applicable): use of reused and recycled waters, solvents management, proper disposal of dyes, proper disposal of petroleum products and spent lubricants, spill prevention and control, fueling procedures, and general good housekeeping practices.

11.V.4 Additional SWPPP Requirements.

11.V.4.1 Potential Pollutant Sources. (See also Part 5.2.4) The permittee must document in the SWPPP the following additional sources and activities that have potential pollutants associated with them: industry-specific significant materials and industrial activities (e.g., backwinding, beaming, bleaching, backing bonding, carbonizing, carding, cut and sew operations, desizing, drawing, dyeing locking, fulling, knitting, mercerizing, opening, packing, plying, scouring, slashing, spinning, synthetic-felt processing, textile waste processing, tufting, turning, weaving, web forming, winging, yarn spinning, and yarn texturing).

11.V.4.2 Description of Good Housekeeping Measures for Material Storage Areas. The permittee must document in the SWPPP the containment area or enclosure for materials stored outdoors in connection with Part 11.V.3.1.1 above.

11.V.5 Additional Inspection Requirements.

(See also Part 6.1) Inspect, at least monthly, the following activities and areas (at a minimum): transfer and transmission lines, spill prevention, good housekeeping practices, management of process waste products, and all structural and nonstructural management practices.

11. Subpart W – Sector W – Furniture and Fixtures.

A permittee must comply with Part 11 sector-specific requirements associated with their primary industrial activity and any co-located industrial activities, as defined in Appendix C. The sector-specific requirements apply to those areas of a permittees facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

11.W.1 Covered Storm Water Discharges.

The requirements in Subpart W apply to storm water discharges associated with industrial activity from Furniture and Fixtures facilities as identified by the SIC Codes specified under Sector W in Table D-1 of Appendix D of the permit.

11.W.2 Additional SWPPP Requirements.

11.W.2.1 Drainage Area Site Map. (See also Part 5.2.3) The permittee must document in the SWPPP where any of the following may be exposed to precipitation or surface runoff: material storage (including tanks or other vessels used for liquid or waste storage) areas; outdoor material processing areas; areas where wastes are treated, stored, or disposed of; access roads; and rail spurs.

11. Subpart X – Sector X – Printing and Publishing.

The permittee must comply with Part 11 sector-specific requirements associated with their primary industrial activity and any co-located industrial activities, as defined in Appendix C. The sector-specific requirements apply to those areas of the permittees facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

11.X.1 Covered Storm Water Discharges.

The requirements in Subpart X apply to storm water discharges associated with industrial activity from Printing and Publishing facilities as identified by the SIC Codes specified under Sector X in Table D-1 of Appendix D of the permit.

11.X.2 Additional Technology-Based Effluent Limits.

11.X.2.1 Good Housekeeping Measures. (See also Part 4.2.2)

11.X.2.1.1 Material Storage Areas. Plainly label and store all containerized materials (e.g., skids, pallets, solvents, bulk inks, hazardous waste, empty drums, portable and mobile containers of plant debris, wood crates, steel racks, and fuel oil) in a protected area, away from drains. Minimize contamination of the storm water runoff from such storage areas. Implement an inventory control plan to prevent excessive purchasing of potentially hazardous substances. In order to minimize storm water exposure materials should be stored indoors or under cover.

11.X.2.1.2 Material Handling Area. Minimize contamination of storm water runoff from material handling operations and areas (e.g., blanket wash, mixing solvents, loading and unloading materials). Implement the following (or their equivalents), as practicable: use spill and overflow protection, cover fueling areas, and cover or enclose areas where the transfer of materials may occur. When applicable, address the replacement or repair of leaking connections, valves, transfer lines, and pipes that may carry chemicals or wastewater.

11.X.2.1.3 Fueling Areas. Minimize contamination of storm water runoff from fueling areas. Implement the following (or their equivalents), as practicable: cover the fueling area, use spill and overflow protection, minimize runoff of storm water to the fueling areas, use dry cleanup methods, and treat aor recycle storm water runoff collected from the fueling area.

11.X.2.1.4 Above Ground Storage Tank Area. Minimize contamination of the storm water runoff from above-ground storage tank areas, including the associated piping and valves. Implement the following (or their equivalents), as practicable: regularly clean these areas, explicitly address tanks, piping and valves in the SPCC program, minimize storm water runoff from adjacent areas, restrict access to the area, insert filters in adjacent catch basins, provide absorbent booms in unbermed fueling areas, use dry cleanup methods, and permanently seal drains within critical areas that may discharge to a storm drain.

11.X.2.2 Employee Training. (See also Part 4.2.9) As part of the permittees employee training program, address, at a minimum, the following activities (as applicable): spent solvent management, spill prevention and control, used oil management, fueling procedures, and general good housekeeping practices.

11.X.3 Additional SWPPP Requirements.

11.X.3.1 Description of Good Housekeeping Measures for Material Storage Areas. In connection with Part 11.X.2.1.1, describe in the SWPPP the containment area or enclosure for materials stored outdoors.

11. Subpart Y – Sector Y – Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Industries.

A permittee must comply with Part 11 sector-specific requirements associated with their primary industrial activity and any co-located industrial activities, as defined in Appendix C. The sector-specific requirements apply to those areas of the permittees facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

11.Y.1 Covered Storm Water Discharges.

The requirements in Subpart Y apply to storm water discharges associated with industrial activity from Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Industries facilities as identified by the SIC Codes specified under Sector Y in Table D-1 of Appendix D of the permit.

11.Y.2 Additional Technology-Based Effluent Limits.

11.Y.2.1 *Controls for Rubber Manufacturers.* (See also Part 4.2) Minimize the discharge of zinc in a permittees storm water discharges. Parts 11.Y.2.1.1 to 11.Y.2.1.5 give possible sources of zinc to be reviewed and list some specific control measures to be considered for implementation (or their equivalents). Following are some general control measure options to consider: using chemicals purchased in pre-weighed, sealed polyethylene bags; storing in-use materials in sealable containers, ensuring an airspace between the container and the cover to minimize "puffing" losses when the container is opened, and using automatic dispensing and weighing equipment.

11.Y.2.1.1 *Zinc Bags.* Ensure proper handling and storage of zinc bags at the permittees facility. Following are some control measure options: employee training on the handling and storage of zinc bags, indoor storage of zinc bags, cleanup of zinc spills without washing the zinc into the storm drain, and the use of 2,500-pound sacks of zinc rather than 50- to 100-pound sacks.

11.Y.2.1.2 *Dumpsters.* Minimize discharges of zinc from dumpsters. Following are some control measure options: covering the dumpster, moving the dumpster indoors, or providing a lining for the dumpster.

11.Y.2.1.3 *Dust Collectors and Baghouses.* Minimize contributions of zinc to storm water from dust collectors and baghouses. Replace or repair, as appropriate, improperly operating dust collectors and baghouses.

11.Y.2.1.4 *Grinding Operations.* Minimize contamination of storm water as a result of dust generation from rubber grinding operations. One control measure option is to install a dust collection system.

11.Y.2.1.5 Zinc Stearate Coating Operations. Minimize the potential for storm water contamination from drips and spills of zinc stearate slurry that may be released to the storm drain. One control measure option is to use alternative compounds to zinc stearate.

11.Y.2.2 Controls for Plastic Products Manufacturers. Minimize the discharge of plastic resin pellets in the storm water discharges. Control measures to be considered for implementation (or their equivalents) include minimizing spills, cleaning up of spills promptly and thoroughly, sweeping thoroughly, pellet capturing, employee education, and disposal precautions.

11.Y.3 Additional SWPPP Requirements.

11.Y.3.1 Potential Pollutant Sources for Rubber Manufacturers. (See also Part 5.2.4) The permittee must document in the SWPPP the use of zinc at their facility and the possible pathways through which zinc may be discharged in storm water runoff.

11.Y.4 Sector-Specific Benchmarks. (See also Part 7 of the permit.)

Table 11.Y.4-1: Sector – Specific Benchmarks – Sector Y

Subsector (Permittees may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector Y1. Rubber Products Manufacturing (SIC 3011, 3021, 3052, 3053, 3061, 3069)	Total Zinc (saltwater)[1] Total Zinc (freshwater)[2]	0.09 mg/L Hardness Dependent

Note:
1. Saltwater benchmark values apply to storm water discharges into saline waters where indicated.
2. The freshwater benchmark values of some metals are dependent on water hardness. For these parameters, permittees must determine the hardness of the receiving water (see Appendix E, "Calculating Hardness in Receiving Waters for Hardness Dependent Metals," for methodology), in accordance with Part 7.2.1.1, to identify the applicable 'hardness range' for determining their benchmark value applicable to their facility. The ranges occur in 25 mg/L increments. Hardness Dependent Benchmarks follow in the table below:

Water Hardness Range (mg/L)	Zinc (mg/L)
0 – < 25	0.04
25 – < 50	0.05
50 – < 75	0.08
75 – < 100	0.11
100 – < 125	0.13
125 – < 150	0.16
150 – < 175	0.18
175 – < 200	0.20
200 – < 225	0.23
225 – < 250	0.25
250+	0.26

11. Subpart Z – Sector Z – Leather Tanning and Finishing.

A permittee must comply with Part 11 sector-specific requirements associated with their primary industrial activity and any co-located industrial activities, as defined in Appendix C. The sector-specific requirements apply to those areas of the permittees facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

11.Z.1 Covered Storm Water Discharges.

The requirements in Subpart Z apply to storm water discharges associated with industrial activity from Leather Tanning and Finishing facilities as identified by the SIC Code specified under Sector Z in Table D-1 of Appendix D of the permit.

11.Z.2 Additional Technology-Based Effluent Limits.

11.Z.2.1 Good Housekeeping Measures. (See also Part 4.2.2)

11.Z.2.1.1 Storage Areas for Raw, Semiprocessed, or Finished Tannery By-products. Minimize contamination of storm water runoff from pallets and bales of raw, semiprocessed, or finished tannery by-products (e.g., splits, trimmings, shavings). Use indoor storage or protection with polyethylene wrapping, tarpaulins, roofed storage, etc. Place materials on an impermeable surface and enclose or put berms (or equivalent measures) around the area to prevent storm water run-on and runoff.

11.Z.2.1.2 Material Storage Areas. Label storage containers of all materials (e.g., specific chemicals, hazardous materials, spent solvents, waste materials) minimize contact of such materials with storm water.

11.Z.2.1.3 Buffing and Shaving Areas. Minimize contamination of storm water runoff with leather dust from buffing and shaving areas. Use dust collection enclosures, preventive inspection and maintenance programs, or other appropriate preventive measures.

11.Z.2.1.4 Receiving, Unloading, and Storage Areas. Minimize contamination of storm water runoff from receiving, unloading, and storage areas. If these areas are exposed, use the following (or their equivalents): covering all hides and chemical supplies, diverting drainage to the process sewer, or grade berming or curbing the area to prevent storm water runoff.

11.Z.2.1.5 Outdoor Storage of Contaminated Equipment. Minimize contact of storm water with contaminated equipment. Use the following (or their equivalents): covering equipment, diverting drainage to the process sewer, or cleaning thoroughly prior to storage.

11.Z.2.1.6 Waste Management. Minimize contamination of storm water runoff from waste storage areas. Use the following (or their equivalents): covering dumpsters, moving waste management activities indoors, covering waste piles with temporary covering material such as tarpaulins or polyethylene, or minimizing storm water runoff by enclosing the area or building berms around the area.

11.Z.3 Additional SWPPP Requirements.

11.Z.3.1 Drainage Area Site Map. (See also Part 5.2.3) The permittee must document in the SWPPP where any of the following may be exposed to precipitation or surface runoff: processing and storage areas of the beamhouse, tanyard, and re-tan wet finishing and dry finishing operations.

11.Z.3.2 Potential Pollutant Sources. (See also Part 5.2.4) The permittee must document in the SWPPP the following sources and activities that have potential pollutants associated with them (as appropriate): temporary or permanent storage of fresh and brine-cured hides; extraneous hide substances and hair; leather dust, scraps, trimmings, and shavings.

11. Subpart AA – Sector AA – Fabricated Metal Products.

A permittee must comply with Part 11 sector-specific requirements associated with their primary industrial activity and any co-located industrial activities, as defined in Appendix C. The sector-specific requirements apply to those areas of the permittees facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

11.AA.1 Covered Storm Water Discharges.

The requirements in Subpart AA apply to storm water discharges associated with industrial activity from Fabricated Metal Products facilities as identified by the SIC Codes specified under Sector AA in Table D-1 of Appendix D of the permit.

11.AA.2 Additional Technology-Based Effluent Limits.

11.AA.2.1 Good Housekeeping Measures. (See also Part 4.2.2)

11.AA.2.1.1 Raw Steel Handling Storage. Minimize the generation of and/or recover and properly manage scrap metals, fines, and iron dust. Include measures for containing materials within storage handling areas.

11.AA.2.1.2 Paints and Painting Equipment. Minimize exposure of paint and painting equipment to storm water.

11.AA.2.2 Spill Prevention and Response Procedures. (See also Part 4.2.4) Ensure that the necessary equipment to implement a cleanup is available to personnel. The following areas should be addressed:

11.AA.2.2.1 Metal Fabricating Areas. Maintain clean, dry, orderly conditions in these areas. Use dry clean-up techniques.

11.AA.2.2.2 Storage Areas for Raw Metal. Keep these areas free of conditions that could cause, or impede appropriate and timely response to, spills or leakage of materials. Implement the following (or their equivalents): maintaining storage areas so that there is easy access in the event of a spill, and labeling stored materials to aid in identifying spill contents.

11.AA.2.2.3 Metal Working Fluid Storage Areas. Minimize the potential for storm water contamination from storage areas for metal working fluids.

11.AA.2.2.4 Cleaners and Rinse Water. Control and clean up spills of solvents and other liquid cleaners, control sand buildup and disbursement from sand-blasting operations, and prevent exposure of recyclable wastes. Substitute environmentally benign cleaners when possible.

11.AA.2.2.5 Lubricating Oil and Hydraulic Fluid Operations. Minimize the potential for storm water contamination from lubricating oil and hydraulic fluid operations. Use appropriate monitoring methods or equipment or other devices to detect and control leaks and overflows. Install perimeter controls such as dikes, curbs, grass filter strips, or equivalent measures, as practicable.

11.AA.2.2.6 Chemical Storage Areas. Minimize storm water contamination and accidental spillage in chemical storage areas. Include a program to inspect containers and identify proper disposal methods.

11.AA.2.3 Spills and Leaks. (See also Part 5.2.4.3) In the permittees spill prevention and response procedures, required by Part 4.2.4, pay attention to the following materials (at a minimum): chromium, toluene, pickle liquor, sulfuric acid, zinc and other water priority chemicals, and hazardous chemicals and wastes.

11.AA.3 Additional SWPPP Requirements.

11.AA.3.1 Drainage Area Site Map. (See also Part 5.2.3) The permittee must document in the SWPPP where any of the following may be exposed to precipitation or surface runoff: raw metal storage areas; finished metal storage areas; scrap disposal collection sites; equipment storage areas; retention and detention basins; temporary and permanent diversion dikes or berms; right-of-way or perimeter diversion devices; sediment traps and barriers; processing areas, including outside painting areas; wood preparation; recycling; and raw material storage.

11.AA.3.2 Potential Pollutant Sources. (See also Part 5.2.4) The permittee must document in the SWPPP the following additional sources and activities that have potential pollutants associated with them: loading and unloading operations for paints, chemicals, and raw materials; outdoor storage activities for raw materials, paints, empty containers, corn cobs, chemicals, and scrap metals; outdoor manufacturing or processing activities such as grinding, cutting, degreasing, buffing, and brazing; onsite waste disposal practices for spent solvents, sludge, pickling baths, shavings, ingot pieces, and refuse and waste piles.

11.AA.4 Additional Inspection Requirements.

11.AA.4.1 Inspections. (See also Part 6) At a minimum, include the following areas in all inspections: raw metal storage areas, finished product storage areas, material and chemical storage areas, recycling areas, loading and unloading areas, equipment storage areas, paint areas, and vehicle fueling and maintenance areas.

11.AA.4.2 Comprehensive Site Inspections. (See also Part 6.3) As part of the permittees inspections, also inspect areas associated with the storage of raw metals, spent solvents and chemicals storage areas, outdoor paint areas, and drainage from roof. Potential pollutants include chromium, zinc, lubricating oil, solvents, aluminum, oil and grease, methyl ethyl ketone, steel, and related materials.

11.AA.5 Sector-Specific Benchmarks. (See also Part 7 of the permit.)

Table 11.AA.5-1: Sector – Specific Benchmarks – Sector AA

Subsector (Permittees may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector AA1. Fabricated Metal Products, except Coating (SIC 3411-3499; 3911-3915)	Total Aluminum	0.75 mg/L
	Total Iron	1.0 mg/L
	Total Zinc (saltwater)[1] Total Zinc (freshwater)[2]	0.09 mg/L Hardness Dependent
	Nitrate plus Nitrite Nitrogen	0.68 mg/L
Subsector AA2. Fabricated Metal Coating and Engraving (SIC 3479)	Total Zinc (saltwater)[1] Total Zinc (freshwater)[2]	0.09 mg/L Hardness Dependent
	Nitrate plus Nitrite Nitrogen	0.68 mg/L

Note:
1. Saltwater benchmark values apply to storm water discharges into saline waters where indicated.
2. The freshwater benchmark values of some metals are dependent on water hardness. For these parameters, permittees must determine the hardness of the receiving water (see Appendix E, "Calculating Hardness in Receiving Waters for Hardness Dependent Metals," for methodology), in accordance with Part 7.2.1.1, to identify the applicable 'hardness range' for determining their benchmark value applicable to their facility. The ranges occur in 25 mg/L increments. Hardness Dependent Benchmarks follow in the table below:

Water Hardness Range (mg/L)	Zinc (mg/L)
0 – < 25	0.04
25 – < 50	0.05
50 – < 75	0.08
75 – < 100	0.11
100 – < 125	0.13
125 – < 150	0.16
150 – < 175	0.18
175 – < 200	0.20
200 – < 225	0.23
225 – < 250	0.25
250+	0.26

11. Subpart AB – Sector AB — Transportation Equipment, Industrial or Commercial Machinery Facilities.

A permittee must comply with Part 11 sector-specific requirements associated with their primary industrial activity and any co-located industrial activities, as defined in Appendix C. The sector-specific requirements apply to those areas of the permittees facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

11.AB.1 Covered Storm Water Discharges.

The requirements in Subpart AB apply to storm water discharges associated with industrial activity from Transportation Equipment, Industrial or Commercial Machinery facilities as identified by the SIC Codes specified under Sector AB in Table D-1 of Appendix D of the permit.

11.AB.2 Additional SWPPP Requirements.

11.AB.2.1 Drainage Area Site Map. (See also Part 5.2.3) Identify in the permittees SWPPP where any of the following may be exposed to precipitation or surface runoff: vents and stacks from metal processing and similar operations.

11. Subpart AC– Sector AC –Electronic and Electrical Equipment and Components, Photographic and Optical Goods.

A Permittee must comply with Part 11 sector-specific requirements associated with their primary industrial activity and any co-located industrial activities, as defined in Appendix C. The sector-specific requirements apply to those areas of the permittees facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

11.AC.1 Covered Storm Water Discharges.

The requirements in Subpart AC apply to storm water discharges associated with industrial activity from facilities that manufacture Electronic and Electrical Equipment and Components, Photographic and Optical goods as identified by the SIC Codes specified in Table D-1 of Appendix D of the permit.

11.AC.2 Additional Requirements.

No additional sector-specific requirements apply.

11. Subpart AD – Sector AD – Discharges Designated by the Director as Requiring Permits.

A permittee must comply with Part 11 sector-specific requirements associated with their primary industrial activity and any co-located industrial activities, as defined in Appendix C. The sector-specific requirements apply to those areas of the permittees facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

11.AD.1 Covered Discharges.

Sector AD is used to provide permit coverage for facilities designated by the Department.

11.AD.1.1 Eligibility for Permit Coverage. Because this sector is primarily intended for use by discharges designated by the Department as needing a permit (which is an atypical circumstance), the permittee must obtain the Department's written permission to use this permit prior to submitting an NOI. If a permittee is authorized to use this permit, they will still be required to ensure that their discharges meet the basic eligibility provisions of this permit at Part 1.2.

11.AD.3 Sector-Specific Benchmarks and Effluent Limits. (See also Part 7 of the permit.)

The Department will establish any additional monitoring and reporting requirements for the permittees facility prior to authorizing the permittee to be covered by this permit. Additional monitoring requirements would be based on the nature of activities at the facility and the storm water discharges.

Appendix A – Standard Conditions

Table of Contents

Appendix A of the permit contains standard regulatory language that must be included in all APDES permits. These requirements are based on the regulations and cannot be challenged in the context of an individual APDES permit action. The standard regulatory language covers requirements such as monitoring, recording, reporting requirements, compliance responsibilities, and other general requirements. Appendix A, Standard Conditoins is an integral and enforceable part of the permit. Failure to comply with a Standard Condition in this Appendix constitutes a violation of the permit and is subject to enforcement.

1.0 Standard Conditions Applicable to All Permits

1.1. Contact Information and Addresses

1.1.1. Permitting Program

Documents, reports, and plans required under the permit and Appendix A are to be sent to the following address:

State of Alaska
Department of Environmental Conservation
Division of Water
Wastewater Discharge Authorization Program
555 Cordova Street
Anchorage, Alaska 99501
Telephone (907) 269-6285
Fax (907) 269-3487
Email: DEC.Water.WQPermit@alaska.gov

1.1.2. Compliance and Enforcement Program

Documents and reports required under the permit and Appendix A relating to compliance are to be sent to the following address:

State of Alaska
Department of Environmental Conservation
Division of Water
Compliance and Enforcement Program
555 Cordova Street
Anchorage, Alaska 99501
Telephone Nationwide (877) 569-4114
Anchorage Area / International (907) 269-4114
Fax (907) 269-4604
Email: dec-wqreporting@alaska.gov

1.2. Duty to Comply

A permittee shall comply with all conditions of the permittee's APDES permit. Any permit noncompliance constitutes a violation of 33 U.S.C. 1251-1387 (Clean Water Act) and state law and is grounds for enforcement action including termination, revocation and reissuance, or modification of a permit, or denial of a permit renewal application. A permittee shall comply with effluent standards or prohibitions established under 33 U.S.C. 1317(a) for toxic pollutants

within the time provided in the regulations that establish those effluent standards or prohibitions even if the permit has not yet been modified to incorporate the requirement.

1.3. Duty to Reapply

If a permittee wishes to continue an activity regulated by this permit after its expiration date, the permittee must apply for and obtain a new permit. In accordance with 18 AAC 83.105(b), a permittee with a currently effective permit shall reapply by submitting a new application at least 180 days before the existing permit expires, unless the Department has granted the permittee permission to submit an application on a later date. However, the Department will not grant permission for an application to be submitted after the expiration date of the existing permit.

1.4. Need to Halt or Reduce Activity Not a Defense

In an enforcement action, a permittee may not assert as a defense that compliance with the conditions of the permit would have made it necessary for the permittee to halt or reduce the permitted activity.

1.5. Duty to Mitigate

A permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

1.6. Proper Operation and Maintenance

1.6.1. A permittee shall at all times properly operate and maintain all facilities and systems of treatment and control and related appurtenances that the permittee installs or uses to achieve compliance with the conditions of the permit. The permittee's duty to operate and maintain properly includes using adequate laboratory controls and appropriate quality assurance procedures. However, a permittee is not required to operate back-up or auxiliary facilities or similar systems that a permittee installs unless operation of those facilities is necessary to achieve compliance with the conditions of the permit.

1.6.2. Operation and maintenance records shall be retained and made available at the site.

1.7. Permit Actions

A permit may be modified, revoked and reissued, or terminated for cause as provided in 18 AAC 83.130. If a permittee files a request to modify, revoke and reissue, or terminate a permit, or gives notice of planned changes or anticipated noncompliance, the filing or notice does not stay any permit condition.

1.8. Property Rights

A permit does not convey any property rights or exclusive privilege.

1.9. Duty to Provide Information

A permittee shall, within a reasonable time, provide to the Department any information that the Department requests to determine whether a permittee is in compliance with the permit, or whether cause exists to modify, revoke and reissue, or terminate the permit. A permittee shall also provide to the Department, upon request, copies of any records the permittee is required to keep under the permit.

1.10. Inspection and Entry

A permittee shall allow the Department, or an authorized representative, including a contractor acting as a representative of the Department, at reasonable times and on presentation of credentials establishing authority and any other documents required by law, to:

1.10.1. Enter the premises where a permittee's regulated facility or activity is located or conducted, or where permit conditions require records to be kept;

1.10.2. Have access to and copy any records that permit conditions require the permittee to keep;

1.10.3. Inspect any facilities, equipment, including monitoring and control equipment, practices, or operations regulated or required under a permit; and

1.10.4. Sample or monitor any substances or parameters at any location for the purpose of assuring permit compliance or as otherwise authorized by 33 U.S.C. 1251-1387 (Clean Water Act).

1.11. Monitoring and Records

A permittee must comply with the following monitoring and recordkeeping conditions:

1.11.1. Samples and measurements taken for the purpose of monitoring must be representative of the monitored activity.

1.11.2. The permittee shall retain records in Alaska of all monitoring information for at least three years, or longer at the Department's request at any time, from the date of the sample, measurement, report, or application. Monitoring records required to be kept include:

1.11.2.1. All calibration and maintenance records,

1.11.2.2. All original strip chart recordings or other forms of data approved by the Department for continuous monitoring instrumentation,

1.11.2.3. All reports required by a permit,

1.11.2.4. Records of all data used to complete the application for a permit,

1.11.2.5. Field logbooks or visual monitoring logbooks,

1.11.2.6. Quality assurance chain of custody forms,

1.11.2.7. Copies of discharge monitoring reports, and

1.11.2.8. A copy of this APDES permit.

1.11.3. Records of monitoring information must include:

1.11.3.1. The date, exact place, and time of any sampling or measurement;

1.11.3.2. The name(s) of any individual(s) who performed the sampling or measurement(s);

1.11.3.3. The date(s) and time any analysis was performed;

1.11.3.4. The name(s) of any individual(s) who performed any analysis;

1.11.3.5. Any analytical technique or method used; and

1.11.3.6. The results of the analysis.

1.11.4. Monitoring Procedures

Analyses of pollutants must be conducted using test procedures approved under 40 CFR Part 136, adopted by reference at 18 AAC 83.010, for pollutants with approved test procedures, and using test procedures specified in the permit for pollutants without approved methods.

1.12. Signature Requirement and Penalties

1.12.1. Any application, report, or information submitted to the Department in compliance with a permit requirement must be signed and certified in accordance with 18 AAC 83.385. Any person who knowingly makes any false material statement, representation, or certification in any application, record, report, or other document filed or required to be maintained under a permit, or who knowingly falsifies, tampers with, or renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be subject to penalties under 33 U.S.C. 1319(c)(4), AS 12.55.035(c)(1)(B), (c)(2) and (c)(3), and AS 46.03.790(g).

1.12.2. In accordance with 18 AAC 83.385, an APDES permit application must be signed as follows:

1.12.2.1. For a corporation, a responsible corporate officer shall sign the application; in this subsection, a responsible corporate officer means:

1.12.2.1.1. A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation; or

1.12.2.1.2. The manager of one of more manufacturing, production, or operating facilities, if

1.12.2.1.2.1. The manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental statutes and regulations;

1.12.2.1.2.2. The manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and

1.12.2.1.3. Authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

1.12.2.2. For a partnership or sole proprietorship, by the general partner or the proprietor, respectively, shall sign the application.

1.12.2.3. For a municipality, state, federal, or other public agency, either a principal executive officer or ranking elected official shall sign the application; in this subsection, a principal executive officer of an agency means:

1.12.2.3.1. The chief executive officer of the agency; or

1.12.2.3.2. A senior executive officer having responsibility for the overall operations of a principal geographic unit or division of the agency.

1.12.3. Any report required by an APDES permit, and a submittal with any other information requested by the Department, must be signed by a person described in Appendix A, Part 1.12.2, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

1.12.3.1. The authorization is made in writing by a person described in Appendix A, Part 1.12.2;

1.12.3.2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, including the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility; or an individual or position having overall responsibility for environmental matters for the company; and

1.12.3.3. The written authorization is submitted to the Department to the Permitting Program address in Appendix A, Part 1.1.1.

1.12.4. If an authorization under Appendix A, Part 1.12.3 is no longer effective because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Appendix A, Part 1.12.3 must be submitted to the Department before or together with any report, information, or application to be signed by an authorized representative.

1.12.5. Any person signing a document under Appendix A, Part 1.12.2 or Part 1.12.3 shall certify as follows:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

1.13. Proprietary or Confidential Information

1.13.1. A permit applicant or permittee may assert a claim of confidentiality for proprietary or confidential business information by stamping the words “confidential business information” on each page of a submission containing proprietary or confidential business information. The Department will treat the stamped submissions as confidential if the information satisfies the test in 40 CFR §2.208, adopted by reference at 18 AAC 83.010, and is not otherwise required to be made public by state law.

1.13.2. A claim of confidentiality under Appendix A, Part 1.13.1 may not be asserted for the name and address of any permit applicant or permittee, a permit application, a permit, effluent data, sewage sludge data, and information required by APDES or NPDES application forms provided by the Department, whether submitted on the forms themselves or in any attachments used to supply information required by the forms.

1.13.3. A permittee's claim of confidentiality authorized under Appendix A, Part 1.13.1 is not waived if the Department provides the proprietary or confidential business information to the EPA or to other agencies participating in the permitting process. The Department will supply any information obtained or used in the administration of the state APDES program to the EPA upon request under 40 CFR §123.41, as revised as of July 1, 2005. When providing information submitted to the Department with a claim of confidentiality to the EPA, the Department will notify the EPA of the confidentiality claim. If the Department provides the EPA information that is not claimed to be confidential, the EPA may make the information available to the public without further notice.

1.14. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any action or relieve a permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject to under state laws addressing oil and hazardous substances.

1.15. Cultural and Paleontological Resources

If cultural or paleontological resources are discovered because of this disposal activity, work that would disturb such resources is to be stopped, and the Office of History and Archaeology, a Division of Parks and Outdoor Recreation of the Alaska Department of Natural Resources (http://www.dnr.state.ak.us/parks/oha/), is to be notified immediately at (907) 269-8721.

1.16. Fee

A permittee must pay the appropriate permit fee described in 18 AAC 72.

1.17. Other Legal Obligations

This permit does not relieve the permittee from the duty to obtain any other necessary permits from the Department or from other local, state, or federal agencies and to comply with the requirements contained in any such permits. All activities conducted and all plan approvals implemented by the permittee pursuant to the terms of this permit shall comply with all applicable local, state, and federal laws and regulations.

2.0 Special Reporting Obligations

2.1. Planned Changes

2.1.1. The permittee shall give notice to the Department as soon as possible of any planned physical alteration or addition to the permitted facility if:

2.1.1.1. The alteration or addition may make the facility a "new source" under one or more of the criteria in 18 AAC 83.990(44); or

2.1.1.2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged if those pollutants are not subject to effluent limitations in the permit or to notification requirements under 18 AAC 83.610.

2.1.2. If the proposed changes are subject to plan review, then the plans must be submitted at least 30 days before implementation of changes (see 18 AAC 15.020 and 18 AAC 72 for plan review requirements). Written approval is not required for an emergency repair or routine maintenance.

2.1.3. Written notice must be sent to the Permitting Program address in Appendix A, Part 1.1.1.

2.2. Anticipated Noncompliance

2.2.1. A permittee shall give seven days' notice to the Department before commencing any planned change in the permitted facility or activity that may result in noncompliance with permit requirements.

2.2.2. Written notice must be sent to the Compliance and Enforcement Program address in Appendix A, Part 1.1.2.

2.3. Transfers

2.3.1. A permittee may not transfer a permit for a facility or activity to any person except after notice to the Department in accordance with 18 AAC 83.150. The Department may modify or revoke and reissue the permit to change the name of the permittee and incorporate such other requirements under 33 U.S.C. 1251-1387 (Clean Water Act) or state law.

2.3.2. Written notice must be sent to the Permitting Program address in Appendix A, Part 1.1.1.

2.4. Compliance Schedules

2.4.1. A permittee must submit progress or compliance reports on interim and final requirements in any compliance schedule of a permit no later than 14 days following the scheduled date of each requirement.

2.4.2. Written notice must be sent to the Compliance and Enforcement Program address in Appendix A, Part 1.1.2.

2.5. Corrective Information

2.5.1. If a permittee becomes aware that it failed to submit a relevant fact in a permit application or submitted incorrect information in a permit application or in any report to the Department, the permittee shall promptly submit the relevant fact or the correct information.

2.5.2. Information must be sent to the Permitting Program address in Appendix A, Part 1.1.1.

2.6. Bypass of Treatment Facilities

2.6.1. **Prohibition of Bypass**

Bypass is prohibited. The Department may take enforcement action against a permittee for any bypass, unless:

2.6.1.1. The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

2.6.1.2. There were no feasible alternatives to the bypass, including use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. However, this condition is not satisfied if the permittee, in the exercise of reasonable engineering judgment, should have installed adequate back-up equipment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance; and

2.6.1.3. The permittee provides notice to the Department of a bypass event in the manner, as appropriate, under Appendix A, Part 2.6.2.

2.6.2. **Notice of bypass**

2.6.2.1. For an anticipated bypass, the permittee submits notice at least 10 days before the date of the bypass. The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the conditions of Appendix A, Parts 2.6.1.1 and 2.6.1.2.

2.6.2.2. For an unanticipated bypass, the permittee submits 24-hour notice, as required in 18 AAC 83.410(f) and Appendix A, Part 3.4, Twenty-four Hour Reporting.

2.6.2.3. Written notice must be sent to the Compliance and Enforcement Program address in Appendix A, Part 1.1.2.

2.6.3. Notwithstanding Appendix A, Part 2.6.1, a permittee may allow a bypass that:

2.6.3.1. Does not cause an effluent limitation to be exceeded, and

2.6.3.2. Is for essential maintenance to assure efficient operation.

2.7. Upset Conditions

2.7.1. In any enforcement action for noncompliance with technology-based permit effluent limitations, a permittee may claim upset as an affirmative defense. A permittee seeking to establish the occurrence of an upset has the burden of proof to show that the requirements of Appendix A, Part 2.7.2 are met.

2.7.2. To establish the affirmative defense of upset, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that:

2.7.2.1. An upset occurred and the permittee can identify the cause or causes of the upset;

2.7.2.2. The permitted facility was at the time being properly operated;

2.7.2.3. The permittee submitted 24-hour notice of the upset, as required in 18 AAC 83.410(f) and Appendix A, Part 3.4, Twenty-four Hour Reporting; and

2.7.2.4. The permittee complied with any mitigation measures required under 18 AAC 83.405(e) and Appendix A, Part 1.5, Duty to Mitigate.

2.7.3. Any determination made in administrative review of a claim that noncompliance was caused by upset, before an action for noncompliance is commenced, is not final administrative action subject to judicial review.

2.8. Existing Manufacturing, Commercial, Mining, and Silvicultural Discharges

2.8.1. In addition to the reporting requirements under 18 AAC 83.410, an existing manufacturing, commercial, mining, and silvicultural discharger shall notify the Department as soon as that discharger knows or has reason to believe that any activity has occurred or will occur that would result in:

2.8.1.1. The discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in the permit, if that discharge will exceed the highest of the following notification levels:

2.8.1.1.1. One hundred micrograms per liter (100 µg/L);

2.8.1.1.2. Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile, 500 micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol, and one milligram per liter (1 mg/L) for antimony;

2.8.1.1.3. Five times the maximum concentration value reported for that pollutant in the permit application in accordance with 18 AAC 83.310(c)-(g); or

2.8.1.1.4. The level established by the Department in accordance with 18 AAC 83.445.

2.8.1.2. Any discharge, on a non-routine or infrequent basis, of a toxic pollutant that is not limited in the permit, if that discharge will exceed the highest of the following notification levels:

2.8.1.2.1. Five hundred micrograms per liter (500 µg/L);

2.8.1.2.2. One milligram per liter (1 mg/L) for antimony;

2.8.1.2.3. Ten times the maximum concentration value reported for that pollutant in the permit application in accordance with 18 AAC 83.310(c)-(g); or

2.8.1.2.4. The level established by the Department in accordance with 18 AAC 83.445.

3.0 Monitoring, Recording, and Reporting Requirements

3.1. Representative Sampling

A permittee must collect effluent samples from the effluent stream after the last treatment unit before discharge into the receiving waters. Samples and measurements must be representative of the volume and nature of the monitored activity or discharge.

3.2. Reporting of Monitoring Results

At intervals specified in the permit, monitoring results must be reported on the EPA discharge monitoring report (DMR) form, as revised as of March 1999, adopted by reference.

3.2.1. Monitoring results shall be summarized each month on the DMR or an approved equivalent report. The permittee must submit reports monthly postmarked by the 15th day of the following month.

3.2.2. The permittee must sign and certify all DMRs and all other reports in accordance with the requirements of Appendix A, Part 1.12, Signature Requirement and Penalties. All signed and certified legible original DMRs and all other documents and reports must be submitted

to the Department at the Compliance and Enforcement Program address in Appendix A, Part 1.1.2.

3.2.3. If, during the period when this permit is effective, the Department makes available electronic reporting, the permittee may, as an alternative to the requirements of Appendix A, Part 3.2.2, submit monthly DMRs electronically by the 15th day of the following month in accordance with guidance provided by the Department. The permittee must certify all DMRs and other reports, in accordance with the requirements of Appendix A, Part 1.12, Signature Requirement and Penalties. The permittee must retain the legible originals of these documents and make them available to the Department upon request.

3.3. Additional Monitoring by Permittee

If the permittee monitors any pollutant more frequently than the permit requires using test procedures approved in 40 CFR Part 136, adopted by reference at 18 AAC 83.010, or as specified in this permit, the results of that additional monitoring must be included in the calculation and reporting of the data submitted in the DMR or annual report required by Appendix A, Part 3.2. All limitations that require averaging of measurements must be calculated using an arithmetic means unless the Department specifies another method in the permit. Upon request by the Department, the permittee must submit the results of any other sampling and monitoring regardless of the test method used.

3.4. Twenty-four Hour Reporting

A permittee shall report any noncompliance event that may endanger health or the environment as follows:

3.4.1. A report must be made:

3.4.1.1. Orally within 24 hours after the permittee becomes aware of the circumstances, and

3.4.1.2. In writing within five days after the permittee becomes aware of the circumstances.

3.4.2. A report must include the following information:

3.4.2.1. A description of the noncompliance and its causes, including the estimated volume or weight and specific details of the noncompliance;

3.4.2.2. The period of noncompliance, including exact dates and times;

3.4.2.3. If the noncompliance has not been corrected, a statement regarding the anticipated time the noncompliance is expected to continue; and

3.4.2.4. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

3.4.3. An event that must be reported within 24 hours includes:

3.4.3.1. An unanticipated bypass that exceeds any effluent limitation in the permit (see Appendix A, Part 2.6, Bypass of Treatment Facilities).

3.4.3.2. An upset that exceeds any effluent limitation in the permit (see Appendix A, Part 2.7, Upset Conditions).

3.4.3.3. A violation of a maximum daily discharge limitation for any of the pollutants listed in the permit as requiring 24-hour reporting.

3.4.4. The Department may waive the written report on a case-by-case basis for reports under Appendix A, Part 3.4 if the oral report has been received within 24 hours of the permittee becoming aware of the noncompliance event.

3.4.5. The permittee may satisfy the written reporting submission requirements of Appendix A, Part 3.4 by submitting the written report via e-mail, if the following conditions are met:

3.4.5.1. The Noncompliance Notification Form or equivalent form is used to report the noncompliance;

3.4.5.2. The written report includes all the information required under Appendix A, Part 3.4.2;

3.4.5.3. The written report is properly certified and signed in accordance with Appendix A, Parts 1.12.3 and 1.12.5;

3.4.5.4. The written report is scanned as a PDF (portable document format) document and transmitted to the Department as an attachment to the e-mail; and

3.4.5.5. The permittee retains in the facility file the original signed and certified written report and a printed copy of the conveying email.

3.4.6. The e-mail and PDF written report will satisfy the written report submission requirements of this permit provided the e-mail is received by the Department within five days after the time the permittee becomes aware of the noncompliance event and the e-mail and written report satisfy the criteria of Part 3.4.5. The e-mail address to report noncompliance is: dec-wqreporting@alaska.gov.

3.5. Other Noncompliance Reporting

A permittee shall report all instances of noncompliance not required to be reported under Appendix A, Parts 2.4 (Compliance Schedules), 3.3 (Additional Monitoring by Permittee), and 3.4 (Twenty-four Hour Reporting) at the time the permittee submits monitoring reports under Appendix A, Part 3.2. (Reporting of Monitoring Results). A report of noncompliance under this part must contain the information listed in Appendix A, Part 3.4.2 and be sent to the Compliance and Enforcement Program address in Appendix A, Part 1.1.2.

4.0 Penalties for Violations of Permit Conditions

Alaska laws allow the State to pursue both civil and criminal actions concurrently. The following is a summary of Alaska law. Permittees should read the applicable statutes for further substantive and procedural details.

4.1. Civil Action

Under AS 46.03.760(e), a person who violates or causes or permits to be violated a regulation, a lawful order of the Department, or a permit, approval, or acceptance, or term or condition of a permit, approval or acceptance issued under the program authorized by AS 46.03.020 (12) is liable, in a civil action, to the State for a sum to be assessed by the court of not less than $500

nor more than $100,000 for the initial violation, nor more than $10,000 for each day after that on which the violation continues, and that shall reflect, when applicable:

4.1.1. Reasonable compensation in the nature of liquated damages for any adverse environmental effects caused by the violation, that shall be determined by the court according to the toxicity, degradability, and dispersal characteristics of the substance discharged, the sensitivity of the receiving environment, and the degree to which the discharge degrades existing environmental quality;

4.1.2. Reasonable costs incurred by the State in detection, investigation, and attempted correction of the violation;

4.1.3. The economic savings realized by the person in not complying with the requirements for which a violation is charged; and

4.1.4. The need for an enhanced civil penalty to deter future noncompliance.

4.2. Injunctive Relief

4.2.1. Under AS 46.03.820, the Department can order an activity presenting an imminent or present danger to public health or that would be likely to result in irreversible damage to the environment be discontinued. Upon receipt of such an order, the activity must be immediately discontinued.

4.2.2. Under AS 46.03.765, the Department can bring an action in Alaska Superior Court seeking to enjoin ongoing or threatened violations for Department-issued permits and Department statutes and regulations.

4.3. Criminal Action

Under AS 46.03.790(h), a person is guilty of a Class A misdemeanor if the person negligently:

4.3.1. Violates a regulation adopted by the Department under AS 46.03.020(12);

4.3.2. Violates a permit issued under the program authorized by AS 46.03.020(12);

4.3.3. Fails to provide information or provides false information required by a regulation adopted under AS 46.03.020(12);

4.3.4. Makes a false statement, representation, or certification in an application, notice, record, report, permit, or other document filed, maintained, or used for purposes of compliance with a permit issued under or a regulation adopted under AS 46.03.020(12); or

4.3.5. Renders inaccurate a monitoring device or method required to be maintained by a permit issued or under a regulation adopted under AS 46.03.020(12).

4.4. Other Fines

Upon conviction of a violation of a regulation adopted under AS 46.03.020(12), a defendant who is not an organization may be sentenced to pay a fine of not more than $10,000 for each separate violation (AS 46.03.790(g)). A defendant that is an organization may be sentenced to pay a fine not exceeding the greater of: (1) $200,00; (2) three times the pecuniary gain realized by the defendant as a result of the offense; or (3) three times the pecuniary damage or loss

caused by the defendant to another, or the property of another, as a result of the offense (AS 12.55.035(c)(B), (c)(2), and (c)(3)).

APPENDIX B
ABBREVIATIONS AND ACRONYMS

Appendix B – Abbreviations and Acronyms

BOD_5 – Biochemical Oxygen Demand (5-day test)

BMP – Best Management Practice

CERCLA – Comprehensive Environmental Response, Compensation and Liability Act

CGP – Construction General Permit

COD – Chemical Oxygen Demand

CWA – Clean Water Act (or the Federal Water Pollution Control Act, 33 U.S.C. §1251 et seq)

CWT – Centralized Waste Treatment

DMR – Discharge Monitoring Report

EPA – U. S. Environmental Protection Agency

ESA – Endangered Species Act

FWS – U. S. Fish and Wildlife Service

LA – Load Allocations

MDMR – MSGP Discharge Monitoring Report

MGD – Million Gallons per Day

MOS – Margin of Safety

MS4 – Municipal Separate Storm Sewer System

MSDS – Material Safety Data Sheet

MSGP – Multi-Sector General Permit

NAICS – North American Industry Classification System

NEPA – National Environmental Policy Act

NHPA – National Historic Preservation Act

NMFS – U. S. National Marine Fisheries Service

NOI – Notice of Intent

NOT – Notice of Termination

NPDES – National Pollutant Discharge Elimination System

NRC – National Response Center

NRHP – National Register of Historic Places

NSPS – New Source Performance Standard

NTU – Nephelometric Turbidity Unit

OMB – U. S. Office of Management and Budget

ORW – Outstanding Resource Water

OSM – U. S. Office of Surface Mining

POTW – Publicly Owned Treatment Works

RCRA – Resource Conservation and Recovery Act

RQ – Reportable Quantity

SARA – Superfund Amendments and Reauthorization Act

SHPO – State Historic Preservation Officer

SIC – Standard Industrial Classification

SMCRA – Surface Mining Control and Reclamation Act

SPCC – Spill Prevention, Control, and Countermeasures

SWPPP – Stormwater Pollution Prevention Plan

THPO – Tribal Historic Preservation Officer

TMDL – Total Maximum Daily Load

TSDF – Treatment, Storage, or Disposal Facility

TSS – Total Suspended Solids

USGS – United States Geological Survey

WLA – Wasteload Allocation

WQS – Water Quality Standard

APPENDIX C
DEFINITIONS

Appendix C – Definitions (for the purposes of this permit).

Action Area – all areas to be affected directly or indirectly by the storm water discharges, allowable non-storm water discharges, and storm water discharge-related activities, and not merely the immediate area involved in these discharges and activities.

Arid Climate – areas where annual rainfall averages from 0 to 10 inches.

Best Management Practices (BMPs) – schedules of activities, practices (and prohibitions of practices), structures, vegetation, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. See 40 CFR 122.2.

Cationic Treatment Chemical – For the purposes of this permit, means polymers, flocculants, or other chemicals that contain an overall positive charge. Among other things, they are used to reduce turbidity in storm water discharges by chemically bonding to the overall negative charge of suspended silts and other soil materials and causing them to bind together and settle out. Common examples of cationic treatment chemicals are chitosan and cationic PAM.

Co-Located Industrial Activities – Any industrial activities, excluding your primary industrial activity(ies), located on-site that are defined by the storm water regulations at 122.26(b)(14)(i)-(ix) and (xi). An activity at a facility is not considered co-located if the activity, when considered separately, does not meet the description of a category of industrial activity covered by the storm water regulations or identified by the SIC code list in Appendix D.

Control Measure – refers to any BMP or other method (including effluent limitations) used to prevent or reduce the discharge of pollutants to waters of the United States.

Director – a Director of the Division of Water within the Department of Environmental Conservation.

Discharge – when used without qualification, means the "discharge of a pollutant." See 40 CFR 122.2.

Discharge of a Pollutant – any addition of any “pollutant” or combination of pollutants to “waters of the United States” from any “point source,” or any addition of any pollutant or combination of pollutants to the waters of the “contiguous zone” or the ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation. This includes additions of pollutants into waters of the United States from: surface runoff which is collected or channeled by man; discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works. See 40 CFR 122.2.

Discharge-Related Activities – activities that cause, contribute to, or result in storm water and allowable non-storm water point source discharges, and measures such as the siting, construction and operation of BMPs to control, reduce, or prevent pollution in the discharges.

Drought-Stricken Area – a period of below average water content in streams, reservoirs, ground-water aquifers, lakes and soils.

EPA Approved or Established Total Maximum Daily Loads (TMDLs) – "EPA Approved TMDLs" are those that are developed by a State and approved by EPA. "EPA Established TMDLs" are those that are developed by EPA.

Existing Discharger – an operator applying for coverage under this permit for discharges authorized previously under an NPDES general or individual permit.

Facility or Activity – any NPDES "point source" (including land or appurtenances thereto) that is subject to regulation under the NPDES program. See 40 CFR 122.2.

Fall Freeze-up –For the purposes of this permit, means for planning purposes in the development of the SWPPP and initial planning of the control measure maintenance the date in the fall that air temperatures will be predominately below freezing. It is the date in the fall that has an 80% probability that a minimum temperature below a threshold of 32.5 degrees Fahrenheit will occur on or after the given date. This date can be found by looking up the "Fall 'Freeze' Probabilities" for the weather station closest to the facility on the website www.wrcc.dri.edu/summary/Climsmak.html. NOTE: This estimation of "Fall Freeze-up" is for planning purposes only. During construction and operation the permittee will need to maintain control measures based on actual conditions.

Federal Facility – any buildings, installations, structures, land, public works, equipment, aircraft, vessels, and other vehicles and property, owned by, or constructed or manufactured for the purpose of leasing to, the federal government.

Final Stabilization - For the purposes of this permit, means that:

1. All soil disturbing activities at the site have been completed and either of the two following criteria shall be met:

    a. a uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a density of 70 percent of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or

    b. equivalent non vegetative permanent stabilization measures have been employed (such as the use of riprap, gabions, porous backfill (ADOT&PF Specification 703-2.10), railroad ballast or subballast, ditch lining (ADOT&PF Specification 610-2.01 with <3% smaller than #200 sieve), geotextiles, or fill material with low erodibility as determined by an engineer familiar with the site and documented in the SWPPP).

2. When background native vegetation will cover less than 100 percent of the ground (e.g., arid areas, beaches), the 70 percent coverage criteria is adjusted as follows: if the native vegetation covers 50 percent of the ground, then 70 percent of 50 percent (0.70 X 0.50 = 0.35) would

require 35 percent total cover for final stabilization. On a beach with no natural vegetation, no stabilization is required.

3. In arid and semi-arid areas only, all soil disturbing activities at the site have been completed and both of the following criteria have been met:

    a. Temporary erosion control measures (e.g., degradable rolled erosion control product) are selected, designed, and installed along with an appropriate seed base to provide erosion control for at least three years without active maintenance by the permittee;

    b. The temporary erosion control measures are selected, designed, and installed to achieve 70 percent vegetative coverage within three years.

Impaired Water (or "Water Quality Impaired Water" or "Water Quality Limited Segment") – A water is impaired for purposes of this permit if it has been identified by a State or EPA pursuant to Section 303(d) of the Clean Water Act as not meeting applicable State water quality standards (these waters are called "water quality limited segments" under 40 CFR 30.2(j)). Impaired waters include both waters with approved or established TMDLs, and those for which a TMDL has not yet been approved or established.

Indian Country – (a) all land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and including rights-of-way running through the reservation; (b) all dependent Indian communities within the borders of the United States, whether within the original or subsequently acquired territory thereof, and whether within or without the limits of a State, and (c) all Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same. This definition includes all land held in trust for an Indian tribe. (18 U.S.C. 1151)

Industrial Activity – the 10 categories of industrial activities included in the definition of "storm water discharges associated with industrial activity" as defined in 40 CFR 122.26(b)(14)(i)-(ix) and (xi).

Industrial Storm Water – storm water runoff from industrial activity.

Measurable Storm Event - a storm event that results in an actual discharge from the facility that follows the preceding measurable storm event by at least 72 hours (3 days). No specific storm magnitude (i.e., 0.1 inches or greater) is specified, only an event which results in a discharge. For snowmelt, an event which some point in time produces a measurable discharge from the facility.

Minimize – To reduce and/or eliminate to the extent achievable using control measures (including best management practices) that are technologically available and economically practicable and achievable in light of best industry practice.

Municipal Separate Storm Sewer System (MS4) – a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

a. Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States;

b. Designed or used for collecting or conveying storm water;

c. Which is not a combined sewer; and

d. Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2. See 40 CFR 122.26(b)(4) and (b)(7).

New Discharger – a facility from which there is a discharge, that did not commence the discharge at a particular site prior to August 13, 1979, which is not a new source, and which has never received a finally effective NPDES permit for discharges at that site. See 40 CFR 122.2.

New Source – any building, structure, facility, or installation from which there is or may be a "discharge of pollutants," the construction of which commenced:

- after promulgation of standards of performance under section 306 of the CWA which are applicable to such source, or

- after proposal of standards of performance in accordance with section 306 of the CWA which are applicable to such source, but only if the standards are promulgated in accordance with section 306 within 120 days of their proposal. See 40 CFR 122.2.

New Source Performance Standards (NSPS) – technology-based standards for facilities that qualify as new sources under 40 CFR 122.2 and 40 CFR 122.29.

No exposure – all industrial materials or activities are protected by a storm-resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff. See 40 CFR 122.26(g).

Operator – any entity with a storm water discharge associated with industrial activity that meets either of the following two criteria:

a. The entity has operational control over industrial activities, including the ability to modify those activities;

b. The entity has day-to-day operational control of activities at a facility necessary to ensure compliance with the permit (e.g., the entity is authorized to direct workers at a facility to carry out activities required by the permit); or

c. The entity is either the owner or leasee of a parcel of land which is being used as a Non-Traditional Non-Metallic Mineral Mining facility.

Permittee – Is a person who is authorized to discharge pollutants to waters of the United States in accordance with the conditions and requirements of this permit.

Person – an individual, association, partnership, corporation, municipality, State or Federal agency, or an agent or employee thereof. See 40 CFR 122.2.

Point Source – any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff. See 40 CFR 122.2.

Pollutant – dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal and agricultural waste discharged into water. See 40 CFR 122.2.

Pollutant of Concern – A pollutant which causes or contributes to a violation of a water quality standard, including a pollutant which is identified as causing an impairment in a state's 303(d) list.

Polymer – For the purposes of this permit, means coagulants and flocculants used to enhance sediment removal capabilities of check dams, sediment traps, or basins. Common construction site polymers include polyacrylamide (PAM), chitosan, alum, polyaluminum, chloride, and gypsum.

Practicable – For the purposes of this permit, means capable of being done after taking into consideration costs, existing technology, standards of construction practice, impacts to water quality, site conditions, and logistics in light of the overall project purpose.

Primary Airport – are publicly owned airports that receive scheduled passenger service and have more than 10,000 passengers boarding each year.

Primary Industrial Activity – includes any activities performed on-site which are (1) identified by the facility's primary SIC code; or (2) included in the narrative descriptions of 122.26(b)(14)(i), (iv), (v), or (vii), and (ix). [For co-located activities covered by multiple SIC codes, it is recommended that the primary industrial determination be based on the value of receipts or revenues or, if such information is not available for a particular facility, the number of employees or production rate for each process may be compared. The operation that generates the most revenue or employs the most personnel is the operation in which the facility is primarily engaged. In situations where the vast majority of on-site activity falls within one SIC code, that activity may be the primary industrial activity.] Narrative descriptions in 40 CFR 122.26(b)(14) identified above include: (i) activities subject to storm water effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards; (iv) hazardous waste treatment storage, or disposal facilities including those that are operating under interim status or a permit under subtitle C of the Resource Conservation and Recovery Act (RCRA); (v) landfills, land application sites and open dumps that receive or have received industrial wastes; (vii)

steam electric power generating facilities; and (ix) sewage treatment works with a design flow of 1.0 mgd or more.

Qualified Personnel – Qualified personnel are those who possess the knowledge and skills to assess conditions and activities that could impact storm water quality at your facility, and who can also evaluate the effectiveness of control measures.

Reportable Quantity Release – a release of a hazardous substance at or above the established legal threshold that requires emergency notification. Refer to 40 CFR Parts 110, 117, and 302 for complete definitions and reportable quantities for which notification is required.

Runoff Coefficient – the fraction of total rainfall that will appear at the conveyance as runoff. See 40 CFR 122.26(b)(11).

Saline Water – salinity equal or exceed 0.5 parts per thousand (by mass).

Semi-Arid Climate – areas where annual rainfall averages from 10 to 20 inches.

Significant Materials – includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; any chemical the facility is required to report pursuant to section 313 of Title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with storm water discharges. See 40 CFR 122.26(b)(12).

Special Aquatic Sites – sites identified in 40 CFR 230 Subpart E. These are geographic areas, large or small, possessing special ecological characteristics of productivity, habitat, wildlife protection, or other important and easily disrupted ecological values. These areas are generally recognized as significantly influencing or positively contributing to the general overall environmental health or vitality of the entire ecosystem of a region.

Spring Thaw –For the purposes of this permit, means for planning purposes in the development of the SWPPP and initial planning of the control measure maintenance the date in the spring that air temperatures will be predominately above freezing. It is the date in the spring that has a 20% probability that a minimum temperature below a threshold of 32.5 degrees Fahrenheit will occur on or after the given date. This date can be found by looking up the "Spring 'Freeze' Probabilities" for the weather station closest to the facility on the website www.wrcc.dri.edu/summary/Climsmak.html NOTE: This estimation of "Spring Thaw" is for planning purposes only. During construction and operation the permittee will need to maintain control measures based on actual conditions.

Storm Water – storm water runoff, snow melt runoff, and surface runoff and drainage. See 40 CFR 122.26(b)(13).

Storm Water Discharges Associated with Construction Activity – a discharge of pollutants in storm water runoff from areas where soil disturbing activities (e.g., clearing, grading, or excavating),

construction materials, or equipment storage or maintenance (e.g., fill piles, borrow areas, concrete truck washout, fueling), or other industrial storm water directly related to the construction process (e.g., concrete or asphalt batch plants) are located. See 40 CFR 122.26(b)(14)(x) and 40 CFR 122.26(b)(15).

Storm Water Discharges Associated with Industrial Activity – the discharge from any conveyance that is used for collecting and conveying storm water and that is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the NPDES program under Part 122. For the categories of industries identified in this section, the term includes, but is not limited to, storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined at part 401 of this chapter); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and final products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water. For the purposes of this paragraph, material handling activities include storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product, by-product or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with storm water drained from the above described areas. Industrial facilities include those that are federally, State, or municipally owned or operated that meet the description of the facilities listed in 40 CFR 122.26(b)(14). The term also includes those facilities designated under the provisions of 40 CFR 122.26(a)(1)(v). See 40 CFR 122.26(b)(14).

Tackifier and Soil Stabilizer (binder) – For the purposes of this permit, means hydraulically applied chemicals derived from natural and synthetic sources used to promote adhesion among soil particles or mulch materials. In general soil stabilizers (also known as soil binders) are used to increase soil adhesion, which improves soil stabilization by reducing water and wind driven erosion. Tackifiers are used as “glue” to bind and immobilize straw, cellulose products, pine needles, or other mulch that has been applied to a seeded area. Common examples include polyacrylamide (PAM), guar, chloride compounds, psyllium, resins, enzymes, surfactants, and various polymers, starches, and other compounds.

Temporary Stabilization – measures taken to protect soils from erosion by rainfall, snow melt, runoff, or wind, with surface roughening or a surface cover, including, but not limited to, establishment of ground vegetation, application of mulch, surface tackifers, rolled erosion control products, gravel or paving.

Total Maximum Daily Loads (TMDLs) – A TMDL is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. A TMDL includes wasteload allocations (WLAs) for point source discharges; load allocations (LAs) for nonpoint sources and/or natural background, and must include a

margin of safety (MOS) and account for seasonal variations. (See Section 303(d) of the Clean Water Act and 40 CFR 130.2 and 130.7).

Treatment Chemicals – For the purposes of this permit, means polymers, flocculants, or other chemicals used to reduce turbidity in storm water. Tackifier and soil stabilizers (binders) are not considered treatment chemicals.

Uncontaminated – Free from the presence of pollutants attributable to industrial activity.

Water Quality Impaired – See 'Impaired Water'.

Water Quality Standards – For the purposes of this permit, means the Alaska Water Quality Standards (18 AAC 70) as approved by U.S. EPA. As defined in 40 CFR §131.3 water quality standards are provisions of State or Federal law which consist of a designated use or uses for the waters of the United States and water quality criteria for such waters based upon such uses. Water quality standards are to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act.

Winter Shutdown – The cessation of soil disturbing or soil stabilizing construction activity for the winter. Typically this period is from October/November to April/May and is approximately from fall freeze-up to spring thaw.

"You" and "Your" – as used in this permit are intended to refer to the permittee, the operator, or the discharger as the context indicates and that party's facility or responsibilities. The use of "you" and "your" refers to a particular facility and not to all facilities operated by a particular entity. For example, "you must submit" means the permittee must submit something for that particular facility. Likewise, "all your discharges" would refer only to discharges at that one facility.

APPENDIX D
ACTIVITIES COVERED

Appendix D – Facilities and Activities Covered

Your permit eligibility is limited to discharges from facilities in the "sectors" of industrial activity summarized in Table D-1. These sector descriptions are based on Standard Industrial Classification (SIC) Codes and Industrial Activity Codes. References to "sectors" in this permit (e.g., sector-specific monitoring requirements) refer to these groupings.

Table D-1. Sectors of Industrial Activity Covered by This Permit

Subsector (May be subject to more than one sector/subsector)	SIC Code or Activity Code[1]	Activity Represented
SECTOR A: TIMBER PRODUCTS		
A1	2421	General Sawmills and Planing Mills
A2	2491	Wood Preserving
A3	2411	Log Storage and Handling
A4	2426	Hardwood Dimension and Flooring Mills
	2429	Special Product Sawmills, Not Elsewhere Classified
	2431-2439 (except 2434)	Millwork, Veneer, Plywood, and Structural Wood (see Sector W)
	2448	Wood Pallets and Skids
	2449	Wood Containers, Not Elsewhere Classified
	2451, 2452	Wood Buildings and Mobile Homes
	2493	Reconstituted Wood Products
	2499	Wood Products, Not Elsewhere Classified
A5	2441	Nailed and Lock Corner Wood Boxes and Shook
SECTOR B: PAPER AND ALLIED PRODUCTS		
B1	2631	Paperboard Mills
B2	2611	Pulp Mills
	2621	Paper Mills
	2652-2657	Paperboard Containers and Boxes
	2671-2679	Converted Paper and Paperboard Products, Except Containers and Boxes
SECTOR C: CHEMICALS AND ALLIED PRODUCTS		
C1	2873-2879	Agricultural Chemicals
C2	2812-2819	Industrial Inorganic Chemicals
C3	2841-2844	Soaps, Detergents, and Cleaning Preparations; Perfumes, Cosmetics, and Other Toilet Preparations
C4	2821-2824	Plastics Materials and Synthetic Resins, Synthetic Rubber, Cellulosic and Other Manmade Fibers Except Glass
C5	2833-2836	Medicinal Chemicals and Botanical Products; Pharmaceutical Preparations; in vitro and in vivo Diagnostic Substances; and Biological Products, Except Diagnostic Substances
	2851	Paints, Varnishes, Lacquers, Enamels, and Allied Products
	2861-2869	Industrial Organic Chemicals
	2891-2899	Miscellaneous Chemical Products
C5	3952 (limited to list of inks and paints)	Inks and Paints, Including China Painting Enamels, India Ink, Drawing Ink, Platinum Paints for Burnt Wood or Leather Work, Paints for China Painting, Artist's Paints and Artist's Watercolors
	2911	Petroleum Refining

Table D-1. Sectors of Industrial Activity Covered by This Permit

Subsector (May be subject to more than one sector/subsector)	SIC Code or Activity Code[1]	Activity Represented
SECTOR D: ASPHALT PAVING AND ROOFING MATERIALS AND LUBRICANTS		
D1	2951, 2952	Asphalt Paving and Roofing Materials
D2	2992, 2999	Miscellaneous Products of Petroleum and Coal
SECTOR E: GLASS, CLAY, CEMENT, CONCRETE, AND GYPSUM PRODUCTS		
E1	3251-3259	Structural Clay Products
	3261-3269	Pottery and Related Products
E2	3271-3275	Concrete, Gypsum, and Plaster Products
E3	3211	Flat Glass
	3221, 3229	Glass and Glassware, Pressed or Blown
	3231	Glass Products Made of Purchased Glass
	3241	Hydraulic Cement
	3281	Cut Stone and Stone Products
	3291-3299	Abrasive, Asbestos, and Miscellaneous Nonmetallic Mineral Products
SECTOR F: PRIMARY METALS		
F1	3312-3317	Steel Works, Blast Furnaces, and Rolling and Finishing Mills
F2	3321-3325	Iron and Steel Foundries
F3	3351-3357	Rolling, Drawing, and Extruding of Nonferrous Metals
F4	3363-3369	Nonferrous Foundries (Castings)
F5	3331-3339	Primary Smelting and Refining of Nonferrous Metals
	3341	Secondary Smelting and Refining of Nonferrous Metals
	3398, 3399	Miscellaneous Primary Metal Products
SECTOR G: METAL MINING (ORE MINING AND DRESSING)		
G1	1021	Copper Ore and Mining Dressing Facilities
G2	1011	Iron Ores
	1021	Copper Ores
	1031	Lead and Zinc Ores
	1041, 1044	Gold and Silver Ores
	1061	Ferroalloy Ores, Except Vanadium
	1081	Metal Mining Services
	1094, 1099	Miscellaneous Metal Ores
SECTOR H: COAL MINES AND COAL MINING-RELATED FACILITIES		
H1	1221-1241	Coal Mines and Coal Mining-Related Facilities
SECTOR I: OIL AND GAS EXTRACTION AND REFINING		
I1	1311	Crude Petroleum and Natural Gas
	1321	Natural Gas Liquids
	1381-1389	Oil and Gas Field Services
SECTOR J: MINERAL MINING AND DRESSING		
J1	1442	Construction Sand and Gravel
	1446	Industrial Sand
J2	1411	Dimension Stone
	1422-1429	Crushed and Broken Stone, Including Rip Rap
	1481	Nonmetallic Minerals Services, Except Fuels
	1499	Miscellaneous Nonmetallic Minerals, Except Fuels
J3	1455, 1459	Clay, Ceramic, and Refractory Materials
	1474-1479	Chemical and Fertilizer Mineral Mining

Table D-1. Sectors of Industrial Activity Covered by This Permit

Subsector (May be subject to more than one sector/subsector)	SIC Code or Activity Code[1]	Activity Represented
SECTOR K: HAZARDOUS WASTE TREATMENT, STORAGE, OR DISPOSAL FACILITIES		
K1	HZ	Hazardous Waste Treatment, Storage, or Disposal Facilities, including those that are operating under interim status or a permit under subtitle C of RCRA
SECTOR L: LANDFILLS, LAND APPLICATION SITES, AND OPEN DUMPS		
L1	LF	All Landfill, Land Application Sites and Open Dumps
L2	LF	All Landfill, Land Application Sites and Open Dumps, except Municipal Solid Waste Landfill (MSWLF) Areas Closed in Accordance with 40 CFR 258.60
SECTOR M: AUTOMOBILE SALVAGE YARDS		
M1	5015	Automobile Salvage Yards
SECTOR N: SCRAP RECYCLING FACILITIES		
N1	5093	Scrap Recycling and Waste Recycling Facilities except Source-Separated Recycling
N2	5093	Source-separated Recycling Facility
SECTOR O: STEAM ELECTRIC GENERATING FACILITIES		
O1	SE	Steam Electric Generating Facilities, including coal handling sites
SECTOR P: LAND TRANSPORTATION AND WAREHOUSING		
P1	4011, 4013	Railroad Transportation
	4111-4173	Local and Highway Passenger Transportation
	4212-4231	Motor Freight Transportation and Warehousing
	4311	United States Postal Service
	5171	Petroleum Bulk Stations and Terminals
SECTOR Q: WATER TRANSPORTATION		
Q1	4412-4499	Water Transportation Facilities
SECTOR R: SHIP AND BOAT BUILDING AND REPAIRING YARDS		
R1	3731, 3732	Ship and Boat Building or Repairing Yards
SECTOR S: AIR TRANSPORTATION FACILITIES		
S1	4512-4581	Air Transportation Facilities
SECTOR T: TREATMENT WORKS		
T1	TW	Treatment Works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that are located within the confines of the facility, with a design flow of 1.0 mgd or more, or required to have an approved pretreatment program under 40 CFR Part 403. Not included are farm lands, domestic gardens or lands used for sludge management where sludge is beneficially reused and which are not physically located in the confines of the facility, or areas that are in compliance with section 405 of the CWA
SECTOR U: FOOD AND KINDRED PRODUCTS		
U1	2041-2048	Grain Mill Products
U2	2074-2079	Fats and Oils Products
U3	2011-2015	Meat Products
	2021-2026	Dairy Products

Table D-1. Sectors of Industrial Activity Covered by This Permit

Subsector (May be subject to more than one sector/subsector)	SIC Code or Activity Code[1]	Activity Represented
U3	2032-2038	Canned, Frozen, and Preserved Fruits, Vegetables, and Food Specialties
	2051-2053	Bakery Products
	2061-2068	Sugar and Confectionery Products
	2082-2087	Beverages
	2091-2099	Miscellaneous Food Preparations and Kindred Products
	2111-2141	Tobacco Products
SECTOR V: TEXTILE MILLS, APPAREL, AND OTHER FABRIC PRODUCT MANUFACTURING; LEATHER AND LEATHER PRODUCTS		
V1	2211-2299	Textile Mill Products
	2311-2399	Apparel and Other Finished Products Made from Fabrics and Similar Materials
	3131-3199	Leather and Leather Products (note: see Sector Z1 for Leather Tanning and Finishing)
SECTOR W: FURNITURE AND FIXTURES		
W1	2434	Wood Kitchen Cabinets
	2511-2599	Furniture and Fixtures
SECTOR X: PRINTING AND PUBLISHING		
X1	2711-2796	Printing, Publishing, and Allied Industries
SECTOR Y: RUBBER, MISCELLANEOUS PLASTIC PRODUCTS, AND MISCELLANEOUS MANUFACTURING INDUSTRIES		
Y1	3011	Tires and Inner Tubes
	3021	Rubber and Plastics Footwear
	3052, 3053	Gaskets, Packing and Sealing Devices, and Rubber and Plastic Hoses and Belting
	3061, 3069	Fabricated Rubber Products, Not Elsewhere Classified
Y2	3081-3089	Miscellaneous Plastics Products
	3931	Musical Instruments
	3942-3949	Dolls, Toys, Games, and Sporting and Athletic Goods
	3951-3955 (except 3952 – see Sector C)	Pens, Pencils, and Other Artists' Materials
	3961, 3965	Costume Jewelry, Costume Novelties, Buttons, and Miscellaneous Notions, Except Precious Metal
	3991-3999	Miscellaneous Manufacturing Industries
SECTOR Z: LEATHER TANNING AND FINISHING		
Z1	3111	Leather Tanning and Finishing
SECTOR AA: FABRICATED METAL PRODUCTS		
AA1	3411-3499 (except 3479)	Fabricated Metal Products, Except Machinery and Transportation Equipment, and Coating, Engraving, and Allied Services.
	3911-3915	Jewelry, Silverware, and Plated Ware
AA2	3479	Fabricated Metal Coating and Engraving
SECTOR AB: TRANSPORTATION EQUIPMENT, INDUSTRIAL OR COMMERCIAL MACHINERY		
AB1	3511-3599 (except 3571-3579)	Industrial and Commercial Machinery, Except Computer and Office Equipment (see Sector AC)

Table D-1. Sectors of Industrial Activity Covered by This Permit

Subsector (May be subject to more than one sector/subsector)	SIC Code or Activity Code[1]	Activity Represented
AB1	3711-3799 (except 3731, 3732)	Transportation Equipment Except Ship and Boat Building and Repairing (see Sector R)
SECTOR AC: ELECTRONIC, ELECTRICAL, PHOTOGRAPHIC, AND OPTICAL GOODS		
AC1	3571-3579	Computer and Office Equipment
	3812-3873	Measuring, Analyzing, and Controlling Instruments; Photographic and Optical Goods, Watches, and Clocks
	3612-3699	Electronic and Electrical Equipment and Components, Except Computer Equipment
SECTOR AD: NON-CLASSIFIED FACILITIES		
AD1	Other stormwater discharges designated by the Director as needing a permit (see 40 CFR 122.26(a)(9)(i)(C) & (D)) or any facility discharging stormwater associated with industrial activity not described by any of Sectors A-AC. NOTE: Facilities may not elect to be covered under Sector AD. Only the Director may assign a facility to Sector AD.	

[1] A complete list of SIC Codes (and conversions from the newer North American Industry Classification System" (NAICS)) can be obtained from the Internet at www.census.gov/epcd/www/naics.html or in paper form from various locations in the document titled *Handbook of Standard Industrial Classifications*, Office of Management and Budget, 1987.

Appendix E
Calculating Hardness in Receiving Waters for Hardness Dependent Metals

Appendix E – Calculating Hardness in Receiving Waters for Hardness Dependent Metals

E.1 Overview

DEC adjusted the benchmarks for six hardness-dependent metals (i.e., cadmium, copper, lead, nickel, silver, and zinc) to further ensure compliance with water quality standards and provide additional protection for endangered species and their critical habitat. For any sectors required to conduct benchmark samples for a hardness-dependent metal, DEC includes 'hardness ranges' from which benchmark values are determined. To determine which hardness range to use, you must collect data on the hardness of your receiving water(s). Once the site-specific hardness data have been collected, the corresponding benchmark value for each metal is determined by comparing where the hardness data fall within 25 mg/L ranges, as shown in Table E.1.

Table E.1: Hardness Ranges to Be Used to Determine Benchmark Values for Cadmium, Copper, Lead, Nickel, Silver, and Zinc.

	Benchmark Values (mg/L, total)					
Hardness (mg/L)	**Cadmium**	**Copper**	**Lead**	**Nickel**	**Silver**	**Zinc**
0 - 25	0.0005	0.0038	0.014	0.15	0.0007	0.04
25 - 50	0.0008	0.0056	0.023	0.20	0.0007	0.05
50 - 75	0.0013	0.0090	0.045	0.32	0.0017	0.08
75 - 100	0.0018	0.0123	0.069	0.42	0.0030	0.11
100 - 125	0.0023	0.0156	0.095	0.52	0.0046	0.13
125 - 150	0.0029	0.0189	0.122	0.61	0.0065	0.16
150 - 175	0.0034	0.0221	0.151	0.71	0.0087	0.18
175 - 200	0.0039	0.0253	0.182	0.80	0.0112	0.20
200 - 225	0.0045	0.0285	0.213	0.89	0.0138	0.23
225 - 250	0.0050	0.0316	0.246	0.98	0.0168	0.25
250+	0.0053	0.0332	0.262	1.02	0.0183	0.26

E.2 How to Determine Hardness for Hardness-Dependent Parameters.

You may select one of three methods to determine hardness, including; individual grab sampling, grab sampling by a group of operators which discharge to the same receiving water, or using third-party data. Regardless of the method used, you are responsible for documenting the procedures used for determining hardness values. Once the hardness value is established, you are required to include this information in your first benchmark report submitted to DEC so that the Department can make appropriate comparisons between your benchmark monitoring results and the corresponding benchmark. You must retain all report and monitoring data in accordance with Part 9.5 of the permit. The three method options for determining hardness are detailed in the following sections.

(1) Permittee Samples for Receiving Stream Hardness

This method involves collecting samples in the receiving water and submitting these to a laboratory for analysis. If you elect to sample your receiving water(s) and submit samples for analysis, hardness must be determined from the closest intermittent or perennial stream downstream of your point of discharge.

The sample can be collected during either dry or wet weather. Collection of the sample during wet weather is more representative of conditions during stormwater discharges; however, collection of in-stream samples during wet weather events may be impracticable or present safety issues.

Hardness must be sampled and analyzed using approved methods as described in 40 CFR Part 136 (Guidelines Establishing Test Procedures for the Analysis of Pollutants).

(2) Group Monitoring for Receiving Stream Hardness

You can be part of a group of permittees discharging to the same receiving waters and collect samples that are representative of the hardness values for all members of the group. In this scenario, hardness of the receiving water must be determined using 40 CFR Part 136 procedures and the results shared by group members. To use the same results, hardness measurements must be taken on a stream reach within a reasonable distance of the discharge points of each of the group members.

(3) Collection of Third-Party Hardness Data

You can submit receiving stream hardness data collected by a third party provided the results are collected consistent with the approved 40 CFR Part 136 methods. These data may come from a local water utility, previously conducted stream reports, TMDLs, peer reviewed literature, other government publications, or data previously collected by the permittee. Data should be less than 10 years old.

Water quality data for many of the nation's surface waters are available on-line or by contacting EPA or a state environmental agency. EPA's data system STORET, short for STOrage and RETrieval, is a repository for receiving water quality, biological, and physical data and is used by state environmental agencies, EPA and other federal agencies, universities, private citizens, and many others. Similarly, state environmental agencies and the U.S. Geological Service (USGS) also have water quality data available that, in some instances, can be accessed online. "Legacy STORET" codes for hardness include: 259 hardness, carbonate; 260 hardness, noncarbonated; and 261 calcium + magnesium, while more recent, "Modern STORET" data codes include: 00900 hardness, 00901 carbonate hardness, and 00902 noncarbonate hardness; or the discrete measurements of calcium (00915) and magnesium (00925) can be used to calculate hardness. Hardness data historically has been reported as "carbonate," "noncarbonate," or "Ca + Mg." If these are unavailable, then individual results for calcium (Ca) and magnesium (Mg) may be used to calculate hardness using the following equation:

$$\frac{mg}{L}CAO_3 = 2.497\left(Ca\frac{mg}{L}\right) + 4.118\left(Mg\ \frac{mg}{L}\right)$$

When interpreting the data for carbonate and non-carbonate hardness, note that total hardness is equivalent to the sum of carbonate and noncarbonate hardness if both forms are reported. If only carbonate hardness is reported, it is more than likely that noncarbonate hardness is absent and the total hardness is equivalent to the available carbonate hardness.

Appendix F – MSGP Forms

Notice of Intent (NOI) Form

To obtain coverage under this permit, you must submit a Notice of Intent (NOI). You must submit an NOI using either:

(1) DEC's Electronic Notice of Intent (eNOI) system, available at http://dec.alaska.gov/water/wastewater/stormwater/apdesenoi/, or

(2) file a paper copy of the NOI.

Notice of Termination (NOT) Form

To terminate coverage under this permit, you must submit a Notice of Termination (NOT). You must either

(1) terminate coverage using DEC's online eNOI system, available at http://dec.alaska.gov/water/wastewater/stormwater/apdesenoi/ or

(2) file a paper copy of the NOT.

The following forms are available at:

http://dec.alaska.gov/water/wastewater/stormwater/forms

- Notice of Intent (NOI) Form
- Notice of Termination (NOT) Form
- Annual Report Form
- Corrective Action Form
- NOI Modification Form
- No Exposure Certification Form
- Noncompliance Notification Form
- MSGP Industrial Discharge Monitoring Report (DMR)

Notice of Intent (NOI) for Storm Water Discharges Associated with Industrial Activity under the APDES Multi-Sector General Permit (MSGP)

Facility Information

Facility Name:

Have storm water discharges from your site been covered previously under an APDES Permit? ☐ Yes ☐ No

If Yes, provide the permit authorization number: _____

Street Location

Street:	Borough or similar government subdivision		
City:		State: Alaska	Zip:
Latitude:	Longitude:	Determined By: ☐ GPS ☐ Internet Map Service ☐ Other:	

Estimated area of industrial activity at your site exposed to storm water: _____ (acres)

Briefly describe the nature of the industrial activities at the facility:

Identify the 4-digit Standard Industrial Classification (SIC) code or 2-letter Activity Code that best represents the products produced or services rendered for which your facility is primarily engaged, as defined in the MSGP.

Primary SIC Code: _____ or Primary Activity Code: _____

Is your site presently inactive or unstaffed?* ☐ Yes ☐ No

** Note that if your facility becomes inactive and unstaffed during the permit term, you must submit an NOI modification to reflect the change.*

If Yes, is your site expected to be inactive and unstaffed for the entire permit term? ☐ Yes ☐ No

If No, indicate the length of time that you expect your facility to be inactive and unstaffed. _____

Federal Effluent Limitation Guidelines and Sector-Specific Requirements

Are you requesting permit coverage for storm water discharges subject to effluent limitation guidelines? ☐ Yes ☐ No

If yes, which effluent limitation guidelines apply to your storm water discharge?

40 CFR Part/Subpart	Eligible Discharges	Affected MSGP Sector	Check if applicable
Part 411, Subpart C	Runoff from material storage piles at cement manufacturing facilities.	E	☐
Part 418, Subpart A	Runoff from phosphate fertilizer manufacturing facilities that comes into contact with any raw materials, finished products, by-products, or waste products (SIC 2874).	C	☐
Part 423	Coal pile runoff at steam electric generating facilities.	O	☐
Part 429, Subpart I	Discharges resulting from spray down or intentional wetting of logs at wet deck storage areas.	A	☐
Part 436, Subpart B, C, or D	Mine dewatering discharges at crushed stone mines, construction sand and gravel mines, or industrial sand mines.	J	☐
Part 443, Subpart A	Runoff from asphalt emulsion facilities.	D	☐
Part 445, Subparts A & B	Runoff from hazardous waste and non-hazardous waste landfills.	K, L	☐
Part 449, Subpart A	Runoff from Air Transportation	S	☐

If you are a Sector S (Air Transportation facility, do you anticipate using more than 100,000 gallons of glycol-based deicing/anti-icing chemicals and/or 100 tons or more of urea on an average annual basis? ☐ Yes ☐ No

Identify the applicable sector(s) and subsector(s) of industrial activity, including co-located industrial activity, for which you are requesting coverage:

Sector	Subsector	Sector	Subsector	Sector	Subsector	Sector	Subsector	Sector	Subsector	Sector	Subsector

For Agency Use
Permit #: ____________

Discharge Information

Does your facility discharge into a Municipal Separate Storm Sewer System (MS4)? ☐ Yes ☐ No
If Yes, provide the name of the MS4 Operator: ____________________________________

If you are subject to benchmark monitoring requirements for a hardness-dependent metal:
- What is the hardness of your receiving water(s) (See Appendix E)? ______________
- Does your facility discharge into any saltwater receiving waters? ☐ Yes ☐ No

Outfalls: *(Attach a separate list if necessary)*

List all of the storm water outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002). Also provide the latitude and longitude in decimal degrees for each outfall.		**For each outfall, provide the following receiving water information:** Provide the name of the first water of the U.S. that receives storm water directly from the outfall and/or from the MS4 that the outfall discharges to:	If the receiving water is impaired (on the CWA 303(d) list), list the pollutants that are causing the impairment:	Are the pollutant(s) causing the impairment present in your discharge? Yes	No	If a TMDL has been completed for this receiving waterbody, provide the following information:
Outfall ID	001A			☐	☐	TMDL ID#:
Latitude						TMDL Name:
Longitude						Pollutant(s) for which there is a TMDL:
If substantially identical to other outfall, list identical outfall ID: ____________						
Outfall ID				☐	☐	TMDL ID#:
Latitude						TMDL Name:
Longitude						Pollutant(s) for which there is a TMDL:
If substantially identical to other outfall, list identical outfall ID: ____________						
Outfall ID				☐	☐	TMDL ID#:
Latitude						TMDL Name:
Longitude						Pollutant(s) for which there is a TMDL:
If substantially identical to other outfall, list identical outfall ID: ____________						
Outfall ID				☐	☐	TMDL ID#:
Latitude						TMDL Name:
Longitude						Pollutant(s) for which there is a TMDL:
If substantially identical to other outfall, list identical outfall ID: ____________						
Outfall ID				☐	☐	TMDL ID#:
Latitude						TMDL Name:
Longitude						Pollutant(s) for which there is a TMDL:
If substantially identical to other outfall, list identical outfall ID: ____________						

Operator Information

Contact Name:	Organization:	Title:
Phone:	Fax (optional):	Email:

Mailing Address ☐ Check if same as Operator Information	Street (PO Box)		
	City	State	Zip

Storm Water Pollution Prevention Plan (SWPPP) Contact / Location Information

Contact Name:	Organization:	Title:
Phone:	Fax (optional):	Email:

Mailing Address ☐ Check if same as Operator Information	Street (PO Box)		
	City	State	Zip

Universal Resource Locator or URL:

Billing Contact / Location Information

Contact Name:	Organization:	Title:
Phone:	Fax (optional):	Email:

Mailing Address ☐ Check if same as Operator Information	Street (PO Box)		
	City	State	Zip

NOI Preparer Contact / Location Information *(Complete if NOI was prepared by someone other than the Certifier)*

Contact Name:	Organization:	Title:
Phone:	Fax (optional):	Email:

Mailing Address ☐ Check if same as Operator Information	Street (PO Box)		
	City	State	Zip

Document Attachments

Documents attached with this application:

☐ Storm Water Pollution Prevention Plan (SWPPP)

☐ Other:

Certification Information

An Alaska Pollutant Discharge Elimination System (APDES) permit application or report must be signed by an individual with the appropriate authority per 18 AAC 83.385. For additional information, please refer to 18 AAC 83.385 at the following link: http://www.legis.state.ak.us/basis/aac.asp#18.83.385.

Corporate Executive Officer 18 AAC 83.385 (a)(1)(A)	For a corporation, a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation.
Corporate Operations Manager 18 AAC 83.385 (a)(1)(B)	For a corporation, the manager of one or more manufacturing, production, or operating facilities, if (i) the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental statutes and regulations; (ii) the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and (iii) authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
Sole Proprietor or General Partner 18 AAC 83.385 (a)(2)	For a partnership or sole proprietorship, the general partner or the proprietor respectively.
Public Agency, Chief Executive Officer 18 AAC 83.385 (a)(3)(A)	For a municipality, state, or other public agency, the chief executive officer of the agency.
Public Agency, Senior Executive Officer 18 AAC 83.385 (a)(3)(B)	For a municipality, state, or other public agency, a senior executive officer having responsibility for the overall operations of a principal geographic unit or division of the agency.

Any report required by an APDES permit, and a submittal with any other information requested by the department, must be signed by a person described in above, or by a duly authorized representative of that person.
**For Delegated Authority: the delegation must be made in writing and submitted to the DEC.*
Your signature will not be approved until DEC receives the written delegation.
An Example of written authorization delegating authority can be found on the Division of Water website:
http://dec.alaska.gov/media/13316/delegation-of-signatory-authority.pdf

Operations Manager *(Delegated Authority)** 18 AAC 83.385 (b)(2)(A)	For a duly authorized representative, an individual or a position having responsibility for the overall operation of the regulated facility or activity, including the position of plant manager, operator of a well or a well field, superintendent or position of equivalent responsibility.
Environmental Manager *(Delegated Authority)** 18 AAC 83.385 (b)(2)(B)	For a duly authorized representative, an individual or position having overall responsibility for environmental matters for the company.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Organization:	Name:	Title:
Phone:	Fax (optional):	Email:

Mailing Address: ☐ Check if same as Operator Information	Street (PO Box):		
	City:	State:	Zip:

Signature/Responsible Official

Date

Instructions for Completing the Notice of Intent (NOI) for Storm Water Discharges Associated with Industrial Activity under the Multi-Sector General Permit (MSGP)

Who must file a NOI?

Under section 402(p) of the Clean Water Act (CWA) and regulations at 40 CFR Part 122.26, adopted by reference at 18 AAC 83.010 (3) storm water discharges associated with industrial activity are prohibited to waters of the United States unless authorized under an Alaska Pollutant Discharge Elimination System (APDES) permit. You can obtain coverage under the MSGP by submitting a completed NOI if you operate a facility that:

- is located in a jurisdiction where DEC is the permitting authority, listed in Part 1.1 of the MSGP;
- discharges storm water associated with industrial activities, identified in Appendix D of the MSGP;
- meet the eligibility requirements in Part 1.2 of the permit;
- develop a storm water pollution prevention plan (SWPPP) in accordance with Part 5 of the MSGP; and
- install and implement control measures in accordance with Part 4 to meet numeric and non-numeric effluent limits.

If you are unsure if you need an APDES storm water permit, contact your APDES storm water permit program. Contacts are listed at:

http://dec.alaska.gov/water/wastewater/stormwater/

One NOI must be submitted for each facility or site for which you are seeking permit coverage. You do not need to submit separate NOIs for each type of industrial activity present at your facility, provided your SWPPP covers all activities.

When to File the NOI Form

Do not file your NOI until you have obtained and thoroughly read a copy of the MSGP. A copy of the MSGP is located on the DEC website (http://dec.alaska.gov/water/wastewater/stormwater/multisector/). The MSGP describes procedures to ensure your eligibility, prepare your SWPPP, install and implement appropriate storm water control measures, and complete the NOI form questions – all of which must be done before you sign the NOI certification statement attesting to the accuracy and completeness of your NOI. You will also need a copy of the MSGP once you have obtained coverage so that you can comply with the implementation requirements of the permit.

Completing the NOI Form

To complete this form, type or print in the appropriate areas only. Please make sure you complete all questions. Make sure you make a photocopy for your records before you send the completed form to the address below. You may also use this paper form as a checklist for the information you will need when filing an NOI electronically via DEC's OASys system. http://dec.alaska.gov/water/oasys.aspx.

Facility Information

Enter the facility's official or legal name. Unless the name of your facility has changed, please use the same name provided on prior NOIs or permit applications.

Indicate if industrial storm water discharges from your facility were previously covered by an APDES permit.

If your facility was previously covered by the MSGP, please include the tracking number that you received in your confirmation letter or email from DEC's Storm water Program. You can find the tracking number assigned to your previous NOI on DEC's Online Permit Search: http://dec.alaska.gov/Applications/Water/WaterPermitSearch/search.

Enter the street address, including city, state, zip code, borough or similar government subdivision of the actual physical location of the facility. Do NOT use a P.O. Box.

Provide the facility latitude and longitude in decimal degrees format. You can obtain your facility's latitude and longitude though Global Positioning System (GPS) receivers, internet map service, U.S. Geological Survey (USGS) quadrangle or topographic maps, or EPA's web-based siting-tools, among other methods. For consistency, DEC requests that measurements be taken from the approximate center of the facility. Specify which method you used to determine latitude and longitude.

Identify the data source that you used to determine the facility latitude and longitude. If you did not use a USGS quadrangle or topographic map or GPS receivers, then select "Other" and write the method used on the line provided. If you used a USGS quadrangle or topographic map, write the map scale on the line provided. Scale should be identified on the map.

Enter the estimated area of industrial activity at your site exposed to storm water, in acres.

Briefly describe the nature of the industrial activities present at your facility.

Indicate whether your facility is currently inactive and unstaffed. If so then indicate whether your facility will be inactive and unstaffed for the entire permit term; or, if not, specify the specific length of time in units of days, weeks, months, or years (e.g. 3 months) that you expect the facility to be inactive and unstaffed.

Federal Effluent Limitation Guidelines and Sector-Specific Requirements

Depending on your industrial activities, your facility may be subject to effluent limitation guidelines which include additional effluent limits and monitoring requirements for your facility. Please review these requirements, described in Part 4.3 of the MSGP and check any appropriate boxes on the NOI form.

For Sector S facilities (Air Transportation), indicate whether you anticipate that the entire airport facility will use more than 100,000 gallons of glycol-based deicing/anti-icing chemicals and/or 100 tons or more of urea on an average annual basis. If so, additional effluent limits and monitoring conditions apply to your discharge (see Part 11 Sector S of the MSGP).

List the four-digit Standard Industrial Classification (SIC) code and/or two character activity code that best describes the primary industrial activities performed by your facility under which you are required to obtain permit coverage. Your primary industrial activity includes any activities performed on-site which are (1) identified by the facility's one SIC code for which the facility is primarily engaged; and (2) included in the narrative descriptions of 40 CFR 122.26(b)(14)(i), (iv), (v), or (vii), and (ix). See Appendix D of the MSGP for a complete list of SIC codes and activities codes.

If your site has co-located industrial activities that are not identified as your primary industrial activity, identify the sector and subsector codes that describe these other industrial activities. For a complete list of sector and subsector codes, see Appendix D of the MSGP.

Discharge Information

Receiving Waters and Wetlands

You must identify all the outfalls from your facility that discharge storm water. Each outfall must be assigned a unique 3-digit ID (e.g., 001, 002, 003). You must also provide the latitude and longitude for each outfall from your facility. Indicate whether any outfalls are substantially identical to an outfall already listed, and identify the outfall it is identical to. For each unique outfall you list, you must specify the name of the first water of the U.S. that receives storm water directly from the outfall and/or the Municipal Separate Storm Sewer System (MS4) that the outfall discharges to.

Your receiving water may be a lake, stream, river, ocean, wetland, or other waterbody, and may or may not be located adjacent to your facility. Your storm water may discharge directly to the receiving water or indirectly via a storm sewer system, an open drain or ditch, or other conveyance structure. Do NOT list a man-made conveyance, such as a storm sewer system, as your receiving water. Indicate the first receiving water your storm water discharge enters. For example, if your discharge enters a storm sewer system that empties into Trout Creek, which flows into Pine River, your receiving water is Trout Creek, because it is the first waterbody your discharge will reach. Similarly, a discharge into a ditch that feeds Spring Creek should be identified as “Spring Creek” since the ditch is a manmade conveyance. If you discharge into a MS4, you must identify the waterbody into which that portion of the storm sewer discharges and also provide the name of the MS4 operator. That information should be readily available from the operator of the MS4. If you are uncertain of the MS4 operator, contact DEC Division of Water for that information.

You must specify whether any receiving waters that you discharge to are listed as “impaired” as defined in Appendix C, and the pollutants for which the water is impaired. You must also check/identify any Total Maximum Daily Loads (TMDL) that have been completed for any of the waters of the U.S. that you discharge to. You must also provide information about the outfall latitude/ longitude. Further information regarding impaired waters and TMDLs can be found at http://dec.alaska.gov/water/water-quality/impaired-waters.

If you are subject to any benchmark monitoring requirements for metals (see the requirements applicable to your Sector(s) in Part 11 of the permit), indicate the hardness for your receiving water(s). See Appendix E of the permit for information about determining waterbody hardness.

If you are subject to benchmark monitoring requirements for hardness-dependent metals, you must also answer whether your facility discharges into any saltwater receiving waters.

Operator Information

Provide the name of the contact person and the legal name of the firm, public organization, or any other public entity that operates the facility described in this application. An operator of a facility is a legal entity that controls the operation of the facility.

Provide the operator’s mailing address, telephone number, fax number (optional), and email address. Correspondence will be sent to this address.

Storm Water Pollution Prevention Plan (SWPPP) Contact Information

Identify the name, telephone number, and email address of the person who will serve as a contact for DEC on issues related to storm water management at your facility. This person should be able to answer questions related to storm water discharges, the SWPPP, and other issues related to storm water permit coverage or have immediate access to individuals with that knowledge. This person does not have to be the facility operator but should have intimate knowledge of storm water management activities at the facility.

If you are making your SWPPP publicly available on a website, provide the appropriate Internet URL address.

Billing Contact Information

Provide the name of the contact person and the legal name of the firm, public organization, or any other public entity that is responsible for accounts payable for this facility.

Provide the billing contact’s mailing address, telephone number, fax number (optional), and email address. Correspondence for billing purposes will be sent to this address. If the billing contact address is the same as the operator, check the box and continue to Section III Facility Information. See 18 AAC 72.956 for applicable authorization fee to be paid with the submittal of the NOI.

Certification Information

The NOIs, must be signed as follows:

(1) For a corporation, a responsible corporate officer shall sign the NOI, a responsible corporate officer means:

  (A) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation; or

  (B) the manager of one or more manufacturing, production, or operating facilities, if

    (i) the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental statutes and regulations;

    (ii) the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and

    (iii) authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

(2) For a partnership or sole proprietorship, the general partner or the proprietor, respectively; or

(3) for a municipality, state, or other public agency, either a principal executive officer or ranking elected official shall sign the application; in this subsection, a principal executive officer of an agency means

  (A) the chief executive officer of the agency; or

  (B) a senior executive officer having responsibility for the overall operations of a principal geographic unit or division of the agency.

Include the name, title, organization, and email address of the person signing the form and the date of signing. An unsigned or undated NOI form will not be considered valid application for permit coverage.

If the NOI was prepared by someone other than the certifier (for example, if the NOI was prepared by the facility SWPPP contact or a consultant for the certifier's signature), include the name, organization, telephone number, and email address of the NOI preparer.

Where to File the NOI Form

DEC encourages you to complete the NOI form and SWPPP electronically via the Internet. DEC's Online Application System (OASys) can be found at http://dec.alaska.gov/water/oasys.aspx. Filing electronically is the fastest way to obtain permit coverage and help ensure that your NOI is complete. If you choose not to file electronically, you must send the NOI to the address listed below.

If you file by mail, remember to retain a copy for your records.

NOIs sent by mail:

Alaska Dept. of Environmental Conservation
Wastewater Discharge Authorization Program
Storm Water NOI
555 Cordova Street
Anchorage, AK 99501
Phone: (907) 269-6285
dec.water.wqpermit@alaska.gov

Your SWPPP needs to be submitted with the NOI as required in Part 5 of the MSGP. You must keep a copy of your SWPPP on-site or otherwise make it available to facility personnel responsible for implementing provisions of the permit.

Notice of Termination (NOT) of Coverage for Storm Water Discharges Associated with Industrial Activity under an APDES General Permit

Submission of this Notice of Termination constitutes notice that the party identified in Section II of this form is no longer authorized to discharge storm water associated with industrial activity under the APDES program for the facility identified in Section III of this form. All necessary information must be included on the form. The NOT must be submitted within 30 days of one of the conditions in Section 10 of the MSGP being met. Refer to the instructions at the end of this form for information on submitting a Notice of Termination.

I. Permit Information

Permit Tracking Number:

Reason for Termination (Check only one):

- ☐ You transferred operational control to another operator.
- ☐ You no longer have storm water discharge associated with industrial activity subject to regulation under the APDES program, and you have already implemented necessary sediment and erosion controls as required by Part 4.2.5.
- ☐ You are a Sector G, H, or J facility and you have met the applicable termination requirements.
- ☐ You obtained coverage under an alternative APDES permit.

☐ All required reports (including DMR if applicable) and certifications have been submitted to DEC.

II. Operator Information

Contact Name:	Organization:	Title:
Phone:	Fax (optional):	Email:
Mailing Address — Street (PO Box)		
City	State	Zip

III. Facility Information

Facility Name:

Location Address:

City: State: Alaska Zip:

Borough or Similar Government Subdivision:

IV. Certification Information

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Organization:	Name:	Title:
Phone:	Fax (optional):	Email:
Mailing Address: ☐ Check if same as Operator Information — Street (PO Box):		
City:	State:	Zip:

Signature/Responsible Official

Date

Instructions for Completing a Notice of Termination Form for Storm Water Discharges Associated with INDUSTRIAL ACTIVITY under the Multi-Sector General Permit (MSGP)

Who May File Notice of Termination (NOT) Form
A permittee currently covered by Alaska's APDES Storm water Multi-Sector General Permit may submit a Notice of Termination (NOT) form. You must submit an NOT within 30 days after one or more of the following conditions have been met:

- *a new owner or operator has assumed responsibility for the facility;*
- *you have ceased operations at the facility and there are nt or no longer will be discharges of storm water associated with industrial activity from the facility, and you have already implemented necessary sediment and erosion controls as required by Part 4.2.5;*
- *you are a Sector G, H, or J facility, and you have met the applicable termination requirements; or*
- *you have obtained coverage under an individual or alternative general permit for all discharges required to be covered by an APDES permit.*

See the MSGP Part 10 for more information.

Completing the Form

Type or print, in the appropriate areas only. "NA" can be entered in areas that are not applicable. If you have any questions about how or when to use this form, contact the DEC Storm Water Program at (907) 269-6285 or online at http://dec.alaska.gov/water/wastewater/stormwater/.

Section I. Permit Information
Enter the existing APDES Storm water General Permit Tracking Number assigned to the facility by DEC's Storm Water Program. If you do not know the tracking number, you can find the tracking number assigned to your facility on DEC's Water Permit Search http://dec.alaska.gov/Applications/Water/WaterPermitSearch//Search.aspx.

Indicate your reason for submitting the NOT by checking the appropriate box. (See MSGP Part 10 for more information) Check only one box.

Section II. Operator Information
Provide the legal name of the person, firm, public organization, or any other entity that operates the facility described in this application and is covered by the permit tracking number identified in Section I. The operator is the legal entity that controls the facility's operation, rather than the site manager. Enter the operator's complete mailing address, telephone number, email address, and. the fax number (optional) of the operator.

Section III. Facility Information
Enter the official or legal name and complete street address, including city, state, zip code, and borough or similar government subdivision of the facility.

Section IV. Certification Information
The NOTs, must be signed as follows:

(1) For a corporation, a responsible corporate officer shall sign the NOT, a responsible corporate officer means:

(A) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation; or

(B) the manager of one or more manufacturing, production, or operating facilities, if

(i) the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental statutes and regulations;

(ii) the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and

(iii) authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

(2) For a partnership or sole proprietorship, the general partner or the proprietor, respectively; or

(3) for a municipality, state, or other public agency, either a principal executive officer or ranking elected official shall sign the application; in this subsection, a principal executive officer of an agency means

(A) the chief executive officer of the agency; or

(B) a senior executive officer having responsibility for the overall operations of a principal geographic unit or division of the agency.

Include the name, title, and email address of the person signing the form and the date of signing. An unsigned or undated NOT form will not be considered valid termination of permit coverage.

Where to File NOT form
DEC encourages you to complete the NOT form electronically via the Internet. DEC's Online Application System (OASys) can be found at http://dec.alaska.gov/water/oasys.aspx .Filing electronically is the fastest way to terminate permit coverage and help ensure that your NOT is complete. If you choose not to file electronically, you must send the NOT to the address listed below.

If you file by mail, please remember to retain a copy for your records.

NOTs sent by mail:

Alaska Dept. of Environmental Conservation
Wastewater Discharge Authorization Program
555 Cordova Street
Anchorage, AK 99501
Phone: (907) 269-6285

For Agency Use
Permit Tracking #_____

Alaska Department of Environmental Conservation
MSGP Annual Reporting Form

Section I. General Information

Facility Name	APDES Permit Tracking Number

Facility Physical Address

Street	City	State	Zip Code
		Alaska	

Contact Person	Title	Phone	Email

Lead Inspector's Name	Additional Inspector's Name	Additional Inspector's Name	Inspection Date

Section II. General Inspection Findings

1. As part of this comprehensive site inspection, did you inspect all potential pollutant sources, including areas where industrial activity may be exposed to storm water? ☐ Yes ☐ No

   If NO, describe why not:

***Note**: Complete Section III of this form for each industrial activity area inspected and included in your SWPPP or as newly defined, in Section II parts 2 and 3 below, where pollutants may be exposed to storm water.*

2. Did this inspection identify any storm water or non-storm water outfalls not previously identified in your SWPPP? ☐ Yes ☐ No

   If YES, for each location, describe the sources of those storm water and non-storm water discharges and any associated control measures in place:

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3. Did this inspection identify any sources of storm water or non-storm water discharges not previously identified in your SWPPP? ☐ Yes ☐ No

   If YES, describe these sources of storm water or non-storm water pollutants expected to be present in these discharges, and any control measures in place:

4. Did you review storm water monitoring data as part of this inspection to identify potential pollutant hotspots? ☐ Yes ☐ No ☐ NA, no monitoring performed

   If YES, summarize the findings of that review and describe any additional inspection activities resulting from this review:

5. Describe any evidence of pollutants entering the drainage system or discharging to surface waters, and the condition of and around outfalls, including flow dissipation measure to prevent scouring:

6. Have you taken or do you plan to take corrective actions, as specified in Part 8 of the permit, since your last annual report submission (or since you received authorization to discharge under this permit if this is your first annual report), including any corrective actions identified as a result of this annual comprehensive site inspection? ☐ Yes ☐ No

   If YES, how many conditions requiring review for corrective action as specified in Parts 8.1 and 8.2 of the MSGP were addressed by these corrective actions?

***Note**: Complete the attached Corrective Action Form (Section IV) for each condition identified, including any conditions identified as a result of this comprehensive storm water inspection.*

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Section III. Industrial Activity Area Specific Findings

Complete one block for each industrial activity area where pollutants may be exposed to storm water*. Copy this page for additional industrial activity areas. In reviewing each area, you should consider:*

- *Industrial materials, residue, or trash that may have or could come into contact with storm water;*
- *Leaks or spills from industrial equipment, drums, tanks, and other containers;*
- *Offsite tracking of industrial or waste materials from areas of no exposure to exposed areas; and*
- *Tracking or blowing of raw, final, or waste material from areas of no exposure to exposed areas.*

Industrial Activity Area:

1. Brief Description:

2. Are any control measures in need of maintenance or repair?	☐ Yes	☐ No
3. Have any control measures failed and require replacement?	☐ Yes	☐ No
4. Are any additional/revised control measures necessary in this area?	☐ Yes	☐ No

If YES, to any of these three questions, provide a description of the problem: *(Any necessary corrective actions should be described on the attached Corrective Action Form.)*

Industrial Activity Area:

1. Brief Description:

2. Are any control measures in need of maintenance or repair?	☐ Yes	☐ No
3. Have any control measures failed and require replacement?	☐ Yes	☐ No
4. Are any additional/revised control measures necessary in this area?	☐ Yes	☐ No

If YES, to any of these three questions, provide a description of the problem: *(Any necessary corrective actions should be described on the attached Corrective Action Form.)*

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Industrial Activity Area:

1. Brief Description:

2. Are any control measures in need of maintenance or repair?	☐	Yes	☐	No
3. Have any control measures failed and require replacement?	☐	Yes	☐	No
4. Are any additional/revised control measures necessary in this area?	☐	Yes	☐	No

If YES, to any of these three questions, provide a description of the problem: *(Any necessary corrective actions should be described on the attached Corrective Action Form.)*

Industrial Activity Area:

1. Brief Description:

2. Are any control measures in need of maintenance or repair?	☐	Yes	☐	No
3. Have any control measures failed and require replacement?	☐	Yes	☐	No
4. Are any additional/revised control measures necessary in this area?	☐	Yes	☐	No

If YES, to any of these three questions, provide a description of the problem: *(Any necessary corrective actions should be described on the attached Corrective Action Form.)*

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Section IV. Corrective Actions

Complete this page for each specific condition requiring a corrective action or a review determining that no corrective action is needed. Copy this page for additional corrective actions or reviews.

Include both corrective actions that have been initiated or completed since the last annual report, and future corrective actions needed to address problems identified in the comprehensive storm water inspection. Include an update on any outstanding corrective actions that had not been completed at the time of your previous annual report.

1. Corrective Action # of for this reporting period.

2. Is this corrective action:

- ☐ An update on a corrective action from a previous annual report; or
- ☐ A new corrective action?

3. Identify the condition(s) triggering the need for this review:

- ☐ Unauthorized release of discharge
- ☐ Numeric effluent limitation exceedance
- ☐ Control measures inadequate to meet applicable water quality standards
- ☐ Control measures inadequate to meet non-numeric effluent limitations
- ☐ Control measures not properly operated or maintained
- ☐ Change in facility operations necessitated change in control measures
- ☐ Average benchmark value exceedance
- ☐ Other (describe):

4. Briefly describe the nature of the problem identified:

5. Date problem identified:

6. How problem was identified:

- ☐ Comprehensive site inspection
- ☐ Quarterly visual assessment
- ☐ Routine facility inspection
- ☐ Notification by EPA or DEC
- ☐ Other (describe):

7. Description of corrective action(s) taken or to be taken to eliminate or further investigate the problem (e.g., describe modifications or repairs to control measures, analysis to be conducted, etc.) or if no modification is needed, basis for that determination.

8. Did/will this corrective action require modification of your SWPPP? ☐ Yes ☐ No

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9. Date corrective action initiated:	
10. Date corrective action completed:	Or expected to be completed:
11. If corrective action not yet completed, provide the status of the corrective action as the time of the comprehensive site inspections and describe any remaining steps (including timeframes associated with each step) necessary to complete the corrective action:	

Section V. Annual Report Certification

Compliance Certification

Do you certify that your annual inspection has met the requirements of Part 6.3 of the permit, and that, based upon the results of this inspection, to the best of your knowledge, you are in compliance with the permit? ☐ Yes ☐ No

If NO, summarize why you are not in compliance with the permit:

Annual Report Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those person directly responsible for gathering the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name of Authorized Representative	Title	Email
Signature		Date Signed

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Permit Tracking #: _____

Alaska Department of Environmental Conservation
MSGP Corrective Action Form

Section I. General Information

Facility Name			APDES Permit Tracking Number
Facility Physical Address			
Street	City	State	Zip Code
		Alaska	
Contact Person	Title	Phone	Email
Lead Inspector's Name	Additional Inspector's Name	Additional Inspector's Name	Inspection Date

Section II. Corrective Actions

Complete this page for each specific condition requiring a corrective action or a review determining that no corrective action is needed. Copy this page for additional corrective actions or reviews.

Include both corrective actions that have been initiated or completed since the last annual report, and future corrective actions needed to address problems identified in the comprehensive storm water inspection. Include an update on any outstanding corrective actions that had not been completed at the time of your previous annual report.

1. Corrective Action # of for this reporting period.

2. Is this corrective action:
   - ☐ An update on a corrective action from a previous annual report; or
   - ☐ A new corrective action?

3. Identify the condition(s) triggering the need for this review:
   - ☐ Unauthorized release of discharge
   - ☐ Numeric effluent limitation exceedance
   - ☐ Control measures inadequate to meet applicable water quality standards
   - ☐ Control measures inadequate to meet non-numeric effluent limitations
   - ☐ Control measures not properly operated or maintained
   - ☐ Change in facility operations necessitated change in control measures
   - ☐ Average benchmark value exceedance
   - ☐ Other (describe):

4. Briefly describe the nature of the problem identified:

5. Date problem identified:

6. How problem was identified:
   - ☐ Comprehensive site inspection
   - ☐ Quarterly visual assessment
   - ☐ Routine facility inspection
   - ☐ Notification by EPA or DEC
   - ☐ Other (describe):

For Agency Use
Permit Tracking #: _____

7. Description of corrective action(s) taken or to be taken to eliminate or further investigate the problem (e.g., describe modifications or repairs to control measures, analysis to be conducted, etc.) or if no modification is needed, basis for that determination.

8. Did/will this corrective action require modification of your SWPPP? ☐ Yes ☐ No

9. Date corrective action initiated:

10. Date corrective action completed: Or expected to be completed:

11. If corrective action not yet completed, provide the status of the corrective action as the time of the comprehensive site inspections and describe any remaining steps (including timeframes associated with each step) necessary to complete the corrective action:

Section III. Certification

Do you certify that your annual inspection has met the requirements of Part 6.3 of the permit, and that, based upon the results of this inspection, to the best of your knowledge, you are in compliance with the permit? ☐ Yes ☐ No

If NO, summarize why you are not in compliance with the permit:

Certification Statement

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those person directly responsible for gathering the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name of Authorized Representative	Title	Email
Signature		Date Signed

Notice of Intent (NOI) Modification Form for Storm Water Discharges Associated with Industrial Activity under the APDES Multi-Sector General Permit (MSGP)

Current NOI Information (Please copy content exactly from your NOI. Indicate changes on the next pages.)

Permit Number:

Facility Information (as it appears on your NOI):

Facility Name:			
Street Location	Street:	Borough or similar government subdivision	
	City:	State: Alaska	Zip:
	Latitude:	Longitude:	Determined By: ☐ GPS ☐ Internet Map Service ☐ Other:

Operator Information (as it appears on your NOI):

Contact Name:	Organization:	Title:
Phone:	Fax (optional):	Email:
Mailing Address	Street (PO Box)	
	City	State / Zip

Instructions for Completing a Modification to an APDES Notice of Intent (NOI)

Use the form on the subsequent pages to indicate the items for which you are submitting this modification. Only enter information you wish to change. You may use this form to modify an NOI that you submitted to DEC for coverage under the Multi-Sector General Permit (MSGP) If you have any questions about modifying your NOI, call the DEC Storm Water Program at (907) 269-6285.

When Should You Modify Your Notice of Intent (NOI)?

You can use this form to update or correct information on your NOI, including:

- Owner/Operator address and contact information
- Changes to the SWPPP Contact
- Facility/Site information
- Acreage of industrial area exposed to storm water
- Changes in SIC code or industrial sector designation; or
- Changes to discharge information

When must you Submit a Notice of Termination (NOT) Instead of a Modification Form?

- The owner/operator has changed: You must submit an NOT when you transfer control of a site to a new owner/operator.
- The new owner/operator must then file a new NOI to obtain coverage under the MSGP. Coverage is not transferable.
- You have ceased operations at the facility and there are no longer discharges associated with industrial activity at the facility.
- You are a Sector G, H, or J facility and you have met the applicable termination requirements; or
- You have obtained coverage under an individual or alternative general permit for all discharges required to be covered by an APDES permit, unless ADEC has required that you obtain such coverage under authority of Part 2.8.1 of the MSGP, in which case coverage under this permit will terminate automatically.

Notice of Intent (NOI) for Storm Water Discharges Associated with Industrial Activity under the APDES Multi-Sector General Permit (MSGP)

Facility Information

Facility Name:

Have storm water discharges from your site been covered previously under an APDES Permit? ☐ Yes ☐ No

If Yes, provide the permit authorization number: _____

Street Location

Street:	Borough or similar government subdivision		
City:		State: Alaska	Zip:
Latitude:	Longitude:	Determined By: ☐ GPS ☐ Internet Map Service ☐ Other:	

Estimated area of industrial activity at your site exposed to storm water: _____ (acres)

Briefly describe the nature of the industrial activities at the facility:

Identify the 4-digit Standard Industrial Classification (SIC) code or 2-letter Activity Code that best represents the products produced or services rendered for which your facility is primarily engaged, as defined in the MSGP.

Primary SIC Code: _____ or Primary Activity Code: _____

Is your site presently inactive or unstaffed?* ☐ Yes ☐ No

** Note that if your facility becomes inactive and unstaffed during the permit term, you must submit an NOI modification to reflect the change.*

If Yes, is your site expected to be inactive and unstaffed for the entire permit term? ☐ Yes ☐ No

If No, indicate the length of time that you expect your facility to be inactive and unstaffed. _____

Federal Effluent Limitation Guidelines and Sector-Specific Requirements

Are you requesting permit coverage for storm water discharges subject to effluent limitation guidelines? ☐ Yes ☐ No

If yes, which effluent limitation guidelines apply to your storm water discharge?

40 CFR Part/Subpart	Eligible Discharges	Affected MSGP Sector	Check if applicable
Part 411, Subpart C	Runoff from material storage piles at cement manufacturing facilities.	E	☐
Part 418, Subpart A	Runoff from phosphate fertilizer manufacturing facilities that comes into contact with any raw materials, finished products, by-products, or waste products (SIC 2874).	C	☐
Part 423	Coal pile runoff at steam electric generating facilities.	O	☐
Part 429, Subpart I	Discharges resulting from spray down or intentional wetting of logs at wet deck storage areas.	A	☐
Part 436, Subpart B, C, or D	Mine dewatering discharges at crushed stone mines, construction sand and gravel mines, or industrial sand mines.	J	☐
Part 443, Subpart A	Runoff from asphalt emulsion facilities.	D	☐
Part 445, Subparts A & B	Runoff from hazardous waste and non-hazardous waste landfills.	K, L	☐
Part 449, Subpart A	Runoff from Air Transportation	S	☐

If you are a Sector S (Air Transportation facility, do you anticipate using more than 100,000 gallons of glycol-based deicing/anti-icing chemicals and/or 100 tons or more of urea on an average annual basis? ☐ Yes ☐ No

Identify the applicable sector(s) and subsector(s) of industrial activity, including co-located industrial activity, for which you are requesting coverage:

Sector	Subsector	Sector	Subsector	Sector	Subsector	Sector	Subsector	Sector	Subsector	Sector	Subsector

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Discharge Information

Does your facility discharge into a Municipal Separate Storm Sewer System (MS4)? ☐ Yes ☐ No
If Yes, provide the name of the MS4 Operator: ______________________________

If you are subject to benchmark monitoring requirements for a hardness-dependent metal:
– What is the hardness of your receiving water(s) (See Appendix E)? ______________
– Does your facility discharge into any saltwater receiving waters? ☐ Yes ☐ No

Outfalls: *(Attach a separate list if necessary)*

List all of the storm water outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002). Also provide the latitude and longitude in decimal degrees for each outfall.		**For each outfall, provide the following receiving water information:** Provide the name of the first water of the U.S. that receives storm water directly from the outfall and/or from the MS4 that the outfall discharges to:	If the receiving water is impaired (on the CWA 303(d) list), list the pollutants that are causing the impairment:	Are the pollutant(s) causing the impairment present in your discharge? Yes	No	If a TMDL has been completed for this receiving waterbody, provide the following information:
Outfall ID	001A			☐	☐	TMDL ID#:
Latitude						TMDL Name:
Longitude						Pollutant(s) for which there is a TMDL:
If substantially identical to other outfall, list identical outfall ID: ______						
Outfall ID				☐	☐	TMDL ID#:
Latitude						TMDL Name:
Longitude						Pollutant(s) for which there is a TMDL:
If substantially identical to other outfall, list identical outfall ID: ______						
Outfall ID				☐	☐	TMDL ID#:
Latitude						TMDL Name:
Longitude						Pollutant(s) for which there is a TMDL:
If substantially identical to other outfall, list identical outfall ID: ______						
Outfall ID				☐	☐	TMDL ID#:
Latitude						TMDL Name:
Longitude						Pollutant(s) for which there is a TMDL:
If substantially identical to other outfall, list identical outfall ID: ______						
Outfall ID				☐	☐	TMDL ID#:
Latitude						TMDL Name:
Longitude						Pollutant(s) for which there is a TMDL:
If substantially identical to other outfall, list identical outfall ID: ______						

Operator Information

Contact Name:	Organization:	Title:
Phone:	Fax (optional):	Email:

Mailing Address ☐ Check if same as Operator Information	Street (PO Box)		
	City	State	Zip

Storm Water Pollution Prevention Plan (SWPPP) Contact / Location Information

Contact Name:	Organization:	Title:
Phone:	Fax (optional):	Email:

Mailing Address ☐ Check if same as Operator Information	Street (PO Box)		
	City	State	Zip

Universal Resource Locator or URL:

Billing Contact / Location Information

Contact Name:	Organization:	Title:
Phone:	Fax (optional):	Email:

Mailing Address ☐ Check if same as Operator Information	Street (PO Box)		
	City	State	Zip

NOI Preparer Contact / Location Information *(Complete if NOI was prepared by someone other than the Certifier)*

Contact Name:	Organization:	Title:
Phone:	Fax (optional):	Email:

Mailing Address ☐ Check if same as Operator Information	Street (PO Box)		
	City	State	Zip

Document Attachments

Documents attached with this application:

☐ Storm Water Pollution Prevention Plan (SWPPP)

☐ Other:

Certification Information

An Alaska Pollutant Discharge Elimination System (APDES) permit application or report must be signed by an individual with the appropriate authority per 18 AAC 83.385. For additional information, please refer to 18 AAC 83.385 at the following link: http://www.legis.state.ak.us/basis/aac.asp#18.83.385.

Corporate Executive Officer 18 AAC 83.385 (a)(1)(A)	For a corporation, a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation.
Corporate Operations Manager 18 AAC 83.385 (a)(1)(B)	For a corporation, the manager of one or more manufacturing, production, or operating facilities, if (i) the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental statutes and regulations; (ii) the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and (iii) authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
Sole Proprietor or General Partner 18 AAC 83.385 (a)(2)	For a partnership or sole proprietorship, the general partner or the proprietor respectively.
Public Agency, Chief Executive Officer 18 AAC 83.385 (a)(3)(A)	For a municipality, state, or other public agency, the chief executive officer of the agency.
Public Agency, Senior Executive Officer 18 AAC 83.385 (a)(3)(B)	For a municipality, state, or other public agency, a senior executive officer having responsibility for the overall operations of a principal geographic unit or division of the agency.

Any report required by an APDES permit, and a submittal with any other information requested by the department, must be signed by a person described in above, or by a duly authorized representative of that person.
**For Delegated Authority: the delegation must be made in writing and submitted to the DEC.*
Your signature will not be approved until DEC receives the written delegation.
An Example of written authorization delegating authority can be found on the Division of Water website:
http://dec.alaska.gov/media/13316/delegation-of-signatory-authority.pdf

Operations Manager *(Delegated Authority)** 18 AAC 83.385 (b)(2)(A)	For a duly authorized representative, an individual or a position having responsibility for the overall operation of the regulated facility or activity, including the position of plant manager, operator of a well or a well field, superintendent or position of equivalent responsibility.
Environmental Manager *(Delegated Authority)** 18 AAC 83.385 (b)(2)(B)	For a duly authorized representative, an individual or position having overall responsibility for environmental matters for the company.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Organization:	Name:	Title:
Phone:	Fax (optional):	Email:

Mailing Address: ☐ Check if same as Operator Information	Street (PO Box):		
	City:	State:	Zip:

Signature/Responsible Official

Date

Instructions for Completing the Notice of Intent (NOI) for Storm Water Discharges Associated with Industrial Activity under the Multi-Sector General Permit (MSGP)

Who must file a NOI?

Under section 402(p) of the Clean Water Act (CWA) and regulations at 40 CFR Part 122.26, adopted by reference at 18 AAC 83.010 (3) storm water discharges associated with industrial activity are prohibited to waters of the United States unless authorized under an Alaska Pollutant Discharge Elimination System (APDES) permit. You can obtain coverage under the MSGP by submitting a completed NOI if you operate a facility that:

- is located in a jurisdiction where DEC is the permitting authority, listed in Part 1.1 of the MSGP;
- discharges storm water associated with industrial activities, identified in Appendix D of the MSGP;
- meet the eligibility requirements in Part 1.2 of the permit;
- develop a storm water pollution prevention plan (SWPPP) in accordance with Part 5 of the MSGP; and
- install and implement control measures in accordance with Part 4 to meet numeric and non-numeric effluent limits.

If you are unsure if you need an APDES storm water permit, contact your APDES storm water permit program. Contacts are listed at:

http://dec.alaska.gov/water/wastewater/stormwater/

One NOI must be submitted for each facility or site for which you are seeking permit coverage. You do not need to submit separate NOIs for each type of industrial activity present at your facility, provided your SWPPP covers all activities.

When to File the NOI Form

Do not file your NOI until you have obtained and thoroughly read a copy of the MSGP. A copy of the MSGP is located on the DEC website (http://dec.alaska.gov/water/wastewater/stormwater/multisector/). The MSGP describes procedures to ensure your eligibility, prepare your SWPPP, install and implement appropriate storm water control measures, and complete the NOI form questions – all of which must be done before you sign the NOI certification statement attesting to the accuracy and completeness of your NOI. You will also need a copy of the MSGP once you have obtained coverage so that you can comply with the implementation requirements of the permit.

Completing the NOI Form

To complete this form, type or print in the appropriate areas only. Please make sure you complete all questions. Make sure you make a photocopy for your records before you send the completed form to the address below. You may also use this paper form as a checklist for the information you will need when filing an NOI electronically via DEC's OASys system. http://dec.alaska.gov/water/oasys.aspx.

Facility Information

Enter the facility's official or legal name. Unless the name of your facility has changed, please use the same name provided on prior NOIs or permit applications.

Indicate if industrial storm water discharges from your facility were previously covered by an APDES permit.

If your facility was previously covered by the MSGP, please include the tracking number that you received in your confirmation letter or email from DEC's Storm water Program. You can find the tracking number assigned to your previous NOI on DEC's Online Permit Search: http://dec.alaska.gov/Applications/Water/WaterPermitSearch/search.

Enter the street address, including city, state, zip code, borough or similar government subdivision of the actual physical location of the facility. Do NOT use a P.O. Box.

Provide the facility latitude and longitude in decimal degrees format. You can obtain your facility's latitude and longitude though Global Positioning System (GPS) receivers, internet map service, U.S. Geological Survey (USGS) quadrangle or topographic maps, or EPA's web-based siting-tools, among other methods. For consistency, DEC requests that measurements be taken from the approximate center of the facility. Specify which method you used to determine latitude and longitude.

Identify the data source that you used to determine the facility latitude and longitude. If you did not use a USGS quadrangle or topographic map or GPS receivers, then select "Other" and write the method used on the line provided. If you used a USGS quadrangle or topographic map, write the map scale on the line provided. Scale should be identified on the map.

Enter the estimated area of industrial activity at your site exposed to storm water, in acres.

Briefly describe the nature of the industrial activities present at your facility.

Indicate whether your facility is currently inactive and unstaffed. If so then indicate whether your facility will be inactive and unstaffed for the entire permit term; or, if not, specify the specific length of time in units of days, weeks, months, or years (e.g. 3 months) that you expect the facility to be inactive and unstaffed.

Federal Effluent Limitation Guidelines and Sector-Specific Requirements

Depending on your industrial activities, your facility may be subject to effluent limitation guidelines which include additional effluent limits and monitoring requirements for your facility. Please review these requirements, described in Part 4.3 of the MSGP and check any appropriate boxes on the NOI form.

For Sector S facilities (Air Transportation), indicate whether you anticipate that the entire airport facility will use more than 100,000 gallons of glycol-based deicing/anti-icing chemicals and/or 100 tons or more of urea on an average annual basis. If so, additional effluent limits and monitoring conditions apply to your discharge (see Part 11 Sector S of the MSGP).

List the four-digit Standard Industrial Classification (SIC) code and/or two character activity code that best describes the primary industrial activities performed by your facility under which you are required to obtain permit coverage. Your primary industrial activity includes any activities performed on-site which are (1) identified by the facility's one SIC code for which the facility is primarily engaged; and (2) included in the narrative descriptions of 40 CFR 122.26(b)(14)(i), (iv), (v), or (vii), and (ix). See Appendix D of the MSGP for a complete list of SIC codes and activities codes.

If your site has co-located industrial activities that are not identified as your primary industrial activity, identify the sector and subsector codes that describe these other industrial activities. For a complete list of sector and subsector codes, see Appendix D of the MSGP.

Discharge Information

Receiving Waters and Wetlands

You must identify all the outfalls from your facility that discharge storm water. Each outfall must be assigned a unique 3-digit ID (e.g., 001, 002, 003). You must also provide the latitude and longitude for each outfall from your facility. Indicate whether any outfalls are substantially identical to an outfall already listed, and identify the outfall it is identical to. For each unique outfall you list, you must specify the name of the first water of the U.S. that receives storm water directly from the outfall and/or the Municipal Separate Storm Sewer System (MS4) that the outfall discharges to.

Your receiving water may be a lake, stream, river, ocean, wetland, or other waterbody, and may or may not be located adjacent to your facility. Your storm water may discharge directly to the receiving water or indirectly via a storm sewer system, an open drain or ditch, or other conveyance structure. Do NOT list a man-made conveyance, such as a storm sewer system, as your receiving water. Indicate the first receiving water your storm water discharge enters. For example, if your discharge enters a storm sewer system that empties into Trout Creek, which flows into Pine River, your receiving water is Trout Creek, because it is the first waterbody your discharge will reach. Similarly, a discharge into a ditch that feeds Spring Creek should be identified as “Spring Creek” since the ditch is a manmade conveyance. If you discharge into a MS4, you must identify the waterbody into which that portion of the storm sewer discharges and also provide the name of the MS4 operator. That information should be readily available from the operator of the MS4. If you are uncertain of the MS4 operator, contact DEC Division of Water for that information.

You must specify whether any receiving waters that you discharge to are listed as “impaired” as defined in Appendix C, and the pollutants for which the water is impaired. You must also check/identify any Total Maximum Daily Loads (TMDL) that have been completed for any of the waters of the U.S. that you discharge to. You must also provide information about the outfall latitude/ longitude. Further information regarding impaired waters and TMDLs can be found at http://dec.alaska.gov/water/water-quality/impaired-waters.

If you are subject to any benchmark monitoring requirements for metals (see the requirements applicable to your Sector(s) in Part 11 of the permit), indicate the hardness for your receiving water(s). See Appendix E of the permit for information about determining waterbody hardness.

If you are subject to benchmark monitoring requirements for hardness-dependent metals, you must also answer whether your facility discharges into any saltwater receiving waters.

Operator Information

Provide the name of the contact person and the legal name of the firm, public organization, or any other public entity that operates the facility described in this application. An operator of a facility is a legal entity that controls the operation of the facility.

Provide the operator’s mailing address, telephone number, fax number (optional), and email address. Correspondence will be sent to this address.

Storm Water Pollution Prevention Plan (SWPPP) Contact Information

Identify the name, telephone number, and email address of the person who will serve as a contact for DEC on issues related to storm water management at your facility. This person should be able to answer questions related to storm water discharges, the SWPPP, and other issues related to storm water permit coverage or have immediate access to individuals with that knowledge. This person does not have to be the facility operator but should have intimate knowledge of storm water management activities at the facility.

If you are making your SWPPP publicly available on a website, provide the appropriate Internet URL address.

Billing Contact Information

Provide the name of the contact person and the legal name of the firm, public organization, or any other public entity that is responsible for accounts payable for this facility.

Provide the billing contact’s mailing address, telephone number, fax number (optional), and email address. Correspondence for billing purposes will be sent to this address. If the billing contact address is the same as the operator, check the box and continue to Section III Facility Information. See 18 AAC 72.956 for applicable authorization fee to be paid with the submittal of the NOI.

Certification Information

The NOIs, must be signed as follows:

(1) For a corporation, a responsible corporate officer shall sign the NOI, a responsible corporate officer means:

  (A) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation; or

  (B) the manager of one or more manufacturing, production, or operating facilities, if

    (i) the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental statutes and regulations;

    (ii) the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and

    (iii) authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

(2) For a partnership or sole proprietorship, the general partner or the proprietor, respectively; or

(3) for a municipality, state, or other public agency, either a principal executive officer or ranking elected official shall sign the application; in this subsection, a principal executive officer of an agency means

  (A) the chief executive officer of the agency; or

  (B) a senior executive officer having responsibility for the overall operations of a principal geographic unit or division of the agency.

Include the name, title, organization, and email address of the person signing the form and the date of signing. An unsigned or undated NOI form will not be considered valid application for permit coverage.

If the NOI was prepared by someone other than the certifier (for example, if the NOI was prepared by the facility SWPPP contact or a consultant for the certifier's signature), include the name, organization, telephone number, and email address of the NOI preparer.

Where to File the NOI Form

DEC encourages you to complete the NOI form and SWPPP electronically via the Internet. DEC's Online Application System (OASys) can be found at http://dec.alaska.gov/water/oasys.aspx. Filing electronically is the fastest way to obtain permit coverage and help ensure that your NOI is complete. If you choose not to file electronically, you must send the NOI to the address listed below.

If you file by mail, remember to retain a copy for your records.

NOIs sent by mail:

Alaska Dept. of Environmental Conservation
Wastewater Discharge Authorization Program
Storm Water NOI
555 Cordova Street
Anchorage, AK 99501
Phone: (907) 269-6285
dec.water.wqpermit@alaska.gov

Your SWPPP needs to be submitted with the NOI as required in Part 5 of the MSGP. You must keep a copy of your SWPPP on-site or otherwise make it available to facility personnel responsible for implementing provisions of the permit.

For Agency Use
Permit Tracking #: _____

No Exposure Certification for Exclusion from APDES Storm Water Permitting

Submission of this No Exposure Certification constitutes notice that the entity identified in Section I does not require permit authorization for its storm water discharges associated with industrial activity in Alaska identified in Section II under ADEC's Storm Water Multi-Sector General Permit (MSGP) due to the existence of a condition of no exposure.

A condition of no exposure exists at an industrial facility when all industrial materials and activities are protected by a storm resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff. Industrial materials or activities include, but are not limited to, material handling equipment or activities, industrial machinery, raw materials, intermediate products, by-products, final products, or waste products. Material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product, or waste product. A storm resistant shelter is not required for the following industrial materials and activities:

- drums, barrels, tanks, and similar containers that are tightly sealed, provided those containers are not deteriorated and do not leak. "Sealed" means banded or otherwise secured and without operational taps or valves;
- adequately maintained vehicles used in material handling; and
- final products, other than products that would be mobilized in storm water discharges (e.g., rock salt).

A No Exposure Certification must be provided for each facility qualifying for the no exposure exclusion. In addition, the exclusion from APDES permitting is available on a facility-wide basis only, not for individual outfalls. If any industrial activities or materials are or will be exposed to precipitation, the facility is not eligible for the no exposure exclusion.

By signing and submitting this No Exposure Certification form, the entity in Section I is certifying that a condition of no exposure exists at its facility or site, and is obligated to comply with the terms and conditions of 40 CFR 122.26(g), adopted by reference at 18 AAC 83.010(b)(3).

ALL INFORMATION MUST BE PROVIDED ON THIS FORM.

Detailed instructions for completing this form and obtaining the no exposure exclusion are provided on page 3.

Section I. Facility Operator Information

Organization: Contact Person:

Mailing Address:

Street (PO Box):

City: State: Zip:

Phone: Fax (optional): Mobile:

Email:

Section II. Facility Location Information

Facility Name:

Location Address:

Street: Borough or Similar Government Subdivision

City: State: Alaska Zip:

Latitude: Longitude: Determined By:

☐ GPS ☐ USGS Topographic Map

☐ Other:

If you used a USGS Topographic map, what was the scale?

Estimated area of industrial activity at your site exposed to storm water: (acres)

Is this a federal facility? ☐ Yes ☐ No Is this facility located on Indian Lands? ☐ Yes ☐ No

For Agency Use
Permit Tracking #:

Identify the 4-digit Standard Industrial Classification (SIC) code or 2-letter Activity Code that best represents the products produced or services rendered for which your facility is primarily engaged, as define in MSGP:	Primary SIC Code: or Primary Activity Code:

Was the facility or site previously covered under an NPDES or APDES storm water permit? ☐ Yes ☐ No

a. If Yes, enter the NPDES or APDES permit number or tracking number:

Have you paved or roofed over a formerly exposed pervious area in order to qualify for the no exposure exclusion? ☐ Yes ☐ No

If yes, please indicate approximately how much area was paved or roofed over. Completing this question does not disqualify you for the no exposure exclusion. However, your permitting authority may use this information in considering whether storm water discharges from your site are likely to have an adverse impact on water quality, in which case you could be required to obtain permit coverage.

☐ Less than one acre ☐ One to five acres ☐ More than five acres

Section III. Exposure Checklist

Are any of the following materials or activities exposed to precipitation, now or in the foreseeable future? (Please check either "Yes" of "No" in the appropriate box.) **If you answer "Yes" to any of these questions, (1) through (11), you are not eligible for the no exposure exclusion.**	Yes	No
(1) Using, storing, or cleaning industrial machinery or equipment, and areas where residuals from using, storing, or cleaning industrial machinery or equipment remain and are exposed to storm water.	☐	☐
(2) Materials or residuals on the ground or in storm water inlets from spills/leaks.	☐	☐
(3) Materials or products from past industrial activity.	☐	☐
(4) Material handling equipment (except adequately maintained vehicles).	☐	☐
(5) Materials or products during loading/unloading or transporting activities.	☐	☐
(6) Materials or products stored outdoors (except final products intended for outside use [e.g., new cars] where exposure to storm water does not result in the discharge of pollutants).	☐	☐
(7) Materials contained in open, deteriorated, or leaking storage drums, barrels, tanks, and similar containers.	☐	☐
(8) Materials or products handled/stored on roads or railways owned or maintained by the discharger.	☐	☐
(9) Waste material (except waste in covered, non-leaking containers [e.g., dumpsters]).	☐	☐
(10) Application or disposal of process wastewater (unless otherwise permitted).	☐	☐
(11) Particulate matter or visible deposits of residuals from roof stacks and/or vents not otherwise regulated (i.e., under an air quality control permit) and evident in the storm water outflow.	☐	☐

Section VIII. Certification Information

I certify under penalty of law that I have read and understand the eligibility requirements for claiming a condition of "no exposure" and obtaining an exclusion from APDES storm water permitting under DEC Multi-Sector General Permit.

I certify under penalty of law that there are no discharges of storm water contaminated by exposure to industrial activities or materials from the industrial facility or site identified in this document (except as allowed under 40 CFR 122.26(g)(2)).

I understand that I am obligated to submit a no exposure certification form once every five years to the APDES permitting authority and, if requested, to the operator of the local municipal separate storm sewer system (MS4) into which the facility discharges (where applicable). I understand that I must allow the APDES permitting authority, or MS4 operator where the discharge is into the local MS4, to perform inspections to confirm the condition of no exposure and to make such inspection reports publicly available upon request. I understand that I must obtain coverage under an APDES permit prior to any point source discharge of storm water from the facility.

Additionally, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Printed Name of Authorized Official

Title

Signature

Date

Email

For Agency Use
Permit Tracking #: _____

Instructions for the No Exposure Certification for Exclusion from APDES Storm Water Permitting

Who May File a No Exposure Certification

Federal law at 40 CFR Part 122.26, adopted by reference at 18 AAC 83.010(b)(3), prohibits point source discharges of storm water associated with industrial activity to waters of the U.S. without an Alaska Pollutant Discharge Elimination System (APDES) permit. However, APDES permit coverage is not required for discharges of storm water associated with industrial activities identified at 40 CFR 122.26(b)(14)(i)-(ix) and (xi) if the discharger can certify that a condition of "no exposure" exists at the industrial facility or site.

Storm water discharges from construction activities identified in 40 CFR 122.26(b)(14)(x) and (b)(15) are not eligible for the no exposure exclusion.

Obtaining and Maintaining the No Exposure Exclusion

This form is used to certify that a condition of no exposure exists at the industrial facility or site described herein. This certification is only applicable in jurisdictions where DEC is the NPDES permitting authority and must be re-submitted at least once every five years.

The industrial facility operator must maintain a condition of no exposure at its facility or site in order for the no exposure exclusion to remain applicable. If conditions change resulting in the exposure of materials and activities to storm water, the facility operator must obtain coverage under an APDES storm water permit immediately.

Completing the Form

You must type or print in appropriate areas only. One form must be completed for each facility or site for which you are seeking to certify a condition of no exposure. Additional guidance on completing this form can be accessed at DEC's Storm water Program website: http://dec.alaska.gov/water/wnpspc/stormwater/index.htm.

Please make sure you have addressed all applicable questions and have made a photocopy for your records before sending the completed form to this address.

Section I. Facility Operator Information

- Provide the legal name of the person, firm, public organization, or any other entity that operates the facility or site described in this certification. The name of the operator may or may not be the same as the name of the facility. The operator is the legal entity that controls the facility's operation, rather than the plant or site manager.
- Provide the telephone number of the facility operator.
- Provide the email address of the facility operator.
- Provide the mailing address of the operator (P.O. Box numbers may be used). Include the city, state, and zip code. All correspondence will be sent to this address.

Section II. Facility/Site Location Information

- Enter the official or legal name of the facility or site.
- Enter the complete street address (if no street address exists, provide a geographic description [e.g., Intersection of Routes 9 and 55]), city, state, zip code, and borough or similar government subdivision. Do not use a P.O. Box number.
- Indicate whether the facility is located on Indian Lands.
- Indicate whether the industrial facility is operated by a department or agency of the Federal Government (see also Section 313 of the Clean Water Act).
- Enter the latitude and longitude of the approximate center of the facility or site. The latitude and longitude of your facility can be determined in several different ways, including through the use of global positioning system (GPS) receivers, U.S. Geological Survey (U.S.G.S.) topographic or quadrangle maps, among others.
- Indicate whether the facility was previously covered under an NPDES or APDES storm water permit. If so, include the permit number or permit tracking number.
- List the four-digit Standard Industrial Classification (SIC) code and/or two character activity code that best describes the primary industrial activities performed by your facility. Your primary industrial activity includes any activities performed on-site which are:
  - (1) identified by the facility's one SIC code for which the facility is primarily engaged; and
  - (2) included in the narrative descriptions of 40 CFR 122.26(b)(14)(i), (iv), (v), or (vii), and (ix). See Appendix D of the MSGP for a complete list of SIC codes and activities codes.
- Enter the total size of the site associated with industrial activity in acres. Acreage may be determined by dividing square footage by 43,560.
- Check "Yes" or "No" as appropriate to indicate whether you have paved or roofed over a formerly exposed, pervious area (e.g., lawn, meadow, dirt or gravel road/parking lot) in order to qualify for no exposure. If yes, also indicate approximately how much area was paved or roofed over and is now impervious area.

Section III. Exposure Checklist

Check "Yes" or "No" as appropriate to describe the exposure condition at your facility. If you answer "Yes" to **ANY** of the questions, (1) through (11), in this section, a potential for exposure exists at your site and you cannot certify to a condition of no exposure. You must obtain (or already have) coverage under an APDES storm water permit. After obtaining permit coverage, you can institute modifications to eliminate the potential for a discharge of storm water exposed to industrial activity and then certify to a condition of no exposure.

Section IV. Certification Information

The Certification of No Exposure, must be signed as follows:

(1) For a corporation, a responsible corporate officer shall sign the Certification, a responsible corporate officer means:

- (A) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation; or
- (B) the manager of one or more manufacturing, production, or operating facilities, if
  - (i) the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental statutes and regulations;
  - (ii) the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and
  - (iii) authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

(2) For a partnership or sole proprietorship, the general partner or the proprietor, respectively; or

(3) for a municipality, state, or other public agency, either a principal executive officer or ranking elected official shall sign the application; in this subsection, a principal executive officer of an agency means

- (A) the chief executive officer of the agency; or
- (B) a senior executive officer having responsibility for the overall operations of a principal geographic unit or division of the agency.

Include the name, title, and email address of the person signing the form and the date of signing. An unsigned or undated Certification form will not be considered valid exclusion from permit coverage.

Where to File Certification form

Please submit the Certification to DEC as follows:

If you file by mail, please submit the original form with a signature in ink. DEC will not accept a photocopied signature. Remember to retain a copy for your records.

Certifications sent by mail:

Alaska Dept. of Environmental Conservation
Wastewater Discharge Authorization Program
555 Cordova Street
Anchorage, AK 99501
Phone: (907) 269-6285

Alaska Department of Environmental Conservation
Division of Water, Compliance and Enforcement Program
555 Cordova Street
Anchorage, Alaska 99501
Nationwide Toll Free: 1(877) 569-4114 Anchorage/International: (907) 269-4114
Fax: (907) 269-4604 E-mail address: dec-wqreporting@alaska.gov.

NONCOMPLIANCE NOTIFICATION

GENERAL INFORMATION	PERMIT# (if any):	
Owner or Operator:	**Facility Name:**	**Facility Location:**
Person Reporting:	**Phone Numbers of Person Reporting:**	**Reported How? (e.g. by phone):**
Date/Time Event was Noticed:	**Date/Time Reported:**	**Name of DEC Staff Contacted:**

VERBAL NOTIFICATION MUST BE MADE TO ADEC WITHIN 24 HOURS OF DISCOVERY OF NONCOMPLIANCE

INCIDENT DETAILS (attach additional sheets, lab reports, and photos as necessary)

Period of Noncompliance	**Start Date/Time** (exact):	**End Date/Time** (exact):

If noncompliance has not been corrected, provide a statement regarding the anticipated time the noncompliance is expected to continue:

Estimated Quantity involved (volume or weight):

Description of the noncompliance and its cause (be specific):

Actions taken to reduce, eliminate, and prevent reoccurrence of noncompliance and Actual/Potential Impact on Environmental Health (describe in detail) (e.g. Supplied drinking water to nearby well owners and informed well owners not to drink from wells until further notice)

Permit Condition Deviation (Identify each permit condition exceeded during the event.)

Parameter (e.g. BOD pH)	Permit Limit	Exceedance (sample result)	Sample Date

Corrective Actions (Attach a description of corrective actions taken to restore the system to normal operation and to minimize or eliminate chances of recurrence.)

Environmental Damage: (if yes, provide details below) ☐ **Yes** ☐ **No** ☐ **Unknown**

Actual /Potential Impact on Environment/Public Health (describe in detail)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: **Title:** **Signature:** **Date:**

FORMS MUST BE SENT TO ADEC WITHIN FIVE DAYS OF BECOMING AWARE OF THE EVENT.

Alaska Department of Environmental Conservation
Multi-Sector General Permit (MSGP)

Discharge Monitoring Report (DMR)

Part 9.1 requires you to use the electronic NetDMR system to prepare and submit your Discharge Monitoring Report (DMR) form. However, if you are given approval by the DEC (Permitting Program or Compliance and Enforcement Program, see Standard Conditions, Appendix A, Part 1.1 Contact Information and Addresses) to use a paper DMR form, and you elect to use it, you must complete and submit the following form.

Reason(s) for Submission *(Check all that apply)*

- ☐ Submitting monitoring data (fill in all Sections).
- ☐ Reporting no discharge for all outfalls for this monitoring period (fill in Sections I, II, III, IV, and VI).
- ☐ Reporting that your site status has changed to inactive and unstaffed (fill in Sections I, II, VI and include date of status change in comments field in Section V).
- ☐ Reporting that your site status has changed to active (fill in all sections and include date of status change in comments field in Section V).
- ☐ Reporting that no further pollutant reductions are achievable for all outfalls and for all pollutants via Part 7.2.1.4 of the MSGP (fill in Sections I, II, and VI).

Section I. Permit Information

Permit Authorization Number:

Section II. Facility Information

Facility Name:			
Street Location — Street:			
City:		State: Alaska	Zip:

Contact Name:	Organization:	Title:
Phone:	Fax (optional):	Email:

DMR Preparer (Complete if DMR was prepared by someone other than the person signing the certification in Section VI):

Name:	Organization:	Title:
Phone:	Fax (optional):	Email:

Section III. Discharge Information

Identify Monitoring Period:	Check here if proposing alternative monitoring periods due to irregular storm water runoff. Identify alternative monitoring schedule and indicate for which alternative period you are reporting monitoring data.	
☐ Quarter 1 (January 1 – March 31)	Quarter 1: From:	To:
☐ Quarter 2 (April 1 – June 30)	Quarter 2: From:	To:
☐ Quarter 3 (July 1 – September 30)	Quarter 3: From:	To:
☐ Quarter 4 (October 1 – December 31)	Quarter 4: From:	To:

Are you required to monitor for cadmium, copper, chromium, lead, nickel, silver, or zinc? ☐ Yes, ☐ No (Skip to Section IV)
What is the hardness level of the receiving water? _____ mg/L

Section IV. Outfall Information

How many outfalls are identified in your SWPPP? _____ List names of outfalls required to be monitored in the table below.
Do any of your outfalls discharge substantially identifical effluents? ☐ Yes, ☐ No
If YES, for each monitored outfall, indicate outfall names that are substantially identical in the table below.

a. Monitored Outfall Name*	b. Substantially Identical Outfalls [List name(s) of outfall(s) that are substantially identical to outfall in a.]	c. No Discharge?

* Reference attachment if additional space is needed to complete the table.

Section V. Monitoring Information

Permit Tracking Number:

Nature of Discharge: ☐ Rainfall (complete a, b. and c below) ☐ Snowmelt

a. Duration of the rainfall event (hours): _____ b. Rainfall amount (inches): _____ c. Time since previous measurable storm event (days): _____

Outfall Name	Monitoring Type (QBM, ELG, S, I, O)*	Parameter	Quality or Concentration	Units	Results Description	Collection Date	Exceedance due to natural background pollutant levels	No further pollutant reductions achievable?

* (QBM) – Quarterly benchmark monitoring; (ELG) – Annual effluent limitation guidelines monitoring; (S) – State specific monitoring; (I) – Impaired waters monitoring; (O) – Other monitoring as required by DEC

Comment and/or Explanation of any Violations (Reference all attachments here)

Section VI. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Organization:		Name:	Title:
Phone:	Fax (optional):	Email:	
Mailing Address:	Street (PO Box):		
	City:	State:	Zip:

_____ _____

Signature/Responsible Official Date

Instructions for Completing the MSGP Industrial Discharge Monitoring Report (DMR)

Who Must Submit A Discharge Monitoring Report to DEC?

- An operator or owner of a facility covered under the Multi-Sector General Permit (MSGP or permit) that are required to monitor pursuant to Parts 7.2.1, 7.2.2, 7.2.3, and 7.2.4 of the permit must submit the MSGP Discharge Monitoring Report (DMR) consistent with the reporting requirements specified in Part 9.1 of the permit.

Completing the Form

- Type or print, in the appropriate areas only. "NA" can be entered in areas that are not applicable. If you have any questions about how or when to use this form, contact the DEC Storm Water Program at (907) 269-6285 or online at http://dec.alaska.gov/water/wastewater/stormwater/.

Reasons for Submission

- Indicate your reason(s) for submitting this DMR by checking all boxes that apply. The reasons for submission are defined as follows:
- *Submitting monitoring data*: For each storm event sampled, submit one DMR form with data for all outfalls sampled. Select this reason even if you only have monitoring data for some of your outfalls (i.e., some outfalls did not discharge). If you select this reason, you are required to complete all Sections of the form.
- *Reporting no discharge for all outfalls for this monitoring period*: Indicates that there were no discharges from all outfalls during this monitoring period. If you select this reason, you are only required to complete Sections I, II, III, IV, and VI.
- *Reporting that your site status has changed to inactive and unstaffed*: Indicates that your facility is currently inactive and unstaffed (See Part 7.2.1.6 of the permit for more information). If you select this reason, you are only required to complete Sections I, II, and VI and include date of status change in the comment field in Section V.
- *Reporting that your site status has changed from inactive to active*: Indicates that your facility is currently active (See Part 7.2.1.6 of the permit for more information). If you select this reason, you are required to complete all Sections of the form and include date of status change in the comment field in Section V.
- Reporting that no further reductions are achievable for all outfalls and for all effluent monitoring pollutants via Part 7.2.1.4 and Parts 4 of the permit: Indicates that your facility has determined that no further pollutant reductions are technologically available and economically practicable and achievable in light of best industry practice to meet the technology-based effluent limitations or are necessary to meet the water-quality-based effluent limitations in Parts 4 of the permit (See Part7.2.1.4 of the permit for more information). If you select this reason, you are required to complete Sections I, II and VI. However, if you can make this finding for some outfalls and pollutants, but not for others, you cannot select this reason; you will instead be able to identify which outfalls and which pollutants you can make this finding for in Section V.

Section I. Permit Tracking Number

- Enter the APDES tracking number assigned by DEC to the facility. If you do not know the tracking number, you can find the tracking number assigned to your facility on DEC's Water Permit Search http://dec.alaska.gov/Applications/Water/WaterPermitSearch/Search.aspx

Section II. Facility Information

- Enter the facility's official or legal name. Unless the name of your facility has changed, please use the same name provided on your NOI. You can use ADEC's Water Permit Search, http://dec.alaska.gov/Applications/Water/WaterPermitSearch/Search.aspx to view your NOI.
- Enter the street address, including city, state, and zip code of the actual physical location of the facility. Do not use a P.O. Box.
- Identify the name, telephone number, and email address of the person who will serve as a contact for DEC on issues related to monitoring at your facility. This person should be able to answer questions related to stormwater discharges and monitoring or have immediate access to individuals with that knowledge. This person does not have to be the facility operator but should have intimate knowledge of monitoring activities at the facility.
- If the form was prepared by someone other than the person who is signing the certification statement in Section VI (for example, if the DMR was prepared by a member of the facility's storm water pollution prevention team or a consultant for the certifier's signature), include the name, organization, telephone number, and email address of the DMR preparer.

Section III. Discharge Information

- Indicate the appropriate monitoring period (Quarter 1, 2, 3, or 4) covered by the DMR. "Alternative" monitoring periods can apply to facilities located in arid and semi-arid climates or in areas subject to snow or prolonged freezing. To use alternative monitoring periods, you must provide a revised monitoring schedule here in the first monitoring report submitted and indicate for which alternative monitoring period you are reporting monitoring data. If using alternative monitoring periods, identify the first day of the monitoring period through the last day of the monitoring period for each of the four periods. The dates should be displayed as month (Mo) / day (Day). See Part 7.2.1.2 of the permit for more information.
- If you are submitting benchmark monitoring data, identify if your facility is required to collect benchmark samples for one or more hardness-dependent metals (i.e., cadmium, copper, lead, nickel, silver, and zinc). If you select "yes" to this question you must also complete the table in Section III., and if you select "no" to this question, you may skip to Section IV.
- If you selected "yes" for the previous question, then you are required to submit to DEC with your first benchmark report a hardness level established consistent with the procedures in Appendix E of the permit, which is representative of your receiving water. If your outfalls discharge to more than one receiving water, as reported in your NOI form, you should report hardness for the receiving water with the lowest hardness values. Hardness values must be reported in milligrams per liter (mg/L).

Section IV. Outfall Information

- Enter the total number of outfalls identified in your SWPPP. Outfalls are locations where storm water exits the facility, including pipes, ditches, swales, and other structures used to remove storm water from the facility.
- Indicate if your facility has two or more outfalls that you believe discharge substantially identical effluents (i.e., storm water), based on the similarities of the general industrial activities and control measures, exposed materials that may significantly contribute pollutants to storm water, and runoff coefficients of

their drainage areas. See Parts 5.2.6.2 and 6.2.3 of the permit for more information on substantially identical outfalls.

- If you selected "yes" for the previous question, then you must list the outfall name(s) in Column b that you expect to be substantially identical to the corresponding outfall in Column a.
  a. *Monitored Outfall Name:* List name(s) of outfall(s) you are required to monitor.
  b. *Substantially Identical Outfalls:* List name(s) of outfall(s) substantially identical to "*Monitored Outfall*" in Column a. (if applicable)].
  c. *No Discharge:* Check box if you are reporting "No Discharge" for the monitored outfall for the reporting period identified in Section III.

Example:

a. Monitored Outfall Name	b. Substantially Identical Outfall	c. No Discharge
Outfall A	Outfall B, Outfall C	☐
Outfall D		☒

Reference attachments if additional space is needed to complete the table in Section IV.

Section V. Monitoring Information

- Enter the APDES tracking number assigned to the facility reported in Section I.
- For the reported monitoring event, indicate whether the discharge was from a rainfall or snowmelt event. If you select "rainfall", then indicate:
  - the duration (in hours) of the rainfall event;
  - rainfall total (in inches) for that rainfall event; and
  - time (in days) since the previous measurable storm event.
- If the discharge occurs during a period of both rainfall and snowmelt, check both the rainfall and snowmelt boxes and report the appropriate rainfall information in items a-c. To report multiple monitoring events in the same reporting period, copy Page 2 of this Form and enter each monitoring event separately with data for all outfalls sampled.
- For each pollutant monitored at an outfall, you must complete one row in the Table as follows:
  - *Outfall Name*: Provide the outfall name for which you monitored (e.g., Outfall 1, Outfall 2, Outfall 3).
  - *Monitoring Type*: Provide the type of monitoring using the specified codes below:
    - QBM – Quarterly benchmark monitoring;
    - ELG – Annual effluent limitations guidelines monitoring;
    - S – State specific monitoring;
    - I - Impaired waters monitoring; or
    - O – Other monitoring as required by DEC.
- *Parameter(s)*: Enter each "Parameter" (or "pollutant") monitored. For QBM and ELG monitoring, use the same parameter name as in Part 11 of the permit.
- *Quality or Concentration*: Enter sample measurement value for each parameter analyzed and required to be reported. Enter "ND" (i.e., not detected) for any sample results below the method detection limit or "BQL" (i.e., below quantitation limit) for sample results above the detection limit but below the quantitation limit.
- *Units*: Enter the units for sample measurement values (e.g., "mg/L" for milligrams per liter) for each parameter analyzed and required to be reported. For monitoring results reported as ND or BQL, this space will be left blank and the units will be reported under Results Description.
- *Results Description*: This section must be completed for any monitoring results reported as ND or BQL in the "Quality or Concentration" column. For ND, report the laboratory detection level and units in this column. For BQL, report the laboratory quantitation limit and units in this column.
- *Collection Date*: Identify the sampling date for each parameter monitoring result reported on this form.
- *Exceedance due to natural background pollutant levels*: Check box if following the first 4 quarters of benchmark monitoring (or sooner if the exceedance is triggered by less than 4 quarters of data) you have determined that the exceedance of the benchmark is attributable solely to the presence of that pollutant in the natural background for that outfall and any substantially identical outfalls. See Part 7.2.1.5 of the permit for more information. Attach supporting rationale for your determination to the submitted DMR and reference attachment in comments portion of Section V.
- *No further pollutant reductions achievable*: Check box if after collection of 4 quarterly samples (or sooner if the exceedance is triggered by less than 4 quarters of data), the average of the 4 monitoring values for any parameter exceeds the benchmark and you have made the determination that no further pollutant reductions are technologically available and economically practicable and achievable in light of best industry practice to meet the technology-based effluent limitations or are necessary to meet the water-quality-based effluent limitations in Parts 4 of the permit (See Part 7.2.1.4 of the permit for more information) for that outfall and any substantially identical outfalls. Attach supporting rationale for your determination to the submitted DMR and reference attachment in comments portion of Section V.
- Where violations of the permit requirements are reported, include a brief explanation to describe the cause and corrective actions taken and reference each violation by date. Also, this section should include any additional comments such as are required when changing site status from inactive and unstaffed to active or vice versa. Attach additional pages if you need more space.
- Attach additional copies of Section V as necessary to address all outfalls and parameters.

Section VI. Certification

- Enter *Printed Name and Title of Principal Executive Officer or Authorized Agent* with *Signature of Principal Executive Officer or Authorized Agent*, and the *Date* this form was signed and the email address of the "*Principal Executive Officer or Authorized Agent*." If you submit multiple pages of Section V monitoring data, each page must be appropriately signed and certified as described below.

The DMRs must be signed as follows:

(1) For a corporation, a responsible corporate officer shall sign the DMR, a responsible corporate officer means:
  (A) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation; or
  (B) the manager of one or more manufacturing, production, or operating facilities, if
    (i) the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental statutes and regulations;

(ii) the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and
(iii) authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

(2) For a partnership or sole proprietorship, the general partner or the proprietor, respectively; or
(3) for a municipality, state, or other public agency, either a principal executive officer or ranking elected official shall sign the application; in this subsection, a principal executive officer of an agency means
(A) the chief executive officer of the agency; or
(B) a senior executive officer having responsibility for the overall operations of a principal geographic unit or division of the agency.

- Include the name, title, and email address of the person signing the form and the date of signing. An unsigned or undated DMR will not be considered valid.

Where to File the DMR Form

- Monitoring data collected pursuant to Part 7.2 of the permit must be reported on the paper DMR form and sent to the following address:
- If you file by mail, remember to retain a copy for your records.
  - DMRs sent by mail:
    Alaska Dept. of Environmental Conservation
    Wastewater Discharge Authorization Program
    Office of Compliance
    555 Cordova Street
    Anchorage, AK 99501
    Phone: (907) 269-6285
    dec-wqreporting@alaska.gov

Appendix D:
NOI and Acknowledgement

Appendix E:
Corrective Action Log

Corrective Action Documentation

Instructions:

Within 24 hours of becoming aware of a condition identified in Parts 4.1 or 4.2 of the 2015 MSGP, document the existence of the condition and subsequent actions. Note that this information must be summarized in the annual report (as required in Part 7.5 of the 2015 MSGP).

Description of Condition:

For Spills and Leaks:

Description of Incident:

Material:

Date/Time:

Amount:

Location:

Reason for Spill:

Discharge to Waters of U.S.:

Date:

Immediate Actions:

Actions Taken within 14 Days:

14 Day Infeasibility:

45 Day Extension:

Appendix F:
Employee Training Log

Employee Training

Instructions:

- Keep records of employee training, including the date of the training (see Parts 2.1.2.8 and 5.2.5.1 of the 2015 MSGP).
- For in-person training, consider using the tables below to document your employee trainings. For computer-based or other types of training, keep similar records on who was trained, the training date, and the type of training conducted.

Training Date:	
Training Description:	
Trainer:	
Employee(s) trained	Employee signature

Appendix G:

Stormwater Industrial Routine Facility Inspection Report

Stormwater Industrial Routine Facility Inspection Report

General Information			
Facility Name			
NPDES Tracking No.			
Date of Inspection		**Start/End Time**	
Inspector's Name(s)			
Inspector's Title(s)			
Inspector's Contact Information			
Inspector's Qualifications			

Weather Information
Weather at time of this inspection? ❑ Clear ❑Cloudy ❑ Rain ❑ Sleet ❑ Fog ❑ Snow ❑ High Winds ❑ Other: Temperature:
Have any previously unidentified discharges of pollutants occurred since the last inspection? ❑Yes ❑No **If yes, describe:**
Are there any discharges occurring at the time of inspection? ❑Yes ❑No **If yes, describe:**

Control Measures

- *Number the structural stormwater control measures identified in your SWPPP on your site map and list them below (add as many control measures as are implemented on-site). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required control measures at your facility.*
- *Identify if maintenance or corrective action is needed.*
  - *If maintenance is needed, fill out section B of this template*
  - *If corrective action is needed, fill out section G of this template*

	Structural Control Measure	Control Measure is Operating Effectively?	If No, In Need of Maintenance, Repair, or Replacement?	Maintenance or Corrective Action Needed and Notes
1		❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
2		❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	

	Structural Control Measure	Control Measure is Operating Effectively?	If No, In Need of Maintenance, Repair, or Replacement?	Maintenance or Corrective Action Needed and Notes
3		❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
4		❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
5		❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
6		❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
7		❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
8		❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
9		❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
10		❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	

Areas of Industrial Materials or Activities Exposed to Stormwater

Below are some general areas that should be assessed during routine inspections. Customize this list as needed for the specific types of industrial materials or activities at your facility that are potential pollutant sources. Identify if maintenance or corrective action is needed. If maintenance is needed, fill out section B of this template. If corrective action is needed, fill out section G of this template.

	Area/Activity	Inspected?	Controls Adequate (appropriate, effective and operating)?	Maintenance or Corrective Action Needed and Notes
1	**Material loading/unloading and storage areas**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
2	**Equipment operations and maintenance areas**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
3	**Fueling areas**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
4	**Outdoor vehicle and equipment washing areas**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
5	**Waste handling and disposal areas**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
6	**Erodible areas/construction**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
7	**Non-stormwater/ illicit connections**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
8	**Salt storage piles or pile containing salt**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
9	**Dust generation and vehicle tracking**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
10	**Processing areas**	❑Yes ❑No ❑ N/A	❑Yes ❑No	

11	**Areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
12	**Immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
13	**(Other)**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
14	**(Other)**	❑Yes ❑No ❑ N/A	❑Yes ❑No	

Discharge Points

At discharge points, describe any evidence of, or the potential for, pollutants entering the drainage system. Also describe observations regarding the physical condition of and around all outfalls, including any flow dissipation devices, and evidence of pollutants in discharges and/or the receiving water. Identify if any corrective action is needed.

Non-Compliance

Describe any incidents of non-compliance observed and not described above:

Additional Control Measures

Describe any additional control measures needed to comply with the permit requirements:

Notes

Use this space for any additional notes or observations from the inspection:

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Print name and title: _____

Signature: _____**Date:**_____

Appendix H:
Quarterly Visual Assessment Reports

MSGP Quarterly Visual Assessment Form

(Complete a separate form for each outfall you assess)

Name of Facility: NPDES Tracking No.

Outfall Name: "Substantially Identical Discharge Point"? ☐ Yes ☐ No

Person(s)/Title(s) collecting sample:

Person(s)/Title(s) examining sample:

Date & Time Discharge Began: Date & Time Sample Collected: Date & Time Sample Examined:

Substitute Sample? ☐ No ☐ Yes

Nature of Discharge: ☐ Rainfall ☐ Snowmelt

If rainfall: Rainfall Amount: _ Previous Storm Ended > 72 hours Before Start of This Storm? ☐ Yes ☐ No*

Pollutants Observed

Color ☐ None ☐ Other (describe): _____

Odor ☐ None ☐ Musty ☐ Sewage ☐ Sulfur ☐ Sour ☐ Petroleum/Gas ☐ Solvents ☐ Other (describe): _____

Clarity ☐ Clear ☐ Slightly Cloudy ☐ Cloudy ☐ Opaque ☐ Other

Floating Solids ☐ No ☐ Yes (describe): _____

Settled Solids** ☐ No ☐ Yes (describe): _____

Suspended Solids ☐ No ☐ Yes (describe): _____

Foam (gently shake sample) ☐ No ☐ Yes (describe): _____

Oil Sheen ☐ None ☐ Flecks ☐ Globs ☐ Sheen ☐ Slick ☐ Other (describe): _____

Other Obvious Indicators of Stormwater Pollution ☐ No ☐ Yes (describe): _____

* The 72-hour interval can be waived when the previous storm did not yield a measurable discharge or if you are able to document (attach applicable documentation) that less than a 72-hour interval is representative of local storm events during the sampling period.

** Observe for settled solids after allowing the sample to sit for approximately one-half hour.

Identify probably sources of any observed stormwater contamination. Also, include any additional comments, descriptions of pictures taken, and any corrective actions necessary below (attach additional sheets as necessary).

Certification Statement (Refer to MSGP Subpart 11 Appendix B for Signatory Requirements)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. Name: B. Title:

C. Signature: D. Date Signed:

Appendix I:
eNOI Instructions

Storm Water Multi-Sector General Permit eNOI

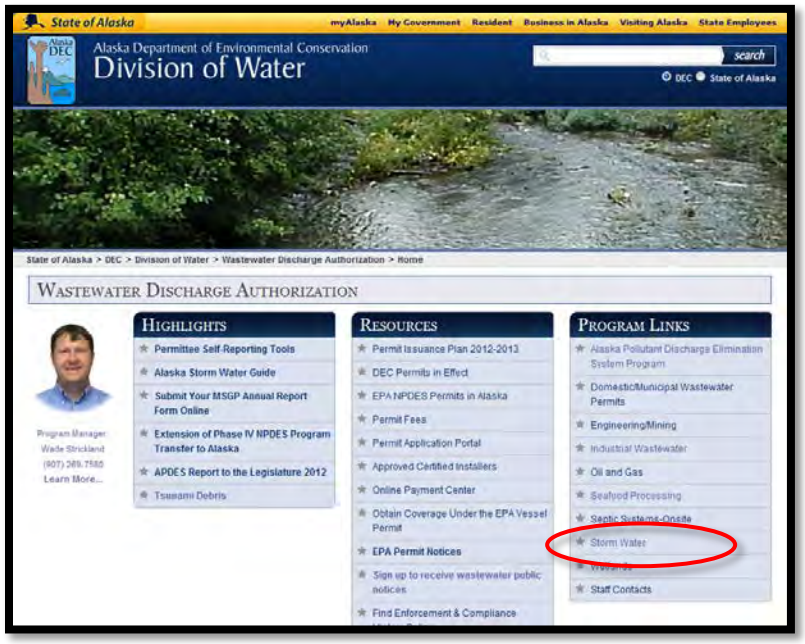
Step-by-Step Guide

The Multi-Sector General Permit (MSGP) Notice of Intent (NOI) can now be filled out using the Division of Water's Online Application System. This document will guide you through this online process.

2015 Multi-Sector General Permit eNOI

1 Go to the Division of Water's Wastewater Discharge Authorization home page at:
http://www.dec.state.ak.us/water/wwdp/index.htm

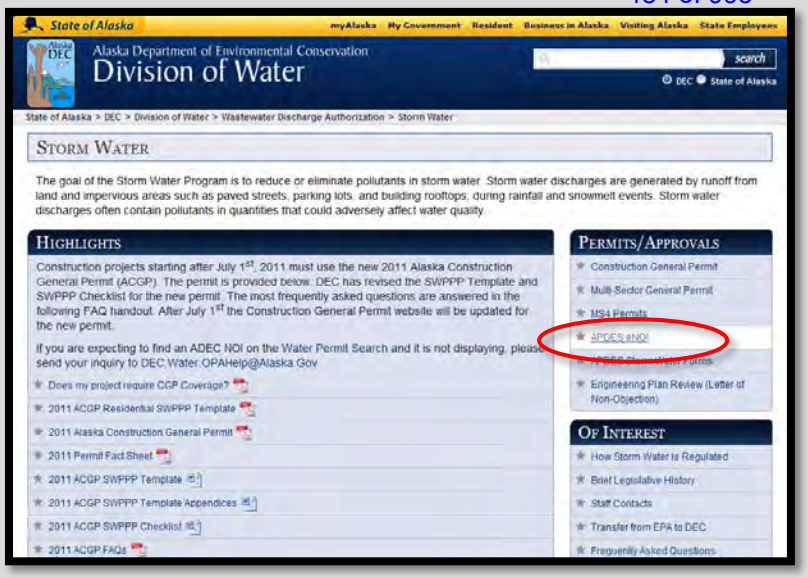
Select the "**Storm Water"** link under **Program Links**.



2

The Storm Water home page contains links to the Multi-Sector General Permit, APDES Storm Water Forms and many other resources for permittees.

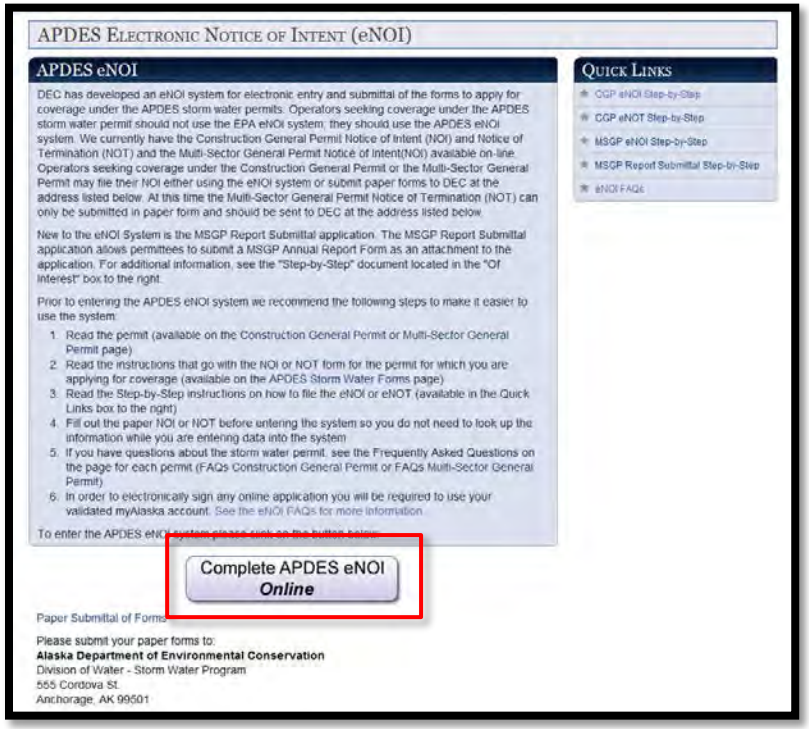
When you are ready to begin the online eNOI application process, click on the **"APDES eNOI"** link under **Permits/Approvals**.



3

On the next page, click the **"Complete APDES eNOI Online"** button.

Storm Water eNOI System FAQs are available at: http://dec.alaska.gov/water/wnpspc/pdfs/eNOIFAQs.pdf

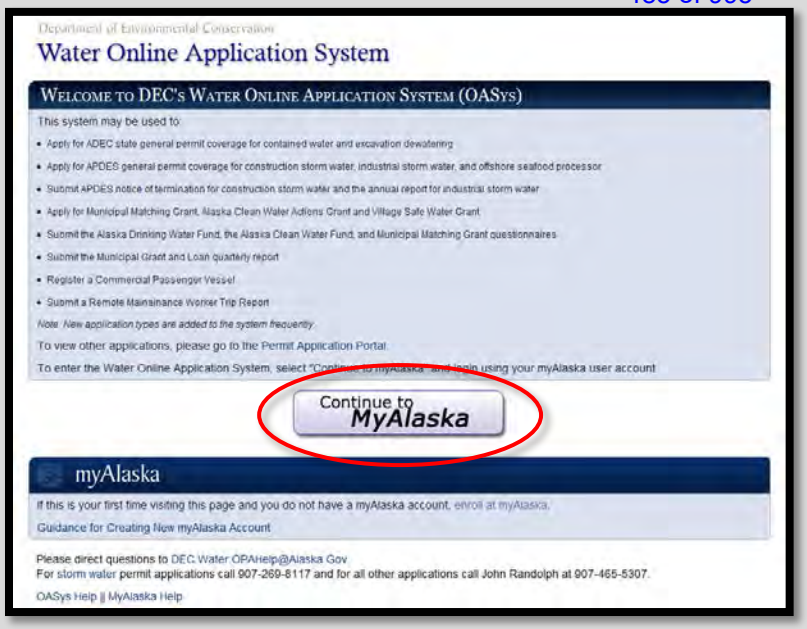


4

Welcome to the **Water Online Application System** (OASys)! From the OASys home page, you can continue to your application by clicking the **"Continue to MyAlaska"** button.

TIP: OASys requires an active myAlaska account. If you do not have a myAlaska account skip to step 6 below.

NOTE: If you have used a **myAlaska** account to apply for and e-sign a PDF then you already have an active myAlaska account.



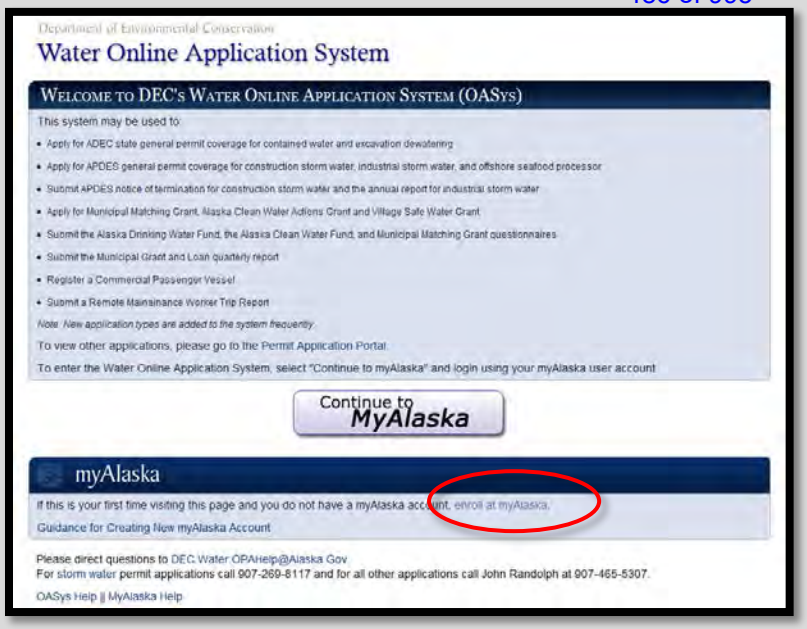
5

Log in to your myAlaska account and skip to step 7 in this guidance.

6 If you don't have a myAlaska account, select the **"enroll at myAlaska"** link. You only need to create a myAlaska account once.

Guidance for creating a new myAlaska account is available at:

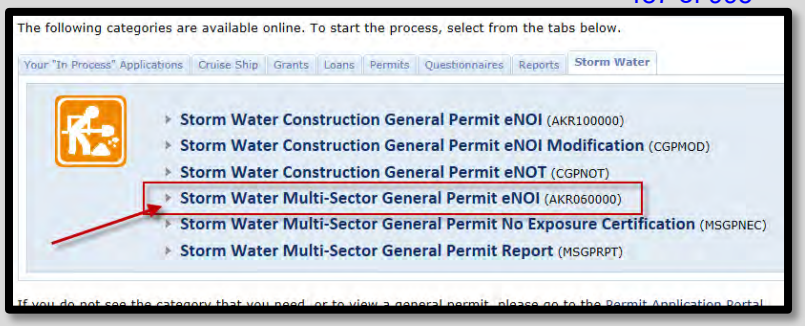
http://dec.alaska.gov/water/OASysHelp/attachments/myAK_Reg_guidance.pdf



7 After successfully logging in to myAlaska, you will arrive at the Water Online Application system.

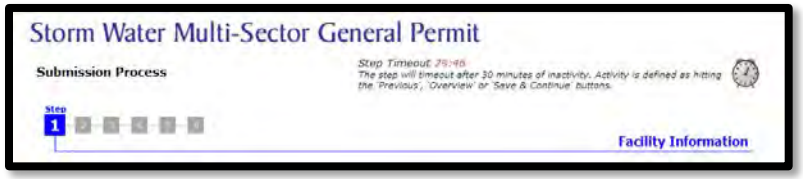
Select the "**Storm Water**" tab.

8 Select the "**Storm Water Multi-Sector General Permit eNOI"** from the available categories.

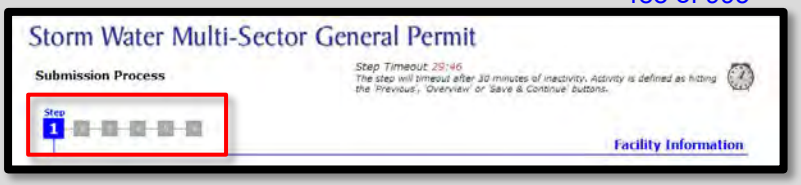


9 A series of steps will take you through the application, asking for information pertinent to your project.
Fill out the information on these pages as completely and thoroughly as possible.

(Below you will find a few "Tips" that provide additional information regarding navigation of these steps.)



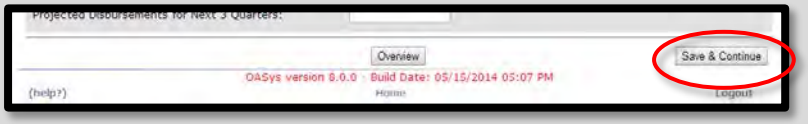
The step numbers at the top of the page can be used to navigate directly to pages that have already been completed.



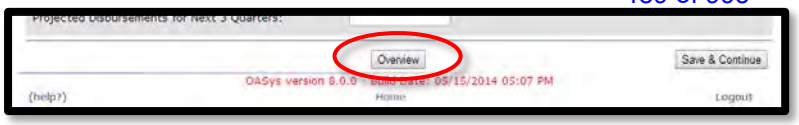
10 Any question with a red star (*) next to it is required and must be completed before the current step can be completed.

11 When finished with a step, go to the next page by selecting the "**Save & Continue"** button in the lower right corner of the page.

NOTE: At any time, you can logout, and your information will be saved, however changes to the current page are not saved until you hit **"Save & Continue"**.



12 At any time, you can also select the **"Overview"** button at the bottom of any page to go to the overview step (**last step**). This step allows you to review your information and to edit previously entered information.

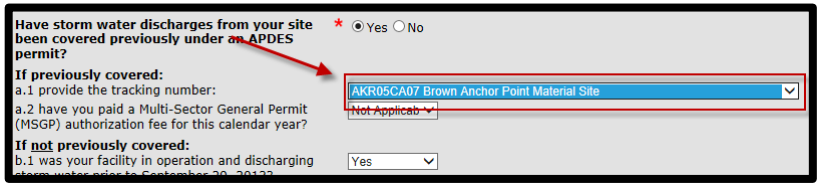


13 For **Step 1** of the application process carefully read the information provided on this page and answer all questions as required. then click **"Save & Continue"** to continue to the next step.

14

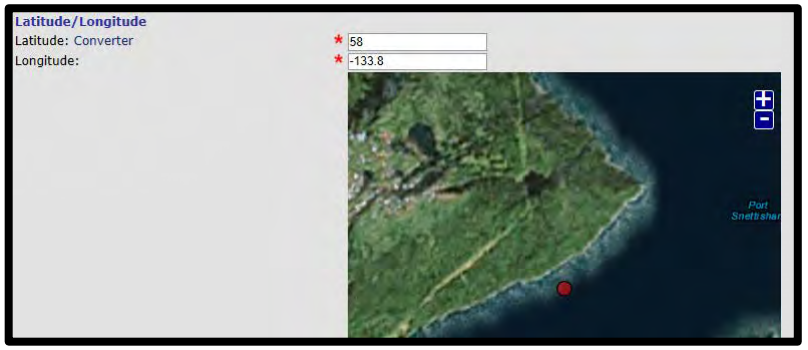
Highlighted Feature #1:

Step 1 contains a question regarding previous coverage. If your site was previously covered, you can select the tracking number from a list of valid MSGP authorizations in our database.



Highlighted Feature #2:

Step 1 contains a map that will display the location of the latitude and longitude you enter. This is for <u>display purposes only.</u> Note that you cannot move the red dot to update the latitude and longitude values.

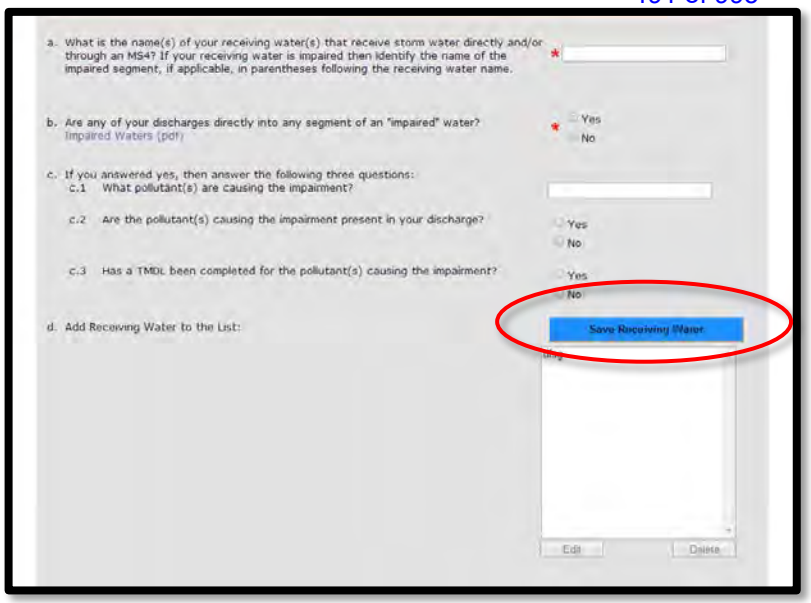


15

Step 2 collects information regarding your storm water discharge. Answer all questions as required then click **"Save & Continue"** to continue to the next step.

16

Step 3 collects information regarding the receiving waters into which storm water from your facility will discharge.



For each receiving water, complete the required questions "a." and "b." and if applicable, questions in part "c." and then click the blue **"Save Receiving Water"** button.

Once all receiving waters have been entered, click **"Save & Continue"** to continue to the next step.

17

Step 4 requires you to enter contact information for the Facility Operator, SWPPP Contact, NOI Preparer, Billing Contact and **NOI Certifier**. All contacts that are marked as required MUST have a contact that fulfills that role.

Click the "**Add"** button to access the Contact Details window. You must enter contact information for all required persons before continuing.

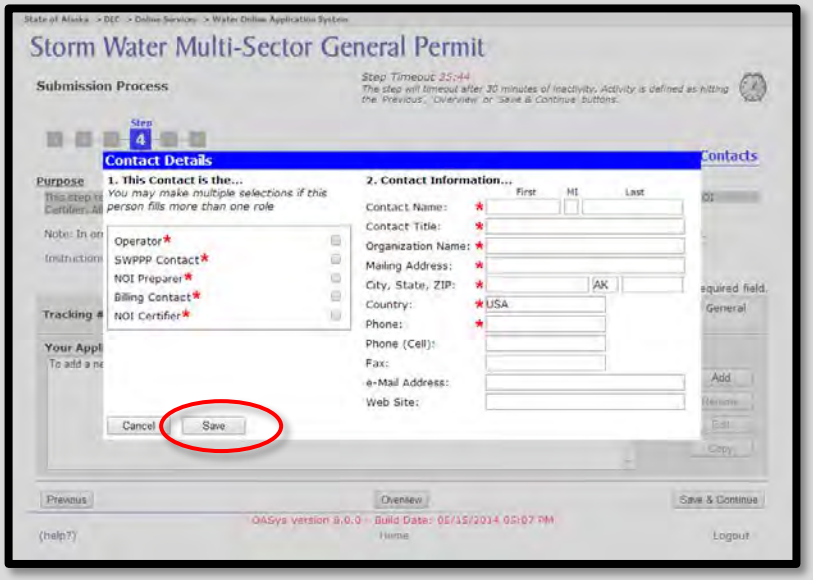
In the Contact Details pop out window answer all required fields and click the **"Save"** button.

Once completed, click **"Save & Continue"** to move to the next step.

TIP: You may enter multiple contacts and a single contact may fulfill multiple roles. Simply check all applicable roles for each contact.

IMPORTANT: The **NOI Certifier** must have the signing authority as required by 18 AAC 83.385 to sign the eNOI.

http://dec.alaska.gov/commish/regulations/pdfs/18%20AAC%2083.pdf#page=71



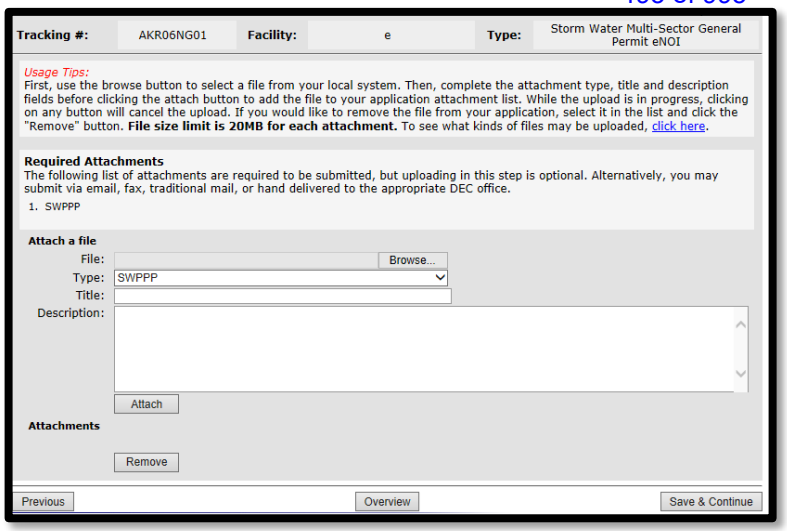
18

Step 5 allows you to electronically submit any supporting documents. If you don't supply the required documents here, you will need to send them in later.

To attach a file:

- Click the **"Browse…"** button
- A file browser window will open. Select the file you want to upload then click the Open button. The name of the file you selected will appear next to the "Browse…" button.
- Select what kind of file it is from the drop-down menu and add a title and description.
- Click **"Attach"** when you have all the information completed to submit your document.

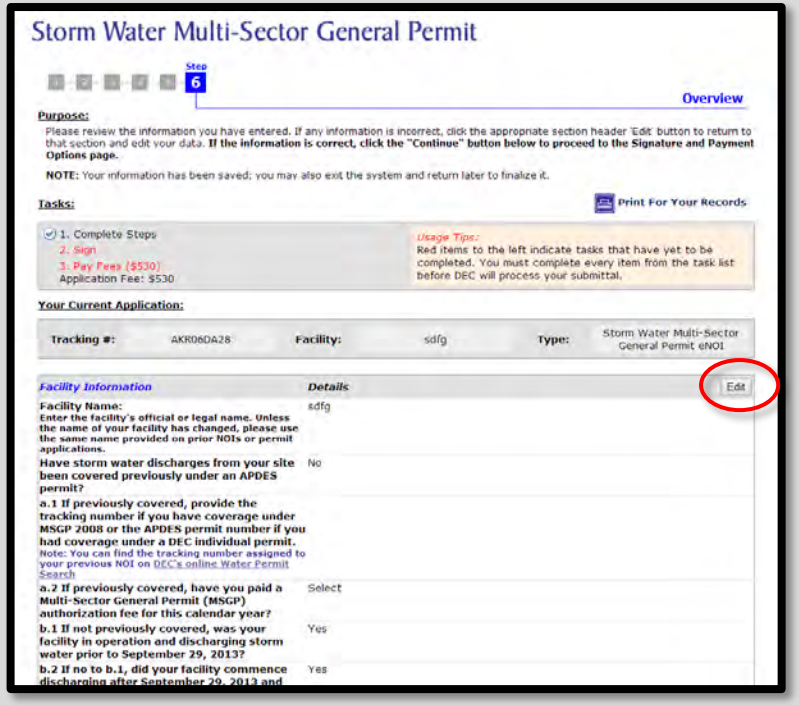
Click **"Save & Continue"** to continue to the next step.



19

Step 6 is the overview page. Here you can review all the information you have entered and make sure it is correct. You can use the **"Edit"** button for any given section to go back and make any necessary adjustments.

Any fields you have left blank will be highlighted yellow, so you can go back and edit them if you need to.

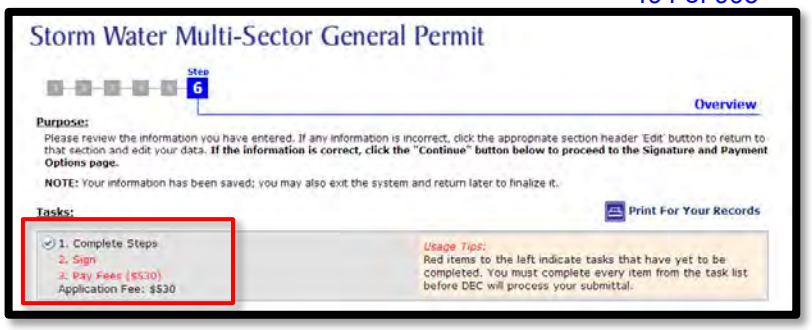


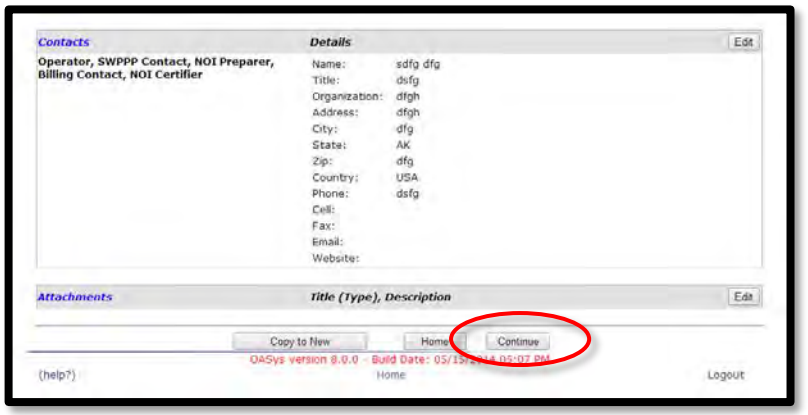
20

After all information is entered and you have finished adding all online attachments, you will need to sign and submit your application.

A check will appear next to **"Complete Steps"** if the application is complete and ready to be signed.

To go the **Final Steps** page, select the **"Sign"** link under tasks on the Application Overview page. You can also click on the **"Continue"** button at the bottom of the page.



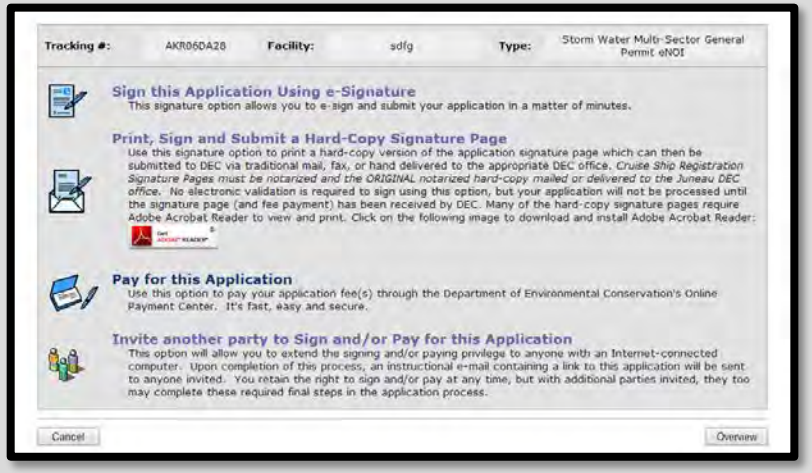


21

The **"Final Steps"** page presents the options for signing and paying for your application.

To sign your application, you may:

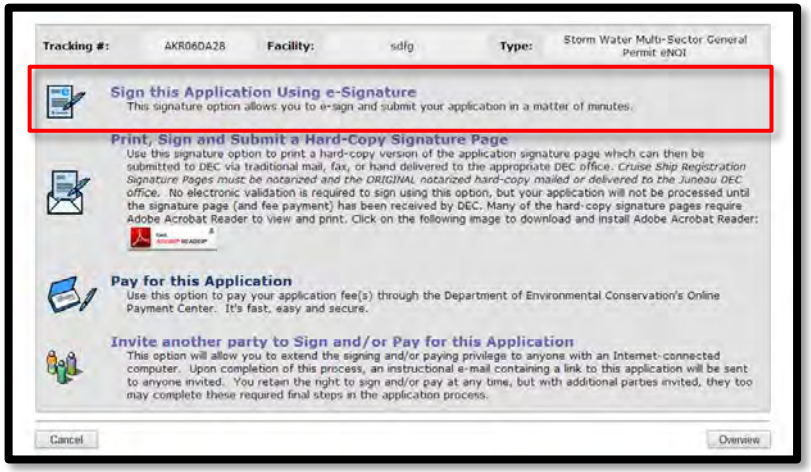
- Sign using an e-Signature
  (Continue to the step 19 of this guide)
- Print and sign a hard-copy
  (Skip to step 22 of this guide)
- Invite another party to sign your application
  (Skip to step 28 of this guide)



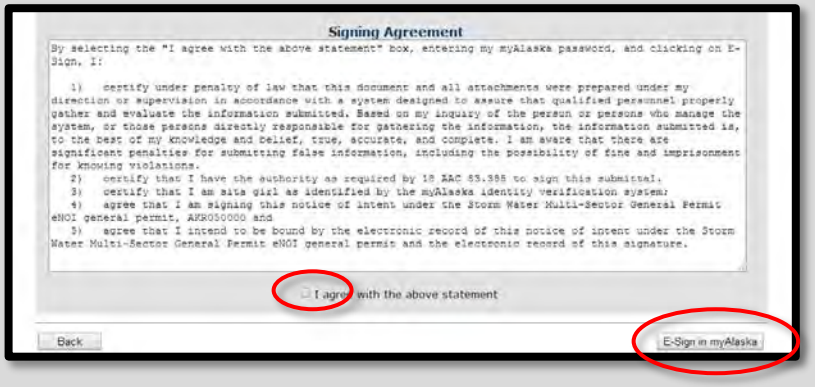
To pay for your application, you may either:

- Pay by credit card or electronic funds transfer
  (Skip to step 24 of this guide)
- Invite another party to pay for your application
  (Skip to step 27 of this guide)

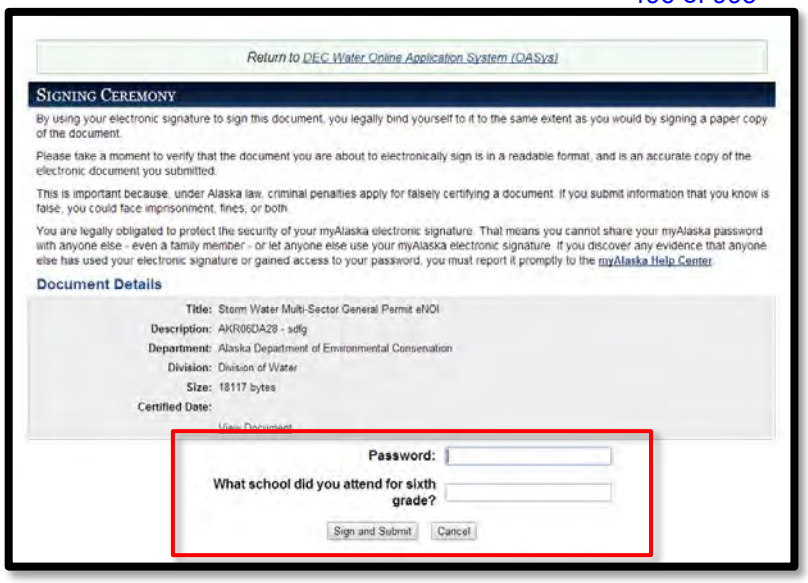
22 Select **"Sign this Application Using e-Signature"** if you are already approved to electronically sign an application.



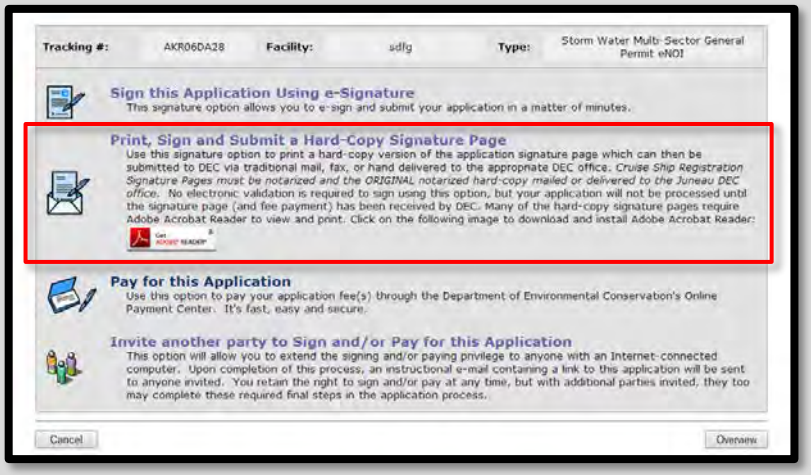
23 Check the box indicating that you agree with the Signing Agreement. To complete the signing process, click on the **"E-Sign in myAlaska"** button to continue to the Signing Ceremony.



24 To complete the signature process enter your myAlaska password, answer the secret question and click the **"Sign & Submit"** button to submit your signature.
(Skip to step 25 of this guidance)

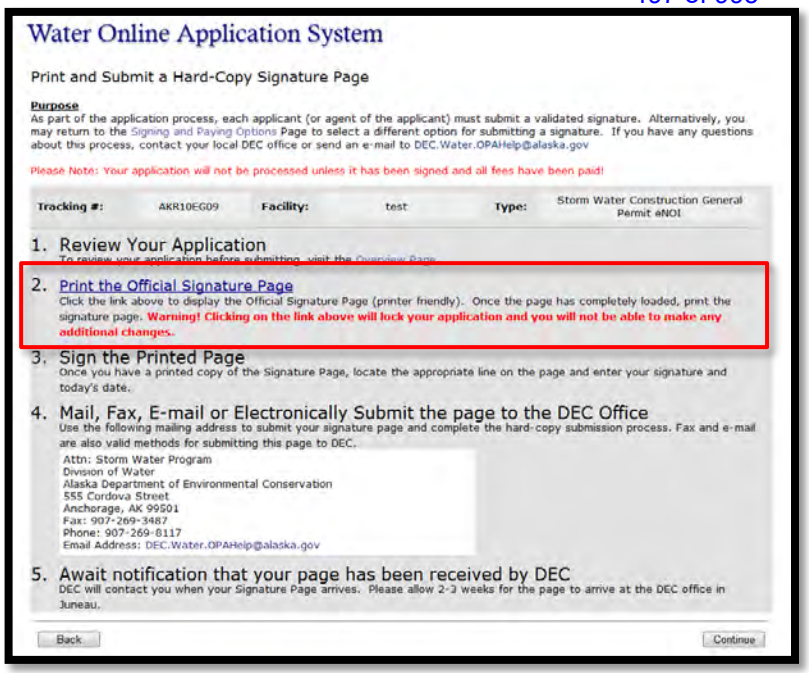


25 To print a hard-copy signature page, select **"Print, Sign and Submit a Hard-Copy Signature Page"**.



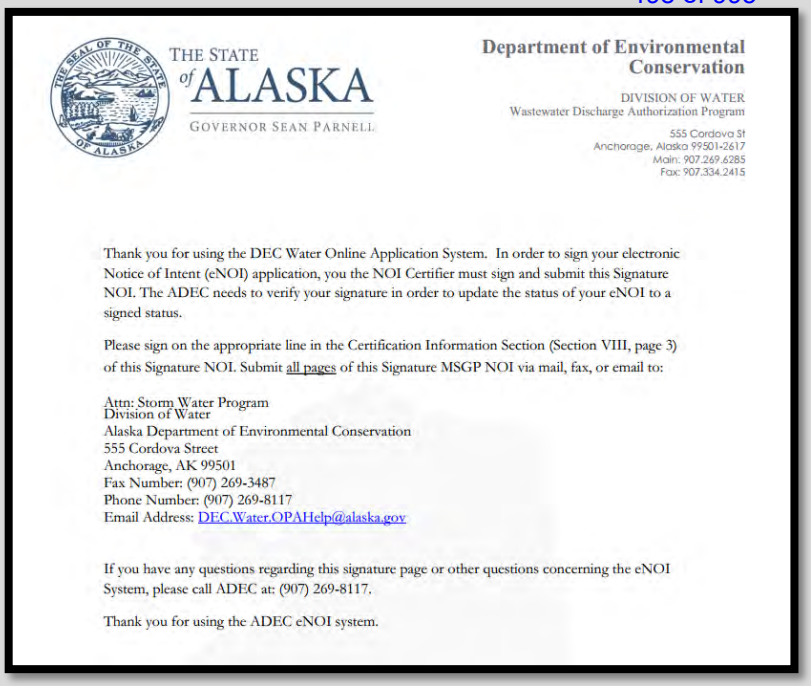
26 Carefully read the steps to submitting your application on this page. Click the **"Print the Official Signature Page"** link to access your printable signature page.

WARNING: Printing your official signature page will lock your application and you will not be able to make any additional changes.



27 When your document has finished downloading print it, sign it on the appropriate line and send it to the address provided in the Signature NOI:

Attn: Storm Water Program
Division of Water
Alaska Dept. of Environmental Conservation
555 Cordova Street
Anchorage, AK 99501



THE STATE of ALASKA
GOVERNOR SEAN PARNELL

Department of Environmental Conservation

DIVISION OF WATER
Wastewater Discharge Authorization Program

555 Cordova St
Anchorage, Alaska 99501-2617
Main: 907.269.6285
Fax: 907.334.2415

Thank you for using the DEC Water Online Application System. In order to sign your electronic Notice of Intent (eNOI) application, you the NOI Certifier must sign and submit this Signature NOI. The ADEC needs to verify your signature in order to update the status of your eNOI to a signed status.

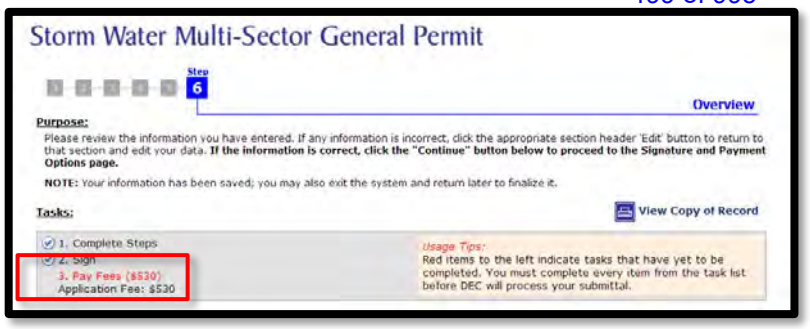
Please sign on the appropriate line in the Certification Information Section (Section VIII, page 3) of this Signature NOI. Submit all pages of this Signature MSGP NOI via mail, fax, or email to:

Attn: Storm Water Program
Division of Water
Alaska Department of Environmental Conservation
555 Cordova Street
Anchorage, AK 99501
Fax Number: (907) 269-3487
Phone Number: (907) 269-8117
Email Address: DEC.Water.OPAHelp@alaska.gov

If you have any questions regarding this signature page or other questions concerning the eNOI System, please call ADEC at: (907) 269-8117.

Thank you for using the ADEC eNOI system.

28 To pay for your application, on the Overview page click the **"Pay Fees ($530)"** link.



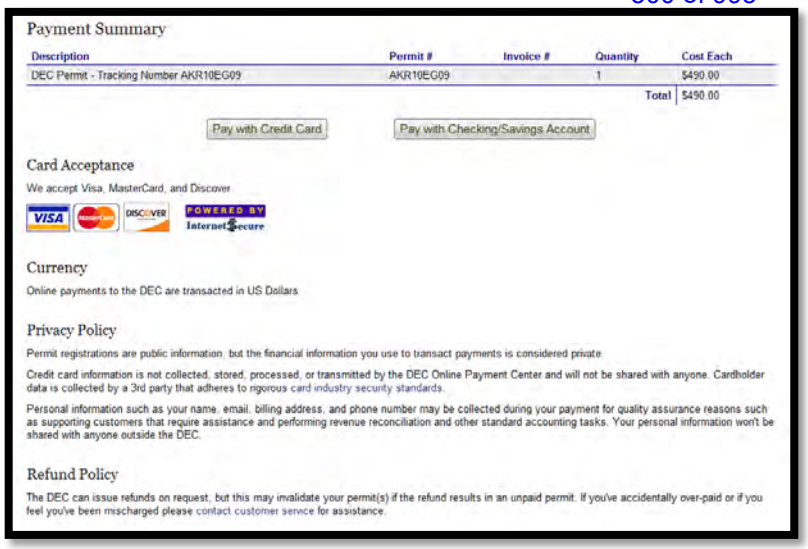
29 Select **"Pay for this Application."**

(If you will be inviting another party to pay for this application skip to step 28 of this guidance.)

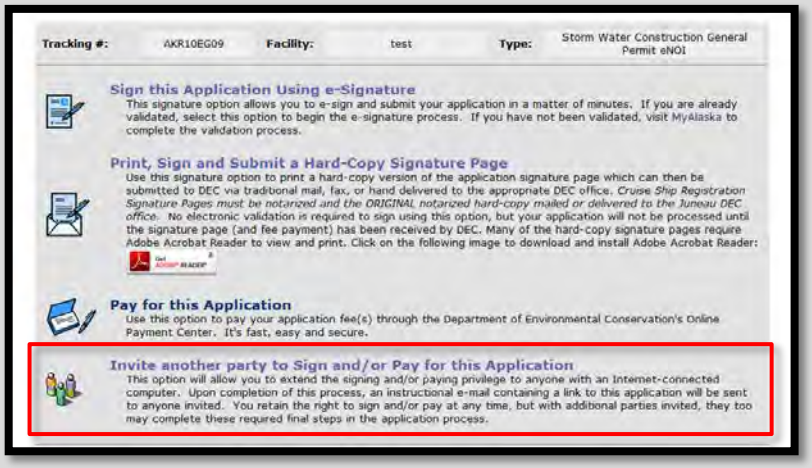
30 You will be taken to the **Payment Summary** page. From here, you can choose to pay via credit card or an electronic funds transfer from a checking or savings bank account.

Follow the on-screen instructions, you will be taken back to your application.

(Skip to step 33 of this guidance.)



31 If you require another party to sign or pay for your application, select the "**Invite another party to Sign and/or Pay for this Application**" and proceed to the next step of this guide.



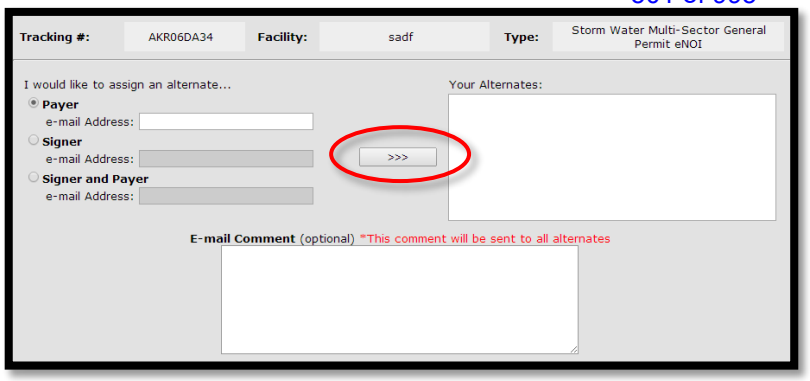
32

Depending on whether you are inviting another party to sign, pay, or both, select from the available options: **Payer, Signer,** or **Signer and Payer**. Then enter the email of your alternative signer/payer into the input field and click the >>> button to add that contact to the e-mail list.

TIP: You can enter multiple emails in this step. Simply enter each additional contact as described above, pressing the >>> button after each contact.

Click the "**Continue**" button and an email will be sent to each of your invited alternates.

WARNING: You must click the >>> button to add the e-mail to the displayed list of alternates before clicking the "Continue" button or else they won't receive an e-mail.



33

An instructional email containing a link to this application is sent to each alternate signer/payer allowing them to complete the final steps in the application process.

NOTE: The alternate signer will need to have a myAlaska account.

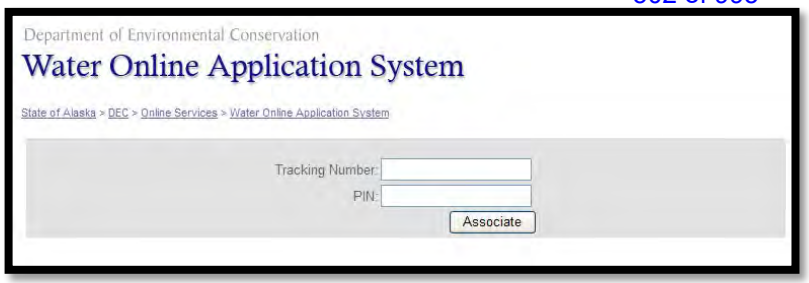

Storm Water Multi-Sector General Permit

sita d girl (salome.starbuck@alaska.gov) has identified you as the person responsible to sign and pay for application number 'AKR06DA34' for the facility: 'sadf'.
This application is for a discharge under the Storm Water Multi-Sector General Permit eNOI AKR06.

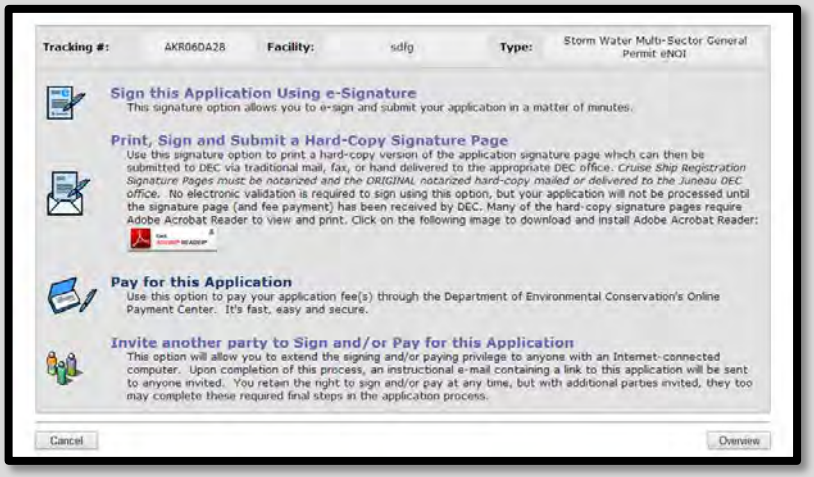
In order to access this application, you will need the following Tracking Number and PIN:
Tracking Number: AKR06DA34
Pin: 3582

To continue, please visit the Water Online Application (https://test.dec.alaska.gov/applications/water/osys/Associate.aspx) site.
Please direct questions to DEC.Water.OPAHelp@alaska.gov.
For storm water applications call 907-269-8117 and for all other applications call John Randolph at 907-465-5407.

34 After clicking on the link provided in the email, the alternate signer/payer will login to OASys and enter the Tracking Number and PIN which are also provided in the email.



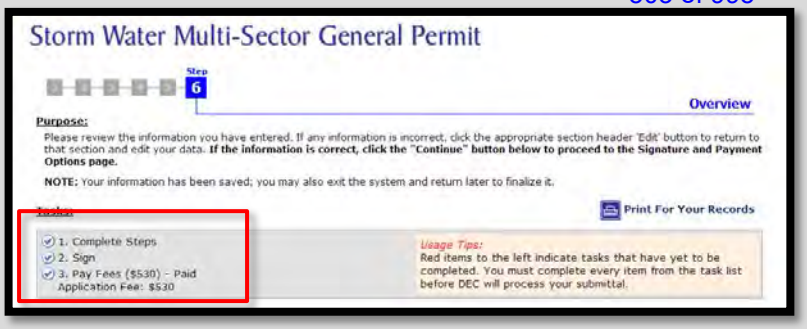
35 The alternate signer will be taken to the **"Final Steps"** page, giving them the opportunity to e-sign (if validated) or print, sign and submit a hard-copy signature page.



36 After your application has been signed or paid, you will receive an email certifying that your application was signed or paid and another after being both signed and paid that your application was successfully submitted.

If you submitted a hard-copy signature page, it may take a few days to process.

37 If you choose to return to the application in the Water Online Application System, the Application Overview will display all tasks completed.



38 **Highlighted Feature:**
The **"Copy to New"** button allows you to create a new questionnaire of the same type that pre-populates with information from a previous questionnaire.

To copy previously submitted information, open your original submittal and select **"Copy to New"** at the bottom of the questionnaire overview page.

For assistance with the online process, please contact the Division of Water at 907-465-5180 or email DEC.Water.OPAHelp@alaska.gov

DEPARTMENT OF THE ARMY
ALASKA DISTRICT, U.S. ARMY CORPS OF ENGINEERS
REGULATORY DIVISION
P.O. BOX 6898
JBER, AK 99506-0898

June 21, 2024

Regulatory Division
POA-2024-00081

Dan Steiner
SDCS, LLC
5900 W. Dewberry Dr.
Wasilla, AK 99623

Dear Mr. Steiner:

This is in response to your letter requesting a Department of the Army (DA) Jurisdictional Determination (JD) for an area in the parcel of land located within Section 27, T. 18 N., R. 1 E., Seward Meridian; Latitude 61.61605° N., Longitude 149.24436° W.; Matanuska-Susitna Borough, Lot D1; 3182 N Trunk Rd., in Palmer, Alaska.

Based on our review of information available to our office and the information you provided, we have determined that the subject parcel contains wetlands that are not a water of the U.S., under the U.S. Army Corps of Engineers (Corps) regulatory jurisdiction. The wetlands on your property are isolated, intrastate, non-navigable, and have no connection to interstate or foreign commerce. Therefore, pursuant to the federal guidance on the Solid Waste Agency of Northern Cook County versus U.S. Army Corps of Engineers consistent with Sackett, a DA permit is not required for any activities that may occur in the review area.

A copy of the Approved Jurisdictional Determination (AJD) form is available at: https://www.poa.usace.army.mil/Missions/Regulatory/Jurisdictional-Determinations/Issued-Approved-Jurisdictional-Determinations/ under June 2024, under your file number. It is also enclosed for your records.

This AJD does not establish any precedent with respect to any other JD under Section 404 of the Clean Water Act.

The wetlands on your parcel were reviewed pursuant to Section 404 of the Clean Water Act which requires that a DA permit be obtained for the placement or discharge of dredged and/or fill material into waters of the U.S., including wetlands, prior to conducting the work (33 U.S.C. 1344).

For regulatory purposes, the Corps defines wetlands as those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

This AJD is valid for a period of five (5) years from the date listed on the AJD form, unless new information supporting a revision is provided to us before the expiration date. Also enclosed is a Notification of Administrative Appeals Options and Process and Request for Appeal form regarding this AJD (see section labeled "Approved Jurisdictional Determination").

Nothing in this letter excuses you from compliance with other federal, state, or local statutes, ordinances, or regulations.

Please contact me via email at Emily.N.Vullo@usace.army.mil, by mail at the address above, by phone at (907) 753-2704, or toll free from within Alaska at (800) 478-2712, if you have questions. For more information about the Regulatory Program, please visit our website at www.poa.usace.army.mil/Missions/Regulatory.

Sincerely,

Emily Vullo

Emily Vullo
Project Manager

Enclosures

DEPARTMENT OF THE ARMY
ALASKA DISTRICT, U.S. ARMY CORPS OF ENGINEERS
REGULATORY DIVISION
P.O. BOX 6898
JBER, AK 99506-0898

CEPOA-RDS-SS

29 May 2024

MEMORANDUM FOR RECORD

SUBJECT: US Army Corps of Engineers (Corps) Pre-2015 Regulatory Regime Approved Jurisdictional Determination in Light of *Sackett v. EPA*, 143 S. Ct. 1322 (2023) ,[1] POA-2024-00081, MFR 2 of 2[2]

BACKGROUND. An Approved Jurisdictional Determination (AJD) is a Corps document stating the presence or absence of waters of the United States on a parcel or a written statement and map identifying the limits of waters of the United States on a parcel. AJDs are clearly designated appealable actions and will include a basis of JD with the document.[3] AJDs are case-specific and are typically made in response to a request. AJDs are valid for a period of five years unless new information warrants revision of the determination before the expiration date or a District Engineer has identified, after public notice and comment, that specific geographic areas with rapidly changing environmental conditions merit re-verification on a more frequent basis.[4] For the purposes of this AJD, we have relied on section 10 of the Rivers and Harbors Act of 1899 (RHA),[5] the Clean Water Act (CWA) implementing regulations published by the Department of the Army in 1986 and amended in 1993 (references 2.a. and 2.b. respectively), the 2008 *Rapanos-Carabell* guidance (reference 2.c.), and other applicable guidance, relevant case law and longstanding practice, (collectively the pre-2015 regulatory regime), and the *Sackett* decision (reference 2.d.) in evaluating jurisdiction.

This Memorandum for Record (MFR) constitutes the basis of jurisdiction for a Corps AJD as defined in 33 CFR §331.2. The features addressed in this AJD were evaluated consistent with the definition of "waters of the United States" found in the pre-2015 regulatory regime and consistent with the Supreme Court's decision in *Sackett*. This AJD did not rely on the 2023 "Revised Definition of 'Waters of the United States,'" as

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[1] While the Supreme Court's decision in *Sackett* had no effect on some categories of waters covered under the CWA, and no effect on any waters covered under RHA, all categories are included in this Memorandum for Record for efficiency.
[2] When documenting aquatic resources within the review area that are jurisdictional under the Clean Water Act (CWA), use an additional MFR and group the aquatic resources on each MFR based on the TNW, interstate water, or territorial seas that they are connected to. Be sure to provide an identifier to indicate when there are multiple MFRs associated with a single AJD request (i.e., number them 1, 2, 3, etc.).
[3] 33 CFR 331.2.
[4] Regulatory Guidance Letter 05-02.
[5] USACE has authority under both Section 9 and Section 10 of the Rivers and Harbors Act of 1899 but for convenience, in this MFR, jurisdiction under RHA will be referred to as Section 10.

CEPOA-RDS-SS
SUBJECT: Pre-2015 Regulatory Regime Approved Jurisdictional Determination in Light of *Sackett v. EPA*, 143 S. Ct. 1322 (2023), POA-2024-00081

amended on 8 September 2023 (Amended 2023 Rule) because, as of the date of this decision, the Amended 2023 Rule is not applicable in this state due to litigation.

1. SUMMARY OF CONCLUSIONS.

   a. Provide a list of each individual feature within the review area and the jurisdictional status of each one (i.e., identify whether each feature is/is not a water of the United States and/or a navigable water of the United States).

      i. Wetland 1; non-jurisdictional

2. REFERENCES.

   a. Final Rule for Regulatory Programs of the Corps of Engineers, 51 FR 41206 (November 13, 1986).

   b. Clean Water Act Regulatory Programs, 58 FR 45008 (August 25, 1993).

   c. U.S. EPA & U.S. Army Corps of Engineers, Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in *Rapanos v. United States & Carabell v. United States* (December 2, 2008)

   d. *Sackett v. EPA*, 598 U.S. _, 143 S. Ct. 1322 (2023)

   e. 2008 Rapanos Guidance: List of Resources

   f. 2003 SWANCC Guidance: List of Resources

3. REVIEW AREA. The area of review is located at Lot D1, T18N, R1E, Section 27, Seward Meridian, 3182 N Trunk Rd. Palmer, AK and consists of a 3.16-acre area bound on the east side by Old Homestead Road and bound on the south side by East Bogard Road. There is a small creek (Wasilla Creek) outside of the review area to the east in-between the review area and Old Homestead Road. The area of review is contained within a parcel owned by Ralph Kircher. The northern portion of the lot is currently undeveloped and is uplands. The southern portion of the lot (surrounding the review area) and the lot to the west is developed as farmland. The approximate center of the area of review is located at latitude 61.61605° North, longitude 149.24436° West. No other AJDs have been done in the general vicinity.

CEPOA-RDS-SS
SUBJECT: Pre-2015 Regulatory Regime Approved Jurisdictional Determination in Light of *Sackett v. EPA*, 143 S. Ct. 1322 (2023), POA-2024-00081

4. NEAREST TRADITIONAL NAVIGABLE WATER (TNW), INTERSTATE WATER, OR THE TERRITORIAL SEAS TO WHICH THE AQUATIC RESOURCE IS CONNECTED. The nearest TNW is Knik Arm, which is part of the territorial seas.[6]

5. FLOWPATH FROM THE SUBJECT AQUATIC RESOURCES TO A TNW, INTERSTATE WATER, OR THE TERRITORIAL SEAS
Wasilla Creek flows directly into Knick Arm, which is part of the territorial seas. However, Wetland 1 is not connected to Wasilla Creek or another TNW via a continuous surface connection. Available LiDAR and satellite imagery indicate that Wetland 1 is contained within a depression that is entirely surrounded by uplands. Neighboring vegetation is dominated by vegetation signatures that are indicative of upland communities.

   Additionally, no surface connection is indicated by the National Hydrography Dataset (NHD) nor National Wetland Inventory (NWI) or the Cook Inlet Wetlands Mapper. Satellite imagery, spanning several years and different seasons, shows no signs of surface water or hydrology patterns between the review wetland and a TNW, nor did Google Earth Street View. There are some aerial images which show a "path," but they have been confirmed to be ATV tracks and are not present on recent aerial imagery.

6. SECTION 10 JURISDICTIONAL WATERS[7]: Describe aquatic resources or other features within the review area determined to be jurisdictional in accordance with Section 10 of the Rivers and Harbors Act of 1899. Include the size of each aquatic resource or other feature within the review area and how it was determined to be jurisdictional in accordance with Section 10.[8] N/A

7. SECTION 404 JURISDICTIONAL WATERS: Describe the aquatic resources within the review area that were found to meet the definition of waters of the United States in accordance with the pre-2015 regulatory regime and consistent with the Supreme

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[6] This MFR should not be used to complete a new stand-alone TNW determination. A stand-alone TNW determination for a water that is not subject to Section 9 or 10 of the Rivers and Harbors Act of 1899 (RHA) is completed independently of a request for an AJD. A stand-alone TNW determination is conducted for a specific segment of river or stream or other type of waterbody, such as a lake, where upstream or downstream limits or lake borders are established.

[7] 33 CFR 329.9(a) A waterbody which was navigable in its natural or improved state, or which was susceptible of reasonable improvement (as discussed in § 329.8(b) of this part) retains its character as "navigable in law" even though it is not presently used for commerce, or is presently incapable of such use because of changed conditions or the presence of obstructions.

[8] This MFR is not to be used to make a report of findings to support a determination that the water is a navigable water of the United States. The district must follow the procedures outlined in 33 CFR part 329.14 to make a determination that water is a navigable water of the United States subject to Section 10 of the RHA.

Court's decision in *Sackett*. List each aquatic resource separately, by name, consistent with the naming convention used in section 1, above. Include a rationale for each aquatic resource, supporting that the aquatic resource meets the relevant category of "waters of the United States" in the pre-2015 regulatory regime. The rationale should also include a written description of, or reference to a map in the administrative record that shows, the lateral limits of jurisdiction for each aquatic resource, including how that limit was determined, and incorporate relevant references used. Include the size of each aquatic resource in acres or linear feet and attach and reference related figures as needed.

a. TNWs (a)(1): N/A

b. Interstate Waters (a)(2): N/A

c. Other Waters (a)(3): N/A

d. Impoundments (a)(4): N/A

e. Tributaries (a)(5): N/A

f. The territorial seas (a)(6): N/A

g. Adjacent wetlands (a)(7): N/A

8. NON-JURISDICTIONAL AQUATIC RESOURCES AND FEATURES

a. Describe aquatic resources and other features within the review area identified as "generally non-jurisdictional" in the preamble to the 1986 regulations (referred to as "preamble waters").[9] Include size of the aquatic resource or feature within the review area and describe how it was determined to be non-jurisdictional under the CWA as a preamble water. N/A

b. Describe aquatic resources and features within the review area identified as "generally not jurisdictional" in the *Rapanos* guidance. Include size of the aquatic resource or feature within the review area and describe how it was determined to be non-jurisdictional under the CWA based on the criteria listed in the guidance.

Wetland 1 (0.47-acres) is not adjacent to or abutting a jurisdictional water and therefore would not be considered jurisdictional. The nearest jurisdictional water, Wasilla Creek, is about 0.1 miles (170 meters) southeast of the review area and

[9] 51 FR 41217, November 13, 1986.

is separated due to changes in topography. The wetland is in a depression. No culverts are present to facilitate a continuous surface connection to Wasilla Creek. Given the lack of reasonable proximity or hydrologic connection, the review wetlands are unlikely to have more than a speculative or insubstantial effect on the chemical, physical, and/or biological integrity of Wasilla Creek or Knik Arm.

c. Describe aquatic resources and features identified within the review area as waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA. Include the size of the waste treatment system within the review area and describe how it was determined to be a waste treatment system. N/A

d. Describe aquatic resources and features within the review area determined to be prior converted cropland in accordance with the 1993 regulations (reference 2.b.). Include the size of the aquatic resource or feature within the review area and describe how it was determined to be prior converted cropland. N/A

e. Describe aquatic resources (i.e. lakes and ponds) within the review area, which do not have a nexus to interstate or foreign commerce, and prior to the January 2001 Supreme Court decision in "*SWANCC*," would have been jurisdictional based solely on the "Migratory Bird Rule." Include the size of the aquatic resource or feature, and how it was determined to be an "isolated water" in accordance with *SWANCC*.

Wetland 1 (0.47-acre) is a non-navigable intrastate water that does not have a nexus to interstate or foreign commerce. It is located on private property and is not accessible to the public. Wetland 1 is not currently being used for commercial navigation, has not historically been used for commercial navigation, nor is susceptible to being used in the future for commercial navigation, including commercial water-borne recreation as they contain no open water. The wetlands are not adjacent to or abutting a jurisdictional water and therefore would not be considered jurisdictional. Hydrologic connectivity to jurisdictional waters is broken by uplands and lack culverts to support a continuous surface or subsurface connection. Given the absence of reasonable proximity or hydrologic connection to a jurisdictional water and the lack of a nexus to interstate or foreign commerce, the review wetland is considered an isolated water. This wetland would only have been jurisdictional based on the Migratory Bird Rule.

f. Describe aquatic resources and features within the review area that were determined to be non-jurisdictional because they do not meet one or more categories of waters of the United States under the pre-2015 regulatory regime

consistent with the Supreme Court's decision in *Sackett* (e.g., tributaries that are non-relatively permanent waters; non-tidal wetlands that do not have a continuous surface connection to a jurisdictional water).

Wetland 1 is not a TNW or tributary to a TNW. The non-tidal wetland is a combination of palustrine scrub shrub (PSS) and palustrine emergent (PEM) wetlands and does not have a continuous surface water connection to a jurisdictional water as discussed in 8 (b) and 8 (e) above. Therefore, the review wetlands are considered non-jurisdictional.

9. DATA SOURCES. List sources of data/information used in making determination. Include titles and dates of sources used and ensure that information referenced is available in the administrative record.

   a. U.S. Fish and Wildlife Service. 2023. National Wetlands Inventory website. U.S. Department of the Interior, Fish, and Wildlife Service, Washington, D.C. http://www.fws.gov/wetlands/; accessed April 2024

   b. USDA Soil Mapper; https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey; accessed April 2024

   c. Cook Inlet Wetland Mapper; https://msb.maps.arcgis.com/apps/webappviewer/index.html?id=1565847242 7f459ab6d73b1d3ca5ab77; accessed April 2024

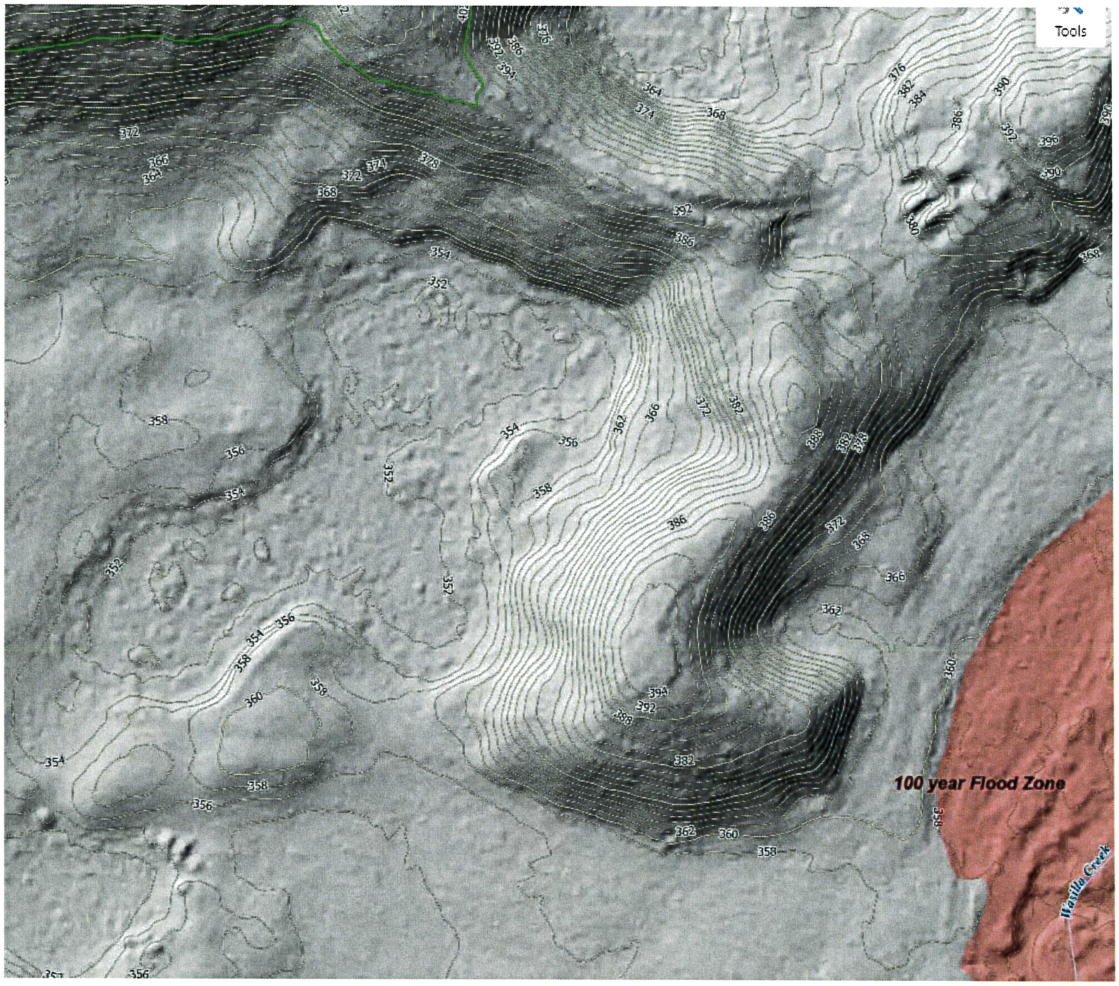
   d. Matanuska-Susitna Borough Mapper, 2019 USGS LiDAR Contours and Imagery: https://mapping.matsugov.us/Html5Viewer/index.html?viewer=MSB_Parcel_Viewer; accessed May 29, 2024

10. OTHER SUPPORTING INFORMATION. The on-site wetland is not adjacent to or abutting a TNW and therefore cannot be considered jurisdictional. The wetland is bordered by uplands. The nearest RPW that flows into a TNW, Wasilla Creek, is over 0.1-mile east of the review area. As described in Sections 8 (b), (e), and (f) above, there is no continuous surface water connection between the review area wetland and an RPW or a TNW. Given the lack of reasonable proximity or hydrologic connection to a jurisdictional water, the review wetlands are considered non-jurisdictional.

11. NOTE: The structure and format of this MFR were developed in coordination with the EPA and Department of the Army. The MFR's structure and format may be

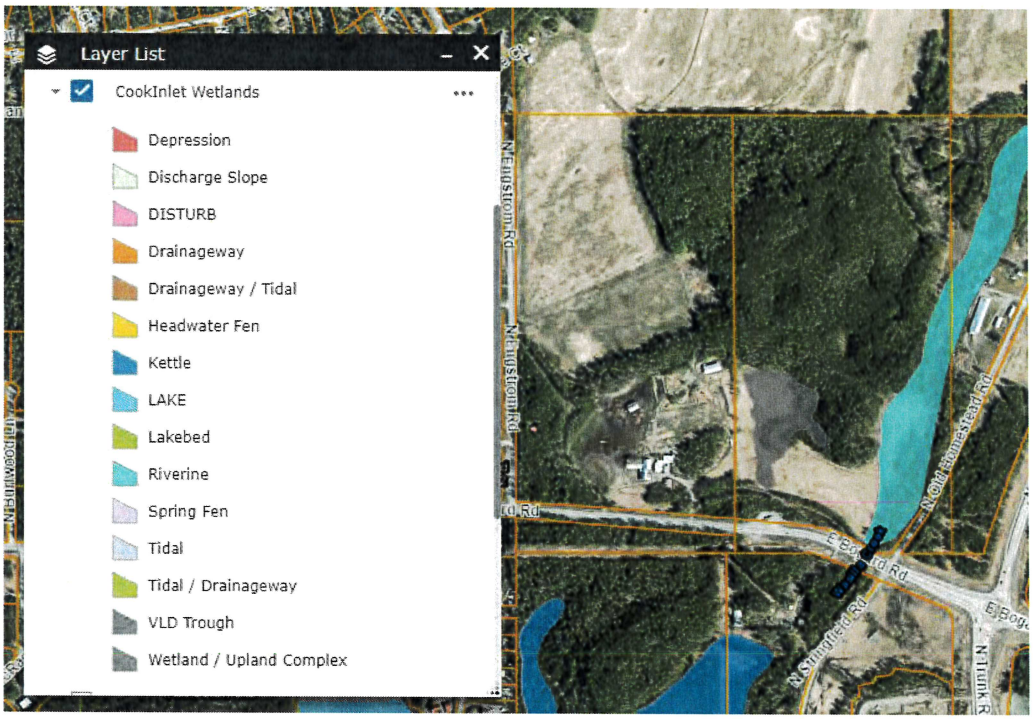
subject to future modification or may be rescinded as needed to implement additional guidance from the agencies; however, the approved jurisdictional determination described herein is a final agency action.


Tools
S18N01E27
AREA IN QUESTION
3182
Wasilla Creek
S18N01E26
3400
N Trunk Rd
7927
7955
E Bogard Rd
N Old Homestead Rd
S18N01E34
8110
S18N01E35

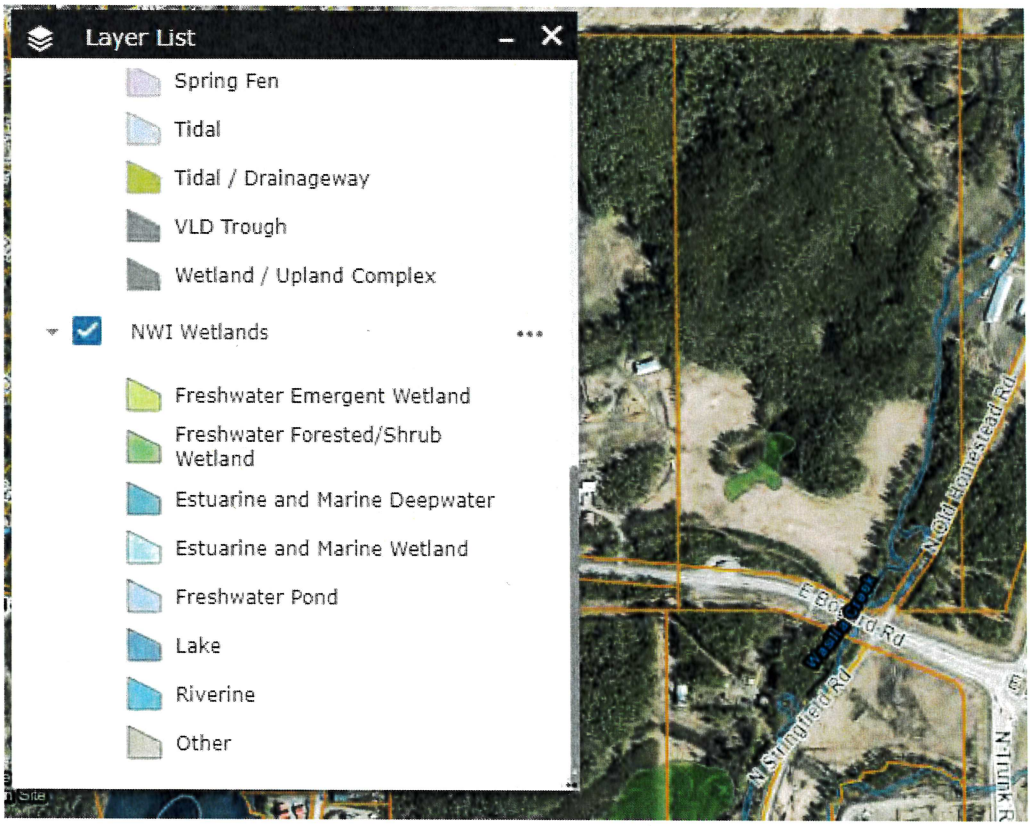


2019 Matanuska-Susitna Borough Mapper, 2019 USGS LiDAR Hillshade and Contours

Wetland 1



Cook Inlet Wetlands



NWI Wetlands

2022 imagery

2021 imagery

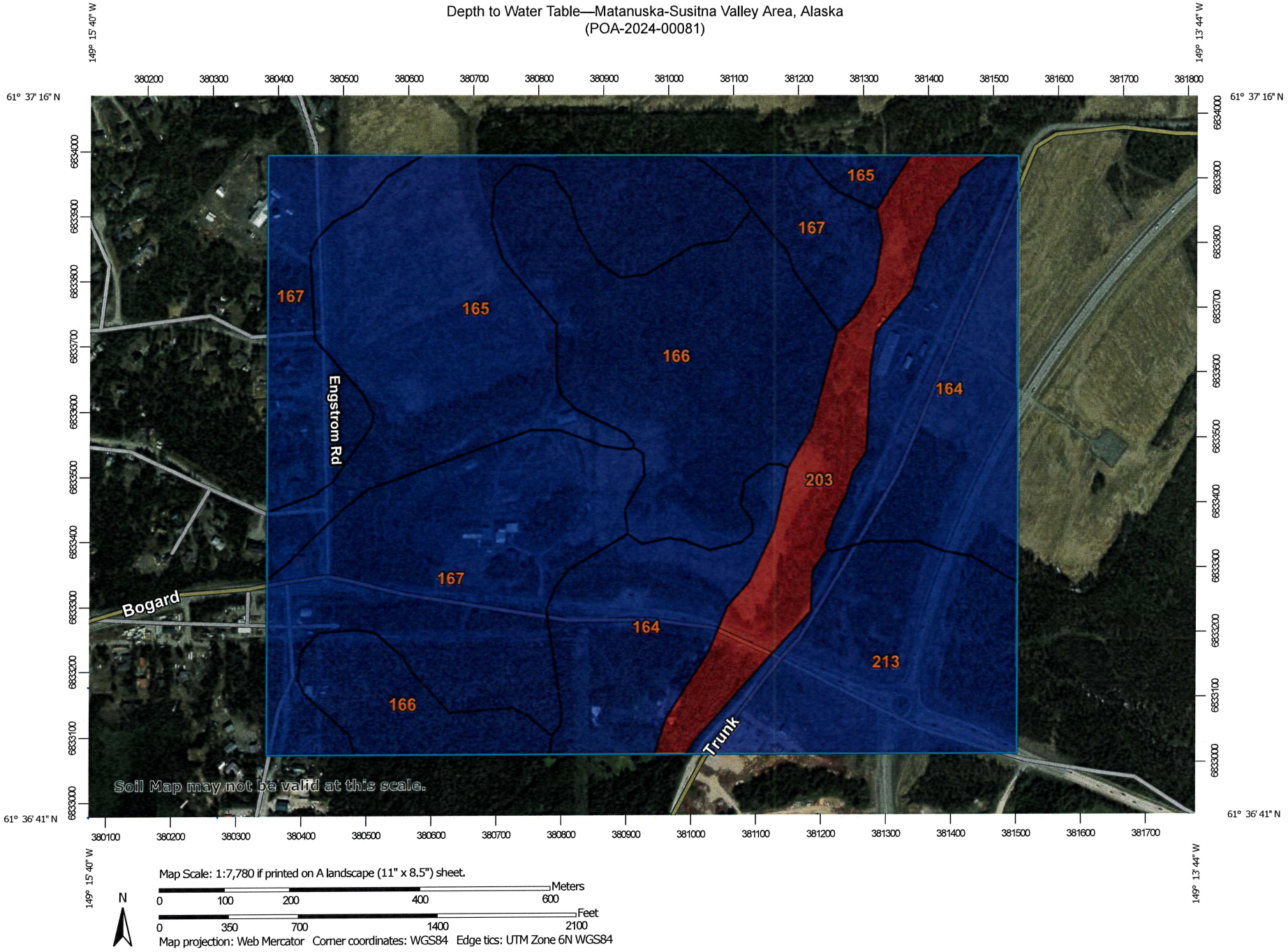
2019 imagery

2017 imagery

2016 imagery

2011 imagery

Depth to Water Table—Matanuska-Susitna Valley Area, Alaska
(POA-2024-00081)



Depth to Water Table—Matanuska-Susitna Valley Area, Alaska
(POA-2024-00081)

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- 0 - 25
- 25 - 50
- 50 - 100
- 100 - 150
- 150 - 200
- > 200
- Not rated or not available

Soil Rating Lines
- 0 - 25
- 25 - 50
- 50 - 100
- 100 - 150
- 150 - 200
- > 200
- Not rated or not available

Soil Rating Points
- 0 - 25
- 25 - 50
- 50 - 100
- 100 - 150
- 150 - 200
- > 200
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Matanuska-Susitna Valley Area, Alaska
Survey Area Data: Version 21, Sep 6, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 25, 2015—Oct 19, 2023

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Depth to Water Table

Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
164	Knik silt loam, 0 to 3 percent slopes	>200	50.2	19.0%
165	Knik silt loam, gently sloping and moderately steep	>200	49.0	18.6%
166	Knik silt loam, steep and sloping	>200	50.7	19.2%
167	Knik silt loam, undulating	>200	64.8	24.6%
203	Typic Cryaquents, 0 to 2 percent slopes	23	19.5	7.4%
213	Yensus silt loam, sloping and moderately steep	>200	29.7	11.2%
Totals for Area of Interest			**264.0**	**100.0%**

Description

"Water table" refers to a saturated zone in the soil. It occurs during specified months. Estimates of the upper limit are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table.

This attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

Rating Options

Units of Measure: centimeters

Aggregation Method: Dominant Component

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

Interpret Nulls as Zero: No

Beginning Month: January

Ending Month: December

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL		
Applicant: Dan Steiner	File Number: POA-2024-00081	Date: June 21, 2024

Attached is:		See Section Below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
	PERMIT DENIAL	C
X	APPROVED JURISDICTIONAL DETERMINATION	D
	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://www.usace.army.mil/CECW/Pages/reg_materials.aspx or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:	If you only have questions regarding the appeal process you may also contact:
Emily Vullo Alaska District Corps of Engineers CEPOA-RD-S P.O. Box 6898 JBER, AK 99506-0898 907-753-2704 Emily.N.Vullo@usace.army.mil	Ms. Kate Bliss Regulatory Program Manager U.S. Army Corps of Engineers, Pacific Ocean Division CEPOD-PDC, Bldg. 525 Fort Shafter, HI 96858-5440 (808) 835-4626 Kate.M.Bliss@usace.army.mil

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

_____ Signature of appellant or agent.	Date:	Telephone number:

Matanuska-Susitna Borough
Planning and Land Use Department
Development Services Division
350 East Dahlia Ave Palmer, AK 99645
Phone (907) 861-7822 / Fax (907) 861-8158
www.matsugov.us

AUTHORIZATION TO CONSTRUCT DRIVEWAY

PERMIT # D31515
TAX PARCEL ID # 18N01E27D002
Engstrom Road

November 6, 2024

All driveway installations shall comply with MSB Title 11.12. This authorization will expire **one year** from the date of this notice.

Call before you dig. Dial 811 to have utilities located before starting any dirt work.

The driveway access must adhere to the specifications outlined in the engineering plans, drawings, and other relevant documents submitted during the application process.

NO CULVERT REQUIRED

- Ditch and driveway apron shall be clear of rocks larger than 6" and any debris.
- Driveways fronting on paved roadway surfaces shall have a paved apron to the furthest point of curvature from the roadway.
- Signage and striping, if used, shall conform to the "2016 Alaska Traffic Manual" (Alaska Department of Transportation and Public Facilities) and shall be maintained by the landowner.
- This approval is for single-direction access only. Any future change in land use or traffic patterns affecting this driveway's functional use will require a new application to be submitted and reviewed.

When driveway construction is complete, call the Inspection Request Line at 861-7822 option 2 or email PermitCenter@matsugov.us to request a final inspection. Be sure to reference the permit number shown above.

Sincerely,

Michelle Olsen

Michelle Olsen, RWA
Permit Center

CORRESPONDENCE

MATANUSKA-SUSITNA BOROUGH
Planning and Land Use Department
Development Services Division
350 East Dahlia Avenue • Palmer, AK 99645
Phone (907) 861-7822
www.matsugov.us

May 31, 2024

Dan Steiner
5900 W. Dewberry Dr.
Wasilla AK 99623

SUBJECT: Conditional Use Permit Application – Request for Additional Information
LOCATION: 7955 E. Bogard Rd, 3182 N. Trunk Rd., & 7801 E Glade Ct.
Tax ID #s 18N01E27A002, D001, & D002

Dear Mr. Steiner,

Borough staff has reviewed the application material and the site plan(s) submitted on May 13, 2024, for a conditional use permit for earth material extraction under MSB 17.30 on the above-referenced property. It has been determined that the following information needs to be provided or clarified to process this request:

1. The southeast corner of the property boundary is shown incorrectly on the index sheet and sheets C0.1 and C0.2.
2. The site plan contains some misspellings that could be confusing.
    a. On sheet C1.0, Note 2, line 1, replace "being" with begin.
    b. On sheet C1.2, Note 1, remove the first instance of "are."
    c. On sheet C1.2, Note 3, replace "ares" with areas and "move" with more.
3. The site plan, Sheet C1.0, has an extra internal line that clutters the sheet; please remove it. I've attached a redlined copy.
4. In the narrative section titled Site Access, Bogard Road should replace Trunk Road within this section. Within the Demand for Gravel Pits, first paragraph, last line, gravel is missing the r.
5. On the site plan, there is a proposed driveway off of E Bogard Road. However, the 10-foot-high visual screening soil berm may be blocking the entrance to the extraction area. Clarify how vehicles will enter the gravel extraction area using this driveway.
6. Will the extraction area be visible from Bogard or Engstrom during any of the phases? If so, visual berms may be required to meet MSB 17.28.060(A)(4).
7. The site plan, Sheet C1.0, is missing the symbols for the cross-section lines A and B.
8. Please verify with the operator whether water trucks will be used to remove tracked soil from adjacent roadways. Most earth material excavation applications include this.
9. Where is the water obtained for filling the water trucks?
10. Provide quantity estimates; annual extraction amounts will suffice for this.
11. Provide a separate reclamation plan meeting the standards of MSB 17.28.063 & 17.28.067. Staff will not extract the information from the DNR reclamation application material. Address each item under MSB 17.28.063 and 17.28.067.

12. Permanent and semi-permanent structures include screening plants, wash plants, crushers, conveyor belt operations, etc. The site plan should show where these types of processing equipment will be on the property to ensure MSB 17.55 setback requirements are met.
13. Often, the operation keeps the processing equipment in the same location for all the phases. Is this the case for this operation?
14. Are there any ditches, settling ponds, wash pit ponds, etc. proposed?
15. Have you written confirmation from DEC regarding your discussions with them about the Drinking Water Protection Areas?
16. The expectation for asking about anticipated vehicle routes is the route trucks will take after leaving the site and the route the trucks will take coming back to the site.
17. In our previous meetings, Mr. Laughlin mentioned additional voluntary traffic restrictions that he currently follows, such as avoiding operation during morning rush hours or when school buses are running. Will this information be included in the application?
18. How was the peak hour and traffic volume at the peak hour determined?
19. Lighting Plan. MSB 17.28.060(A)(6) requires exterior lights to be directed downward and shielded to mitigate light spillage. Include this in your narrative.
20. This property is located in the Core Planning Area of the Borough. The SWPPP indicates the possible presence of a fuel tank on site. Can you provide information on the size of the fuel tank? Please note that a Core Area Conditional Use Permit is necessary for the processing, manufacturing, or storage of hazardous materials weighing 10,000 lbs. or more (MSB 17.61.100).
21. Provide a proposed timetable for the phases.
22. What is the proposed end use of the property, after extraction is completed?
23. On page 2 of the SWPPP, you list Jade Laughlin as the owner. Is this correct since he is not the owner of the property?
24. Provide evidence of ADNR's acceptance of the reclamation plan and payment of financial assurance. If payment will be made after permit approval, we can list this as a condition of approval prior to operating.
25. Staff will recommend a condition of approval that the NOI be received prior to operating the earth material excavation operation.
26. Since the USACE has not issued the jurisdictional determination yet, can you include in your narrative that earth materials excavation will not occur within 100 linear feet of a lake, river, stream, or other water body, including wetlands, to comply with MSB 17.28.060(A)(7)?
27. Provide the driveway permit issued by ADOT&PF for access to E. Bogard Road. The permit may include conditions inconsistent with the current application responses.
28. Provide the driveway permit issued by MSB for access onto N. Engstrom Road.

Once the required information has been submitted and determined to be complete, staff will continue processing the application. It may be helpful to sit down together and go over these items. Thank you for your time and consideration on this matter.

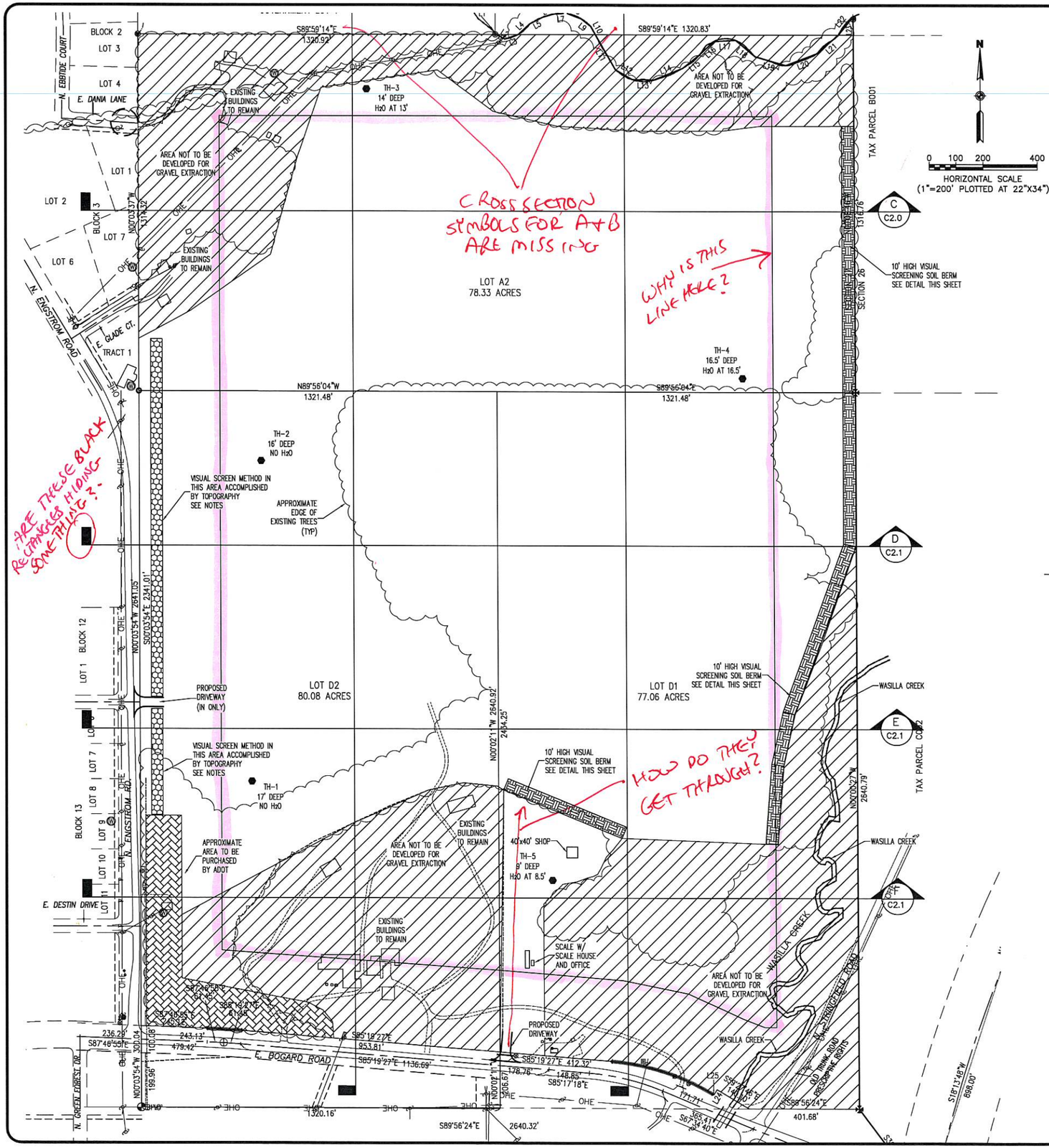
Respectfully,

Peggy Horton

Peggy Horton,
Current Planner
Development Services Division
907-861-7862

Attachment:
Sheet C1.0 redline

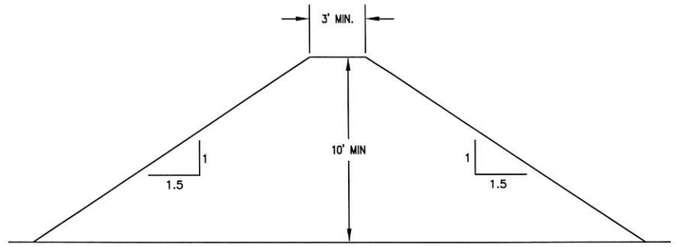
February 3, 2025
Planning Commission Meeting
532-3995



NOTES

1. LOCATION OF 10' HIGH VISUAL SCREENING BERM TO BE ADJUSTED AS NEEDED.
2. MATERIAL EXTRACTION TO BEINGIN THE LOWER ELEVATION AREAS AND MOVE OUT FROM THERE. AS A RESULT, THE FINISH GRADE TOPOGRAPHY ALONG ENGSTROM ROAD WILL ALWAYS BE AT LEAST 10' LOWER THAN THE PROPERTY LINE. THIS WILL ACT AS VISUAL SCREENING AND NO ADDITIONAL BERM WILL BE NEEDED. SEE SECTION D/C2.1.

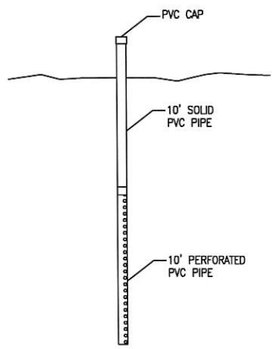
BEGIN
OK



1 C1.0 10' HIGH SOIL BERM
SCALE: NOT TO SCALE

NOTES

1. INSTALL MONITORING WELLS AT THE PERIMETER OF THE AREA WHERE MATERIAL IS BEING EXTRACTED.
2. WHEN SOIL IS EXTRACTED TO TOP OF PERFORATED PIPE, REMOVED WELL AND RELOCATED IT AT A DEEPER ELEVATION.



2 C1.0 GROUND WATER MONITORING WELL
SCALE: NOT TO SCALE

SDCS, LLC
STEINER DESIGN & CONSTRUCTION SERVICES, LLC
5900 W. DEWBERRY DR. PH: (907) 357-5609
WASILLA, AK 99623 FAX: (907) 357-5608

STATE OF ALASKA
49TH
DAN E. STEINER
No. CE 9505
5/9/24
REGISTERED PROFESSIONAL ENGINEER

CENTRAL GRAVEL PRODUCTS
GRAVEL PIT DEVELOPMENT
LOTS A2, D1, D2, TOWNSHIP 18N RANGE 1E SECTION 27

BY	DATE	REVISIONS

JOB NO.: 23-016
DATE: 5/9/2024
DRAWN: DES
REVIEWED: DES

SHEET TITLE
SITE PLAN

SHEET
C1.0

From: Peggy Horton
To: dsteiner@mtaonline.net
Subject: RE: Havemeister Earth Material Excavation CUP application review
Date: Tuesday, July 9, 2024 4:01:00 PM
Attachments: Sheet C1.0.pdf
image001.png

Oops!

From: dsteiner@mtaonline.net <dsteiner@mtaonline.net>
Sent: Tuesday, July 9, 2024 3:48 PM
To: Peggy Horton <Peggy.Horton@matsugov.us>
Subject: RE: Havemeister Earth Material Excavation CUP application review

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Peggy,

The letter says there is a C1.0 with redlines. Can you send that again also?

Dan Steiner, PE
SDCS, LLC
(wk) 907-357-5609
(cell) 907-715-7704

From: Peggy Horton <Peggy.Horton@matsugov.us>
Sent: Tuesday, July 9, 2024 3:45 PM
To: Dan Steiner - Steiner Design & Construction Svs, LLC (dsteiner@mtaonline.net) <dsteiner@mtaonline.net>
Subject: FW: Havemeister Earth Material Excavation CUP application review

---

From: Peggy Horton
Sent: Friday, May 31, 2024 4:16 PM
To: dsteiner@mtaonline.net
Subject: RE: Havemeister Earth Material Excavation CUP application review

Dan,
I missed something, which is not unusual. Please replace the previous RFAI with this one.

Peggy Horton
Current Planner
Matanuska-Susitna Borough

350 E. Dahlia Avenue
Palmer AK 99645
907-861-7862

From: dsteiner@mtaonline.net <dsteiner@mtaonline.net>
Sent: Friday, May 31, 2024 11:51 AM
To: Peggy Horton <Peggy.Horton@matsugov.us>
Subject: RE: Havemeister Earth Material Excavation CUP application review

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Thank you.

Dan Steiner, PE
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(cell) 907-715-7704

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Subject: Havemeister Earth Material Excavation CUP application review

Dan,
Please see the attached request for additional information.

Regards,

Peggy Horton
Current Planner
907-861-7862

From:	Peggy Horton
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Subject:	FW: Havemeister Earth Material Excavation CUP application review
Date:	Tuesday, July 9, 2024 3:45:00 PM
Attachments:	RFAI 5-31-24.pdf image001.png

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Please see the attached request for additional information.

Regards,

Peggy Horton
Current Planner
907-861-7862

From: Peggy Horton
To: dsteiner@mtaonline.net
Subject: RE: Hagemeister Earth Material Excavation CUP application review
Date: Thursday, July 11, 2024 11:44:00 AM
Attachments: image001.png

I see the dilemma here. This is a long answer to your question.

Usually, an operator informs us about the usual routes for the trucks they send out and where they return from, specifying the closest intersection or the direction to and from. For this application, the routes include the Trunk Roundabout, the Engstrom intersection, and, most impacted, the entire residential area located to the west and north of the site along Enstrom Road. Will the operator send trucks through those residential neighborhoods to the northern Wasilla-Fishhook area? Or will the trucks go west on Bogard and Seldon to get to Wasilla-Fishhook? The operator may already know the answer to this. Will any trucks that go through residential areas be hauling pup trailers? Do you know if the operation uses pup trailers at all?

We don't need to, and we understand you can't accurately predict the destination of every truck. You can state this in your narrative. The objective is to comprehend the nearby paths the trucks will ordinarily take as they leave and return to the site. In this case, the Engstrom access is an "in only" route, so for a typical journey, the trucks will be arriving from Bogard to Engstrom and then heading into the site. Occasionally, trucks may come from the northern end of Engstrom to the site. As for the departure, the operator may know that most of the trucks will head west from the driveway on Bogard towards Wasilla, or maybe he knows most of the trucks will head east on Bogard to the roundabout at Trunk. Or perhaps it is both, so state that.

The road and access plan should also state any limitations the State or the Borough has put on the two driveways. I know you're still working on these applications, but it's important that the Planning Commission have some information to make their decision.

The narrative says that at the peak hour, the operation may have a total of 12 trips out and 12 trips in. When this amount of traffic is occurring, will the operation add any traffic mitigation techniques, such as flaggers, truck entering/existing signs, etc.? I don't know if this is necessary; I'm trying to think of everything I can to answer your question and limit the back-and-forth with PD&E later.

How will the operation ensure trucks are not queued up on Engstrom, backing up traffic?

Will the DOT require right-in-right-out on Bogard? Will it be used as an "out-only" driveway?

Respectfully,

Peggy Horton
Current Planner
Matanuska-Susitna Borough
350 E. Dahlia Avenue
Palmer AK 99645
907-861-7862

From: dsteiner@mtaonline.net <dsteiner@mtaonline.net>
Sent: Wednesday, July 10, 2024 4:59 PM
To: Peggy Horton <Peggy.Horton@matsugov.us>
Subject: RE: Hagemeister Earth Material Excavation CUP application review

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Peggy,

I don't quite understand the following:

16. The expectation for asking about anticipated vehicle routes is the route trucks will take after leaving the site and the route the trucks will take coming back to the site.

    Based on this statement my response would be "It is impossible to know what rout trucks will take coming to and leaving from the site." But I don't think this is what you are looking for. Can you clarify statement 16?

Dan Steiner, PE
SDCS, LLC
(wk) 907-357-5609
(cell) 907-715-7704

From: Peggy Horton <Peggy.Horton@matsugov.us>
Sent: Tuesday, July 9, 2024 3:45 PM
To: Dan Steiner - Steiner Design & Construction Svs, LLC (dsteiner@mtaonline.net) <dsteiner@mtaonline.net>
Subject: FW: Havemeister Earth Material Excavation CUP application review

From: Peggy Horton

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To: dsteiner@mtaonline.net
Subject: RE: Havemeister Earth Material Excavation CUP application review

Dan,
I missed something, which is not unusual. Please replace the previous RFAI with this one.

Peggy Horton
Current Planner
Matanuska-Susitna Borough
350 E. Dahlia Avenue
Palmer AK 99645
907-861-7862

From: dsteiner@mtaonline.net <dsteiner@mtaonline.net>
Sent: Friday, May 31, 2024 11:51 AM
To: Peggy Horton <Peggy.Horton@matsugov.us>
Subject: RE: Havemeister Earth Material Excavation CUP application review

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Thank you.

Dan Steiner, PE
SDCS, LLC
(wk) 907-357-5609
(cell) 907-715-7704

From: Peggy Horton <Peggy.Horton@matsugov.us>
Sent: Friday, May 31, 2024 11:48 AM
To: Dan Steiner - Steiner Design & Construction Svs, LLC (dsteiner@mtaonline.net) <dsteiner@mtaonline.net>

Subject: Havemeister Earth Material Excavation CUP application review

Dan,
Please see the attached request for additional information.

Regards,

Peggy Horton
Current Planner
907-861-7862

From: dsteiner@mtaonline.net
To: Peggy Horton
Subject: RE: Havemeister Earth Material Excavation CUP application review
Date: Friday, August 9, 2024 2:49:43 PM
Attachments: image001.png
23-016 MSB Review Comments - Response 01.pdf

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Peggy,

Please replace the previous response letter with the one attached. There was a typo in it.

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SDCS, LLC
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(cell) 907-715-7704

From: dsteiner@mtaonline.net <dsteiner@mtaonline.net>
Sent: Friday, August 9, 2024 1:59 PM
To: 'Peggy Horton' <Peggy.Horton@matsugov.us>
Cc: Jade Laughlin <Centralgravelproducts@hotmail.com>; Gary LoRusso <garyl@keystonesurveyak.com>
Subject: RE: Havemeister Earth Material Excavation CUP application review

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Attached in the following:

Letter in response to your comments.
Updated Narrative
Updated Plans

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From: Peggy Horton <Peggy.Horton@matsugov.us>
Sent: Tuesday, July 9, 2024 3:45 PM

To: Dan Steiner - Steiner Design & Construction Svs, LLC (dsteiner@mtaonline.net) <dsteiner@mtaonline.net>
Subject: FW: Havemeister Earth Material Excavation CUP application review

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From: Peggy Horton
Sent: Friday, May 31, 2024 4:16 PM
To: dsteiner@mtaonline.net
Subject: RE: Havemeister Earth Material Excavation CUP application review

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To: Peggy Horton
Cc: Jade Laughlin; "Gary LoRusso"
Subject: RE: Havemeister Earth Material Excavation CUP application review
Date: Friday, August 9, 2024 2:00:49 PM
Attachments: image001.png
CGP - Gravel Pit Plans - 8-9-2024.pdf
23-016 Gravel Pit Narrative - 8-9-2024.pdf
23-016 MSB Review Comments - Response 01.pdf

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From: Peggy Horton
To: "dsteiner@mtaonline.net"
Subject: RE: Havemeister Earth Material Excavation CUP application review
Date: Monday, August 12, 2024 10:22:00 AM
Attachments: image001.png
Plans for 2nd RFAI.pdf
Narrative Pg 3 & 4.pdf

Dan,
The response to #26 states USACE issued a jurisdictional determination. The copy was not included in the submittal.

See the marked-up items attached.

Thank you for your time and effort on this project.

Peggy Horton
Current Planner
Matanuska-Susitna Borough
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Palmer AK 99645
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Regards,

Peggy Horton
Current Planner
907-861-7862

ok

I have discussed this project with ADEC. The only contaminate that they were concerned with was turbidity. Since the project will maintain a large vegetative buffer along the creek and the existing and finish topography of the developed areas drain away from the creek, ADEC is not concerned and said that no action is required.

- Visual Screening: Visual screening will be provided by either a 10' high soil berm, existing vegetation, or topography. See the included plans for locations of all the visual screening.

- Noise Mitigation: Noice mitigation will be provide by the hours of operation and maintaining equipment used on site. All the heavy equipment (excavators, loaders, etc.) and processing/crushing equipment will maintain all required mufflers and noise dampeners. Material extraction will also start near the middle of the site and at a lower elevation from the surrounding property. As work progresses, the extraction will continue to be at a lower elevation. Also, this type of production has strict OSHA regulations for noise that are strictly followed.

- Lighting Plan: The only exterior lights will be mounted on the proposed shop and scale house. These lights will be directed downward and will include shields, as needed, to prevent light spillage on to adjacent properties.

Borough, State, and Federal Laws

- ADNR Reclamation Plan: A reclamation plan has been submitted to the ADNR. A copy of the plan has been included with this submittal.

- Reclamation Financial Assurance: A copy of the reclamation financial assurance that was filed with the State of Alaska will be delivered to the MSB as soon as DNR determines what the fee will be and it has been paid.

- United States Army Corps of Engineers: There is a small area that has been identified as a wetland within the project parcels (see Sheet C0.2). No material extraction will take place in or near this area and the wetland will not be disturbed. As a precaution, a Jurisdictional Determination (JD) has been requested from the United States Army Corps of Engineers, but they have not made their determination at the time of this submittal.

↑ UPDATE IF YOU RECEIVED THE DETERMINATION

Additional Information

Drifting Snow Along Engstrom Road

In our discussion with the MSB, the MSB expressed concern about drifting snow along Engstrom Road and the increase in drifting that a 10' high soil berm would cause. With the existing topography and the plan to begin material extraction at the lower elevations of the site, a 10' high soil berm along Engstrom Road will not be needed. See section D/C2.1 for visual explanation.

As a result, this project should not increase drifting snow and should, as the gravel pit is developed, reduce the volume of snow that drifts onto Engstrom Road.

Site Access

Access to the proposed gravel pit will be at two locations. Refer to Sheet C1.0 for the access points. The primary access will be off of Bogard Road adjacent to the common property line of Lot D1 and D2. Trunk Road is State of Alaska right-of-way. SDCS is in the process of applying for a driveway permit from ADOT.

BOGARD

A secondary access is located off of Engstrom Road, across from Sebastian Drive. This will be an "in only" access. Engstrom Road is MSB right-of-way. SDCS is in the process of applying for a driveway permit from the MSB.

Demand for Gravel Pits

Central Gravel Products is anxious for this new gravel pit to be developed. There is a high demand for the soil products that will be produced. Central Gravel Products is concerned about the depletion of gravel pits in the Matanuska-Susitna Valley and knows that this proposed gravel pit will help meet the demand for gravel for many years to come.

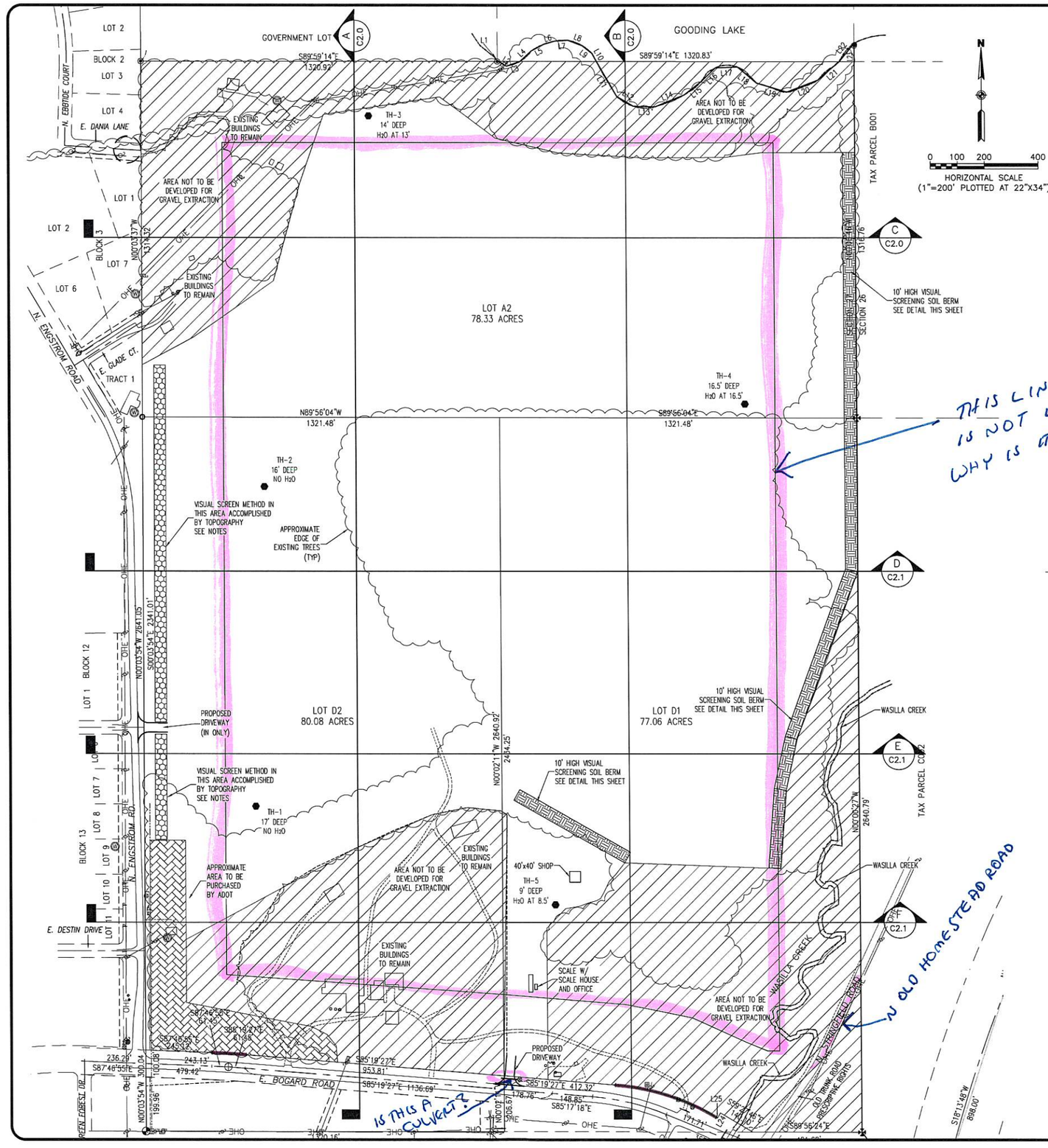
Please let us know if you have any questions or need additional information. Thank you for your help with this project.

Sincerely,

Dan Steiner

Dan Steiner, P.E.
Manager

des
encl.

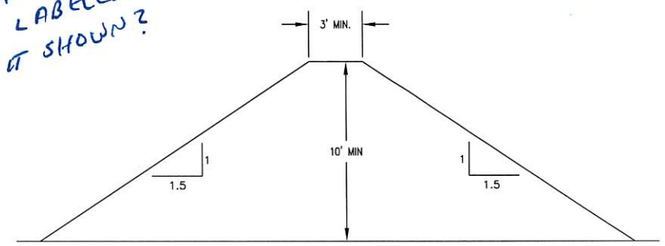


NOTES

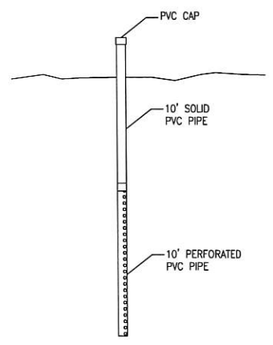
1. LOCATION OF 10' HIGH VISUAL SCREENING BERM TO BE ADJUSTED AS NEEDED.
2. MATERIAL EXTRACTION TO BEGIN IN THE LOWER ELEVATION AREAS AND MOVE OUT FROM THERE. AS A RESULT, THE FINISH GRADE TOPOGRAPHY ALONG ENGSTROM ROAD WILL ALWAYS BE AT LEAST 10' LOWER THAN THE PROPERTY LINE. THIS WILL ACT AS VISUAL SCREENING AND NO ADDITIONAL BERM WILL BE NEEDED. SEE SECTION D/C2.1 OK
3. ALL PROCESSING EQUIPMENT (SCREENING PLANTS, CRUSHERS, CONVEYOR BELTS, ETC.), PERMANENT AND TEMPORARY STRUCTURES, AND MATERIAL PILES ARE TO BE PLACE +40' AT ALL TIMES FROM ALL PERIMETER PROPERTY LINES.

PLACED

FYI: THE SETBACK IN MSB 17.55 IS FOR ALL PROPERTY LINES, NOT JUST THE PERIMETER OF THE GRAVEL OPERATION.



1 C1.0 10' HIGH SOIL BERM
SCALE: NOT TO SCALE



NOTES

1. INSTALL MONITORING WELLS AT THE PERIMETER OF THE AREA WHERE MATERIAL IS BEING EXTRACTED.
2. WHEN SOIL IS EXTRACTED TO TOP OF PERFORATED PIPE, REMOVED WELL AND RELOCATED IT AT A DEEPER ELEVATION.

RELOCATE REMOVE

2 C1.0 GROUND WATER MONITORING WELL
SCALE: NOT TO SCALE

RECEIVED
AUG 12 2024
Mat-Su Borough
Development Services

STATE OF ALASKA
49TH
DAN E. STEINER
No. CE 9505
8/9/24
REGISTERED PROFESSIONAL ENGINEER

SDCS, LLC
STEINER DESIGN & CONSTRUCTION SERVICES, LLC
5900 W. DEWBERRY DR. PH:(907) 357-5609
WASILLA, AK 99623 FAX:(907) 357-5608

CENTRAL GRAVEL PRODUCTS
GRAVEL PIT DEVELOPMENT

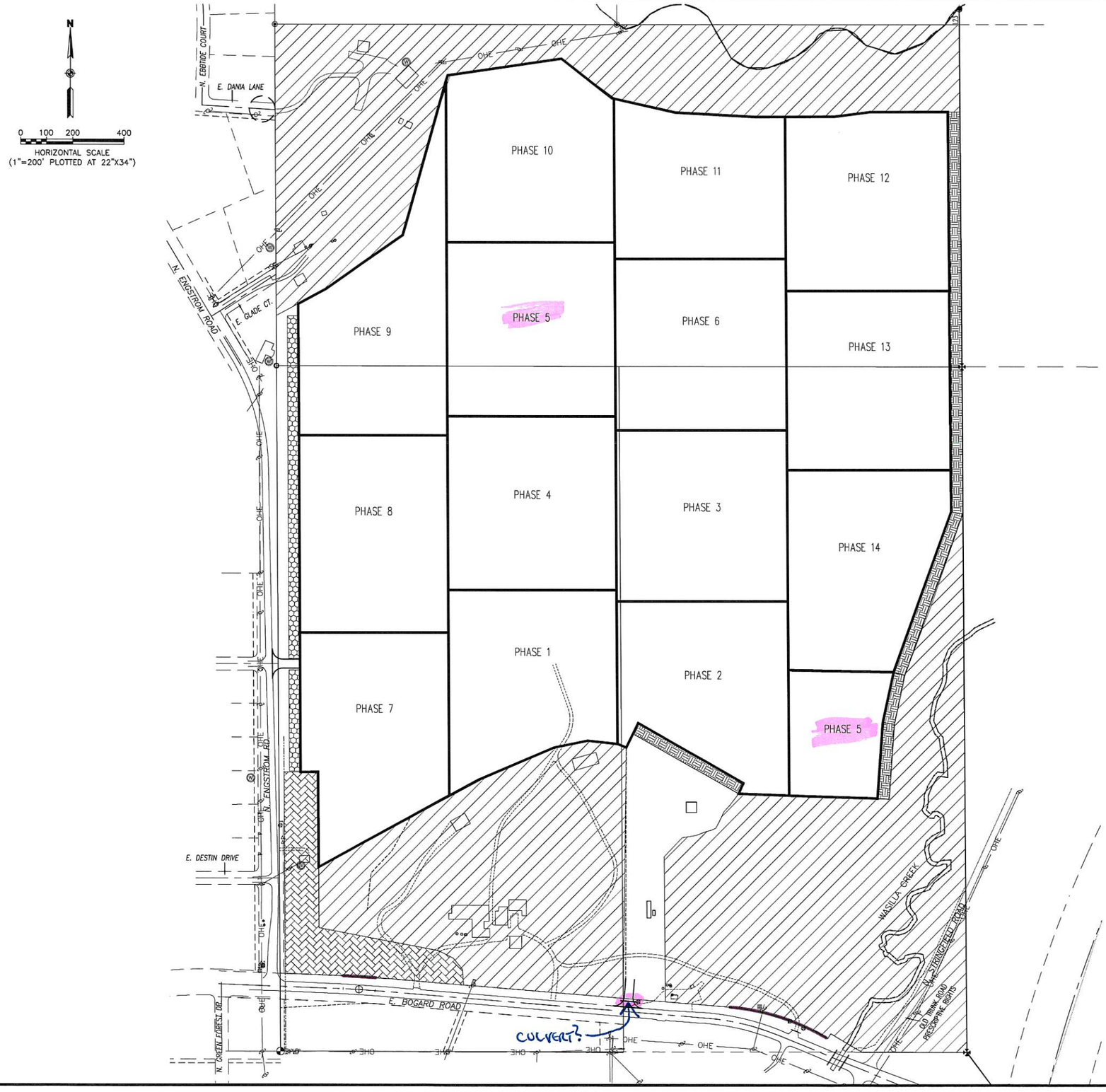
LOTS A2, D1, D2, TOWNSHIP 18N RANGE 1E SECTION 27

BY	DATE	REVISIONS

JOB NO.: 23-016
DATE: 8/9/2024
DRAWN: DES
REVIEWED: DES

SHEET TITLE
SITE PLAN

SHEET
C1.0



NOTES

1. THE PHASES SHOWN ARE 10 ACRES OR LESS.
2. NO MORE THAN 10 ACRES ARE DEVELOPED AT ONE TIME FOR MATERIAL EXTRACTION.
3. AS MORE ADDITIONAL AREA IS DEVELOPED, PREVIOUS DEVELOPED AREAS WILL BE RECLAIMED SO THAT NO MORE THAN 10 ACRES AT A TIME ARE DEVELOPED.
4. PHASES SHOWN ARE AN ESTIMATE. FUTURE EVENTS WILL IMPACT THE PHASING, BUT THE AREA DEVELOPED WILL ALWAYS BE 10 ACRES OR LESS.

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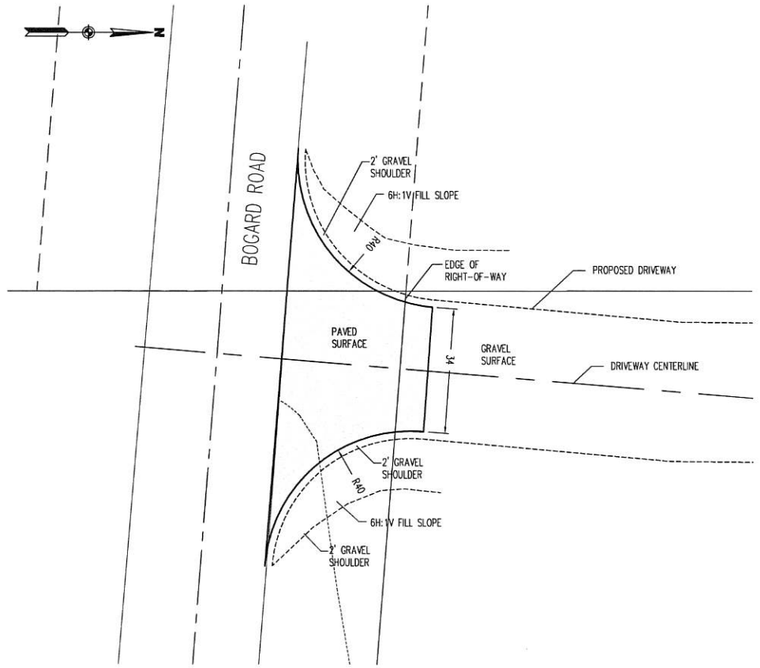
DATE: 8/9/2024
DRAWN: DES
REVIEWED: DES

SHEET TITLE
PHASING PLAN

SHEET
C1.2

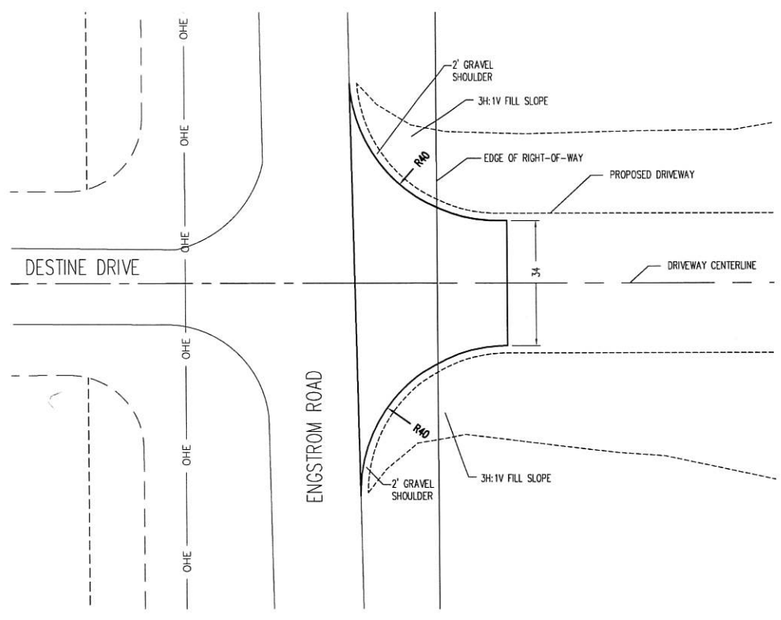


PLAN VIEW
BOGARD ROAD DRIVEWAY
(STATE OF ALASKA)

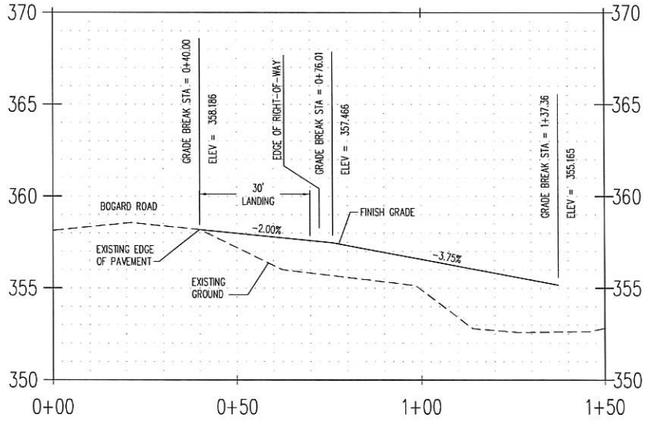
0 10 20 40
HORIZONTAL SCALE
(1"=20' PLOTTED AT 22"X34")
0 2 4 8
VERTICAL SCALE
(1"=4' PLOTTED AT 22"X34")

NOTES

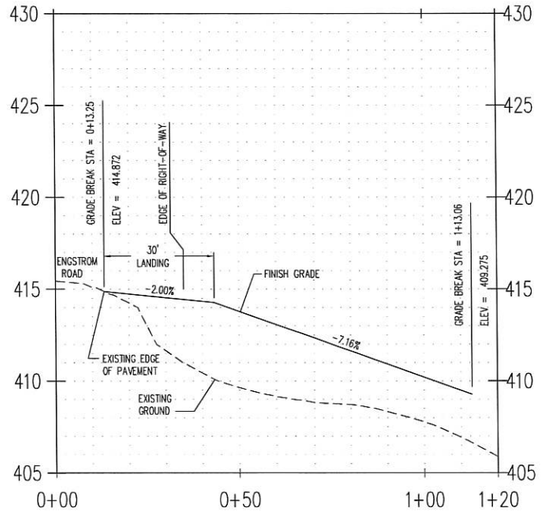
1. ALL WORK IN STATE OF ALASKA RIGHT-OF-WAY TO CONFORM TO THE ADOT DRIVEWAY PERMIT.
2. ALL WORK IN MSB RIGHT-OF-WAY TO CONFORM TO THE MSB DRIVEWAY PERMIT. .
3. ALL DRIVEWAYS TO BE PAVED WITHIN PUBLIC RIGH-OF-WAY.
4. ENGSTROM ROAD DRIVEWAY TO BE IN ONLY.
5. DUE TO EXISTING TOPOGRAPHY, NO CULVERTS ARE NEEDED IN EITHER DRIVEWAY.



PLAN VIEW
ENGSTROM ROAD DRIVEWAY
(STATE OF MSB)



PROFILE VIEW
BOGARD ROAD DRIVEWAY



PROFILE VIEW
ENGSTROM ROAD DRIVEWAY
(STATE OF MSB)

STATE OF ALASKA
DAN E. STEINER
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GRAVEL PIT DEVELOPMENT
LOTS A2, D1, D2, TOWNSHIP 18N RANGE 1E SECTION 27

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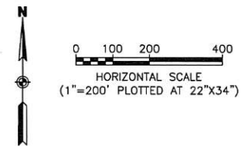
JOB NO.: 23-016
DATE: 8/9/2024
DRAWN: DES
REVIEWED: DES

SHEET TITLE
DRIVEWAY
PLAN & PROFILE

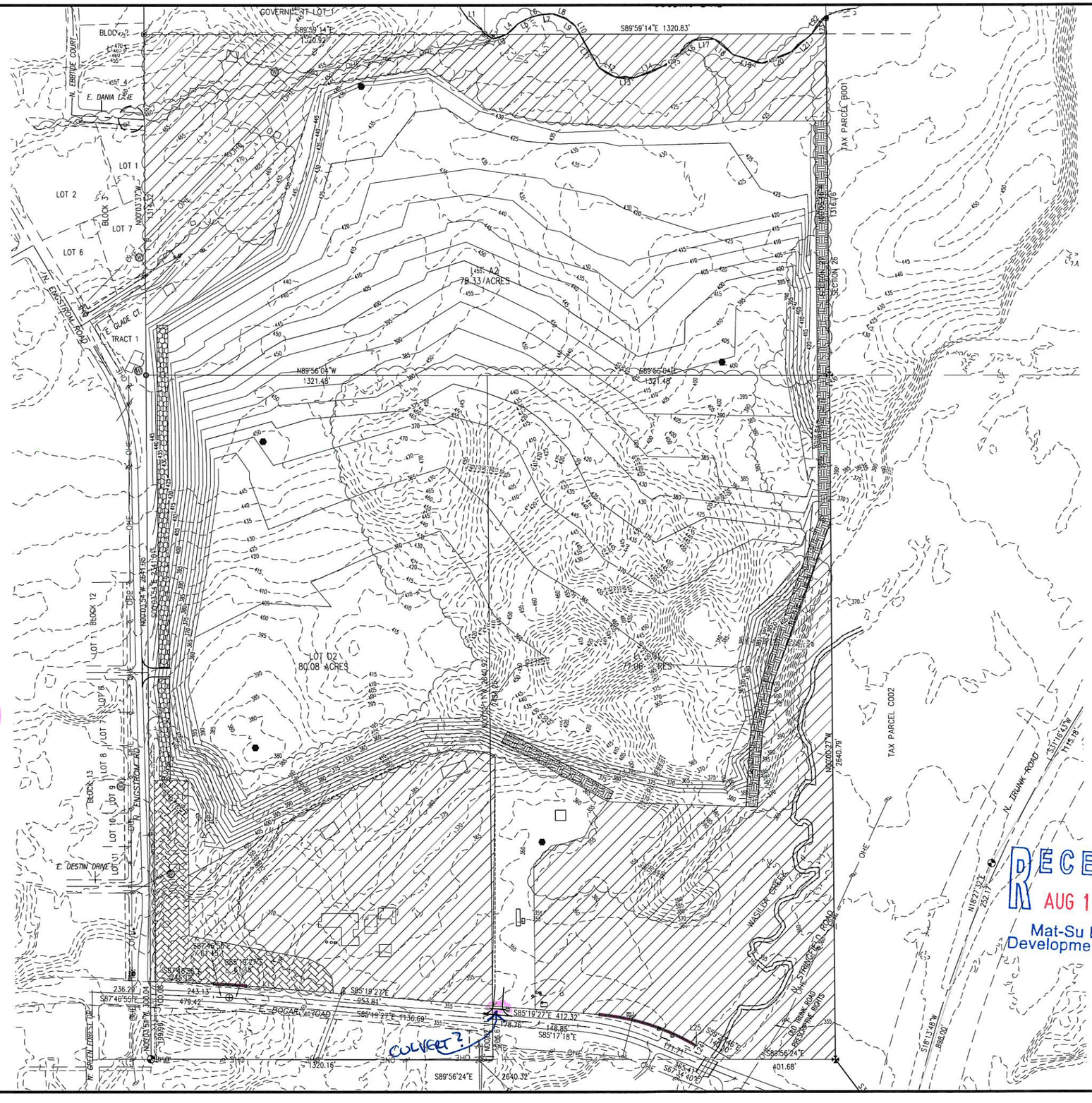
SHEET
C1.3



NOTES

1. THE PLAN IS TO HAVE APPROXIMATELY 10 ACRES BEING WORKED AT ONE TIME. AS MORE AREA IS OPENED FOR MATERIAL EXTRACTION, THE PREVIOUSLY OPENED AREAS WILL BE RECLAIMED.
2. FINISH SLOPES WILL BE TRACK WALKED WITH TRACK EQUIPMENT AND COVERED WITH 4" OF TOPSOIL AND SEEDED.
3. ROOT/ORGANIC DEBRIS WILL EITHER BE BURNED, BURIED, OR LEVELED AND COVERED WITH TOPSOIL.
4. RECLAMATION PLAN MAY CHANGE AS OTHER DEVELOPMENT OPPORTUNITIES BECOME AVAILABLE. THE OWNER WILL UPDATE THE RECLAMATION PLAN AS NEEDED TO REPRESENT ANY CHANGES TO THE PLAN.
5. JUNK VEHICLES, JUNK VEHICLE PARTS, AND TRASH SHALL BE REMOVED IN ACCORDANCE WITH MSB 8.50.
6. SLOPES SHALL NOT BE STEEPER THAN 2H:1V OR THE NATURAL STABILIZED ANGLE OF REPOSE OF THE EXISTING EARTH MATERIAL.
7. SITE SOILS MORE SUSCEPTIBLE TO EROSION OR LIQUEFACTION REQUIRE A SLOPE ADEQUATE TO ENSURE STABILIZATION.
8. SLOPES SHALL BE GRADED TO BLEND WITH THE SURROUNDING UNDISTURBED TOPOGRAPHY.
9. SURFACE WATER QUALITY SHALL BE PROTECTED BY IMPLEMENTING APPLICABLE BEST MANAGEMENT PRACTICES DESCRIBED IN THE CURRENT PUBLICATION OF THE STATE OF ALASKA'S USER MANUAL BEST MANAGEMENT PRACTICES FOR GRAVEL PITS.
10. ALL DISTURBED AREAS SHALL BE COVERED WITH A MINIMUM COMPACTION DEPTH OF FOUR INCHES OF TOPSOIL STRIPPED AND STOCKPILED DURING INITIAL DEVELOPMENT ACTIVITIES. IN CASES WHERE THERE IS INSUFFICIENT TOPSOIL ON SITE TO PROVIDE THIS MINIMUM COVERAGE, ALL AVAILABLE TOPSOIL SHALL BE RETAINED FOR RECLAMATION.
11. NATURAL SUBSTANCES AND ORGANIC MATERIALS THAT HAVE WATER AND NUTRIENT HOLDING CAPACITY CONDUCIVE TO PLANT GROWTH MAY BE USED AS A SUBSTITUTE FOR TOPSOIL.
12. ALL SURFACE AREAS SHALL BE STABILIZED AND PROTECTED AGAINST EROSION.
13. A VEGETATIVE COVER SHALL BE ESTABLISHED AND MAINTAINED OVER ALL DISTURBED AREAS ON THE MATERIAL EXTRACTION SITE IN CONFORMANCE WITH THE CURRENT ALASKA STATE DEPARTMENT OF NATURAL RESOURCES, DIVISION OF AGRICULTURE, REVEGETATION MANUAL FOR ALASKA.
14. SIXTY PERCENT LIVE PLANT COVER OF THE ENTIRE RESTORED AREA SHALL BE ACHIEVED BY THE END OF THE FOURTH GROWING SEASON AFTER THE PHASE IS COMPLETED.
15. RESEEDING OF RECLAIMED AREAS SHALL UTILIZE CERTIFIED SEED SUITABLE FOR ALASKA CONDITIONS THAT IS FREE OF NOXIOUS WEEDS OR UNDESIRABLE PLANT SPECIES IDENTIFIED IN 11 AAC 34.020, PROHIBITED AND RESTRICTED NOXIOUS WEEDS.
16. AREAS COVERED BY BUILDINGS, PAVED DRIVEWAYS, PAVED ROADS, AND PAVED PARKING LOTS AND AREAS WHERE FUTURE UTILITY EASEMENTS AND SEPTIC SYSTEMS WILL EXIST ARE EXEMPT FROM THE RECLAMATION STANDARDS OUTLINED IN SUBSECTIONS (F) THROUGH (H) OF THIS SECTION.
17. STANDARDS FOR RECLAMATION BELOW THE SEASONAL HIGH WATER TABLE UPON COMPLETION OF EARTH MATERIALS EXTRACTION ARE AS FOLLOWS:
18. THE FIRST 20 FEET OF SLOPE BELOW THE WATER TABLE SHALL NOT EXCEED TEN PERCENT TO CREATE A BENTHIC ZONE.
19. THE REMAINING SLOPE WITHIN THE WATER TABLE SHALL NOT EXCEED THE STABILIZED ANGLE OF REPOSE.

ARE YOU INTENDING TO OPERATE BELOW SEASONAL HIGH WATER TABLE?
REMOVE THIS IF THE ANSWER IS NO.



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SHEET
C3.0

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Date: Friday, August 23, 2024 2:37:00 PM
Attachments: image001.png

Dan,
Please take a look at the issues below.

First, there is a setback issue with the coffee shop off of Bogard. From the scaled site plan provided, it appears that the coffee shop is within the 25' setback from Bogard Road right-of-way. The coffee shop is not temporary, and it is a structure according to the definition in MSB 17.55. MSB 17.30.050 and 17.30.060 require setbacks to be reviewed during this process. What is the plan for resolving this setback violation?

Second, you supplied the DNR application material, which is dated May 2024. We can make it a condition of approval that financial assurance is filed after the CUP is approved. Still, the acceptance letter from DNR for your reclamation plan is needed for the application. May to August is a long time for a DNR review.

Third, if you have yet to receive assurances that the driveway locations are acceptable to both the MSB and DOT, then the site plans, buffers, access routes, etc., may change. Changes to those would require an update to the CUP. I hesitate to hold a public hearing when we don't have any assurances that the permits will be issued in the locations you propose.

Respectfully,

Peggy Horton
Current Planner
Matanuska-Susitna Borough
350 E. Dahlia Avenue
Palmer AK 99645
907-861-7862

From: Dan Steiner <dsteiner@mtaonline.net>
Sent: Monday, August 12, 2024 2:34 PM
To: Peggy Horton <Peggy.Horton@matsugov.us>
Subject: RE: Havemeister Earth Material Excavation CUP application review

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Your right. I'll fix it hwn I get back to my office. Sorry. Might be later tonight before I get back

Dan Steiner
Sent from my phone.

-------- Original message --------
From: Peggy Horton <Peggy.Horton@matsugov.us>
Date: 8/12/24 2:19 PM (GMT-09:00)
To: dsteiner@mtaonline.net
Subject: RE: Havemeister Earth Material Excavation CUP application review

Dan,

Did you forget to correct Trunk Road to Bogard Road on the 4th page of the narrative, or was this on purpose for some reason?

I will need a few days to prepare the application for acceptance and schedule the public hearing. You should hear from me by the end of the week.

Respectfully,
Peggy Horton
Current Planner
Matanuska-Susitna Borough
350 E. Dahlia Avenue
Palmer AK 99645
907-861-7862

From: dsteiner@mtaonline.net <dsteiner@mtaonline.net>
Sent: Monday, August 12, 2024 1:38 PM
To: Peggy Horton <Peggy.Horton@matsugov.us>
Subject: RE: Havemeister Earth Material Excavation CUP application review

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Peggy,

Attached are updated sheets and narrative per your comments. Please integrate the updated sheets into the plan set.

Also attached is the response from the USACE.

Thank you for your help.

Dan Steiner, PE
SDCS, LLC
(wk) 907-357-5609
(cell) 907-715-7704

From: Peggy Horton <Peggy.Horton@matsugov.us>
Sent: Monday, August 12, 2024 10:23 AM
To: dsteiner@mtaonline.net
Subject: RE: Havemeister Earth Material Excavation CUP application review

Dan,
The response to #26 states USACE issued a jurisdictional determination. The copy was not included in the submittal.

See the marked-up items attached.

Thank you for your time and effort on this project.

Peggy Horton
Current Planner
Matanuska-Susitna Borough
350 E. Dahlia Avenue
Palmer AK 99645
907-861-7862

From: dsteiner@mtaonline.net <dsteiner@mtaonline.net>
Sent: Friday, August 9, 2024 2:49 PM
To: Peggy Horton <Peggy.Horton@matsugov.us>
Subject: RE: Havemeister Earth Material Excavation CUP application review

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Peggy,

Please replace the previous response letter with the one attached. There was a typo in it.

Dan Steiner, PE
SDCS, LLC
(wk) 907-357-5609
(cell) 907-715-7704

From: dsteiner@mtaonline.net <dsteiner@mtaonline.net>
Sent: Friday, August 9, 2024 1:59 PM
To: 'Peggy Horton' <Peggy.Horton@matsugov.us>

Cc: Jade Laughlin <Centralgravelproducts@hotmail.com>; Gary LoRusso <garyl@keystonesurveyak.com>
Subject: RE: Havemeister Earth Material Excavation CUP application review

Peggy,

Attached in the following:

Letter in response to your comments.
Updated Narrative
Updated Plans

I have addressed everything, but the driveway permits. I am still working on those. The design for the driveways is include in the plans.

Thanks for your help.

Dan Steiner, PE
SDCS, LLC
(wk) 907-357-5609
(cell) 907-715-7704

From: Peggy Horton <Peggy.Horton@matsugov.us>
Sent: Tuesday, July 9, 2024 3:45 PM
To: Dan Steiner - Steiner Design & Construction Svs, LLC (dsteiner@mtaonline.net) <dsteiner@mtaonline.net>
Subject: FW: Havemeister Earth Material Excavation CUP application review

---

From: Peggy Horton
Sent: Friday, May 31, 2024 4:16 PM
To: dsteiner@mtaonline.net
Subject: RE: Havemeister Earth Material Excavation CUP application review

Dan,
I missed something, which is not unusual. Please replace the previous RFAI with this one.

Peggy Horton
Current Planner
Matanuska-Susitna Borough

350 E. Dahlia Avenue
Palmer AK 99645
907-861-7862

From: dsteiner@mtaonline.net <dsteiner@mtaonline.net>
Sent: Friday, May 31, 2024 11:51 AM
To: Peggy Horton <Peggy.Horton@matsugov.us>
Subject: RE: Havemeister Earth Material Excavation CUP application review

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Thank you.

Dan Steiner, PE
SDCS, LLC
(wk) 907-357-5609
(cell) 907-715-7704

From: Peggy Horton <Peggy.Horton@matsugov.us>
Sent: Friday, May 31, 2024 11:48 AM
To: Dan Steiner - Steiner Design & Construction Svs, LLC (dsteiner@mtaonline.net) <dsteiner@mtaonline.net>
Subject: Havemeister Earth Material Excavation CUP application review

Dan,
Please see the attached request for additional information.

Regards,

Peggy Horton
Current Planner
907-861-7862

From: Peggy Horton
To: Dan Steiner - Steiner Design & Construction Svs, LLC (dsteiner@mtaonline.net)
Subject: Central Gravel Products CUP #10298 mailing and advertising fee.
Date: Wednesday, October 2, 2024 9:06:00 AM

Good Morning,

In accordance with the requirements of MSB 17.03 – Public Notification, the applicant shall pay the cost of mailings or advertisements required by ordinance specific to that action. Please be advised of the following charges:

Mailing:	$246.33
Advertising:	$ 92.25
TOTAL DUE:	$338.58

The public hearing notices were mailed on September 17, 2024, and the advertisement was published in the September 20, 2024, Frontiersman. Please pay the fees as soon as possible. They can be paid online using the Other Permits button in our Online Payment Portal here: MSB Payments Portal (matsugov.us). Should you have any questions or require additional information, please contact me.

Peggy Horton
Current Planner
Matanuska-Susitna Borough
350 E. Dahlia Avenue
Palmer AK 99645
907-861-7862

From: Peggy Horton
To: Dan Steiner - Steiner Design & Construction Svs, LLC (dsteiner@mtaonline.net)
Subject: Central Gravel Products CUP # 10298 Comments
Date: Wednesday, October 2, 2024 9:12:00 AM
Attachments:
PH Comment from Bongers 10-1-24.pdf
PH Comment from Bottoms 9-23-24.pdf
PH Comment from Bowen 9-28-24.pdf
PH Comment from Carlton 9-24-24.pdf
PH Comment from Douglass 9-26-24.pdf
PH Comment from Drake 9-23-24.pdf
PH Comment from Durbin 9-23-24.pdf
PH Comment from Grove 9-26-24.pdf
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PH Comment from Thomas 9-26-24.pdf
PH Comment from Weinhammer 9-30-24.pdf
PH Comment from Welton 9-25-24.pdf
PH Comments from Bertram 9-20-24.pdf
PH Comments from Schoppe 9-22-24.pdf
ADF&G Commments 9-19-24.pdf

Dan,
Attached are the public comments we've received so far. I've also attached ADF&G comments received on 9/19/2024.

There appears to be a high level of public concern.

Peggy Horton
Current Planner
907-861-7862

From: Dustin Spidal
To: Layla Lesley
Cc: Peggy Horton; Alex Forkner; Jamie Taylor; Jason Ortiz
Subject: FW: Proposed Gravel Pit in RSA 25
Date: Thursday, October 3, 2024 3:08:02 PM
Attachments: Snow Fence Guide (shrp-h-320).pdf
image001.png
image002.png

Layla,

Here is the information Tom was mentioning during the meeting. We use snow fence to reduce the drifting in this area.

Thanks,

Dustin Spidal
Operational Branch Manger of Roads
Phone (907) 861-7758
Cell (907) 354-3458
Email:
dustin.spidal@matsugov.us

From: Tom Adams <Tom.Adams@matsugov.us>
Sent: Thursday, October 3, 2024 9:44 AM
To: Dustin Spidal <Dustin.Spidal@matsugov.us>
Subject: RE: Proposed Gravel Pit in RSA 25

I advised him of this guide to consider mitigating snow drifts at Engstrom.

Tom Adams, PE - Director
Mat-Su Borough Public Works
tom.adams@matsugov.us
(907) 861-7751 – Office

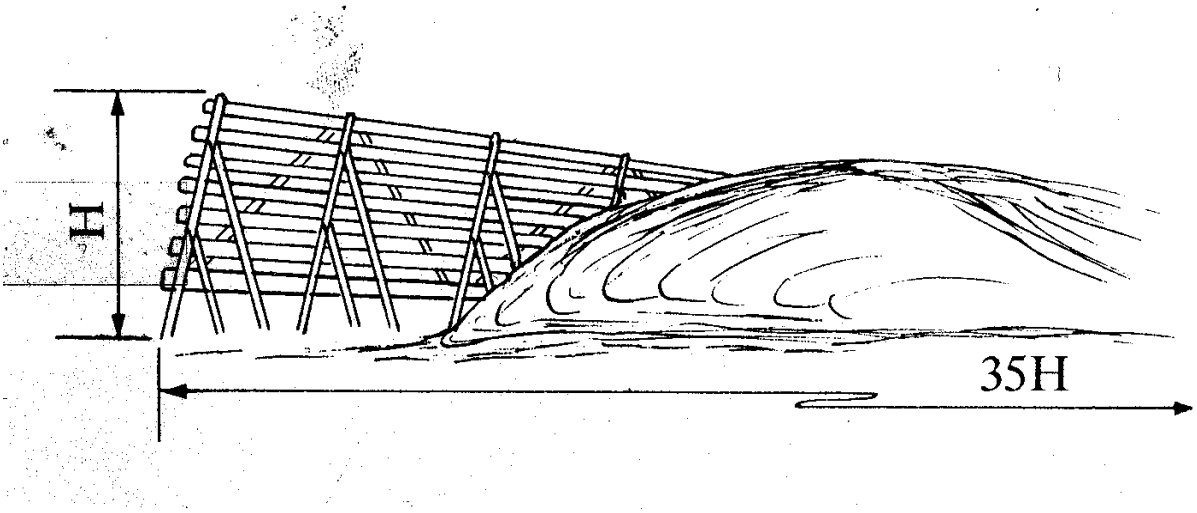
From: Dustin Spidal <Dustin.Spidal@matsugov.us>
Sent: Tuesday, October 1, 2024 2:34 PM
To: Tom Adams <Tom.Adams@matsugov.us>
Subject: Fwd: Proposed Gravel Pit in RSA 25

Tom,

What is the engineering you referring to that Peggy mentioned? Are talking about snow fencing?

SHRP-W/FR-91-106

Snow Fence Guide



Ronald **D.** Tabler
Tabler & Associates

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National Research Council

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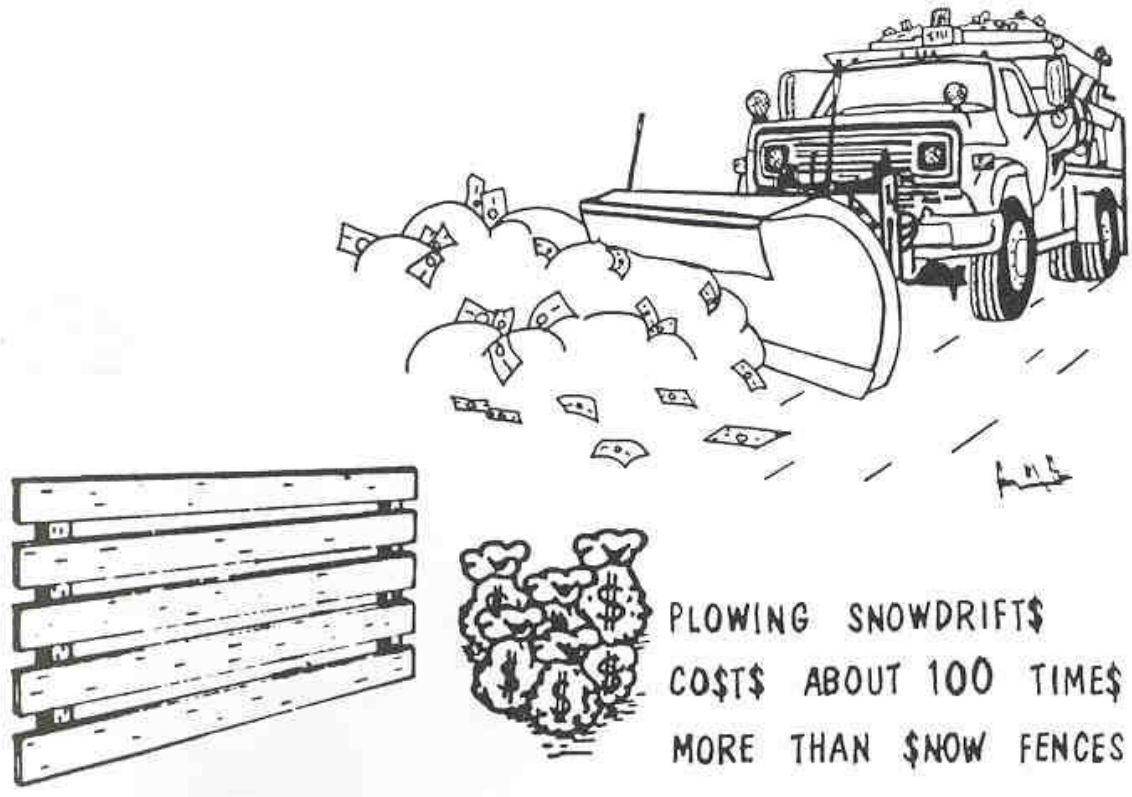
Snow Fence Guide



Ronald **D.** Tabler
Tabler & Associates

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Washington, DC 1991

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October 1991

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Strategic Highway Research Program
2101 Constitution Avenue, N.W.
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Acknowledgments

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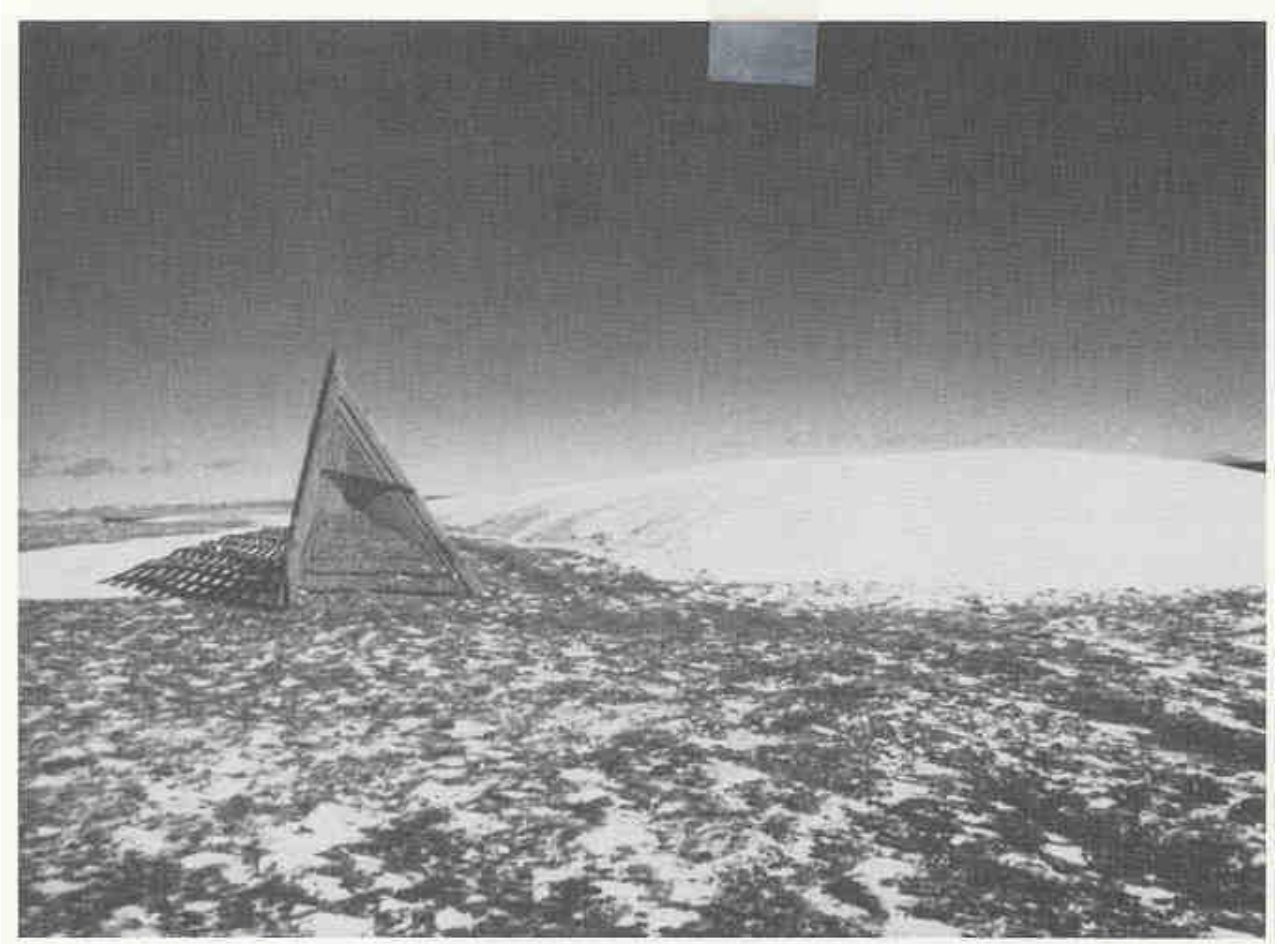
Research leading to the new guidelines presented here was also supported by:

Rocky Mountain Forest and Range Experiment Station, Forest Service, U.S. Department of Agriculture;

University of Wyoming Mechanical Engineering Department;

Wyoming Department of Transportation.

The author thanks Dr. Kynric Pell, head of the Mechanical Engineering Department, University of Wyoming, for his support as principal investigator.



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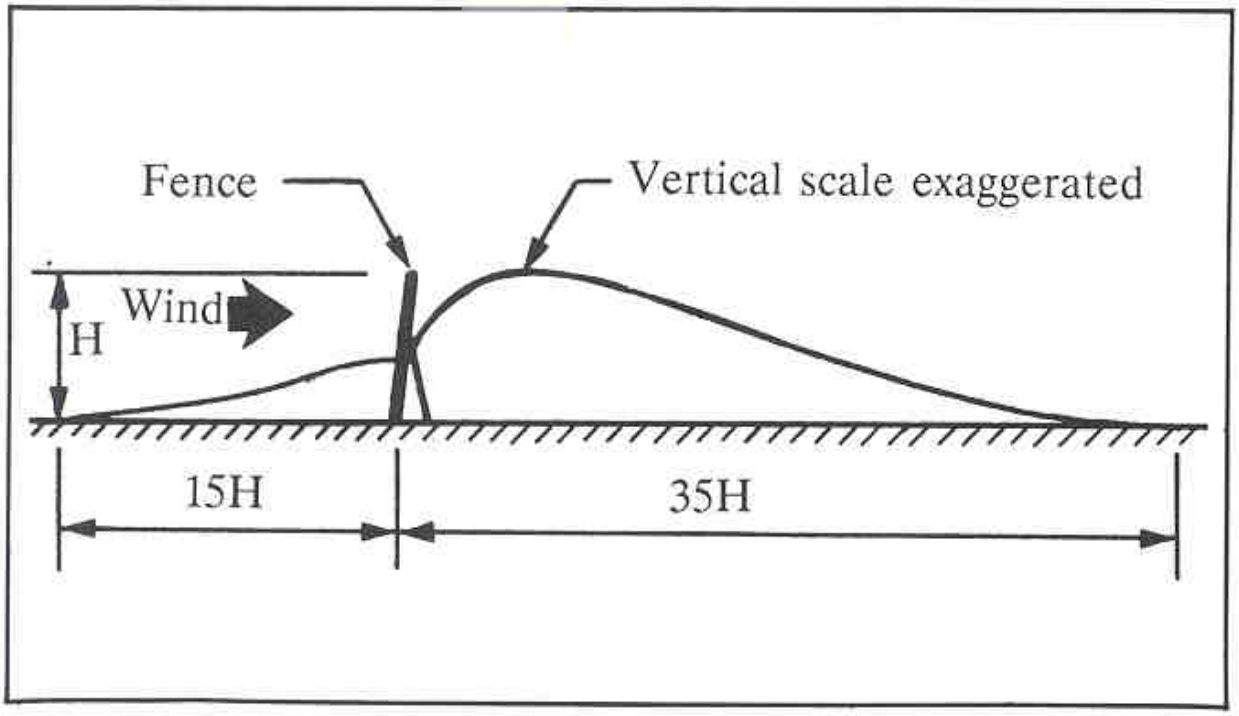


Tips to Remember

1. Mechanical snow removal costs about 100 times more than trapping snow with fences.

2. The best fence porosity is 40% to 50%.

3. For effectiveness and economy, a single row of tall fences is always preferable to multiple rows of shorter fences.

4. One 6-ft. (1.8-m) fence = 2 rows of 4-ft. (1.2-m) fence One 8-ft. (2.4-m) fence = 5 rows of 4-ft. (1.2-m) fence

5. Fences can improve driver visibility and reduce ice.

6. To improve driver visibility and to maximize effectiveness, fences should be 8 ft. (2.4 m) or taller.

7. Fences should be set back at least 35H from the road shoulder.

8. Extend fences beyond protection limits to an angle of 30* on either side of the prevailing wind direction.

9. Although fences should be perpendicular to the prevailing wind direction, departures up to 25' are permissible.

10. Leave a gap equal to 10% of the total fence height under the fence.

Purpose of This Guide

Snow fences can save lives and reduce maintenance costs. To be effective, however, snow fences must be designed and placed properly.

The modern snow fence is a giant step forward from the 4-ft. (1.4-m) picket fence so common 20 years ago. Placed in contact with the ground, the old-fashioned fence was an ineffective snow collector.

Properly designed and placed, taller fences are dramatically more effective than the traditional low picket fence. New lightweight plastics now allow the construction of portable fences up to 8 ft. (2.4 m) tall.

Fence projects can fail because the fences are improperly designed or placed. One common mistake is failure to design the fence for the capacity of snow it needs to hold over the season. Placing the fence too close to the road can actually make snowdrift problems worse, and is another common mistake.

To encourage more widespread use of this extremely cost effective snow fence technology, SHRP developed this *Snow Fence Guide* to cover everything maintenance personnel need to know in order to design and locate snow fences correctly.

The *Guide* summarizes the results of new research conducted by SHRP, as well as other research conducted over the last two decades. A 21-minute video, "Effective Snow Fences," supplements the *Guide.* Use the order form in the back of this book to order the *Guide.*

1. Benefits of Snow Fences

Blowing snow is a maintenance engineer's nightmare. It blinds drivers, causes accidents, and makes clearing the road difficult--at times impossible. When the snow melts, runoff seeps under the pavement, where water can cause cracking and heaving.

A well-planned snow fence program can provide a solution to blowing snow problems, and can be an excellent long-term investment. In the 1970s, the Wyoming Department of Transportation reduced snow and ice removal costs by more than one-third on a 45-mile stretch of I-80 where fences were installed (Figure 1). The fences have been remarkably effective in preventing drift formation over the 20 years they have been in place. Data available from the Wyoming study shows that storing snow with snow fences costs three cents a ton over the 25-year life of the fence, compared to three dollars a ton for moving it.

The remarkable effectiveness of properly designed snow fences is illustrated by Figure 2, which shows the conditions at a road cut before and after snow fences were installed.

In addition to their cost-effectiveness, snow fences make roads much safer. Snowdrifts can cause loss of vehicle control, reduce sight distance on curves and at intersections,

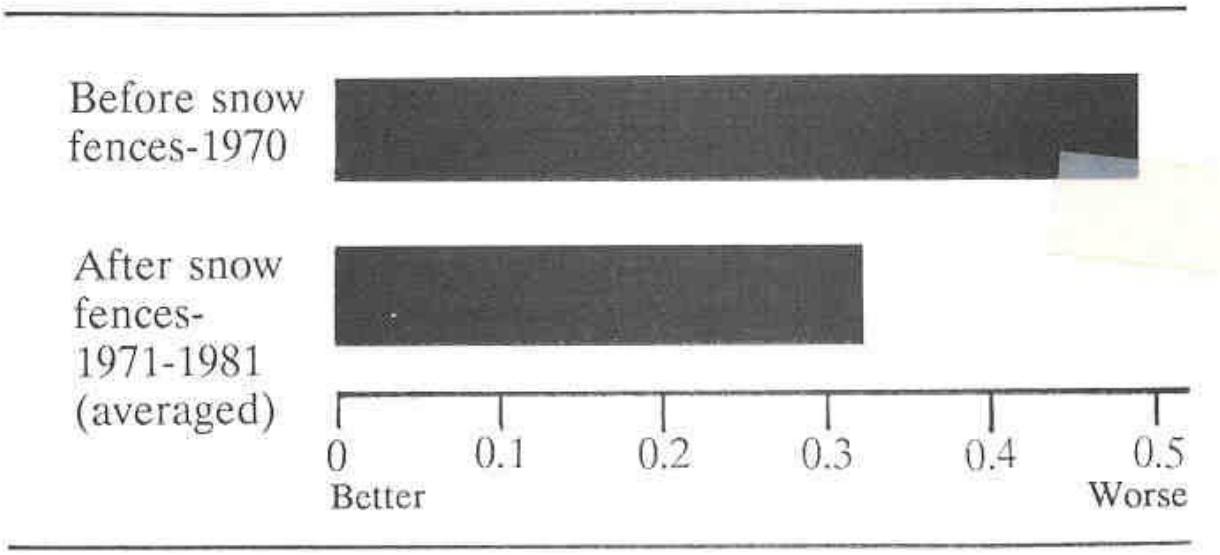


Figure 1. Snow removal costs before and after snow fences were installed on Wyoming I-80. Figures are based on the ratio between snow removal costs in the snow fence test section versus the remainder of the highways.

impair motorist visibility, promote ice formation, bury informational signs, and render safety barriers ineffective. By reducing the blowing snow crossing the road, snow fences improve visibility and reduce the formation of slush and ice (Figures 3 and 4).

The number of accidents caused by poor visibility was reduced by 70% where fences were constructed along I-80.

A final benefit of snow fences is that snow stays off the road, where runoff cannot damage the pavement or block drainage.

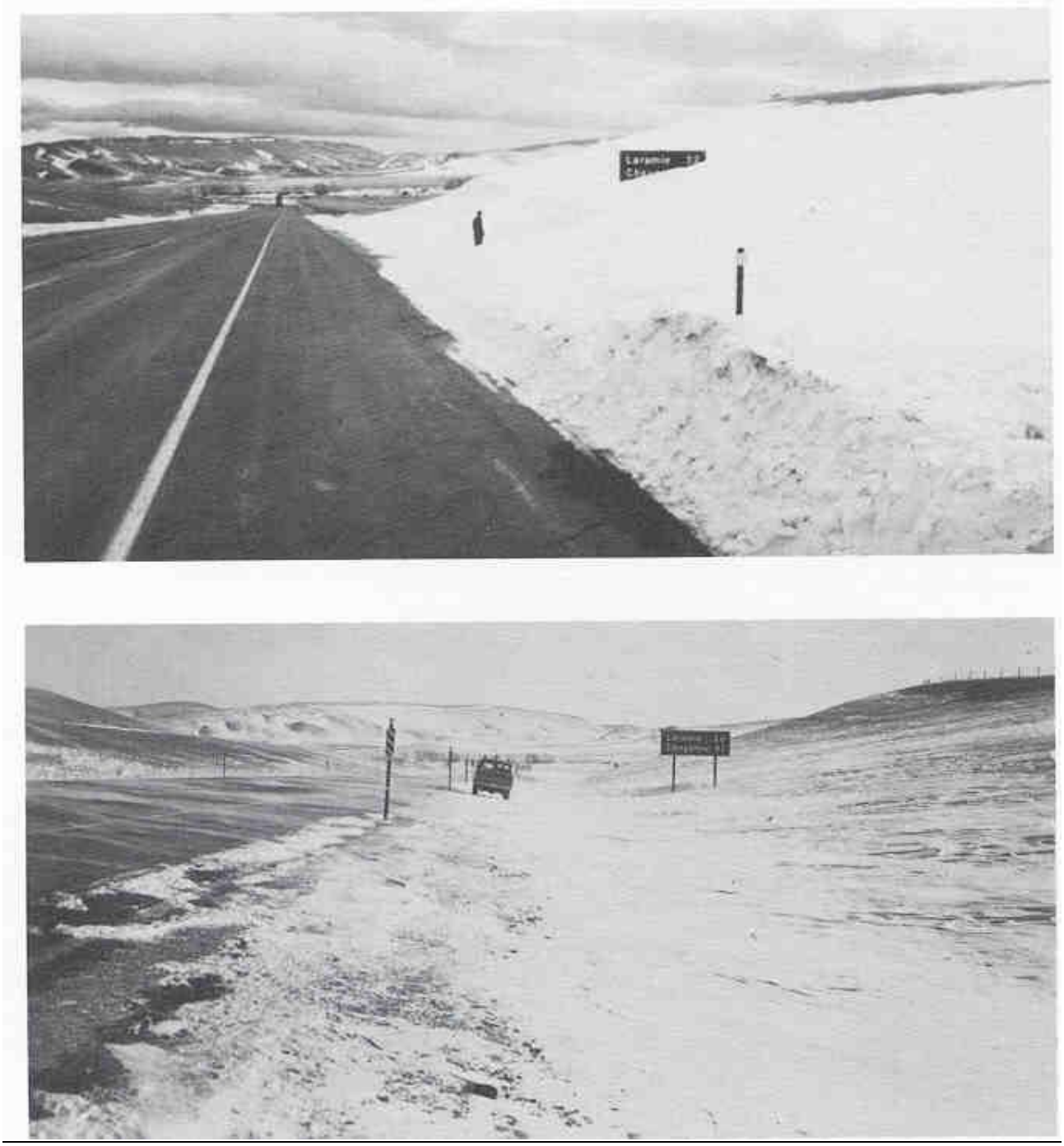


Figure 2. Snow conditions at a road cut before (top) and after (bottom) building snow fences. This cut has remained drift-free for the 20 years since the fences were built, and is representative of more than 25 other locations on this highway where drifts have been eliminated.

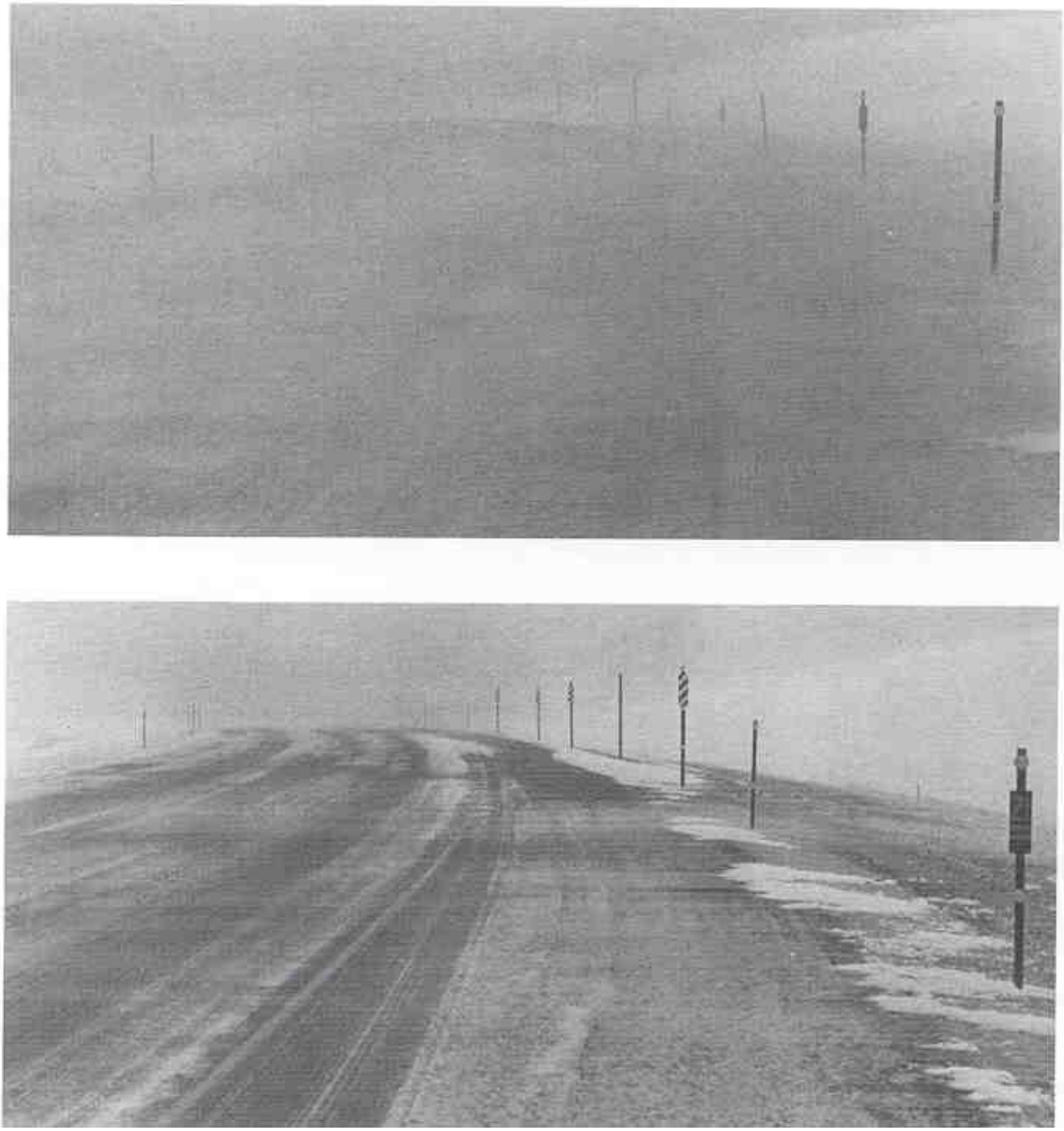


Figure 3. Improved visibility downwind or a 12-ft. (3.7-m) snow fence. The top photograph was shot 200 ft. (60 m) outside of the protected area. The bottom photograph was taken at the boundary of the protected area. (Photographs by Keith Rounds, Wyoming Department of Transportation.)

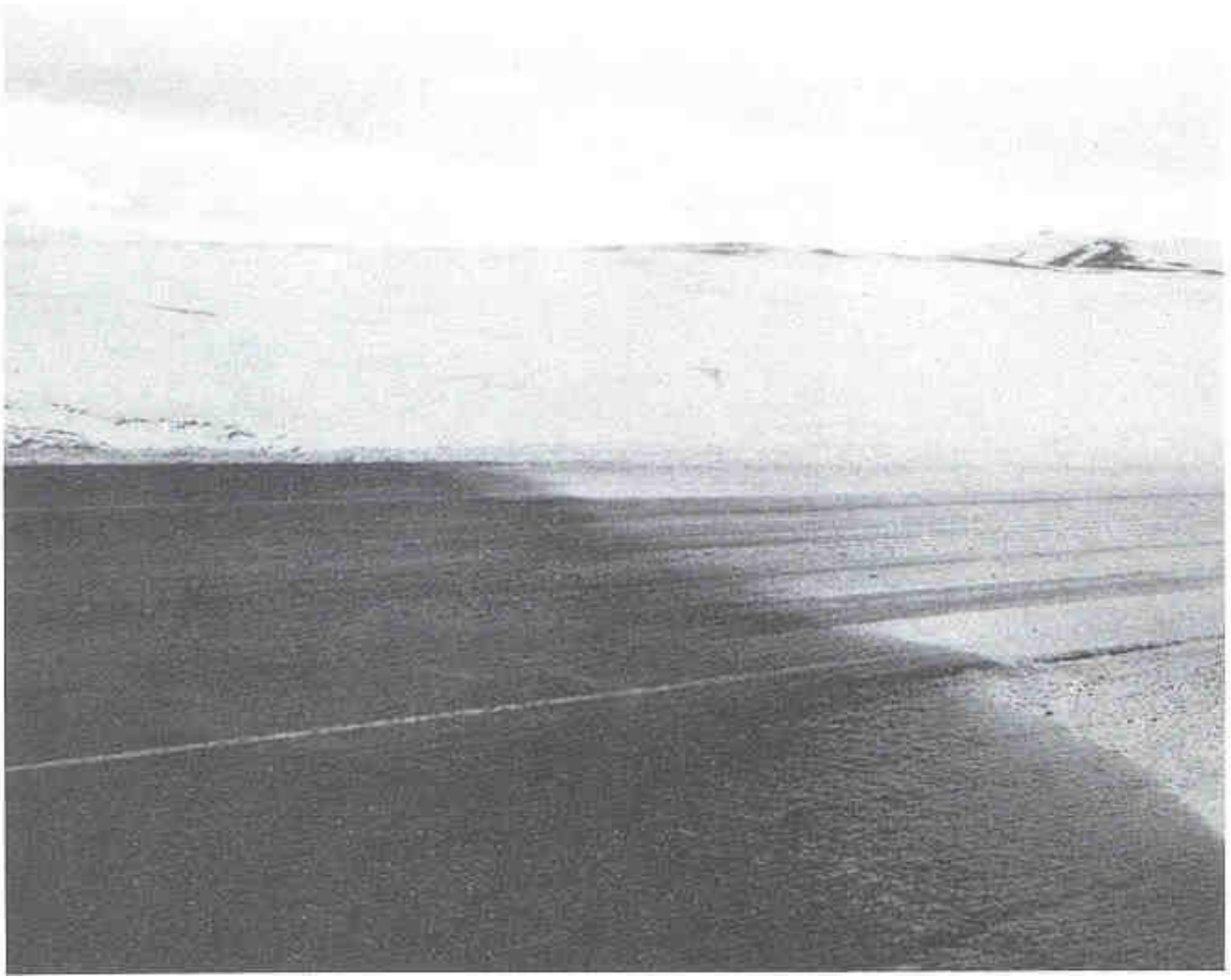


Figure 4. Transition from frozen slush to wet pavement caused by a 12-ft. (3.7-m) snow fence located about 500 ft. (152 m) upwind. The area on the right side of the transition was unfenced.

2. Introduction to Snow Fence Design

How Snow Fences Work

Blowing snow particles resemble tiny grains of sand. Snow particles that are too heavy to be suspended in the air move by bouncing or intermittently jumping (saltating) along the surface. If they are too heavy to saltate, particles roll or creep along the surface, forming "snow waves," or "dunes." Snow fences restrain the wind, reducing wind speed. This reduces the force of the wind on the surface of the snow, allowing the creeping and saltating particles to come to rest. Some of these particles are deposited on the upwind side of the fence because of the reduced wind speed that occurs ahead of the barrier. Most of the snow deposit occurs on the downwind side of the porous snow fence. Further information on how drifts form is given on p. 23, "The Four Stages of Drift Growth."

Designing the Fence

The most important factor in designing a snow fence--and one that often is disregarded--is capacity. Sizing a snow fence is similar to determining the required capacity for a culvert, detention pond, or storm drain. The first step is to estimate how much blowing snow must be stored, and the

second step is to design a fence system that has the capacity to store it.

To estimate the quantity of blowing snow, one must determine the distance (fetch) within which the wind can pick up snow and deposit it on the road, and the amount of relocated precipitation. Figure 5 illustrates the fetch concept. If the prevailing wind direction (or directions) is known, fetch can be measured on aerial photographs or topographic maps, or by direct observation during the winter.

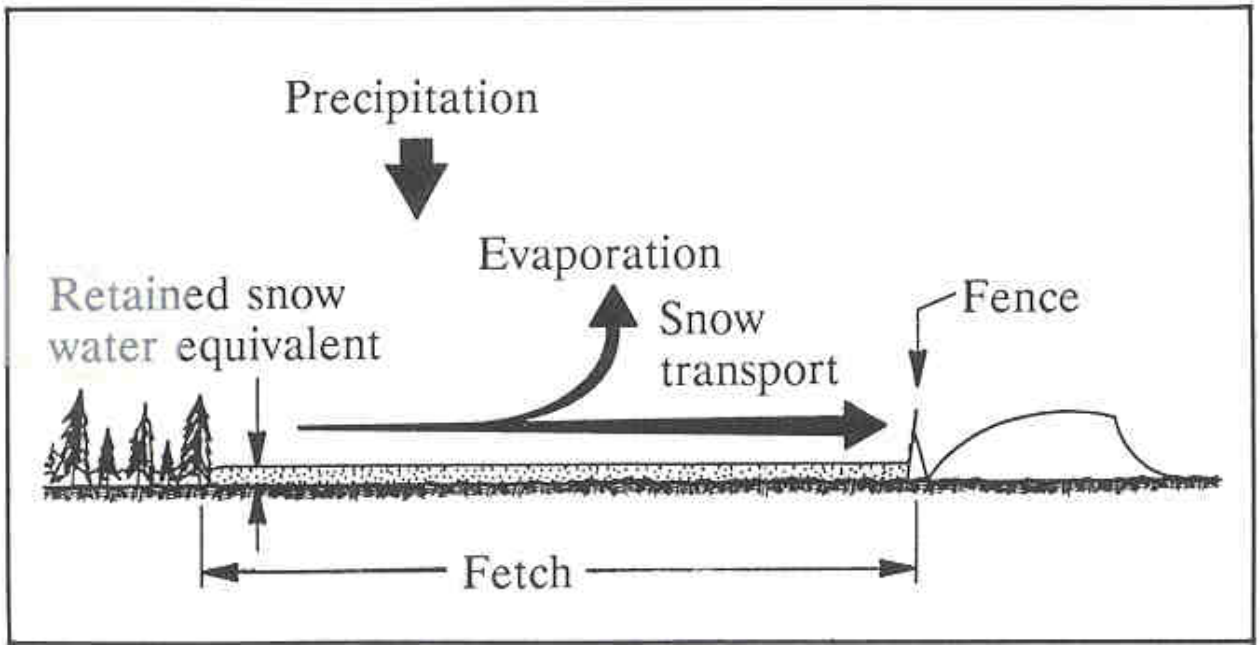


Figure 5. The fetch concept used to estimate snow transport.

The first step in determining relocated precipitation is to estimate water-equivalent winter precipitation, which may be calculated as 10% of the annual snowfall. A conservative estimate for relocated precipitation is 70%.

The fetch and relocated precipitation are used in the snow transport curve (Figure 6) to determine the amount

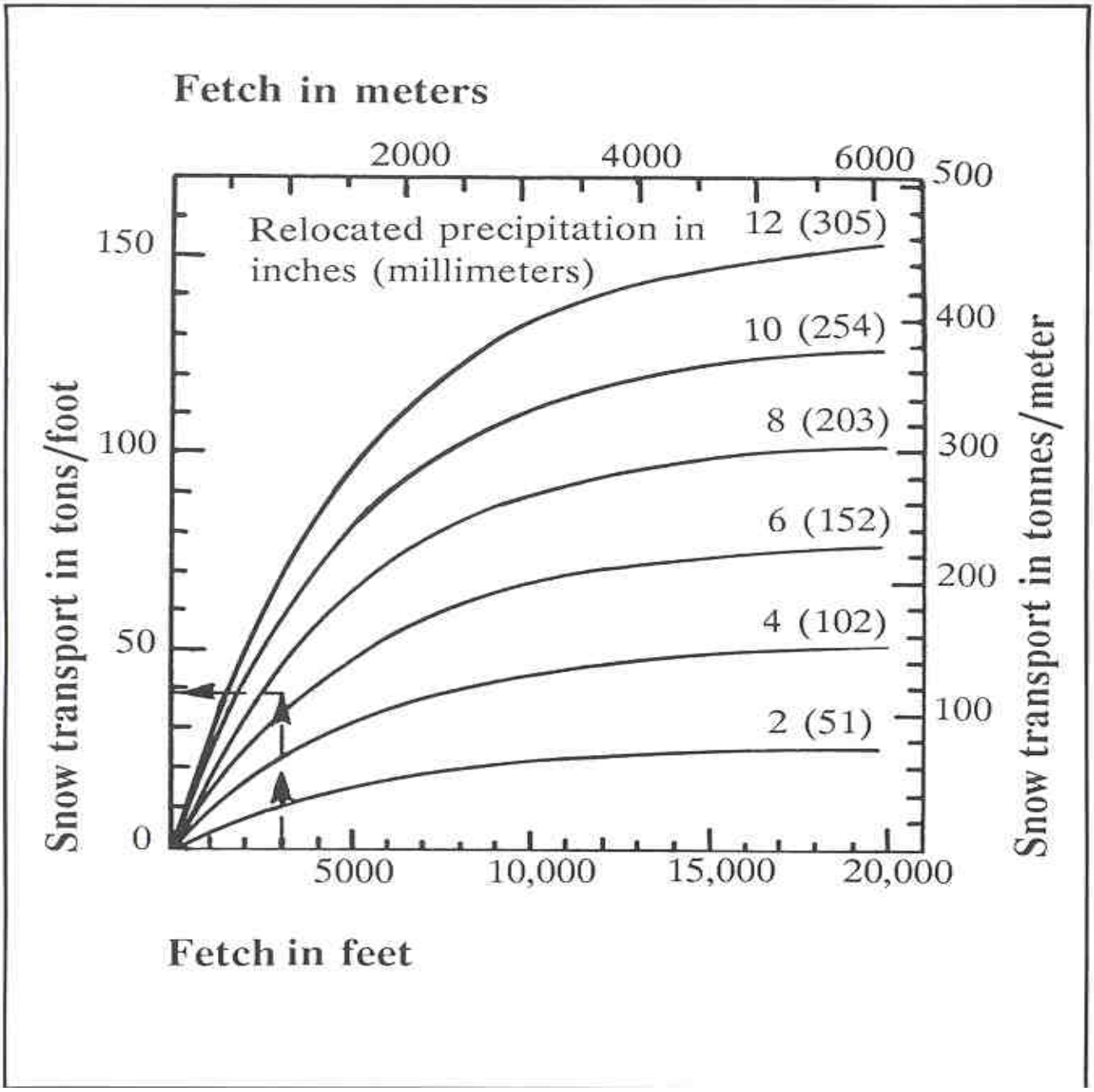


Figure 6. Variation of seasonal snow transport with fetch and relocated precipitation.

of seasonal snow transport. The height of fencing (or number of rows of fence having a specified height) can be determined from the amount of snow transport (Figure 7).

For example, if the fetch upwind of the road is 3,000 ft. (915 m), and the average annual snowfall is 90 in. (2290 mm), then relocated precipitation would be 6.3 in.= 90 in. x 10% x 70% (160 mm = 229 cm x 10% x 70%). Enter Figure 6 at a fetch of 3,000 ft. (915 m), proceed vertically to intercept the relocated precipitation curve at 6.3 in. (160 mm), and then move to the y axis to determine that the snow transport would be approximately 38 tons/foot (120 tonnes/m). In this case, an 11-ft. (3.4 m) fence would be required, as shown in Figure 7.

Seven rows of 4.5-ft. (1.4 m) fences would be needed to provide the same snow storage. A single row of taller fence is always preferable to multiple rows of shorter fence. The taller fence not only traps more snow, but also much more effectively improves driver visibility, costs less, and requires less land. A rule of thumb is that fences should be at least 8 ft. (2.4 m) tall.

The fence should extend lengthwise far enough to cover the area to be protected, extended on either side by 20 times the height of the fence. The extension allows for variations in wind direction and for the reduced trapping efficiency and storage capacity near fence ends.

Fences should have a gap at the bottom equal to 10-15% of the fence height. Leave 40-50% of the fence surface area open to make the fence porous. Solid fences do not collect snow efficiently.

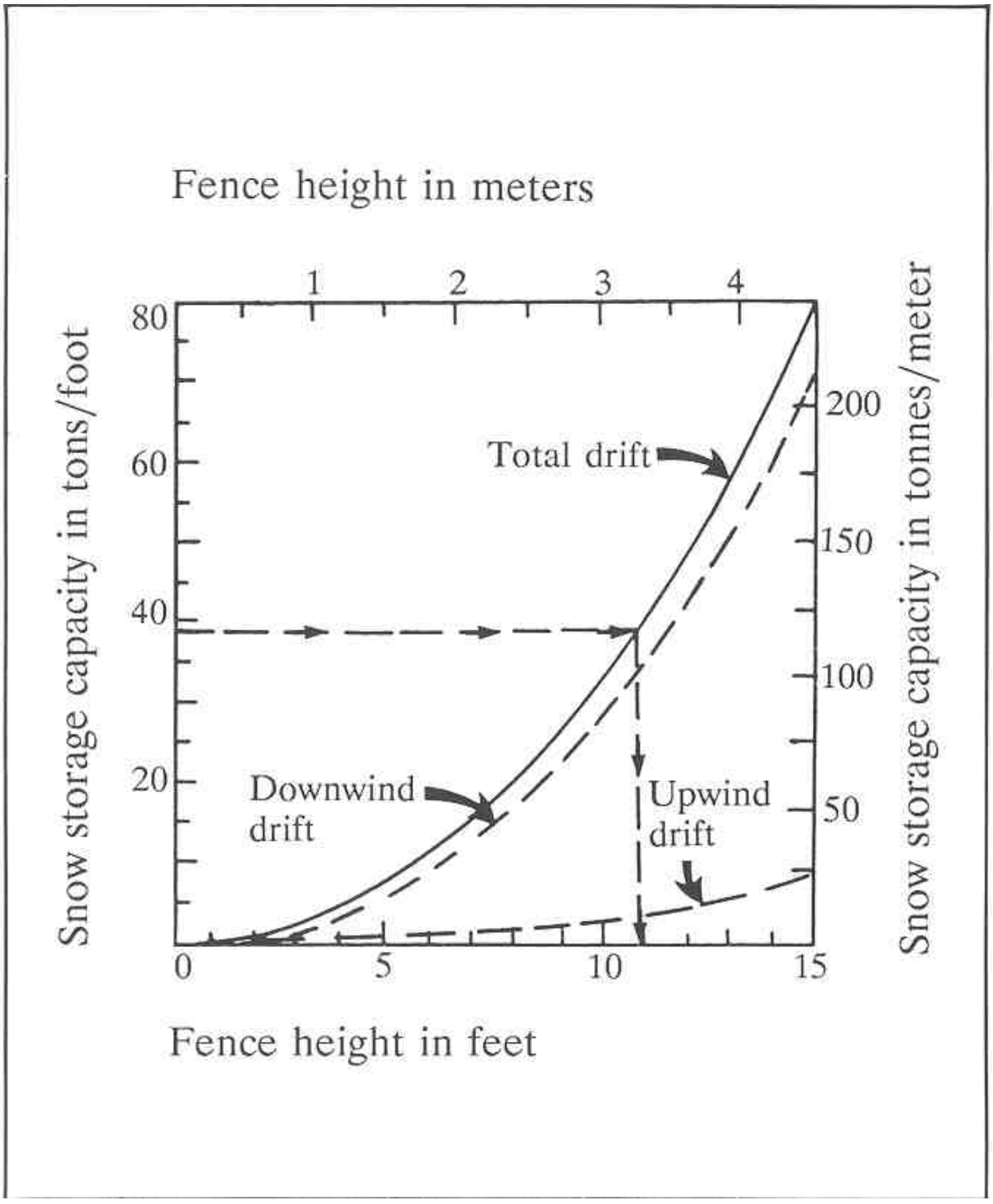


Figure 7. Snow Storage capacity in relation to fence height.

Placing the Fence

Snow fences too close to the road can *increase* the amount of snow on the road! The distance between fences and the road should be at least 35 times the height of the fence.

Although fences should be perpendicular to the prevailing wind direction, the angle can vary by as much as 25° without affecting performance.

More detailed step-by-step guidance on designing and placing snow fences is provided in the next chapter.

3. Step-by-Step Guide to Snow Fence Design

Analyze the Snow Drift Problem

Identify *what* the snowdrifting problem is, *where* it is, and *why* it exists.

Is visibility poor? Are there drifts on the roads? Does ice form in some spots? Are there areas that seem to encourage accidents? Is it expensive to plow the snow? Or is the problem a combination of these things? Once you have determined what the problem is, the next step is to identify solutions.

Define the Area that Needs Fence Protection

Knowing *where* the problem is allows us to use snow fences where they are most needed. Define the area that needs snow fence protection by the mileposts or stations at the limits of the problem. Mark these locations on plans or aerial photographs. Observations should be made in the wintertime with the input of the local maintenance supervisor. Aerial photographs taken during the winter can show the problem boundaries, and also provide information on wind directions.

Determine Why the Problem Exists

Determining why a drifting problem exists can indicate the best possible solution to the situation. Road cuts, vegetation, buildings, guard rails, median barriers, or bridge abutments and their relationships to prevailing wind and snow conditions can cause snowdrifts. An important part of understanding the problem is to gain insight into how long the problem has existed, and the reasons that the problem has not been solved previously.

Determine the Wind Direction

Wind direction is the most important information for snow fence design. Wind direction determines the fetch, the snow transport, and fence orientation and placement.

The prevailing wind direction should be determined as precisely as possible. Methods to determine wind direction are to:

1. Analyze meteorological data from a representative weather station;
2. Determine direction of drift features in the field;
3. Determine direction of drift features using aerial photographs;
4. Note the orientation of wind-sculpted vegetation, such as flagged or bent trees, or snow-caused abrasion on wooden poles or posts.

The simplest procedure for determining wind direction is to use a hand-held compass to determine the direction of drifts

behind shrubs, trees, or other objects casting drifts. The streamlined shapes of drifts provide readily identifiable indicators for wind direction. The alignment of large drifts, measured late in the winter, represents the average direction of drifting. If only small drifts are available, measurements must be repeated several times over a winter to obtain a meaningful average. Because cuts and fills can alter local wind directions, it is important *not* to take measurements from drifts in road cuts or other locations where wind direction may be different from the wind direction at the snow fence site.

The direction of drifts formed by solitary objects is readily discernible on aerial photographs at scales up to 1:12,000 if the following requirements are met:

1. Black and white film must be used (color film does not provide sufficient contrast);

2. Photographs must be taken on bright, sunny days, preferably in the early morning when the sun is low;

3. Flights should be scheduled after major drifting events having typical winds, but not after a recent snowfall that can cover up drift features;

4. Photographs must be taken before melting begins, preferably near the time of peak snow accumulation.

Photographs also can be used to identify and delineate problem locations, measure the fetch, and help situate fences. The cost of aerial photographs may easily be repaid by the time saved in field measurements, design, and preparation of location maps.

Estimate the Snow Transport

Adequate capacity is the most important requirement for any snow fence system. Many snow fence projects fail because they are not designed for sufficient storage capacity. "Sizing" a snow fence is similar to determining the required capacity for a culvert, detention pond, or storm drain. First, estimate how much blowing snow must be stored. Second, design a fence system that can store it.

Snow transport is the mass of snow moved by the wind over a period of time within a specific width across the wind. It is usually expressed as tons per foot or tonnes per meter. The snow transport is related directly to the size of the fetch. The fetch is measured from the upwind side of the snow fence to the next upwind obstacle to snow transport. Obstacles include deep gullies or stream channels, trees, ice pressure ridges, and open water.

It is possible to calculate the snow transport from the fetch, from the amount of relocated precipitation, and from the evaporation that occurs when snow moves. Most blowing snow travels within 6 ft. (1.8 m) of the surface (Table 1). This is essential information for determining the height of the fence.

To estimate the snow transport at a prospective fence location, use Figure 7 (p. 13). The wind direction information from the previous section determines the fetch and hence snow transport. The fetch can be measured on aerial photographs or topographic maps, or measured in the field. An upper limit for the fetch is 4 miles (6 km), because most of the snow from further upwind evaporates.

Height		Wind speed, in miles per hour (meters per second)				
feet	meters	22 (10)	34 (15)	45 (20)	56 (26)	67 (30)
0.0-1.6	0.0-0.5	88.5	68.7	51.9	41.1	33.8
1.6-3.3	0.5-1.0	2.4	8.1	12.6	15.2	16.7
3.3-4.9	1.0-1.5	1.6	5.0	8.0	9.9	11.1
4.9-6.6	1.5-2.0	1.3	3.9	6.1	7.5	8.5
6.6-8.2	2.0-2.5	1.2	3.1	4.8	6.0	6.9
8.2-9.8	2.5-3.0	1.1	2.7	4.2	5.2	5.8
9.8-11.5	3.0-3.5	1.0	2.5	3.6	4.4	5.1
11.5-13.1	3.5-4.0	1.0	2.1	3.2	4.0	4.5
13.1-14.8	4.0-4.5	1.0	2.0	2.9	3.5	4.0
14.8-16.4	4.5-5.0	0.9	1.9	2.7	3.2	3.6

Table 1. Vertical distribution of snow transport as a function of wind speed. Values are percentages of total transport in the first 16 ft. (5 m) above the surface**.**

The next step is to determine the relocated precipitation by estimating water-equivalent precipitation over the snowdrifting season. For most purposes, it is sufficient to design for the *average* winter. Sources of precipitation data include climatological data published by the National Weather Service, or summaries published in climatological atlases. The average water-equivalent of newly fallen snow is about 10% of the snowfall. In the western states, the best estimate for winter precipitation is provided by records of the peak snowpack water-equivalent as measured on snow courses operated by the U.S. Soil Conservation Service. In Canada, snowfall data are available in the *Climatological Atlas of Canada.*

The proportion of precipitation relocated by the wind over the course of a winter varies with weather conditions,

vegetative cover, and topography, but seldom exceeds 70%. In the absence of specific measurements, 70% may be used as an upper limit for conservative design. If a closer estimate is desirable, snow retention may be measured over a winter and expressed as a percentage of average precipitation.

Determine the Fence Height and the Number of Rows Required

T'here are two ways to determine how much storage capacity is needed: by estimating snow transport as described above; or by trial-and-error. Estimating snow transport speeds up the determination, but for those who prefer to learn by experience, there is one simple rule that applies to most locations: *Start with a fence 8 ft. (2.4 m) tall.*

Given the snow transport (Figure 6, p. 11), however, the required height of fencing (or the number of rows of fence of a specific height) is easily calculated from Figure 7 **(p.** 13), which contains information about the storage capacity of fences.

For the example on p. 12 where the snow transport was estimated to be 38 tons/ft. (113 tonnes/m), an 11-ft. (3.4-m) fence would be required. Seven rows of fence 4.5 ft. (1.4 m) tall would be required to provide the same snow storage capacity. The 11-ft. (3.4-m) fence would be less expensive to build and install, would require less land area, and would trap snow more efficiently. For these reasons, a single row of taller fence is always preferable to multiple rows of shorter fence.

Determine Fence Placement

Layout Procedure

The following procedure is recommended for laying out fence systems:

1. Enlarge a topographic map or aerial photograph to a scale of 1 in. = 500 ft. (1 cm = 60 m) or larger;

2. Mark the required protection limits on the map;

3. Draw lines on the map parallel to the prevailing wind direction at protection limits;

4. Determine fence orientation and setback;

5. Draw tentative fence locations;

6. Make a field visit to determine if fence locations should be adjusted for topographic features and other conditions not apparent on the map or photograph.

Fence Orientation

The orientation of a fence is much less important than its proper extension on either side of the area to be protected. Fences should be parallel to the road if the prevailing wind direction is within 25' of perpendicular to the road. If winds are more closely angled to the road, fences should be aligned perpendicular to the prevailing wind direction. Departures from these guidelines of up to 25' may be made to avoid adverse terrain, or to take advantage of favorable

topography. Where fences are designed at an angle to the road, adding a parallel fence between the road and the angled fences affords the most complete protection.

If the average wind direction is nearly parallel with the centerline of the road, visibility can be improved by placing fences on both sides of the road in a herringbone pattern (Figure 8). To deflect the blowing snow away from the road, the fences should be aligned so that the outside end is farther downwind than the end nearest the road.

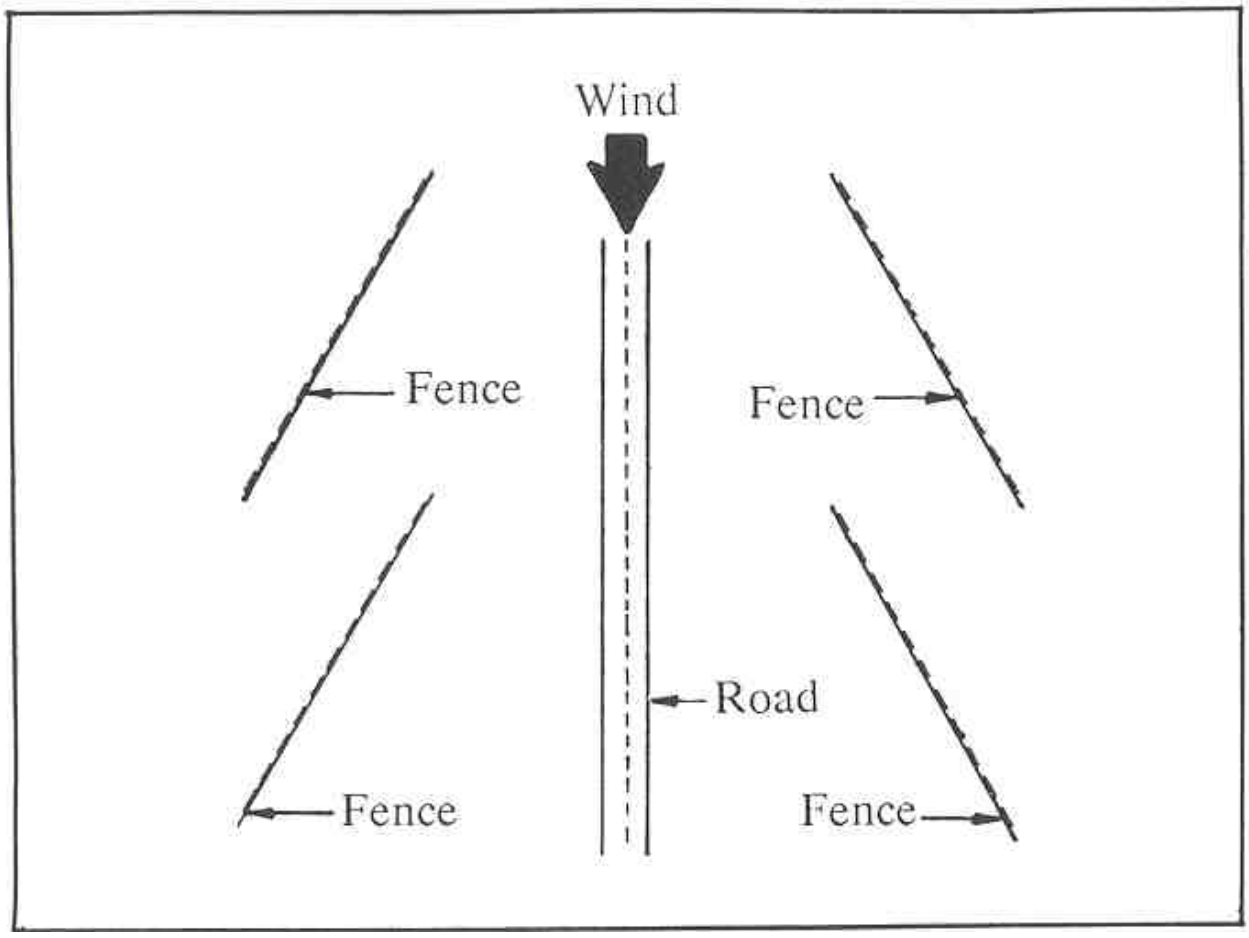


Figure 8. Herringbone snow fence pattern used to improve visibility with winds that blow down the road.

The Four Stages of Drift Growth

Snow fences slow down the wind and allow snow particles to stop or fall to the ground. Since the wind slows ahead of the snow fence, some snow deposits upwind of the fence. For a 50% porous fence on level ground, the upwind drift contains about 15% as much snow as the downwind drift, and grows in proportion to the downwind drift. Figure 9 shows the four stages of drift growth.

In the first stage, a lens-shaped drift forms as creeping and saltating particles are caught by the fence. The wind force diminishes for a distance equal to about 15 times the height of the fence (15H). Some blowing snow deposits on the ground, but the wind still carries some particles from the shelter of the fence.

This lens-shaped deposit becomes deeper until the wind no longer follows its curvature. At this stage, an eddy or recirculation zone forms at the downwind end of the lens, causing a slip-face to form. This is characteristic of the second stage of drift growth. At this stage, the drift adds significant resistance to the approaching wind. The recirculation zone helps trap particles blowing off the top of the drift.

During the second stage, the lens-shaped drift becomes deeper but not much longer (Profile 3, Figure 9). The efficiency of the fence may actually

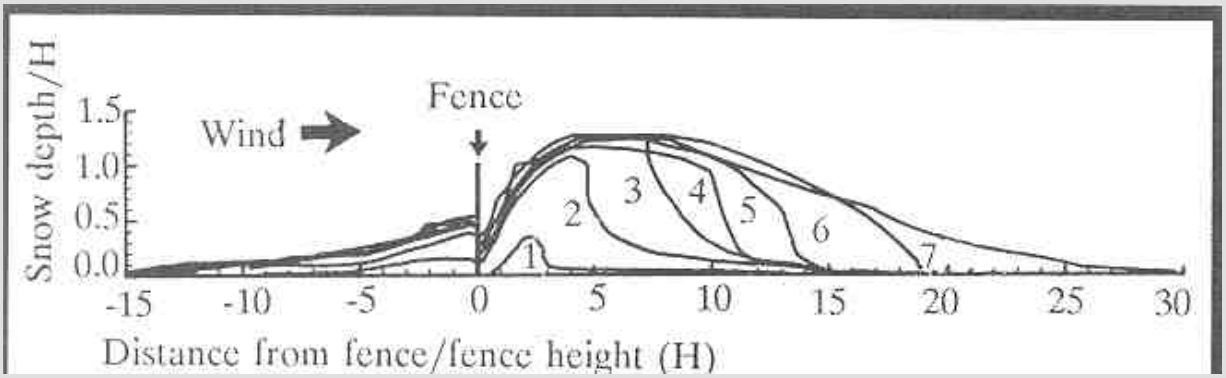


Figure 9. Stages of growth for a 50% porous snow fence, as illustrated by profiles on seven dates. ©1986 Tabler & Associates

increase as the drift adds resistance to the wind. The slip-face and recirculation zone that form in this stage trap some of the snow that blows off the top of the drift.

As the downwind drift approaches its maximum depth (for 50% porous fences, 1 to 1.2 times the height of the fence), the third stage of growth begins. The recirculation zone fills in as the drift lengthens downwind (Profiles 4-6, Figure 9). This stage is characterized by a decline in trapping efficiency as the recirculation zone diminishes in size.

The fourth stage of growth begins when the drift first assumes a smooth profile without the slip-face, marking the disappearance of the recirculation zone. At this stage, the drift is about 20*H* in length (Profile 6, Figure 9). Subsequent growth is slow as the drift elongates to its final length of 30 to 35*H* (Profile 7, Figure 9).

Minimum Setback Distance

Fences should be far enough from the road so that the downwind drift does not extend onto the road. On flat terrain, the minimum setback for 50% porous snow fences is 35*H*. Minimum setback for a 6-ft. (1.8-m) fence, for example, would be 35 x 6 ft. = 210 ft. (35 x 1.83 m = 64 m). Snow fences may be set back farther to prevent their drifts from burying right-of-way fences, or if terrain will encourage longer drifts.

Maximum Setback Distance

Certain terrain features, such as a hill, a ditch, or a gully, may require a fence to be placed farther from the road than the minimum distance. The farther a fence is from the area to be protected, the less protection it affords.

The maximum setback distance depends on the nature of the drifting problem. At shallow road cuts where even a small amount of blowing snow can cause drift encroachment on the road, fences must be closer than in the case of deep cuts that store more snow before drifts reach the road.

The End Effect

Fences should extend far enough beyond the protection limits to intercept blowing snow from the anticipated range of wind directions, and to allow for the reduced trapping efficiency and storage capacity near the fence ends--the end effect.

To account for both the end effect and the natural variability in wind direction, fences should extend far enough on both

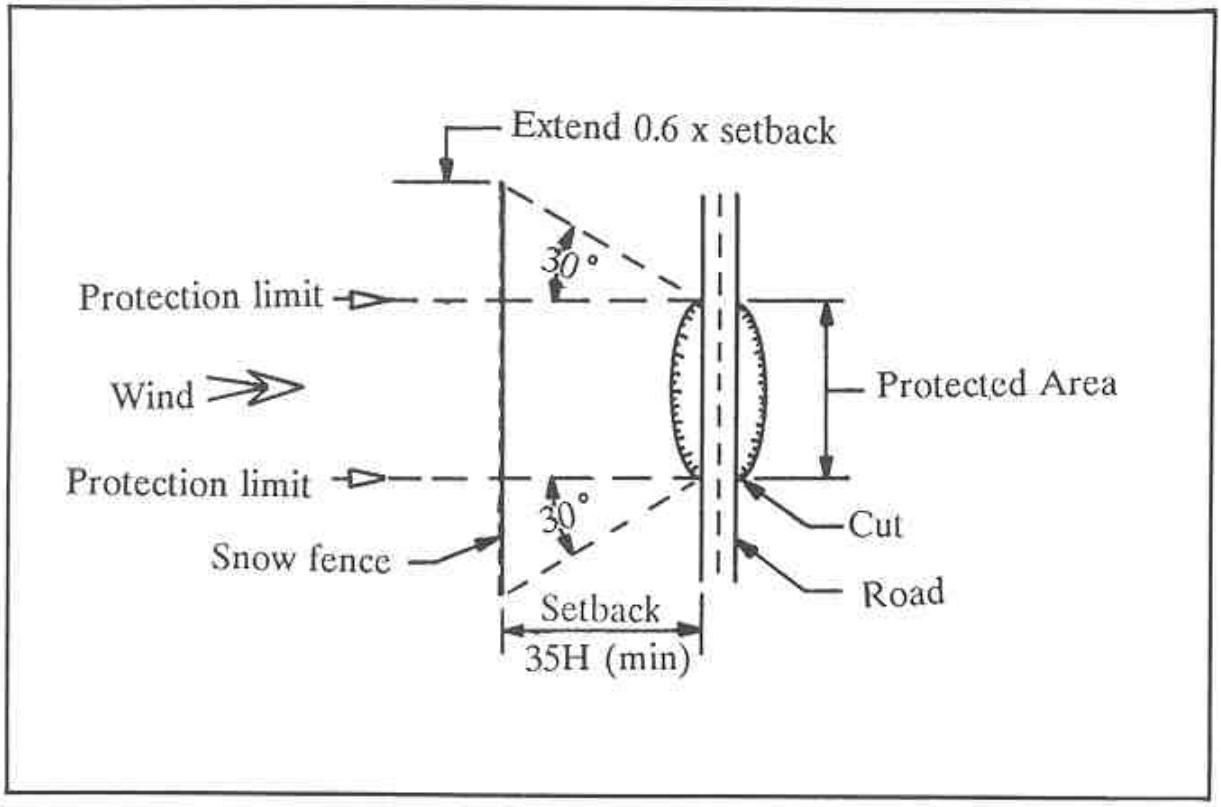


Figure 10. Setback and length of parallel fences. ©1986 Tabler & Associates

sides of the protected area to intercept winds that vary up to 30° on either end of the prevailing wind directions (Figures 10 and 11). The required overlap length for parallel fences is therefore equal to 0.6 times the setback distance.

Example: Assume that a parallel fence 8 ft. (2.4 m) tall is used to protect a cut 500 ft. (152 m) in length.

Then:
Setback distance = 35 x 8 ft. = 280 ft. (35 x 2.4 m = 84 m)

Length of extension beyond protection limit = 0.6 x 280 ft. =
168 ft. (0.6 x 84 m = 50 m)

Total fence length = 500 ft. + (2 x 168 ft.) = 836 ft. (152 m + (2 x 50 m) = 252 m)

Spacing of Multiple Rows

Although a single tall fence is most efficient, there are situations where multiple rows are necessary, such as for temporary installations where fences are installed and removed on a seasonal basis. Proper spacing maximizes the storage and trapping efficiency of each fence and prevents structural damage.

The spacing guidelines given below are distances measured in the direction of the prevailing wind. On flat ground, 30 times the height of the fence (30*H*) is a satisfactory spacing. In other situations, proper spacing depends on terrain and a simple guideline is not possible.

Oblique, Staggered Fences

When the wind direction requires fences to be aligned at an angle to (obliquely with) the road, oblique, staggered rows of fence may provide the best protection. The required length of these rows depends on the angle between the road and the fence, the offset between rows, and the overlap required to compensate for the end effect and variations in wind direction. This latter requirement is determined by the 30° angle specified for the overlap at the end of a fence.

To avoid burial of staggered fences, the *minimum* spacing recommended between staggered rows is 25H. For example, for 4-ft. (1.2-m) fences the offset should be 100 ft. (30 m).

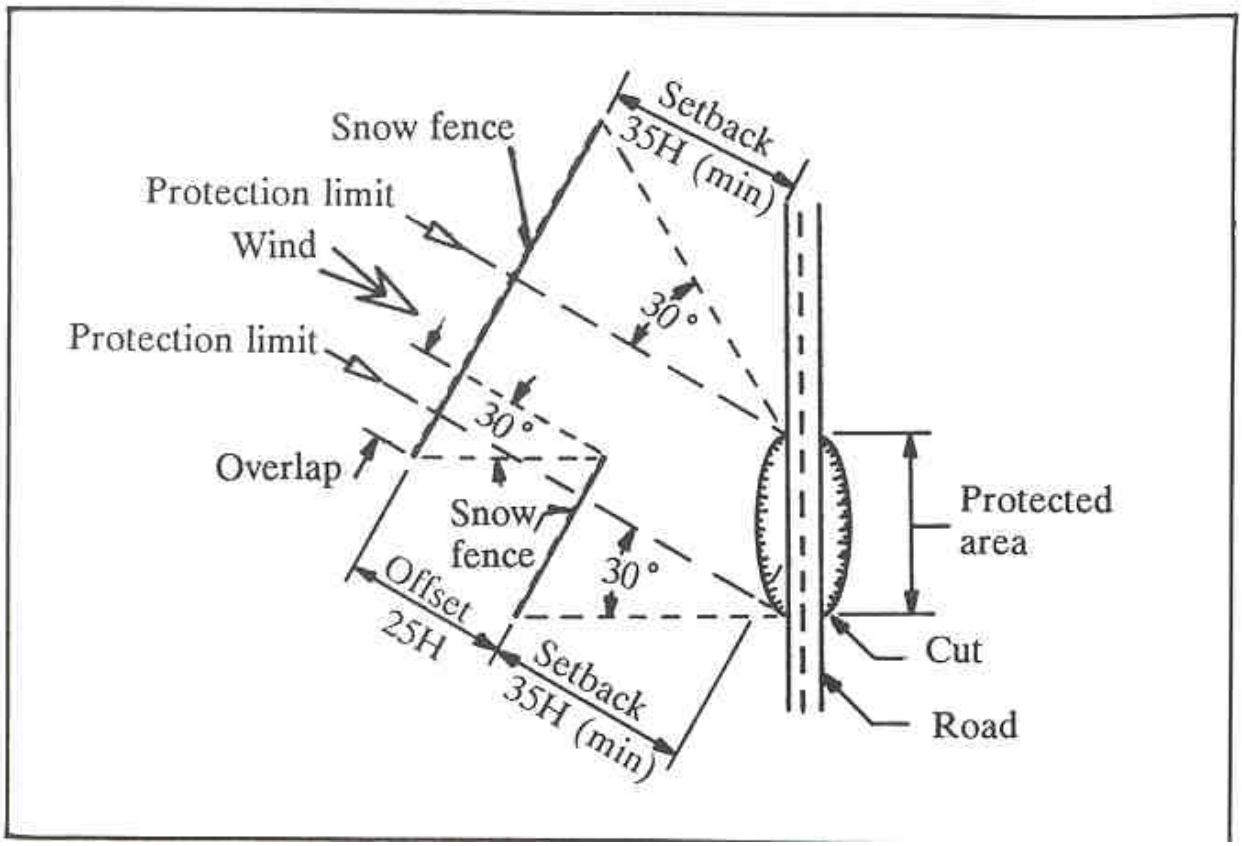


Figure 11. Setback, overlap, and extensions for oblique, staggered fences. ©1986 Tabler & Associates

Oblique, staggered fences should be overlapped a distance equal to 0.6 times the offset distance. For example, if fence rows are offset 100 *ft.* (55 m), the overlap should be 0.6 x 100 ft. = 60 ft. (0.6 x 30 m = 18 m).

Terrain Considerations

Favorable locations include the crests of ridges or hills, and sites upwind of stream channels or other topographic depressions that increase storage capacity. Fences should not be placed in locations where drifts form naturally, such as in depressions or on the downwind side of hills. Steep,

upwind-facing slopes reduce both trapping efficiency and storage capacity.

Fences should not be placed on embankment slopes, but instead should be located upwind of the toe of the slope. If placed too close to the shoulder of the embankment, a fence can cause a deep drift on the road.

Openings in Fence Lines

Fences should be as long as necessary, without gaps. This is because the acceleration of the wind through openings reduces snow deposition over an area much larger than the opening itself. Even leaving 6-in. (15-cm) spaces between panels of the Wyoming fence causes appreciable erosion and scalloping with significant loss of snow storage capacity.

The snow fence planner should resist giving in to the requests of landowners, wildlife officials, and others who think it necessary to leave openings for livestock or wildlife. Where openings are unavoidable, they should be closed off by overlapping the two sections or by building another fence upwind.

Design the Fence

After the height, length, and location of the fence system have been selected, the next step is to select the type of fence to be constructed and the materials to be used. The following discussion describes the basic requirements for an efficient snow fence, standard designs, and criteria for custom designs.

Height and Bottom Gap

Height is by far the most important factor in fence design because it has the greatest influence on snow trapping efficiency, storage capacity, and cost. By comparison, characteristics of the fencing material, such as porosity and size and shape of openings, are relatively unimportant. A 6-ft. (1.8-m) fence, for example, will store more than twice as much snow as a 4-ft. (1.2 m) fence. See p. 20 for the procedure to determine the required fence height.

Adding 6 in. (15 cm) to a 4-ft. (1.2-m) fence increases its capacity by 30%. A gap between the bottom of the fence and the ground increases the height and capacity of a snow fence. Partially or totally buried fences do not trap blowing snow effectively, are often damaged by snow settlement, and can develop abnormally long drifts. A bottom gap reduces snow deposition close to the fence.

The optimum bottom gap on flat ground is equal to 10% to 12% of the total vertical height. The gap should be measured from the lower edge of the fencing material to the top of the vegetation as it appears in winter. Although bottom gaps greater than 15% of total fence height significantly reduce snow storage capacity, it is sometimes desirable to leave larger gaps in locations where the fence may become buried as a result of deep snowcover, or where terrain contributes to deposition at the fence.

Recommended minimum bottom gaps are presented in Table 2. "Fencing height" refers to the width of the fencing material, and is equal to the total fence height less the bottom gap.

Fencing height		Bottom gap		Fence height	
feet	meters	inches	centimeters	feet	meters
4.0	1.2	6	15	4.5	1.4
5.3	1.6	8	20	6.0	1.8
7.1	2.2	11	28	8.0	2.4
8.0	2.4	12	30	9.0	2.7
8.9	2.7	13	33	10.0	3.0
10.7	3.3	16	41	12.0	3.7
12.5	3.8	18	46	14.0	4.3

Table 2. Minimum bottom gaps for common heights of properly designed snow fences.

Types of Fences

Fences may be supported by steel or wood posts set in the ground ("post-supported), or by a surface-mounted framework, anchored or counterweighted to resist overturning in the wind ("truss-type"). There are advantages and disadvantages to each of these two types.

Post-supported

Advantages:

- Occupies least land area.
- Suitable for any height of fencing.
- Less susceptible to damage by snow creep on steep slopes.

- Allows use of different fencing materials, such as plastics.
- Suitable for permafrost soils.

Disadvantages:

- Usually more expensive than truss-type.
- Fences taller than 6 ft. (1.8 m) are not easily relocated.
- More time is required for field construction. Supports must be custom-designed for each site.

Truss-type

Advantages:

- Least expensive to build in most locations.
- Relatively easy to remove or relocate.
- Can be prefabricated to reduce field construction time.
- Standard plans are available for most applications.

Disadvantages:

- Susceptible to damage by snow creep or glide on steep slopes.
- Occupies significant land area.
- Maximum practical height limited to about 14 ft. (4.3 m).

The Wyoming Truss-Type Fence

Basic design: The truss-type snow fence used by the Wyoming Department of Transportation since 1971 consists of horizontal 1- x 6-in. (2.5- x 15-cm) wooden boards fastened to wooden trusses, and is anchored with steel reinforcing bar (rebar) driven into the ground. The version

recommended here has an average porosity of about 45%, a bottom gap equal to 10% to 12% of the total height, a 15° layback angle, and a panel length of 16 ft. (4.9 m). Figure 12 shows dimensions for an 8-ft. (2.4-m) height, but the basic design is adaptable to heights up to 14 ft. (4.3 m).

Anchors: Steel rebar provides an inexpensive anchor with excellent extraction resistance in most soils. Number 6 rebar, with a diameter of 3/4 in. (1.9 cm), is best suited for this application. This diameter provides adequate extraction resistance, has adequate rigidity for driving, and is sufficiently flexible to deflect around stones in the soil. The anchors shown in Figure 13 are attached near both ends of each sill. In dry soils, 2-ft. (0.6-m) penetration is adequate to anchor 8-ft. (2.4-m) fences, and 4-ft. (1.2-m) penetration is sufficient for the 14 ft. (4.2 m) height. Where fences must be placed on wet or boggy soils, longer rebar or another type of anchor should be used. Rebar should be driven at an angle of 30° to 45°. Most failures of driven anchors are caused by improper attachment of sills to the rebar. The U-clamp shown is effective and inexpensive, but must be fabricated.

Service Life: Properly designed Wyoming fences can withstand winds of 100 mph (45 m/s), snow settlement pressures associated with complete burial on level terrain, and rubbing by animals. When built according to specifications and properly anchored, the Wyoming fence has proven to be durable and relatively maintenance-free for at least 25 years.

An Economy Model: The member that rests on the ground (the sill) fixes the vertical inclination and provides rigidity to the frame. Because the sill must be in contact with the

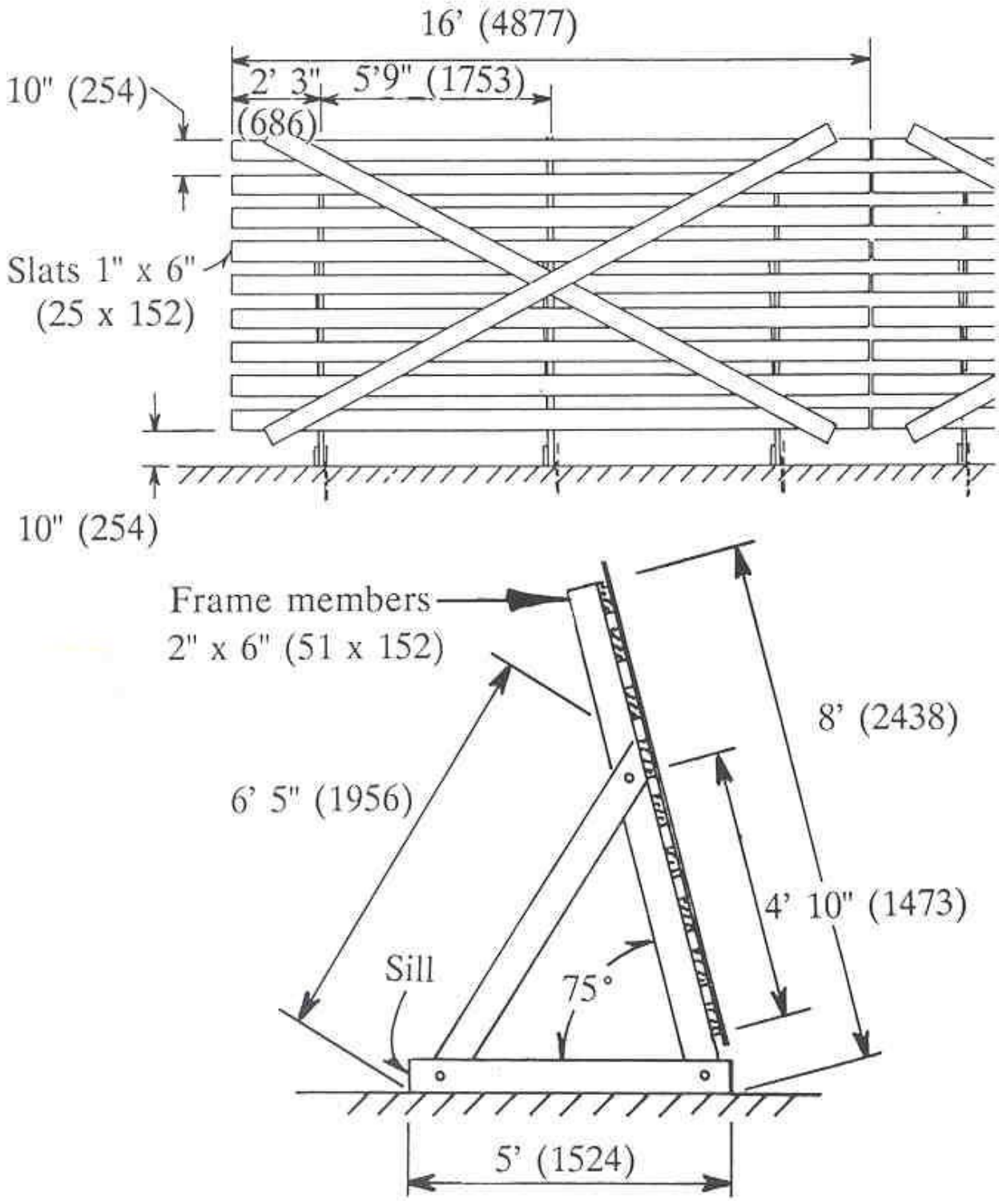


Figure 12. Dimensions of the 8-ft. (2.4-m) Wyoming snow fence. Dimensions in Parenthese are millimeters. ©1991 Tabler and Associates

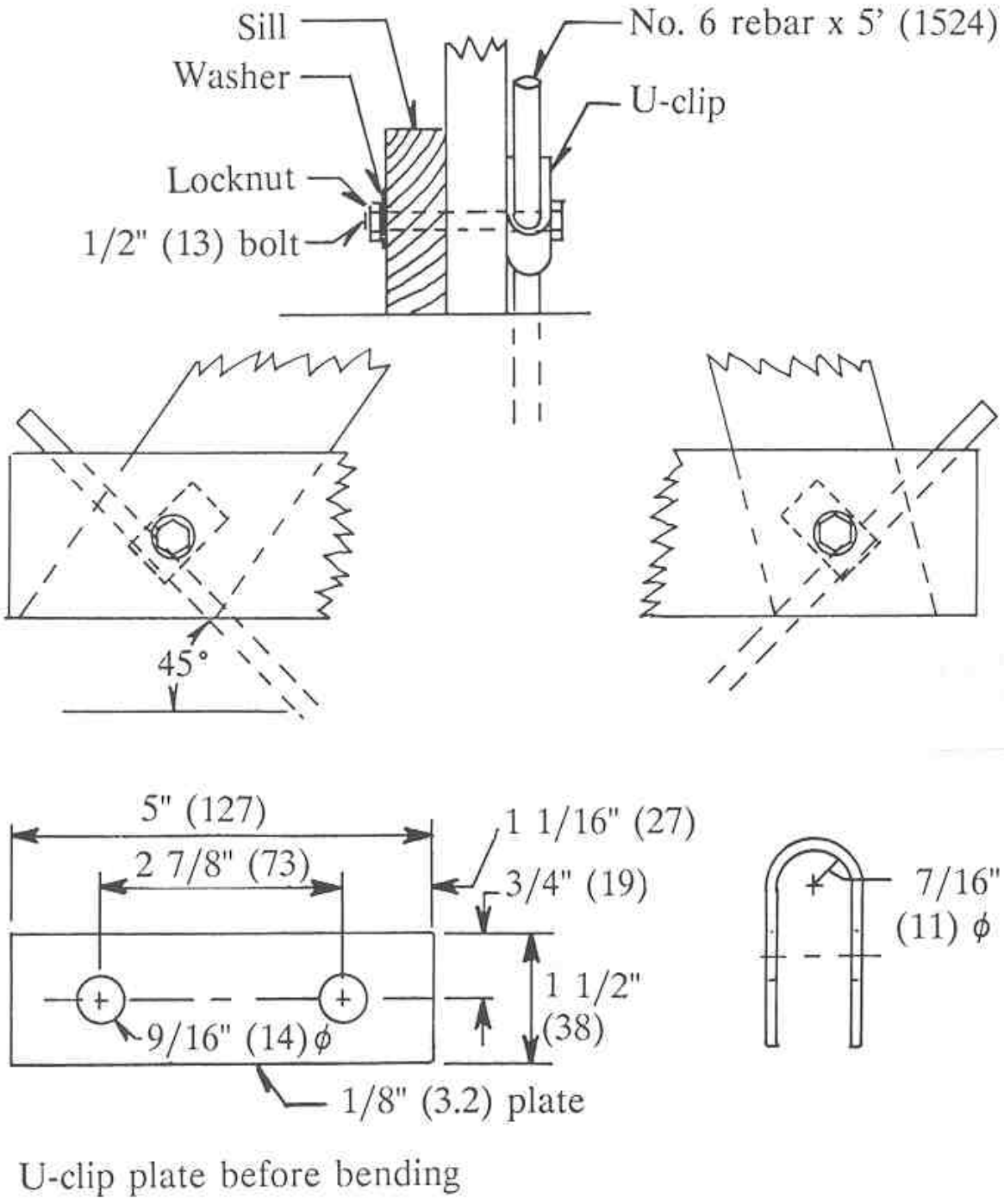


Figure 13. Anchor detail for the 8-ft (2.4-m) Wyoming snow fence. Dimensions in Parenthese are millimeters. ©1990 Tabler and Associates

ground over its entire length, it is usually necessary to smooth off the ground under each sill. This "seating" process is often time-consuming on rocky or brush-covered sites, and adds significantly to construction cost. On such sites, the sill member can be eliminated for fence heights up to 8 ft. (2.4 m) or so without compromising structural strength. This modification significantly reduces construction cost, and also provides flexibility in setting the inclination angle, and hence the vertical height. It is important to maintain a constant layback angle.

Designing Post Supports

Posts can support wooden slats or a variety of synthetic snow fencing materials. The supports must be designed to withstand wind loads, and to allow proper tensioning of fencing materials. Because plastic fencing requires tensions as high as 250 lbf per foot of height (3.65 kN/m), posts at ends or corners must be braced longitudinally. Curved fence lines generally are undesirable because the tensioning forces would tend to pull down the fence.

The force that the wind exerts on a fence depends on the wind speed, density of the air, upwind topography and ground cover, and the height and porosity of the fence. Snow fences typically are designed for winds of 100 mph (45 m/s). The wind speed to be used for design of a snow fence varies with geographic location. Design wind speeds commonly required by local building codes for barns or storage buildings not intended for human occupancy can be used for snow fences.

The steel T- or U-posts commonly used to support 4-ft.
(1.2-m) fences are spaced 8 ft. (2.4 m) apart to avoid bending

in strong winds. On a fence 6 ft. (1.8 m) tall, the bending moment exerted by the wind is about 65% greater than that on a 4-ft. (1.2-m) fence, so steel posts must be spaced about 4.5 ft. (1.4 m) apart if braces or guys are not used. Post supports are therefore usually impractical for temporary fences taller than 5 ft. (1.5 m) or so.

Transverse braces and guys are to be avoided for post-supported fences. When these supports become buried in the drift, they sustain large loads that can result in structural failure of the fence. This is particularly true on sloping ground where snow creep occurs. The vertical supports therefore must be sufficiently strong to resist bending or breaking under the design wind load, and they must be embedded deeply enough to keep the fence from overturning.

Table 3 shows an example of the size and embedment of wooden poles required to support various heights of snow fence in winds of 100 mph (45 m/s). This example is for supports placed 12 ft. apart, which is a common spacing.

Fencing Materials

Horizontal rails are best. Otherwise, there are no great differences among materials having 40% to 50% porosity.

There is a tendency for snow to be deposited close to the fence. With horizontal rails, even if the bottom gap does become plugged, the spaces between rails serve as gaps to slow the rate of burial. The small openings typical of most plastic fencing materials favor deposition near the fence. If the bottom gap remains open, however, there is little

Fence height		Diameter at butt		Embedment depth	
feet	meters	inches	centimeters	feet	meters
4	1.2	4.7	12	3.6	1.1
6	1.8	6.3	16	4.7	1.4
8	2.4	7.4	19	5.2	1.6
10	3.0	8.7	22	6.1	1.9
12	3.7	10.1	26	7.0	2.1
14	4.3	11.4	29	7.9	2.4

Table 3. Approximate post diameter and embedment required to support indicated heights of snow fence in 100 mph (45 m/s) winds. Values are for Douglas fir posts at 12 ft (3.7 m) centers in soil with an average bearing strength (2500 psf, 120 kPa) with compacted backrill. ©1986 Tabler & Associates

difference in snow storage capacity among materials having 40% to 50% porosity.

Wood, metal, plastic, and woven fabrics can be used. If *properly installed,* all of these materials are equally good investments.

Picket Fencing

The familiar picket snow fence consisting of slats 1.5 in. (4 cm) wide, held together with twisted wires, has a 10% lower snow storage capacity and trapping efficiency than other types of fencing, apparently because the slats are spaced too far apart. Although slat spacing varies from roll to roll and increases with repeated stretching, porosity is typically about 60%. If a bottom gap is provided under this

type of material for a permanent installation, the top of the fencing should be wired to a horizontal support, such as a two-by-four (5 x 10 cm). Even then, the individual slats tend to slip downward through the wire loops. For this reason, picket fencing is not recommended when several tiers of m material are required for taller fences.

Synthetic Materials

Numerous types of synthetic fencing materials are available, ranging from woven fabrics to extruded plastic nets and polymer rails. Most of the plastic fencing materials are made from polyethylene. Specifications important for snow fencing include tensile strength, resistance to ultraviolet (UV) degradation, and size of openings. Black fencing is more resistant to UV degradation than other colors.

Although many synthetic fencing materials have high tensile strength, most are easily cut and susceptible to abrasion and therefore must be well secured at vertical supports. For tall, permanent fences, strips of elastomeric roofing membrane (EPDM) should be placed between the vertical supports and the fencing, and between the fencing and the batten. Battens should be rigid and secured tightly to vertical supports with steel banding. The fencing material should be tensioned to the manufacturer's specification before it is fastened to the intermediate posts. The end poles must be adequately braced to allow tensioning. This is typically accomplished by extending a diagonal brace from the top of the end pole to the ground line of the adjacent line pole.

A flexible polymer rail sold primarily for horse fencing also can be used to build snow fences. This product consists of a polymer strap 5 in. (12.5 cm) wide, in which three 12.5-gauge

wires are embedded. In addition to allowing fence height and porosity to be customized, this material conforms readily to irregular terrain.

Temporary Fences

Temporary fences often are necessary on cultivated land or where permanent fences are not compatible with summer land uses. It is now clear that taller fences are much more effective than the 4-ft. (1.2-m) picket fences used in the past.

The Tensar Corporation has a patent pending on a new design for portable fences 6.5 ft. (2 m) and 8 ft. (2.4 m) tall. This design uses a wooden frame of two-by-six (5 x 15 cm) members, bolted together at the corners, with a strip of plastic mesh fencing 4 ft. (1.2 m) wide pulled taut across the center (Figures 14, 15, 16). Tensioning is accomplished with threaded rods connected to a pipe woven through the plastic. The panels are 8 ft. (2.4 m) wide. They are connected by rebar pins that pass through U-clips like those used to anchor the larger, permanent fences. U-clips also attach the fence to rebar anchors driven into the ground. For most soils, 2 ft. (61 cm) is adequate penetration. The U-clip-and-pin connections allow rapid installation and disassembly, and add flexibility for proper installation on rough terrain. Panels can overlap at either the top or bottom to close gaps between panels. The U-clips rotate to accommodate irregular terrain. Only one U-clip must be tightened at each connection to prevent the pin from vibrating out. The U-clips can be made from either 1/8-in. (3-mm) steel plate or polyethylene. Each pair of adjacent panels shares a brace member 2 x 6 in. (5 x 15 cm) and one upwind anchor. Braces can be installed on either side of the fence.

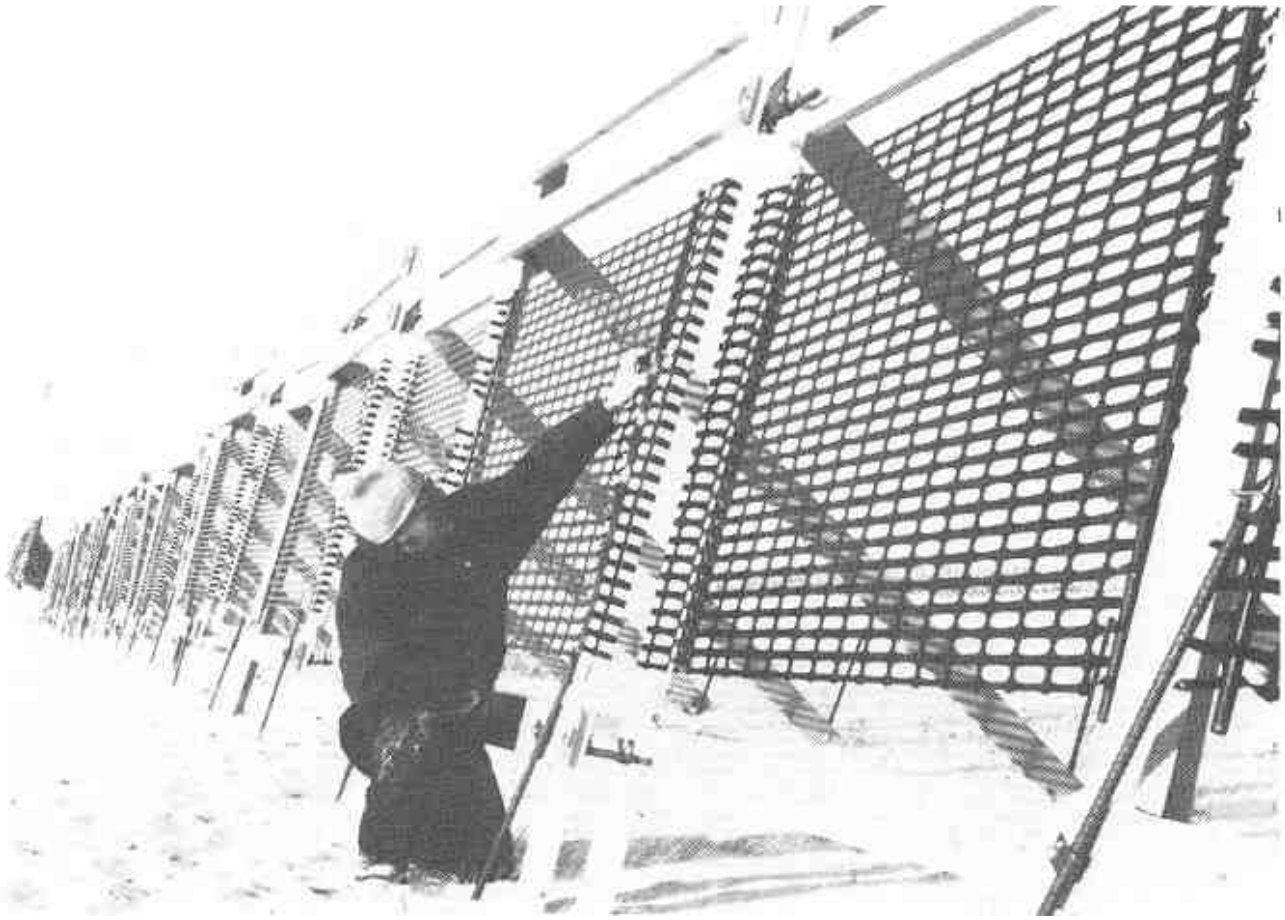
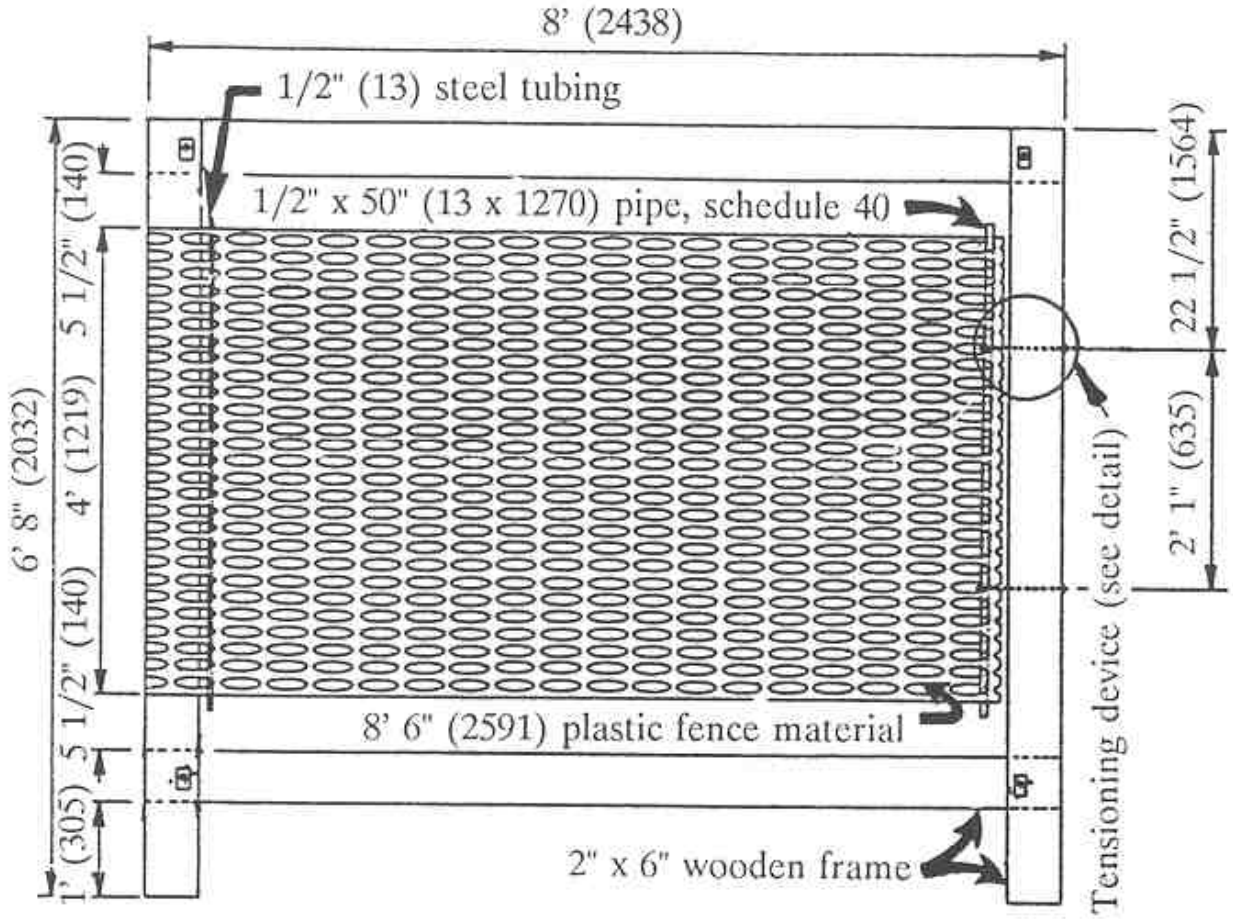


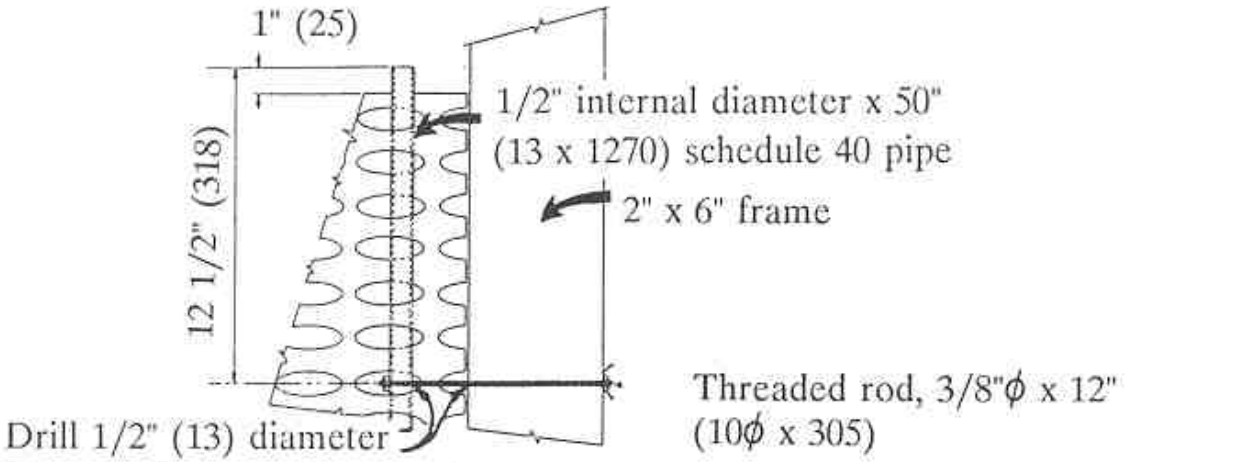
Figure 14. A design for temporary fences 6.5 and 8 ft. (2 and 2.4 m) tall by the Tensar Corporation uses wooden frames to support plastic fencing connected with rebar pins and U-shaped anchor clips described in Figure 13. ©1990 Tabler & Associates

Field installation of prefabricated panels requires approximately three person-hours per 100 ft. (30 m) of fence. It takes less time to install the 8-ft. (2.4-m) fence than to build a series of conventional 4-ft. (1.2-m) fences of the same storage capacity. Material and fabrication costs are comparable to costs for permanent fences.

A portable fence 6.5 ft. (2 m) tall stores three times as much snow as a conventional 4-ft. (1.2-m) fence. A portable fence



Elevation of 6.5 ft. fence



Tensioning device detail

Patent pending, Tensar Corporation

Figure 15. Framing details for the temporary fence. © 1990 Tabler & Associates

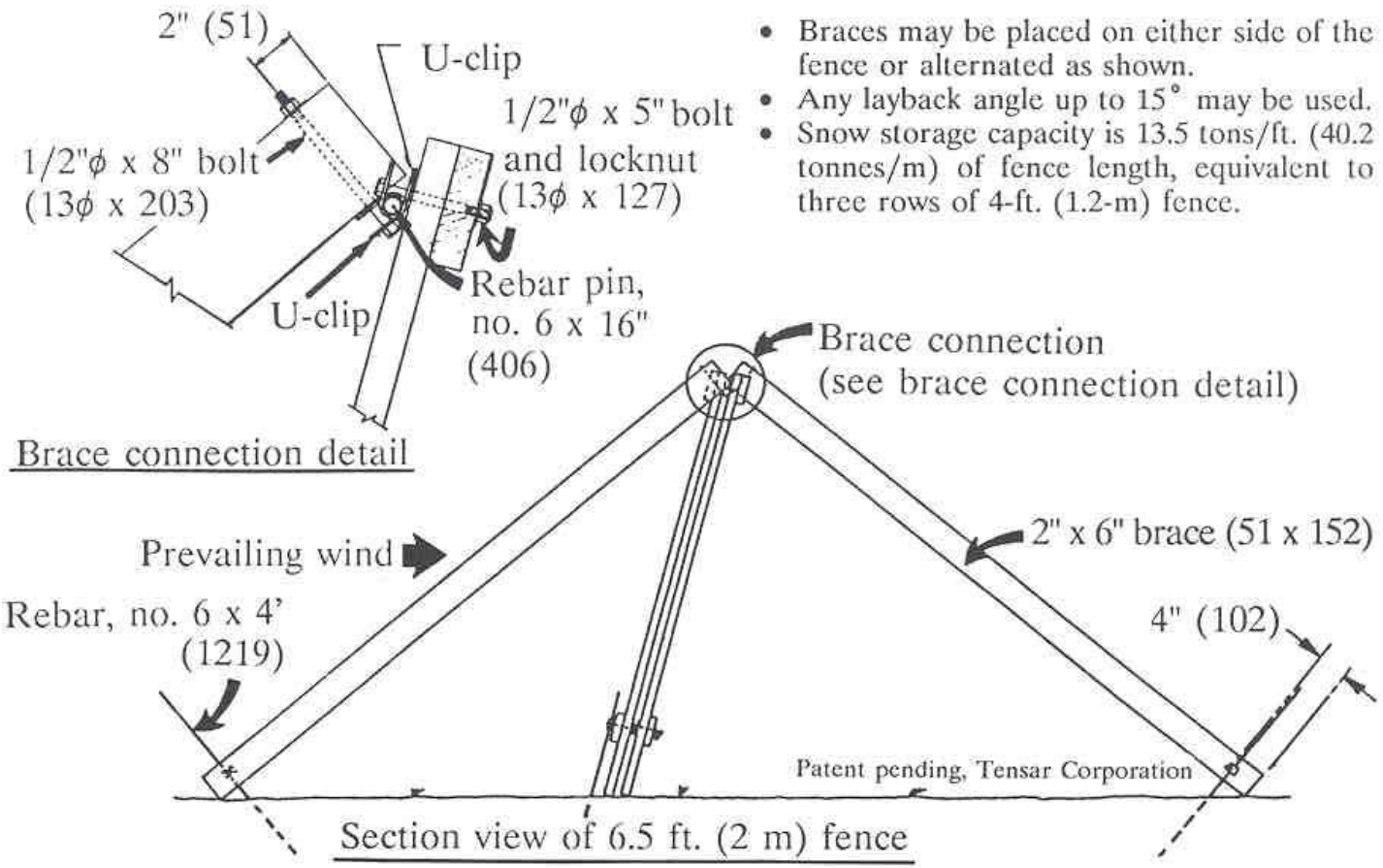


Figure 16. Framing details for the temporary snow fence. ©1990 Tabler & Associates

8 ft. (2.4 m) tall stores 4.6 times as much snow as a 4-ft. (1.2-m) fence.

Guidelines for Fences 4 ft. (1.2 m) Tall

Where taller fences cannot be used, the following guidelines should be used for 4-ft. (1.2-m) fences:

- Fences should be as long as possible, and placed at least 160 ft. (49 m) from the road shoulder, assuming a 6-in. (15-cm) bottom gap.
- A bottom gap of 6 in. (15 cm) should be left under the fence.
- Steel posts should be on 8 ft. (2.4 m) centers. End posts should be 6 ft. or less from the adjacent post to facilitate bracing.
- The end post should be braced with a steel post driven into the ground at an angle so as to extend from near the top of the end post to the ground line of the adjacent post and wired in place.
- If picket fencing is used, it should be pulled taut to at least 250 lbf (1.1 kN) for a 4-ft. (1.2-m) width. Synthetic fencing material also should be pulled taut, at tensions specified by manufacturer, typically 500 to 1000 lbf (2.2 to 4.5 kN).
- Plastic fencing material should be sandwiched between two 2- x 2-in. (5- x 5-cm) boards wired tightly to the steel post at the center and at 6 in. (15 cm) from each edge. A better but more expensive method is to slip a piece of

foam insulation for 1-in. (2.5-cm) pipe around the post to replace the inner 2- x 2-in. (5- x 5-cm) board.

Living Snow Fences

Advantages

If properly designed, plantings of trees and shrubs can make effective snow fences (Figure 17). Vegetative plantings offer many benefits in addition to drift control:

- Living snow fences are more pleasing in appearance than structural fences.
- Habitat is provided for wildlife.
- Little maintenance is required after plants are established.
- Living snow fences can be a part of the roadside beautification plan, but be cautious about placing plants too close to the road.

Disadvantages

- On some sites, climate, soil type, and other environmental conditions make the establishment of trees difficult.
- Several years are required before plants become tall enough to intercept snow.
- Barrier height and porosity, and hence drift length and storage capacity, change with time.

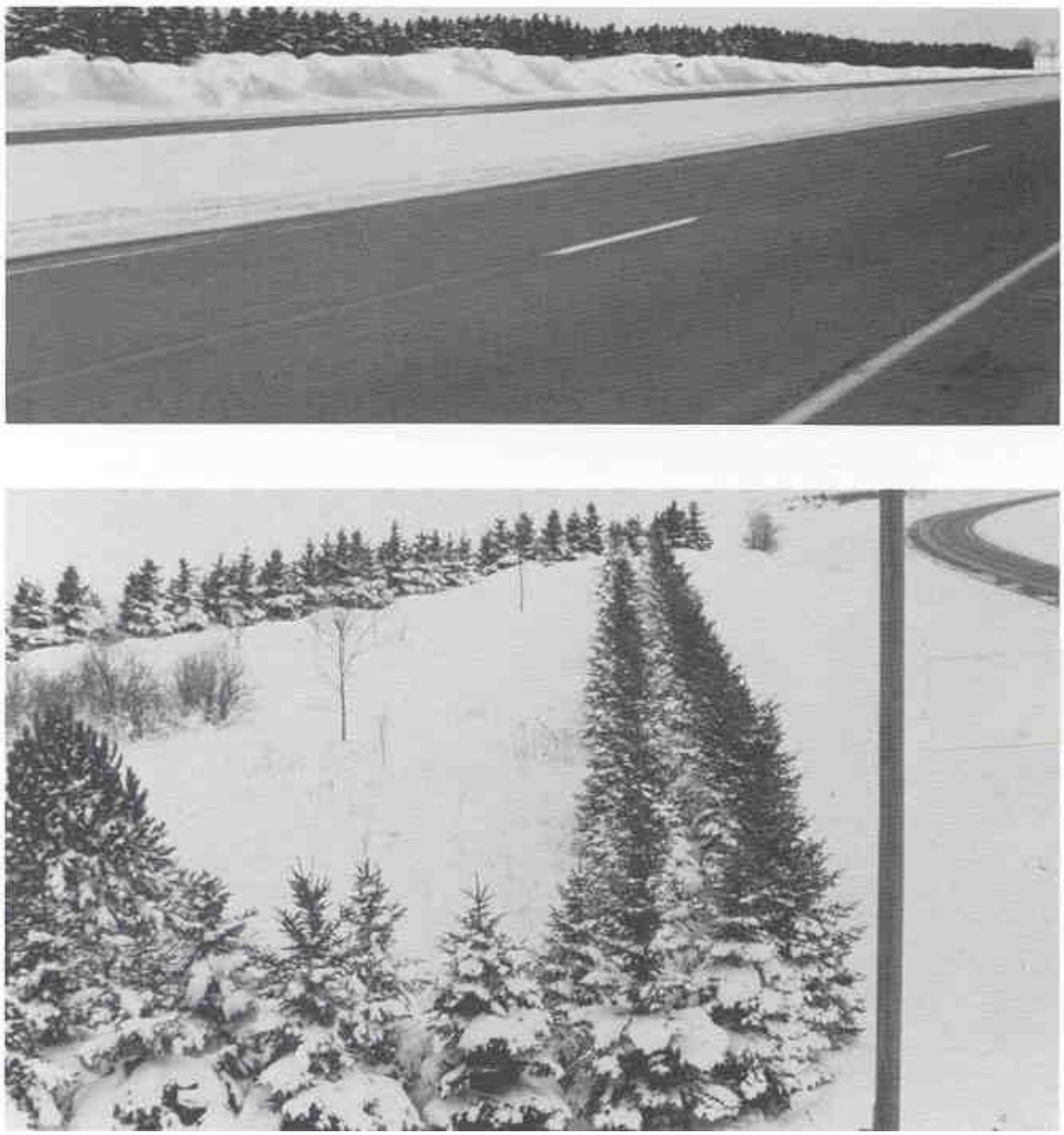


Figure 17. Living snow fences. The top photograph shows a Colorado spruce snow fence along I-35 near Owatonna, Minnesota. The bottom photograph shows the snow fence in a triangular area of a right-of-way adjacent to a separation structure across I-35. (Photographs by the Minnesota Department of Transportation.)

- Vegetative barriers are subject to damage by such things as insects, disease, and wind. Using a variety of plants helps counter the negative effects of such occurrences.

Minimum Setback Distance

Because living snow fences' mature height will usually exceed that required to store the design snow transport, trees often can be planted closer to the road than 35 times their mature height. Snow deposition behind a porous barrier extends for a distance of about 15 times the barrier height throughout the early stages of drift growth. This suggests that the minimum setback distance for a living snow fence should be 15 times the height of the trees (or shrubs) at maturity. The planting should not cast a drift on the road *at any stage* in its growth. This can only be determined if the seasonal snow transport is known. Therefore, the basic guideline is:

> *The setback distance for a living snow fence should be 15 times its height at maturity, or 35 times the required height of structural snow fence, whichever is greater.*

For very tall trees, such a spacing may prove excessive during the many years required for the trees to reach maturity. A solution is to plant two or more rows of fast-growing shrubs having a height at maturity of 6 to 8 ft. (1.8 to 2.4 in) at a distance from the road equal to 35 times their mature height.

Snowbreak Forests

Living snow fences consisting of only a few rows of trees or shrubs behave like porous snow fences. Plantings on the order of 200 ft. (60 in) in depth, however, behave as solid barriers regardless of the kinds of trees planted. Deep

plantings will therefore accumulate snow on the upwind side of the barrier first, and deposition on the downwind side will be restricted to within 5H of the trees until the upwind drift reaches the top of the trees. If the trees are sufficiently tall, the snow storage capacity on the upwind side will never be exhausted.

Although planting such wide belts of trees is frequently impractical, the lesson from the snowbreak forest is that the most effective plantings consist of numerous rows of trees-not just two or three--to encourage more deposition on the upwind side. A snowbreak forest should be placed no closer to the road shoulder than five times the height of the mature trees.

Interim Drift Control

Where possible, structural fences should be used to provide snow control while the trees or shrubs are growing. Structural fences should be placed so that the downwind drift does not bury the trees or shrubs, because snow settlement breaks branches. In addition to providing interim control, structural fences provide some protection for the young trees. The additional water provided by the drift also can encourage faster growth.

Pruning

Pruning has been recommended as a way to reduce deposition within the trees. Removing lower branches has the same effects as widening the bottom gap under a structural fence. Pruning reduces snow deposition on the upwind side and elongates the downwind drift. Because pruning increases wind speed and snow transport under the

canopy, this practice may not be in the best interest of wildlife. A better way to improve habitat is to *increase* the density of the leading edge of the planting, using a dense structural fence if necessary, to encourage snow deposition upwind of the trees.

Other Guidelines

Guidelines for species, spacing, and planting vary with geographic location. For specific information on these important aspects of living snow fences, a competent landscape architect should be consulted. An alternative is to consult with local extension agents for help in the selection of plants and planting specifications to insure proper growth.

There are two conceptual guidelines that are generally applicable. First, avoid leaving holes and openings in the planting, for the reasons explained in the discussion of structural fences. A minimum of three rows should be used, with a staggered planting pattern. Trees should be planted close enough to form an unbroken row at maturity, but not so close that trees do not have room to grow. Second, the layout should avoid burying trees in deep drifts formed by rows farther upwind. The minimum spacing depends on the estimated snow transport and the height of the upwind trees.

Standing Corn

At least two states have experimented with leaving a number of rows of corn standing in fields adjacent to the highway right-of-way. Experience has shown that this strategy is economically viable. The number standing corn rows varies with the size of the harvester and the harvesting pattern used by the farmer, but to be effective, the minimum is six to

eight rows. The most effective strategy is to use two strips of corn rows separated by 150 to 200 ft. (45 to 60 m). The minimum setback from the road shoulder should be 35 times the height of the standing corn. Figure 18 illustrates the effectiveness of such fences.

Owners receive payment for the corn left standing in the field based on the market value for the crop on the day of harvest. Some corn left standing can be salvaged in the spring. Costs for such a program in 1984 in one state averaged $1,300/mile ($810/km).

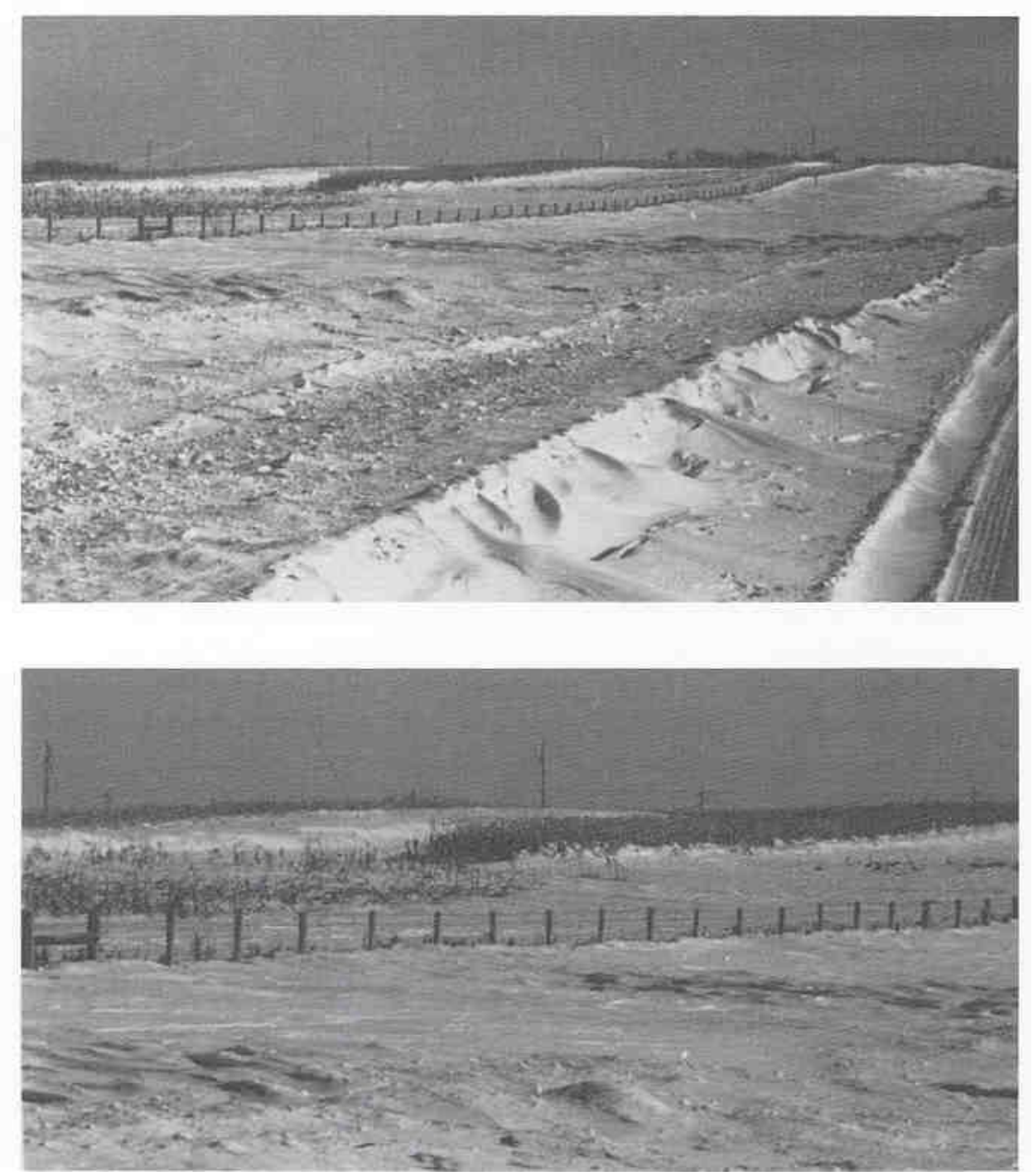


Figure 18. Standing corn living snow fences. Two strips of standing corn are shown in each photograph. Note that the first strip (about six rows, farther from the road) trapped more snow than the second strip (closer to the road). Photographs by the Minnesota Department of Transportation.

4. Working With Landowners

Existing public rights-of-way usually are too narrow to accommodate effective snow fencing, and the difficulty of obtaining easements on private land often discourages highway agencies from implementing a snow fence program. One strategy that can be used to obtain community support for a snow fence program is to start with one or more "demonstration" projects. Initial projects could focus on locations having maximum benefit and minimal conflicting land uses, or where landowners are most likely to be receptive.

One of the concerns commonly expressed by farmers is that the snowdrifts will delay tillage or planting in the spring. It helps to have some information ready on this subject when approaching landowners for snow fence easements. A useful rule of thumb is that snow melts at the rate of 0.22 in. for every degree-day above 32°F (1 cm of depth for every degree-day above O°C). A drift 6 ft. (1.8 m) deep, for example, would persist until 327 °F-days (182 °C-days) had accumulated. Climatological information published by the National Weather Service can be used to determine the probable melt-out date. This information can be useful in easement negotiations, particularly when it can be shown that the delay would be minimal. It is not unusual to find that the drifts formed by the proposed fences are comparable to

naturally occurring drifts in the same or nearby fields, providing a persuasive argument in favor of the fences.

The following negotiation strategy can help highway agencies secure cooperation of landowners.

The Initial Contact

- The initial contact with landowners should be made by local highway officials known to the landowner, and should be made soon after a major snowstorm. A chance meeting at the local coffee shop or post office is better than an arranged meeting.

- Bring up the subject of snow fences casually by inquiring about problems the landowner might be having with snowdrifts on the property, on farm-to-market roads, or in getting to town.

- Suggest that new ideas about snow fences might be useful to the landowner, and incidentally would help improve conditions at the location where the road or highway department wants to build fences.

- Arrange for a later meeting at the site.

The Second Meeting

- Explain the importance of the snowdrifting problem at the location in question. Photographs of drift conditions or accidents in previous years, if available, can support

this point. If actual accident data and/or information for the specific site are available, explain how snow fences could help reduce accidents.

- Present information about the effectiveness of fences.

- Describe the fences that need to be built and the area they will occupy. If pertinent, also discuss living snow fences, such as the corn snow fence.

- Point out advantages to landowner, if any other than contribution to safety and other transportation benefits. Living snow fences, for example, can create food and habitat for wildlife, including pheasants, deer, and songbirds. Snow fences can sometimes provide wind protection for livestock or can provide a source of water.

- Respond to the landowner's concerns about the negative effects of the fences, and ask the landowner to share specific concerns or objections.

- Thoroughly discuss each of the landowner's concerns, providing specific information (such as probable melt-out dates for snow fence drifts) to help the landowner realistically evaluate the impact of the proposed fences.

- Ask if the landowner would be willing to participate in a snow fence demonstration project. Discuss the possibility of limited compensation for indirect costs of the snow fence.

- Work toward a permanent installation to avoid the costs of installation and removal. This point is particularly

valid if the land is not in high-production agriculture. If one high fence can do the work of several rows of shorter fence, this is an argument in favor of a permanent installation.

- Where the fence needs to be located in a field dedicated to agricultural use, a temporary installation may be the only acceptable alternative, even though more than one row is required. The new 8-ft. (2.4-m) temporary design will reduce the need for multiple rows in many locations.

Glossary

Blowing Snow Terms

Wind speed: The rate at which the wind blows. Since wind speed increases with height above ground, this *Guide* refers to the wind speed at the standard height of 33 ft. (10 m).

Blowing snow: Snow that has been relocated from the surface by the wind, excluding falling, new snow.

Saltating particles: Snow particles too heavy to be suspended in the air that move by bouncing or intermittently jumping along the surface. Although most saltating particles are contained in the first 2 in. (5 cm) or so above the surface, most of the blowing snow is transported in this way at wind speeds below about 45 mph (20 m/s).

Creeping particles: Snow particles too heavy to saltate that roll along the surface, forming "snow waves" or "dunes."

Suspended particles: Snow carried by the wind for extended distances. Suspended particles reduce visibility.

Snow transport: The quantity of snow moved by the wind over a period of time and space. The concentration of blowing snow above 16 ft. (5 m) in height is negligible.

Fetch: The length of the area upwind of the snow fence. The upwind end of the fetch is a topographic or vegetative boundary with no snow transport (forest margins, deep gullies or stream channels, ice pressure ridges, or shorelines of unfrozen bodies of water).

Relocated precipitation: Snow that is blown from its original location, excluding snow that stays in place due to gullies, ditches, brush, melting, or compaction.

Precipitation: Water that falls from the sky as rain, sleet, hail, or snow. Precipitation is measured in water equivalent regardless of the form in which it falls.

Snow fence: A barrier that prevents snow from drifting onto a specific area.

Bottom gap: A space between the ground and the bottom edge of the snow fence that helps to keep snow from drifting in the fence.

Porosity: The holes or spaces in the fencing material. Porosity is expressed as a percentage, and does not include the bottom gap. Fences of 40 - 50% porosity are most effective in slowing the wind and trapping snow.

Fence height. The vertical height of a fence, measured from the ground to the upper edge of the fencing. It is represented in this text by the letter *H*.

Throughout this Guide*, a numerical value followed by* H *represents a dimension expressed as multiples of fence height.*

Fencing height: The vertical height of the Porous fence material. Fencing height is equal to the height of the fence minus the bottom gap.

Fence inclination: The angle, expressed in degrees from vertical, that the fence tilts either upwind or downwind. The top of a fence can be inclined in the downwind direction up a to 15° from vertical without affecting performance adversely.

Snowdrift Terms

Upwind drift: The snow that collects on the side of the fence that faces the wind.

Downwind drift: The snow that collects on the side of the fence that faces away from the wind.

Slip-face: An abrupt drop-off that forms near the end of a downwind drift during intermediate stages of growth.

Recirculation zone: A region of recirculating wind formed immediately downwind of the slip-face, or any solid barrier.

Equilibrium drift: When a fence has filled to capacity, the drift is said to have reached equilibrium. At this stage, the fence has no more effect on blowing snow.

End effect: The lack of snow deposition near the ends of a snow fence caused by wind scouring.

Trapping efficiency: The amount of blowing snow caught by the fence, in relation to the incoming snow transport over the height of the fence.

Storage capacity: The amount of snow a drift contains when the fence is filled with snow. Because drifts are roughly triangular in cross-section, their cross-sectional areas are approximately proportional to the *square* of the fence height. Although this suggests that an 8-ft. (2.4-m) fence would hold four times as much snow as a 4-ft. (1.2-m) fence, the taller fence will actually store 4.6 times as much snow on a weight basis, because the density of drifted snow increases with depth. In mathematical terminology, storage capacity is proportional to height raised to the 2.2 power.

Parallel fences: Fences that are equally distant from the road along their length. Parallel fences require a shorter total fence length, have fewer openings to detract from trapping efficiency, and are more effective because of the reduced space between the fence and the area to be protected.

Oblique fences: Fences aligned at an angle to the road.

Offset distance: The distance, measured perpendicularly to the fences, between rows of staggered, oblique fences.

Setback distance: The distance between the fence and the road shoulder, as measured in the prevailing wind direction.

Fence Placement Terms

Protected area: A section of road that has a snow fence to reduce or eliminate snow drifting or visibility problems.

Protection limits: The boundaries of the protected area, typically marked by survey stations or mile markers.

Fence orientation or alignment: The compass bearing of a fence or its alignment with respect to either the prevailing wind direction or the road alignment.

Departure angle: The angle between the prevailing wind direction and a line drawn perpendicular to the alignment of a snow fence. Storage capacity per unit length of fence decreases as the wind becomes more oblique to the fence. However, the capacity per unit of width across the wind is not appreciably affected by a moderate departure angle. Trapping efficiency may decline as winds become more oblique to the fence, especially for departure angles greater than 45°.

Order Form

Use the order form below to obtain copies of the *Snow Fence Guide* and the 21-minute video, "Effective Snow Fences." SHRP's publications are sold through the Transportation Research Board (TRB), which, like SHRP, is a unit in the National Academy of Sciences. *Please do not send order forms to SHRP. Make checks payable to TRB.*

Please send me _____ copies of the Snow Fence Guide (SHRP-W/FR-91-106)
at $10.00 each = $_____

Please send me _____ copies of **Effective Snow Fences** (video)
at $10.00 each = $_____

_____Check or money order, payable to TRB, enclosed.

_____Bill payment to my:_____ Mastercard _____ VISA _____ American Express

Credit card number:_____

Expiration date:_____ Telephone:_____

Signature:_____

Name:_____

Address:_____

City:_____ State:_____ Zip:_____

Return this form to: Transportation Research Board, National Research Council; 2101 Constitution Avenue, N.W., Washington, DC 20418; (202) 334-3214.

Tips to Remember

1. Mechanical snow removal costs about 100 times more than trapping snow with fences.

2. The best fence porosity is 40% to 50%.

3. For effectiveness and economy, a single row of tall fences, is always preferable to multiple rows or shorter fences.

4. One 6-ft. (1.8-m) fence = 2 rows of 4-ft. (1.2-m) fence
   One 8-ft. (2.4-m) fence = 5 rows of 4-ft. (1.2-m) fence

5. Fences can improve driver visibility and reduce ice.

6. To improve driver visibility and to maximize effectiveness, fences should be 8 ft. or (2.4 m) or taller.

7. Fences should be set back at least 35*H* from the road shoulder.

8. Extend fences beyond protection limits to an angle of 30° on either side of the prevailing wind direction.

9. Although fences should be perpendicular to the prevailing wind direction, departures up to 25° are permissible.

10. Leave a gap equal to 10% of the total fence height under the fence.

ISBN: 309-05251-3

From: Peggy Horton
To: Dan Steiner - Steiner Design & Construction Svs, LLC (dsteiner@mtaonline.net)
Subject: Central Gravel Products #10298 Comments
Date: Tuesday, October 8, 2024 3:30:00 PM
Attachments: PH Comment from Spotto 10-7-24.pdf
PH Comments from Blackwell 10-7-24.pdf
PH Comment from Howe 10-4-24.pdf
PH Comment from Finley & Parrent 10-4-24.pdf
PH Comments from L Fleury 10-3-24.pdf
PH Comment from V Fleury 10-3-24.pdf
PH Comments from K Willison 10-3-24.pdf
PH Comments from D Bowen 10-2-24.pdf
PH Comment from K Willison 10-2-24.pdf
PH Comment from CA Willison 10-2-24.pdf
PH Comment from Ogan 10-2-24.pdf
Public Comments email to applicant 10-2-24.pdf

Hi Dan,
Attached are public comments we've received since 10/2/24. Happily, some of them support Central Gravel. I've had two people come into my office to show them the application material. Both walked away glad they came in to discuss.

On another note, I believe you were going to get me a dimension from the coffee shop to the Bogard Road public right-of-way. The scaled site plan indicates it is much closer than the required 25'. That dimension would be helpful for the report.

Regards,

Peggy Horton
Current Planner
907-861-7862

From: Peggy Horton
To: Dan Steiner - Steiner Design & Construction Svs, LLC (dsteiner@mtaonline.net)
Subject: Central Gravel Products CUP #10298 Comments
Date: Wednesday, October 16, 2024 9:53:00 AM
Attachments: PH Comments from Doty 10-15-24.pdf
PH Comment from Wilson 10-15-24.pdf
PH Comment from Ferguson 10-15-24.pdf
PH Comment from Burzynski 10-15-24.pdf
PH COmment from Remote Alaska Solutions 10-15-24.pdf
PH Comment from Hulsey 10-15-24.pdf
PH Comment from Munro 10-14-24.pdf
PH Comment from Blackstone 10-14-24.pdf
PH Comment from S Conger 10-10-24.pdf
PH Comment from R Conger 10-10-24.pdf
PH Comment from Leopold 10-9-24.pdf
PH Comment from Bennett 10-9-24.pdf

Hello Dan,
Attached are the public comments we've received from 10/9/24 to 10/15/24. I understand the North Lakes Community Council will hold a meeting on October 24, 2024, and this proposal is on their agenda.

Peggy Horton
Current Planner
907-861-7862

From: Peggy Horton
To: Dan Steiner - Steiner Design & Construction Svs, LLC (dsteiner@mtaonline.net)
Cc: Jason Ortiz; Rick Benedict; Alex Strawn
Subject: Central Gravel Products CUP #10298
Date: Monday, October 21, 2024 10:40:00 AM
Attachments: Legend for Wetland map.pdf
NWI & CI Wetlands.pdf

Dan,

While I was making maps for the staff report, I discovered something important that should have been addressed earlier concerning the wetlands on the property. The Corps has no jurisdiction over the wetland that they reviewed. However, the borough still has a code concerning wetlands buffers for earth material extraction activities. MSB 17.28.060(A)(7)(a) requires a 100' undisturbed buffer be left, and no earth materials extraction activities shall take place within 100 linear feet of a lake, river, stream, or other water body, including wetlands.

The wetlands map you provided on sheet C0.2 appears to have used the National Wetlands Inventory, which is less spatially accurate than the Cook Inlet Wetlands map. I've attached a map that shows both. Despite the improved accuracy of this resource, limitations remain. While helpful in identifying the extent and types of wetlands in an area, it is not sufficiently detailed to serve as an accurate wetland delineation for regulatory purposes.

The operation's site plan shows that the Cook Inlet wetlands extend to the southern and eastern visual screening berms. Below, I have drafted a proposed recommendation for the Planning Commission to ensure the operation complies with MSB code:

Before starting extraction activities within 500 feet of any wetlands shown in the Cook Inlet Wetlands Inventory, the operation shall hire a qualified wetland delineator to identify the boundaries of the wetlands on the subject properties. Additionally, a licensed land surveyor shall establish and mark a 100-foot undisturbed buffer around the identified wetlands. A detailed wetland delineation report, along with a certification from the land surveyor confirming the 100-foot buffer was marked, shall be submitted to the Borough Planning Staff. These markers shall remain visible for the entire duration of the permit. No extraction activities shall take place within the buffer zone in accordance with MSB 17.28.060(A)(7)(a).

MSB 17.125 – Definitions

"Extraction" means to take and remove earth materials from the subject site to an off-site location.

"Wetlands" means those areas that are inundated and saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs, and similar areas.

Let me know if you have questions or comments.

Peggy Horton
Current Planner
Matanuska-Susitna Borough
350 E. Dahlia Avenue
Palmer AK 99645
907-861-7862

From: Peggy Horton
To: Dan Steiner - Steiner Design & Construction Svs, LLC (dsteiner@mtaonline.net); Jade Laughlin; Gary LoRusso - Keystone Surveying (garyl@mtaonline.net)
Subject: Central Gravel Products CUP
Date: Tuesday, November 19, 2024 11:54:00 AM

Good Morning,
You probably already heard this. I'm sending you this information so I can include this email in my records.

On November 18, 2024, the Planning Commission decided to postpone the public hearing for the Central Gravel Products CUP application until the February 3, 2025 meeting. They did not open the public hearing, and no member of the public spoke about the CUP at the hearing. I spoke with several people after the decision and assured them that I was available to answer any questions they had.

I have updated the Borough website with the new hearing date.

Peggy Horton
Current Planner
907-861-7862

From: dsteiner@mtaonline.net
To: Peggy Horton; Tom Adams
Cc: Jade Laughlin; "Gary LoRusso"
Subject: Central Gravel Products - CUP Permit - Updates
Date: Thursday, January 16, 2025 1:55:06 PM
Attachments: C2.1.pdf
C1.0.pdf
C1.2.pdf
CGP - MSB - Snowdrifting Memo.pdf

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]

Peggy,

It has been determined that a visual screening berm will be placed adjacent to Engstrom Road. To keep the berm from increasing the problem with snow drifting on Engstrom Road, it will be placed 200' from the right-of-way line.

Attached are updated drawings that show the placement of the berm. Once soil extraction activities are at a low enough elevation that the berm is not warranted, the berm can be removed. This is also indicated on the plans.

Attached are updated plan sheets that show the proposed berm adjacent to Engstrom Road. This includes a new site plan, updated site sections, and an updated phasing plan. The phasing plan has been adjusted so that the last parts of this gravel pit to be utilized is the area adjacent to Engstrom Road.

Also attached is a memo that shows how it was determined how far the berm needed to be from Engstrom Road, so it did not exacerbate the snow drifting problem.

Please contact me if you have any questions or need additional information.

Dan Steiner, PE
SDCS, LLC
(wk) 907-357-5609
(cell) 907-715-7704

From: dsteiner@mtaonline.net
To: Peggy Horton
Cc: Jade Laughlin; "Gary LoRusso"
Subject: RE: Central Gravel Products CUP
Date: Thursday, January 23, 2025 10:24:34 AM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
No, it is not required for the ATC from ADT. It will be needed when CGP applies for a lane closure to construct the driveway.

Dan Steiner, PE
SDCS, LLC
(wk) 907-357-5609
(cell) 907-715-7704

From: Peggy Horton <peggy.horton@matsugov.us>
Sent: Thursday, January 23, 2025 10:21 AM
To: dsteiner@mtaonline.net
Subject: RE: Central Gravel Products CUP

So you don't intend to have that prior to the public hearing?

Peggy Horton
Current Planner
907-861-7862

From: dsteiner@mtaonline.net <dsteiner@mtaonline.net>
Sent: Thursday, January 23, 2025 10:20 AM
To: Peggy Horton <peggy.horton@matsugov.us>
Cc: Jade Laughlin <Centralgravelproducts@hotmail.com>; 'Gary LoRusso' <garyl@keystonesurveyak.com>
Subject: RE: Central Gravel Products CUP

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Peggy,

If you are referring to the traffic control plan that ADOT is requiring, it will be prepared at the time of driveway construction. It will most likely be prepared by Northern Dame, the company that supplies the traffic control devices.

Dan Steiner, PE
SDCS, LLC

(wk) 907-357-5609
(cell) 907-715-7704

From: Peggy Horton <peggy.horton@matsugov.us>
Sent: Thursday, January 23, 2025 10:00 AM
To: dsteiner@mtaonline.net
Subject: Central Gravel Products CUP

Dan,
I'd like to suggest that the last phase of the project encompass the area where the visual berm is located. That way, the area closest to Engstrom Road would be the last phase, and it could be done quicker than incorporating it into the last three phases of the project, each of which can take two years or more. See the attached drawing. Is there any reason this can't be incorporated into the phasing plan?

When can the Traffic Control Plan be expected?
Will you be the engineer to create the traffic control plan?

Regards,
Peggy Horton
Current Planner
Matanuska-Susitna Borough
350 E. Dahlia Avenue
Palmer AK 99645
907-861-7862

From: dsteiner@mtaonline.net <dsteiner@mtaonline.net>
Sent: Tuesday, January 21, 2025 3:58 PM
To: Peggy Horton <peggy.horton@matsugov.us>
Subject: FW: Central Gravel Products- DOT&PF ARR 33504

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Sorry, I forgot to include you in the reply.

Dan Steiner, PE
SDCS, LLC
(wk) 907-357-5609
(cell) 907-715-7704

From: dsteiner@mtaonline.net <dsteiner@mtaonline.net>
Sent: Tuesday, January 21, 2025 3:54 PM
To: 'Walsh, Matthew H (DOT)' <matthew.walsh@alaska.gov>; 'Jade Laughlin' <Centralgravelproducts@hotmail.com>; 'Gary LoRusso' <garyl@keystonesurveyak.com>
Cc: 'Beckwith, Morris R (DOT)' <morris.beckwith@alaska.gov>; 'Adler, Clint J (DOT)' <clint.adler@alaska.gov>; 'Bosin, Anna D (DOT)' <anna.bosin@alaska.gov>; 'Bentz, Chris L (DOT)' <chris.bentz@alaska.gov>; 'Baski, Sean M (DOT)' <sean.baski@alaska.gov>
Subject: RE: Central Gravel Products- DOT&PF ARR 33504

Matt,

As the engineering working for CGP, I acknowledge the special condition regarding flagging prior to operation of the proposed driveway. I have invited CGP to do the same.

Dan Steiner, PE
SDCS, LLC
(wk) 907-357-5609
(cell) 907-715-7704

From: Walsh, Matthew H (DOT) <matthew.walsh@alaska.gov>
Sent: Tuesday, January 21, 2025 3:22 PM
To: dsteiner@mtaonline.net; 'Jade Laughlin' <Centralgravelproducts@hotmail.com>; 'Gary LoRusso' <garyl@keystonesurveyak.com>
Cc: Beckwith, Morris R (DOT) <morris.beckwith@alaska.gov>; Adler, Clint J (DOT) <clint.adler@alaska.gov>; Bosin, Anna D (DOT) <anna.bosin@alaska.gov>; Bentz, Chris L (DOT) <chris.bentz@alaska.gov>; Baski, Sean M (DOT) <sean.baski@alaska.gov>
Subject: RE: Central Gravel Products- DOT&PF ARR 33504

Dan,

ROW received approval that the attached have been approved to include in the Approval to Construct.

Prior to moving forward, I want to confirm that DOT&PF will be including the below Special Condition regarding flagging prior to operations in the Approval to Construct. Please let me know if you have any concerns regarding the Special Condition.

Matt

Matt Walsh
ROW Property Management Supervisor, Central Region
Alaska Department of Transportation & Public Facilities
Office: 907-269-0700 • Direct: 907-269-0677 • matthew.walsh@alaska.gov

Keep Alaska Moving through service and infrastructure.

From: dsteiner@mtaonline.net <dsteiner@mtaonline.net>
Sent: Friday, January 17, 2025 2:43 PM
To: Walsh, Matthew H (DOT) <matthew.walsh@alaska.gov>; 'Jade Laughlin' <Centralgravelproducts@hotmail.com>; 'Gary LoRusso' <garyl@keystonesurveyak.com>
Cc: Beckwith, Morris R (DOT) <morris.beckwith@alaska.gov>; Adler, Clint J (DOT) <clint.adler@alaska.gov>; Bosin, Anna D (DOT) <anna.bosin@alaska.gov>; Bentz, Chris L (DOT) <chris.bentz@alaska.gov>; Baski, Sean M (DOT) <sean.baski@alaska.gov>
Subject: RE: Central Gravel Products- DOT&PF ARR 33504

Matt,

Thank you for the response. We really appreciate all your help with this.

Dan Steiner, PE
SDCS, LLC
(wk) 907-357-5609
(cell) 907-715-7704

From: Walsh, Matthew H (DOT) <matthew.walsh@alaska.gov>
Sent: Friday, January 17, 2025 2:40 PM
To: dsteiner@mtaonline.net; 'Jade Laughlin' <Centralgravelproducts@hotmail.com>; 'Gary LoRusso' <garyl@keystonesurveyak.com>
Cc: Beckwith, Morris R (DOT) <morris.beckwith@alaska.gov>; Adler, Clint J (DOT) <clint.adler@alaska.gov>; Bosin, Anna D (DOT) <anna.bosin@alaska.gov>; Bentz, Chris L (DOT) <chris.bentz@alaska.gov>; Baski, Sean M (DOT) <sean.baski@alaska.gov>
Subject: RE: Central Gravel Products- DOT&PF ARR 33504

Hi Dan,

It is not necessary that the TCP be in place and approved before the ATC but that the TCP is approved prior to operations. We are looking for acceptance and understanding of the special condition listed below.

There are other requirements for flagging operations including a temporary speed reduction to 45 MPH (down from 55 MPH) on Bogard as well as truck warning signs both Eastbound and Westbound. DOT&PF is aware of the January 21st deadline.

Matt

Matt Walsh
ROW Property Management Supervisor, Central Region
Alaska Department of Transportation & Public Facilities
Office: 907-269-0700 • Direct: 907-269-0677 • matthew.walsh@alaska.gov
Keep Alaska Moving *through service and infrastructure.*

From: dsteiner@mtaonline.net <dsteiner@mtaonline.net>
Sent: Friday, January 17, 2025 2:34 PM
To: Walsh, Matthew H (DOT) <matthew.walsh@alaska.gov>; 'Jade Laughlin' <Centralgravelproducts@hotmail.com>; 'Gary LoRusso' <garyl@keystonesurveyak.com>
Cc: Beckwith, Morris R (DOT) <morris.beckwith@alaska.gov>; Adler, Clint J (DOT) <clint.adler@alaska.gov>; Bosin, Anna D (DOT) <anna.bosin@alaska.gov>; Bentz, Chris L (DOT) <chris.bentz@alaska.gov>; Baski, Sean M (DOT) <sean.baski@alaska.gov>
Subject: RE: Central Gravel Products- DOT&PF ARR 33504

Matt,

Attached is a set of plans that have been submitted to ADOT with all the latest page updates.

It is going to take a little bit of time to put a traffic control plan together. Monday is a holiday. Will you be able to provide an email to Peggy Horton by January 21 that ADOT will allow access onto to Bogard Road even though we are still working out some of the final details?

Dan Steiner, PE
SDCS, LLC
(wk) 907-357-5609
(cell) 907-715-7704

From: Walsh, Matthew H (DOT) <matthew.walsh@alaska.gov>
Sent: Friday, January 17, 2025 2:06 PM
To: dsteiner@mtaonline.net; 'Jade Laughlin' <Centralgravelproducts@hotmail.com>; 'Gary LoRusso' <garyl@keystonesurveyak.com>
Cc: Beckwith, Morris R (DOT) <morris.beckwith@alaska.gov>; Adler, Clint J (DOT) <clint.adler@alaska.gov>; Bosin, Anna D (DOT) <anna.bosin@alaska.gov>; Bentz, Chris L (DOT) <chris.bentz@alaska.gov>; Baski, Sean M (DOT) <sean.baski@alaska.gov>
Subject: RE: Central Gravel Products- DOT&PF ARR 33504

Hi Dan,

DOT&PF is continuing to move forward in our process in the driveway review. We are awaiting final approval of your submitted design comments. I will touch base with Chris on Tuesday when he returns. Can you please resend an updated plan set with all the changes?

ROW did receive one additional comment regarding the designs and turning movements; DOT&PF is requesting the following condition be including the in the Approval to Construct until the driveway becomes a right in/right out.

Prior to the initiation of trucking operations, a traffic control plan will need to be submitted and approved by DOT&PF for flagging operations associated with a left-hand turning movement. This traffic control plan will remain in effect until the improvements approved by DOT&PF in in the Central Gravel Products Gravel Development plan attached to this Approval to Construct are constructed limiting the access to a right in/right out turning movements.

Thanks,
Matt

Matt Walsh
ROW Property Management Supervisor, Central Region
Alaska Department of Transportation & Public Facilities
Office: 907-269-0700 • Direct: 907-269-0677 • matthew.walsh@alaska.gov
Keep Alaska Moving *through service and infrastructure.*

From: dsteiner@mtaonline.net <dsteiner@mtaonline.net>
Sent: Thursday, January 16, 2025 4:42 PM
To: Walsh, Matthew H (DOT) <matthew.walsh@alaska.gov>; 'Jade Laughlin' <Centralgravelproducts@hotmail.com>; 'Gary LoRusso' <garyl@keystonesurveyak.com>
Cc: Beckwith, Morris R (DOT) <morris.beckwith@alaska.gov>; Adler, Clint J (DOT) <clint.adler@alaska.gov>; Bosin, Anna D (DOT) <anna.bosin@alaska.gov>; Bentz, Chris L (DOT) <chris.bentz@alaska.gov>; Baski, Sean M (DOT) <sean.baski@alaska.gov>
Subject: RE: Central Gravel Products- DOT&PF ARR 33504

Matt,

I talked to Peggy Horton at the MSB today. Just to let you know, we don't need the permit to be issued by next Tuesday, she just needs something as simple as an email that states that ADOT is going to grant access on to Bogard road, even if there are still some design issues that we are working out.

Peggy also said that if there are conditions that ADOT will need to be part of the MSB permit, to let her know. Even if it is "the owner must comply with all conditions of the ADOT driveway

permit" she can include that. They don't need anything, she just asked that I let you know, so I am letting you know.

Thank you for your help.

Dan Steiner, PE
SDCS, LLC
(wk) 907-357-5609
(cell) 907-715-7704

From: dsteiner@mtaonline.net <dsteiner@mtaonline.net>
Sent: Tuesday, January 14, 2025 11:33 AM
To: 'Walsh, Matthew H (DOT)' <matthew.walsh@alaska.gov>; 'Jade Laughlin' <Centralgravelproducts@hotmail.com>; 'Gary LoRusso' <garyl@keystonesurveyak.com>
Cc: 'Beckwith, Morris R (DOT)' <morris.beckwith@alaska.gov>; 'Adler, Clint J (DOT)' <clint.adler@alaska.gov>; 'Bosin, Anna D (DOT)' <anna.bosin@alaska.gov>; 'Bentz, Chris L (DOT)' <chris.bentz@alaska.gov>; 'Baski, Sean M (DOT)' <sean.baski@alaska.gov>
Subject: RE: Central Gravel Products- DOT&PF ARR 33504

See my responses below in red.

Please let me know if you need any other changes.

Dan Steiner, PE
SDCS, LLC
(wk) 907-357-5609
(cell) 907-715-7704

From: Walsh, Matthew H (DOT) <matthew.walsh@alaska.gov>
Sent: Monday, January 13, 2025 2:36 PM
To: dsteiner@mtaonline.net; 'Jade Laughlin' <Centralgravelproducts@hotmail.com>; 'Gary LoRusso' <garyl@keystonesurveyak.com>
Cc: Beckwith, Morris R (DOT) <morris.beckwith@alaska.gov>; Adler, Clint J (DOT) <clint.adler@alaska.gov>; Bosin, Anna D (DOT) <anna.bosin@alaska.gov>; Bentz, Chris L (DOT) <chris.bentz@alaska.gov>; Baski, Sean M (DOT) <sean.baski@alaska.gov>
Subject: RE: Central Gravel Products- DOT&PF ARR 33504

Dan,

To move towards your deadlines, I am providing the following comments made by our Highway Design section at this time instead of waiting for a complete review by all functional groups.

1. Sheet C1.0.1: Add note No. 4 to include topsoil and seed of all disturbed ground within

DOT & MSB right of way. Seed is required to be weed free certified and be native plants to south central AK.

Note added. Updated C1.0.1 attached.

2. Sheet C1.4: Please check/evaluate Stopping Sight Distance (SSD) and Intersection Sight Distance (ISD) as 5 MPH higher than posted (55 MPH for Bogard and 40 MPH for Engstrom). This is consistent with original design intent of the roads and accounts for some speeding which happens regularly on these roads. Both SSD and ISD are required to be met and shall be shown on the plans. Combination truck should be used for time gap (sec) for all maneuvers to and from the approaches per AASHTO A Policy on Geometric Design of Highways and Streets, 7th Edition 2018. Time gap does not need adjusted for grade as most of the grades up and downstream within ISD window are less than ±3%.

   SSD and ISD checked at both intersections. No adjustment needed or Enstrom road. Bogard road updated. Updated C1.4 attached

3. Sheet C1.3.1:
   a. All median noses are to be bullnosed per DOT details to mitigate plow strikes. Each Bullnose is required to be marked with a Flexible Delineator per attached Details. No sharp angles allowed at bullnose radiuses.
   b. All median curb shall be expressway curb and gutter not the mountable as shown on the plans.
   c. Median island is required to be paved or concrete.
   d. Note No. 1 shall be deleted and access is recommended to be constructed as right in right out with full median as shown on the plans. (this is recommended, plans indicate intent to do so only when roundabout is constructed. As the exact timing of that cannot be certain, design highly recommends there be no condition tied to the roundabouts construction.)
   e. All signs shall be installed with frangible couplings and bases for DOT Standard Plan S-31.02. Signs shall be mounted per Central Region Light Sign Framing and Attachment Details (see attached). Signs shall be installed per DOT Standard Plan S-05.02 for height and offset conditions. Signs posts should be checked for wind loading and sized appropriately with galvanized steel tube only (3" steel tube will likely suffice).

   All changes made. See updated/added sheets C1.3.1, C1.3.2, C1.3.3

4. Sheet C1.3:
   a. Vertical curves with a K value greater than or equal to 5 need to be added in the profile grade.
   b. Full 30' at ±2% grade is required prior to start of the vertical curve is required.

   All changes made. Updated C1.3 Attached.

Note that additional comments could still be generated by our other functional groups review that could require reconciliation.

Matt

Matt Walsh
ROW Property Management Supervisor, Central Region
Alaska Department of Transportation & Public Facilities
Office: 907-269-0700 • Direct: 907-269-0677 • matthew.walsh@alaska.gov
Keep Alaska Moving *through service and infrastructure.*

From: Walsh, Matthew H (DOT)
Sent: Monday, January 6, 2025 11:20 AM
To: dsteiner@mtaonline.net; 'Jade Laughlin' <Centralgravelproducts@hotmail.com>; 'Gary LoRusso' <garyl@keystonesurveyak.com>
Cc: Beckwith, Morris R (DOT) <morris.beckwith@alaska.gov>; Adler, Clint J (DOT) <clint.adler@alaska.gov>; Bosin, Anna D (DOT) <anna.bosin@alaska.gov>; Bentz, Chris L (DOT) <chris.bentz@alaska.gov>; Baski, Sean M (DOT) <sean.baski@alaska.gov>
Subject: RE: Central Gravel Products- DOT&PF ARR 33504

Dan,

Thank you for providing revised documents and follow up to our questions sent in the November 21st email. We will circulate the revised plans with your responses for internal review. DOT&PF does recognize the February 3 MSB Planning Commission Meting, however, beware that DOT&PF has many additional projects that require review of our functional groups and cannot guarantee an Approval to Construct by January 21st.

Thanks,
Matt

Matt Walsh
ROW Property Management Supervisor, Central Region
Alaska Department of Transportation & Public Facilities
Office: 907-269-0700 • Direct: 907-269-0677 • matthew.walsh@alaska.gov
Keep Alaska Moving *through service and infrastructure.*

From: dsteiner@mtaonline.net <dsteiner@mtaonline.net>
Sent: Monday, January 6, 2025 10:32 AM
To: Walsh, Matthew H (DOT) <matthew.walsh@alaska.gov>; 'Jade Laughlin' <Centralgravelproducts@hotmail.com>; 'Gary LoRusso' <garyl@keystonesurveyak.com>
Cc: Beckwith, Morris R (DOT) <morris.beckwith@alaska.gov>; Adler, Clint J (DOT) <clint.adler@alaska.gov>; Bosin, Anna D (DOT) <anna.bosin@alaska.gov>; Bentz, Chris L (DOT) <chris.bentz@alaska.gov>; Baski, Sean M (DOT) <sean.baski@alaska.gov>

Subject: RE: Central Gravel Products- DOT&PF ARR 33504

Matt,

Attached are updated drawings addressing the ADOT comments.

Please note a couple of things. Traffic counts have been obtained for the coffee shop. However, since then, It has been decided that the coffee stand will be removed from this site. The peak hour for the coffee shop included 40 vehicle trips. When the coffee shop is removed, the peak hour for the gravel pit will be approximately half of that.
Also, two driveways will be removed. With that and the coffee shop removal, four driveway access points will be reduced to one access point, the driveway to the gravel pit.

The paperwork (easements, power of attorney, etc.) are in the process of getting signatures.

We are trying to get things ready for he MSB Planning Commission Meeting on February 3. To do this, we need to get information to the MSB by January 21, including ADOT approval for the Bogard Road driveway. We respectfully request a review of the attached plans and any review comments within 10 calendar days. This would hopefully give us enough time to respond to comments and re-submit plans for approval by January 21.

Please let me know if you have any questions.

To be able to precede with our review, DOT&PF requests the following information:
-

- Traffic counts for the current coffee stand Fresh Start Expresso. N/A – Coffee shop to be relocated. See Demolition Sheet - C1.0.1
- Revised design plans with a demolition sheet showing the removal of the discussed access points. See Demolition Sheet - C1.0.1
- Revised design plans with the proposed design elements for a right-in/right-out driveway. See Sheets – C1.3 and C1.3.1

Specific design comments for the previously submitted design plans that require reconciliation are the following:

- C1.4 sight distance shown for Bogard Rd does not appear to use proper offset. The figure appears to show some unknown offset distance from what appears to be the center of travel lane. The offset distance must be 14.4-17.8’ from the edge of travel way (fog line). Show all obstructions in the area and or plans for removal of obstructions, for example there are tress in close currently but not shown. Site Distance Sheet updated.

Sheet - C1.4

- C1.3 note 5 states topography negates need for culvert. Would need to see a ditch profile to confirm this, else a cross culvert should be installed per standard. A culvert has been added. See Sheet – C1.3

Dan Steiner, PE
SDCS, LLC
(wk) 907-357-5609
(cell) 907-715-7704

From: Peggy Horton
To: Rod Hanson
Cc: Alex Strawn; Jason Ortiz; North Lakes Community Council (board@nlakes.cc)
Subject: Central Gravel CUP Public Hearing
Date: Thursday, January 23, 2025 4:29:00 PM

Mr. Hanson,
I'm sorry for the delay in getting back to you. We have very recently received information concerning the Bogard driveway and updates to the visual screening plans. It took a few days for us to digest this and run it up and down the flagpole. I will be updating the CUP's public notice page on our website tomorrow. Here's a link to that: Matanuska-Susitna Borough - MSB 17.30 - Conditional Use Permit for Earth Materials Extraction.

I have not received any additional public comments after those presented at the 11-18-24 meeting. Those can be found within the packet and the handouts on the Planning Commission agenda: Matanuska-Susitna Borough – Agendas. Search for the date of the last hearing, 11-18-24, and click on the packet and handouts to see those public comments. These will be included in the next CUP packet.

I spoke to Cole Branham, MSB Project Management Manager, who said all of HDL's information on the project is included with AM 24-143. The next step will be gathering public input, such as at the Transportation Fair, which will be held on January 30, 2025, at Raven Hall in the Fairgrounds.

I will include that legislation with your comments for the next CUP packet.

Respectfully,
Peggy Horton
Current Planner
Matanuska-Susitna Borough
350 E. Dahlia Avenue
Palmer AK 99645
907-861-7862

From: Rod Hanson <rod@nlakes.cc>
Sent: Tuesday, January 21, 2025 3:51 PM
To: Peggy Horton <peggy.horton@matsugov.us>
Cc: Lacie Olivieri <lacie.olivieri@matsugov.us>; Alex Strawn <Alex.Strawn@matsugov.us>; Tom Adams <Tom.Adams@matsugov.us>; Adler, Clint J (DOT) <clint.adler@alaska.gov>; North Lakes Community Council (board@nlakes.cc) <board@nlakes.cc>
Subject: Central Gravel SUP Public Hearing

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Good afternoon Peggy,

Can you please confirm for the NLCC that the continuation of the Central Gravel Products CUP Public Hearing before the Planning Commission is still scheduled for February 3rd? If so, can you tell us when we might expect to see any updated application materials that may have been submitted by the applicant, as well as a copy of public comments received? We would also to see any correspondence from the State DOT on their review of the property owners' request(s) for driveway access onto Bogard Road.

We also recommend that the Planning Department provide Planning Commissioners with additional information to assist in their determination decision(s):

1. A copy of Action Memo AM24-143 that was accepted by the Assembly in December. This Action Memo approved a change order to the contract with HDL Engineering and requested an expansion of their work to evaluate alternatives for the Engstrom to Trunk Road connection project. Within the proposal from HDL Engineering was a good description of their intended work, which included another look at the Southern Route for consideration.
2. An updated status report from HDL Engineering Consultants on their process and expanded alternatives analysis.

We believe it is imperative that the Planning Commission consider the long term benefits of the Southern connection option as they make their decisions on this Conditional Use Permit. If the vision is that the Southern Route may ultimately be constructed, then the conditions of approval and driveway access locations for Central Gravel should be aligned with that vision and the concepts described in the Bogard Road Corridor Access Management Plan.

Thank You,

Rod Hanson
President, North Lakes Community Council

COMMENTS

Agency Comments

From: Rod Hanson
To: Peggy Horton
Cc: Lacie Olivieri; Alex Strawn; Tom Adams; Adler, Clint J (DOT); North Lakes Community Council (board@nlakes.cc)
Subject: Central Gravel SUP Public Hearing
Date: Tuesday, January 21, 2025 3:51:21 PM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Good afternoon Peggy,

Can you please confirm for the NLCC that the continuation of the Central Gravel Products CUP Public Hearing before the Planning Commission is still scheduled for February 3rd? If so, can you tell us when we might expect to see any updated application materials that may have been submitted by the applicant, as well as a copy of public comments received? We would also to see any correspondence from the State DOT on their review of the property owners' request(s) for driveway access onto Bogard Road.

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We believe it is imperative that the Planning Commission consider the long term benefits of the Southern connection option as they make their decisions on this Conditional Use Permit. If the vision is that the Southern Route may ultimately be constructed, then the conditions of approval and driveway access locations for Central Gravel should be aligned with that vision and the concepts described in the Bogard Road Corridor Access Management Plan.

Thank You,

Rod Hanson
President, North Lakes Community Council

MATANUSKA-SUSITNA BOROUGH ACTION MEMORANDUM **AM No. 24-143**

SUBJECT: APPROVAL OF CHANGE ORDER NO. THREE FOR CONTRACT NO. 22-090P(C) WITH HDL ENGINEERING CONSULTANTS, LLC, FOR THE ENGSTROM ROAD TO TRUNK ROAD CONNECTOR PROJECT TO ADD $164,134 FOR ENGINEERING SERVICES AND EXTEND THE CONTRACT TO MARCH 31, 2026.

AGENDA OF: December 17, 2024

ASSEMBLY ACTION:

Approved under the consent agenda 12/17/24 - EMW

AGENDA ACTION REQUESTED: Present to the Assembly for consideration.

Route To:	Signature
Project Management Division Manager	X Cole Branham 12/4/2024 Signed by: Cole Branham
Public Works Director	X Michael Brown 12/4/2024 Signed by: Mike Brown
Purchasing Director	X Dustin Silva 12/4/2024 Signed by: Dustin Silva
Finance Director	X Cheyenne Heindel 12/4/2024 Signed by: Cheyenne Heindel
Borough Attorney	X JA for NS 12/4/2024 Signed by: John Aschenbrenner
Borough Manager	X Michael Brown 12/4/2024 Signed by: Mike Brown
Borough Clerk	X Lonnie McKechnie 12/4/2024 Signed by: Lonnie McKechnie

ATTACHMENT(S): Cost Proposal (9 Pages)

SUMMARY STATEMENT: On January 31, 2022, the Matanuska-Susitna Borough (Borough) Purchasing Division issued a solicitation requesting proposals from qualified firms for engineering services for the Engstrom Road to Trunk Road Connector Project. The Engstrom Road to Trunk Road Connector project, Project No. 35472-1800-1811, is part of the Transportation Infrastructure Program 2021 (TIP21), approved as Proposition 1 by Borough voters in November 2021. The purpose of the Engstrom Road to Trunk Road Connector project is to improve safety and increase the capacity of the road network in the Fishhook area by providing an alternate route between Engstrom

Road and Trunk Road with a minimum design life of 20 years. The need of the project is to improve connectivity and reduce congestion to meet current and future traffic volumes, which are constructed by the Fishhook and North Lakes area's limited collector-level road network.

In response to the advertisement, six proposals were received. A proposal evaluation made up of Borough Public Works staff evaluated the proposals and selected HDL Engineering Consultants, LLC (HDL) as the most qualified firm for this project. The Purchasing Department, with the involvement of Public Works, negotiated with HDL to develop a fee proposal for professional engineering services for reconnaissance engineering and a preliminary evaluation of alternatives. On August 19, 2022, the Purchasing Division executed a professional service agreement with HDL for the contract amount of $63,000 for the Engstrom Road to Trunk Road Connector project.

The Reconnaissance Engineering Report prepared by HDL in July 2023 addressed three alternatives: No Build, South Alignment, and North Alignment. The report considered purpose & need, design criteria, typical section, geotechnical, hydrology & hydraulics, environmental considerations, right-of-way requirements, pedestrian & bicycle facilities, utility impacts, planning documents, wind & snow drifts, DOT&PF facilities, and cost. Based on the report, Public Works recommends proceeding with preliminary engineering for the North Alignment. The North Alignment meets the purpose and need and aligns with long-term planning and goals.

On October 10, 2023, at the Joint Assembly and Planning Commission meeting, Public Works staff presented an update on the transportation projects, including a presentation on the Engstrom Road to Trunk Road Connector project. The presentation included an overview of the Engstrom Road to Trunk Road Connector project, the alternatives considered, and the proposed advancement to preliminary engineering of the North Alignment to evaluate further and begin preliminary engineering efforts for the preferred option.

Change Order One (1) added $182,348 to provide preliminary engineering through the design study report (DSR) to evaluate the North Alignment further. The Consultant's services include preliminary environmental activities & permitting, geotechnical evaluation, hydrologic & hydraulic design, traffic & safety analysis, design study report, preliminary plans, and intersection alternatives. The change order also extended the contract to December 31, 2024. Change Order One was approved through AM 24-001 by the Assembly.

Change Order Two (2) added $2,000 for survey work to collect data necessary for right-of-way acquisition. This survey included a tie to monumentation to support the acquisition process.

Change Order Three (3) will add $164,134 to expand the Traffic and Safety Analysis to include additional alternative routes identified, along with an Alternative Analysis Memo and Public Involvement efforts. During the process of acquiring Right of Entry (ROE) for fieldwork, property owner concerns led to the need for further evaluation of additional routes. This change order will assess alternate routes to assist in selecting an alternative. The Public Involvement component will include a project website, advertising, and public meeting workshops. This change order will also extend the contract to March 31, 2026.

The Administration request authority to extend this contract up to 180 days for unforeseen circumstances.

RECOMMENDATION OF ADMINISTRATION: Approve Change Order Three (3) for Contract No. 22-090P(C) with HDL Engineering Consultants, LLC, for the Engstrom Road To Trunk Road Connector Project, to add $164,134 for preliminary engineering services and extend the contract to March 31, 2026. Additionally, authorize contract extension authority up to 180 days.

MATANUSKA-SUSITNA BOROUGH
FISCAL NOTE

Agenda Date: December 17, 2024

SUBJECT: APPROVAL OF CHANGE ORDER NO. THREE FOR CONTRACT NO. 22-090P(C) WITH HDL ENGINEERING CONSULTANTS, LLC, FOR THE ENGSTROM ROAD TO TRUNK ROAD CONNECTOR PROJECT TO ADD $164,134 FOR ENGINEERING SERVICES AND EXTEND THE CONTRACT TO MARCH 31, 2026.

FISCAL ACTION (TO BE COMPLETED BY FINANCE)	FISCAL IMPACT **YES** NO
AMOUNT REQUESTED $164,134.00	FUNDING SOURCE RSA and Roads & Bridges Cap Projects
FROM ACCOUNT # 410/430.000.000 4xx.xxx	PROJECT
TO ACCOUNT:	PROJECT #
VERIFIED BY: Recoverable Signature X Liesel Weiland Signed by: Liesel Weiland	

EXPENDITURES/REVENUES: **(Thousands of Dollars)**

OPERATING	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029
Personnel Services						
Travel						
Contractual						
Supplies						
Equipment						
Land/Structures						
Grants, Claims						
Miscellaneous						
TOTAL OPERATING						
CAPITAL		164.1				
REVENUE						

FUNDING: **(Thousands of Dollars)**

General Fund						
State/Federal Funds						
Other		164.1				
TOTAL		164.1				

POSITIONS:

Full-Time						
Part-Time						
Temporary						

ANALYSIS: (Attach a separate page if necessary)

APPROVED BY:	12/4/2024 X Cheyenne Heindel Signed by: Cheyenne Heindel

HDL ENGINEERING Consultants LLC

December 3, 2024

Cole Branham
Project Management Division Manager
Matanuska-Susitna Borough Public Works
350 East Dahlia Avenue
Palmer, AK 99645

Subject: Cost Proposal – Additional Alternatives Analysis and Public Involvement Services
Engstrom Road to Trunk Road Connector, MSB Project No. 35472-1811

As requested by the Matanuska-Susitna Borough (MSB), HDL Engineering Consultants, LLC (HDL) has prepared this scope and fee proposal for the following:

- Public Involvement – increasing the public outreach scope
- Alternatives Analysis – evaluating additional alternatives
- Traffic and Safety Analysis – evaluation of increased area

Project Overview

Background and Status

In August 2022, notice to proceed (NTP) 1 was issued for Preliminary Environmental and Reconnaissance Engineering services. Under this task, HDL analyzed two alternate routes connecting Engstrom Road to Trunk Road (Connector), identified as the North and South Alignments. HDL performed desktop evaluations of the environmental, cultural resources, geotechnical, hydrologic & hydraulic (H&H), and right-of-way (ROW) impacts of each route. The results of this analysis was summarized and submitted as a Reconnaissance Engineering Report (Recon Report) to the MSB in July 2023.

Then in February 2024, NTP 2 was issued for Preliminary Engineering services to support the further study, selection, and development of a preferred design alternative. Tasks approved under this NTP included fieldwork in support of further environmental, cultural resources, geotechnical, and H&H analysis and recommendations, in addition to traffic and safety analysis, a design study report, public involvement, and the development of plans, specifications, and estimate (PS&E) to a 35% design level. Also at this time, the MSB was in negotiations with the Stone Creek Estates owner during the plat application for subdividing and developing Stone Creek Estates. The MSB requested HDL assist with the process by providing preliminary design, including plan and profile sheets, and ROW recommendations.

Civil Engineering
Geotechnical Engineering
Transportation Engineering
Aviation Engineering
W/WW Engineering
Environmental Services
Surveying & Mapping
Construction Administration
Material Testing

While the MSB was in the process of acquiring Right of Entry (ROE) for fieldwork, the Lohmann-Olson Family LLLP, owners of multiple lots impacted by the proposed route, submitted a letter to the MSB Planning Commission requesting, among other things, that "alternative routes be vetted and evaluated, and a final route selected." This letter and denial of ROE prompted further meetings and discussions, ultimately with the MSB's desire to redefine the project scope so that it could meet requirements needed to secure federal funding for construction.

Task 6 – Traffic and Safety Analysis

We will expand the scope of our Traffic and Safety Analysis, identified in our cost proposal dated December 6, 2023, to include each route identified as part of the alternatives analysis, discussed below, within the Fishhook Triangle area. We will analyze changes in traffic patterns based on the existing road network, the Connector alternatives, and other future road network connection projects including but not limited to the Engstrom Road Extension, Tex-Al Drive Extension, and the Palmer-Fishhook Road-Trunk Road Roundabout projects. The expanded scope will be captured in the Traffic and Safety Analysis Memo and summarized in the body of the Alternatives Analysis Memo.

Task 9 – Design Study Report

Alternatives Analysis Memo

HDL will expand upon the routes analyzed in the Recon Report by identifying and analyzing alternate routes for connecting Engstrom Road to Trunk Road. The analysis will include:

a. Further review of the 2017 Fishhook Area Collector Study, MSB's Long Range Transportation Plan (LRTP), and MSB's Official Streets and Highway Plan (OSHP), the Bogard-Seldon Corridor Access Management Plan (CAMP), and the MSB's Sub-Area Solutions Studies (SASS) to guide alternate route identification and impacts of future projects to traffic patterns.
b. Identification of alternate routes connecting Engstrom Road to Trunk Road. Routes will be identified by evaluating existing collector and subcollector roadways, reviewing the LRTP and OSHP, the Bogard-Seldon CAMP, the MSB's SASS, public/stakeholder input, and engineering judgement.
c. A figure showing the preliminary alignments and intersection locations over an aerial photo for each alternative.
d. A preliminary desktop geotechnical evaluation of the additional routes to evaluate existing soils and, if needed, an alternate preliminary structural section recommendation.
e. A preliminary H&H desktop evaluation along the additional routes to identify any potential creek/stream crossing locations.
f. Reconnaissance-level cost estimate, based on per-foot costs of similar roadways and stream crossings for each alternative.

We will summarize the findings in an Alternative Analysis Memo, highlighting attributes of each alternative, and provide a preferred alternative recommendation.

Task 10 – Public Involvement

HDL will work closely with the MSB to engage the public and key stakeholders throughout the alternatives development process. A kickoff meeting for the PI task will take place to refine the schedule for engaging the public and key stakeholders throughout the development of alternatives. A Public Engagement Plan (PEP) will be developed to summarize timeline established during the task kickoff meeting that will outline methods that will be used to engage the public and key project stakeholders.

Project Website.

Using the MSB's styles guide, HDL will develop a project specific website that will be used throughout the project to engage and inform the public. The website content will be updated regularly including pre- and post-meetings with the public. The intent of the website is to keep the public informed of the project and opportunities to meet with the team, make project information readily accessible, and provide an easy way for the public to comment on the project. HDL will provide hosting services for the website and will purchase a URL that is project specific. All technical information and graphics presented on the website will be approved by the MSB. HDL will coordinate with the MSB, prior to each website update.

Public Meetings/Workshops.

The MSB will host three public open houses to inform the public of the project and collect input on logical Engstrom to Trunk connections. Each public open house will include a project overview and informational exhibits as well as provide participants an opportunity to let the MSB know about their concerns as well as express ideas for alignment alternatives. HDL will schedule and plan each open house, develop all meeting materials (boards, comment forms, sign-in sheets, handouts, etc.) and will participate in each meeting. A meeting summary will be developed following each open house. HDL will prepare an Excel spreadsheet to track all comments received throughout the project.

Advertising.

A project fact sheet will be distributed to all box holders within the project specific mailing boundary. The boundary will be developed in collaboration with the MSB. The project factsheet will including information detailing the project's purpose, why it is necessary, a brief summary of the history of the project, and a link to the project website. Members of the public who are interested in the project will be asked to sign up on the project website to receive updates in regard to future public open houses. Public open house meetings will be advertised using methods including:

- Project website
- Newspaper advertisements (Anchorage Daily News and Frontiersman)
- MSB's Facebook page

- Email distribution to those that have signed up for project updates via the project website
- Email distribution to those that the MSB has defined as a key stakeholder (community council members, road service area members, emergency services, etc.)

The MSB will be responsible for coordination and release of meeting information via the MSB's Facebook page. HDL will develop a project fact sheet and will attend two Mat-Su Borough Transportation Fairs.

Scoping Summary Report.
HDL will prepare a report that summarizes public and stakeholder engagement throughout the alternatives development process.

Contract Extension

The January 16, 2024 Purchase Order (No. 2024-00002501) authorizing Preliminary Engineering services lists a contract completion date of December 31, 2024. A revised completion will be required to continue the project.

Assumptions/Exclusions

This quote is prepared using the following assumptions and exclusions; deviation may require additional compensation.

1. Alternatives analysis will include up to five (5) distinct routes, including the North and South Alignments identified in the Reconnaissance Engineering Report, particularly for the Traffic and Safety analysis. Other minor routes identified during research and analysis and/or from public and stakeholder engagement will be reviewed and discussed in the Alternatives Analysis Memo, and listed in the alternatives analysis matrix, but not directly analyzed in-depth for traffic pattern impacts.
2. Evaluation of environmental impacts is not included in this scope of work.
3. The project website URL will be good for up to two years. After two years use of the URL will require renewal.
4. Public meetings will take place at a venue agreed upon by the MSB.
5. Three public open house meetings are included in the scope. Additional coordination will be added by contract amendment.
6. Public meeting announcements will be displayed on the project website and will be placed in the Anchorage Daily News and the Frontiersman.

Cost Proposal

We propose to provide the aforementioned services on a fixed fee basis at the cost identified below:

Task	Proposed Fee
#6 Traffic & Safety	$51,270
#9 Design Study Report	$69,110
#10 Public Involvement	$43,754
Total	**$164,134**

We look forward to continuing our work with you on the exciting project. If you have any questions, please feel free to contact me.

Sincerely,
HDL Engineering Consultants, LLC

Nick Oliveira, PE, PTOE
Principal Engineer
e: NOliveira@HDLalaska.com | o: 907.564.2120 | d: 907.564.2136

Attach: Cost Proposal (4 pages)

CC: Tom Adams, PE, MSB
Shawn Hull, PE, HDL
Heather Campfield, IAP^2, HDL
Matthew Coburn, PE, HDL
Trevor Strait, PE, HDL

FIRM: HDL Engineering Consultants	PROJECT TITLE: Engstrom Road to Trunk Road Connector	DATE: 12/3/2024

TOTAL NEGOTIATED FIXED FEE:

GROUP	TASK	LABOR (or FP)	INDIRECT COST	EXPENSES	TOTAL COST	FEE DISTRIBUTION	FIRM'S TOTAL PRICE	*SUB-CONTRACTS	PRICE PLUS SUBS
Env	1	$0		$0	$0		$0	$0	$ -
Survey	2	$0		$0	$0		$0	$0	$ -
ROW Map	3	$0		$0	$0		$0	$0	$ -
Geo	4	$0		$0	$0		$0	$0	$ -
H&H	5	$0		$0	$0		$0	$0	$ -
T&S	6	$50,170		$1,100	$51,270		$51,270	$0	$ 51,270
DSR	9	$69,110		$0	$69,110		$69,110	$0	$ 69,110
PI	10	$36,045		$7,709	$43,754		$43,754	$0	$ 43,754
ESCP	11	$0		$0	$0		$0	$0	$ -
PS&E	12	$0		$0	$0		$0	$0	$ -
Utility	13	$0		$0	$0		$0	$0	$ -
Bid	14	$0		$0	$0		$0	$0	$ -
Closeout	15	$0		$0	$0		$0	$0	$ -
CA	16	$0		$0	$0		$0	$0	$ -
Electrical	17	$0		$0	$0		$0	$0	$ -

*Subcontractors for negotiated professional or technical services, products, etc. (Commodity items available to the general public at market

ESTIMATED TOTALS	LABOR (or FP)	INDIRECT COST	EXPENSES	TOTAL COST	FEE	FIRM'S TOTAL PRICE	*SUB-CONTRACTS	PRICE PLUS SUBS
FOR FIRM:	**$155,325**	**$0**	**$8,809**	**$164,134**	**$0**	**$164,134**	**$0**	**$ 164,134**

COST ESTIMATE PER TASK

FIRM: HDL Engineering Consultants	**PROJECT TITLE:** Engstrom Road to Trunk Road Connector		
TASK NO: 6	**TASK DESCRIPTION:** Traffic and Safety Analysis	**DATE:**	12/3/2024
GROUP:	**METHOD OF PAYMENT:** FP ☑ FPPE ☐ T&E ☐ CPFF ☐	**PREPARED BY:**	Trevor Strait

SUB-TASK NO.	SUB-TASK DESCRIPTION	LABOR HOURS PER JOB CLASSIFICATION										
		Project Manager	Contract Manager	Traffic Engineer	EIT	Designer/ Drafter	Clerical					Sheets
	General Mgmt & Coordination	4	2	4								
	Data Collection			8	16							
	Growth Rate Development			4	12							
	Traffic Forecasting			24	32							
	Alternative Capacity Analysis	2		48	48							
	Crash Analysis			4	8							
	Review Existing and Develop Alts			8	16							
	Sight Distance Analysis			4	8							
	Coordination/meetings	2		4								
	Draft Traffic Analysis Report			16	24	4	4					
	Final Traffic Analysis Report			8	12	2	2					
	QC Review	2										
TOTAL LABOR HOURS		10	2	132	176	6	6	0	0	0	0	0
*** LABOR RATES ($/HR)**		$180.00	$205.00	$180.00	$130.00	$130.00	$90.00	$0.00	$0.00	$0.00	$0.00	$0.00
LABOR COSTS ($)		$1,800	$410	$23,760	$22,880	$780	$540	$0	$0	$0	$0	$0

EXPENSES

SUB-TASK NO.	ITEM(S)	QUANTITY	UNIT PRICE	TOTAL PRICE
	Miovision Rental & Processing per day	2	$500.00	$1,000.00
				$0.00
				$0.00
				$0.00
				$0.00
				$0.00
	Markup at 10%			$100.00
		TOTAL EXPENSES:		**$1,100**

COMMENTS: See proposal dated December 3, 2024 for project scope and assumptions.

FIRM'S TOTAL COST OF LABOR (or Fixed Price):	**$50,170**
***IF CPFF*, TOTAL INDIRECT COST @**	**$0**
FIRM'S TOTAL EXPENSES	**$1,100**
FIRM'S TOTAL COST (no Subcontracts or Fee)	**$51,270**

SUB-CONTRACTORS: Firm Initials and Price Per Task

						Subtotal	10% Markup
FIRM:							
AMOUNT:						$0	$0

TOTAL SUBCONTRACTOR PRICES: **$0**

COST ESTIMATE PER TASK

FIRM: HDL Engineering Consultants					**PROJECT TITLE:** Engstrom Road to Trunk Road Connector							
TASK NO: 9	**TASK DESCRIPTION:** Design Study Report										**DATE:** 12/3/2024	
GROUP:	**METHOD OF PAYMENT:** FP ☑ FPPE ☐ T&E ☐ CPFF ☐								**PREPARED BY:** Shawn Hull			

SUB-TASK NO.	SUB-TASK DESCRIPTION	LABOR HOURS PER JOB CLASSIFICATION										
		Project Manager	Contract Manager	Civil Engineer	EIT	Clerical	Environ Lead	Geotech Lead	H&H Engineer	Drafter		
	General Mgmt & Coordination	12	8									
	Documentation Review											
	2017 Fishhook Collector Study			2								
	MSB's LRTP			2								
	MSB's OS&HP			4								
	Seldon/Bogard CAMP			2								
	MSB SASS			4								
	Review	2		2								
	Alternatives Analysis											
	Alternate Routes Identification	8		24								
	Desktop Eval.: Env, Geo, H&H	2		8			16	8	16			
	Develop Alternatives	16		100	100							
	Alternatives Analysis Memo											
	Project Background			1	2							
	Project Desc, Location, Vic Map			1	2					2		
	Purpose and Need			1	1							
	Design Standards/Guidelines			1	1							
	Typical Section & Ped. Facilities			1	1					2		
	Alternatives Comparision (Table)			2	4							
	Environmental Considerations			1	1		4					
	Drainage/Fish Passage			2	2				4			
	Traffic & Safety			4	2							
	ROW Requirements			4	8							
	Utility Impacts			2	4							
	Maintenance Considerations			2	4							
	Addt'l Imp Project Impacts			2	4							
	Cost Estimate			2	4							
	Draft Memo Submittal	4		4	4	2						
	Final Memo											
	Comment Revisions/Responses	4		4	8							
	QC Review	8	2									
TOTAL LABOR HOURS		56	10	182	152	2	20	8	20	4	0	0
*** LABOR RATES ($/HR)**		$180.00	$205.00	$160.00	$130.00	$90.00	$150.00	$150.00	$160.00	$130.00	$0.00	$0.00
LABOR COSTS ($)		$10,080.00	$2,050.00	$29,120.00	$19,760.00	$180.00	$3,000.00	$1,200.00	$3,200.00	$520.00	$0.00	$0.00

EXPENSES

SUB-TASK NO.	ITEM(S)	QUANTITY	UNIT PRICE	TOTAL PRICE
				$0.00
				$0.00
				$0.00
				$0.00
				$0.00
				$0.00
	Markup at 10%			$0.00
		TOTAL EXPENSES:		**$0**

SUB-CONTRACTORS: Firm Initials and Price Per Task

FIRM:						**Subtotal**	**10% Markup**
AMOUNT:						$0	$0

COMMENTS: See proposal dated December 3, 2024 for project scope and assumptions.

FIRM'S TOTAL COST OF LABOR (or Fixed Price):		**$69,110**
***IF CPFF*, TOTAL INDIRECT COST @**	**0.00%**	**$0**
FIRM'S TOTAL EXPENSES		**$0**
FIRM'S TOTAL COST (no Subcontracts or Fee)		**$69,110**
TOTAL SUBCONTRACTOR PRICES:		**$0**

COST ESTIMATE PER TASK

FIRM: HDL Engineering Consultants		**PROJECT TITLE:** Engstrom Road to Trunk Road Connector	
TASK NO: 10	**TASK DESCRIPTION:** Public Involvement		**DATE:** 12/3/2024
GROUP:	**METHOD OF PAYMENT:** FP ☑ FPPE ☐ T&E ☐ CPFF ☐		**PREPARED BY:** Heather Campfield

SUB-TASK NO.	SUB-TASK DESCRIPTION	LABOR HOURS PER JOB CLASSIFICATION										
		Project Manager (SH)	ENV Manager (HC)	ENV Planner (MS)	ENV Specialist (GH)	GIS Specialist (MS)	Graphics Design/Web site (RJ)	Traffic Engineer (TS)	Designer/ Drafter	Contract Manager	Contract Manager	
	General Mgmt & Coordination											
	Public Involvement											
	Public Engagement Plan											
	Task Kickoff Mtg w/ MSB	2	2	4				4				
	Develop Project Engagement Plan		2	6								
	Develop Mailing List boundary/Mailing Addresses			2								
	Project Website											
	Develop Project Website		2	2			6					
	Updates to Project Website Pre-Meeting (3 updates)		2	2			6					
	Updates to Project Website Post-Meeting (3 updates)		2	2			6					
	Public Meetings											
	Public Mtg 1											
	Develop Meeting Advertisements			4			2					
	Develop Meeting Materials	2	4	8		2	6	2				
	Attend Meeting	3	3	6				3				
	Develop Meeting Summary	1	2	3								
	Document Public Comments Received	1	2	4								
	Public Mtg 2											
	Develop Meeting Advertisements			2			2					
	Develop Meeting Materials	2	4	6		2	6	2				
	Attend Meeting	3	3	6				3				
	Develop Meeting Summary and Website Update	1	2	3								
	Document Public Comments Received	1	2	4								
	Public Mtg 3			2			2					
	Develop Meeting Advertisements	2	4	6			6	2				
	Develop Meeting Materials	3	3	6		2		3				
	Attend Meeting	1	2	3								
	Develop Meeting Summary and Website Update	1	2	4								
	Document Public Comments Received											
	Scoping Summary Report											
	Draft/Final Report	2	2	8			3					
TOTAL LABOR HOURS		25	45	93	0	6	45	19	0	0	0	0
*** LABOR RATES ($/HR)**		$180.00	$205.00	$125.00	$145.00	$125.00	$145.00	$180.00	$130.00	$205.00	$0.00	$0.00
LABOR COSTS ($)		$4,500.00	$9,225.00	$11,625.00	$0.00	$750.00	$6,525.00	$3,420.00	$0.00	$0.00	$0.00	$0.00

EXPENSES

SUB-TASK NO.	ITEM(S)	QUANTITY	UNIT PRICE	TOTAL PRICE
	Mailing Addresses w/in Mailing Boundary (addresses obtained from MSB parcel data)	0		$0.00
	URL for Project Website	1	$40.00	$40.00
	Public Meeting Materials	3	$275.00	$825.00
	Public Board Displays	9	$150.00	$1,350.00
	Public Mtg Venue Rental (assumes meeting space is free to MSB)	0		$0.00
	Newsletter/Postcard (printing/mailing, 4300 boxes x 1 mailer)	1	$3,293.18	$3,293.18
	Meeting Advertisements (ADN/Frontiersman x 3 mtgs)	3	$500.00	$1,500.00
	Markup at 10%			$700.82
		TOTAL EXPENSES:		**$7,709**

COMMENTS: See proposal dated December 3, 2024 for project scope and assumptions. Assumes meeting space will be free to MSB use.

FIRM'S TOTAL COST OF LABOR (or Fixed Price):		**$36,045**
***IF CPFF*, TOTAL INDIRECT COST @**	**0.00%**	**$0**
FIRM'S TOTAL EXPENSES		**$7,709**
FIRM'S TOTAL COST (no Subcontracts or Fee)		**$43,754**

SUB-CONTRACTORS: Firm Initials and Price Per Task

					Subtotal	10% Markup
FIRM:						
AMOUNT:					$0	$0

TOTAL SUBCONTRACTOR PRICES: **$0**

From: dsteiner@mtaonline.net
To: Peggy Horton
Subject: FW: Central Gravel Products- DOT&PF ARR 33504
Date: Tuesday, January 21, 2025 3:58:34 PM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Sorry, I forgot to include you in the reply.

Dan Steiner, PE
SDCS, LLC
(wk) 907-357-5609
(cell) 907-715-7704

From: dsteiner@mtaonline.net <dsteiner@mtaonline.net>
Sent: Tuesday, January 21, 2025 3:54 PM
To: 'Walsh, Matthew H (DOT)' <matthew.walsh@alaska.gov>; 'Jade Laughlin' <Centralgravelproducts@hotmail.com>; 'Gary LoRusso' <garyl@keystonesurveyak.com>
Cc: 'Beckwith, Morris R (DOT)' <morris.beckwith@alaska.gov>; 'Adler, Clint J (DOT)' <clint.adler@alaska.gov>; 'Bosin, Anna D (DOT)' <anna.bosin@alaska.gov>; 'Bentz, Chris L (DOT)' <chris.bentz@alaska.gov>; 'Baski, Sean M (DOT)' <sean.baski@alaska.gov>
Subject: RE: Central Gravel Products- DOT&PF ARR 33504

Matt,

As the engineering working for CGP, I acknowledge the special condition regarding flagging prior to operation of the proposed driveway. I have invited CGP to do the same.

Dan Steiner, PE
SDCS, LLC
(wk) 907-357-5609
(cell) 907-715-7704

From: Walsh, Matthew H (DOT) <matthew.walsh@alaska.gov>
Sent: Tuesday, January 21, 2025 3:22 PM
To: dsteiner@mtaonline.net; 'Jade Laughlin' <Centralgravelproducts@hotmail.com>; 'Gary LoRusso' <garyl@keystonesurveyak.com>
Cc: Beckwith, Morris R (DOT) <morris.beckwith@alaska.gov>; Adler, Clint J (DOT) <clint.adler@alaska.gov>; Bosin, Anna D (DOT) <anna.bosin@alaska.gov>; Bentz, Chris L (DOT) <chris.bentz@alaska.gov>; Baski, Sean M (DOT) <sean.baski@alaska.gov>
Subject: RE: Central Gravel Products- DOT&PF ARR 33504

Dan,

ROW received approval that the attached have been approved to include in the Approval to

Construct.

Prior to moving forward, I want to confirm that DOT&PF will be including the below Special Condition regarding flagging prior to operations in the Approval to Construct. Please let me know if you have any concerns regarding the Special Condition.

Matt

Matt Walsh
ROW Property Management Supervisor, Central Region
Alaska Department of Transportation & Public Facilities
Office: 907-269-0700 • Direct: 907-269-0677 • matthew.walsh@alaska.gov
Keep Alaska Moving *through service and infrastructure.*

From: dsteiner@mtaonline.net <dsteiner@mtaonline.net>
Sent: Friday, January 17, 2025 2:43 PM
To: Walsh, Matthew H (DOT) <matthew.walsh@alaska.gov>; 'Jade Laughlin' <Centralgravelproducts@hotmail.com>; 'Gary LoRusso' <garyl@keystonesurveyak.com>
Cc: Beckwith, Morris R (DOT) <morris.beckwith@alaska.gov>; Adler, Clint J (DOT) <clint.adler@alaska.gov>; Bosin, Anna D (DOT) <anna.bosin@alaska.gov>; Bentz, Chris L (DOT) <chris.bentz@alaska.gov>; Baski, Sean M (DOT) <sean.baski@alaska.gov>
Subject: RE: Central Gravel Products- DOT&PF ARR 33504

Matt,

Thank you for the response. We really appreciate all your help with this.

Dan Steiner, PE
SDCS, LLC
(wk) 907-357-5609
(cell) 907-715-7704

From: Walsh, Matthew H (DOT) <matthew.walsh@alaska.gov>
Sent: Friday, January 17, 2025 2:40 PM
To: dsteiner@mtaonline.net; 'Jade Laughlin' <Centralgravelproducts@hotmail.com>; 'Gary LoRusso' <garyl@keystonesurveyak.com>
Cc: Beckwith, Morris R (DOT) <morris.beckwith@alaska.gov>; Adler, Clint J (DOT) <clint.adler@alaska.gov>; Bosin, Anna D (DOT) <anna.bosin@alaska.gov>; Bentz, Chris L (DOT) <chris.bentz@alaska.gov>; Baski, Sean M (DOT) <sean.baski@alaska.gov>
Subject: RE: Central Gravel Products- DOT&PF ARR 33504

Hi Dan,

It is not necessary that the TCP be in place and approved before the ATC but that the TCP is approved prior to operations. We are looking for acceptance and understanding of the special condition listed below.

There are other requirements for flagging operations including a temporary speed reduction to 45 MPH (down from 55 MPH) on Bogard as well as truck warning signs both Eastbound and Westbound. DOT&PF is aware of the January 21st deadline.

Matt

Matt Walsh
ROW Property Management Supervisor, Central Region
Alaska Department of Transportation & Public Facilities
Office: 907-269-0700 • Direct: 907-269-0677 • matthew.walsh@alaska.gov
Keep Alaska Moving *through service and infrastructure.*

From: dsteiner@mtaonline.net <dsteiner@mtaonline.net>
Sent: Friday, January 17, 2025 2:34 PM
To: Walsh, Matthew H (DOT) <matthew.walsh@alaska.gov>; 'Jade Laughlin' <Centralgravelproducts@hotmail.com>; 'Gary LoRusso' <garyl@keystonesurveyak.com>
Cc: Beckwith, Morris R (DOT) <morris.beckwith@alaska.gov>; Adler, Clint J (DOT) <clint.adler@alaska.gov>; Bosin, Anna D (DOT) <anna.bosin@alaska.gov>; Bentz, Chris L (DOT) <chris.bentz@alaska.gov>; Baski, Sean M (DOT) <sean.baski@alaska.gov>
Subject: RE: Central Gravel Products- DOT&PF ARR 33504

Matt,

Attached is a set of plans that have been submitted to ADOT with all the latest page updates.

It is going to take a little bit of time to put a traffic control plan together. Monday is a holiday. Will you be able to provide an email to Peggy Horton by January 21 that ADOT will allow access onto to Bogard Road even though we are still working out some of the final details?

Dan Steiner, PE
SDCS, LLC
(wk) 907-357-5609
(cell) 907-715-7704

From: Walsh, Matthew H (DOT) <matthew.walsh@alaska.gov>
Sent: Friday, January 17, 2025 2:06 PM
To: dsteiner@mtaonline.net; 'Jade Laughlin' <Centralgravelproducts@hotmail.com>; 'Gary LoRusso'

<garyl@keystonesurveyak.com>
Cc: Beckwith, Morris R (DOT) <morris.beckwith@alaska.gov>; Adler, Clint J (DOT) <clint.adler@alaska.gov>; Bosin, Anna D (DOT) <anna.bosin@alaska.gov>; Bentz, Chris L (DOT) <chris.bentz@alaska.gov>; Baski, Sean M (DOT) <sean.baski@alaska.gov>
Subject: RE: Central Gravel Products- DOT&PF ARR 33504

Hi Dan,

DOT&PF is continuing to move forward in our process in the driveway review. We are awaiting final approval of your submitted design comments. I will touch base with Chris on Tuesday when he returns. Can you please resend an updated plan set with all the changes?

ROW did receive one additional comment regarding the designs and turning movements; DOT&PF is requesting the following condition be including the in the Approval to Construct until the driveway becomes a right in/right out.

Prior to the initiation of trucking operations, a traffic control plan will need to be submitted and approved by DOT&PF for flagging operations associated with a left-hand turning movement. This traffic control plan will remain in effect until the improvements approved by DOT&PF in in the Central Gravel Products Gravel Development plan attached to this Approval to Construct are constructed limiting the access to a right in/right out turning movements.

Thanks,
Matt

Matt Walsh
ROW Property Management Supervisor, Central Region
Alaska Department of Transportation & Public Facilities
Office: 907-269-0700 • Direct: 907-269-0677 • matthew.walsh@alaska.gov
Keep Alaska Moving *through service and infrastructure.*

From: dsteiner@mtaonline.net <dsteiner@mtaonline.net>
Sent: Thursday, January 16, 2025 4:42 PM
To: Walsh, Matthew H (DOT) <matthew.walsh@alaska.gov>; 'Jade Laughlin' <Centralgravelproducts@hotmail.com>; 'Gary LoRusso' <garyl@keystonesurveyak.com>
Cc: Beckwith, Morris R (DOT) <morris.beckwith@alaska.gov>; Adler, Clint J (DOT) <clint.adler@alaska.gov>; Bosin, Anna D (DOT) <anna.bosin@alaska.gov>; Bentz, Chris L (DOT) <chris.bentz@alaska.gov>; Baski, Sean M (DOT) <sean.baski@alaska.gov>
Subject: RE: Central Gravel Products- DOT&PF ARR 33504

Matt,

I talked to Peggy Horton at the MSB today. Just to let you know, we don't need the permit to be issued by next Tuesday, she just needs something as simple as an email that states that ADOT is going to grant access on to Bogard road, even if there are still some design issues that we are working out.

Peggy also said that if there are conditions that ADOT will need to be part of the MSB permit, to let her know. Even if it is "the owner must comply with all conditions of the ADOT driveway permit" she can include that. They don't need anything, she just asked that I let you know, so I am letting you know.

Thank you for your help.

Dan Steiner, PE
SDCS, LLC
(wk) 907-357-5609
(cell) 907-715-7704

From: dsteiner@mtaonline.net <dsteiner@mtaonline.net>
Sent: Tuesday, January 14, 2025 11:33 AM
To: 'Walsh, Matthew H (DOT)' <matthew.walsh@alaska.gov>; 'Jade Laughlin' <Centralgravelproducts@hotmail.com>; 'Gary LoRusso' <garyl@keystonesurveyak.com>
Cc: 'Beckwith, Morris R (DOT)' <morris.beckwith@alaska.gov>; 'Adler, Clint J (DOT)' <clint.adler@alaska.gov>; 'Bosin, Anna D (DOT)' <anna.bosin@alaska.gov>; 'Bentz, Chris L (DOT)' <chris.bentz@alaska.gov>; 'Baski, Sean M (DOT)' <sean.baski@alaska.gov>
Subject: RE: Central Gravel Products- DOT&PF ARR 33504

See my responses below in red.

Please let me know if you need any other changes.

Dan Steiner, PE
SDCS, LLC
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(cell) 907-715-7704

From: Walsh, Matthew H (DOT) <matthew.walsh@alaska.gov>
Sent: Monday, January 13, 2025 2:36 PM
To: dsteiner@mtaonline.net; 'Jade Laughlin' <Centralgravelproducts@hotmail.com>; 'Gary LoRusso' <garyl@keystonesurveyak.com>
Cc: Beckwith, Morris R (DOT) <morris.beckwith@alaska.gov>; Adler, Clint J (DOT) <clint.adler@alaska.gov>; Bosin, Anna D (DOT) <anna.bosin@alaska.gov>; Bentz, Chris L (DOT) <chris.bentz@alaska.gov>; Baski, Sean M (DOT) <sean.baski@alaska.gov>

Subject: RE: Central Gravel Products- DOT&PF ARR 33504

Dan,

To move towards your deadlines, I am providing the following comments made by our Highway Design section at this time instead of waiting for a complete review by all functional groups.

1. Sheet C1.0.1: Add note No. 4 to include topsoil and seed of all disturbed ground within DOT & MSB right of way. Seed is required to be weed free certified and be native plants to south central AK.
   Note added. Updated C1.0.1 attached.
2. Sheet C1.4: Please check/evaluate Stopping Sight Distance (SSD) and Intersection Sight Distance (ISD) as 5 MPH higher than posted (55 MPH for Bogard and 40 MPH for Engstrom). This is consistent with original design intent of the roads and accounts for some speeding which happens regularly on these roads. Both SSD and ISD are required to be met and shall be shown on the plans. Combination truck should be used for time gap (sec) for all maneuvers to and from the approaches per AASHTO A Policy on Geometric Design of Highways and Streets, 7th Edition 2018. Time gap does not need adjusted for grade as most of the grades up and downstream within ISD window are less than ±3%.
   SSD and ISD checked at both intersections. No adjustment needed or Enstrom road.
   Bogard road updated. Updated C1.4 attached
3. Sheet C1.3.1:
   a. All median noses are to be bullnosed per DOT details to mitigate plow strikes. Each Bullnose is required to be marked with a Flexible Delineator per attached Details. No sharp angles allowed at bullnose radiuses.
   b. All median curb shall be expressway curb and gutter not the mountable as shown on the plans.
   c. Median island is required to be paved or concrete.
   d. Note No. 1 shall be deleted and access is recommended to be constructed as right in right out with full median as shown on the plans. (this is recommended, plans indicate intent to do so only when roundabout is constructed. As the exact timing of that cannot be certain, design highly recommends there be no condition tied to the roundabouts construction.)
   e. All signs shall be installed with frangible couplings and bases for DOT Standard Plan S-31.02. Signs shall be mounted per Central Region Light Sign Framing and Attachment Details (see attached). Signs shall be installed per DOT Standard Plan S-05.02 for height and offset conditions. Signs posts should be checked for wind loading and sized appropriately with galvanized steel tube only (3” steel tube will likely suffice).

   All changes made. See updated/added sheets C1.3.1, C1.3.2, C1.3.3
4. Sheet C1.3:
   a. Vertical curves with a K value greater than or equal to 5 need to be added in the

profile grade.

b. Full 30' at ±2% grade is required prior to start of the vertical curve is required.

All changes made. Updated C1.3 Attached.

Note that additional comments could still be generated by our other functional groups review that could require reconciliation.

Matt

Matt Walsh
ROW Property Management Supervisor, Central Region
Alaska Department of Transportation & Public Facilities
Office: 907-269-0700 • Direct: 907-269-0677 • matthew.walsh@alaska.gov
Keep Alaska Moving *through service and infrastructure.*

From: Walsh, Matthew H (DOT)
Sent: Monday, January 6, 2025 11:20 AM
To: dsteiner@mtaonline.net; 'Jade Laughlin' <Centralgravelproducts@hotmail.com>; 'Gary LoRusso' <garyl@keystonesurveyak.com>
Cc: Beckwith, Morris R (DOT) <morris.beckwith@alaska.gov>; Adler, Clint J (DOT) <clint.adler@alaska.gov>; Bosin, Anna D (DOT) <anna.bosin@alaska.gov>; Bentz, Chris L (DOT) <chris.bentz@alaska.gov>; Baski, Sean M (DOT) <sean.baski@alaska.gov>
Subject: RE: Central Gravel Products- DOT&PF ARR 33504

Dan,

Thank you for providing revised documents and follow up to our questions sent in the November 21st email. We will circulate the revised plans with your responses for internal review. DOT&PF does recognize the February 3 MSB Planning Commission Meting, however, beware that DOT&PF has many additional projects that require review of our functional groups and cannot guarantee an Approval to Construct by January 21st.

Thanks,
Matt

Matt Walsh
ROW Property Management Supervisor, Central Region
Alaska Department of Transportation & Public Facilities
Office: 907-269-0700 • Direct: 907-269-0677 • matthew.walsh@alaska.gov
Keep Alaska Moving *through service and infrastructure.*

From: dsteiner@mtaonline.net <dsteiner@mtaonline.net>
Sent: Monday, January 6, 2025 10:32 AM
To: Walsh, Matthew H (DOT) <matthew.walsh@alaska.gov>; 'Jade Laughlin' <Centralgravelproducts@hotmail.com>; 'Gary LoRusso' <garyl@keystonesurveyak.com>
Cc: Beckwith, Morris R (DOT) <morris.beckwith@alaska.gov>; Adler, Clint J (DOT) <clint.adler@alaska.gov>; Bosin, Anna D (DOT) <anna.bosin@alaska.gov>; Bentz, Chris L (DOT) <chris.bentz@alaska.gov>; Baski, Sean M (DOT) <sean.baski@alaska.gov>
Subject: RE: Central Gravel Products- DOT&PF ARR 33504

Matt,

Attached are updated drawings addressing the ADOT comments.

Please note a couple of things. Traffic counts have been obtained for the coffee shop. However, since then, It has been decided that the coffee stand will be removed from this site. The peak hour for the coffee shop included 40 vehicle trips. When the coffee shop is removed, the peak hour for the gravel pit will be approximately half of that.
Also, two driveways will be removed. With that and the coffee shop removal, four driveway access points will be reduced to one access point, the driveway to the gravel pit.

The paperwork (easements, power of attorney, etc.) are in the process of getting signatures.

We are trying to get things ready for he MSB Planning Commission Meeting on February 3. To do this, we need to get information to the MSB by January 21, including ADOT approval for the Bogard Road driveway. We respectfully request a review of the attached plans and any review comments within 10 calendar days. This would hopefully give us enough time to respond to comments and re-submit plans for approval by January 21.

Please let me know if you have any questions.

To be able to precede with our review, DOT&PF requests the following information:
-

- Traffic counts for the current coffee stand Fresh Start Expresso. N/A – Coffee shop to be relocated. See Demolition Sheet - C1.0.1
- Revised design plans with a demolition sheet showing the removal of the discussed access points. See Demolition Sheet - C1.0.1
- Revised design plans with the proposed design elements for a right-in/right-out driveway. See Sheets – C1.3 and C1.3.1

Specific design comments for the previously submitted design plans that require reconciliation are the following:

- C1.4 sight distance shown for Bogard Rd does not appear to use proper offset. The figure appears to show some unknown offset distance from what appears to be the center of travel lane. The offset distance must be 14.4-17.8' from the edge of travel way (fog line). Show all obstructions in the area and or plans for removal of obstructions, for example there are tress in close currently but not shown. Site Distance Sheet updated. Sheet - C1.4
- C1.3 note 5 states topography negates need for culvert. Would need to see a ditch profile to confirm this, else a cross culvert should be installed per standard. A culvert has been added. See Sheet – C1.3

Dan Steiner, PE
SDCS, LLC
(wk) 907-357-5609
(cell) 907-715-7704

Matanuska-Susitna Borough
Development Services Division

Request for Review

Contact: Peggy Horton **Phone:** x 7862

Due Date: 1-22-25

Project: Central Gravel Earth Materials Excavation CUP 10298

Special Considerations

Please find attached the proposed buffer drawings to meet the requirements of MSB 17.28.060(A)(4) for visual screening and 17.28.060(A)(5) for noise mitigation. A public hearing is scheduled for February 3, 2025, and the staff report is due tomorrow. I apologize for the short notice. I don't know if the applicant will try for an additional postponement, but it's possible.

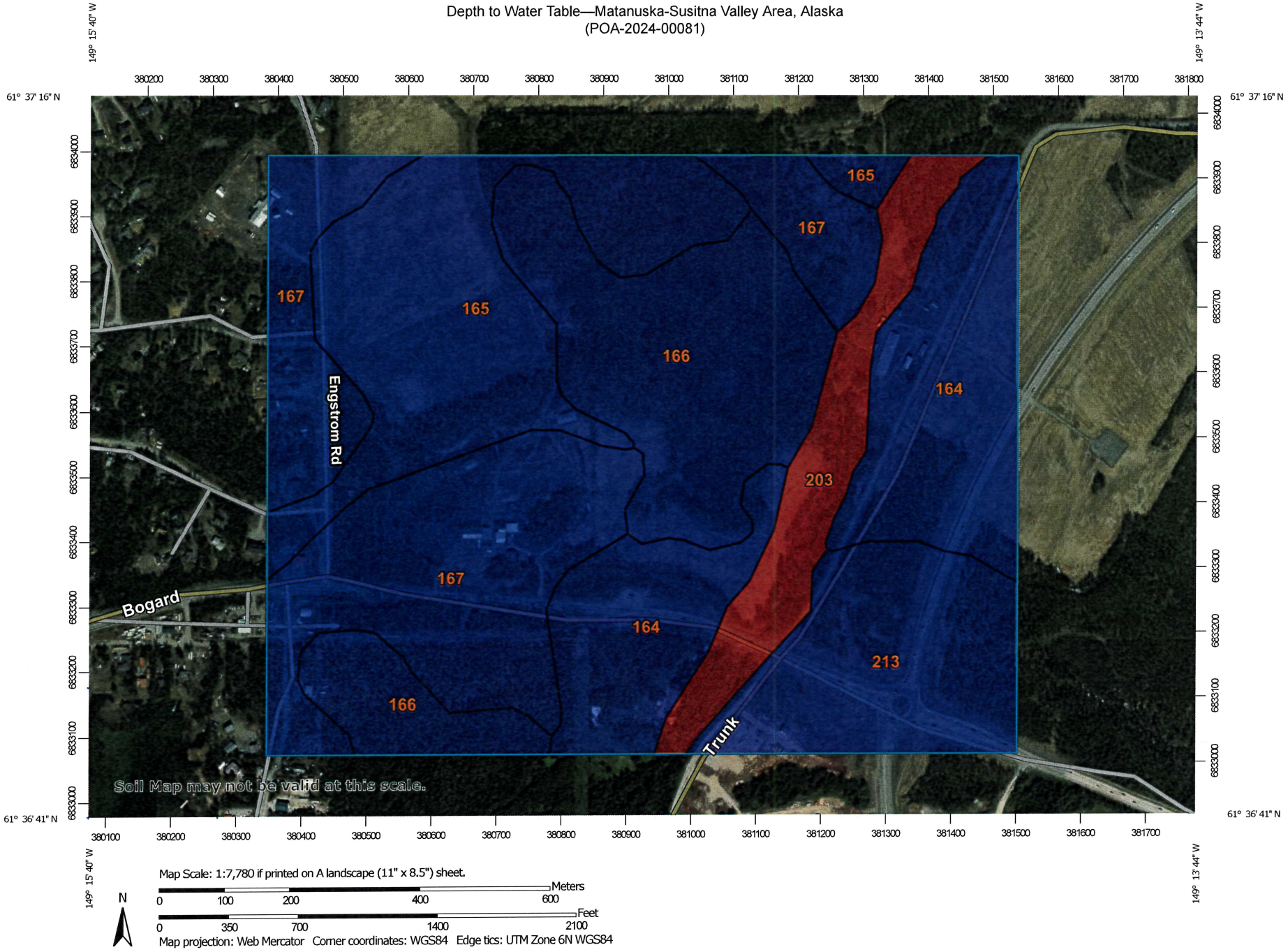
Reviewed By: PD&E **Date:** 1/22/25

☐ **No Comment:**

Comments:

PD&E supports DOT's comments regarding access onto Bogard Road and the required traffic control plan. The proposed plan involving flagging, and speed limit reduction would appropriately mitigate left turns on Bogard Road until the construction of the roundabout and channelization. Provide the traffic control plan provided to DOT for MSB review. Visual screening will need to be considered for phases 13, 14, and 15. Provide the visual screening plan for those phases.

Depth to Water Table—Matanuska-Susitna Valley Area, Alaska
(POA-2024-00081)



5900 W. Dewberry Dr.
Wasilla, AK 99622

SDCS, LLC
STEINER DESIGN & CONSTRUCTION SERVICES, LLC

Phone: (907) 357-5609
Fax: (907) 357-5608

Memorandum

To:	Tom Adams, PE MSB DPW Director	Company:	MSB – DPW	Date	1/16/2025
From:	Dan Steiner, PE				
Subject:	Central Gravel Products – New Gravel Pit Permitting – Concern about snow drifting on Engstrom Road caused by visual screening berms.				

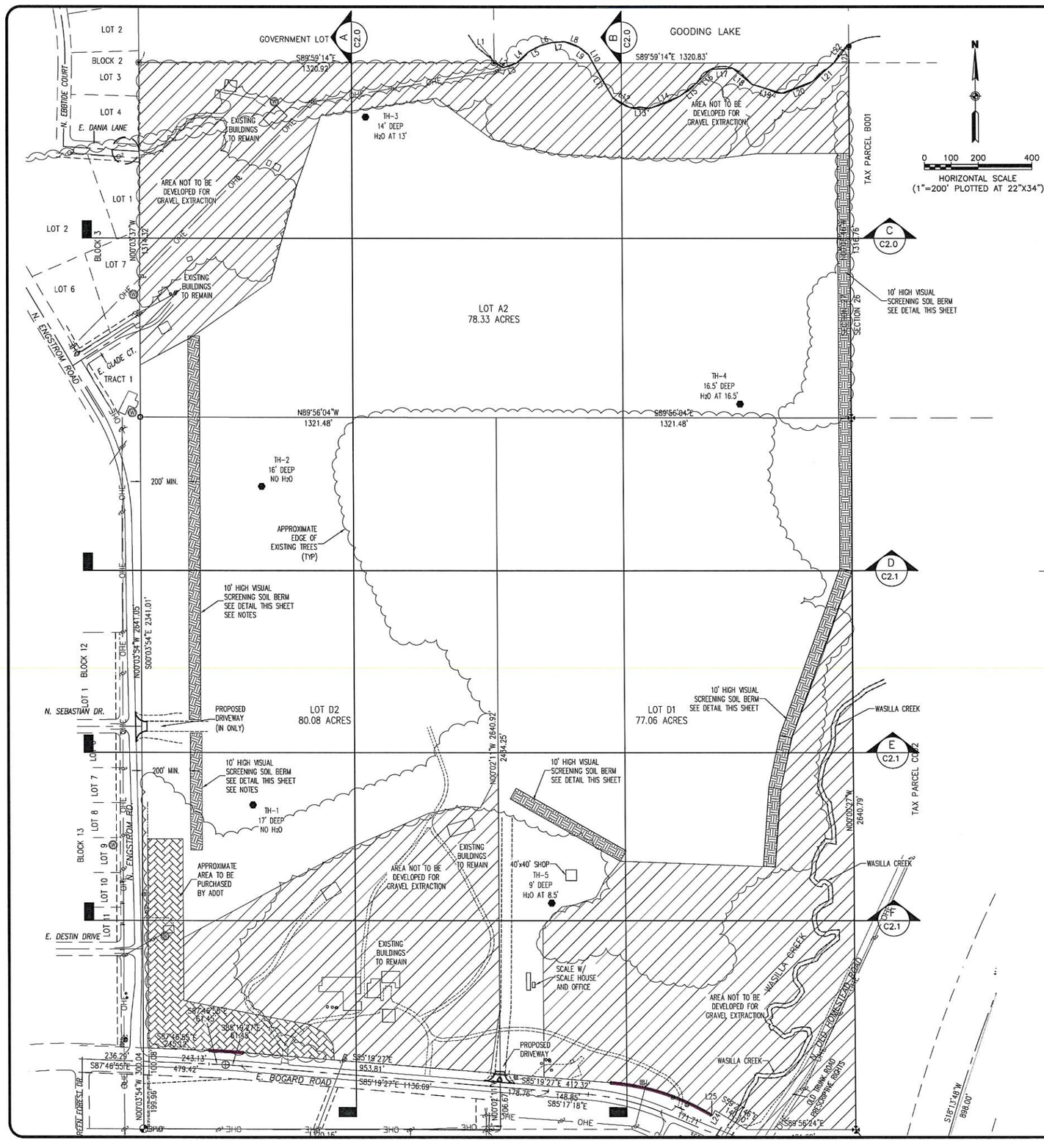
As part of the above referenced project, a visual screening berm is needed to parallel Engstrom Road. Engstrom Road currently has snow drifting issues. The MSB has expressed concern that a visual screening berm could increase the problem of snow drifting in Engstrom Road.

The document "Controlling Blowing and Drifting Snow with Snow Fences and Road Design" (NCHRP-20-07147) was consulted regarding "snow drifting". The visual screening berm would be considered a snow fence with 0% porosity. Figure 5.17, on page 126, indicates that a 0% porosity snow fence would create a snow drift that is 13 times as long as the berm is high.

The proposed visual screening berms will be 10' high and would create a snow drift on the downwind side of approximately 130'. As a result, it is proposed that the visual screening berm be placed 200' from the west property line. This would provide a safety factor of 1.5 with regard to a snowdrift created by the visual screening berms reaching Engstrom Road.

The placement of this visual screening berm will most likely not prevent drifting snow onto Engstrom Road. Once the snow drift adjacent to the visual screening berm "matures" snow will continue past this drift toward Engstrom Road. However, the berm should not increase the drifting. In fact, there is a good chance that this berm may decrease the volume of snow that drifts on to Engstrom Road since a portion of the snow that would usually reach Engstrom Road will now be stored behind the visual screening berm.

February 3, 2025
Planning Commission Meeting
691-10995

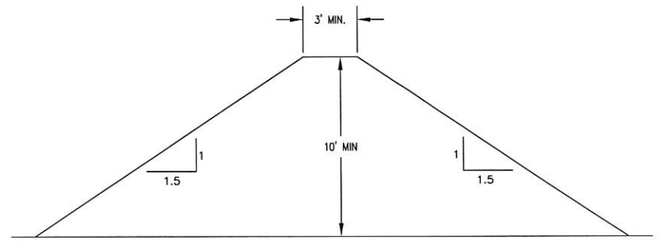


N

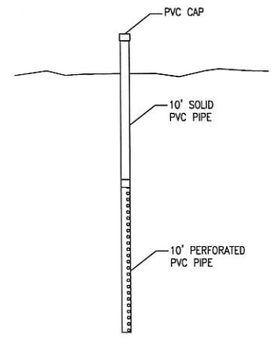
0 100 200 400
HORIZONTAL SCALE
(1"=200' PLOTTED AT 22"X34")

NOTES

1. LOCATION OF 10' HIGH VISUAL SCREENING BERM TO BE ADJUSTED AS NEEDED.
2. MATERIAL EXTRACTION TO BEGIN IN THE LOWER ELEVATION AREAS AND MOVE OUT FROM THERE.
3. ALL PROCESSING EQUIPMENT (SCREENING PLANTS, CRUSHERS, CONVEYOR BELTS, ETC.), PERMANENT AND TEMPORARY STRUCTURES, AND MATERIAL PILES ARE TO BE PLACED +40' AT ALL TIMES FROM ALL PROPERTY LINES.
4. THE VISUAL SCREENING BERM ALONG ENGSTROM ROAD CAN BE REMOVED WHEN EXTRACTION ACTIVITIES ARE AT A LOW ENOUGH ELEVATION THAT THE BERM IS NO LONGER NEEDED.



1 C1.0 10' HIGH SOIL BERM
SCALE: NOT TO SCALE



NOTES

1. INSTALL MONITORING WELLS AT THE PERIMETER OF THE AREA WHERE MATERIAL IS BEING EXTRACTED.
2. WHEN SOIL IS EXTRACTED TO TOP OF PERFORATED PIPE, REMOVE WELL AND RELOCATE IT AT A DEEPER ELEVATION.

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JAN 16 2025
Mat-Su Borough
Development Services

2 C1.0 GROUND WATER MONITORING WELL
SCALE: NOT TO SCALE

STATE OF ALASKA
49TH
DAN E. STEINER
No. CE 9505
1/16/25
REGISTERED PROFESSIONAL ENGINEER

SDCS, LLC
STEINER DESIGN & CONSTRUCTION SERVICES, LLC
5900 W. DEWBERRY DR. PH:(907) 357-5609
WASILLA,AK 99623 FAX:(907) 357-5608

CENTRAL GRAVEL PRODUCTS
GRAVEL PIT DEVELOPMENT

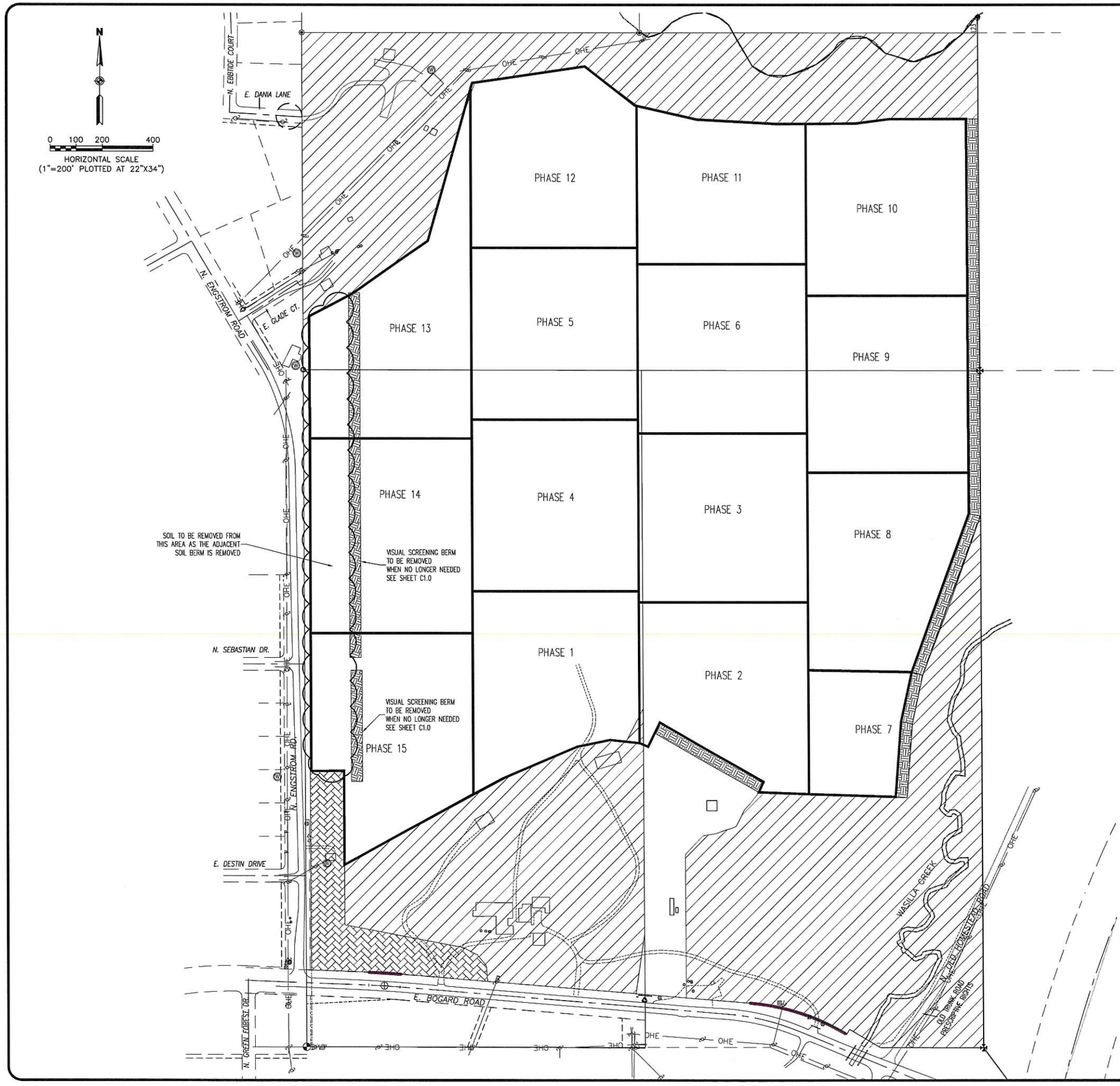
LOTS A2, D1, D2, TOWNSHIP 18N RANGE 1E SECTION 27

BY	DATE	REVISIONS

JOB NO.: 23-016
DATE: 1/16/2025
DRAWN: DES
REVIEWED: DES

SHEET TITLE
SITE PLAN

SHEET
C1.0



NOTES

1. THE PHASES SHOWN ARE 10 ACRES OR LESS.
2. NO MORE THAN 10 ACRES ARE DEVELOPED AT ONE TIME FOR MATERIAL EXTRACTION.
3. AS MORE ADDITIONAL AREA IS DEVELOPED, PREVIOUS DEVELOPED AREAS WILL BE RECLAIMED SO THAT NO MORE THAN 10 ACRES AT A TIME ARE DEVELOPED.
4. PHASES SHOWN ARE AN ESTIMATE. FUTURE EVENTS WILL IMPACT THE PHASING, BUT THE AREA DEVELOPED WILL ALWAYS BE 10 ACRES OR LESS.

STATE OF ALASKA
DAN E. STEINER
No. CE 9505
1/16/25
REGISTERED PROFESSIONAL ENGINEER

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CENTRAL GRAVEL PRODUCTS
GRAVEL PIT DEVELOPMENT
LOTS A2, D1, D2, TOWNSHIP 18N RANGE 1E SECTION 27

BY	DATE	REVISIONS

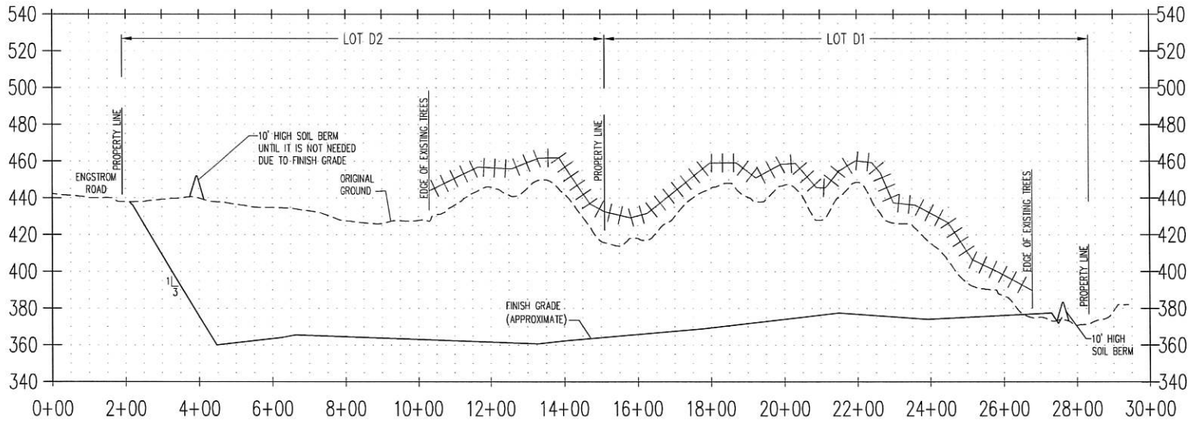
JOB NO.: 23-016
DATE: 1/16/2025
DRAWN: DES
REVIEWED: DES

SHEET TITLE
PHASING PLAN

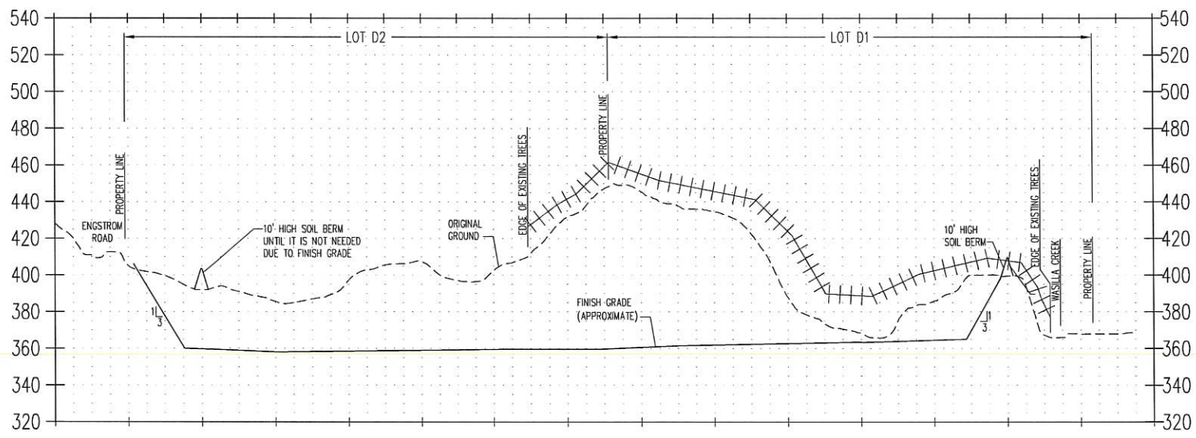
SHEET
C1.2

0 100 200 400
HORIZONTAL SCALE
(1"=200' PLOTTED AT 22"X34")

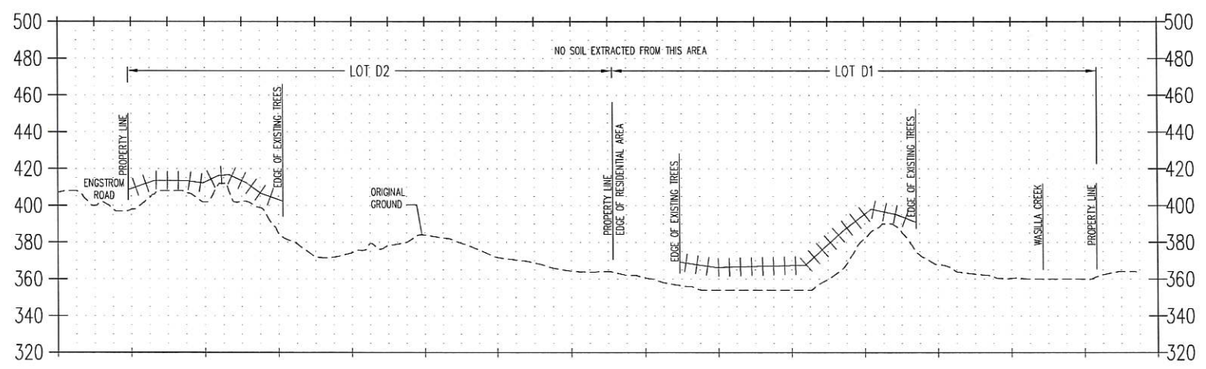
0 20 40 80
VERTICAL SCALE
(1"=40' PLOTTED AT 22"X34")



SECTION D



SECTION E



SECTION F

STATE OF ALASKA
DAN E. STEINER
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1/16/25
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CENTRAL GRAVEL PRODUCTS
GRAVEL PIT DEVELOPMENT
LOTS A2, D1, D2, TOWNSHIP 18N RANGE 1E SECTION 27

BY	DATE	REVISIONS

JOB NO.: 23-016
DATE: 1/16/2025
DRAWN: DES
REVIEWED: DES

SHEET TITLE
SITE SECTIONS
D, E, F

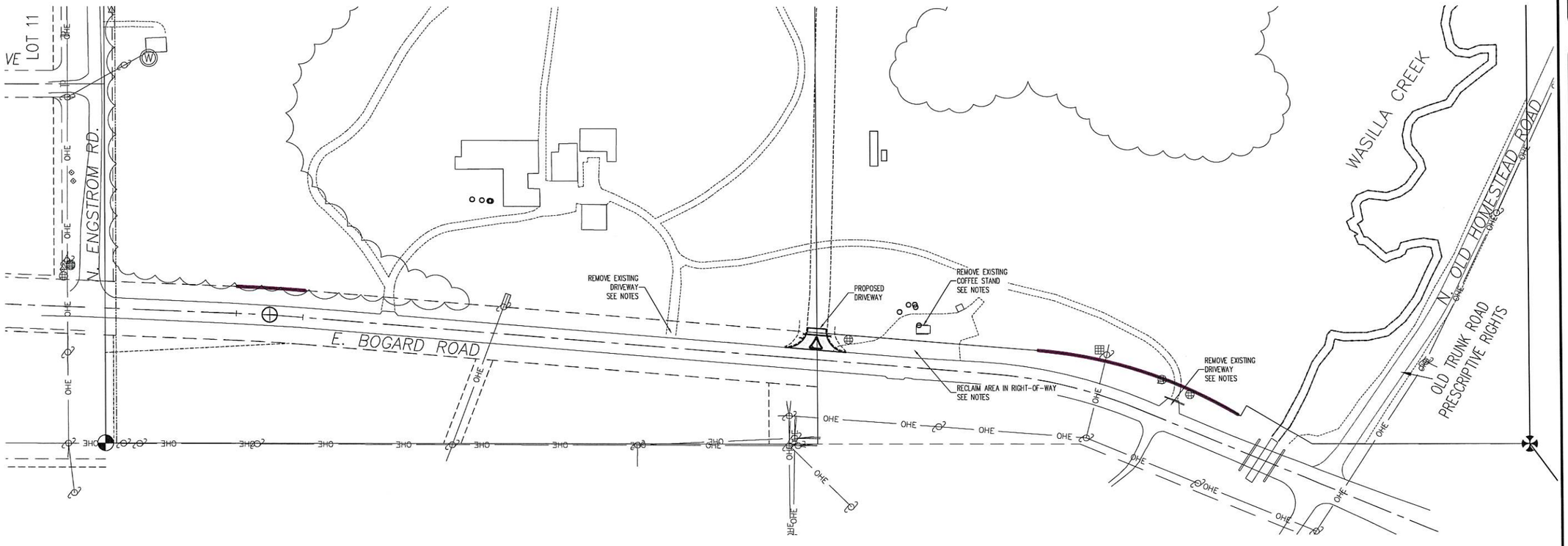
SHEET
C2.1

N

0 100 200 400
HORIZONTAL SCALE
(1"=200' PLOTTED AT 22"X34")

NOTES

1. REMOVE EXISTING DRIVEWAYS AS SHOWN.
2. EXISTING COFFEE STAND TO BE REMOVED AND RELOCATED TO A DIFFERENT LOCATION.
3. REMOVING DRIVEWAYS AND RECLAIMING THE AREAS IN THE RIGHT-OF-WAY INCLUDES THE FOLLOWING:
   - REMOVE ANY AC PAVEMENT NOT ASSOCIATED WITH BOGARD ROAD. ANY AC PAVEMENT TO BE REMOVED MUST BE VERTICALLY SAW-CUT.
   - REMOVE EXISTING SOIL USED FOR DRIVEWAYS OR COFFEE SHOP AREA AS NEEDED TO RESHAPE ROAD SHOULDER. MATCH EXISTING ROAD SHOULDER IN WIDTH, SLOPE, AND DEPTH.
   - SALVAGE ANY EXISTING CULVERTS TO ADOT. IF ADOT DOES NOT WANT EXISTING CULVERTS, CONTRACTOR TO DISPOSE OF CULVERT AND END SECTIONS.
   - ALL RESHAPED MATERIAL TO BE COMPACTED TO 95% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D1557.
   - TOPSOIL AND SEED ALL DISTURBED AREAS WITHIN ADOT AND MSB RIGHT OF WAY. SEE TO BE CERTIFIED WEED FREE AND CONSISTS OF PLANTS NATIVE TO SOUTH CENTRAL ALASKA. CONTRACTOR TO GET APPROVAL FROM ENGINEER FOR SEED MIX BEFORE SEEDING.



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JAN 16 2025
Mat-Su Borough
Development Services

STATE OF ALASKA
49TH
DAN E. STEINER
No. CE 9505
1/14/25
REGISTERED PROFESSIONAL ENGINEER

SDCS, LLC
STEINER DESIGN & CONSTRUCTION SERVICES, LLC
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WASILLA, AK 99623 FAX:(907) 357-5608

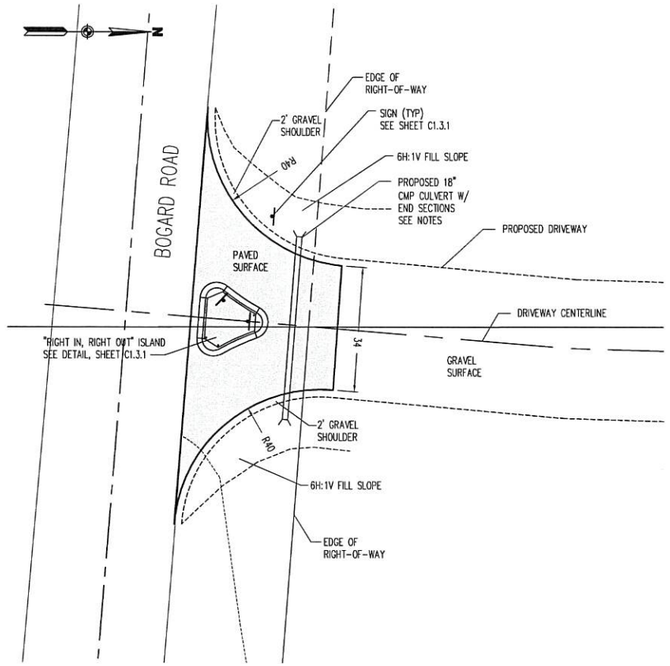
CENTRAL GRAVEL PRODUCTS
GRAVEL PIT DEVELOPMENT
LOTS A2, D1, D2, TOWNSHIP 18N RANGE 1E SECTION 27

BY	DATE	REVISIONS

JOB NO.: 23-016
DATE: 1/14/2025
DRAWN: DES
REVIEWED: DES

SHEET TITLE
DEMOLITION PLAN

SHEET
C1.0.1



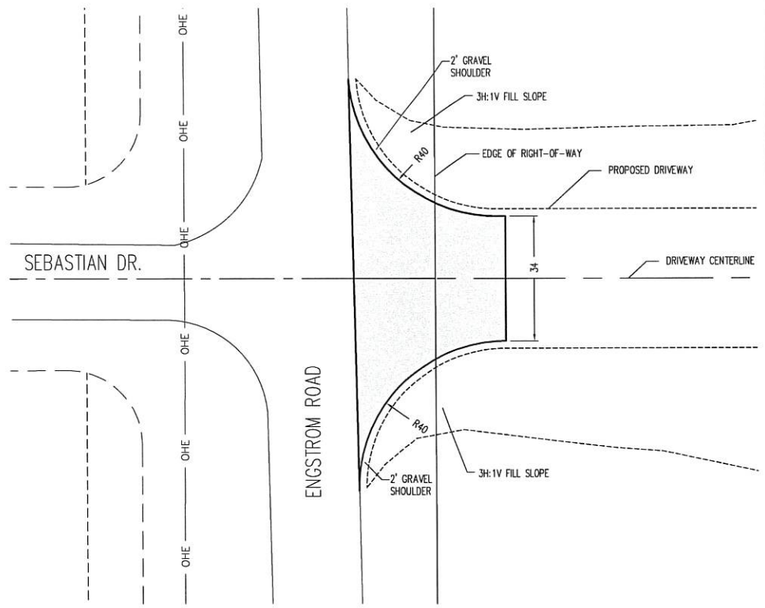
PLAN VIEW
BOGARD ROAD DRIVEWAY
(STATE OF ALASKA)

0 10 20 40
HORIZONTAL SCALE
(1"=20' PLOTTED AT 22"X34")
0 2 4 8
VERTICAL SCALE
(1"=4' PLOTTED AT 22"X34")

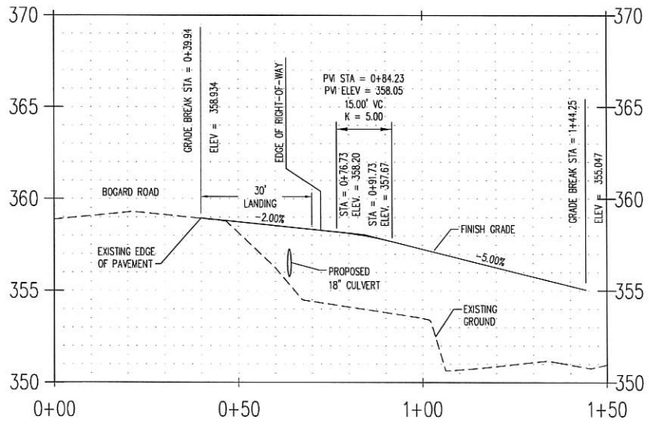
N

NOTES

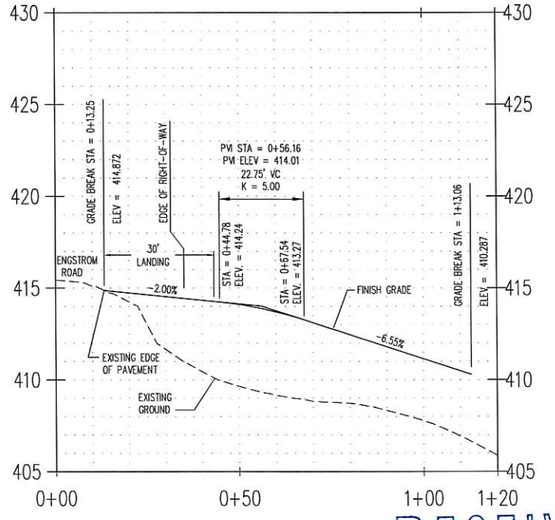
1. ALL WORK IN STATE OF ALASKA RIGHT-OF-WAY TO CONFORM TO THE ADOT DRIVEWAY PERMIT.
2. ALL WORK IN MSB RIGHT-OF-WAY TO CONFORM TO THE MSB DRIVEWAY PERMIT. .
3. ALL DRIVEWAYS TO BE PAVED WITHIN PUBLIC RIGHT-OF-WAY.
4. ENGSTROM ROAD DRIVEWAY TO BE "IN" ONLY.
5. DUE TO EXISTING TOPOGRAPHY, CULVERT NOT NEEDED AT ENGSTROM DRIVEWAY.
6. FILED LOCATED CULVERT AT BOGARD ROAD DRIVEWAY.



PLAN VIEW
ENGSTROM ROAD DRIVEWAY
(MSB)



PROFILE VIEW
BOGARD ROAD DRIVEWAY
(STATE OF ALASKA)



PROFILE VIEW
ENGSTROM ROAD DRIVEWAY
(MSB)

STATE OF ALASKA
DAN E. STEINER
No. CE 9505
1/14/25
REGISTERED PROFESSIONAL ENGINEER

SDCS, LLC
STEINER DESIGN & CONSTRUCTION SERVICES, LLC
5900 W. DEWBERRY DR. PH:(907) 357-5609
WASILLA,AK 99623 FAX:(907) 357-5608

CENTRAL GRAVEL PRODUCTS
GRAVEL PIT DEVELOPMENT
LOTS A2, D1, D2, TOWNSHIP 18N RANGE 1E SECTION 27

BY	DATE	REVISIONS

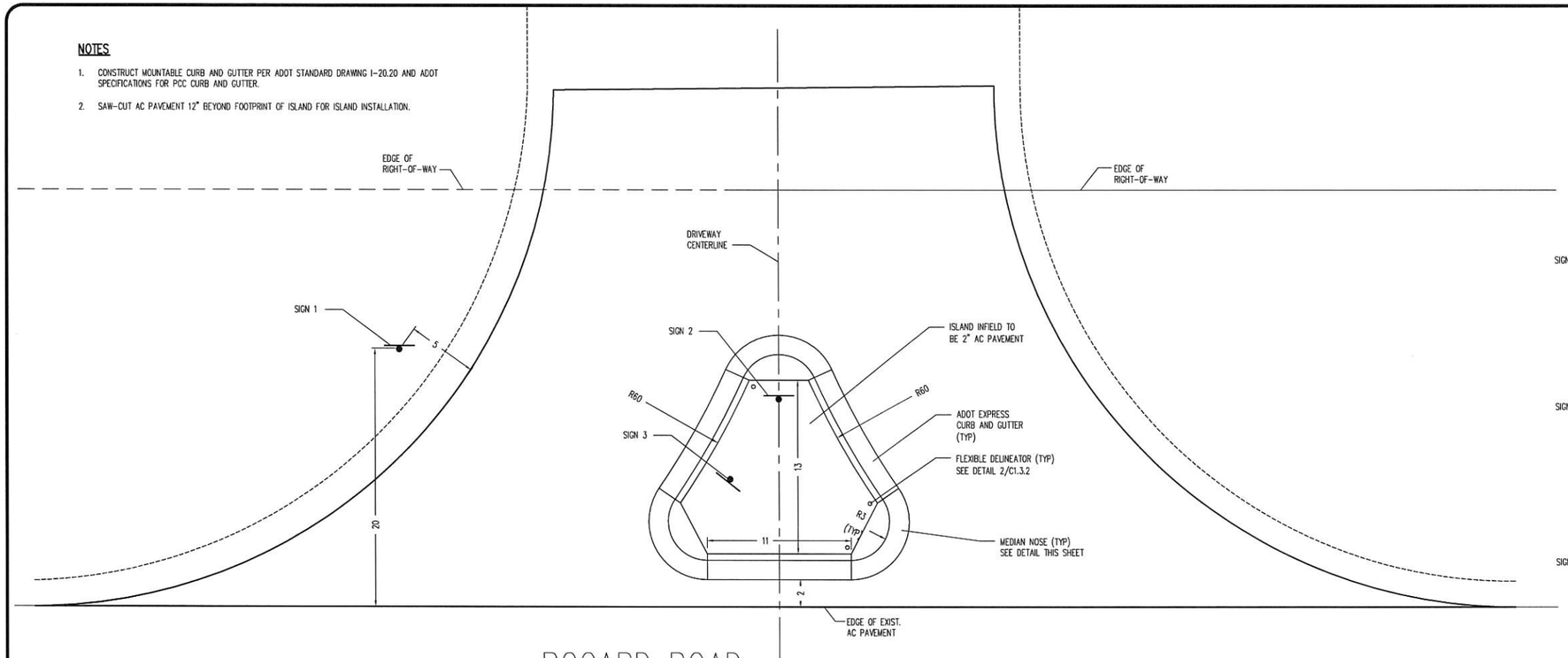
JOB NO.: 23-016
DATE: 1/14/2025
DRAWN: DES
REVIEWED: DES

SHEET TITLE
DRIVEWAY PLAN & PROFILE

SHEET
C1.3

NOTES

1. CONSTRUCT MOUNTABLE CURB AND GUTTER PER ADOT STANDARD DRAWING I-20.20 AND ADOT SPECIFICATIONS FOR PCC CURB AND GUTTER.
2. SAW-CUT AC PAVEMENT 12" BEYOND FOOTPRINT OF ISLAND FOR ISLAND INSTALLATION.



RIGHT IN, RIGHT OUT, ISLAND AND SIGNS

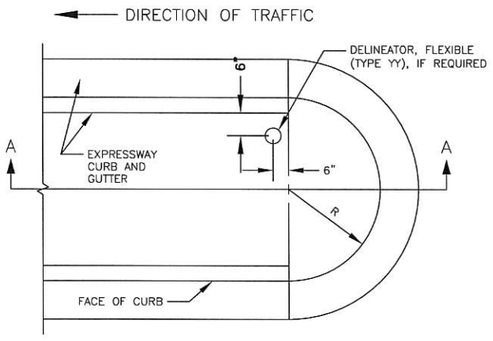
SIGN NOTES AND SCHEDULE

1. CONSTRUCT SIGNS PER ADOT REQUIREMENTS.
2. ALL SIGNS TO HAVE 3" STEEL POST WITH FRANGIBLE COUPLINGS AND BASES PER ADOT STANDARD DETAILS S-31.02.
3. SIGNS TO BE INSTALLED PER ADOT STANDARD DETAILS S-05.02.
4. SEE ADDITIONAL SIGN DETAILS ON SHEETS C1.3.2 AND C1.3.3.
5. CONSTRUCT SIGNS FACING AS SHOWN IN DETAIL, THIS SHEET.

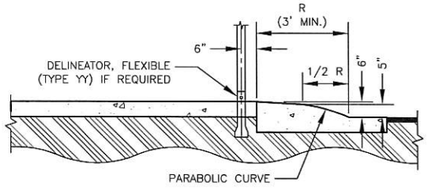
SIGN 1 – R1-1 "STOP SIGN" 24"X24"

SIGN 2 – R3-5R "RIGHT TURN ONLY 18"X24"

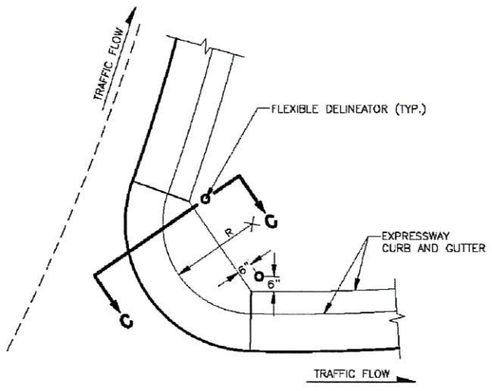
SIGN 3 – R5-1 "DO NOT ENTER" 24"X24"



PLAN



SECTION A-A, C-C

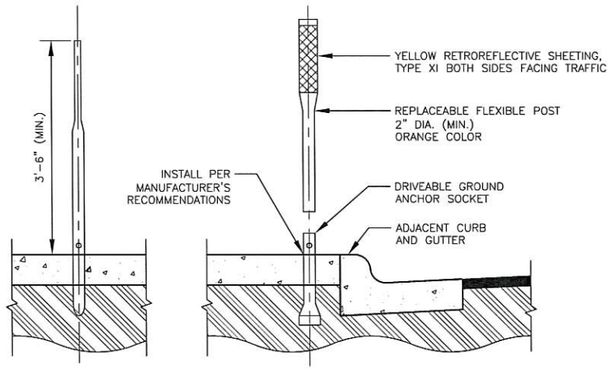


PLAN
ROUNDABOUT MEDIAN NOSE

SLOPED MEDIAN NOTES:

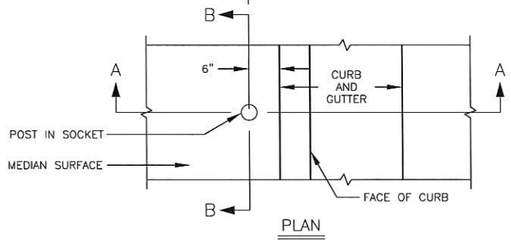
1. PAINT ALL SLOPED MEDIAN NOSES WITH YELLOW REFLECTORIZED PAINT. PAINT FOR NOSES IS SUBSIDIARY TO 670 ITEMS.

SLOPED MEDIAN NOSE



SECTION B-B

SECTION A-A



PLAN

DELINEATOR NOTES:

1. INSTALL DELINEATORS WHERE SHOWN IN THE SUMMARY TABLE, OR AS DIRECTED BY THE ENGINEER.
2. CENTER POINT OF THE DELINEATOR SHALL BE 6 INCHES FROM THE BACK OF CURB.
3. WHERE DELINEATORS ARE SET IN CONCRETE PAVEMENT, PLACE THEM IN EXPANSION JOINTS.

FLEXIBLE DELINEATOR

STATE OF ALASKA
DAN E. STEINER
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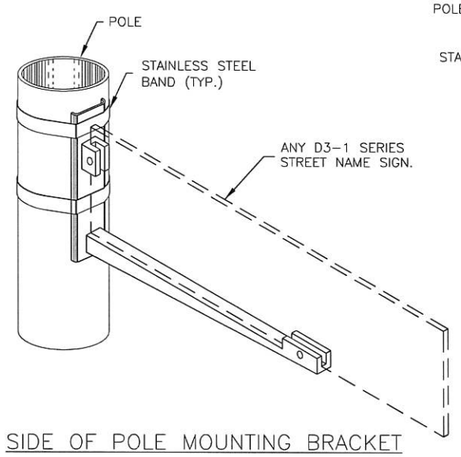
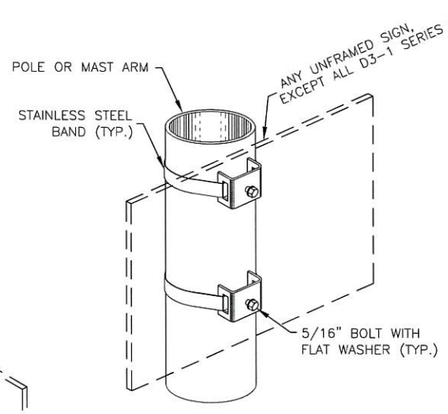
SHEET TITLE
BOGARD ROAD DRIVEWAY ISLAND AND SIGN DETAILS

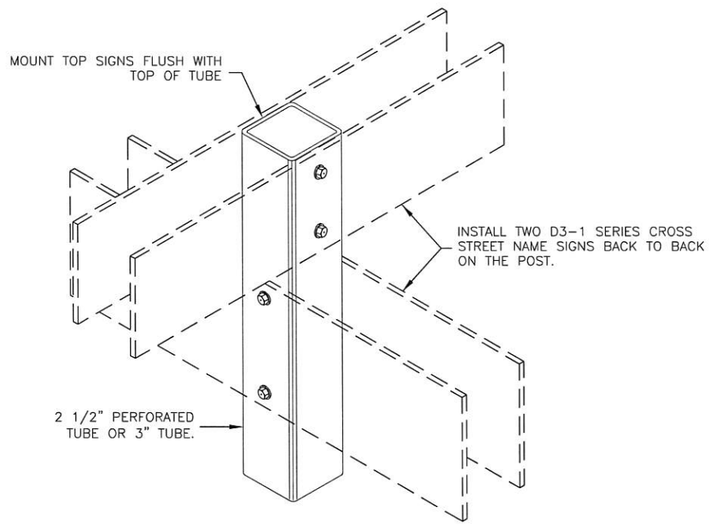
SHEET
C1.3.1



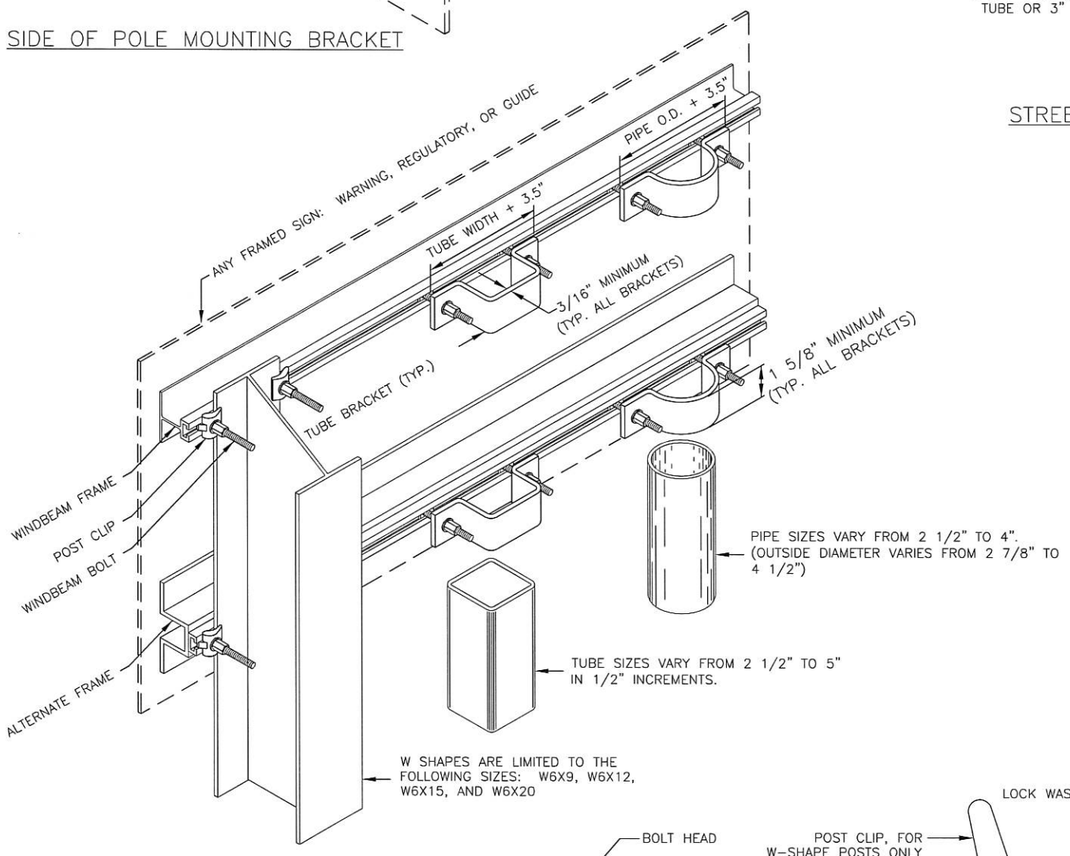
SIDE OF POLE MOUNTING BRACKET



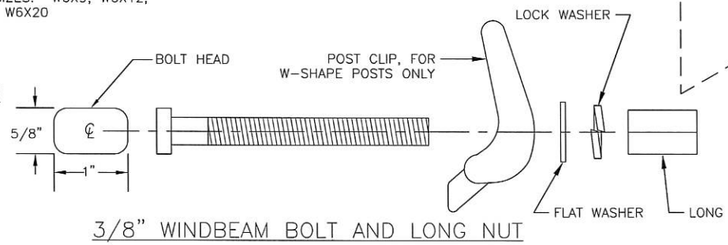
SADDLE BRACKETS



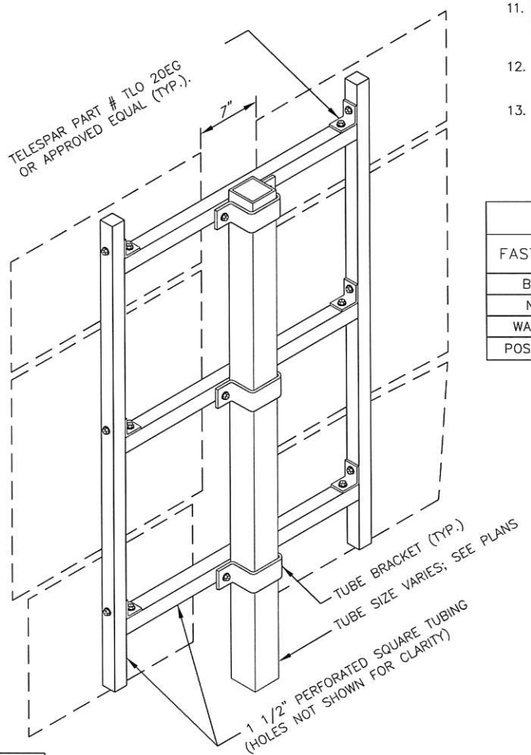
STREET NAME SIGN INSTALLATION



FRAMED SIGN ATTACHMENT BRACKETS



3/8" WINDBEAM BOLT AND LONG NUT



ROUTE MARKER TREE

NOTES:

1. EXCEPT FOR POLES AND MAST ARMS, ONLY USE TUBES TO SUPPORT SIGNS MOUNTED ON ONE POST.
2. ATTACH SIGNS, FRAMED AND UNFRAMED TO THEIR SUPPORTS WITH ZINC PLATED 3/8" BOLTS, EXCEPT ATTACH UNFRAMED SIGNS TO PERFORATED TUBES WITH ACCESSORY DRIVE RIVETS AND TO SADDLES WITH 5/16" BOLTS.
3. BOLT UNFRAMED SIGNS DIRECTLY TO TUBES IN TWO LOCATIONS, NEAR TOP AND NEAR BOTTOM OF MATING SURFACE. ATTACH THEM TO POLES AND MAST ARMS WITH TWO SADDLES.
4. ATTACH BRACKETS TO POLES AND MAST ARMS WITH DOUBLE WRAPS OF 3/4" WIDE BY 0.020" THICK STAINLESS STEEL BANDING MATERIAL. TIGHTEN EACH BAND UNTIL IT STOPS MOVING THROUGH THE BUCKLE.
5. ATTACH FRAMED SIGNS TO POSTS WHEREVER THE FRAMES CROSS THE POSTS. AT EACH CROSSING, ATTACH THE SIGN USING TWO POST CLIPS ON W-SHAPE POSTS, A U-SHAPED BRACKET ON PIPES, AND A BRACKET WITH SQUARE CORNERS ON TUBES.
6. THE TUBE BRACKETS USED ON EVEN INCH SIZE TUBES MAY ALSO BE USED ON TUBES 1/2" SMALLER IN SIZE.
7. ONLY USE THE SPECIAL WINDBEAM BOLTS TO ATTACH SIGNS FRAMED WITH THE WINDBEAM FRAMING MATERIAL.
8. ATTACH FRAMED SIGNS TO POLES AND MAST ARMS USING POLE PLATES INSTALLED ACCORDING TO ALASKA STANDARD PLAN S-23.
9. FOR ROUTE MARKER TREES, CUT PERFORATED TUBES TO ENSURE TIGHT FITTING JOINTS. ASSEMBLE THE PIECES WITH ACCESSORY ELL-SHAPED ANGLE BRACKETS.
10. INSTALL THE TOP EDGE OF SIGNS 1" ABOVE THE TOPS OF POSTS, EXCEPT FOR THE D3-1 STREET NAME SIGNS.
11. INSTALL THE TOP EDGE OF SIGNS 3" BELOW THE TOP OF POST, WHENEVER THEY ARE MOUNTED BELOW SIGNS SECURED BY POST TOP MOUNTING BRACKETS.
12. THE BRACKET DETAILS SHOWN INDICATE GENERAL DESIGNS ONLY. DESIGNS MAY VARY BY MANUFACTURER.
13. INSTALL WEATHER TIGHT CAPS ON ALL PIPE AND TUBE POSTS, EXCEPT PERFORATED TUBING.

FASTENER SPECIFICATION TABLE

FASTENERS	ALUMINUM	STEEL	STAINLESS STEEL
BOLTS	ASTM F468 2024-T4	ASTM A307	ASTM F593
NUTS	ASTM F467 2024-T4	ASTM A563	ASTM F594
WASHERS	ANSI B18.22.1	ASTM F844	ANSI B18.22.1
POST CLIPS	ASTM B179 356-T6	N/A	N/A

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JAN 16 2025
Mat-Su Borough
Development Services

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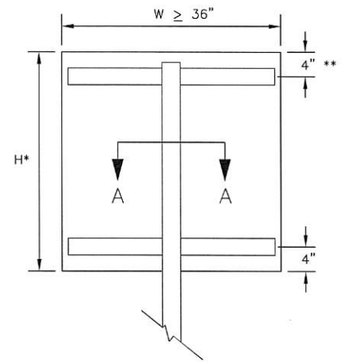
SHEET TITLE
SIGN ATTACHMENT DETAILS

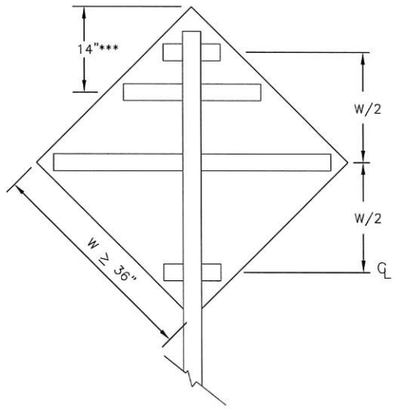
SHEET
C1.3.2



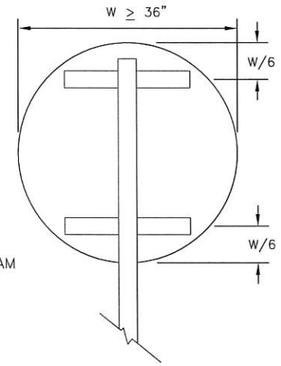
RECTANGLES AND TRAPEZOIDS

* WHEN H > 42 INCHES, INSTALL A 3RD WINDBEAM CENTERED ON THE SIGN.

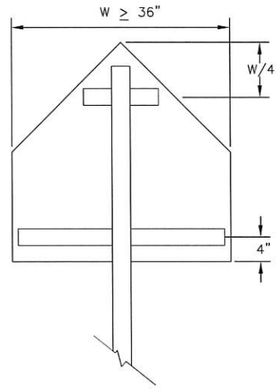
** FOR S5-1 SIGNS MOUNTED ON FLASHING BEACON POSTS, USE A 10" OFFSET. OTHERWISE, USE 4".

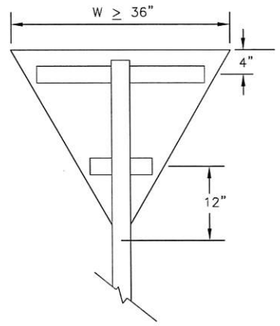


*** FOR WARNING SIGNS MOUNTED ON FLASHING BEACON POSTS, USE THE 14" OFFSET. OTHERWISE, USE W/2.



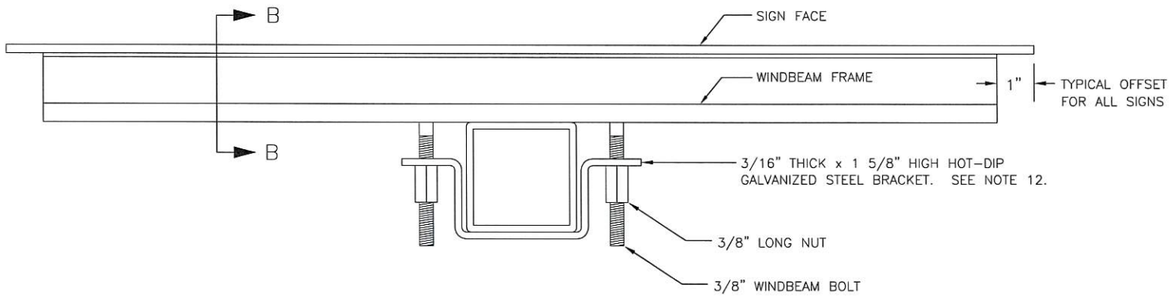
ROUNDS AND OCTAGONS



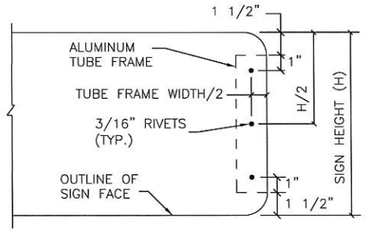


WINDBEAM LOCATIONS FOR EACH SIGN SHAPE

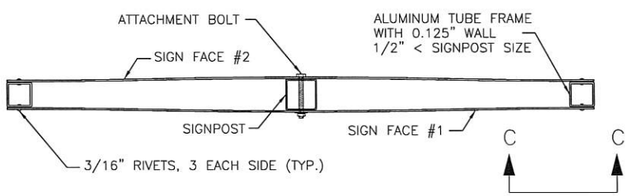
ELEVATION VIEW



SECTION A – A TYPICAL SIGN ATTACHMENT DETAILS AT EACH WINDBEAM

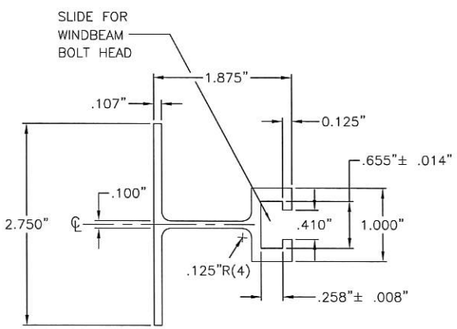


VIEW C – C

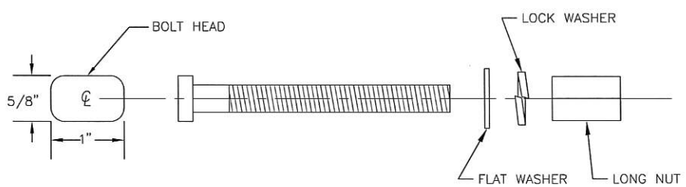


D3-1 STREET NAME SIGN FRAMING DETAIL

PLAN VIEW



SECTION B – B WINDBEAM CROSS SECTION



3/8" WINDBEAM BOLT AND LONG NUT

NOTES:

1. EXCEPT FOR POLES AND MAST ARMS, ONLY USE SQUARE STEEL TUBES TO SUPPORT SIGNS MOUNTED ON SINGLE POSTS.
2. INSTALL WINDBEAM OR ZEE SHAPED FRAMING MEMBERS ON DIAMOND SHAPED SIGNS 36 INCHES AND LONGER ON A SIDE AND ON OTHER SIGNS 36 INCHES WIDE AND WIDER.
3. IN HIGH WIND AREAS, THE PLANS MAY REQUIRE SIGNS SMALLER THAN THOSE LISTED IN NOTE 2 BE FRAMED AS SHOWN HERE IN.
4. THIS DRAWING DEPICTS THE WINDBEAM FRAMING AND ATTACHMENT SYSTEM. ATTACH SIGNS FRAMED WITH ZEE SHAPED FRAMING ACCORDING TO REGIONAL DRAWING "SIGN ATTACHMENT DETAILS", USING "U" SHAPED BRACKETS AND TWO BOLTS WITH NUTS.
5. THE ENGINEER MAY APPROVE OTHER FRAMING MEMBERS. SUBMIT DOCUMENTS THAT DETAIL THE FRAME'S CROSS SECTION AND STRENGTH, AND METHOD OF ATTACHING THE FRAME TO A POST.
6. USE FRAMING MEMBERS MADE FROM ALUMINUM ALLOY 6061-T6.
7. EACH FRAMING MEMBER SHALL BE ONE CONTINUOUS PIECE.
8. ATTACH FRAMING MEMBERS TO THE SIGN PANELS WITH RIVETS OR AN ENGINEER APPROVED, DOUBLE SIDED, HIGH STRENGTH, ADHESIVE TAPE.
9. WITH THE ADHESIVE TAPE, INSTALL TWO RIVETS IN BOTH ENDS OF EACH FRAMING MEMBER, AND ATTACH THE FRAMING MEMBERS TO THE SIGN PANELS ACCORDING TO THE TAPE MANUFACTURER'S WRITTEN INSTRUCTIONS, INCLUDING:
   A. THE CLEANING AND HANDLING OF THE SIGN PANELS AND FRAMING MEMBERS.
   B. THE APPLICATION OF THE ADHESIVE TAPE.
10. WHEN RIVETS ARE USED TO ATTACH FRAMING MEMBERS, INSTALL 2 RIVETS IN EACH END AND THE BALANCE ON 8" MAXIMUM CENTERS.
11. USE 3/16" DIAMETER RIVETS CONFORMING TO ALUMINUM ALLOY 6061-T6 FOR COLD DRIVEN RIVETS, OR ALUMINUM ALLOY 6061-T43 FOR HOT DRIVEN RIVETS.
12. THE BRACKETS USED ON EVEN INCH SIZE TUBES MAY ALSO BE USED ON TUBES 1/2" SMALLER IN SIZE.

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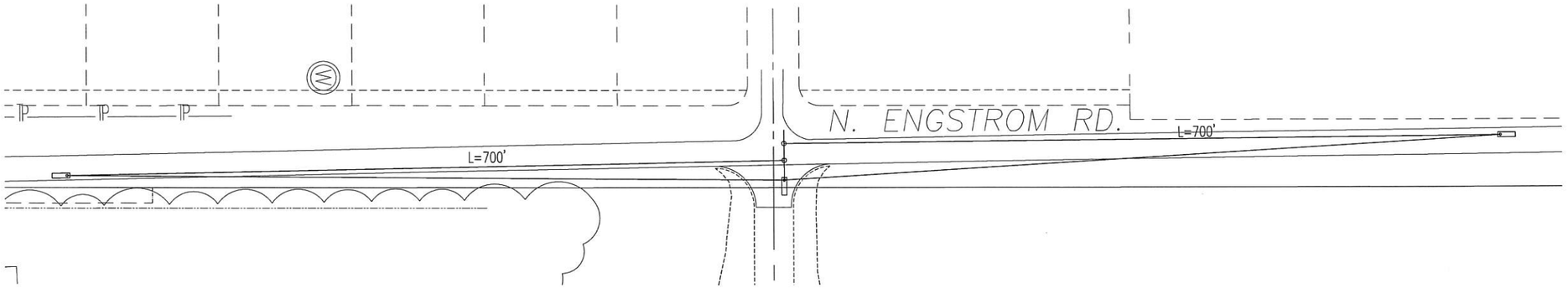
SHEET TITLE
SIGN ATTACHMENT DETAILS

SHEET
C1.3.3

0 30 60 120
HORIZONTAL SCALE
(1"=60' PLOTTED AT 22"X34")

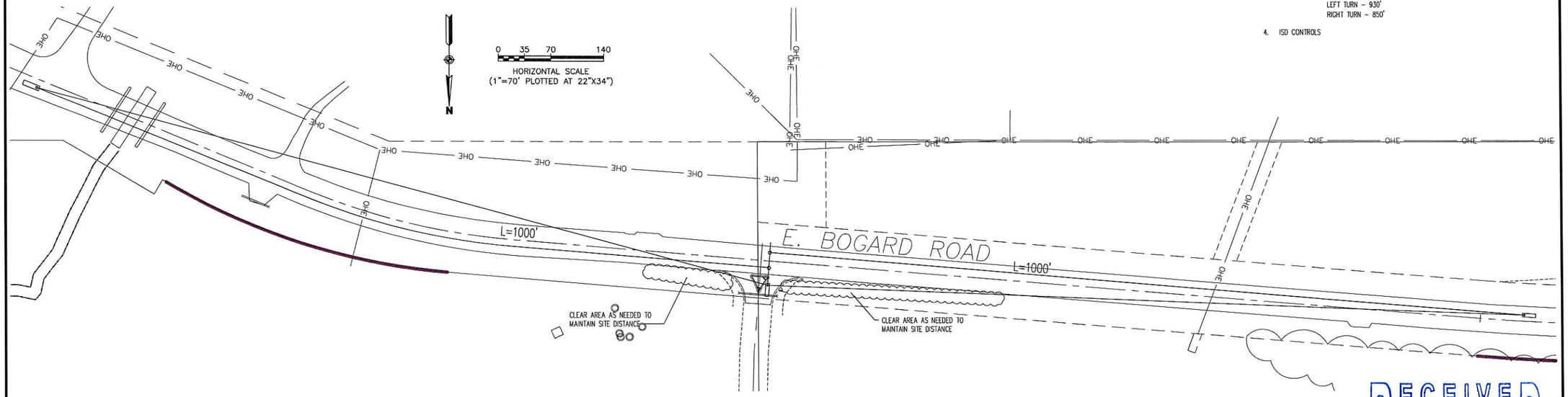


SITE DISTANCE
ENGSTROM ROAD DRIVEWAY
(MSB)

NOTES

1. POSTED SPEED LIMIT IS 35 MPH. DESIGN SPEED IS 40 MPH.
2. MINIMUM SITE DISTANCE PER MSB IS 595 FEET.
3. MINIMUM SSD PER ADOT = 305 FEET.
4. MINIMUM ISD PER ADOT = 680' (BOTH DIRECTIONS)
5. ISD CONTROLS.

0 35 70 140
HORIZONTAL SCALE
(1"=70' PLOTTED AT 22"X34")



SITE DISTANCE
BOGARD ROAD DRIVEWAY
(STATE OF ALASKA)

NOTES

1. POSTED SPEED LIMIT IS 50 MPH. DESIGN SPEED IS 55 MPH
2. MINIMUM STOPING SIGHT DISTANCE (SSD) PER ADOT IS 495 FEET.
3. MINIMUM INTERSECTION SIGHT DISTANCE (ISD) PER ADOT:
   LEFT TURN – 930'
   RIGHT TURN – 850'
4. ISD CONTROLS

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Development Services

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REVIEWED: DES

SHEET TITLE
DRIVEWAY
SITE DISTANCE

SHEET
C1.4

From: Fred Wagner
To: Peggy Horton
Subject: RE: Request for Comments for the Central Gravel Products Earth Materials Extraction Conditional Use Permit
Date: Friday, September 13, 2024 4:12:38 PM

Platting has no comments or concerns.

Sincerely,

Fred Wagner, PLS
MSB Platting Officer
(907)861-7870 Office
(907)355-8507 Cell

From: Peggy Horton <Peggy.Horton@matsugov.us>
Sent: Friday, September 13, 2024 3:46 PM
Subject: Request for Comments for the Central Gravel Products Earth Materials Extraction Conditional Use Permit

Greetings,

Dan Steiner, P.E., acting for Central Gravel Products, submitted an application for an Earth Material Extraction Conditional Use Permit under MSB 17.30—Conditional Use Permit (CUP) for Earth Material Extraction Activities for the extraction of 230,000 cubic yards annually through 2054. The site is located on 153 acres within three properties totaling 235 acres, on 7955 E Bogard Rd., 3182 N. Trunk Rd., 7801 E Glade Ct., Tax ID #s 18N01E27A002, 18N01E27D001, and 18N01E27D002. RSA: 16 & 25

The Planning Commission will conduct a public hearing on this request on November 18, 2024.

Application materials may be viewed online at www.matsugov.us by clicking on 'All Public Notices & Announcements'. A direct link to the application material is here: Matanuska-Susitna Borough - MSB 17.30 - Conditional Use Permit for Earth Materials Extraction (matsugov.us)

Comments are due on or before October 28, 2024, and will be included in the Planning Commission packet for the Commissioner's review and information. Please be advised that comments received after that date will not be included in the staff report to the Planning Commission. Thank you for your review.

Regards,

Peggy Horton
Matanuska-Susitna Borough
Development Services Division
Current Planner
907-861-7862

ENSTAR Natural Gas Company, LLC
Engineering Department, Right of Way Section
401 E. International Airport Road
P. O. Box 190288
Anchorage, Alaska 99519-0288
(907) 277-5551
FAX (907) 334-7798

September 16, 2024

Matanuska-Susitna Borough, Platting Division
350 East Dahlia Avenue
Palmer, AK 99645-6488

To whom it may concern:

ENSTAR Natural Gas Company, LLC has reviewed the following conditional use permit and has no comments or recommendations.

- **EARTH MATERIAL EXTRACTION**
  (MSB 17.30)

If you have any questions, please feel free to contact me at 334-7944 or by email at james.christopher@enstarnaturalgas.com.

Sincerely,

James Christopher

James Christopher
Right of Way Agent
ENSTAR Natural Gas Company, LLC

From: Permit Center
To: Peggy Horton
Subject: RE: Request for Comments for the Central Gravel Products Earth Materials Extraction Conditional Use Permit
Date: Tuesday, September 17, 2024 8:29:27 AM
Attachments: Screenshot 2024-09-17 082718.png

They'll need DW permits as shown on Glade Court and Dania Lane.

Brandon Tucker
Permit Technician
Matanuska-Susitna Borough Permit Center
350 E Dahlia Ave
Palmer AK 99645
P (907) 861-7871
F (907) 861-8158

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Current Planner
907-861-7862

From: Myers, Sarah E E (DFG)
To: Peggy Horton
Subject: RE: Request for Comments for the Central Gravel Products Earth Materials Extraction Conditional Use Permit
Date: Thursday, September 19, 2024 9:09:12 AM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Hi there,

In review of this project and property in regards to fish bearing water bodies, there are two fish bearing water bodies, Wasilla Creek, and Gooding Lake. Based on the presented plans, it appears that a buffer is set in place to avoid both water bodies. Should plans change, a fish habitat would be required for the modification of the bed and banks of Wasilla Creek as it is a cataloged anadromous water body but not for Gooding Lake as long as it is does not create a fish passage barrier. A water withdrawal permit from our office would be required if need be, however it is my understanding that there has been a ban of water withdrawals from the Dept. of Natural Resources for Wasilla Creek. The applicant is welcome to reach out to the ADF&G Habitat Section at (907)861-3200 or dfg.hab.infopaq@alaska.gov.

Sincerely,

Sarah E. E. (Wilber) Myers
Habitat Biologist IV, Mat-Su Area Manager
ADF&G Habitat Section, Palmer Office
Office: 907-861-3206
Fax: 907-861-3232
ADF&G Habitat Section Permits Link

From: Peggy Horton <Peggy.Horton@matsugov.us>
Sent: Friday, September 13, 2024 3:46 PM
Subject: Request for Comments for the Central Gravel Products Earth Materials Extraction Conditional Use Permit

Greetings,

Dan Steiner, P.E., acting for Central Gravel Products, submitted an application for an Earth

Material Extraction Conditional Use Permit under MSB 17.30—Conditional Use Permit (CUP) for Earth Material Extraction Activities for the extraction of 230,000 cubic yards annually through 2054. The site is located on 153 acres within three properties totaling 235 acres, on 7955 E Bogard Rd., 3182 N. Trunk Rd., 7801 E Glade Ct., Tax ID #s 18N01E27A002, 18N01E27D001, and 18N01E27D002. RSA: 16 & 25

The Planning Commission will conduct a public hearing on this request on November 18, 2024.

Application materials may be viewed online at www.matsugov.us by clicking on 'All Public Notices & Announcements'. A direct link to the application material is here:
Matanuska-Susitna Borough - MSB 17.30 - Conditional Use Permit for Earth Materials Extraction (matsugov.us)

Comments are due on or before October 28, 2024, and will be included in the Planning Commission packet for the Commissioner's review and information. Please be advised that comments received after that date will not be included in the staff report to the Planning Commission. Thank you for your review.

Regards,

Peggy Horton
Matanuska-Susitna Borough
Development Services Division
Current Planner
907-861-7862

From: Jamie Taylor
To: Peggy Horton; Daniel Dahms
Cc: Brad Sworts; Tammy Simmons; Michelle Olsen; Tom Adams
Subject: Re: Earth Materials Extraction Permit Coordination with AKDOT needed
Date: Tuesday, October 22, 2024 5:13:22 PM

Hi Peggy,

Regarding the Central Gravel Products CPU on Bogard & Engstrom, we have the following questions/requests for clarification:

- How is visual screening achieved along Engstrom Road where no berm is proposed? The notes on sheet C1.0 are misleading. Looking at cross sections D & E, it appears there will be a completely unobstructed view of the entire pit from Engstrom Road. We understand this is outside of the purview of our review, just curious.
- What is the planned/approximate opening date of the development?
- At which hour of the day does the peak hour of the development occur?

Also, for clarification to the applicant, the peak hour traffic volume is the total of exiting and entering vehicle movements for the entire development. The driveway permit application stated the peak hour traffic volume was 12, but this application says it is 12 in and 12 out, therefore the actual peak hour traffic volume is 24.

We are hoping to coordinate any further comments with DOT on Thursday.

Thank you,

Jamie Taylor, PE (she/her)
Civil Engineer
Matanuska-Susitna Borough
Department of Public Works
t: 907-861-7765 c: 907-355-9810
jamie.taylor@matsugov.us
http://www.matsugov.us/

From: Peggy Horton <Peggy.Horton@matsugov.us>
Sent: Monday, October 21, 2024 1:38 PM
To: Daniel Dahms <Daniel.Dahms@matsugov.us>
Cc: Brad Sworts <Brad.Sworts@matsugov.us>; Jamie Taylor <Jamie.Taylor@matsugov.us>; Tammy

Simmons <Tammy.Simmons@matsugov.us>; Michelle Olsen <Michelle.Olsen@matsugov.us>
Subject: RE: Earth Materials Extraction Permit Coordination with AKDOT needed

Thank you.
Just so you know, the application material includes an ADOT-approved approach to Fireweed Road.

Peggy

From: Daniel Dahms <Daniel.Dahms@matsugov.us>
Sent: Monday, October 21, 2024 11:57 AM
To: Peggy Horton <Peggy.Horton@matsugov.us>
Cc: Brad Sworts <Brad.Sworts@matsugov.us>; Jamie Taylor <Jamie.Taylor@matsugov.us>; Tammy Simmons <Tammy.Simmons@matsugov.us>; Michelle Olsen <Michelle.Olsen@matsugov.us>
Subject: Earth Materials Extraction Permit Coordination with AKDOT needed

Peggy,

PD&E needs to coordinate with AKDOT on our comments regarding the Earth Materials Extraction Permit 10298. I will try and set up a meeting with AKDOT this week to get you comments by COB on Friday.

Daniel Dahms, PE
Department of Public Works
Pre-Design and Engineering Division

From: Needs, Ian J (DEC)
To: Peggy Horton
Cc: DEC DW Agency Reviews (DEC sponsored); Bare, Charity M (DEC); Bjorkman, Jamie K (DEC)
Subject: RE: Request for Comments for the Central Gravel Products Earth Materials Extraction Conditional Use Permit
Date: Friday, October 25, 2024 7:19:01 AM
Attachments: image001.png
gravel-rock-extraction-bmp-manual.pdf
dec-eh-dw-recommendations-for-general-project-activities-near-a-pws-source.pdf

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[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]

Thank you for the opportunity to comment with respect to public water system (PWS) sources. Given the location(s) provided, this project is near an active registered PWS source (see attached "DEC_PWS_Map.jpg" and summary table below). For this reason, we ask that the applicant please adhere to the attached **Recommendations for General Project Activities near a PWS source**, where applicable. Additionally, please provide the applicant with the attached **Alaska Gravel Extraction BMP Manual**, which provides guidance on responsible development of such projects.

To access our interactive web map, which displays PWS source locations and Drinking Water Protection Areas, please visit: https://www.arcgis.com/home/item.html?id=13ed2116e4094f9994775af9a62a1e85.

Summary table

- **Public Water System ID (PWSID)**:
  AK2220154
  Water System Name:
  CREEKWOOD PARK WATER SYSTEM
  Water System Classification:
  Community Water System
  State Assigned Source ID:
  IN001
  Source Name:
  CREEKWOOD INFILTRATION
  Source Water Type:
  Surface Water
  Source Facility Type:
  Infiltration Gallery
  Drinking Water Watch has current sampling results and contact information.

Ian Needs, E.I.T.
Hydrologist 3
DEC-EH | Drinking Water Program
Phone: (907) 269-0292
Info: http://dec.alaska.gov/eh/dw
Anchorage, AK

From: Peggy Horton <Peggy.Horton@matsugov.us>
Sent: Friday, September 13, 2024 3:46 PM
Subject: Request for Comments for the Central Gravel Products Earth Materials Extraction

Conditional Use Permit

Greetings,

Dan Steiner, P.E., acting for Central Gravel Products, submitted an application for an Earth Material Extraction Conditional Use Permit under MSB 17.30—Conditional Use Permit (CUP) for Earth Material Extraction Activities for the extraction of 230,000 cubic yards annually through 2054. The site is located on 153 acres within three properties totaling 235 acres, on 7955 E Bogard Rd., 3182 N. Trunk Rd., 7801 E Glade Ct., Tax ID #s 18N01E27A002, 18N01E27D001, and 18N01E27D002. RSA: 16 & 25

The Planning Commission will conduct a public hearing on this request on November 18, 2024.

Application materials may be viewed online at www.matsugov.us by clicking on 'All Public Notices & Announcements'. A direct link to the application material is here: Matanuska-Susitna Borough - MSB 17.30 - Conditional Use Permit for Earth Materials Extraction (matsugov.us)

Comments are due on or before October 28, 2024, and will be included in the Planning Commission packet for the Commissioner's review and information. Please be advised that comments received after that date will not be included in the staff report to the Planning Commission. Thank you for your review.

Regards,

Peggy Horton
Matanuska-Susitna Borough
Development Services Division
Current Planner
907-861-7862

THE STATE of ALASKA
GOVERNOR MICHAEL J. DUNLEAVY

Department of Environmental Conservation

DIVISION OF ENVIRONMENTAL HEALTH
Drinking Water Program

555 Cordova Street
Anchorage, Alaska, 99501
Main: 907.269.7656
Toll free: 866.756.9656
Fax: 907.269.7650

July 14, 2022

Recommendations for general project activities associated with, or near, a public water system source

The following recommendations are intended to address potential impacts of projects, to be permitted or otherwise, in which planned activities are associated with, or near, a public water system (PWS) source (e.g., water well, spring, surface water intake, etc.). The key aspects of these recommendations are to identify nearby PWS sources, establish appropriate points of contact for the applicant and PWS, and implement best management practices.

Authority:

18 AAC 80.015. Well protection, source water protection, and well decommissioning.

a) A person may not
   (1) cause pollution or contamination to enter a public water system; or
   (2) create or maintain a condition that has a significant potential to cause or allow the pollution or contamination of a public water system.

Recommendations:

1) Identify on a legible map if any part of the project is within a Drinking Water Protection Area (DWPA) for a PWS source. DWPAs can be found using the interactive web map application, "**Alaska DEC Drinking Water Protection Areas**", located at https://dec.alaska.gov/das/GIS/apps.htm. Links to basic instructions for using this web map can be found on the map description page. If you experience problems accessing the map, please contact the Drinking Water Source Protection group at (907) 269-7549, or chris.miller@alaska.gov.

2) Where the project/permit intersects a DWPA, notify the associated PWS contact and provide the following:

   a) A brief description of the project location and associated activities; and

   b) Project contact information.

   PWS contact information can be obtained using the hyperlink from within the pop-up information for each PWS source in the web map, or directly by using the online application called "Drinking Water Watch", found at https://dec.alaska.gov/DWW/.

3) Within the identified DWPA, control stormwater and wastewater discharge such that it is directed away from the PWS.

Recommendations for general project activities associated with, or near, a public water system source (continued)

4) Within the identified DWPA, restrict project/permit activities that could significantly and/or permanently change the natural surface water or groundwater levels of the water sources immediately contributing to the PWS.

5) Within the identified DWPA, implement voluntary best management practices suited to your project where equipment storage, maintenance and operation, or other potential sources of contamination are located to minimize the potential for PWS source contamination.

6) Restrict or limit equipment storage, maintenance and operation, and other potential sources of contamination, within the following high-priority DWPA Zones:

   a) Zone A DWPA (several-months-time-of-travel for contributing groundwater, or 1,000-foot buffer of the contributing surface water body and its immediate tributaries);

   b) Zone E DWPA (1,000-foot buffer of the contributing surface water body and its immediate tributaries for a source using groundwater under the direct influence of surface water (GWUDISW)); or

   c) Provisional DWPA (1,000-foot radius around a PWS source).

7) All non-proprietary data related to the project/permit, including but not limited to, water quality results (field and lab), survey data, water levels, subsurface lithologic descriptions and depth, and groundwater flow direction and gradient information, should be made available to the permitting agency upon request.

   a) When associated with the development, construction, modification, or operation of a PWS, follow the requirements in DEC Drinking Water regulations 18 AAC 80, https://dec.alaska.gov/eh/dw/regulations/.

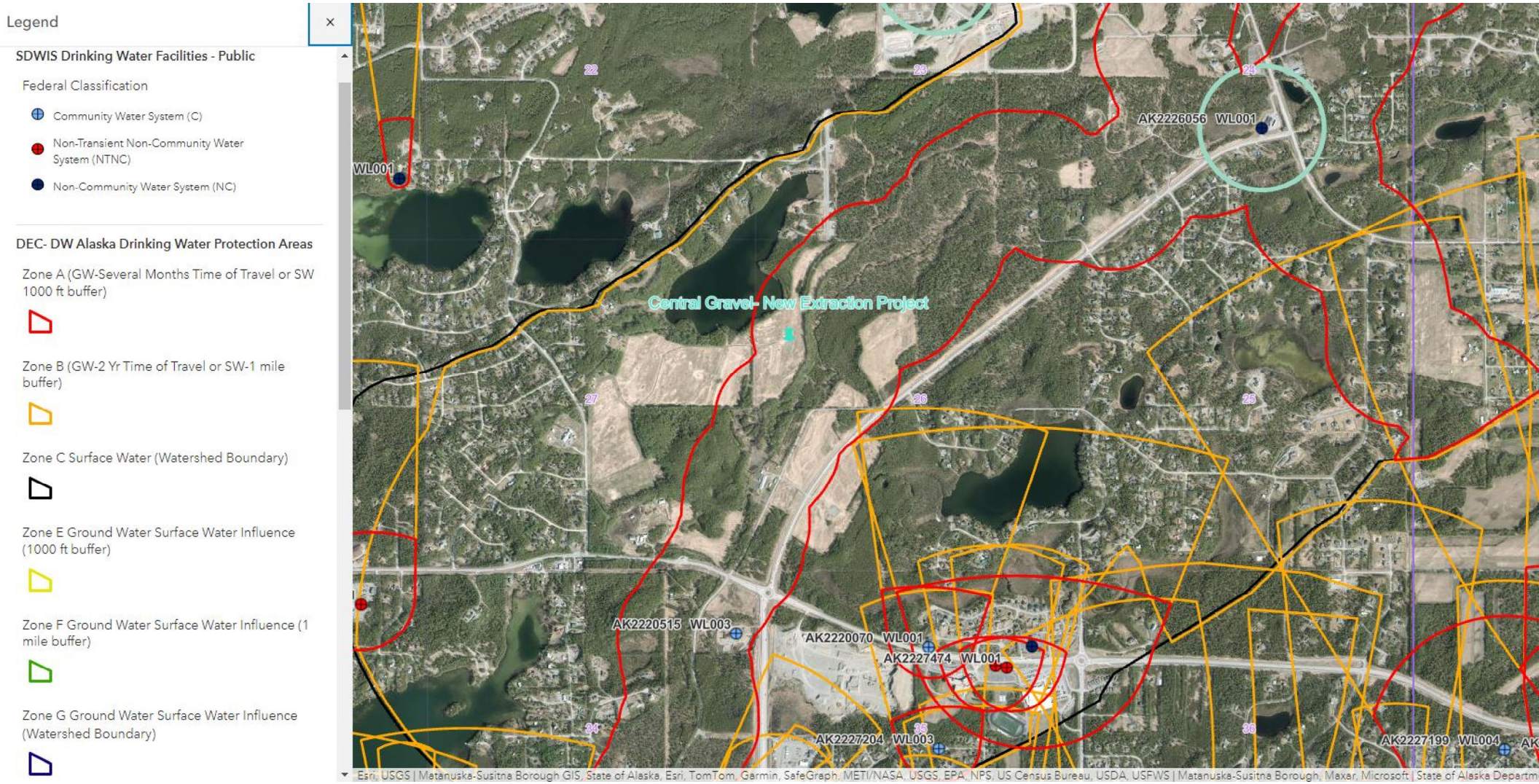
8) Keep a list of PWS contacts and agency spill reporting contacts readily available.

   a) Immediately notify contacts of any potential contamination event, such as spills or excess erosion.

Sincerely,

Charley Palmer, *Hydrologist 3*
DEC Drinking Water Source Protection
E-mail: charley.palmer@alaska.gov
Phone: (907) 269-0292

Alternate contacts:
Chris Miller, Environmental Program Specialist 4, chris.miller@alaska.gov
Kenna Billups, Environmental Program Specialist 2, kenna.billups@alaska.gov

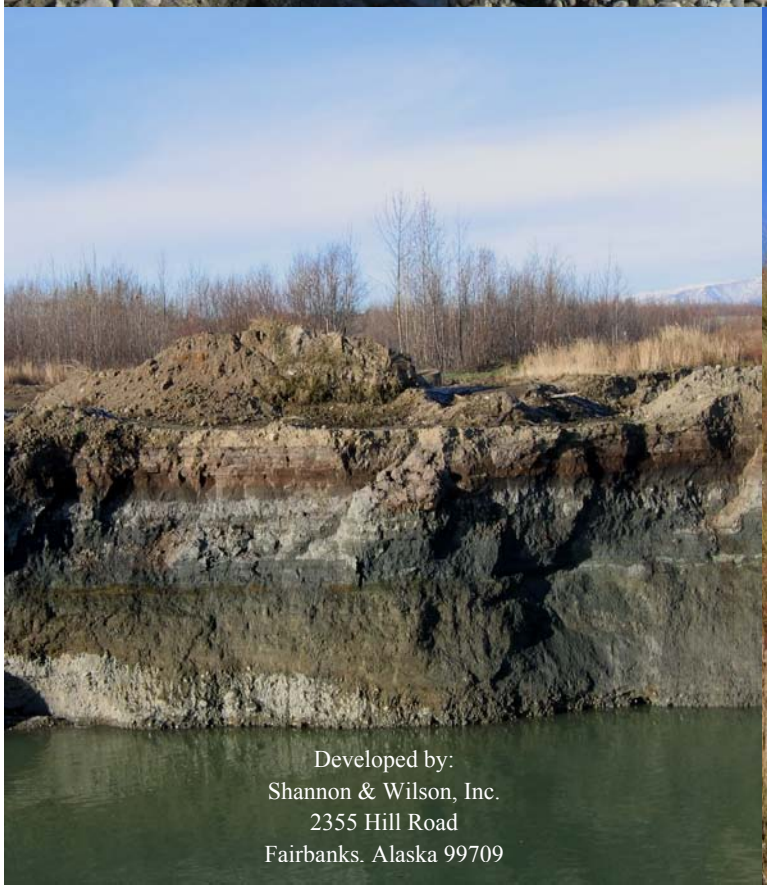

Legend
SDWIS Drinking Water Facilities - Public
Federal Classification
Community Water System (C)
Non-Transient Non-Community Water System (NTNC)
Non-Community Water System (NC)
DEC- DW Alaska Drinking Water Protection Areas
Zone A (GW-Several Months Time of Travel or SW 1000 ft buffer)
Zone B (GW-2 Yr Time of Travel or SW-1 mile buffer)
Zone C Surface Water (Watershed Boundary)
Zone E Ground Water Surface Water Influence (1000 ft buffer)
Zone F Ground Water Surface Water Influence (1 mile buffer)
Zone G Ground Water Surface Water Influence (Watershed Boundary)
Central Gravel- New Extraction Project
AK2226056 WL001
WL001
AK2220515 WL003
AK2220070 WL001
AK2227474 WL001
AK2227204 WL003
AK2227199 WL004
Esri, USGS | Matanuska-Susitna Borough GIS, State of Alaska, Esri, TomTom, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS | Matanuska-Susitna Borough, Maxar, Microsoft | State of Alaska Departm

Alaska DEC User's Manual

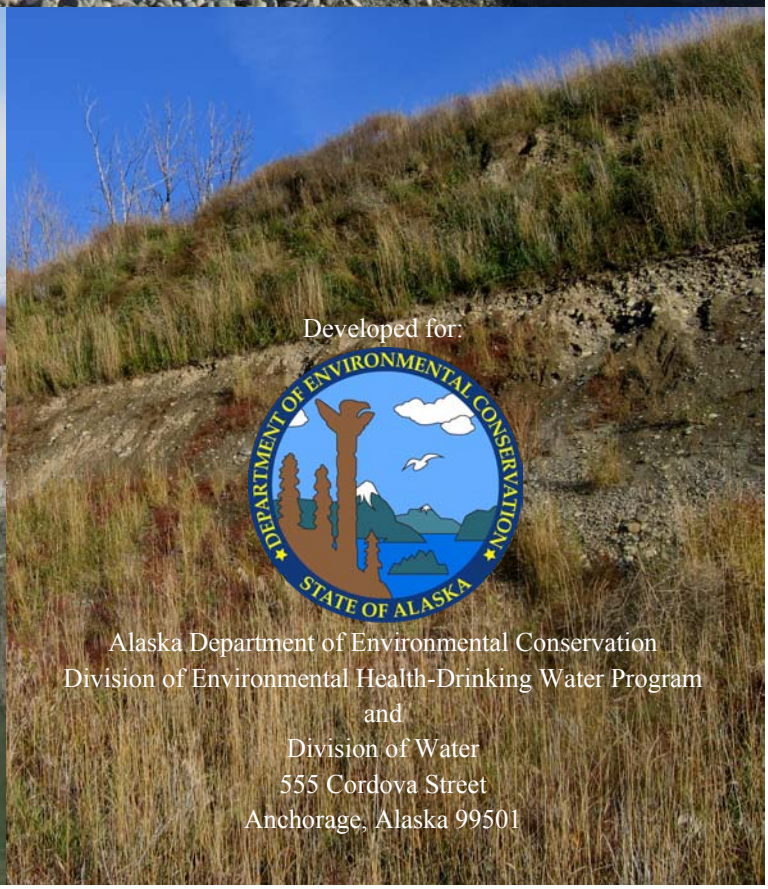
BEST MANAGEMENT PRACTICES FOR GRAVEL/ROCK AGGREGATE EXTRACTION PROJECTS

Protecting Surface Water and Groundwater Quality in Alaska

September 2012



Developed by:
Shannon & Wilson, Inc.
2355 Hill Road
Fairbanks. Alaska 99709



Developed for:

Alaska Department of Environmental Conservation
Division of Environmental Health-Drinking Water Program
and
Division of Water
555 Cordova Street
Anchorage, Alaska 99501

Alaska DEC User's Manual

BEST MANAGEMENT PRACTICES FOR GRAVEL/ROCK AGGREGATE EXTRACTION PROJECTS:

PROTECTING SURFACE WATER AND GROUNDWATER QUALITY IN ALASKA

September 2012

Developed by:
Shannon & Wilson, Inc.
2355 Hill Road
Fairbanks, Alaska 99709

For:
Alaska Department of Environmental Conservation
Division of Environmental Health Drinking Water Program
and
Division of Water
555 Cordova Street
Anchorage, Alaska 99501

PREFACE

This document is a revision to the *User's Manual: Best Management Practices for Gravel Pits and the Protection of Surface Water Quality in Alaska*, dated June 2006. Revisions were made in 2012 to provide updated information regarding permitting processes and agencies, and to address the growing need for best management practices pertaining to the protection of groundwater.

ACKNOWLEDGEMENTS

This 2012 revision of the *User's Manual* is the result of the collective efforts and contributions of a number of individuals and organizations. The Alaska Department of Environmental Conservation would like to thank all of those that contributed to the development of this document. Special thanks go to the 2012 Revision Interagency Review Team:

Charley Palmer, Chris Miller, Anne Gleason, and the Alaska Department of Environmental Conservation, Division of Environmental Health

Laura Eldred, Shane Serrano, William Ashton, Jim Rypkema, and the Alaska Department of Environmental Conservation, Division of Water

Melissa Hill, Roy Ireland, Christina Bohner, and the Alaska Department of Natural Resources, Division of Mining, Land and Water

Kristine Benson and the Alaska Department of Transportation and Public Facilities, Statewide Design and Engineering Services

Special thanks also go to:

Shannon & Wilson, Inc.

Jaretta Roloff, David Norman, Peter Wampler, Allen Throop, Frank Schnitzer, the Washington Department of Natural Resources, and the Oregon Department of Geology and Mineral Industries

Eric Wilson and the Idaho Department of Lands

Ecology and Environment, Inc.

Tadd Owens and the Resource Development Council for Alaska, Inc.

Steve Lovs, Jim Rogers and Alaska Sand and Gravel Company, Inc.

Rob Brown, Chuck Wilkes and Central Paving Products

Robert Ruffner, Stephanie Sims, and the Kenai Watershed Forum

Bob Millard and the City and Borough of Juneau

The Kenai Peninsula Borough

Eileen Probasco and the Matanuska-Susitna Borough

Brian Bergman, Mark Buggins and the City and Borough of Sitka

Steve Masterman, Ernie Siemoneit, Shari Howard, Jessie Reinikainen, Barry Benko and the Alaska Department of Transportation and Public Facilities

Clark Cox and the Alaska Department of Natural Resources, Division of Mining, Land and Water

Misha Vakoc and the Region 10 United States Environmental Protection Agency, Office of Water

Cover Photo Credits:

Top photo: Used with permission of Central Paving Products, Palmer, Alaska

DISCLAIMER

This document is intended to be used as a general guide to assist the aggregate mining community in designing and implementing effective best management practices for protecting surface water and groundwater quality. It is not intended to be the only source of such information or to provide legal advice of any nature. Users of this document are encouraged to seek legal, technical, and engineering advice from qualified professionals who are familiar with their project area. The organizations and individuals contributing to the preparation of this document expressly disclaim any responsibility or liability for any acts or omissions taken by any party as a result of this document's use.

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ACRONYMS

AAC	Alaska Administrative Code
ADR	Alaska Department of Revenue
DEC	Alaska Department of Environmental Conservation
AMD	Acid Mine Drainage
APDES	Alaska Pollutant Discharge Elimination System
BMP	Best Management Practices
CGP	Construction General Permit
DMLW	Division of Mining, Land, and Water
DNR	Alaska Department of Natural Resources
EDGP	Excavation Dewatering General Permit
EPA	United States Environmental Protection Agency
FBATFE	Federal Bureau of Alcohol, Tobacco, Firearms, and Explosives
HMC	Hazardous Materials Control
MSGP	Multi-Sector General Permit
NOI	Notice of Intent
NOA	Naturally Occurring Asbestos
NPDES	National Pollutant Discharge Elimination System
NTU	Nephelometric Turbidity Units
PWS	Public Water System
SWPPP	Storm Water Pollution Prevention Plan
TAH	Total Aromatic Hydrocarbon
TAqH	Total Aqueous Hydrocarbon
TMDL	Total Maximum Daily Load
TWUP	Temporary Water Use Permit

1 INTRODUCTION

1.1 Purpose of the Manual

Key Points – Chapter 1

- The manual provides information on permitting and best management practices for gravel and rock aggregate operations to protect surface water and groundwater quality.
- The manual provides meaningful and comprehensive guidelines that will reduce impacts to water quality.

Aggregate is an important resource for Alaskan communities, used extensively in road building, foundation preparation, concrete, and other applications. Alaskan communities also depend on the quality of their surface and groundwater for drinking and livelihood. Aggregate mines occur throughout Alaska, and their improper operation can result in adverse impacts to surface water and groundwater quality. The primary purpose of this manual is to help protect the quality of Alaska's water from such impacts. One of the most effective ways to control impacts is the use of effective best management practices (BMPs). BMPs are physical, chemical, structural, and/or managerial techniques to minimize water pollution. This manual provides owners and operators of gravel/rock extraction operations in Alaska with guidance regarding permitting processes, as well as a comprehensive list and description of BMPs which can be implemented to help meet permit requirements, protect the quality of water, and reduce conflict with the public.

1.2 Organization of the Manual

This manual is organized into the sections described below:

Chapter 1 – Introduction, including how to use the manual.
Chapter 2 – Provides information on state and federal permit requirements.
Chapter 3 – Describes how to determine potential impacts.
Chapter 4 – Gives guidelines and recommendations for protecting surface water and groundwater quality.
Chapter 5 – Describes how to choose Best Management Practices.
Chapter 6 – Contains BMPs for preventing chemical pollution.
Chapter 7 – Contains BMPs for erosion control and stormwater management.
Chapter 8 – Contains operational BMPs.
Chapter 9– Contains BMPs for reclamation.
Chapter 10– Provides a list of references used in the manual.

Appendix A - Provides definitions for terms used in the User's Manual.
Appendix B – Lists contacts throughout Alaska for additional information on gravel pit BMPs and requirements.
Appendix C – Provides additional resources of information.
Appendix D – Provides limited information regarding state and federal permit requirements.
Appendix E – Is an index of BMPs presented in this manual.

1.3 How to Use the Manual

This manual is appropriate for use by owners and operators of gravel and rock aggregate extraction projects throughout Alaska. The techniques and practices given in this manual can be applied to both small and large-scale operations. Personnel that do not have extensive expertise in designing and implementing control measures may benefit from review of the entire manual. Personnel that have previous experience with the planning, design, and implementation of BMPs may benefit primarily from the BMP guidance given in Chapters 6 through 9, indexed in Appendix E – Best Management Practice Index.

2 PERMITTING AND REGULATORY REQUIREMENTS

This section provides a brief description of the DEC Alaska Pollutant Discharge Elimination System (APDES) Multi-Sector General Permit, DEC's Excavation Dewatering General Permit, the Alaska Water Quality Criteria, and Alaska Department of Natural Resources (DNR) Temporary Water Use Permit (TWUP) and Material Sale application as they apply to gravel pits. This is not intended to be a complete list of regulatory requirements but instead to provide a brief introduction to major regulations for gravel pits with respect to stormwater. Appendix D presents a summary of state and federal permits that may apply to material extraction operations in Alaska.

Key Points – Chapter 2

Links to Key Documents:

- EPA's Multi-Sector General Permit: http://cfpub.epa.gov/npdes/stormwater/msgp.cfm
- DEC's Excavation Dewatering General Permit: http://www.dec.alaska.gov/water/WPSDocs/2009DB0003_pmt.pdf
- Alaska Water Quality Criteria (18 AAC 70): http://www.dec.state.ak.us/regulations/index.htm
- EPA's NPDES Website: http://cfpub.epa.gov/npdes/

DEC permit requirements:

- APDES MSGP
- Excavation dewatering
- Water quality criteria

DNR permit requirements:

- Temporary Water Use Permit
- Material Sale Application

2.1 APDES Multi-Sector General Permit and Other APDES Requirements

Certain stormwater discharges, including those from industrial sites such as gravel pits, are regulated under the DEC APDES program. Both the discharge of stormwater and the discharge of dewatering effluent (uncontaminated groundwater) from gravel pit operations are permitted under the APDES Multi-Sector General Permit (MSGP) under Sector J (Mineral Mining and Dressing).

To apply for permit coverage under the MSGP, a facility operator must complete and submit to DEC a Notice of Intent (NOI) form. To comply with the permit, the facility operator must prepare and follow a Storm Water Pollution Prevention Plan (SWPPP). To discontinue permit coverage, a facility operator must complete and submit to DEC a Notice of Termination form.

There are certain circumstances where a general permit is either not available or not applicable to a specific operation or facility. In this type of situation, a facility operator must obtain coverage under an individual permit. DEC will develop requirements specific to the facility.

Some permits may remain in effect that had been issued by the Environmental Protection Agency (EPA) under an old permit that has since expired. For example, for North Slope Oil and Gas Exploration activities, gravel pits/material sites used for construction of pads and roads were permitted under a Slope-wide NPDES General Permit AKG33-0000. However, pursuant to

Section 401 of the Clean Water Act, the state of Alaska certifies EPA permits, which then become enforceable by the state.

2.2 Excavation Dewatering General Permit

Authorization for excavation dewatering is covered under DEC's Excavation Dewatering State Permit (Permit No. 2009DB0003). The general permit covers wastewater disposal from excavations on sites located less than one mile from a contaminated site and excavations located more than one mile from a contaminated site not eligible for coverage under the ADPES MSGP. Eligible projects covered under this general permit include gravel extraction.

A Notice of Disposal must be submitted to DEC when a total excavation dewatering discharge volume equal to or greater than 250,000 gallons is planned. A Notice of Disposal is not required if the total discharge volume is less than 250,000 gallons. However, it is important to note that the water quality standards in 18 AAC 70 and the terms and conditions of the general permit still apply. If DEC determines that a known contaminated site is located within one mile of a proposed dewatering activity and the wastewater discharge volume is equal to or greater than 250,000 gallons, additional information regarding the contaminated site including hydrogeologic conditions at the site may be needed. Monitoring wells and/or proposed treatment may be additionally required. Monitoring requirements are listed in the general permit.

Management practices must ensure that the dewatering operation is conducted so that the terms of the general permit are met. Some BMPs are outlined in the permit. This may include leaving the dewatering site, including any settling ponds, in a condition that will not cause degradation to the receiving water beyond that resulting from natural causes. If an earthen channel to transport wastewater from a dewatering operation to the receiving water is used, construction equipment should not be driven in the channel, which will result in re-suspended sediment. Fuel handling and storage facilities shall be managed to ensure petroleum products are not discharged into receiving waters.

The DEC dewatering permit was intended to authorize short-term discharges associated with construction. Gravel pits tend to be on-going projects, sometimes planned in phases. Although DEC has not issued an individual permit for a gravel operation, it is an option for larger, on-going gravel extraction with wastewater discharge associated with it.

2.3 Alaska Water Quality Criteria

Water quality criteria adopted by the State of Alaska are found in the Water Quality Standards in 18 AAC 70.020(b) and the DEC's Alaska Water Quality Criteria Manual for Toxic and Other Deleterious Organic and Inorganic Substances (May 26, 2011). These criteria were taken from the EPA criteria documents and Alaska Drinking Water Regulations in 18 AAC 80. Although these EPA criteria documents are no longer adopted directly into state regulation, they contain valuable information on the science used to create the criteria limits and may affect how the criteria are applied or modified. DEC can use these criteria as limits in the absence of mixing zones or other water quality standard exceptions in 18 AAC 70.

Pollutants that might be expected in the discharge from gravel pits are sediment, turbidity, total metals, and petroleum hydrocarbons. Table 2-1 and Table 2-2 contain numeric surface water quality standards for sediment, turbidity, and petroleum products in freshwater and marine waters. Narrative criteria are not included in Table 2-1 and Table 2-2. Criteria for total metals can be found in *Alaska's Water Quality Criteria Manual for Toxic and Other Deleterious Organic and Inorganic Substances* (2011). Alaska regulations (18 AAC 70) should be consulted for a full list of requirements, both numeric and descriptive criteria, and uses.

2.4 Temporary Water Use Permit

A water right is a legal right to use surface or groundwater under the Alaska Water Use Act (AS 46.15). A water right allows a specific amount of water from a specific water source to be diverted, impounded, or withdrawn for a specific use. When a water right is granted, it becomes appurtenant to the land where the water is being used for as long as the water is used. If the land is sold, the water right transfers with the land to the new owner, unless the DNR approves its separation from the land. In Alaska, because water is a common property resource wherever it naturally occurs, landowners do not have automatic rights to groundwater or surface water.

A temporary water use authorization may be needed if the amount of water to be used is a significant amount, the use continues for less than five consecutive years, and the water to be used is not appropriated. This authorization does not establish a water right but will avoid conflicts with fisheries and existing water right holders. To obtain water rights in Alaska, you need to submit an application for water rights to the DNR office in the area of the water use. After your application is processed, you may be issued a permit to drill a well or divert the water.

2.5 Material Sales Application

Material Sales Applications are required for extracting material from state-owned land. To determine if a site is on state-owned land, visit or contact the DNR Public Information Center:

DNR Public Information Center
550 West 7th Avenue, Suite 1260
Anchorage, AK 99501-3557
Phone: 907-269-8400
Fax: 907-269-8901

DNR Public Information Center
3700 Airport Way
Fairbanks, AK 99709-4699
Phone: 907-451-2700
Fax: 907-451-2706

DNR Public Information Office
400 Willoughby Street, 4th Floor
Juneau, AK 99801
Phone: 907-465-3400

There are three different types of state material sales:

- The first and smallest is a "limited" material sale which cannot be for more than 200 cubic yards per 12 month period per person. This is a revocable, nonexclusive contract for personal or commercial use.

- The second type is the "negotiated" sale, which generally cannot exceed 25,000 cubic yards per year per person or company. Material purchased under this type of sale can be sold or used for commercial purposes. The term of the sale is generally one year, but can be longer depending on circumstances.
- The third and larges is the "competitive" sale. The sale contract can be issued for an unlimited amount of material to be taken over many years. Award will be determined by public auction if there are multiple bidders for the same location. If no competitive interest is expressed during the public notification period, no auction is necessary and the sale can proceed to contract upon completion of the decision making process. Material purchased through competitive sale can be sold or used for commercial purposes.

Material Sale Applications care available from and may be submitted to any of the DNR Public Information offices listed above. Applicable State statute and regulations include, but are not limited to: AS 38.05.110-120, AS 38.05.550-565, and 11 AAC 71. Additional information on Material Sale Applications can be found at http://dnr.alaska.gov/mlw/factsht/material_sites.pdf.

Table 2-1: Summary of Selected Freshwater Criteria from 18 AAC 70.020(b)[1]

Pollutant	Water Use	Criteria
Sediment	Water Supply – Agriculture	For sprinkler irrigation, water must be free of particles of 0.074 mm or coarser. For irrigation or water spreading, may not exceed 200 mg/l for an extended period of time.
	Growth and Propagation of Fish, Shellfish, Other Aquatic Life, and Wildlife	Percent accumulation of fine sediment in the range of 0.1 mm to 4.0 mm in the gravel bed of waters used by an anadromous or resident fish for spawning may not be increased more than 5% by weight above natural conditions. In no case may the 0.1 mm to 4.0 fine sediment range in those gravel beds exceed a maximum of 30% by weight.
Turbidity	Water Supply – Drinking, culinary, and food processing	Nephelometric turbidity units (NTU) may not exceed 5 above natural conditions when the natural turbidity is 50 NTU or less. May not have more than 10% increase in turbidity when natural turbidity is more than 50 NTU, not to exceed a maximum increase of 25 NTU.
	Water Supply – Aquaculture & Growth and Propagation of Fish, Shellfish, Other Aquatic Life, and Wildlife	May not exceed 25 NTU above natural conditions. For all lake waters, may not exceed 5 NTU above natural conditions.
	Water Recreation – Contact	May not exceed 5 NTU above natural conditions when the natural turbidity is 50 NTU or less. May not have more than 10% increase in turbidity when natural turbidity is more than 50 NTU, not to exceed a maximum increase of 15 NTU. For all lake waters, may not exceed 5 NTU above natural conditions.
	Water Recreation – Secondary recreation	May not exceed 10 NTU above natural conditions when the natural turbidity is 50 NTU or less. May not have more than 20% increase in turbidity when natural turbidity is more than 50 NTU, not to exceed a maximum increase of 15 NTU.

Table 2-1: Summary of Selected Freshwater Criteria from 18 AAC 70.020(b)[1]

Pollutant	Water Use	Criteria
		For all lake waters, may not exceed 5 NTU above natural conditions.
Petroleum Hydrocarbons	Water Supply – Aquaculture & Growth and Propagation of Fish, Shellfish, Other Aquatic Life, and Wildlife	Total aqueous hydrocarbons (TAqH) in the water column may not exceed 15 µg/L. Total aromatic hydrocarbons (TAH) in the water column may not exceed 10 µg/L.

[1] Refer to regulations for full description of criteria and designated uses:
DEC, 18 AAC 70, Water Quality Standards (Amended as of April 8, 2012)
http://dec.alaska.gov/commish/regulations/pdfs/18%20AAC%2070.pdf

Table 2-2: Summary of Selected Marine Criteria from 18 AAC 70.020(b)[1]

Pollutant	Water Use	Criteria
Sediment	—	No numeric criteria. See 18 AAC 70 for descriptive criteria.
Turbidity	Water Supply – Aquaculture & Water Recreation (Contact and Secondary)	May not exceed 25 NTU.
	Growth and Propagation of Fish, Shellfish, Other Aquatic Life, and Wildlife & Harvesting for Consumption of Raw Mollusks or Other Raw Aquatic Life	May not reduce depth of the compensation point for photosynthetic activity by more than 10%. May not reduce the maximum secchi disk depth by more than 10%.
Petroleum Hydrocarbons	Water Supply – Aquaculture & Growth and Propagation of Fish, Shellfish, Other Aquatic Life, and Wildlife	TAqH in water column may not exceed 15 µg/L. TAH in water column may not exceed 10 µg/L.

[1] Refer to regulations for full description of criteria and designated uses:
DEC, 18 AAC 70, Water Quality Standards (Amended as of April 8, 2012)
http://dec.alaska.gov/commish/regulations/pdfs/18%20AAC%2070.pdf

3 DETERMINING POTENTIAL IMPACTS

Potential pollutants of surface and groundwater from gravel pits include sediment, turbidity, total metals, and/or petroleum hydrocarbons. An increase in turbidity within a stream environment may result in a potential decrease in available free oxygen necessary to support aquatic life. An increase in the concentration of total suspended solids, such as silt or decaying plant matter, can destroy water supplies for human, animal, and other wildlife consumption. Increased sediments in water can also potentially damage fish gills by abrasion, and smother or bury fish redds, effectively killing them.

Key Points – Chapter 3

- Prevent potential impacts by gathering information and understanding the characteristics of the mine site:
  - Topography
  - Climate
  - Vegetation
  - Soil properties
  - Extraction material properties
  - Groundwater conditions
  - Proximity to
    - Public water system sources
    - Surface water bodies
    - Contaminated sites

It is easier and cheaper to prevent impacts to the environment before they happen, rather than attempting to fix them after they have occurred. When planning a mining operation, it is important to determine what impacts that operation might have on the surrounding environment and vice versa. A preliminary assessment should be performed which gathers information on general site conditions, Alaska-specific conditions, and the proximity of public water system sources, surface water bodies, and contaminated sites. Much of the information that should be gathered can be obtained over the internet from sites given below, and by a qualified person performing a thorough field reconnaissance of the mine site.

3.1 General Site Conditions

Before developing a mining plan, it is important to gather information on general site conditions, including local topography, climate, vegetation, soil properties, extraction material properties, and groundwater conditions. In looking at topography, consider the proposed operation with respect to slopes, slope aspects, and natural drainages. Also consider climate, particularly precipitation and wind. These factors will greatly influence the sensitivity of the site to erosion and sediment transport, which can be detrimental to water quality (see Chapter 7). The type of local vegetation, as well as the type, distribution, and thickness of soil are also important to understand because vegetation is one of the best sustainable means of preventing erosion. Local vegetation is already suited to the environment and, if planted in appropriate soil, will require little maintenance and facilitate cost effective reclamation. The type, depth, and thickness of the material to be extracted should also be understood in order to appropriately plan cuts, benches, etc. It is also important to know if the material to be extracted contains naturally occurring asbestos (NOA), which can be a hazard to mine workers and users of the product, or acid-

forming minerals that could contribute to acid mine drainage. The presence of NOA can negatively impact worker health and significantly affect the market available for the resulting aggregate. Basic groundwater characteristics should also be determined, such as groundwater depth, gradient, and the presence or absence of confining layers. It is necessary to have a basic understanding of all these factors (topography, climate, vegetation, soil properties, extraction material properties, and groundwater conditions) in order to understand how a mining operation and the natural environment will interact with one another. It is the understanding of that interaction which allows the development of a mining plan that prevents impacts to surface and groundwater quality.

3.2 Alaska-Specific Conditions

The environments found in Alaska are highly diversified and often extreme. Temperature, precipitation, and wind are key factors that must be taken into account when planning a mining operation, keeping in mind that conditions at one mine site in Alaska may be very different from another at a different location. The mean minimum temperature in Alaska in January ranges from about 23°F in the southeast to -31°F in parts of Northcentral. Figure 3-1 shows mean annual precipitation in Alaska. As shown in this figure, Southeast Alaska and parts of Southcentral receive over 2,000 mm (approximately 78 inches) of precipitation a year. In areas of high precipitation such as these, BMPs targeted to divert or manage stormwater runoff are more critical. Seasonal temperature and precipitation fluctuations also greatly affect the types of vegetation that can be used for soil stabilization, and when they can effectively be planted.

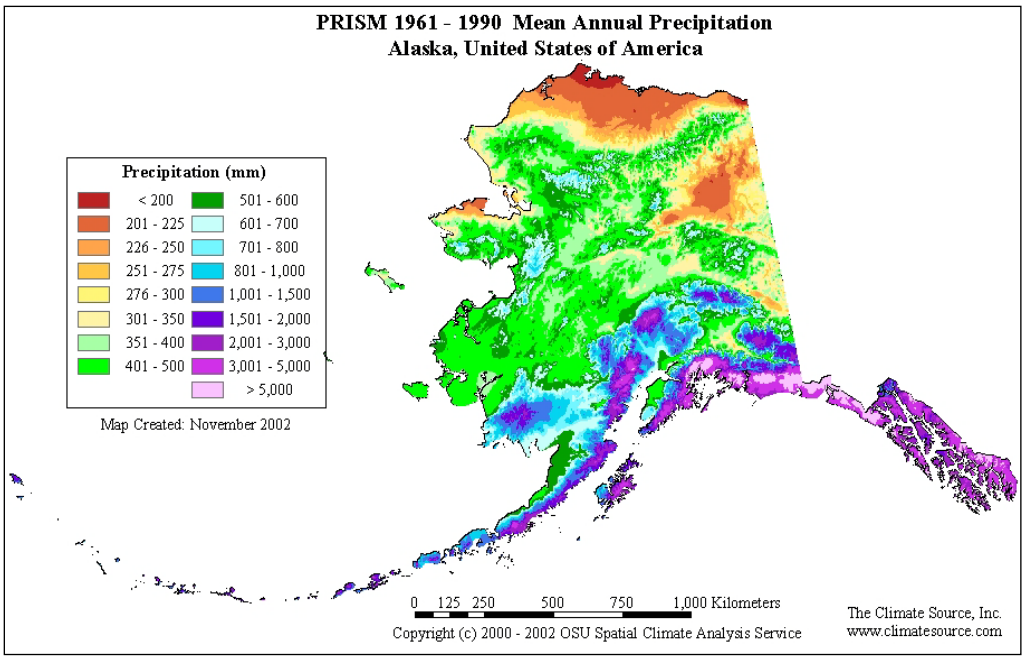


Figure 3-1: Mean Annual Precipitation in Alaska

High winds can increase erosion of exposed soil. A normal storm track along the Aleutian Island chain, the Alaska Peninsula, and all of the coastal area of the Gulf of Alaska exposes these parts of the state to a large majority of the storms crossing the North Pacific, resulting in a variety of

wind problems. Direct exposure results in the frequent occurrence of winds in excess of 50 mph during all but the summer months. Wind velocities approaching 100 mph are not common but do occur, usually associated with mountainous terrain and narrow passes. Winter storms moving eastward across the southern Arctic Ocean cause winds of 50 mph or higher along the arctic coast. Except for local strong wind conditions, winds are generally light in the interior sections (Western Regional Climate Center 2006). Erosion control BMPs should be used in areas with high winds or during high wind seasons.

3.3 Proximity Mapping

Surface runoff and groundwater flow are not constrained by mine site boundaries. Surface and groundwater interact with one another and, although it may not be visible, groundwater can flow from one side of a mine site to another, picking up or dropping off pollutants along the way. Mining changes the natural landscape and therefore can change the flow patterns of surface water and groundwater. It is therefore important to ascertain the proximity of public water system sources, surface water bodies, and existing and potential sources of contamination.

The Alaska Department of Environmental Conservation (DEC) has established drinking water protection areas which act as recommended buffer zones, which are available at their website, given below. Drinking water protection areas should be shown on maps submitted with permit applications wherever proposed project area boundaries fall within drinking water protection area buffer zones. Surface water bodies such as lakes, rivers, and streams can be identified on many web-based maps, such as Google Earth™. Some surface water bodies are considered by DEC to be impaired waters, meaning that they are too polluted or otherwise degraded to meet water quality standards. For these water bodies, a Total Maximum Daily Load (TMDL) for pollutants has been determined or will be developed. A TMDL is the maximum amount of a pollutant that a water body can receive in a day and still meet water quality standards. If a mine operation will place pollutants into impaired waters, via permitted discharge or otherwise, it is important to know the TMDLs for that water body. The location of impaired waters and the associated TMDLs can also be found on the DEC website, given below.

In areas of contamination, mining operations can expose contaminants in groundwater or cause them to migrate to previously unaffected areas by altering the groundwater flow regime. DEC has identified and mapped many contaminated sites, and these can be found on the website below. Other potential sources of contamination to consider are industrial sites where contamination has occurred but has not been detected or reported, abandoned mine sites, and untouched locations with natural acidic drainage.

The locations of drinking water protection areas, locations of impaired waters, TMDL information, identified contaminated sites, and other GIS data associated with DEC permits are available at http://dec.alaska.gov/das/GIS/apps.htm.

4 GENERAL GUIDELINES AND RECOMMENDATIONS FOR PROTECTING SURFACE WATER AND GROUNDWATER QUALITY

Some of the best ways to prevent mining impacts to surface and groundwater quality are to maintain distance between mining operations and the water to be protected, and to monitor water quality. This chapter presents recommended setbacks for mining operations from public water system (PWS) source areas, surface water bodies, and the groundwater table. Where proposed mining is closer to these waters than the recommended setbacks, it is recommended that a detailed hydrogeologic study be performed by a qualified person to evaluate potential impacts and design effective mitigation alternatives.

Key Points – Chapter 4

- Surface water and groundwater quality can be protected in part by:
  - Setbacks/Separation from:
    - PWS source areas
    - Surface water bodies
    - Groundwater table
  - Monitoring of:
    - Quantity
    - Temperature
    - pH
    - Specific conductance
    - Contaminants
  - Detailed hydrogeologic studies

4.1 Setbacks

Depending on the site, permits may require specific horizontal setbacks from water bodies or vertical separation distance from the groundwater table. All requirements of any permit should be met at all times. The following sections provide some general guidance for instances where setbacks are not specifically addressed in permitting.

4.1.1 Public Water System (PWS) Source Areas

DEC has established drinking water protection areas and recommended buffer zones for public water system (PWS) sources, which can be found at http://dec.alaska.gov/das/GIS/apps.htm. There are also PWS sources for which drinking water protection areas have not yet been delineated. For those PWS sources, it is recommended that the buffer zone be considered a 1,000-foot radius around the source area. It is recommended that excavation limits be restricted to areas outside any PWS source buffer zone. Equipment storage, maintenance, and operation should be as limited as possible within designated buffer zones, and appropriate BMPs should be used to prevent water contamination (see Chapter 6).

4.1.2 Lakes, Rivers, and Streams

Due to the interconnected nature of surface water, an impact to one part of a stream or river can have dramatic consequences downstream or upstream and affect the quality of surface and groundwater far from a mine site. Appropriate setbacks from surface water bodies will vary from case to case, but in general, a minimum setback of 200 feet is recommended between excavation limits and the ordinary high water level of surface water bodies, including lakes, rivers, and streams. For in-water work, a U.S. Army Corps of Engineers Section 404 permit for discharging dredged or fill material would be required. BMPs for in-stream work would be site-specific and

addressed in the permit. Mine sites that affect levee-protected areas may require a U.S. Army Corps of Engineers Section 404 permit.

4.1.3 Groundwater and Working Below the Water Table

In general, it is recommended that mines maintain a minimum of four (4) feet of vertical separation distance between extraction operations and the seasonal high water table, and that they restrict activities that could significantly change the natural groundwater gradient.

If mining must be done below the water table, groundwater may become exposed. Upon issuance of a local government conditional use permit, if available, allowing extraction of materials from below the seasonal high water table, no extraction should be performed below the first aquitard encountered within the saturated zone. During the active operation phase of a gravel pit, the top portion of the groundwater is considered treatment works, as authorized under 18 AAC 60 or 18 AAC 72, as long as it does not come in contact with hazardous contaminants. When operation at the gravel pit ceases, the exposed groundwater will once again become a water of the state. At that time, the water will need to comply with water quality standards based on the applicable designed use.

Notice to discharge is required under the Excavation Dewatering General Permit (EDGP) for discharges to land of equal to or greater than 250,000 gallons, or discharges to land at a rate equal to or greater than 40 gallons per minute. For discharges less than this volume and rate, notice under the Excavation Dewatering General Permit is not required; however, the discharge requirements in the permit must be followed. The Multi-Sector General Permit (MSGP) covers excavation pit dewatering discharges to surface waters. However, if an operation is within 1 mile from a contaminated site, the MSGP does not apply and authorization under the EDGP may be required. The DEC will provide more information on conditions and best management practices for a specific site in its permit. If excavation dewatering is needed, BMPs will be required to minimize adverse impacts to the receiving waters resulting from dewatering activities. Some general BMPs for dewatering are presented in Chapter 8.

4.2 Monitoring

Monitoring is the best way to measure the impact of a mining operation on surface water or groundwater quality, and is often required by permit. If required by permit, parameters to be monitored will be specified. Monitored parameters often include:

- surface water and groundwater elevation,
- surface water and groundwater flow,
- surface water and groundwater temperature,
- turbidity,
- pH,
- specific conductance, and
- likely contaminants.

The appropriate or required timeframe for monitoring will vary from case to case, but in general a good practice is to monitor relevant parameters at least 1 year prior to mining, throughout mining, and at least 1 year after reclamation is complete. Monitoring prior to mining provides a baseline record of preexisting conditions and establishes a range of seasonal variability and responsiveness to external influences among measured parameters. Once mining has started, this baseline data cannot be obtained. Monitoring during mining allows early detection of impacts and provides opportunities to evaluate BMP effectiveness and implement additional or different BMPs as needed. Monitoring after reclamation can provide early indications of slow onset problems that may develop after mining shuts down, such as acid drainage. A thorough monitoring program protects both water quality and the mining operation. It is much easier to resolve disputes quickly and fairly with a complete and comprehensive set of data in hand. Modern datalogging equipment can be used to measure and record many parameters at a high frequency with relatively low labor costs. High frequency data provides the ability to evaluate and document impacts from things like climactic and flood events.

Water quality sampling and hydrologic data collection should be accomplished under the supervision of a qualified professional engineer, hydrogeologist, or hydrologist and follow a written sampling plan approved by the permitting agency. All data should be made available to permitting agencies upon request, with the understanding that the permitting agency may provide the data to other public agencies and to the general public upon request.

DEC has prepared a document entitled Monitoring Well Guidance, which provides recommendations for monitoring well construction, maintenance, and decommissioning (http://dec.alaska.gov/spar/csp/guidance/Monitoring%20Well%20Guidance.pdf).

4.3 Detailed Hydrogeologic Studies

Where proposed mining is closer to PWS sources, surface water bodies, or groundwater than the setbacks recommended in this chapter, it is recommended that a detailed hydrogeologic study be performed to evaluate surface and groundwater relationships and potential impacts, and to design effective mitigation alternatives. The hydrogeologic study should be conducted by a qualified person and address the following general framework, modified from Fellman (1982):

1. Geology, topography, and drainage
2. Surface Water
    - Location
    - type (e.g., river/stream, gradient, flow volume, seasonal variability in flow, etc.)
    - present surface water quality and quantity
    - present use of surface water
3. Groundwater
    - depth to groundwater
    - aquifer type (e.g., confined, unconfined, multiple aquifers, perched water, geologic material description, etc.)

- groundwater gradients, flow rates, flow directions
- surface water and groundwater interaction
- present groundwater quality and quantity
- present use of groundwater

4. Determine possible effects of mine development on water quality and quantity
5. Develop strategies to mitigate possible effects
6. Establish a monitoring program

5 HOW TO CHOOSE BEST MANAGEMENT PRACTICES

This chapter discusses types of BMPs, BMP selection criteria, and some issues to consider when selecting BMPs. In most cases, one BMP will not meet all the goals of a project. Appropriate BMPs for a project may vary seasonally, may be site specific, and may depend on the phase of mine operation. Chapters 6 through 9 provide detailed BMPs for preventing chemical pollution, controlling erosion and sediment, managing stormwater, mine operations, and mine reclamation. This chapter discusses the process of selecting appropriate BMPs.

Key Points – Chapter 5

- Source controls are usually more cost effective, easier to implement, and more effective than treatment controls.
- The selection of a BMP will most likely be driven by cost, effectiveness, availability, feasibility, durability, compatibility, and operation.
- Several factors, including climate and soil type, impact the effectiveness of a BMP.
- Using BMPs at your site may result in more money in your pocket and more fish in Alaska's streams.

The first steps in selection of BMPs are to understand the site, understand regulatory requirements (see Chapter 2), and determine potential impacts (see Chapter 3). Local, regional, and statewide issues, concerns and requirements should also be considered, as these will also influence aspects of planning, the selection of the BMPs, and the time frame for implementation. With intelligent mine planning, BMPs can be implemented in such a way that they complement one another and efficiently achieve impact mitigation goals.

5.1 Types of BMPs

Stormwater BMPs are implemented at two general levels:

- ***Source controls***: practices that prevent pollutants from coming in contact with stormwater.
- ***Treatment controls***: practices that treat stormwater once it has come into contact with pollutants.

Source controls are given priority over treatment controls, as they are generally more cost effective, easier to implement, and more effective at minimizing pollution. Source controls include things like vegetating bare slopes to prevent wind and stormwater from transporting sediment, restricting mine traffic to haul roads, and using wheel washers to avoid tracking sediment. Treatment controls are practices that reduce pollutants in water through chemical or physical systems, like settling ponds or oil-water separators.

5.2 Selection Criteria

To determine best practices for a specific project, a menu of potential BMPs should be identified with the goals of the project in mind. Selection criteria for BMPs can include:

- Effectiveness
- Implementation cost
- Temporary vs. permanent
- Cost of construction
- Long-term cost (operation and maintenance)
- Suitability for the site, including environmental compatibility
- Regulatory acceptability
- Availability
- Durability
- Longevity
- Ability to achieve vegetation schedule
- Technical feasibility
- Public acceptability
- Risk/liability

Of these criteria, cost, effectiveness, availability, feasibility, durability, compatibility and operation will most likely drive the selection of a particular BMP. Each of these factors is discussed below. Information was obtained from Oregon Department of Environmental Quality's *Erosion and Sediment Control Manual* (April 2005).

Cost. Things to include in the evaluation of cost effectiveness of a BMP include material costs, preparation costs, installation costs, maintenance costs, and cost of government requirements.

Effectiveness. BMPs should only be implemented if they will be effective. Not all BMPs work in all types of conditions.

Availability. The BMP materials must be readily available from a local supplier or be capable of immediate shipment to the area within the timeframe designated by the plans. This may be a significant issue in Alaska, specifically in areas not accessible by a road year round.

Feasibility. The BMP materials must be capable of relatively quick and easy application with minimal training required. Each BMP should be considered for its flexibility or applicability to a variety of field conditions. Factors to be considered relative to feasibility include:

- The number of steps needed to apply the BMP;
- Whether machinery is required;
- Whether locally available materials can be utilized; and
- The time required for the BMP to be operational, including time needed to not be affected by rainfall.

Durability and Compatibility. Given the nature of the site conditions, the BMP materials must maintain their structural integrity throughout use. History of durability in Alaska or cold weather climate is important. Environmental compatibility is also highly important. For example, if using a vegetative cover BMP, the plants chosen for the vegetative cover must be compatible with

native plants and the climate. The State of Alaska suggests using native plants. The Alaska Plant Materials Center (contact information listed in Appendix B) has published, "A Revegetation Manual for Alaska," which can be found at http://dnr.alaska.gov/ag/RevegManual.pdf.

Operation. Regardless of the BMPs selected, follow-up is always required. Maintenance and repair requirements, and their cost, should be considered. Training of staff for BMP operation may be required for optimal effectiveness of the BMP selected.

Information regarding the required material, equipment, costs, specifications (including operation and feasibility) and compatibility for individual BMPs is provided in Chapters 6 through 9.

5.3 General Considerations

Some issues to consider when choosing BMPs include the following:

- Consider how selected BMPs will work when implemented together as part of a system.
- Climate, particularly precipitation and winds, may have the biggest impact on what type of BMPs are needed for stormwater, erosion, and sediment control.
- Where possible, significant grading operations or exposure of soil should be planned during periods of low rainfall.
- Total exposed soil areas and duration of exposure should be reduced during high rainfall times.
- Wheel washing activities may be needed during high rain events to reduce tracking of sediments.
- Sediment control measures such as berms and silt fencing may not alone adequately reduce discharge during high rainfall.
- Higher than normal amounts of runoff may need to be diverted during high rain events.
- BMPs may need increased inspection and maintenance in areas or times of high rainfall.

5.4 Special Conditions

In addition to the issues discussed previously in this section, some projects may need to consider special operations in choosing appropriate BMPs. Some situations that require special consideration include the dewatering of an excavation pit, mining of gravel below the water table, gravel washing operations, and working in streams and rivers.

5.5 Benefits of Best Management Practices

Properly selected and maintained BMPs can result in economic and environmental advantages for gravel extraction businesses in Alaska.

Some of the **economic benefits** gained from an aggressive soil stabilization plan for a gravel pit may include:

- Stabilized slopes require less repair and are safer for operators;
- Reducing short- and long-term erosion will result in less soil loss;
- Reduction in restoration costs at the end of the project;
- Negative public opinion can be minimized;
- Liability exposure can be decreased; and
- The potential for monetary fines from non-compliance to a permit can be reduced or eliminated.

Some of the **environmental benefits** of effective BMPs are:

- Protection of fish spawning areas, their food sources and habitat;
- Reduction of toxic materials that are introduced into the environment by their attachment and transport by sediment particles;
- Lowered impact on commercial fisheries from decreased sediment;
- Improved water storage capacities in lakes and wetlands; and
- Protection of receiving waters with designated uses such as for drinking water, recreation and wildlife habitat.

6 BEST MANAGEMENT PRACTICES FOR PREVENTING CHEMICAL POLLUTION

Chemical pollution can occur at mine sites due to reactions that release chemicals from the naturally occurring materials, such as acid mine drainage, or by the release of chemicals brought to the site, such as diesel fuel or antifreeze. This chapter provides BMPs to mitigate common forms of both types of chemical pollution. Chemical pollutants can be mitigated with both source and treatment controls. However, as discussed in Chapter 5, source controls are generally more cost effective, easier to implement, and more effective in minimizing pollution.

Key Points – Chapter 5

- Sources of chemical pollution include:
  - Chemical reactions involving naturally occurring materials
    - Acid Mine Drainage
    - Radioactivity
  - Release of chemicals brought to the site
    - Petroleum Products
    - Antifreeze

6.1 Pollution From Native Materials

6.1.1 Acid Mine Drainage

Acid mine drainage (AMD) results from weathering of acid-forming minerals, such as pyrite (FeS_2), in the presence of water and oxygen. The weathering reaction forms sulfuric acid (H_2SO_4), which can drastically lower the pH of surface and groundwater and allow toxic levels of metals to leach into it. While it may occur on natural rock outcrops, it can be exacerbated by excavation for mining or road building.

The first step in preventing AMD is determining if and where acid forming materials are located on your site. Published geologic maps and qualified professionals can help you determine if acid forming materials, such as pyrite, are likely to exist on your site. AMD is most intense in environments where the acid-forming material is cyclically wetted and dried. The key concept in preventing AMD is preventing the weathering reaction in acid-forming materials that generates acid. This is done by limiting the material's exposure to oxygen or water, or both. AMD can be prevented as follows:

- Separate spoils containing acid forming materials for immediate disposal.
- Dispose of the acid-forming material in a designated area with a liner and cap sufficient to keep the weathering reaction from occurring.
- Immediately deal with seams of acid forming minerals remaining in highwalls. This can be done by covering the exposure with water in a permanent impoundment. The impoundment will need to be treated with a buffering agent such as lime until the reaction stabilizes.

If AMD is already occurring at a site, it may be mitigated in part by active or passive measures. Active measures include direct chemical treatment systems. In these systems, chemicals, like lime, are added to the drainage to neutralize acidity and cause metals to precipitate. This often results in a metal-laden sludge which must also be disposed of appropriately. Passive systems, which typically are designed for longer term (decades long) treatment, include constructed anaerobic wetlands and limestone drains. Passive measures are preferred, as they have lower overall maintenance costs.

- To construct an anaerobic wetland, mix limestone with an organic substrate, such as chicken litter. The limestone will reduce the acidity and, in anaerobic conditions, bacteria will remove some of the metal ions. Plants may also incorporate metal ions, helping to fix them to that location.
- A limestone drain is a conduit filled with coarse limestone fragments through which AMD passes. If kept anoxic (covered and saturated), the limestone will reduce acidity without causing metals to precipitate. Precipitates will form when the water comes into contact with oxygen outside the drain, and sludge can be collected in a pond there. The sludge can be placed as a lined and capped fill or sold, if metal content is sufficient. If the drain is open to the air, precipitates may armor the limestone and reduce efficacy.

6.1.2 Radioactive Tailings

Uranium is a naturally occurring radioactive element. It is also soluble in water. If present in uncovered tailings, Uranium can migrate into surface and groundwater, creating increased risk of radiation exposure. Tailings or other excavated materials that may contain Uranium should be isolated from surface and groundwater interaction. This can be accomplished by surrounding the Uranium-bearing fill with a clay liner and cap.

6.2 Petroleum Products

6.2.1 Storage and Handling

- Petroleum product storage and handling should not be performed within PWS source buffer zones, within 200 feet of surface water bodies, or directly adjacent to mining pits, particularly if groundwater is exposed.
- Fuel transfer should always be supervised by an employee to prevent overfill or spillage.
- Storage tanks should be inspected at least once per month.
- Storage tanks should have a secondary containment structure that is impervious to the contents of the tank, that is large enough to accommodate precipitation events, and that has a sump or valve for draining rainwater.
- Water accumulated in containment areas should be visually inspected for the presence of a rainbow sheen, indicating petroleum product contamination. If rainbow sheen is present, the water should be removed for appropriate disposal or allowed to evaporate,

but it should not be discharged. It is illegal to apply any type of oil dispersant without prior state authorization from DEC (this includes soap/dish detergent).

6.2.2 Used Oil

- Used oil can be burned for energy in a properly vented used-oil burner or transported off site for disposal or recycling.
- Check local regulations prior to burning used oil for energy or disposal in a burner or incinerator.
- Do not pour oil into the ground.
- Do not use oil for dust abatement.
- Do not use oil for weed control.

6.2.3 Designated Equipment Maintenance Areas

- Restrict equipment maintenance activity to one area at a site, outside PWS source buffer zones.
- Use drip pans when disconnecting lines to collect dripping fluids.
- Place oil-laden parts on a drip pan instead of the ground.

6.2.4 Hazardous Material Control (HMC)

- Prevent spills by implementing BMPs for the use, storage, and handling of petroleum products.
- Have a Hazardous Materials Control (HMC) Plan that addresses all types of spills possible at the site, such as fuel, hydraulic oil, grease, antifreeze, leaching chemicals, etc.
- Train employees on the HMC plan and practice it annually.
- Have spill response equipment on hand, including:
    - pads, booms, absorbents, shovels
    - containers (drums, dumpsters, etc.) to hold spilled waste and used absorbent products
    - protective equipment, like gloves
- Do not use water to dilute spills.
- For larger spills, use soil and booms to contain and divert spilled product away from surface water and mining pits.
- Have a defined, appropriate off-site disposal agreement in place and train staff on waste management.

6.2.5 Oil/Water Separators

If petroleum products spilled on a site make their way into stormwater runoff, they can be removed through the use of oil/water separators. Oil is less dense than water and will float to the surface if the two are mixed. Figure 6-1 shows two examples of possible oil/water separator designs that make use of this principal. Separated oil can be removed with absorbent pads or by skimming and disposed of appropriately. Keys to successful implementation of oil/water separators include:

- sufficient surface area for the oil to remain on the surface of the water,
- low enough water velocity to avoid mixing, and
- adequate residence time in the sediment pond for sediment to settle out before separation, and
- regular maintenance and clean out.

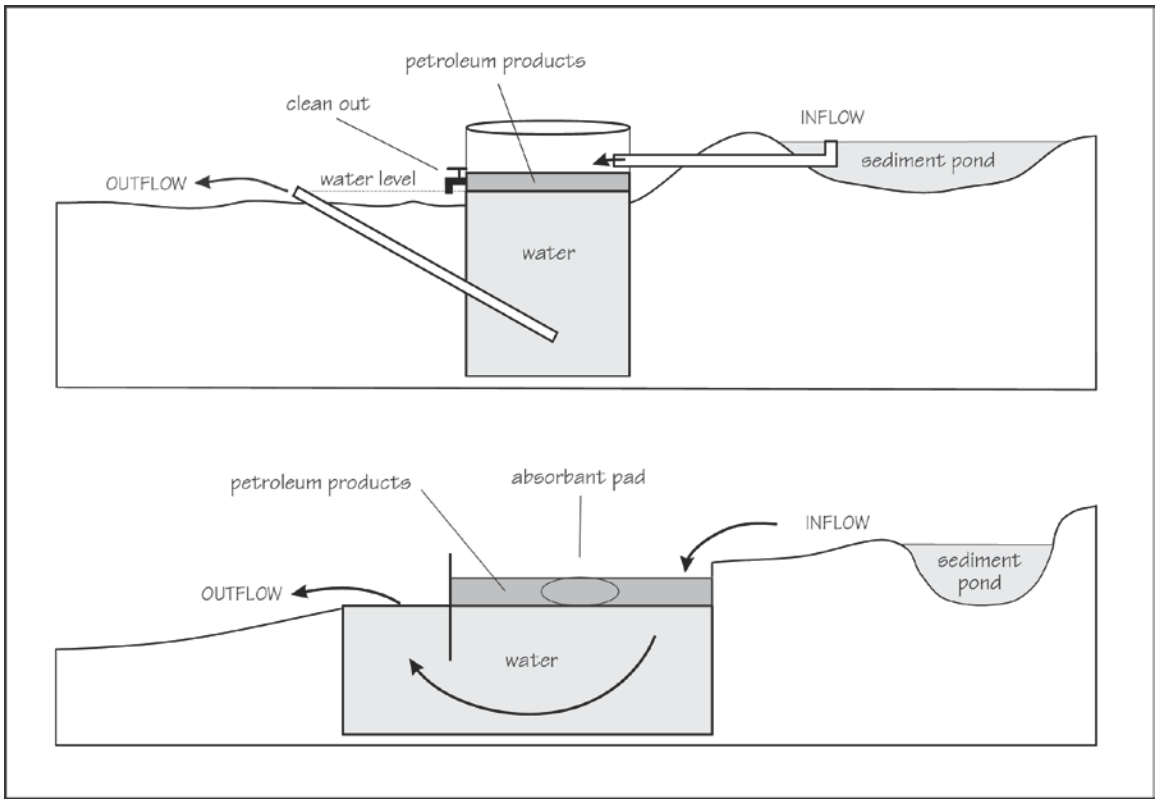


Figure 6-1: Oil Water Separator Details
(Modified from Washington State Department of Natural Resources, 1997.)

6.3 Hazardous Waste

Activities at a mine site may generate hazardous waste. Hazardous waste is any waste material that could be dangerous to human health and the environment. It is the mine's responsibility to determine whether a waste is hazardous or not. The federal government publishes lists of hazardous wastes and regulations regarding them. They may be found at http://www.epa.gov/osw/laws-regs/regs-haz.htm.

7 EROSION CONTROL, SEDIMENT CONTROL, AND STORMWATER MANAGEMENT

Key Points – Chapter 5

- Rain, wind, and melting snow can dislodge sediment and carry it to surface water bodies, degrading their quality.
- Use BMPs in this section to:
  - Prevent erosion
  - Control eroded sediment
  - Manage and treat stormwater

Stormwater is water runoff from rain and melting snow. Runoff can be sheet flow off of a site or it can drain to streams and ditches that route it to rivers, lakes, and marine water. In some areas, runoff is routed to storm drains, which ultimately discharge to surface waters. When stormwater flows across exposed soils, construction sites, or pavement, it can pick up and carry sediment, oil, bacteria, road runoff and other pollutants. Sediment and associated pollutants can clog ditches and culverts, destroy habitat and reduce oxygen for fish, and be toxic to aquatic life. Stormwater runoff is a common cause of water pollution and is a challenge to control. The key to limiting impacts is to prevent erosion, capture and control sediment that does erode, and proactively manage stormwater runoff, including runoff that comes to your site from other properties. It is important to remember that stormwater can run off of other properties and onto your site, bringing increased erosion potential and contaminants with it.

Erosion Control is any practice that protects the soil surface and prevents the soil particles from being detached by rainfall, snowmelt, or wind.

Sediment Control is any practice that traps the soil particles after they have been detached and moved by wind or water. Treatment controls, as well as source controls, can be used in controlling the transport of sediment. Such controls include passive systems that rely on filtering or settling the particles out of the water or wind that is transporting them.

Stormwater Management is the practice of collecting stormwater, diverting it away from disturbed areas, collecting it for treatment (if necessary), and discharging it to a receiving area with the capacity to absorb it.

In general, erosion control and good stormwater management practices are more effective than sediment controls, and are preferred because they keep the soil in place and enhance the protection of the site resources.

When implementing erosion and sediment control BMPs, the following principles should be adhered to as much as possible:

- Fit the natural topography, soils, and vegetation of the site;
- Minimize disturbances to natural vegetation;
- Minimize soil exposure during high precipitation storm events;
- Vegetate disturbed areas;

- Minimize concentrated flows and divert runoff away from slopes or critical areas;
- Minimize slope steepness and slope length;
- Utilize channel linings or temporary structures in drainage channels to slow runoff velocities;
- Keep sediment on-site using settling ponds, check dams, or sediment barriers; and
- Monitor and inspect the site frequently and correct problems promptly.

Erosion control systems cannot perform adequately without the control of runoff. It is important to control flow of runoff to prevent scouring exposed soil. Diverting stormwater away from potential pollutant sources and/or managing runoff from a site are one category of source control BMPs. Numerous factors may affect the amount of runoff generated from a site, including the following:

- Precipitation;
- Soil permeability;
- Watershed area; and
- Ground cover.

The risk of high sediment discharge is greatest in the spring when vegetative cover is not yet established and snowmelt runoff occurs. As winter ends, ensure all appropriate BMP structures are in place and that any elements damaged over the winter are repaired.

7.1 Erosion Control

7.1.1 Vegetation

From temporary stockpiles to permanent reclamation of slopes, vegetation is one of the very best guards against soil erosion. Vegetation is so effective because, if implemented properly, it is self-sustaining and works to protect the soil in a variety of ways. Vegetation absorbs some of the energy of falling rain. Its roots hold soil in place and maintain the moisture-holding capacity of the soil. It reduces groundwater infiltration through evapotranspiration, which is the sum of water reintroduced into the atmosphere by evaporation and plant transpiration. In transpiration, water moves up through a plant and is released into the atmosphere as water vapor through stomata in its leaves. At the ground surface, the presence of vegetation reduces surface flow velocities. Additional benefits of vegetation can include noise reduction, dust control, and improved visual appearance. Some guidelines for vegetation are:

- If an area is already vegetated and does not need to be disturbed, do not clear it.
- If an area must be cleared for mining, clear only the amount needed for expansion within one year.
- As an area is cleared, save the sod or slash and stake it down over the cleared slopes to temporarily filter runoff until the area is mined.

- Replace topsoil, revegetate, and reclaim mined areas as soon as possible.
- Use native species whenever and wherever possible. It would be ideal to use the same species that were cleared, but the growth rates of the native plants and the need for more immediate erosion control may make that impractical.
- Use plant species that are appropriate for the application and climate, and plant them at the appropriate time of year. Table 7-1 summarizes plant species that are commonly used at sites in Alaska.

The Alaska Plant Materials Center, under the DNR Division of Agriculture, has created a manual to help those involved in revegetation efforts select appropriate seed mixes and methods for revegetation. Gravel/rock aggregate extraction site operators should refer to this document, *A Revegetation Manual for Alaska* (2008) for detailed guidance on region-appropriate plant species and revegetation methods. It can be found at: http://dnr.alaska.gov/ag/RevegManual.pdf.

Additional information, including local sources for native plants and seeds, can be found on the Alaska Plant Materials Center website: http://plants.alaska.gov/index.php.

Table 7-1: Species/Cultivar Characteristic Chart (adapted from A Revegetation Manual for Alaska, 2008)

Species	Cultivar Or Equivalent	Availability[1]	Site Conditions Adaptation	Growth Form[2]	Height Average	Region Of Use[3]
Bluegrass, Alpine Poa alpina	Gruening	Fair	Dry	Bunch	6 in.	All
Bluegrass, Glaucous Poa glauca	Tundra	Fair	Dry	Bunch	10 in.	A,I,W
Bluegrass, Kentucky Poa pratensis	Merion	Excellent	Lawns	Sod	10 in.	I,SC,SE
Bluegrass, Kentucky Poa pratensis	Nugget	Good	Lawns	Sod	10 in.	I,SC,SE
Bluegrass, Kentucky Poa pratensis	Park	Excellent	Lawns	Sod	10 in.	I,SC,SE
Fescue, Red Festuca rubra	Arctared	Very Good	Dry to Wet	Sod	18 in.	All
Fescue, Red Festuca rubra	Boreal	Excellent	Dry to Wet	Sod	18 in.	W,I,SE,SC, SW
Fescue, Red Festuca rubra	Pennlawn	Excellent	Dry to Wet	Sod	12 in.	I,SC
Hairgrass, Bering Deschampsia beringensis	Norcoast	Good	Dry to Wet	Bunch	20 in.	All
Hairgrass, Tufted Deschampsia caespitosa	Nortran	Good	Dry to Wet	Bunch	20 in.	All
Polargrass Arctagrostis latifolia	Alyeska	Fair	Wetter Areas	Sod	24 in.	A,I,W,SC
Polargrass Arctagrostis latifolia	Kenai	Fair	Wetter Areas	Sod	24 in.	SC,SE,SW
Reedgrass, Bluejoint Calamagrostis canadensis	Sourdough	Fair	All	Sod	36 in.	All

1. Availability varies from year to year and within any given year.
2. Growth form and height will vary with conditions.
3. Region of Use: W = Western Alaska; I = Interior Alaska; SE = Southeast Alaska; SC = Southcentral Alaska; SW = Southwest Alaska; A = Arctic Alaska; All = All of Alaska.

7.1.1.1 Water and Fertilizer

Adequate water and nutrients are essential for successful revegetation. If it is suspected that the topsoil may be lacking in nutrients when it is time to plant, it may be worthwhile to have a chemical analysis done on it in order to determine what types of fertilizers would be helpful. When using fertilizers, try to apply them under conditions in which they are less likely to wash off into streams, rivers, and lakes. Losing fertilizer to surface water can have negative impacts on the ecological balance and is a waste of fertilizer.

7.1.1.2 Erosion Control Blankets and Mulching

Erosion control blankets are geotextiles made from natural materials, such as jute, coconut husk fibers, and straw, or synthetic materials like plastic. They help to hold seed and soil in place until vegetation is established. Erosion control blankets are very effective, but often prohibitively expensive for large areas. Mulching and hydroseeding are cheaper and also effective, though less effective in steep, erosion prone areas. A good practice is to use a combination of erosion control blankets in oversteepened and erosion-prone areas and to use mulch elsewhere to stabilize soil while vegetation becomes established. The effectiveness of blankets is greatly reduced if rills and gullies develop, so proper anchoring and ground preparation are important. The type of blanket selected depends on the longevity required, the gradient, climate, and other factors. The drawing below is one example. Follow the manufacturer's specifications for installation and stapling requirements.

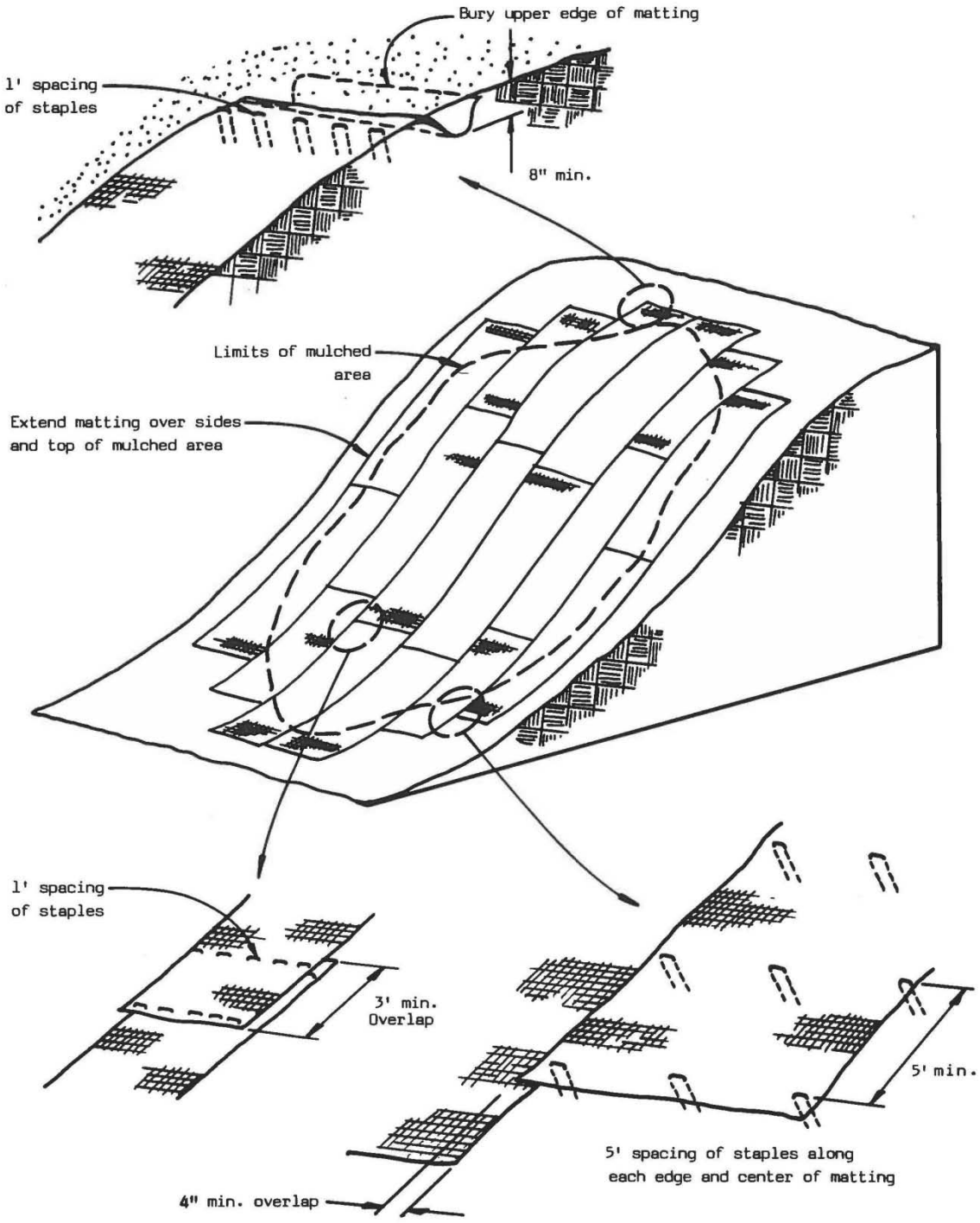


Figure 7-1: Erosion Control Blanket Installation
(Modified from Idaho Department of Lands, 1992.)

7.1.2 Wind Protection

Wind protection is any structure or method to block or reduce wind flow. The purpose of the BMP is to reduce the exposure of dust-generating material to wind. Techniques that reduce the exposure of dust-generating material to wind, or reduce the velocity of wind, will help in controlling dust generation and distribution (such as onto area vegetation or into surface waters)

and in maintaining air quality. This BMP is appropriate for active and inactive sites with exposed soils, and is particularly useful around operations such as screening or crushing activities. Generally, wind protection includes:

- berms with trees and vegetation either placed or left in place;
- barriers, such as fences, around activities that might produce dust, such as screening and crushing (these barriers create a low pressure shadow which allows particles to settle to the ground rather than being released in the air and possibly settling off-site);

Windbreaks, whether composed of natural vegetation or fencing, will reduce wind speed for a distance of as much as 30 times the windbreak's height. For maximum protection, a windbreak setback should be two to five times the mature height of the trees. Other activities that might help reduce releases of dust include placing erodible mined materials in bays or bunkers, creating temporary enclosures or other containment, and covering transportation loads with tarps.

Figure 7-2: Wind Protection Example
(Photo: Alaska Sand and Gravel)

7.1.3 Grading

Grading is used for surface re-contouring, site operations, for implementing erosion control practices, and reclamation. A good grading plan will address sediment and runoff control needs, as well as final site stabilization or revegetation goals. Prepare a grading plan that details:

- slope angles and grade lengths;
- how graded areas are to be stabilized and protected from runoff;
- where and how excess earth material will be stored or disposed;
- berms for visual and wind protection;
- what potential new erosion and sediment loss conditions must be addressed;
- what drainage areas, patterns, and runoff velocities might be affected, and what provisions must be made, such as check dams or settling ponds; and
- seasonal or weather conditions that are of concern.

If possible, grading should not be done during an extreme rainfall event. Also to the extent possible, stabilize graded areas with hydroseed, vegetation, crushed stone, riprap, or other appropriate ground cover as soon as grading is completed. Use mulch or straw to temporarily stabilize areas where final grading must be delayed, and optimize finished slope angles for successful revegetation. During final grading, roughen slopes to retain water, increase infiltration, and facilitate root growth. In areas with high water tables, install underground drainage to prevent seepage, and thus keep the surface dry. Stable channels and floodways must be maintained to convey all runoff from the developed area to an adequate outlet, to avoid causing increased unintended erosion, ground instability, or off-site sedimentation.

7.1.4 Chemical Soil Binders

Chemical soil binders can be used as a cost effective alternative to geotextiles, or as an additive to mulches, as a means of protecting soil from erosion while vegetation becomes established. The binders are typically long chain polymers that work by binding soil particles together. The material usually comes in a liquid or powder form, is effective for 90 to 180 days, and costs on the order of $50 per acre. The chemical soil binder used should be tailored to the specific soil conditions found at the site. They should not be used where they might wash into surface water bodies or where forbidden by permit.

7.1.5 Biotechnical Slope Stabilization

Biotechnical stabilization uses live layers of brush imbedded in the ground to reduce surficial erosion and the risk of shallow slope failures. Steps:

- Cut branches and stems of trees and bushes up to 3 inches in diameter, preferably during the dormant season (fall or early spring).
- Lay the branches and stems between lifts of compacted soil in a criss-cross fashion so the structure extends the full width of the fill. Branches should protrude from the face of the fill slope.
- Space horizontal brush layers no more than 3 to 5 feet apart vertically. Closer spacing may be appropriate near the base of the slope.

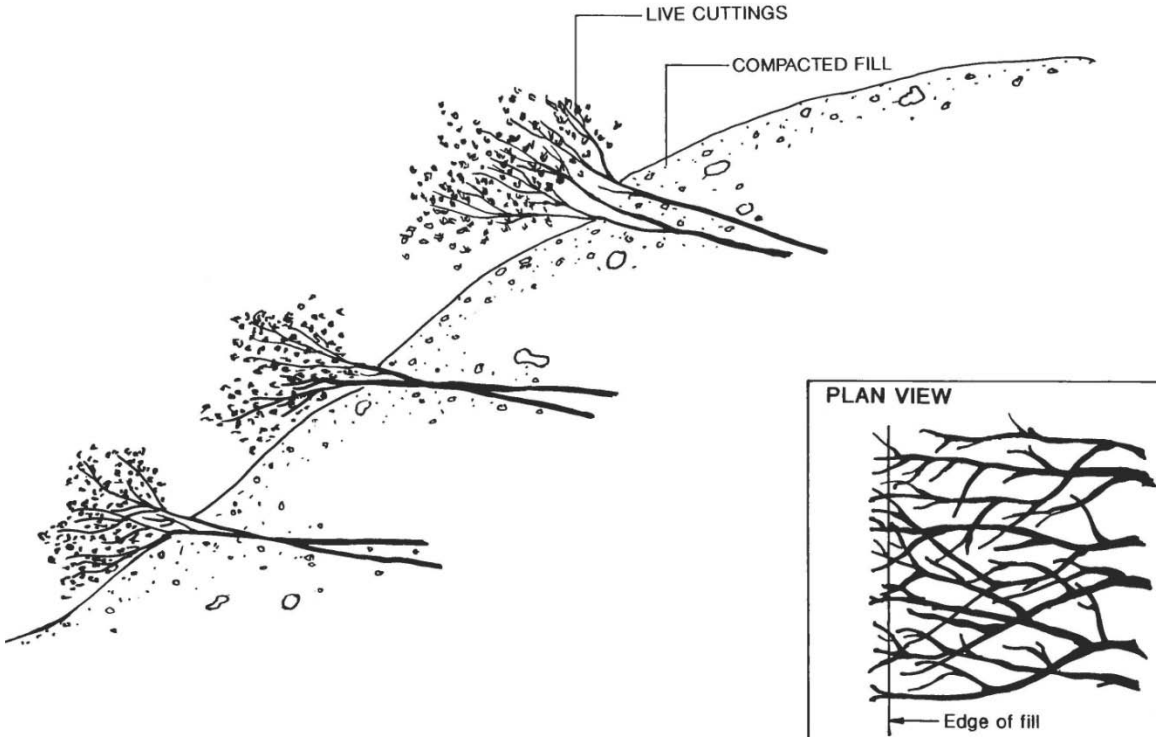
- Alternate layers of brush and compacted fill from the toe to the top of the slope.
- Ideally, the cuttings will root and live shoots will develop, which will help control erosion.
- 

Figure 7-3: Biotechnical Stabilization Detail
(Modified from Idaho Department of Lands, 1992.)

7.1.6 Covering, Tarps, Geotextiles, and Caps

Slopes and stock piles can be covered with a variety of materials for a number of purposes. Some reasons to cover piles include immediate dust and erosion control, establishment of vegetation for sustainable erosion control, chemical stabilization of acid-forming material (reducing water and oxygen), and preventing contaminant release by reducing infiltration. Materials and applications are discussed below.

Tarps – for short term dust and erosion control.

Tarps (tarpaulins) are a synthetic fabric usually made of vinyl, vinyl-coated polyester, or polyethylene. They can be placed over piles and fixed with pins, stakes, ropes, or ties, and weights like sandbags or tires. Edges should overlap like shingles to shed water. Tarps are effective in temporarily reducing erosion from light wind and stormwater. They tend, however, to degrade quickly. If long term erosion control is needed, other BMPs such as vegetation and geotextiles should be considered.

Geotextiles – for erosion control while establishing vegetation.

The term geotextile encompasses a wide variety of fabrics, some made of natural materials and some synthetic. Geotextile manufacturers can typically recommend

appropriate products for specific applications. Typical uses of synthetic geotextiles at mine sites include use in silt fences (see page 34) and use as a liner for structures like trench drains (see page 38). Natural geotextiles, such as a coconut fiber mesh, can be used to reduce erosion on piles or slopes while vegetation is being established. They degrade over time, but their function is usually taken up by the vegetation they helped to foster.

Caps – for reducing infiltration and availability of oxygen.

Capping material to seal in contaminants, reduce infiltration, or reduce oxygen exposure is typically accomplished with a layer of very low permeability sediment, such as clay. Cap design thickness depends very much on the performance requirements of the cap, the environment, and the properties of material used in the cap. Caps are often on the order of a couple of feet thick. In situations where contaminants like acid rock drainage are involved, cap performance should be monitored. Permanent caps can be covered with topsoil and vegetated.

7.1.7 Riprap Stabilization

Riprap is loose, hard, angular rock (stone) placed over soil to help protect against erosion. It is generally used to protect ditches and channels (Figure 7-4), shorelines and stream banks, or drainage outlets. General guidelines to install riprap stabilization include:

- Place a layer of filter material (geotextile, sand, or fine gravel) between the soil to be protected and the riprap to prevent soil from migrating into the riprap.
- For the riprap, select a mixture of stone sizes. The mixture should contain mostly large stones, with enough smaller clasts to fill most of the void between the larger ones. The appropriate size of the riprap will depend on the site. Faster flows will require larger stones to protect against erosion. Some technical guidance on proper sizing of stones for riprap based on water velocity and other factors is provided in *Stream Restoration Design, Part 654 of the National Engineering Handbook*, published by the United States Department of Agriculture Natural Resource Conservation Service, available at http://www.nae.usace.army.mil/reg/nrrbs/TECHNICAL-SUPPLEMENTS/TS14C.pdf.
- Carefully place the riprap so as not to damage the filter material liner.
- In general, the thickness of the riprap layer should be 1.5 times the diameter of the largest stone, and no less than 6 inches thick.
- For shore or bank protection, riprap should be placed along the slope from a depth of 3 feet below the water line to a point above the high water mark where vegetation can be established.
- Routinely inspect riprap stabilization and repair it immediately if it becomes damaged or moves. If disruption is frequent, larger stones may be needed.

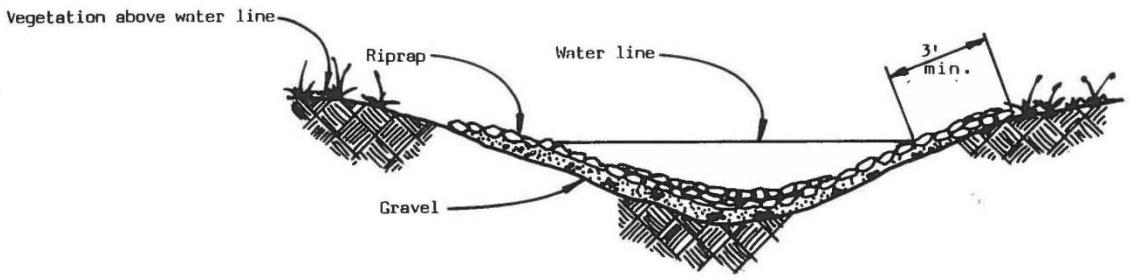


Figure 7-4: Riprap Stabilized Channel or Ditch
(Modified from Idaho Department of Lands, 1992.)

7.1.8 Outlet Protection

Outlet protection prevents scouring and sediment disruption at the location of outlets. It is typically established using riprap stabilization techniques (see page 31) to create an apron immediately below where the outlet releases to the receiving area. If needed, outlet protection can be upgraded to include sediment screens (Figure 7-5) or devices to prevent upstream fish migration.

Figure 7-5: Outlet Protection Example

7.2 Sediment Control

7.2.1 Sediment Barriers

Sediment barriers are used along the bottom of stockpiles or disturbed areas that trap sediment while allowing water to pass through. Three common types of sediment barriers are straw bale barriers, silt fences, and brush barriers. All of these are temporary measures and should be used to keep sediment contained until the source can be better controlled.

7.2.1.1 Straw Bales

Straw bales can be used to make successful sediment barriers, but are often poorly installed and therefore ineffective. Keys to good installation are:

- Set straw bales in a 6-inch-deep trench with vertical walls, dug along a topographic contour (Figure 7-6).
- Anchor the bales using rebar or steel pickets.
- For higher flow, combine with a gravel check dam (Figure 7-7).

Straw bales are best used as a short-term solution to relatively small sediment problems. They will float until they are wet and will typically last only 3 months once they become wet. Straw bale barriers in swales generally should not receive flows greater than about 0.3 cubic yards per second, and sediment should be removed once it reaches half the dam height. Keep in mind that when straw bale barriers fail, which they ultimately will if they are neglected and never removed, there if often more damage done than if no barrier had been installed. Straw wattles can be used for similar purposes as straw bale barriers, and have similar installation guidelines and limitations.

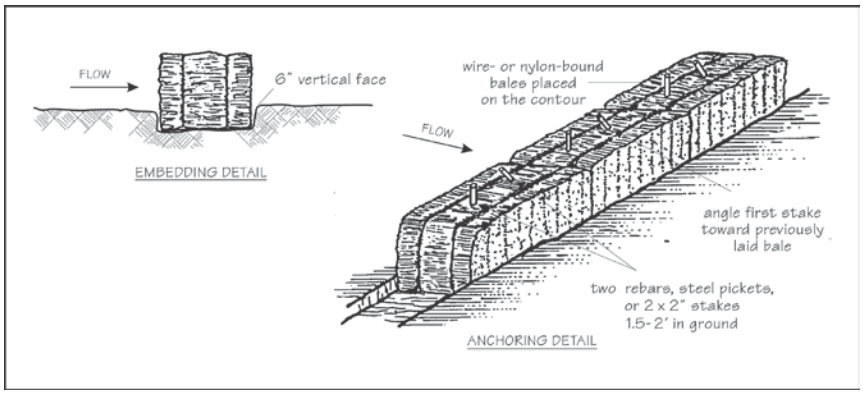


Figure 7-6: Straw Bale Sediment Barrier Detail
(Modified from Washington State Department of Natural Resources, 1997, and Idaho Department of Lands, 1992)

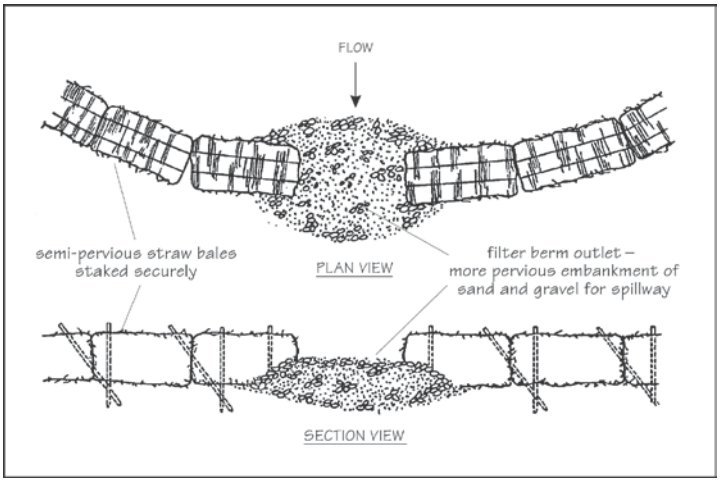


Figure 7-7: Straw Bale Sediment Barrier Detail
(Modified from Washington State Department of Natural Resources, 1997, and Idaho Department of Lands, 1992)

7.2.1.2 Silt Fences

A silt fence is a temporary liner or barrier that slows down or prevents silt or other sediments from moving away from disturbed areas. It is placed perpendicular to slopes below disturbed areas that may be affected by erosion. Using synthetic fabric or geotextile, the silt fence is staked in place and reinforced. Typically, silt fences are less than three feet in height to prevent failure with too much water pressure. Ideally, a silt fence is installed by trenching to anchor the filter fabric with backfill. A trench lined with the bottom of the filter fabric and filled with gravel will provide stability to the BMP. Very often silt fences will become ineffective in heavy rain events or when not monitored; therefore, regular monitoring will help make sure that the BMP is working. Remove all accumulated debris and sediment when they reach half of the height of the silt fence.

Figure 7-8: Silt Fence Example
(Photo: City and Borough of Sitka)

7.2.1.3 Brush Barriers / Slash Filter Windrows

Brush barriers or slash filter windrows can be used below roads, overburden stockpiles, or other bare areas with moderate to steep slopes to filter coarse sediment and reduce water velocity. They are relatively inexpensive, as they can be built with brush cleared from areas prior to mining. They are constructed by piling brush, sticks, and branches in to long rows below areas of concern and can be supported by logs or large rocks.

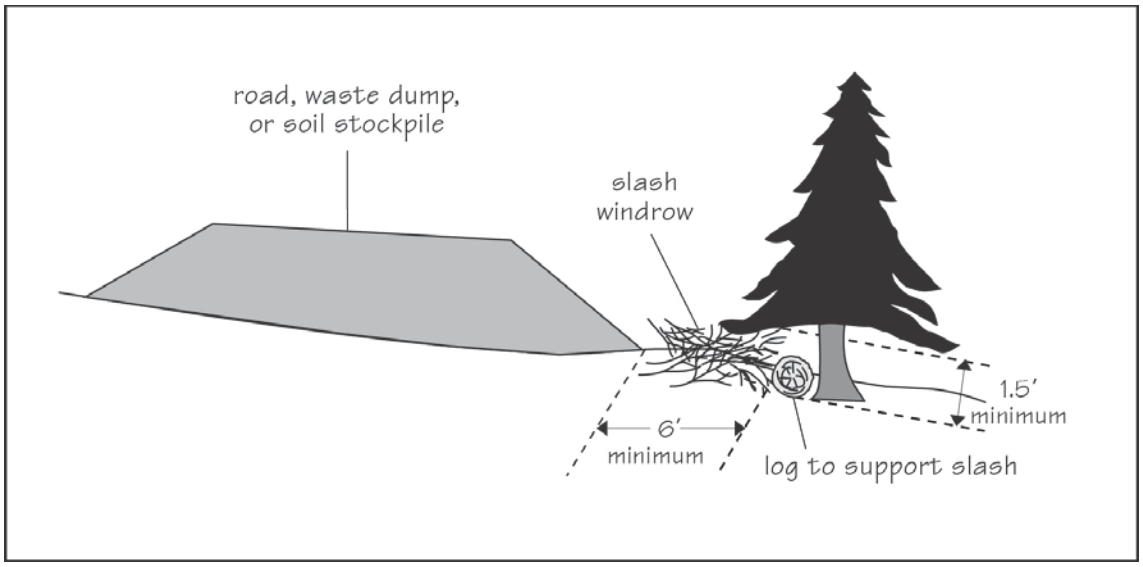


Figure 7-9: Slash Filter Windrow Detail
(Modified from Washington State Department of Natural Resources, 1997, and Idaho Department of Lands, 1992)

7.2.2 Check Dams, Sediment Filters

7.2.2.1 Check Dams

Check dams are used in ditches to slow surface flow, capture sediment, and minimize incision of the ditch.

- They typically consist of 2- to 4-inch-diameter coarse crushed rock, depending on the anticipated water velocity.
- Spacing of the dams depends on the gradient of the ditch.
- The top of the dam should be lower than the channel margins so that water can spill over it and stay in the channel.
- Gabion (wire mesh) baskets can be used to help keep the rocks in the dam from becoming displaced.
- Filter fabric (geotextile) can be placed on the upstream side to trap additional sediment, but it must be anchored in place and its mesh should be sized to avoid clogging. Filter fabric must be cleaned when it becomes clogged.
- Maintenance is required, including excavating captured sediment and maintaining the rock levels.

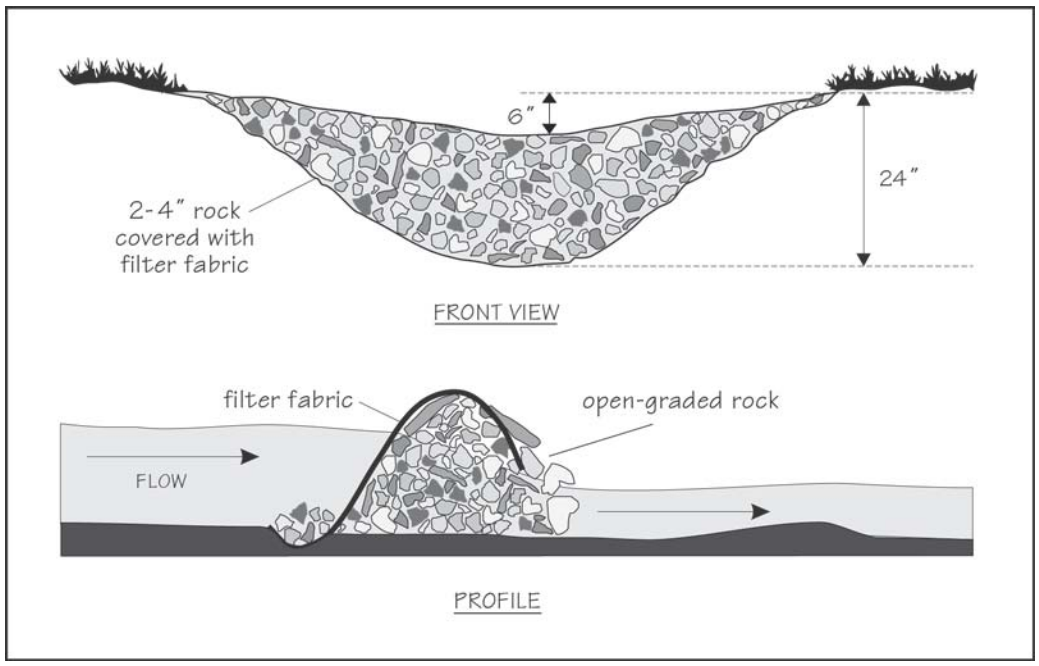


Figure 7-10: Rock Check Dam Detail
(Modified from Washington State Department of Natural Resources, 1997.)

7.2.2.2 Filter Berms

Filter berms are very similar to check dams, but are used in channels with low flow. They are designed to filter out finer sediment. In an ideal berm, fine sand, coarse sand, and gravel are placed sequentially from the upstream side to the downstream end of the berm. The sand will need to be replaced periodically as it becomes clogged with sediment.

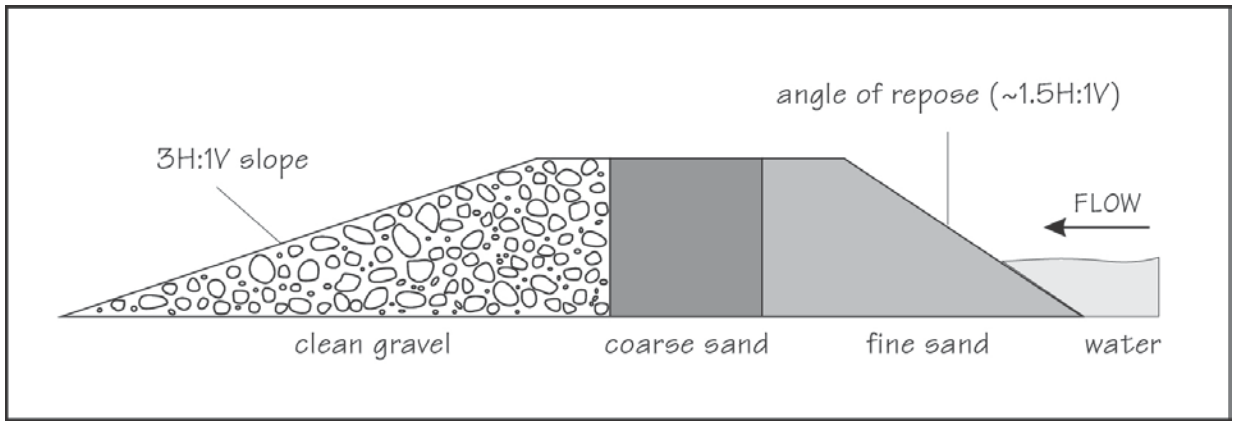


Figure 7-11: Filter Berm Detail
(Modified from Washington State Department of Natural Resources, 1997.)

7.2.3 Dust Abatement

7.2.3.1 Using Water

In dry conditions, dust from haul roads can become a problem. It can get into equipment and blow into surface water bodies. A periodic light spray of water is the most common tool used to control dust. The ground should not be saturated, but just wet enough that dust does not rise from

it when it is disturbed by traffic or wind. This is often accomplished with water trucks, but can also be done with a sprinkler system. If water is in short supply, chemical dust suppressants, such as magnesium chloride, could be considered. Be sure to check state and local law prior to using chemical dust suppressants.

7.2.3.2 Drop Height

It is a good practice to minimize the distance material is dropped from loaders, excavators, and conveyors. This reduces the amount of dust released into the air, reduces noise, and reduces the risk of worker injury.

7.2.3.3 Dust Skirts

Dust skirts are rubber skirts placed around the outlets of conveyors or hoppers that run down to piles, shielding falling aggregate from wind. This reduces dust emissions and prevents material segregation. Dust skirts are useful where drop height is difficult or impossible to control.

7.2.3.4 Naturally Occurring Asbestos

Asbestos is a naturally occurring mineral that is present in some rocks and soils in Alaska. If it becomes airborne in the form of dust from activities like excavation, blasting, or crushing, it is a very serious respiratory hazard. Asbestos inhalation has been linked to numerous illnesses including asbestosis (fibrous scarring of the lungs), mesothelioma, and lung cancer. The possibility of encountering naturally occurring asbestos (NOA) at a mine site should be investigated before ground is broken. The California Geological Survey has published a document called *Guidelines for Geologic Investigations of Naturally Occurring Asbestos in California*. This document may be a useful starting point for determining if NOA exists on your site. It can be obtained at: http://www.consrv.ca.gov/cgs/minerals/hazardous_minerals/asbestos/Asbestos_Guidelines_SP124.pdf. If NOA is present, the dust abatement BMPs listed above will not likely be sufficient to reduce airborne asbestos to an acceptable level.

7.3 Stormwater Management

7.3.1 Diversion

7.3.1.1 Diversion Ditches

Ditches are open drainages that vary in size and depth to capture stormwater runoff and carry it offsite, or to onsite treatment. These can be particularly useful for managing stormwater that runs onto your site from adjacent properties. Ditches can route the flow around your work area, minimizing the exposure of your excavation to stormwater pollutants. Although some ditches may only carry water during rain events, others may be permanently wetted. Ditches may help remove sediments from stormwater, which might otherwise impact rivers, lakes, streams, or other aquatic sites. Naturally occurring vegetation left in ditches may aid substantially in removing sediments from stormwater as it leaves vegetated areas. Vegetation growing on the bank of the ditch can help to remove sediment as surface run-off flows through it.

- Ditches are commonly used to divert stormwater and to keep project sites as dry as possible to inhibit erosion.
- Ditches should be planned to carry more water than at peak flows, especially if they are to be vegetated.
- Oversized ditches may be allowed to naturally vegetate and will probably need less maintenance.
- Severe turns or grade changes along the course of ditches will likely need additional protection. Vegetation (trees or shrubs) may help prevent erosion during peak flows; riprap (see page 32) or other armoring may be necessary.
- Incorporate vegetated swales or check dams to help filter out sediment pollutants.
- In some areas of Alaska, fish (like salmon) have moved into ditches. Avoid this by creating a preventative barrier to fish passage to a constructed ditch.
- If ditches regularly fill with sediments, then use upstream source and sediment controls as needed.

Figure 7-12: Ditch Example
(Photo by permission of Central Paving Products, Anchorage Alaska)

7.3.1.2 Trench Drains

Trench drains can be used to help with stormwater control and dewatering unstable slopes. They are generally ditches that are lined with a geotextile filter fabric and backfilled with crushed drain rock or clean gravel. A perforated pipe can be placed near the bottom of the trench backfill

to move water to the outlet more quickly. Trench drains do require an outlet to remove water. They may also require periodic maintenance. If a pipe is used, it is recommended that cleanouts along the pipe be installed.

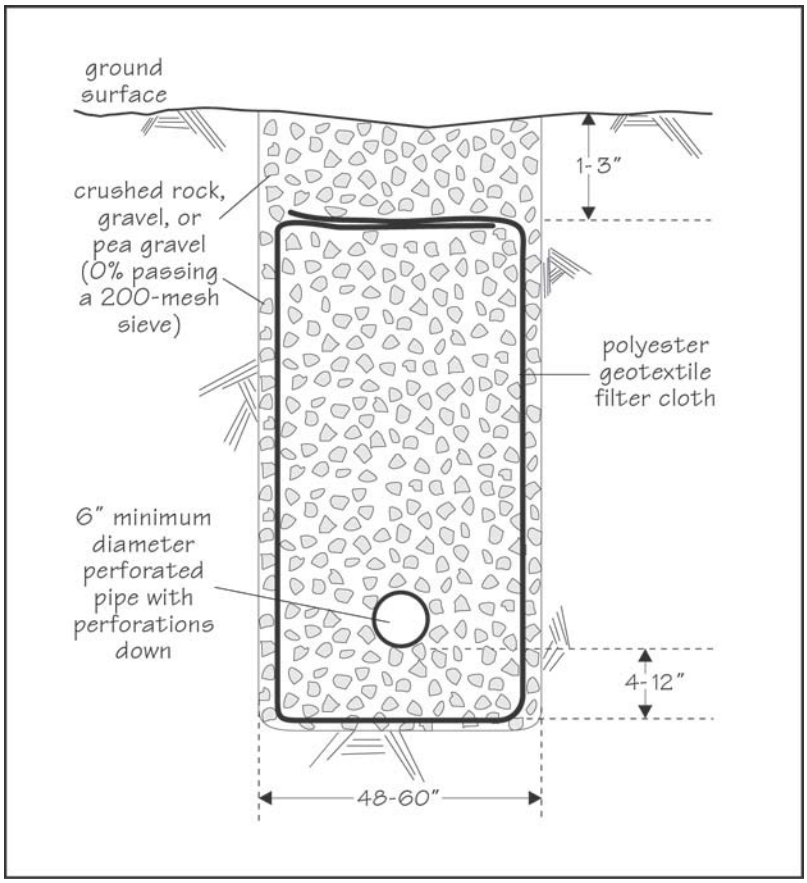


Figure 7-13: Trench Drain Detail
(Modified from Washington State Department of Natural Resources, 1997.)

7.3.1.3 Culverts

Culverts are used to move water under roadways or to divert water around areas or structures. They can be made of metal or plastic; for roadways, metal is typically used. In complex or critical cases, design professionals should be consulted. In general, culverts should:

- have headwalls at the inlet side and erosion protection at outlet locations (see page 32),
- be large enough to carry maximum stream volumes as well as additional seasonal runoff,
- be installed in firm, compacted soil with a minimum cover of 12 inches; and
- be inspected on a regular basis and cleaned or repaired when necessary.

Depending on the location and purpose of a culvert, a local or state permit may be required. Be sure to check before starting culvert construction.

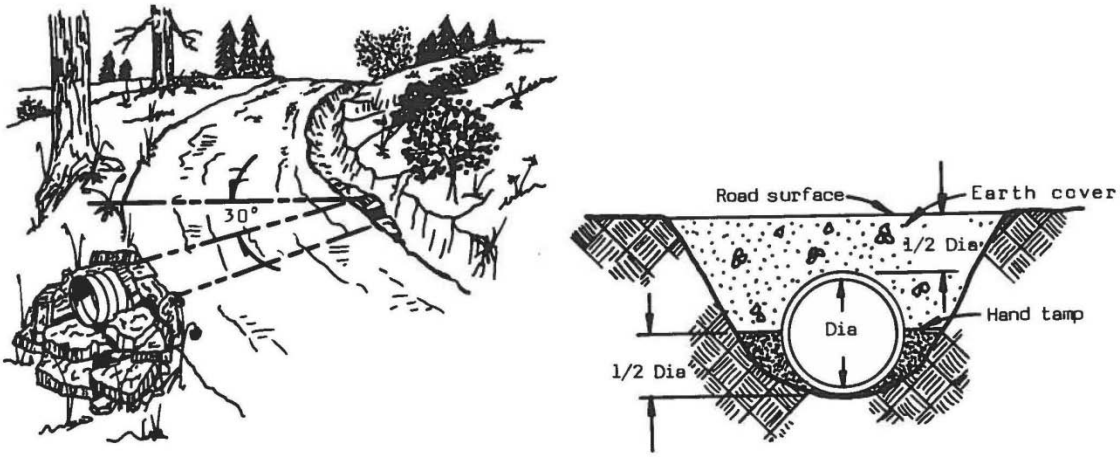


Figure 7-14: Culvert Detail
(Modified from Idaho Department of Lands, 1992.)

7.3.2 Treatment

7.3.2.1 Settling Pond / Retention Basin

Settling ponds are either permanent or semi-permanent structures, such as dugouts, impoundments, or raised tanks, which remove silt and suspended clays from water used for washing aggregate, and/or from sediment-loaded stormwater. Some keys to effective settling ponds are:

- Construct two or more ponds in series, with the coarsest material removed by the first pond, and the finer suspended solids by subsequent ponds. This approach allows one or more ponds to operate while another is being cleaned. (Settling ponds only remove roughly 80 percent of the trapped sediment that flows into them.)
- Locate the ponds in low areas and natural drainageways, but not in streams or wetlands.
- Design ponds for easy access and maintenance.
- Depending on the site conditions and potential for pollutants in the water, it may be appropriate to line settling ponds with plastic.
- Ponds should be cleaned out before they are more than 1/3 full of sediment.
- The distance the water travels within the settling pond should be three to five times the width of the pond.
- Baffles can add to the flow length and pond efficiency.
- Potential materials for construction include earth, riprap, pipe, collars, seed for stabilization of disturbed soil, and new or recycled metal tanks.
- Settling ponds should not be placed where the risk associated with a failure would pose significant risks for people or natural environments such as streams.

Figure 7-15: Settling Pond Example
(Photo: City and Borough of Sitka)

7.3.2.2 Flocculants

Chemical flocculants can reduce the size of settling ponds for a given site by increasing the rate at which particles settle out of water. They work by causing fine particles, like clays, to bind together into larger particles which settle out faster. It is important to choose the right flocculent for the type of fines that will be present in the water to be treated. It is also important to maintain a proper mixture of flocculent in the pond. It must be mixed, but not over-agitated. Ideally, at least 2 ponds are used; one with a retention time of about 20 minutes and another with a retention time of 3 to 8 hours. Ponds will need to be cleaned regularly. Most flocculants are non-toxic to aquatic organisms and fish, but the manufacturer should be consulted regarding the environmental effects of any given flocculent prior to use.

7.3.2.3 Constructed Wetlands

An alternative to a settling pond is a constructed wetland. Constructed wetlands have the added benefit of vegetation to help filter sediment and some pollutants, but they require much greater land area and often require more cost to properly design and upkeep. As they drain to natural waterways, structures must be put in place to prevent fish from entering, and cleaning is more difficult and time consuming due to the presence of vegetation. If a wetland is to be constructed, an environmental professional should be consulted.

7.3.3 Dispersion

7.3.3.1 Discharge to Receiving Waters

If stormwater is discharged directly to a surface water body, a permit is required. The water must meet the quality standards set in the permit. It should not induce physical or thermal erosion at the site of discharge, and should not create thermal barriers to fish movement.

7.3.3.2 Land Application

Land application sends stormwater through dispersal systems that allow turbid water to infiltrate into vegetated areas. The technique can be used to handle all sediment-laden stormwater or just to increase capacity in conjunction with other systems.

- Perforated pipes can be used as a distribution system, laid parallel to slope contours (Figure 7-16).
- Land application should not be used on steep slopes, and turbid water must not be allowed to enter creeks or wetland.
- Land application systems often cannot handle surges in water volume during storms. Soils may not accept stormwater if they are already saturated.
- Infiltration analyses can help determine the capacity and infiltration rate of a site's soils and improve design. Qualified professionals can assist in these analyses and designs.
- Concentration of outflows from land application systems should be avoided, as it may induce erosion.

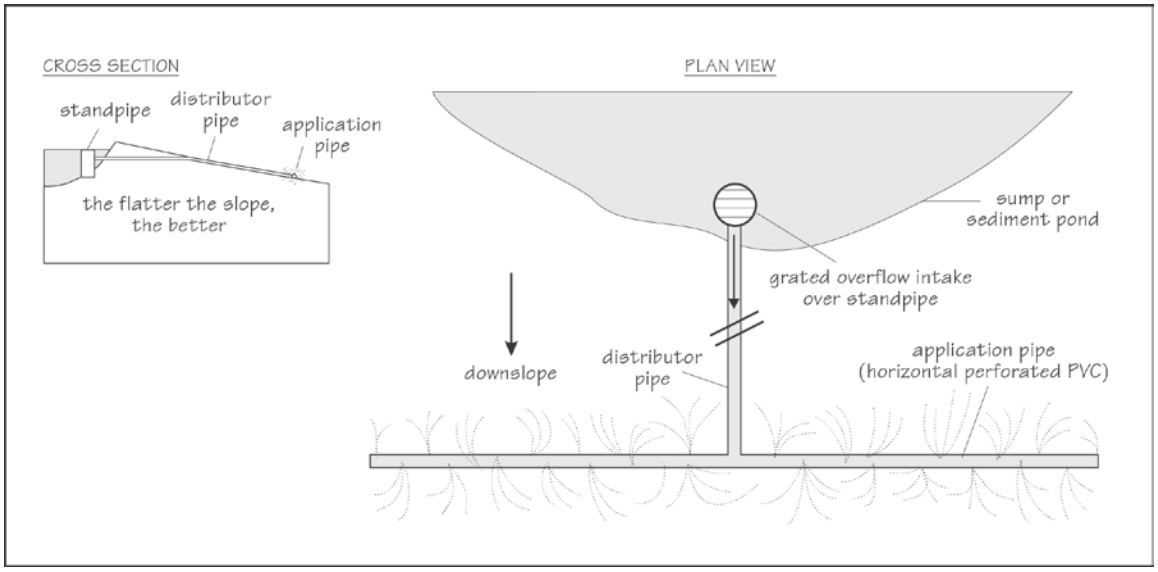


Figure 7-16: Land Application System
(Modified from Washington State Department of Natural Resources, 1997.)

7.3.3.3 Level Spreaders

Level spreaders can be used in locations where concentrated runoff from unvegetated ground needs to be controlled and dispersed over a broad area. They help to reduce water velocities, lessen erosion, allow sediment to settle out, and enhance infiltration. Level spreaders work best in areas with permeable soil. Some guidelines for level spreaders are:

- Do not construct level spreaders on slopes steeper than 3H:1V.
- Level spreaders should be constructed in undisturbed soil.

- Constructed length should be 15 feet for every 0.1 cubic feet per second of discharge water.
- Constructed width should be a minimum of 6 feet from the centerline to the outside edge of the spreader. See Figure 7-17.

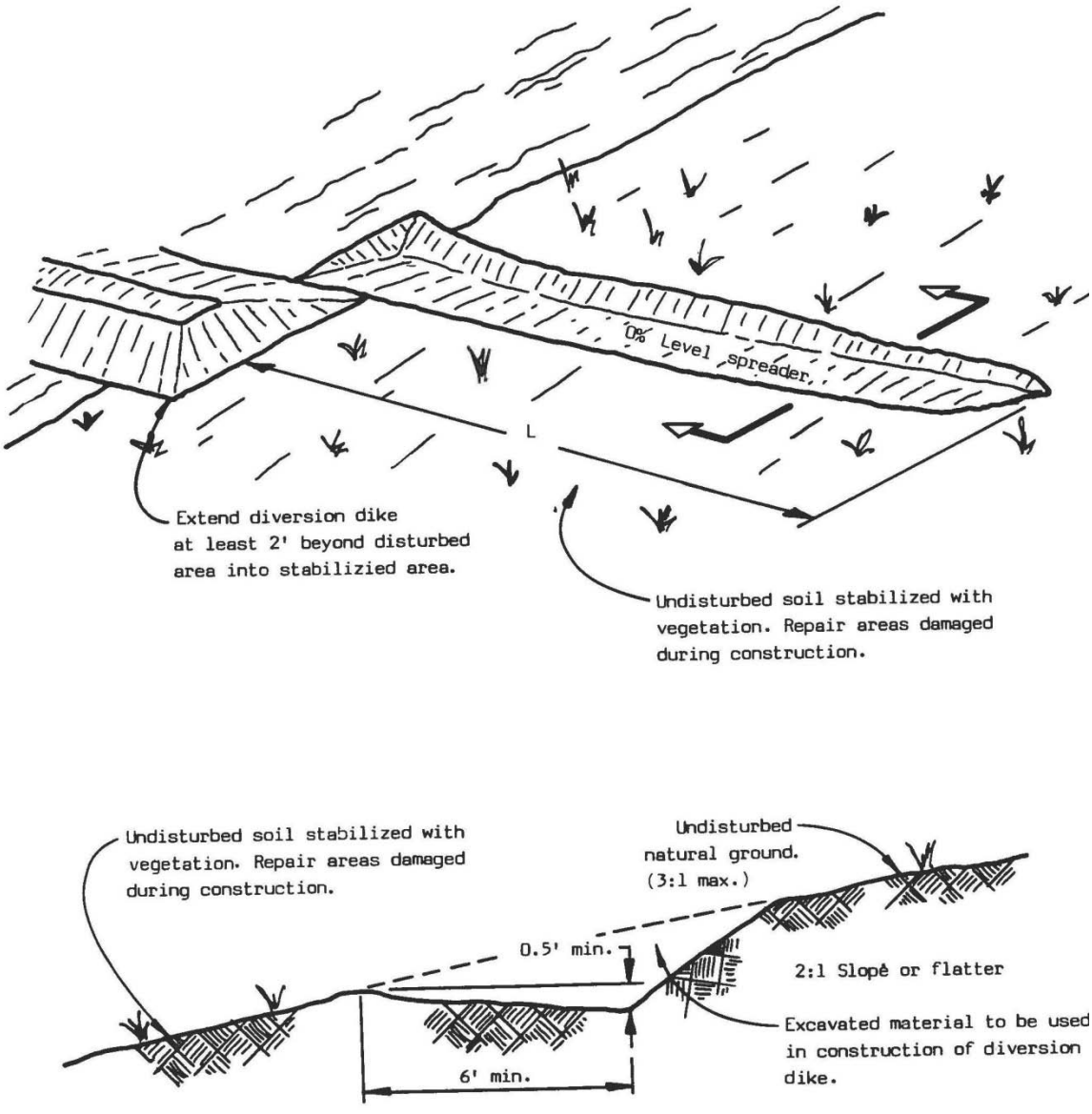


Figure 7-17: Level Spreader Detail
(Modified from Idaho Department of Lands, 1992.)

8 OPERATIONAL BEST MANAGEMENT PRACTICES

Key Points – Chapter 8

- This chapter contains general BMPs for setting up a mine site and mining activities.

Mining Plans should be developed to avoid and/or mitigate potential impacts to surface water, groundwater, and the environment in general. This chapter contains operational BMPs, which can be applied to the layout of a mine site and various mining activities to reduce surface water and groundwater impacts.

8.1 BMPs for the Mine Site

8.1.1 Buffer Zone

As a BMP, a buffer zone is either a natural or enhanced vegetated area around a disturbed site, or near sensitive areas such as a stream, wetland, or inhabited area. It provides distance and adds time to reduce flow and velocity of storm water. If dewatering is performed, buffers reduce offsite groundwater impacts. Buffer zones also reduce noise pollution, allow for dust settling, provide wildlife corridors, and reduce visual impacts. Once established, buffer zones that allow natural succession require little maintenance.

- Preserve or place a buffer zone around the site perimeter, adjacent to streams or other waters, along access corridors, and at the edges of disturbed areas.
- Help reduce sediment and pollution by placing a buffer zone alongside stormwater drainages.
- Retain or plant native trees and shrubs around the perimeter of disturbed areas to help reduce dust, noise, and provide a visual barrier.
- For windbreak protection, tree densities of greater than 20 percent are needed.
- Use other methods to reduce or control flow of surface water such as flow barriers, diversions, sediment traps, check dams, and vegetative plantings, or silt fences when natural buffers are not possible.

Figure 8-1: Buffer Zone Example
(Photo by permission of City and Borough of Sitka)

8.1.2 Berms

Well designed berms may provide some reduction of pollutants and will help reduce noise, dust, and the visual impact of the site within the community. Berms can be used around the perimeter of the property or adjacent to areas sensitive to impacts such as wetlands or surface water bodies. A berm can be used as a site control for surface water entering or leaving a site.

- The elongated and raised structure may be composed of selected material from onsite or offsite.
- Berm heights should be at least 6 feet. For berms taller than 6 feet, vary berms and contour side hills to provide a more natural appearance.
- Plan that berm heights, contours, and vegetation would blend in with naturally occurring conditions.
- If the berm remains in place long-term or permanently, add topsoil to help hold vegetation and provide for natural succession. Seed berm with native grasses or top with other native shrubs, trees, or other indigenous vegetation to reduce draining and drying of the berm.
- Establish ground cover quickly and stabilize soils with mulch, blankets, or other methods.

Figure 8-2: Berm Example
(Photo: City and Borough of Sitka)

8.1.3 Fences

Fences prevent unauthorized entry to a mine site. This protects the mine's equipment from sabotage, helps to manage risk associated with unauthorized people wandering onto the site and getting injured, and prevents wildlife from entering the site and becoming entrapped in pits or falling from high walls. Common fence types are barbed wire and chain link. Fences should be constructed in such a way and to a height sufficient to prevent people or animals from scaling or jumping over them.

8.1.4 Signage

Use signs to inform and remind mine employees of sensitive areas on the site, such as established setbacks from streams or hazardous areas. Also use signs to warn the public and site visitors of mine hazards.

8.1.5 Access and Haul Roads

The use of designated haul roads is recommended for all aggregate site operations. Well-designed and constructed haul roads can make site operations safer, more productive, and cause less wear and tear on equipment. Some keys to effective haul roads are:

- Keep haul roads dry by elevating them and cross-sloping the surface to facilitate drainage.
- For two-way traffic, road widths should be 3 times the width of the largest haul truck.
- Use road shoulder barriers/berms for safety and erosion control.
- Design the banking of curves and curve transitions to minimize the centrifugal forces on vehicles negotiating the curve.
- Maintain safe steepness grades.
- Place intersections at flat, straight alignments.
- Establish a regular grading program to minimize erosion, sediment build-up, noise, and dust. Haul roads may also require periodic scarifying, sanding, and resurfacing.
- Potholes, washboarding, and frost heaving should be repaired immediately to minimize noise, dust, and equipment wear.
- Apply approved dust suppressants such as water or calcium chloride, if necessary.

Figure 8-3: Haul Road Example
(Photo: Alaska Department of Environmental Conservation)

8.1.5.1 Wheel Washer

Wheel washers can be used where materials are being transported off site via paved public roads to help remove dirt, dust, mud, and rocks from trucks prior to mine exit. The reduction of

dirt/dust transported onto paved public roads reduces the dust impacting air quality and the dust covering vegetation and settling into nearby bodies of water. It also reduces windshield damage from thrown rocks. Wheel washers may not be needed if other sediment control mechanisms are in place (stabilized exits, concrete pads), the haul road is paved, or the public roads are dirt/gravel surfaces.

A Wheel washer can be as simple as several railroad rails submerged in a pit, draining to a settling pond (Figure 8-4). Wheel washer design should result in shaking dirt or mud off of a vehicle passing through the pit. Placement of rumble strips, railroad rails, a cattle guard, or steel bars at 2- to 8-inch intervals can provide the agitation needed for removal of dirt, rocks and mud. More advanced designs or high volume facilities may invest in a concrete foundation and mechanized sprayers (Figure 8-5).

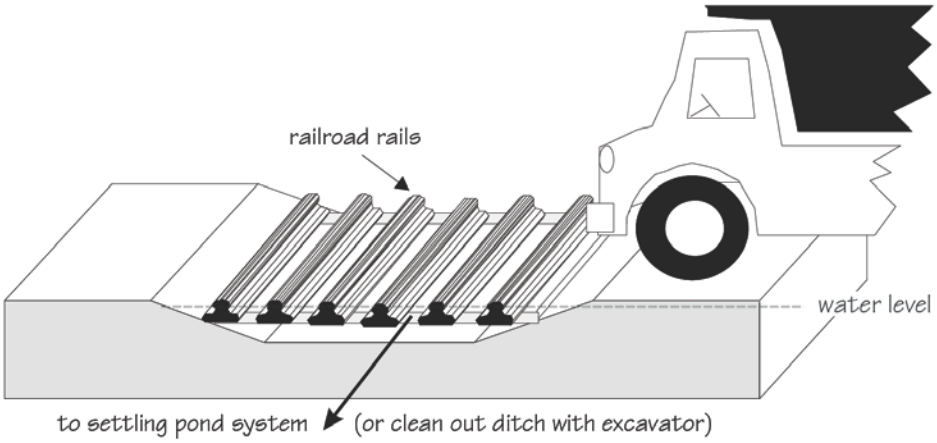


Figure 8-4: Simple Wheel Washer
(Modified from Washington State Department of Natural Resources, 1997.)

Figure 8-5: Wheel Washer with Sprayers
(Photo from January-February issue of Erosion Control Magazine article "Controlling Fugitive Dust on Roadways" by Carol Brzozowski)

8.1.5.2 Stabilized Construction Exits

Stabilized construction exits provide a transition from dirt roads on a mine site to paved roads, to reduce the tracking of mud onto public right of ways. They are an alternative to a wheel washer, and while less effective, may be sufficient for many situations. To construct a stabilized construction exit:

- Excavate a pad that is about 6 inches deep, as wide as the haul road, and at least 50 feet long.
- Lay down a filter fabric geotextile over the excavated area.
- Cover the geotextile with 6 to 12 inches of 2- to 3-inch-diameter angular drain rock.
- Dress the exit with additional stone as needed.

8.1.5.3 Street Cleaning

This BMP involves sweeping or other pavement cleaning practices for entrances or roadways in front of a site, loading areas, haul roads, parking areas, truck aprons, and where materials are being transported on paved roads. Used in concert with other BMPs, street cleaning aids to remove substances that might otherwise pollute rivers, lakes, and streams. Modern sweeper equipment is capable of removing very fine sediment particles. By using the most sophisticated sweepers, greater reductions in sediment and accompanied pollutants can be realized. By using this BMP, some pollutants can be captured before they become soluble with rainwater. The cost for sweeping using simple mechanical techniques is relatively low, but a more efficient sweeper system can be expensive to own and operate.

- Street cleaning is not effective on unpaved surfaces.
- Do not use water to wash paved areas clean if run-off would migrate to rivers, lakes, or streams.

8.1.6 Vibration Reduction

Blasting, screening, and crushing, as well as movement of heavy equipment on site and from the site may produce ground vibrations. Vibrations can affect unstable slopes and can potentially damage nearby structures such as houses. Since transport of materials is one of the primary causes of vibration, levels can be reduced by maintaining roads free of potholes, reducing speeds, and limiting the weight of loads carried by trucks. For blasting activities, which tend to generate stronger vibrations, it is important to monitor vibrations at nearby locations that may be impacted. A blasting specialist can give guidance for charge weights and sequencing that might minimize effects for operations in community areas with other businesses or residents. In some cases, vibrations from blasting can increase the turbidity of groundwater, which can impact nearby wells. If PWS sources or residential wells are within 1000 feet of a proposed blasting operation, vibration and groundwater turbidity before and after blasting should be monitored at the well sites.

8.1.7 Dumps and Stockpiles

Mines with thick overburden generate large amounts of waste soil and rock. This material is generally stockpiled either permanently or for later use in reclamation. Dumps and stockpiles, if poorly placed or constructed, can easily result in landslides and increased sediment loads to nearby surface waters. The following are some guidelines for placement and construction of stockpiles:

- Select a location that is geologically stable. Qualified professionals may be required to assess landslide hazard.
- Select a location that is away from waterways, seeps, and springs.
- Strip all vegetation from the storage area, as it will rot under the stockpile and create a plane of weakness and increase the chances of downslope movement.
- Vegetation removed from the stockpile area can be used around the perimeter of the stockpile to filter runoff.
- Install a blanket drain (drain rock and geotextile) at the base of the pile on any slope where drainage problems are anticipated, and key it into competent material within the slope.
- Construct diversion ditches above stockpiles on steep ground.
- Place the fill in 12- to 18-inch lifts and compact it with a sheep's foot or vibratory roller.
- Shape the pile to prevent water from ponding and to direct water to a drainage system.
- Final slopes should be between 2H:1V and 3H:1V or flatter. Flatter slopes are easier to access for reclamation. Slope designs may be optimized with the help of qualified professionals.
- Terraces may be constructed to slow runoff water velocities.
- When shaping is complete, seed and mulch the pile to establish vegetation.

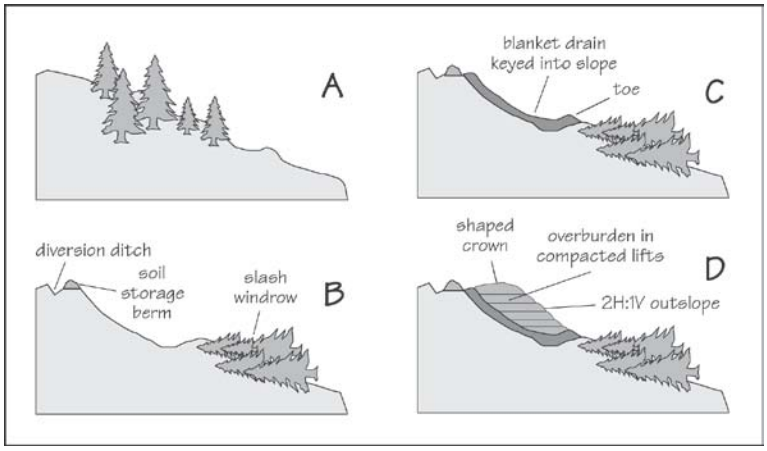


Figure 8-6: Stockpile Construction
(Modified from Washington State Department of Natural Resources, 1997.)

8.1.8 Employee Training

BMPs are only effective if they are properly implemented and maintained. This is accomplished through employee training. Field employees should be taught basic stormwater management and pollution prevention principals. Begin by clearly communicating the company's expectation that its employees should take personal responsibility for helping assure BMP effectiveness. Encourage and recognize their efforts to watch and monitor for BMP effectiveness. Management should lead by example. Create a learning culture for employees to help assure that stormwater management and pollution concerns are quickly and effectively addressed.

8.1.9 Environmental Timing Windows

Project activities such as blasting or clearing may impact fish or wildlife during certain times of the year. One way to help reduce impacts during critical times of the year is to adjust the project work schedule to minimize effects on seasonal life stages for fish or wildlife (such as in spawning fishes, or nesting waterfowl). Adjust project schedule to avoid impacts to fish and wildlife when project activities expose large quantities of soil or for long term operations. Help reduce siltation of natural watercourses and fish habitat by timing operations and project activities such as blasting and clearing land to avoid sensitive periods for fish and other wildlife. Coordinate with the appropriate agency to determine timing windows.

8.1.10 Scheduled Maintenance and Repairs

Scheduled maintenance and repair is a practice that maintains mine efficiency and protects water quality. Scheduled maintenance of equipment helps to reduce down time and helps to protect water quality by reducing oil and coolant leakage. Likewise, scheduled maintenance of BMPs can keep erosion and sediment under control so that the mine satisfies permit obligations and avoids more costly remedial measures.

8.1.11 Self Environmental Audit

The idea of a self environmental audit reflects a non-regulatory approach to helping assure the well-being of water resources in Alaska. This practice is designed to enhance protection of human health and the environment by encouraging operators to voluntarily and promptly discover, disclose, correct, and prevent potential violations of federal and state environmental requirements. The voluntary discovery, prompt disclosure, correction, remediation, and prevention of negative impacts on water quality are key elements of this BMP. Another key element of the self environmental audit is cooperation with state or federal entities with regard to site operations. There are potential economic benefits to self environmental auditing such as benefits to operators when "good faith" efforts are accomplished that address the needs and concerns of resource managers. There are low to moderate costs associated with possible delays in project activities, but these are offset by avoiding fines or more costly remediation measures if problems are not found early.

8.2 BMPs for Mine Activities

8.2.1 Test Holes

Follow all regulations at the state and federal level when drilling test holes to determine the depth and extent of deposits to be mined. Avoid contaminating groundwater by:

- placing holes in areas that do not flood and that have good surface drainage away from the hole;
- keeping holes away from chemical storage areas, landfills, and septic tanks;
- properly installing and decommissioning abandoned observation wells to avoid subsurface contaminant entry; and
- properly backfilling holes with bentonite and/or cement grout and surface seal.

8.2.2 Land Clearing and Grubbing

Clearing and grubbing the land is necessary to prepare a mine site for extraction, but increases the risk of environmental impacts from stormwater runoff. Permit coverage is required prior to beginning the land clearing and grubbing work. To reduce environmental impacts:

- Only clear areas of land that will be used immediately. Vast tracts of cleared land dramatically increase the risk of environmental impacts from stormwater runoff and the associated costs to control runoff from the mining site. Land that is not cleared is better at taking care of itself.
- Implement stormwater management, erosion, and sediment control BMPs before and concurrently with clearing so that sediment laden runoff does not leave the site.
- On slopes, divert slope water around disturbed areas using ditches.
- If possible, clear land and grub during dryer, less windy times of the year.
- Establish, mark, and remember to stay out of buffer zones; stay outside of recommended or permit-required distances from streams, rivers, lakes, wells, etc.

8.2.3 Stripping

Stripping is the removal of topsoil and overburden. If a mine plan employs contemporaneous reclamation (see Chapter 9) then topsoil and overburden can be placed onto previously mined areas as it is removed, which reduces handling costs and maintains useful soil properties. Otherwise, topsoil and overburden should be stockpiled for use in reclamation (see page 54 and page 56 for topsoil storage and stockpiles). Make separate stockpiles for topsoil and other overburden. In overburden soil, try to preserve soil horizons in the stockpiles so that the soil layers can be placed back in the order in which they were removed. Make sure stockpiles are located and built in a way that provides easy access for reclamation. As with land clearing, it is best not to disturb an area until it is ready to be worked.

8.2.4 Aggregate Washing and Process Pond Sludge

Aggregate often requires washing to separate sands and to remove fines. These types of operations typically discharge to processing ponds. Water in a processing pond is often very turbid and should not be discharged to surface water bodies prior to treatment. A series of settling ponds, for example, could be used to remove silt and suspended clays from water used for washing aggregate. Note that aggregate washing operations need an APDES permit from DEC if discharging offsite or if discharge may cause a chemical change in the groundwater.

Processing ponds will accumulate fine sediment and need to be cleaned, especially if they are designed to infiltrate water to the soils. Process pond sludge should be tested to determine metal content and pH prior to evaluating disposal options. Depending on the level of possible contaminants, disposal options may include drying the sludge and either placing it on site, on containment with a cap, or removing it to an off-site approved waste management facility.

8.2.5 Flow-Through Pits

Flow through pits, where a creek comes in one side of the pit and out the other, require an individual Army Corps of Engineers Section 404 permit. DEC's certification of the Corps permit might grant a short-term variance for water quality standards or specify conditions to ensure that the water leaving the pit meets Alaska Water Quality Standards. For information on permitting requirements, see Appendix D .

8.2.6 Dewatering

Dewatering is sometimes necessary for gravel pit operations in Alaska during gravel extraction or while cleaning settling or retention ponds. When dewatering 250,000 gallons or more and/or when operations occur within 1-mile of a contaminated site, notice to use the DEC's Excavation Dewatering General Permit (EDGP) is required. The DEC will provide more information on conditions and best management practices for a specific site in its permit, but some generally recommended BMPs for dewatering include:

- Consider the proximity of the pit to contaminated or potentially contaminated sites and to local water wells. If substantial draw down may occur due to dewatering, a contaminant plume from a contaminated site may move or be exacerbated. The DEC Contaminated Site Program staff should be contacted in advance in this instance. A detailed hydrogeologic study may be necessary.
- Wells, well points, or other systems may be most effective in drawing down the aquifer prior to mining, and reducing effects to aquifers. These methods are often preferred over using a sump or trash pump to dewater a pit while mining, because clean water is extracted and that simplifies discharge.
- Where offsite impacts to shallow aquifer are likely, infiltration trenches or wells can help to mitigate offsite drawdowns.

- For pit seepage, keep a perimeter trench around the outside of the excavation's floor. This trench will collect the groundwater seeping out of the pit walls and create a sump from which less turbid and uncontaminated water can be pumped.
- Make sure that dewatering does not result in or otherwise cause re-suspension of sediments in receiving waters. It is very important that any fluid leaving the site be free of any contaminants or additives such as fuel, antifreeze, solvents, corrosion inhibitors, toxic substances, oil, and grease, and anything which causes foaming in the effluent.
- Perform equipment maintenance away from the pit perimeter.
- Dispose of waste away from the open pit.
- Store fuels and hazardous materials away from the open pit.

Dewatering should not be done in such a way that it results in thermal or physical erosion, typically a problem at the site of discharge. Dewatering should be avoided or carefully (professionally) designed if it will result in offsite impacts such as contamination of surface or ground water, well impacts to neighboring properties, changes in flow patterns of surface water or aquifers, or if it causes flooding or damage to property or vegetation. Dewatering should not be done if discharge will result in thermal barriers to fish movement or otherwise exclude fish from aquatic habitat.

Monitoring of groundwater levels, pumping, turbidity, and other factors may be required by permit. A well-planned monitoring program is a valuable means of assuring the BMP is being conducted properly and that the true effect of dewatering is known. Active treatment of wastewater prior to discharge may be necessary to assure compliance with water quality standards. Should accidental discharge of contaminants occur, the operator should first correct the situation, then report the discharge to the Alaska Department of Environmental Conservation immediately to determine what, if any, mitigation is needed. Groundwater monitoring may be indicated in permitting before, during, or after de-watering.

9 RECLAMATION

This chapter describes various strategies and BMPs for reclamation. The primary goal of mine reclamation is to return a site to a condition that will not pose a hazard to public health and the environment. Reclamation plans are site specific, but they will generally include:

- removal of all mine facilities,
- a grading plan that establishes stable slopes and adequate drainage,
- self-sustaining vegetative cover,
- monitoring of performance during and after reclamation to ensure objectives are being achieved.

Key Points – Chapter 9

- Reclamation restores mined land to a stable condition that will not harm humans or the environment.
- Reclamation plans must be approved by Alaska DNR.
- There are different types of reclamation strategies:
  - Contemporaneous
  - Segmental
  - Post-Mining
- Proper handling, storage, and replacement of topsoil are crucial to revegetation.

By law, reclamation plans must be approved by the commissioner of natural resources from the Alaska Department of Natural Resources (DNR), Division of Mining, Land, and Water. This applies to state, federal, municipal, and private land and water in Alaska. Alaska DNR has published a book of Mining Laws and Regulations, which may be found at http://dnr.alaska.gov/mlw/mining/2009Reg_book.pdf.

9.1 Reclamation Strategies

9.1.1 Contemporaneous Reclamation

In contemporaneous reclamation, material is transported from a newly mined area directly to a previously mined area in one circuit (Figure 9-1). This method is preferred, because it minimizes handling of overburden and avoids creating large areas of unreclaimed land. It is optimal where a relatively small amount of material is extracted in comparison to the overburden moved, as it allows easy reproduction of soil and subsoil profiles. It may, however, be impractical for sites with very thin soil or where material like sand and gravel must be mixed from various parts of the mine in order to meet product specifications.

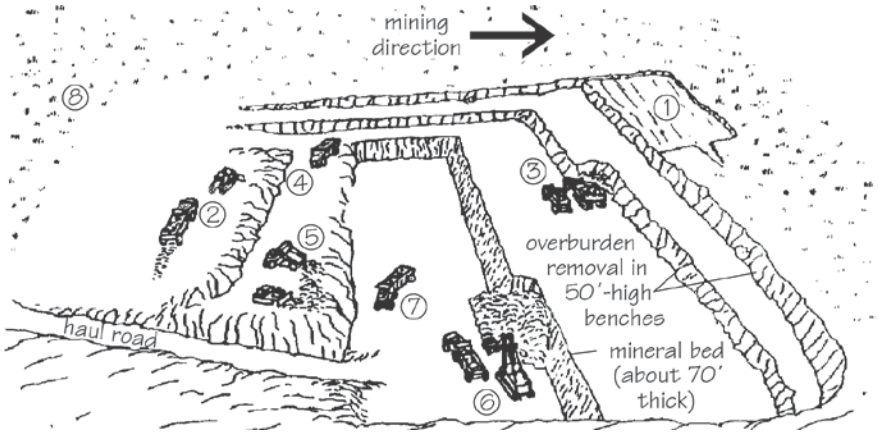


Figure 9-1: Contemporaneous Reclamation
(Modified from Washington State Department of Natural Resources, 1997, and U.S. Bureau of Land Management, 1992)

1) removal of topsoil;
2) spreading topsoil on graded wastes;
3) loading of overburden;
4) hauling of overburden;
5) dumping of overburden;
6) loading of product;
7) hauling of product;
8) reclaimed land.

9.1.2 Segmental Reclamation

In segmental reclamation, the mine site is divided into segments and the order of mining and reclamation among the segments is determined. Prior to mining, topsoil from the first segment is stockpiled. After all resources have been extracted from the first segment and the slopes have been reshaped in accordance with the reclamation plan, topsoil is stripped from the second segment and placed on the first segment and vegetation is planted. This continues until the final segment is mined, and then it is reclaimed with the stockpile of topsoil from the first segment. This reclamation strategy minimizes handling of topsoil and avoids creating large areas of unreclaimed land, but may be impractical for sites with very thin soil or where material like sand and gravel must be mixed from various parts of the mine in order to meet product specifications.

9.1.3 Post-Mining Reclamation

Post-mining reclamation is reclaiming a site after all resources have been extracted. While it may be necessary under certain circumstances, it is generally discouraged because it results in large areas being left unreclaimed for long periods of time. In post-mining reclamation, revegetation is typically slower and more expensive, stockpiled topsoils may deteriorate over time and become less fertile, and bonding liabilities are typically higher.

9.2 Reclamation BMPs

9.2.1 Preservation of Topsoil

Topsoil plays a crucial role for erosion control and is important for rehabilitation and permit requirements. Proper movement and storage of the soil is crucial for preservation and reuse.

Topsoil and other overburden should be removed separately before mining and retained for reclamation. Placing several inches of organic-rich soil over lower quality subsoil can dramatically improve the success of revegetation. If adequate topsoil is not preserved during mining, miners may need to import suitable topsoil, which can be costly. Topsoils must be properly handled and stored to preserve their porosity and biological content, including bacteria, fungi, algae, insects, and worms. Without these properties, the soil will be less helpful to revegetation. Some keys to topsoil preservation are:

- Store topsoil and other soil layers separately so they retain their characteristics and are easier to replace in the same order in which they were excavated.
- Do not strip topsoil when it is excessively wet or dry.
- Do not subject stored topsoil to excessive heavy equipment traffic.
- Storage piles should be constructed to minimize size and compaction.
- Avoid creating soil storage piles in excess of 25 feet in height.
- Do not use natural drainage ways as stockpile areas.
- Add some plant matter like grasses and chipped tree limbs to the pile to increase aeration, but not excessive amounts, as that will make the soil nitrogen deficient.
- Vegetate soil stockpiles. It is a good opportunity to do test seedings in preparation for final reclamation. Make sure seeds and plants used in revegetation are not or do not contain invasive plant species.

9.2.2 Overburden Storage

Overburden is often stockpiled for later use in reclamation backfill. This is a good practice, although long-term overburden stockpiles can contribute heavy sediment load to stormwater runoff. To avoid this, they should be:

- properly constructed for good slope stability (see Grading on page 28), and
- vegetated to prevent erosion.

9.2.3 Backfilling

Backfilling an excavated area may increase stability and help reduce erosion that otherwise might potentially affect surface water. Reducing slope angles can substantially reduce erosional effects and long term stability concerns. Backfilling can be considered when the final face heights in an excavated area are higher and steeper than permit specifications or general standards. Some guidelines for backfilling include:

- Do not backfill or approach an existing slope if stability is in question or the slope is unsafe, as it threatens worker safety.
- Keep backfill slopes at angles of 2 or more horizontal to 1 vertical.

- Unless otherwise specified, fill layers should be placed in lifts of no more than 6-9 inches and then stabilized by compacting, adding water to maintain moisture as needed. Compaction efforts can be made with equipment such as a sheep's foot roller or a smooth vibrating drum roller.
- Avoid flooding or erosion by providing good drainage with robust sediment control.
- Ideally, backfill concurrently with gravel extraction using overburden mined elsewhere on the site.
- Backfill materials may include overburden, waste rock, topsoil, clean excavation spoils from offsite, or select clean construction debris.
- Backfill materials should be free of contamination, brush, rubbish, organics, logs, stumps, and other material not suitable for stable fills.
- If previously stockpiled topsoil is used, it may need to be mixed with quality, clean fill material from sources offsite, as the moisture content of stored material may change and result in poor compaction.
- Establish healthy vegetative cover to avoid erosion (see Grading on page 28 and Vegetation on page 24).
- Use plastic sheeting, mulches, matting, or seeding with native species of grass or other vegetation to protect bare slopes against erosion or if permanent planting is delayed.

9.2.4 Benching

In reclamation, benching is a way of reducing slope lengths, enhancing stability, and facilitating revegetative efforts in soft or hard rock where bedding and structure are not prohibitively oriented. In some situations, it may be preferable to backfilling. A typical benched slope is shown in Figure 9-2. Some keys to benching are:

- Vertical bench cuts should be between 2 and 4 feet high.
- The vertical cut of the upper bench should begin immediately above the horizontal cut of the bench below.
- Benches should be horizontal and parallel to cut slopes or roadways.
- Excavation of each bench should be done in the opposite direction from the bench before, from the top of the slope to the bottom, to reduce the buildup of unconsolidated material at the side of the cut.

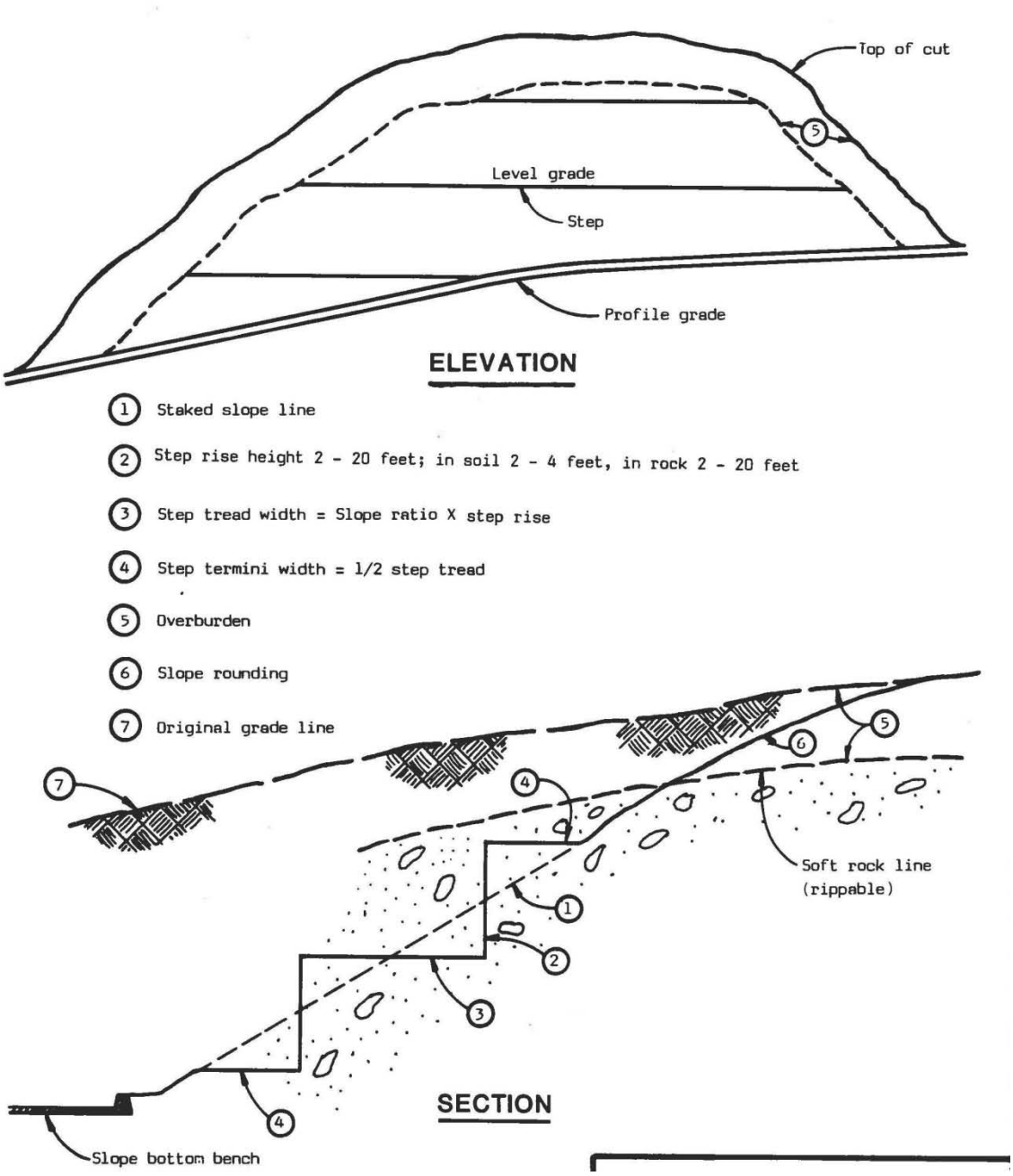


Figure 9-2: Benching Detail
(Modified from Idaho Department of Lands, 1992.)

9.2.5 Reclamation Blasting

Reclamation blasting is a technique that uses selective blasting to reclaim highwalls and benches to forms that blend in better with their surroundings. Holes are carefully placed and charged with explosive to essentially turn rock faces into scree slopes. The use of a blasting contractor familiar with this technique is highly recommended.

9.2.6 Draining Pit Floors

If desired, pit floor drainage can be improved by ripping or blasting.

- Ripping can be accomplished in soft rock or compacted soil or mine waste with vertical shanks mounted on heavy equipment.
- Blasting can be used for harder rock. It can be made into its own program, or if used in production, the last production shot can be drilled an extra 10 feet and some of the fractured material can be left in place.

Both methods will improve drainage and make it easier for roots to penetrate.

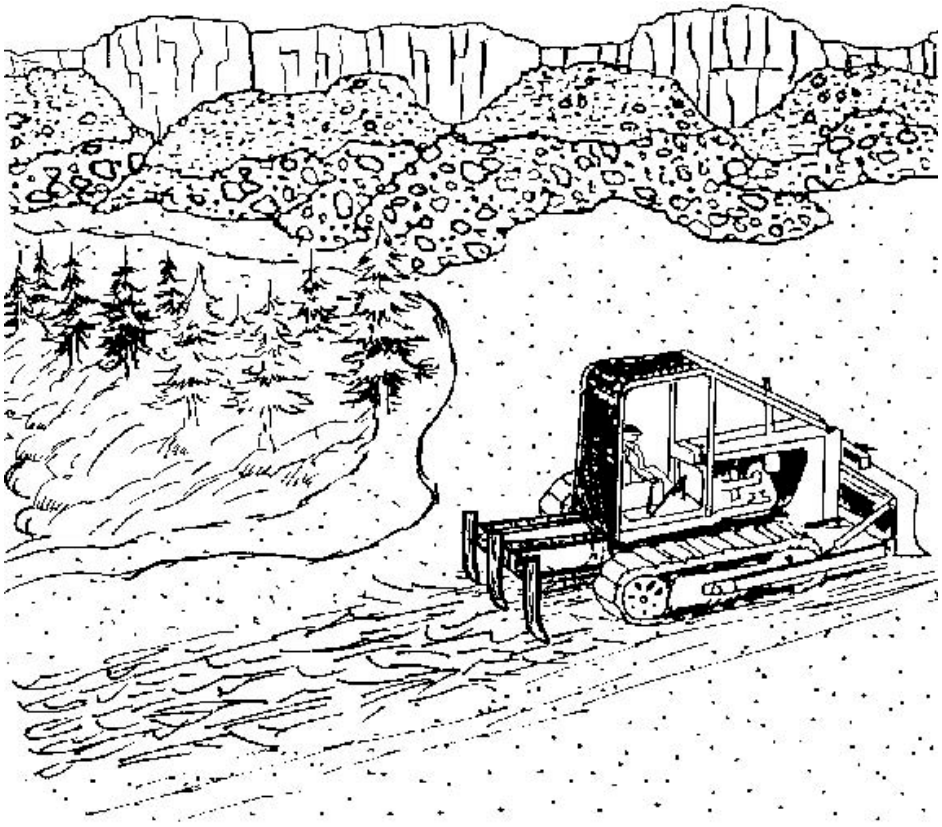


Figure 9-3: Ripping With A Dozer
(Modified from Washington State Department of Natural Resources, 1997.)

9.2.7 Topsoil Replacement

Proper replacement of topsoil on reclaimed surfaces is crucial to revegetation. Some topsoil replacement concepts are:

- Ideally, extract topsoil from its place of origin and place it directly onto an area already mined, backfilled, and graded for reclamation. In this scenario, soil is handled only once, has less moisture loss, and does not compact during storage within stockpiles
- Before spreading the topsoil, establish the erosion and sedimentation control structures such as berms, diversions, dikes, waterways, and sediment basins.

- Soil horizons in stockpiles should be placed in their original order for best results.
- Maintain grades on the areas to be topsoiled, and just before spreading the topsoil, loosen the subgrade slightly for bonding of the topsoil and subsoil.
- Do not spread topsoil when it is frozen or muddy.
- Topsoil should not be compacted.
- A minimum soil replacement depth of 12 inches is recommended for most reclamation applications.
- The minimum recommended soil depth for timber production is 4 feet over rock and 2 feet over gravel of soft overburden.
- If the volume of topsoil available for the site is low, restrict application to low areas that will conserve soil, retain moisture, and catch wind-blown seeds.
- After topsoil is placed, the soil can be analyzed to determine what soil amendments (nutrients and fertilizers) are necessary for proper vegetative growth.

9.2.8 Refuse/Soil Disposal

If excess overburden remains that will not be used in reclamation, it should be disposed of with care. It should not be placed in natural drainages, like drainage hollows on slopes, as it would be more likely to fail and impact surface water. Options for disposal may include sale as a fill material or proper construction of a permanent, vegetated stockpile.

9.2.9 Covering Acid-Forming Materials

If a site contains acid-forming materials, it has the potential to release acid mine drainage. This can be prevented during reclamation by identifying acid forming materials, isolating them, placing them on a liner (plastic or clay) and covering them with a cap (such as a clay) to prevent the chemical reaction which produces acid mine drainage (see page 19) from taking place. If exposures of acid-forming materials are left in a highwall, try to create an environment that does not result in repeated wetting and drying of the material, as these are the conditions most conducive to acid formation. In appropriate topography, a permanent impoundment with an initial addition of a buffering agent (such as lime) could be used.

9.2.10 Revegetation

Revegetation is one of the last but most important steps in mine reclamation, as it reduces erosion, reduces storm-water runoff, provides habitat for animals, and increases the value of the property. Guidance for vegetation is discussed in Chapter 7.

9.2.11 Creating Wildlife Habitat Using Ponds

Mine site reclamation often involves the creation of ponds. Ponds can easily be made into good wildlife habitat by following some general guidelines:

- Keep submerged slopes at 5 horizontal to 1 vertical or flatter to allow development of wetland plant species.
- Make the outline of ponds irregular to increase plant habitat.
- Build up islands in the ponds to provide nesting areas.
- Place structures like downed trees on the shoreline, and anchor them in place to provide fish habitat.

"North Slope Gravel Pit Performance Guidelines," Technical Report Number 93-9, by Robert F. McLean (1993) is a useful resource regarding the creation of wildlife habitat.

9.2.12 Well Decommissioning

Wells that will no longer be used for production or monitoring should be properly decommissioned. The purpose of decommissioning wells is to prevent the unnatural migration of water between different geologic formations in the subsurface. Wells that are not properly decommissioned leave pathways for possible future contaminant transport. Typically, wells can be decommissioned by:

- Sealing them in place with a bentonite grout or cement,
- Removing them and replacing them with bentonite chips, grout, or cement, or
- Redrilling them and backfilling the redrilled hole with bentonite chips, grout, or cement.

It is important that the hole previously occupied by a well is backfilled with bentonite chips, grout, or cement, and not hole cave, as cave does not provide an adequate seal between formations. For Alaska DEC requirements, review 18 AAC 80. For monitoring wells, the Alaska DEC has published a document called *Monitoring Well Guidance*, which includes details on proper techniques for decommissioning monitoring wells. (http://dec.alaska.gov/spar/csp/guidance/Monitoring%20Well%20Guidance.pdf). A well decommissioning form is available through the Alaska DNR Water Forms web site, http://dnr.alaska.gov/mlw/forms/.

10 REFERENCES

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Alaska Department of Environmental Conservation, 2005, *Alaska's Water Quality Criteria Manual for Toxic and Other Deleterious Organic and Inorganic Substances*, May 15, 2003.

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Arkansas Department of Environmental Quality Surface Mining and Reclamation Division, 2001, *Conservation Practices for the Reclamation of Surface Mines in Arkansas: Little Rock, Ark.*, 71 p., available: http://www.adeq.state.ar.us/mining/pdfs/handbook_010406.pdf .

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Idaho Department of Lands, 1992, *Best Management Practices for Mining in Idaho*: Boise, Idaho, 158 p., available: http://www.idl.idaho.gov/bureau/minerals/bmp_manual1992/bmp_index.htm.

McLean, R.F., 1993, *North Slope Gravel Pit Performance Guidelines*, Alaska Department of Fish and Game, Technical Report Number 93-9.

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Nevada Bureau of Land Management, 2008, *Guidance for Hardrock Mining Reclamation/Closure Activities*: Reno, Nev., 44 p., available: http://www.blm.gov/pgdata/etc/medialib/blm/nv/minerals/mining.Par.2513.File.dat/Closure_Guide.pdf.

Norman, D.K., Wampler, P.J., Throop, A.H., Schnitzer, E.F., and Roloff, J.M., 1997, *Best Management Practices for Reclaiming Surface Mines in Washington and Oregon*: Report prepared for Washington Department of Natural Resources Division of Geology and Earth Resources, Open File Report 96-2, Olympia, Wash., and Oregon Department of Geology and Mineral Industries, Open-File Report O-96-2, Portland, Oreg., 128 p., available: http://www.dnr.wa.gov/publications/ger_ofr96-2_best_management_practices.pdf and http://www.oregongeology.org/pubs/ofr/O-96-02.pdf.

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Western Regional Climate Center, 2006, *Historical Climate Information, Alaska Narrative,* http://www.wrcc.dri.edu.

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APPENDICES

Appendix A – Definitions

Appendix B – Contact Information

Appendix C – Resources for Information

Appendix D – State and Federal Permit Requirements

Appendix E – Best Management Practice Index

Appendix A – Definitions

Below is a compilation of definitions used or pertaining to this User's Guide. Additional definitions can be found in the Alaska Water Quality Standards (18 AAC 70).

Best Management Practices (BMPs) – Schedules of activities, prohibitions of practices, maintenance procedures, and structural and/or managerial practices, that when used singly or in combination, prevent or reduce the release of pollutants and other adverse impacts to waters of the state. The types of BMPs are source control and treatment control.

Mining Operations – Typically consists of three phases, any one of which individually qualifies as a "mining activity." The phases are the exploration and construction phase, the active phase, and the reclamation phase.

Nonpoint Source Pollution – Any source of pollution other than a point source (18 AAC 70.990(42)). Point source pollution is a discernible, confined, and discrete conveyance, including a pipe, ditch, channel, tunnel, conduit, well, container, rolling stock, or vessel or other floating craft, from which pollutants are or could be discharged (18 AAC 70.990(46)).

Reclamation – The process of returning a site to a condition that will not pose a hazard to public health and the environment.

Residues – Floating solids, debris, sludge, deposits, foam, scum, or any other material or substance remaining in a body of water as a result of direct or nearby human activity (18 AAC 70.990(49)).

Sediment – Solid material of organic or mineral origin that is transported by, suspended in, or deposited from water. Sediment includes chemical and biochemical precipitates and organic material, such as humus (18 AAC 70.990(51)).

Settleable Solids – Solid material of organic or mineral origin that is transported by and deposited from water, as measured by the volumetric Imhoff cone method and at the method detection limits specified in method 2540(F), *Standard Methods for the Examination of Water and Wastewater*, 18th edition (1992) (18 AAC 70.990(52)).

Source Control BMPs – Source control BMPs **prevent** pollution, or other adverse effects of stormwater, from occurring. Source controls can be further classified as operational or structural. Examples of source control BMPs include methods as various as using mulches and covers on disturbed soil, slope grading, land clearing practices, putting roofs over outside storage areas, and berming areas to prevent stormwater run-off and pollutant runoff.

Stormwater – Storm water runoff, snowmelt runoff, and surface runoff and drainage (MSGP 2000).

Total Suspended Solids – Solids in water that can be trapped by a filter. Total suspended solids can include a wide variety of material, such as silt, decaying plant and animal matter, industrial wastes, and sewage. High concentrations of suspended solids can cause many problems for

stream health and aquatic life and can block light from reaching submerged vegetation. As the amount of light passing through the water is reduced, photosynthesis slows down. Reduced rates of photosynthesis cause less dissolved oxygen to be released into the water by plants and possibly lead to fish kills. High total suspended solids can also cause an increase in surface water temperature, because the suspended particles absorb heat from sunlight.

Treatment Control BMPs – Treatment control BMPs include facilities or operations that remove pollutants by simple gravity settling of particulate pollutants, filtration, biological uptake, and soil adsorption. Treatment control BMPs can accomplish significant levels of pollutant load reductions if properly designed and maintained. An example of a treatment control would be a sediment basin.

Turbidity – Turbidity means an expression of the optical property that causes light to be scattered and absorbed rather than transmitted in straight lines through a water sample. Turbidity in water is caused by the presence of suspended matter such as clay, silts, finely divided organic and inorganic matter, plankton, and other microscopic organisms (18 AAC 70.990(64)).

Waters – Alaska statutes (AS) 46.03.900(36) defines waters to include lakes, bays, sounds, ponds, impounding reservoirs, springs, wells, rivers, streams, creeks, estuaries, marshes, inlets, straits, passages, canals, the Pacific Ocean, Gulf of Alaska, Bering Sea, and Arctic Ocean, in the territorial limits of the state, and all other bodies of surface or underground water, natural or artificial, public or private, inland or coastal, fresh or salt, which are wholly or partially in or bordering the state or under the jurisdiction of the state.

Appendix B – Contact Information

State and Federal Contacts

The following are state and federal contacts for additional information regarding mining and BMPs.

Alaska Department of Environmental Conservation
Drinking Water Program
http://dec.alaska.gov/eh/dw/index.htm

ANCHORAGE
555 Cordova Street
Anchorage, Alaska 99501
Toll Free 1-866-956-7656
907-269-7656

SOLDOTNA
43335 Kalifornsky Beach Rd Suite 11
Soldotna, AK 99669-9792
907-262-3408

FAIRBANKS
610 University Avenue
Fairbanks, AK 99709-3643
Toll Free 1-800-770-2137
907-451-2108

WASILLA
1700 E. Bogard Rd., Bldg. B Suite 103
Wasilla, AK 99654
907-376-1850

Alaska Department of Environmental Conservation
Wastewater Discharge Authorization – Storm Water Program
http://dec.alaska.gov/water/wnpspc/stormwater/Index.htm

ANCHORAGE
555 Cordova Street
Anchorage, AK 99501
(907) 334-2288

Alaska Department of Environmental Conservation
Nonpoint Source Water Pollution Control
http://dec.alaska.gov/water/wnpspc/index.htm

For TMDL information: http://dec.alaska.gov/water/tmdl/tmdl_index.htm

JUNEAU
410 Willoughby Ave., Suite 303
P.O. Box 111800
Juneau, Alaska 99801
907-465-5180

ANCHORAGE
555 Cordova Street
Anchorage, Alaska 99501
907-269-3059

FAIRBANKS
610 University Avenue
Fairbanks, AK 99709-3643
907-451-2125
907-269-3059

Alaska Department of Environmental Conservation
Contaminated Sites Program
http://dec.alaska.gov/spar/csp/index.htm

JUNEAU
410 Willoughby Ave., Suite 303
P.O. Box 111800
Juneau, Alaska 99801
907-465-5390

FAIRBANKS
610 University Avenue
Fairbanks, AK 99709
907-451-2143

ANCHORAGE
555 Cordova Street
Anchorage, Alaska 99501
907-269-7503

Alaska Department of Natural Resources
Division of Mining, Land & Water
550 West 7th Avenue, Suite 1260
Anchorage, Alaska 99501
907-269-8400
http://dnr.alaska.gov/mlw/

Alaska Department of Natural Resources
Plant Materials Center
5310 S. Bodenburg Spur
Palmer, Alaska 99645
907-745-4469
http://plants.alaska.gov/

Environmental Protection Agency, Region 10
NPDES Storm Water Coordinator
1200 Sixth Avenue
Seattle, WA 98101
206-553-6650
http://yosemite.epa.gov/R10/WATER.NSF/webpage/Storm+Water?OpenDocument

Army Corps of Engineers, Alaska District
Regulatory Branch
P.O. Box 6898
Anchorage, Alaska 99506-0898
907-753-2712
http://www.poa.usace.army.mil/reg/

Local Government Contacts

Contact information for local governments in major cities throughout Alaska. Please contact the local governmental organization in your area.

Fairbanks North Star Borough
809 Pioneer Road
P.O. Box 71267
Fairbanks, Alaska 99707-1267
907-459-1000
http://www.co.fairbanks.ak.us/

Matanuska-Susitna Borough
Land and Resource Management Division
350 East Dahlia Avenue
Palmer, Alaska 99645
907-745-4801
http://www.matsugov.us/communitydevelopment/land-and-resource-management

City & Borough of Juneau
Engineering Department
155 South Seward Street
Juneau, Alaska 99801
907-586-0800
http://www.juneau.lib.ak.us/engineering/

City & Borough of Sitka
Public Works Department
100 Lincoln Street
Sitka, Alaska 99835
907-747-1804
http://www.cityofsitka.com/government/departments/publicworks/index.html

Kenai Peninsula Borough
144 North Binkley
Soldotna, Alaska 99669
907-262-4441
http://www.borough.kenai.ak.us/

Municipality of Anchorage
Public Works Department
4700 Elmore Road
Anchorage, Alaska 99507
907-343-8120
http://www.muni.org/departments/works/pages/default.aspx

Appendix C – Resources for Information

BMP METHODS

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Buttleman, C.G. (1992): A Handbook for Reclaiming Sand and Gravel Pits in Minnesota; *Minnesota Department of Natural Resources*, Division of Minerals.

Ciuba, S. and Austin, L. (2001): Runoff Treatment BMPs; *in* Stormwater Management Manual for Western Washington, Volume V. *Washington State Department of Ecology*, Publication 9915, URL http://www.ecy.wa.gov/biblio/9915.html, June 2001.

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O'Brien, E. (2001): Minimum Technical Requirements; Stormwater Management Manual for Western Washington, Volume I. *Washington State Department of Ecology*, Publication 9911, URL http://www.ecy.wa.gov/biblio/9911.html, June 2001.

Oregon Department of Environmental Quality, 2005, *Erosion and Sediment Control Manual*, April 2005.

United States Department of Agriculture and Mississippi State University. (1999): Water Related BMP's in the Landscape; Watershed Science Institute. Created for the Natural Resource Conservation Service, United States Department of Agriculture by the Center for Sustainable Design Mississippi State University Departments of Landscape Architecture, Agricultural and Biological Engineering, and the College of Agriculture and Life Sciences, URL http://abe.msstate.edu/csd/NRCS-BMPs/contents.html, October 2001.

LOCAL BMP METHODS

City and Borough of Sitka, 2004, *A Contractor and citizen Guide to Reducing Stormwater Pollution*, June 2004.

Redburn Environmental & Regulatory Services, *Granite Creek Watershed Project Review Guidelines and Pollution Control Recommendations for Future Development*, for City and Borough of Sitka, June 2005.

ADDITIONAL INFORMATION

King County Washington (2009): Stormwater Pollution Prevention Manual; Department of Natural Resource, Water and Land Division, URL http://your.kingcounty.gov/dnrp/library/water-and-land/stormwater/stormwater-pollution-prevention-manual/SPPM-Jan09.pdf, January 2009.

Murphy, M.L. (1995): Forestry Impacts on Freshwater Habitat of Anadromous Salmonids in the Pacific Northwest and Alaska—Requirements for Protection and Restoration; NOAA Coastal Ocean Program, Decision Analysis Series No. 7, *in*. Schmitten R. A., Editor, (1996) NMFS National Gravel Extraction Policy, *U.S. Department of Commerce National Marine Fisheries Service*, URL http://swr.ucsd.edu/hcd/gravelsw.htm, June 2001.

North Carolina Department of Natural Resources and Community Development. (1988): Erosion and Sediment Control Planning and Design Manual; North Carolina Sediment Control Commission.

United States Department of Agriculture. (2000): Ponds--Planning, Design, and Construction; Agriculture Handbook Number 590.

United States Department of Agriculture, (1994): Planning and Design Manual for the Control of Erosion, Sediment, and Stormwater, Best Management Practice Standards.

Wright, Stoney J. and Hunt, Peggy, 2008, *A Revegetation Manual for Alaska*, Alaska Plant Materials Center, Division of Agriculture, Alaska Department of Natural Resources, 74 p.

DEWATERING INFORMATION

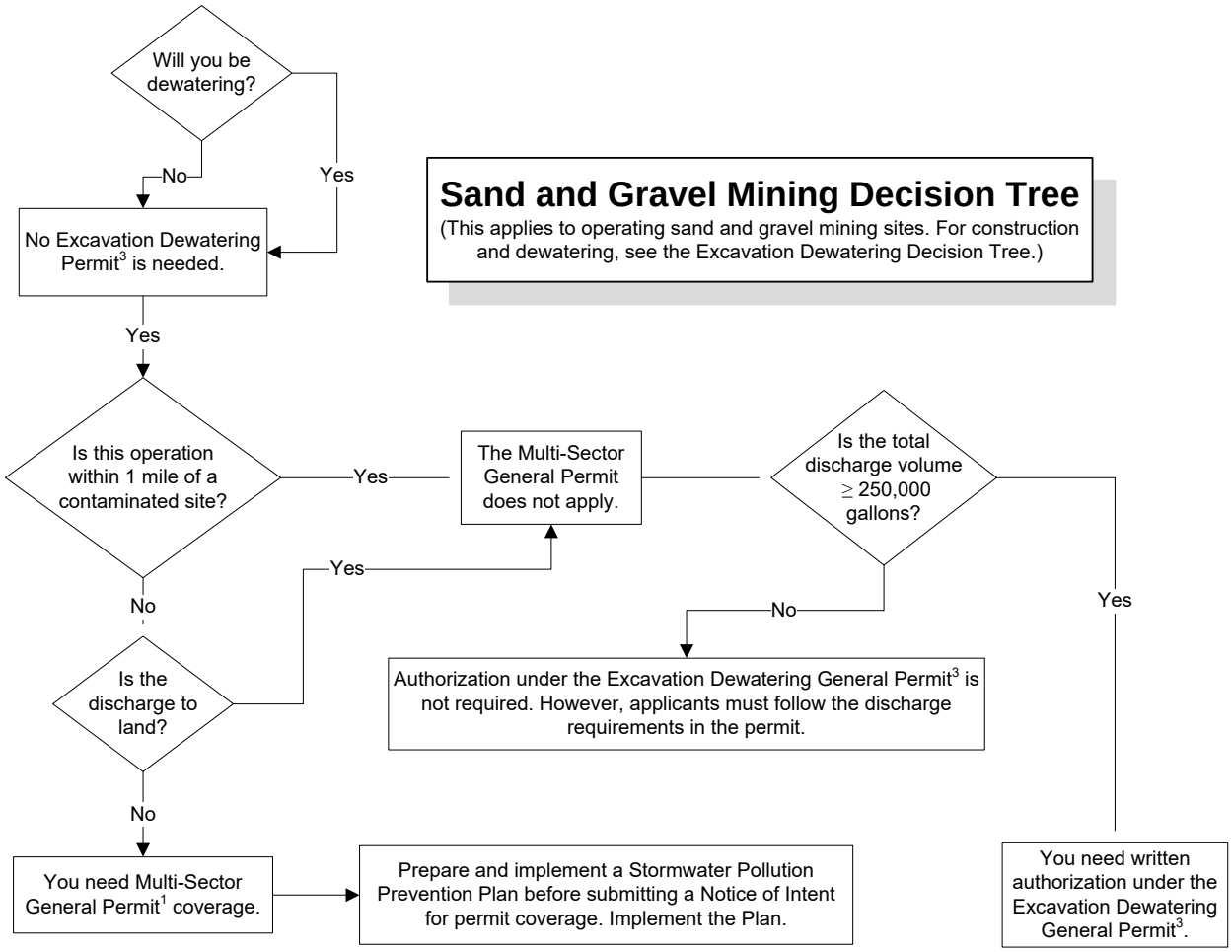
Powers, J.P., Corwin, A.B., Schmall, P.C., and Kaeck, W.E., (2007): Construction Dewatering and Groundwater Control: New Methods and Applications, Third Edition, John Wiley & Sons, Inc., Hoboken, NJ, USA.

Appendix D – State and Federal Permit Requirements

The table in this appendix provides an overview of state and federal requirements for gravel pit operations. **Not all requirements or permits might be identified or applicable**. In addition, local regulations or permits may be required. Please check with the responsible agency and local government agency to identify which apply to your operation.

Issue	Responsible Agency	Agency Requirement
Mining License	AK Dept. of Revenue	Provide copy of approved aggregate/sand & gravel mining license.
Letter of Intent	DNR	File the letter of intent required by AS 27.19.050 (b) annually on a form provided by the department before the mining begins.
Mining Permit	DNR	Provide copy of approved aggregate/sand & gravel mining permit, if extraction activity is conducted on state land.
Reclamation	DNR	Provide copy of approved state reclamation plan, if required (not required if less than 5 acres).
Water Quality – Run-off	DEC	Prepare SWPPP and submit NOI to obtain coverage under Multi-Sector general permit pursuant to APDES requirements. Dewatering discharges can be covered under DEC's construction general permit and Multi Sector General Permit, if less than 250,000 gallons or greater than one mile from contaminated site and is not otherwise contaminated.
Water Quality – Wetlands, Lakes & Streams	US Army Corps of Engineers	Any activity in wetlands, lakes, and streams requires Corps permit.
Water Quality – Groundwater	DEC	There is no prohibition on creation of man-made lakes or dredging into the water table. Dredging taking place into water table must be conducted in compliance with DEC notice of intent for the Multi-sector General Permit or APDES requirements, and DEC requirements for storage, spills and disposal of oil, antifreeze and hydrocarbons. Creation of man-made body of water may require Corps permit.
Water Quality – Dewatering	DEC	For dewatering that exceeds a total volume of 250,000 gallons or a rate of 40 gallons per minute and is within a mile of a DEC-listed contaminated site.
Water Quantity – Dewatering	DNR	Water Use Permit may be required.
Air Quality Control	EPA DEC	EPA Air Quality Control Permit required for asphalt plant and crushers. DEC has dust control regulations; no permits are required.
Burning	DNR DEC	Combustibles must be stockpiled separate from non-combustibles. Burning permit required from DNR. Burning must be conducted in compliance with DEC air quality standards.
Hazardous Materials	EPA	Use of hazardous material regulated by EPA standards.
Oil, Antifreeze & Hydrocarbon Storage (<1,200 gal.), Spills & Disposal	DEC	Regulated by DEC Oil and Hazardous Substances Pollution Control Regulation (18 AAC 75).
Oil, Antifreeze & Hydrocarbon Storage (>1,200 gal.), Spills & Disposal	EPA	Regulated by EPA standards.
Explosives – Storage and Use	FBATFE	Regulated by FBATFE.

Issue	Responsible Agency	Agency Requirement
Revised – June 2012. Key: DNR = Alaska Department of Natural Resources DEC = Alaska Department of Environmental Conservation EPA = United States Environmental Protection Agency APDES = Alaska Pollutant Discharge Elimination System FBATFE = Federal Bureau of Alcohol, Tobacco, Firearms & Explosives		



Sand and Gravel Mining Decision Tree

(This applies to operating sand and gravel mining sites. For construction and dewatering, see the Excavation Dewatering Decision Tree.)

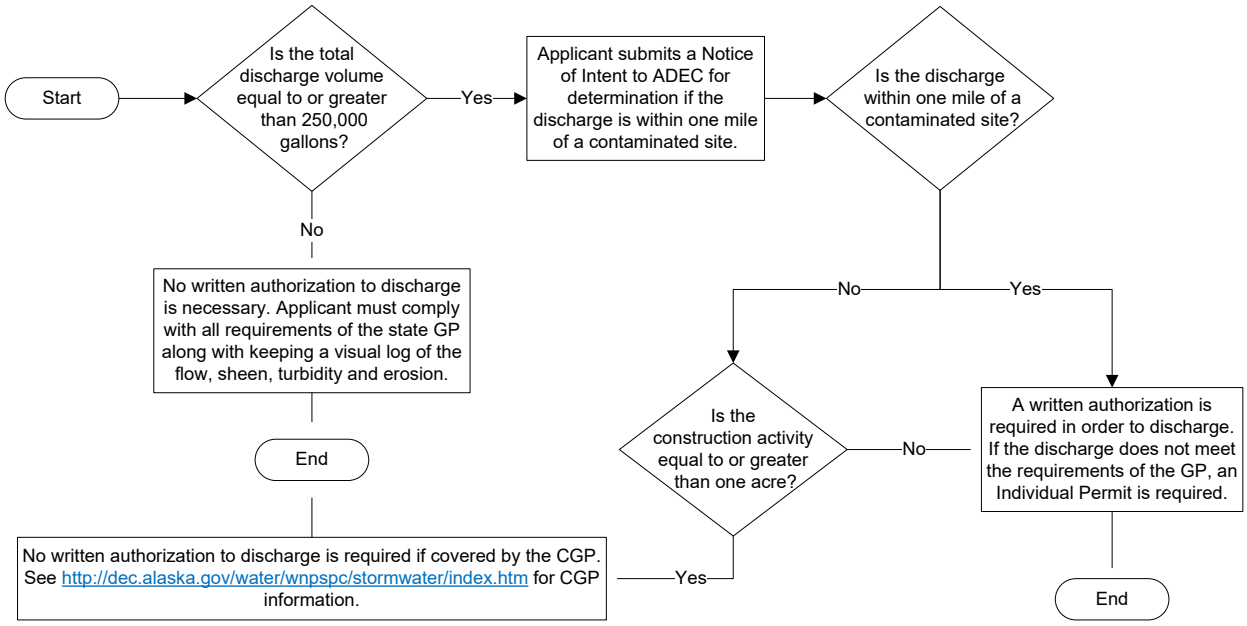
1 – DEC's APDES Multi Sector General Permit for Stormwater Discharges from Industrial Activities = MSGP
http://dec.alaska.gov/water/wnpspc/stormwater/MultiSector.htm

2 – DEC's APDES Construction General Permit for Stormwater Discharges from Construction Sites = CGP
http://dec.alaska.gov/water/wnpspc/stormwater/Index.htm

3 – State of Alaska Excavation Dewatering General Permit 2009DB0003
http://dec.alaska.gov/water/WPSDocs/2009DB0003_pmt.pdf

EXCAVATION DEWATERING DISCHARGE Decision Tree

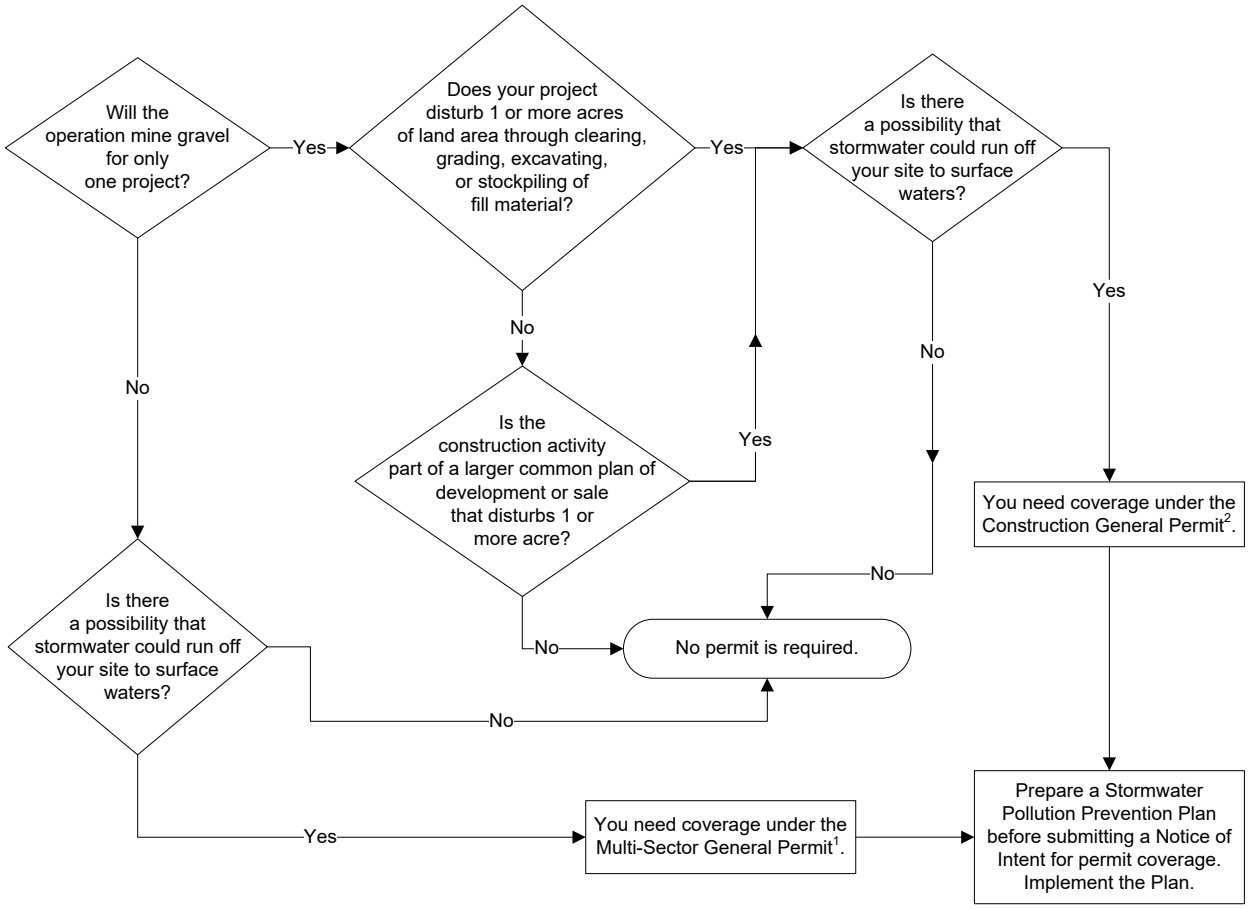
(For GENERAL PERMIT 2009DB0003)



DEC's APDES Construction General Permit for Stormwater Discharges from Construction Sites = CGP
http://dec.alaska.gov/water/wnpspc/stormwater/Index.htm

State of Alaska Excavation Dewatering General Permit 2009DB0003
http://dec.alaska.gov/water/WPSDocs/2009DB0003_pmt.pdf

Alaska Pollutant Discharge Elimination System (APDES) Permit Decision Tree

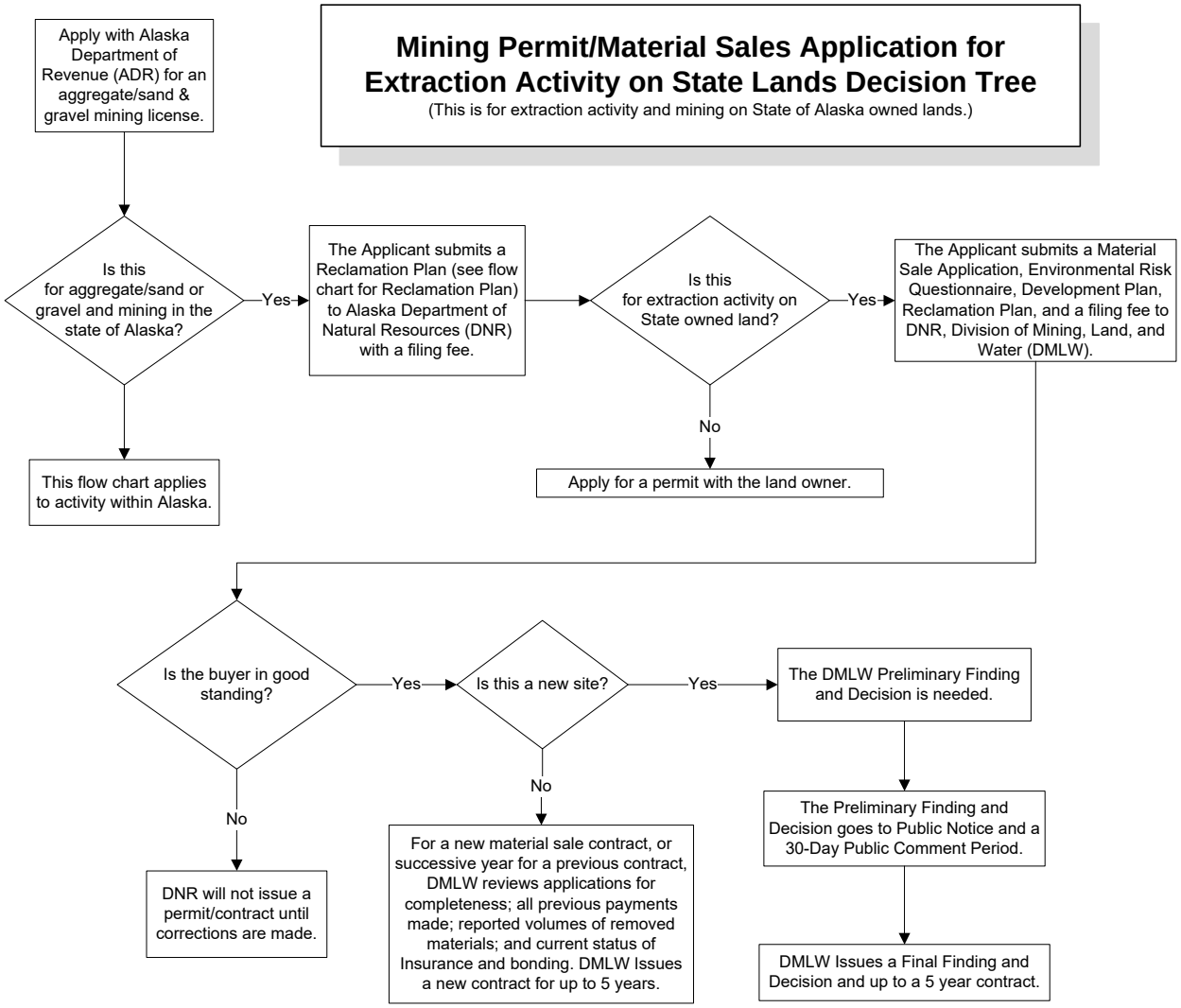


1 – DEC's APDES Multi Sector General Permit for Stormwater Discharges from Industrial Activities = MSGP
http://dec.alaska.gov/water/wnpspc/stormwater/MultiSector.htm

2 – DEC's APDES Construction General Permit for Stormwater Discharges from Construction Sites = CGP
http://dec.alaska.gov/water/wnpspc/stormwater/Index.htm

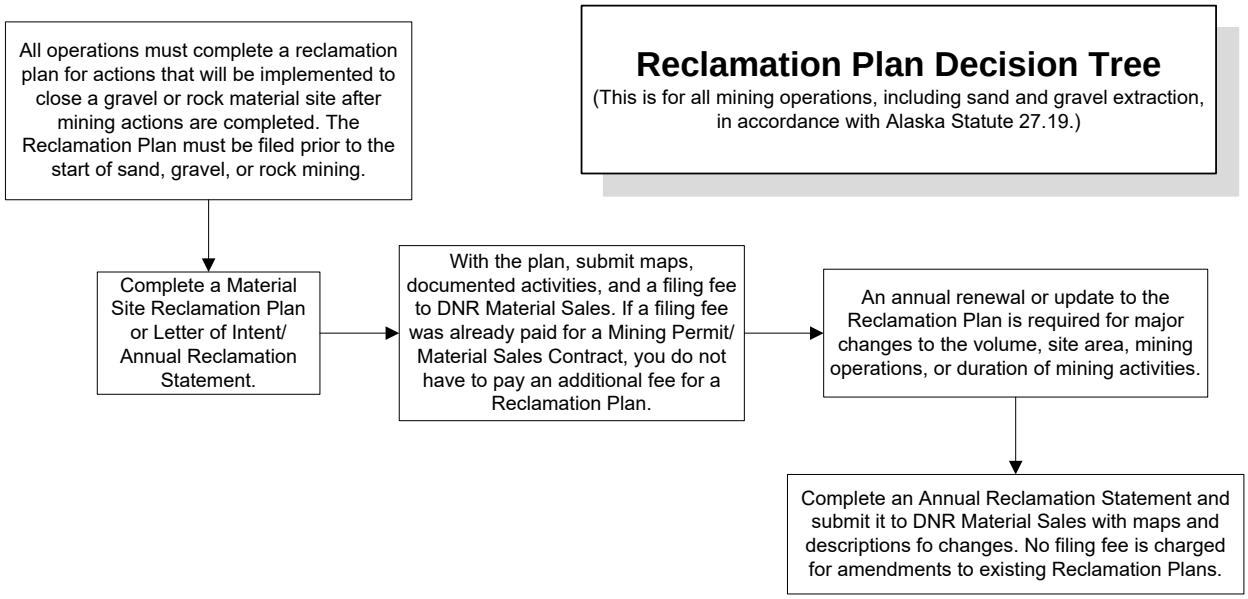
Mining Permit/Material Sales Application for Extraction Activity on State Lands Decision Tree

(This is for extraction activity and mining on State of Alaska owned lands.)



Reclamation Plan Decision Tree

(This is for all mining operations, including sand and gravel extraction, in accordance with Alaska Statute 27.19.)



Appendix E – Best Management Practice Index

This appendix presents an alphabetical index of best management practices found within this manual. These BMPs have been selected for specific application to mining operations in Alaska. There are, however, many "general reference" BMPs that can also be useful. Recommended websites include the following:

National Menu of Best Management Practices for Stormwater Phase II, United States Environmental Protection Agency, http://cfpub.epa.gov/npdes/stormwater/menuofbmps/menu.cfm, December 1999;

Water Related BMP's in the Landscape, Watershed Science Institute, http://www.abe.msstate.edu/csd/NRCS-BMPs/, October 2001;

Stormwater Management Manual for Western Washington, Volumes 1-5 Washington State Department of Ecology, http://www.ecy.wa.gov/biblio/9911.html, June 2001.

Also see Appendix C– Resources for Information.

BMP INDEX

NORTH LAKES COMMUNITY COUNCIL RESOLUTION 24-002
RECOMMENDATIONS TO THE MAT-SU BOROUGH PLANNING COMMISSION
& STATE OF ALASKA DEPARTMENT OF TRANSPORTATION
REGARDING
PROPOSED CONDITIONAL USE PERMIT FOR EARTH MATERIALS EXTRACTION
BY CENTRAL GRAVEL PRODUCTS (MSB RESOLUTION 24-31)

RESOLUTION DATED: OCTOBER 28, 2024

The undersigned President and Secretary, on behalf of the NORTH LAKES COMMUNITY COUNCIL (NLCC) hereby sign the following resolutions:

WHEREAS, The residents of the NLCC area appreciate the current beauty of the farmland and acreage of the Havemeister and Kircher property owners and appreciate their many years of contribution to the livelihood and economy of our area; and

WHEREAS, the NLCC acknowledges that hundreds of people (many of whom are assumed residents in the North Lakes Community Council boundaries) have objected to proposed development and have signed an on-line petition to "Halt the Bogard Gravel Pit" and have put forward written objections which will be submitted to the Planning Commission; and

WHEREAS, the NLCC has received additional written and verbal feedback from community members expressing similar concerns as those within the petition and has also received written and verbal feedback from community members that support the proposed Central Gravel Products development.

WHEREAS, the NLCC acknowledges the right of the property owners to develop their property as they see fit and to provide financial stability for themselves and their heirs; as long as any development complies with State and Borough code; and

WHEREAS, there is no public or governmental process to force a landowner into putting their property into the Alaska Farmland Trust; and

WHEREAS, there are no zoning or land use restrictions in the Mat-Su Borough (MSB) that would prevent the development of an earth material extraction operation (gravel pit) in this area; and

WHEREAS, Central Gravel Products has established a positive reputation with many in our community as a responsible and community-focused and cost-competitive gravel pit operator and has attended two NLCC Membership meetings to address concerns; and

WHEREAS, the most significant public safety concern of the NLCC community is the over-capacity level of vehicle traffic on both Engstrom and Bogard Roads, particularly in the vicinity of the Bogard / Engstrom intersection; and

WHEREAS, this section of Bogard has the highest traffic volume of any section in the corridor estimated in 2023 by the State DOT as 12,600 AADT; and

WHEREAS, community concerns are further magnified when considering the safety impacts of commercial gravel truck traffic turning on and off of Bogard or Engstrom in that particular area; and

WHEREAS, this section of road serves several schools and sees a high level of young high-school age drivers and parents delivering children to and from school; and

WHEREAS, a number of recently approved subdivisions to the north on Engstrom road will simply add more traffic to this area over time; and

WHEREAS, the State of Alaska DOT is proceeding with a major re-design and construction of a roundabout intersection at Bogard / Engstrom / Green Forest that is currently not scheduled for construction until 2026 or 2027; and

WHEREAS, the State DOT and MSB are well aware of community concerns and have recently launched a Bogard - Seldon Corridor Access Management Plan (CAMP) that specifically identifies design principles to be implemented along the Bogard - Seldon Corridor; and

WHEREAS, one of key principles documented in the CAMP is "No New Access" along the particular stretch of Bogard from Trunk Road to Seldon Road; and

WHEREAS, the MSB has also launched another planning effort called Safe Streets for All, which has confirmed the high density of crashes on this stretch of Bogard and has confirmed through community survey the high degree of concern with the Engstrom and Bogard area, and has identified that area for priority focus for safety improvement projects; and

WHEREAS, we understand the Havemeister and Kircher property owners have previously indicated to the MSB a willingness to work quickly and negotiate a sale of the necessary ROW to the MSB to construct a new South Alternative connector road between Engstrom and Trunk Road; and

WHEREAS, the owners of Central Gravel Products have indicated a willingness to actually construct the roadway to MSB standards (except for paving and a bridge across Wasilla Creek) at no charge to the Borough, and therefore at no cost to the taxpayers; and

WHEREAS, the NLCC has met with the Lohmann-Olson family who would be required to sell ROW to the MSB for the North Alternative connector road between Engstrom and Trunk Road and are strongly opposed to doing so; and

WHEREAS, Alaska State DOT prohibited any driveway access to Bogard Road from the nearby Winter Rose Phase 2 commercial property and also indicated they were going to make the intersection of nearby Stringfield and Bogard a "right turn only" intersection; and

WHEREAS, the area proposed for development is in a well-known and documented high-wind zone with significant snow drifting occurring regularly across Engstrom; and

WHEREAS, in addition to traffic safety related concerns, area residents have additional concerns about the negative impacts to property values, personal health, and quality of life due to visual impacts, blowing dust, noise, and blowing snow as a result of earth materials extraction (gravel pit) operations; and

WHEREAS, additional community concerns exist regarding potential negative impact to the water table and/or waterbodies as a result of earth materials extraction (gravel pit) operations; and

WHEREAS, Central Gravel Products owners have identified a number of "self-imposed" operational plans and measures to address Community concerns.

Now therefore, be it **RESOLVED** that the **NORTH LAKES COMMUNITY COUNCIL** strongly recommends the following actions by the MSB Planning Commission and Assembly and by the State of Alaska DOT:

1. Immediate selection of the South Alternative for the new Engstrom Road to Trunk Road Connector. We recommend the MSB move forward aggressively, in partnership with the property owners and gravel pit operator, to finalize design, procure ROW, and complete construction. The new road design should have a center turn lane associated with a major driveway into the proposed Central Gravel Products operation. ROW procurement and road design should anticipate traffic levels and expected commercial or residential development 20 years into the future.

2. The MSB should set a schedule target for all parties (MSB staff, landowners, engineers, contractors, and lawyers) to commission this project prior to the DOT construction activity planned for the Bogard / Engstrom intersection. This would substantially alleviate traffic congestion by providing a detour route during DOT construction of the Bogard / Engstrom roundabout. (Copy of TIP21 Project No.: 35472-1811 attached).

3. The State of Alaska DOT, consistent with prior decisions (example: Winter Rose Subdivision Phase 2), and consistent with the Bogard-Seldon Access Management Plan, should deny application for a new commercial driveway access (or the upgrade of an existing residential driveway) to Bogard Road between the Trunk Road intersection and the Engstrom Road intersection.

4. The State of Alaska DOT, also consistent with prior communications during the Winter Rose Subdivision Phase 2 approval, should take immediate action to make the Bogard and Stringfield intersection a right-turn only intersection. This can be accomplished through the use of signage and jersey barriers and does not need to wait for a more comprehensive redesign of this dangerous section of Bogard Road.

5. The MSB and the State of Alaska should establish regular oversight inspections to assure and enforce all of the environmental protection, noise mitigation, dust mitigation, visual impact mitigation, and snow drifting mitigation measures noted in the development plan submitted by Central Gravel Products.

Now therefore, be it further RESOLVED that the NORTH LAKES COMMUNITY COUNCIL enacts this Resolution in SUPPORT of the proposed earth extraction development upon the submission of a revised development plan and in reciprocal consideration for the guarantees from the developer, Central Gravel Products and agreement to the following changes, some of which are specific self-imposed limitations:

6. Commercial driveway access to the proposed development should be off of the new Engstrom Road to Trunk Road Connector (South Alternative). Until such time as this new road is constructed, temporary driveway access for truck traffic should be along the ROW established for this new road. Community preference is that the temporary driveway should come off of Trunk Road at the intersection with North Old Homestead Road. A new bridge (temporary or permanent) would need to be engineered, permitted, and installed across Wasilla Creek.

7. No permanent commercial driveway access for Central Gravel Products directly to Bogard Road (DOT) and/or Engstrom Road (MSB).

8. The first phase of development should be the earthwork necessary for the developer to construct the new Engstrom to Trunk Road Connector (South Alternative) less paving.

9. Future phases of development for the Central Gravel Products operation should be a maximum of 10-acres each and restricted to the area South of the new Engstrom to Trunk Connector until such time as that area is fully developed and reclaimed.

10. Establish more robust reclamation plans designed to reduce the impacts of dust from sections of property after the gravel extraction has been completed. Where possible, require organics and vegetative seeding on the floor of the excavated area (similar to existing requirements for slopes). Where floor space is necessary for material storage or drive lanes, cap those areas with a layer of 3/4 inch NFS material to reduce the potential for fine dusty material to be picked up by high winds.

11. Require the construction of a visual vegetative buffer screen / berm on the western side of the property parallel with Engstrom Road rather than relying on topography to restrict the view of gravel extraction activities as proposed in the existing development plan.

12. Engineer, locate and construct visual vegetative buffer screens / berms in a manner similar in function to a "snow fence" - that causes snow drifting to occur just downwind of the berm on Havemeister property and not on Engstrom Road or on the new Engstrom to Trunk Connector road.

13. Several self-imposed provisions by Central Gravel Products to provide additional risk mitigation measures to protect the environment and reduce impacts of noise, dust, vibration, snow drifting, etc.). Many of these mitigation measures go above and beyond those required by code. These provisions should be documented in the final approved development plan:
    a. Operating season restricted from May 1st through November 1st annually.
    b. Operating hours restricted from 8:00 am to 5:30 pm Monday through Saturday.
    c. No gravel screening on Saturdays.
    d. Dust control as described in recommendation #10 above.
    e. Visual vegetative buffer screens / berms constructed as described in recommendations 11 and 12 above.
    f. No rock washing and therefore no settling ponds.
    g. No excavation of gravel within 20-feet of the groundwater table.
    h. Protection of Wasilla creek by restricting any operations within 300-feet and not disturbing vegetation within this setback. as operational requirements as part of any final Conditional Use Permit.

WE THE UNDERSIGNED PRESIDENT AND SECRETARY DO CERTIFY THIS RESOLUTION WAS APPROVED THROUGH BOARD MOTION AND UNANIMOUS VOTE, ON BEHALF OF THE NORTH LAKES COMMUNITY COUNCIL AND RESIDENTS HEREIN.

Signed this 28th day of October, 2024.

President, Rod Hanson
North Lakes Community Council

Secretary, Nichole Smith
North Lakes Community Council

Attachment (link): MSB TIP21 Project 35472-1811 Project Data Sheet

Approved: 10/28/24

THE STATE of ALASKA
GOVERNOR MICHAEL J. DUNLEAVY

Department of Transportation and Public Facilities

Division of Project Delivery
Anchorage Field Office

4111 Aviation Avenue
P.O. Box 196900
Anchorage, AK 99519-6900
Main: 907-269-0520
Fax: 907-269-0521
dot.alaska.gov

October 29, 2024

Peggy Horton, Planner
Development Services Division
Matanuska-Susitna Borough
350 East Dahlia Avenue
Palmer, AK 99645

[Sent Electronically]

Re: Conditional Use Permit Review

Dear Ms. Horton:

The Alaska Department of Transportation and Public Facilities (DOT&PF) Central Region has reviewed the following conditional use permits and have the following comments:

- **CUP 10298 – Conditional Use Permit for Earth Materials Extraction – MSB 17.30 – Central Gravel Products**
    - DOT&PF requires eastern Havemeister driveway and all access points to Bogard Road west of Homestead Road along the Kircher property be consolidated to one access, with a shared access easement. This access may be required through design to be a right in and right out only access, which will be determined through the permitting process. No additional accesses will be permitted to Bogard Road.
    - Platting actions or changes in use invalidate existing driveway permits. Driveway permits and Approach Road Review's can be applied for at DOT&PF's online ePermits website: https://dot.alaska.gov/row/Login.po. Please contact DOT&PF's ROW division at 1-800-770-5263 to speak with a regional permit officer if you have any questions.
    - MSB, with DOT&PF collaboration and support, has a draft Bogard-Seldon Corridor Access Management Plan (CAMP) that will be finalized soon. The plan serves to outline access limitations along the Bogard-Seldon corridor, in which this site sits. To best align with the CAMP, access to these properties should be consolidated and reduced.
    - DOT&PF has several active projects in the vicinity, including a Bogard Road Safety and Capacity Improvements project and the Bogard/Engstrom Roundabout. Reduced driveway access in this segment of Bogard Road aligns with the intent of these projects to increase safety along the Bogard Road corridor.

- Please be advised that future access to Bogard Road at this location will become right in and right out only.

All properties accessing DOT&PF roads must apply to Right of Way for a driveway permit and/or approach road review, subject to provisions listed in 17 AAC 10.020. Any previously issued access permits become invalid once the property undergoes a platting action or change in use and must be reissued.

If there are any questions regarding these comments please feel free to contact me at (907) 269-0509 or kristina.huling@alaska.gov.

Sincerely,

Kristina Huling
Mat-Su Area Planner, DOT&PF

cc: Sean Baski, Highway Design Chief, DOT&PF
Matt Walsh, Property Management Supervisor, Right of Way, DOT&PF
Devki Rearden, Engineering Associate, DOT&PF
Morris Beckwith, Right of Way, DOT&PF
Brad Sworts, Pre-Design & Engineering Div. Manager, MSB
Anna Bosin, Traffic & Safety Engineer, DOT&PF

Matanuska-Susitna Borough
Development Services Division

Request for Review

Contact: Peggy Horton **Phone:** X7862

Due Date: 10-15-24

Project: Central Gravel Products Earth Material Extraction CUP Application

Special Considerations

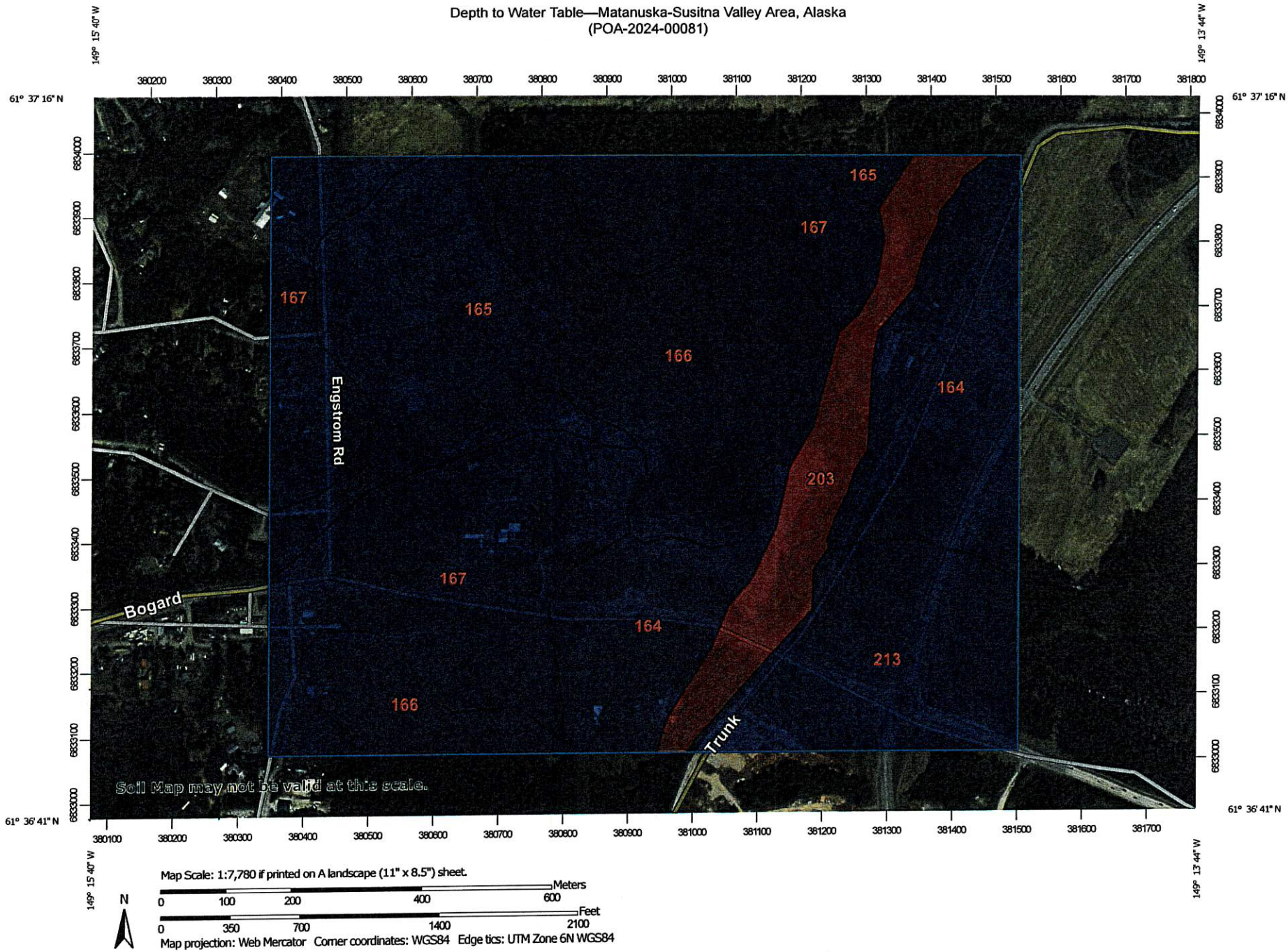
Reviewed By: PD&E **Date:** 10/21/2024

☐ **No Comment:**

Comments:

PD&E suggests conditions of approval on the permit addressing the following:
- Continue to work with Public Works to design and install visual screening and noise buffers along Engstrom Road to prevent snow drifting.
- The Engstrom driveway has been reviewed as an entrance only. If this changes in the future a new driveway permit will need to be applied for.
- No left turns from Bogard Rd. to Engstrom Rd. until the completion of the Bogard Engstrom roundabout.
- No left turns from Bogard Rd. to the Bogard Rd. access.
- Once the Bogard/Engstom roundabout is constructed the Bogard driveway should be right in and right out with construction of a channelizing (porkchop) median.
- All of the existing accesses to Bogard Road between Engstrom Road and Old Homestead Road should be removed and consolidated with a single access at the shared property line of the Havemeister and Kircher properties with a shared common access agreement. This consolidation would provide some mitigation to the high traffic volume and safety issues that currently exist on this section of Bogard Road. This also adheres to the current Bogard/Seldon corridor access management plan draft(CAMP).

Depth to Water Table—Matanuska-Susitna Valley Area, Alaska
(POA-2024-00081)



USDA Natural Resources Conservation Service

Web Soil Survey
National Cooperative Soil Survey

From: Rod Hanson
To: Peggy Horton
Cc: Alex Strawn; Tom Adams; Adler, Clint J (DOT); Central Gravel
Subject: Clarification: Central Gravel Products CUP
Date: Tuesday, November 5, 2024 10:53:02 AM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Peggy, after a meeting last week with Alex Strawn and Tom Adams, I felt the need to clarify in writing the position of the NLCC regarding the proposed Conditional Use Permit (CUP) for Central Gravel Products (CPG) as documented in Resolution 24-002.

Support for approval of the conditional use permit:

The NLCC supports the approval of a conditional use permit (reference the paragraph on page 4 of our resolution, between recommendations 5 and 6). We support approval because:

a. We believe CGP has submitted an application which satisfies the legal requirements for such a development as set forth by the State of Alaska and the Mat-Su Borough, and

b. CGP has indicated a willingness to take additional measures and follow self-imposed limitations on their operation to mitigate community concerns.

We ask that Central Gravel revise their application to document these additional measures and self imposed limitations prior to final approval of the CUP.

Driveway Options:

The MSB has not yet decided on the South Alternative for the Engstrom to Bogard Connector road, which was approved by the voters as part of the TIP21 bonding measure. The NLCC will continue to strongly advocate for a timely decision and construction of the South Alternative connector. The funding has been approved. The South alternative will be two to three times less costly to engineer and construct and it will provide much needed transportation infrastructure solutions much more quickly than the Northern Alternative.

For reasons explained in the resolution, we do not support a driveway (temporary or permanent) onto Bogard Road between Trunk Road and Engstrom. The NLCC wants to see permanent driveway access for CGP from the new Engstrom to Trunk connector road. Until such time as that can be achieved, we do not object to a temporary driveway access into and out of the Havemeister property from Engstrom Road - as long as that access is located further north on Engstrom at the location where an eventual ROW would be established for a connector road between Engstrom and Trunk (reference recommendation

#6 on page 4 of our Resolution). Mr. Strawn and Mr. Adams seemed to indicate that the Borough would not object to an in-and-out driveway at this location. If the Borough were to agree with this approach, then it would simplify the work required from the developer and allow DOT to adhere to the "no new driveways" principles as outlined in the draft Bogard-Seldon Corridor Access Management Plan.

This approach described above provides an opportunity for both the Borough and the State of Alaska to demonstrate they are serious about CAMP and willing to make the tough decisions necessary to adhere to its principles.

If the MSB were to ultimately decide not to construct the South Alternative Engstrom to Trunk Connector, the NLCC would still prefer to see driveway access for Central Gravel onto Engstrom rather than onto Bogard. Once the Engstrom / Bogard Roundabout is constructed, this will be a much safer way to integrate trucks into Eastbound or Westbound Bogard traffic.

I realize this email may not make it into the packet for the Planning Commission on November 18th. If not, then please include it in the "attachments" for the public hearing.

Thank you,

Rod Hanson

From: Rod Hanson
To: Peggy Horton
Cc: North Lakes Community Council (board@nlakes.cc)
Subject: November 18th Planning Commission Hearing on Central Gravel Products CUP
Date: Monday, October 28, 2024 3:57:54 PM
Attachments: NLCC RESOLUTION 24-002 Approved 102824.pdf

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Good afternoon Peggy,

We really appreciate your attendance at last Thursday's NLCC meeting.

Attached is the final, Board approved Resolution regarding the Central Gravel Products CUP application. Please include this Resolution in the November 18 Planning Commission Meeting packet.

If you have any questions, please let us know.

Thank you,

Rod Hanson
President, North Lakes Community Council
907-841-8735

NORTH LAKES COMMUNITY COUNCIL RESOLUTION 24-002
RECOMMENDATIONS TO THE MAT-SU BOROUGH PLANNING COMMISSION & STATE OF ALASKA DEPARTMENT OF TRANSPORTATION REGARDING PROPOSED CONDITIONAL USE PERMIT FOR EARTH MATERIALS EXTRACTION BY CENTRAL GRAVEL PRODUCTS (MSB RESOLUTION 24-31)

RESOLUTION DATED: OCTOBER 28, 2024

The undersigned President and Secretary, on behalf of the NORTH LAKES COMMUNITY COUNCIL (NLCC) hereby sign the following resolutions:

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WHEREAS, the NLCC acknowledges that hundreds of people (many of whom are assumed residents in the North Lakes Community Council boundaries) have objected to proposed development and have signed an on-line petition to "Halt the Bogard Gravel Pit" and have put forward written objections which will be submitted to the Planning Commission; and

WHEREAS, the NLCC has received additional written and verbal feedback from community members expressing similar concerns as those within the petition and has also received written and verbal feedback from community members that support the proposed Central Gravel Products development.

WHEREAS, the NLCC acknowledges the right of the property owners to develop their property as they see fit and to provide financial stability for themselves and their heirs; as long as any development complies with State and Borough code; and

WHEREAS, there is no public or governmental process to force a landowner into putting their property into the Alaska Farmland Trust; and

WHEREAS, there are no zoning or land use restrictions in the Mat-Su Borough (MSB) that would prevent the development of an earth material extraction operation (gravel pit) in this area; and

WHEREAS, Central Gravel Products has established a positive reputation with many in our community as a responsible and community-focused and cost-competitive gravel pit operator and has attended two NLCC Membership meetings to address concerns; and

WHEREAS, the most significant public safety concern of the NLCC community is the over-capacity level of vehicle traffic on both Engstrom and Bogard Roads, particularly in the vicinity of the Bogard / Engstrom intersection; and

WHEREAS, this section of Bogard has the highest traffic volume of any section in the corridor estimated in 2023 by the State DOT as 12,600 AADT; and

WHEREAS, community concerns are further magnified when considering the safety impacts of commercial gravel truck traffic turning on and off of Bogard or Engstrom in that particular area; and

WHEREAS, this section of road serves several schools and sees a high level of young high-school age drivers and parents delivering children to and from school; and

WHEREAS, a number of recently approved subdivisions to the north on Engstrom road will simply add more traffic to this area over time; and

WHEREAS, the State of Alaska DOT is proceeding with a major re-design and construction of a roundabout intersection at Bogard / Engstrom / Green Forest that is currently not scheduled for construction until 2026 or 2027; and

WHEREAS, the State DOT and MSB are well aware of community concerns and have recently launched a Bogard - Seldon Corridor Access Management Plan (CAMP) that specifically identifies design principles to be implemented along the Bogard - Seldon Corridor; and

WHEREAS, one of key principles documented in the CAMP is "No New Access" along the particular stretch of Bogard from Trunk Road to Seldon Road; and

WHEREAS, the MSB has also launched another planning effort called Safe Streets for All, which has confirmed the high density of crashes on this stretch of Bogard and has confirmed through community survey the high degree of concern with the Engstrom and Bogard area, and has identified that area for priority focus for safety improvement projects; and

WHEREAS, we understand the Havemeister and Kircher property owners have previously indicated to the MSB a willingness to work quickly and negotiate a sale of the necessary ROW to the MSB to construct a new South Alternative connector road between Engstrom and Trunk Road; and

WHEREAS, the owners of Central Gravel Products have indicated a willingness to actually construct the roadway to MSB standards (except for paving and a bridge across Wasilla Creek) at no charge to the Borough, and therefore at no cost to the taxpayers; and

WHEREAS, the NLCC has met with the Lohmann-Olson family who would be required to sell ROW to the MSB for the North Alternative connector road between Engstrom and Trunk Road and are strongly opposed to doing so; and

WHEREAS, Alaska State DOT prohibited any driveway access to Bogard Road from the nearby Winter Rose Phase 2 commercial property and also indicated they were going to make the intersection of nearby Stringfield and Bogard a "right turn only" intersection; and

WHEREAS, the area proposed for development is in a well-known and documented high-wind zone with significant snow drifting occurring regularly across Engstrom; and

WHEREAS, in addition to traffic safety related concerns, area residents have additional concerns about the negative impacts to property values, personal health, and quality of life due to visual impacts, blowing dust, noise, and blowing snow as a result of earth materials extraction (gravel pit) operations; and

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WHEREAS, Central Gravel Products owners have identified a number of "self-imposed" operational plans and measures to address Community concerns.

Now therefore, be it **RESOLVED** that the **NORTH LAKES COMMUNITY COUNCIL** strongly recommends the following actions by the MSB Planning Commission and Assembly and by the State of Alaska DOT:

1. Immediate selection of the South Alternative for the new Engstrom Road to Trunk Road Connector. We recommend the MSB move forward aggressively, in partnership with the property owners and gravel pit operator, to finalize design, procure ROW, and complete construction. The new road design should have a center turn lane associated with a major driveway into the proposed Central Gravel Products operation. ROW procurement and road design should anticipate traffic levels and expected commercial or residential development 20 years into the future.

2. The MSB should set a schedule target for all parties (MSB staff, landowners, engineers, contractors, and lawyers) to commission this project prior to the DOT construction activity planned for the Bogard / Engstrom intersection. This would substantially alleviate traffic congestion by providing a detour route during DOT construction of the Bogard / Engstrom roundabout. (Copy of TIP21 Project No.: 35472-1811 attached).

3. The State of Alaska DOT, consistent with prior decisions (example: Winter Rose Subdivision Phase 2), and consistent with the Bogard-Seldon Access Management Plan, should deny application for a new commercial driveway access (or the upgrade of an existing residential driveway) to Bogard Road between the Trunk Road intersection and the Engstrom Road intersection.

4. The State of Alaska DOT, also consistent with prior communications during the Winter Rose Subdivision Phase 2 approval, should take immediate action to make the Bogard and Stringfield intersection a right-turn only intersection. This can be accomplished through the use of signage and jersey barriers and does not need to wait for a more comprehensive redesign of this dangerous section of Bogard Road.

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7. No permanent commercial driveway access for Central Gravel Products directly to Bogard Road (DOT) and/or Engstrom Road (MSB).

8. The first phase of development should be the earthwork necessary for the developer to construct the new Engstrom to Trunk Road Connector (South Alternative) less paving.

9. Future phases of development for the Central Gravel Products operation should be a maximum of 10-acres each and restricted to the area South of the new Engstrom to Trunk Connector until such time as that area is fully developed and reclaimed.

10. Establish more robust reclamation plans designed to reduce the impacts of dust from sections of property after the gravel extraction has been completed. Where possible, require organics and vegetative seeding on the floor of the excavated area (similar to existing requirements for slopes). Where floor space is necessary for material storage or drive lanes, cap those areas with a layer of 3/4 inch NFS material to reduce the potential for fine dusty material to be picked up by high winds.

11. Require the construction of a visual vegetative buffer screen / berm on the western side of the property parallel with Engstrom Road rather than relying on topography to restrict the view of gravel extraction activities as proposed in the existing development plan.

12. Engineer, locate and construct visual vegetative buffer screens / berms in a manner similar in function to a "snow fence" - that causes snow drifting to occur just downwind of the berm on Havemeister property and not on Engstrom Road or on the new Engstrom to Trunk Connector road.

13. Several self-imposed provisions by Central Gravel Products to provide additional risk mitigation measures to protect the environment and reduce impacts of noise, dust, vibration, snow drifting, etc.). Many of these mitigation measures go above and beyond those required by code. These provisions should be documented in the final approved development plan:
    a. Operating season restricted from May 1st through November 1st annually.
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    d. Dust control as described in recommendation #10 above.
    e. Visual vegetative buffer screens / berms constructed as described in recommendations 11 and 12 above.
    f. No rock washing and therefore no settling ponds.
    g. No excavation of gravel within 20-feet of the groundwater table.
    h. Protection of Wasilla creek by restricting any operations within 300-feet and not disturbing vegetation within this setback. as operational requirements as part of any final Conditional Use Permit.

WE THE UNDERSIGNED PRESIDENT AND SECRETARY DO CERTIFY THIS RESOLUTION WAS APPROVED THROUGH BOARD MOTION AND UNANIMOUS VOTE, ON BEHALF OF THE NORTH LAKES COMMUNITY COUNCIL AND RESIDENTS HEREIN.

Signed this 28th day of October, 2024.

President, Rod Hanson
North Lakes Community Council

Secretary, Nichole Smith
North Lakes Community Council

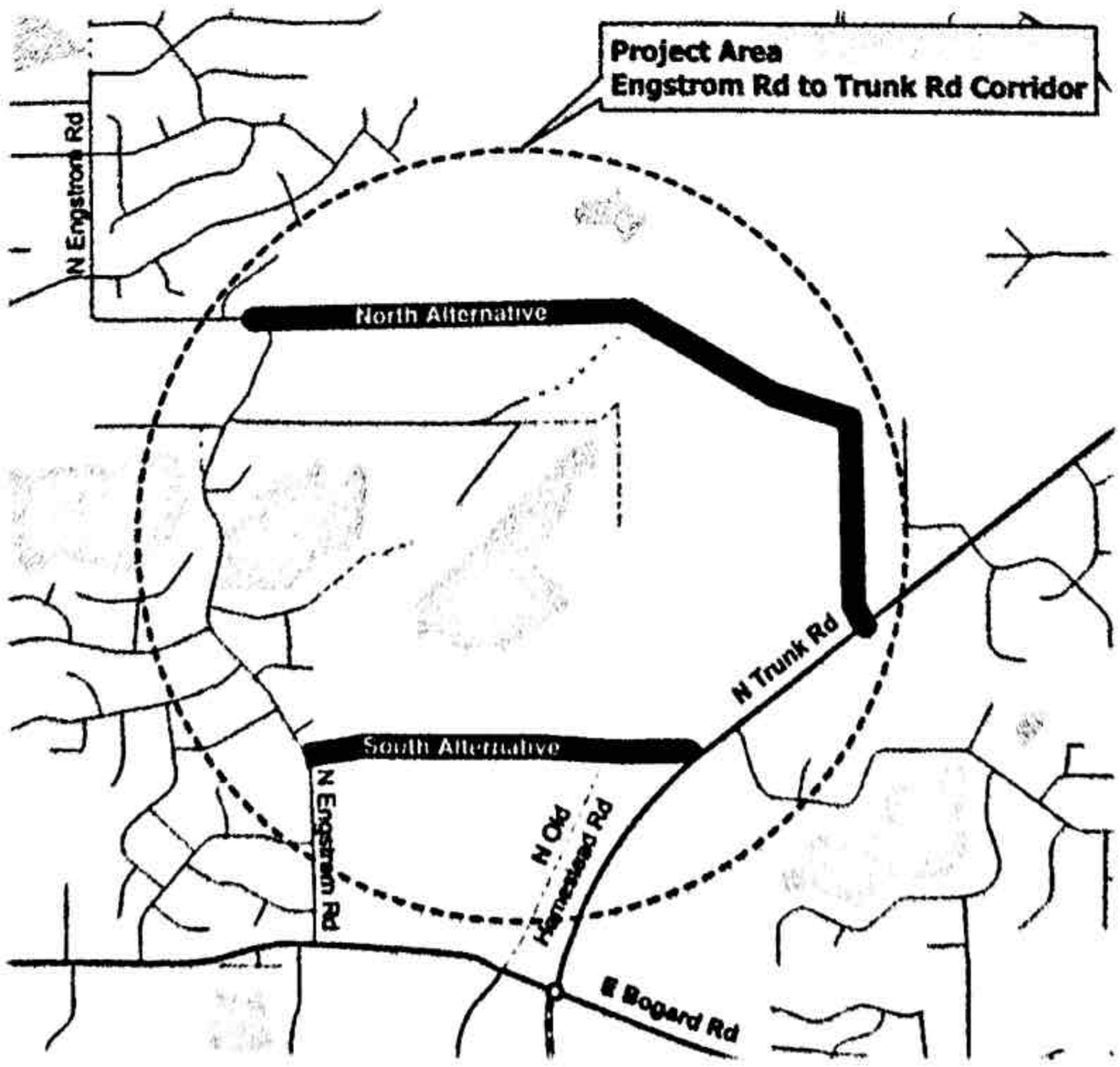
Attachment (link): MSB TIP21 Project 35472-1811 Project Data Sheet

TIP21

Engstrom Road to Trunk Road Corridor

Project No.: 35472-1811
Assembly District: 6
Road Service Area: Bogard No. 25
Description: The purpose of this project is to increase the capacity of the road network in the Fishhook area by providing an alternate route between Engstrom Road and Trunk Road that ultimately decreases traffic at the Engstrom Road and Bogard Road intersection. The need of the project is to improve connectivity and congestion to meet current and future traffic volumes, which are constricted by the Fishhook area's limited Collector level road network. Two alternative routes are being evaluated. Construction is anticipated to be phased. The construction phasing limits are to be determined.
Length: 1-2 miles
Designer: HDL Engineering Consultants, LLC
Contractor: TBD
TIP21 Estimate: $1,868,000
Future Phase(s) Estimate: $11,587,000
Estimated Total Cost: $13,530,000

	TIP21				Future Phase(s)
Phase	**2022**	**2023**	**2024**	**2025**	**After 2025**
Preliminary Engineering		$68,000	$100,000		
Design		$60,000	$303,000	$545,000	
Right-of-Way			$432,000	$335,000	
Utilities				$25,000	$75,000
Construction					$11,587,000
Year Totals:		$128,000	$835,000	$905,000	$11,662,000



Public Comments

From: Jessica Bertram
To: Peggy Horton
Subject: Gravel Pit on Trunk and Bogard
Date: Friday, September 20, 2024 8:04:14 PM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Dear Peggy Horton,

I am writing to express my strong opposition to the proposed gravel pit development at the intersection of Trunk Road and Bogard Road. As a concerned resident, I believe this is an inappropriate location for such an industrial operation, given the area's residential nature and existing congestion.

This section of Trunk and Bogard is already heavily trafficked, and adding large trucks and equipment necessary for gravel pit operations would only exacerbate the traffic issues. The roads are not designed to handle the additional load, and residents already face significant delays and safety concerns when navigating the area.

Additionally, the environmental impact of a gravel pit would be harmful to the quality of life for those living nearby. Dust, noise, and air pollution would severely diminish the health and well-being of residents. The constant noise from trucks and equipment, as well as the airborne dust, poses a significant risk to those with respiratory issues and would disrupt the peaceful atmosphere that residents value.

I urge you to consider alternative locations for this development, ones that are more suited to industrial activities and do not put the health and safety of local families at risk. The preservation of the residential character of this area should be prioritized over any industrial expansion.

Thank you for your time and attention to this matter. I trust that the concerns of the community will be taken into serious consideration.

Sincerely,

Jessica Bertram

From: mel.schoppe@gmail.com
To: Peggy Horton
Subject: Protest of proposed CUP for Earth Material Extraction Bogard/Engstrom area
Date: Sunday, September 22, 2024 1:22:29 PM
Importance: High

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
To Whom It May Concern,

This email is our official protest to the CUP being applied for by Central Gravel Products for the following three locations:

- 7955 E. Bogard Rd. – Tax ID 18N01E27A002
- 3182 N. Truck Rd. – Tax ID 18N01E27D001
- 7801 E. Glade Ct. – Tax ID 18N01E27D002

My husband and I are the property owners of 3 parcels of land near Cornelius Lake, as follows:

- 4907B01L006
- 4907B01L007
- 4907B01L009

The idea that the Matanuska-Susitna Borough would even consider allowing a 30-year permit for a gravel pit at the above-mentioned properties is asinine. There is already an extreme traffic issue near the Bogard and Engstrom intersection due to the excessive subdivision development that has been allowed at the end of Engstrom Road, in conjunction with the extension of Tex Al Road to accommodate traffic for said development. Engstrom Road was never built to accommodate the current amount of traffic that it is seeing and, furthermore, it was never intended to be a “shortcut” for people to use to get from Wasilla-Fishhook. Engstrom Road is in constant need of repairs, it has no shoulders, and it has become increasingly dangerous to drive due to the people outside of the area treating it as a high-speed shortcut. All of this traffic funnels through the Bogard/Engstrom intersection.

The intersection at Bogard and Engstrom is increasingly dangerous due to the high amount of traffic utilizing it and now you want to propose adding a constant flow of large trucks hauling heavy loads through said intersection. Until the existing safety issues are addressed at the Bogard/Engstrom intersection, it is ridiculous to contemplate adding more traffic that will make the intersection even more dangerous to drive. Before you allow more development that will cause more dangerous driving conditions in the area, complete the proposed improvements to the Bogard/Engstrom Road area.

Also, you are now proposing adding a noisy and dusty gravel pit to an area filled with residents that pay exorbitant taxes for lakeview and lakeshore properties and receive less than adequate road maintenance services in exchange for the high property taxes. The area where the gravel pit is being proposed experiences high winds, whiteout conditions and impassable roads due to snowdrifts in the winters. It is a terrible and dangerous idea to now add blowing dust and sand to that equation. What is being proposed is insulting to the tax paying residents of the area. The Matanuska-Susitna Borough needs to do better for the property taxpayers in the area and not grant the 30-year CUP.

Thank you,

Melanie Schoppe
Donald Yunker
1150 S. Colony Way #3-318
Palmer, AK 99645
mel.schoppe@gmail.com
Cell: 907-355-0343
Home: 907-745-3488

From: Anya Bottoms
To: Peggy Horton
Subject: Bogard/Engstrom
Date: Monday, September 23, 2024 5:07:42 PM

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

Hi, I do not want a gravel pit put in the old farming area of bogard & engstrom. There is already a very high traffic & very dangerous road system as it is. The increase of heavy equipment would make it even worse & highly dangerous. Numerous accidents & death have occurred on Bogard. I don't want to see any more. Our Matsu road system is a mess & needs fixed for public safety. Safety should be a priority. There a so many gravel pits in the valley, we really don't need any more, especially in a residential area.
The pollution In the air would bring our quality of life down. The view would be aweful as well, it's such a beautiful field. I live in the valley at the end of Engstrom, in the Vail Estates. Please no gravel pit.
Thank you for your time. Have a great day.
Anya & Sean Bottoms

Sent from my iPad

From: Trisha Drake
To: Peggy Horton
Subject: Proposed gravel pit at Engstrom and Bogard
Date: Monday, September 23, 2024 9:46:58 PM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
This land is and should remain farmland. The Valley is full of dirt, rock and gravel operations. We do not need another. The location its self is totally inappropriate for this kind of business. This land is still an important producer of hay, even after the closure of the dairy farm. If I am not mistaken, the farm and barn are part of the original Colony in the MatSu. So there is historic value as well.

The views across these fields are spectacular. The Matanuska Valley and Talkeetna Mountains to the north and the Chugach Mountains and Kinik Valley to the east. We should trade this for a gravel pit?

We used to have to endure the smell of manure spread on the field every summer to promote hay growth. Not nice, but at least it served a purpose. In the winter, snow from the fields would bury the road and the neighborhood. Still preferable to the noise, dust and devastation the proposed gravel pit would give.

The increase in noise, dust, pollution and ugly will negatively impact the entire area. It will lower the value of the closest properties and lower the quality of life for everyone in the area.

A bit of Change of subject, but since we are talking about this area… A few years ago, we were promised a road, cut along the northern edge of the hay field, from Engstrom to Trunk. This would have gone a long way to help alleviate the horrendous traffic backup at Engstrom and Bogard. If I remember correctly, we even approved bonds to fund the project. What happened to this project? Where did the money go? Why are we still risking our vehicles, our health and our very lives at this intersection every day?

Now we have been promised a traffic circle. When is construction to begin? 2046? If someone dies at that intersection, it is on your heads.

Back on subject. NO GRAVEL PIT AT THIS LOCATION! JUST NO.
Sent from my iPad

From: Nick Durbin
To: Peggy Horton
Subject: Gravel Pit on old Havemeister Farm
Date: Monday, September 23, 2024 11:47:51 AM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Good Afternoon,

I live in the Stone Creek Subdivision near Wolf Lake Airport, I would like to add my comments for not allowing the land where Havemeister Farm Land is/was located to be turned into a Gravel Pit and not allow for any neighborhood/homes being built on the land. The area is already a high traffic area and terrible for winds which we would have more trash and gravel/dirt blowing all over the area. I think the area could be turned into a park for kids in the neighborhood and surrounding areas to come and enjoy or also leave the land how it is, less traffic and building/crowd was the main reason myself and family have moved into the Valley.

Respectfully,
Nicholas Durbin
Address 5362 N Pumice Circle
907-982-6303

Get Outlook for iOS

From: Laura Hines
To: Peggy Horton
Subject: Central Gravel Engstrom and Bogard Permit
Date: Monday, September 23, 2024 1:23:11 PM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Dan Steiner, P.E., acting for Central Gravel Products, submitted an application for an Earth Material Extraction Conditional Use Permit under MSB 17.30—Conditional Use Permit (CUP) for Earth Material Extraction Activities for the extraction of 230,000 cubic yards annually through 2054. The site is located on 153 acres within three properties totaling 235 acres, on 7955 E Bogard Rd., 3182 N. Trunk Rd., 7801 E Glade Ct., Tax ID #s 18N01E27A002, 18N01E27D001, and 18N01E27D002.

I am emailing in regards to a permit that has been requested to excavate earth material until 2054. I believe this area should not be excavated due to the high winds of this area and residential homes within the vicinity. The borough already has an issue with the intersection at Engstrom and Bogard, which in return could cause more of an issue to that intersection. I would highly encourage you to not let this permit go through.

Laura Hines
907-444-0400

From: Michelle
To: Peggy Horton
Subject: Havemeister Dairy Farm site
Date: Monday, September 23, 2024 3:02:20 PM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Hello Peggy,

Please don't allow another gravel pit only 400 feet away from the existing Central Gravel Products Company, 8702 Bogard Road.
The valley is suffering from *Gravel Pit Saturation* already!

Michelle LaRose, property owner
Wasilla, AK

From: Sherylin Morrison
To: Peggy Horton
Subject: Havemeister's hay fields
Date: Monday, September 23, 2024 10:41:44 AM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
To whom it may concern:

My husband and I are against the proposal of Central Gravel turning the Havemeister's 235 acres into a gravel pit. This is a high wind area and would be devastating to the homes located around there as well as the communities north of that location. There is already so many problems with the Engstrom-Bogard intersection with vehicle collisions being at the top of that list. It's unsafe for drivers. Adding more homes (which developers are doing now) and adding a gravel pit to this mess is absolutely insane.

Please count our names as two of opposition to the Havemeister land being turned in to yet another detriment to this community. My husband and I express a resounding NO to this proposal.

Respectfully,

Sherylin M Morrison & Matthew L Morrison
5191 N Slate Circle
Wasilla, AK 99654

907-315-2712
907-414-1273

Matanuska-Susitna Borough
Development Services Division
350 E. Dahlia Avenue
Palmer, Alaska 99645

201 1344B13L005
SWICK LANCE & CARLA
7670 N SEBASTIAN DR
WASILLA, AK 99654-4638

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The public may provide verbal testimony at the meeting or telephonically by calling 1-855-290-3803. In order to be eligible to file an appeal from a decision of the Planning Commission, a person must be designated an interested party. See MSB 15.39.010 for the definition of an interested party. The procedures governing appeals to the Board of Adjustment and Appeals are contained in MSB 15.39.010-250, which is available on the Borough home page: www.matsugov.us, in the Borough Clerk's office, and at various libraries within the borough.

Comments are due on or before ***October 28, 2024,*** and will be included in the Planning Commission packet. Please be advised that comments received from the public after that date will not be included in the staff report but will be provided to the Commission at the meeting.

Name: Lance Swick ***Mailing Address:*** 7670 N Sebastian Dr

Location/Legal Description of your property: Shorewood, Residential,

Comments: Seriously? Any idea what kind of noise pollution, added traffic and air pollution we are looking out. This is a horrible idea. People will sell and more. I know we will.

Note: Vicinity Map Located on Reverse Side

From: Joe Carlton
To: Peggy Horton
Subject: Comments on Earth Material Extraction Conditional Use Permit
Date: Tuesday, September 24, 2024 1:46:09 AM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
My name is Joe Carlton and I live at 7846 E Sandstone Dr. Wasilla, Ak. My house is located in the Stonecreek development on Engstrom. I'd like to provide my comments regarding the land use permit to turn former grazing land into yet another gravel pit.

I don't know if Mat-Su burrough is familiar with the traffic issues at Engstrom and Bogard, if not, you should come out during busy times of the day. Adding additional large tractor trailers on that road to haul gravel and other products out of yet another gravel pit in the Valley would be a very bad idea.

There have been many, many houses go up in the Engstrom area and no relief from traffic congestion. Adding to that by putting this new gravel pit in would be completely unsafe and unwise.

Also, I guess I'd like to know why we need another gravel pit when there's another one that's less than 2 miles away. The Wasilla/Palmer area is basically one big gravel pit, why not put one where it won't impact daily traffic so much?

I'm opposed to this land user permit and hope that the burrough sees fit to deny it.

Thanks,
Joe

From: Benson Hoover
To: Peggy Horton
Subject: Engstrom Gravel Extraction
Date: Tuesday, September 24, 2024 10:13:21 AM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Hello Peggy,

I hope you are keeping well. My name is Benson, and I am emailing with a question regarding an application that was put in for gravel extraction off N Engstrom Rd. If I were to put together a letter with some concerns I have over the extraction of mineral resources in this area, would you be the correct person to send the letter to?

Thank you very much for your time.

--
Benson Hoover
Schlumberger MLWD Field Engineer
(907) 982-6165

From: Angie Ralston Lenard
To: Peggy Horton
Subject: CGP application for permit
Date: Tuesday, September 24, 2024 12:43:07 PM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]

An application for a Conditional use permit for Earth Material Extraction of 230,000+ cubic yards to be mined in 235 acres of which what is now farmland and borders Shorewood Subdivision, which is where my family home and land is located. My disabled father's home is less than 300' away from said potential project. **I believe this permit should be denied.**

I am gravely concerned about the imminent destruction of our health, quality of life, and peace of mind. Noise pollution from generators, trucks, and equipment will become an ever-present feature of our lives if we don't take action. We'll be forced to endure the constant, nerve-wrenching sounds, day in and day out.

Even more concerning, the development of these gravel pits threatens the pristine nature of our environment-the clogging of ditches, culverts and the destruction of habitats, all coupled with reduced oxygen levels.

Studies show that gravel pits impact groundwater quality, with potential negative implications for human health (Ground Water Canada, 2020). This vital resource - our drinking water - stands at risk.

On top of that, we need to consider the financial impact. This development will lead to depreciation of our property values, an unfair burden that we shouldn't be forced to bear.

Vibrations from the non-stop activity of will likely degrade underlying surfaces, once again affecting the quality of our homes. All together, these detrimental changes will greatly impact our lives, our environment, and our peace of mind.

Gravel extraction in and near streams can cause many adverse impacts to anadromous fishes and their habitats. (Wasilla Creek, Gooding and Cornelius Lakes are spawning grounds for the Cottonwood Creek watershed). Potential impacts include: direct harm to trust species; loss or degradation of spawning, rearing, resting, and staging habitat; migration delays and/or blockages; channel widening, shallowing, or ponding; loss of channel stability; loss of pool/riffle structure; increased turbidity and sediment transport; increased bank erosion and/or stream bed downcutting; and loss or degradation of riparian habitat. The impacts can extend far beyond the mining site, and stream recovery can take decades.

Given these significant potential impacts, it is important for us to unite and call for a halt to the

development of gravel pits in our area. We must protect our health, our tranquility, and our environment.

Angie Ralston Lenard
907-841-9582

From: Anita Martin
To: Peggy Horton
Subject: Proposed Gravel Pit at Engstrom and Bogart
Date: Wednesday, September 25, 2024 8:50:19 AM

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

Dear Peggy,

I live at 6570 E Robinson Circle in Wolf Lake. We use Engstrom to go to our house. I love the drive along Engstrom. The hay field bordering on the East side of Engstrom, the former Havermeister dairy property, is the proposed site for the gravel pit. My husband and I, along with our neighbors vehemently oppose this gravel pit at that location. The traffic turning from Engstrom onto Bogart is already terribly dangerous.
The dust and noise from a gravel pit does not work in a residential area. I understand that the owner of the property in question has rights, but so do the neighbors of the property. Our property values are very important as well as our well being. I was sad to hear that homes might be built on the Havermeister property, but that would be better than a gravel pit! The impact on Wasilla creek and Cornelius Lake cannot be positive. This is a terrible idea. Please oppose this type of use for that beautiful property. There are many better places for a gravel pit.

Anita and Brian Martin
6570 E Robinson Circle
Wasilla, AK 99654
Sent from Cyberspace

From: Erin Welton
To: Peggy Horton
Subject: CGP Gravel Extraction Permit
Date: Wednesday, September 25, 2024 9:47:55 AM

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

Hello, my name is Erin Welton, I have grown up here in Alaska and am representing a part of the younger age group. As someone who is trying to start their adult life (buy or build house). I am ALL for the gravel pit provided by Central Gravel Products. I have gone to them for years and they are the only pit in the valley that will service the little guys needing just 5 gallon buckets to fix a few potholes in the driveway, filling up smaller flower beds with soil, or even some decorative rock. But will also help out the bigger guys like local construction companies to fix roads, pave , create new foundations for buildings providing growth in the community.

If CGP is not rewarded the gravel extraction permit then that means the cost of gravel for all the simple honey doo's to making a parking area are going to go up tremendously. Along with trucking costs especially for big state/borough highways or road fixes.

Their plan states that they will be over 300ft away from the creek making it ion impossible to contaminate. They also have a good plan that will prevent snow drift over Engstrom which will help travel to trunk.

I appreciate your time and consideration as I am only one voice on this matter, but please help keep cost down for a 21 year old to build a house.

From: Erika Douglass
To: Peggy Horton
Subject: Proposed conditional use
Date: Thursday, September 26, 2024 7:52:14 AM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Good morning, Peggy,

I hope this finds you well. I am writing in regards to the conditional use permit applied for on tax parcels 18N01E27A002, 18N01E27D001, and 18N01E27D002. The permit is for earth extraction, which we all know, is a gravel pit.

This area of Bogard/Trunk/Engstrom is already highly congested. The intersections are not safe for the hundreds of vehicles that travel it currently, to add additional trucks would make this area an actual nightmare. Regardless of where the trucks enter the property, that area does not have the road for additional traffic.

Additionally, there are multiple schools that already have difficulty handling increased traffic; Colony High School, Colony Middle School, Pioneer Peak Elementary School and Finger Lake Elementary school all within a small radius. How will the added traffic effect the school bus routes? Children who live only a few blocks away are already on the bus for over 45 minutes one way, do you propose that they sit on the bus for more time? That's already nearly 2 hours out of their day and we haven't even gotten into winter and the delays that go along with it.

Then there's the aesthetic concerns. Gravel pits create noise, dust and again - more traffic. All surrounding these properties are residential areas. Please don't allow anyone to turn idyllic farm land into an eye sore.

Thank you for your consideration,
Erika Douglass
MatSu Resident

From: Alaska Frontier Fabrication
To: Peggy Horton
Subject: Regarding proposed gravel pit at Bogard/Trunk/Stringfield
Date: Thursday, September 26, 2024 1:13:45 PM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Peggy,

I would like to voice my opposition for the gravel pit application at 7955 E Bogard Rd., 3182 N. Trunk Rd., 7801 E Glade Ct., Tax ID #s 18N01E27A002, 18N01E27D001, and 18N01E27D002.

I believe the borough needs to address traffic issues in the area before it permits anymore development.

I live at 2150 N Stringfield, the only house located directly on Stringfield. Since the borough permitted the large housing development on the corner of Stringfield and Bogard, our road and adjacent intersections have become a nightmare. The speed limit is too fast (I have asked that it be lowered and was told that it doesn't meet requirements by Jamie, the borough engineer), the additional traffic is overbearing, there are pedestrians walking on the road, with no street lights, and no sidewalks. When this project was built, no consideration was taken into the swamp they were trenching in to. There is now a drainage issue on the opposite side of the street. We are now having to deal with a water problem in the ditch across the street and the borough is trying to drain it into the creek north of my home, which already has a tendency to flood.

Since the school was built across the street from my house, the wind pattern has changed so I understand those opposed complaining about the sand and snow drifts as my home now takes the brunt of the wind directly at my front windows.

All this to say that I feel the borough has a history of permitting projects without planning for the future impacts of their decisions. I believe the negative impact on this area that is woefully underserved with upgrades to the infrastructure would be a terrible mistake until the local issues are dealt with.

Regards,
Carrie Grove
2150 N Stringfield Rd
Palmer, AK 99645

Matanuska-Susitna Borough
Development Services Division
350 E. Dahlia Avenue
Palmer, Alaska 99645

RECEIVED
SEP 26 2024
Mat-Su Borough
Development Services

263 1344B05L010
PRICE MARK N
7370 E SHOREWOOD DR
WASILLA, AK 99654-4615

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Name: Mark Price ***Mailing Address:*** 7370 East Shorewood DR.

Location/Legal Description of your property: 7370 E. Shorewood DR Wasilla AK 99654

Comments: The never Ending Gravel mine needs To Find more Suitable Ground To Develop Elsewhere, the Pits are an eyesore on Fourcorners Never Reclaimed. MP.

Note: Vicinity Map Located on Reverse Side

Matanuska-Susitna Borough
Development Services Division
350 E. Dahlia Avenue
Palmer, Alaska 99645

34 1344B09L028
THOMAS ROBERT R JR & SARAH
3560 N CALDER RD
WASILLA, AK 99654-4644

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Name: Sarah Thomas ***Mailing Address:*** 3560 N Calder Rd, 99654
Location/Legal Description of your property: 51344B09L028
Comments: We are against the gravel pit. Concerns include aesthetics of the area, noise pollution, property values, interfere with road projects that are necessary and traffic issues.

Note: Vicinity Map Located on Reverse Side

From:	Verdie Bowen
To:	Peggy Horton
Cc:	Catherine Bowen; verdie.bowen@gci.net; Daniel Bowen; Edna DeVries; Mike Brown; Dolores McKee
Subject:	Earth Material Extraction Conditional Use Permit under MSB MSB 17.30 Dan Steiner P.E. acting for Central Gravel Products
Date:	Saturday, September 28, 2024 10:11:45 AM

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

Matanuska-Susitna Borough Planning Commission

Verdie and Catherine Bowen who reside at 3500 Calder Road Wasilla AK 99654 are against approval of gravel extractions presents by Dan Steiner.

Adding another gravel extraction site so close to schools and highly residential areas is not a good idea.

If this is something you decide is in your best interest vice the interest of us who live in this area we have two requests.

I would like to see two multi million dollar bond that will cover the loss of property values and for increased medical bills.
Having a neighbor extracting surface material will do nothing for our community but create an eye sore, reduction of hard earned property values, and allow us to have more emergency room treatments for lung issues. Including mine as a disabled veteran.

Thank you for the notification.

Verdie and Catherine Bowen
907 354 4433
3500 N Calder Rd
Wasilla, AK 99655

Sent from my iPhone

From: Christina Weinhammer
To: Peggy Horton; Christina Weinhammer; Ferd Weinhammer
Subject: Gravel Pit Proposal - Engstrom - Wasilla
Date: Monday, September 30, 2024 7:21:22 AM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
To whom it may concern:

We are definitely against a GRAVEL pit in our beautiful neighborhood!

Why is there even a thought from government to start, or should we say, looking to ruin yet another neighborhood with all the noise, dust and turned up ground. Where the cows used to graze and the grass would have been green. ALL will be gone and we have to move again at our ages to a different area or state!

We (all of us) In the neighborhoods have bought property, had houses built, have our retirement and all of that to be taken away?

Money grubbers and environmental destruction is not a way to keep your neighborhoods decent.

Also, one last note, I already suffer from Asthma and have problems with the dust turned up from the roads that our cars turn up into the air. Why make it worse for people looking to live their lives in Alaska? We pay our taxes.

House prices will definitely go DOWN! The neighborhood will become unwanted and slums.

Stop the companies from ruining lives.

Thank you for your help.

Christina Weinhammer and Ferdinand Weinhammer

From: Wee Care A lot
To: Peggy Horton
Subject: 5 Star comment for Central Gravel Production
Date: Tuesday, October 1, 2024 10:57:16 AM

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

To whom it may concern
I am putting my comment out there for central gravel construction. I would give them five stars or more. I think they are a wonderful company. I run a small licensed in-home daycare out of my house so I have rules and regulations I have to abide by just like centers, but being as small as I am, it's hard to find people who will do jobs that I need done because they say it's too small of a job so they don't want to do it. But central gravel is not one of those. They went above, and beyond to help me when I needed to put in a new playground with the regulations for the state. they are polite, professional and knowledgeable and they made me feel like not only one of the family, but like small businesses actually matter unlike other companies who blew me off and wouldn't answer any of my questions, or want to help. So I plan on sticking with Central Gravel Production's for all my outside needs and would definitely recommend them to anybody else.

Sincerely,
Connie Bongers
Owner of wee care a lot child care

From: Ken & Chelsey Okonek
To: Peggy Horton
Subject: Re: Public Comment: Central Gravel Products Application for Material Extraction
Date: Tuesday, October 1, 2024 9:11:34 AM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Thank you Peggy.
I actually read more into Central Gravel and the plans they have shared to help mitigate the concerns of the surrounding neighbors and id to add we appreciate their thorough response and have taken a more neutral response to their application.
Really appreciate your response.

Chelsey

From: Peggy Horton <Peggy.Horton@matsugov.us>
Sent: Tuesday, October 1, 2024 9:09:14 AM
To: Ken & Chelsey Okonek <okoneks.ak@gmail.com>
Subject: RE: Public Comment: Central Gravel Products Application for Material Extraction

Your comments will be included in the public hearing packet.

Peggy Horton
Current Planner
907-861-7862

From: Ken & Chelsey Okonek <okoneks.ak@gmail.com>
Sent: Monday, September 23, 2024 8:52 AM
To: Peggy Horton <Peggy.Horton@matsugov.us>
Subject: Public Comment: Central Gravel Products Application for Material Extraction

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Hello,
Thank you for considering my public comment.
Our family does not support the application for Material Extraction made by Central Gravel Products. This heavily trafficked area will be made worse by large trucks constantly coming and going. Additionally, the increased clearing of brush and leveling of the land will increase snow drifts in the area to Engstrom (which is already an immense problem) but also spread this issue to Bogard. The Borough already struggles to prevent this and keep it safe, please do not add to the problem. Lastly, there are many homes in the area, and adding more noise pollution is unnecessary and not desired by the area. There are many areas for possibility of this plus this company already has an extraction area across the roundabout.

Again, thank you for receiving our comment and we ***do not*** support this application being approved.

Okonek Family

From: Clara Anne
To: Peggy Horton
Subject: MSB 17.30
Date: Wednesday, October 2, 2024 2:49:18 PM

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

Hello, my name is Clara Willison and I am reaching out to let you know I am in support of MSB 17.30. Central Gravel Products has been a long-running gravel pit in the Mat-Su Valley and I am in support of this development for the longevity and ongoing development of our Mat-Su Valley. Without this, prices on everything go up, which hurts the pockets of every single resident living in the Mat-Su Valley. We talk up and down about how we want things to stay local, and this is how we do this by allowing this project to move forward. Central Gravel Products runs a fine operation here in the Mat-Su Valley and deeply cares about its community and its employees. I couldn't imagine anyone else taking on such a project and running it the way it should be run. They have proposed a great plan to keep things local for the residents of our wonderful valley.

Thank you

From:	Daniel Bowen
To:	TimHaleDistrict1@gmail.com; StephanieNowersDistrict2@gmail.com; Dolores McKee; Bill Gamble; Dmitri Fonov; Ron Bernier; Edna DeVries; George Hays; Mike Brown; warrenislak@gmail.com; Sonya Conant; Nicholas Spiropoulos; John Aschenbrenner; Shannon Bodolay; Denise Michalske; Erin Ashmore; Lonnie McKechnie; Estelle Wiese; Peggy Horton; verdie.bowen@gci.net
Subject:	Subject: Opposition to Central Gravel Products Earth Material Extraction CUP – Public Hearing on November 18, 2024
Date:	Wednesday, October 2, 2024 3:22:34 PM
Attachments:	Letter of Oposition to Application #MSB 17.30.pdf

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]

Dear Mayor, Assembly Members, Borough Attorneys, and the Clerk's Office,

I hope this message finds you well.

I am writing to formally submit my opposition to the application for a Conditional Use Permit (CUP) submitted by Central Gravel Products for Earth Material Extraction under MSB 17.30. The proposed gravel pit location near Gooding Lake, Finger Lake, and Cornelius Lake, adjacent to a residential area with a significant population of disabled veterans, retirees, and elderly residents, presents a number of serious concerns related to public health, safety, and environmental impact.

Attached to this email, you will find my detailed letter of opposition, which includes an addendum citing health studies, legal precedents, and relevant statutes. The potential adverse effects of noise, dust, and traffic on vulnerable populations are at the forefront of this concern, as well as the risks to nearby lakes and water quality.

I urge you to take these concerns into full consideration during the public hearing on November 18, 2024, and to reject the permit to protect the well-being of our community.

Thank you for your time and attention to this matter. I look forward to hearing from you and welcome any follow-up if further information is needed.

Sincerely,

The Honorable Daniel P Bowen, 32º

Colonel of the Commonwealth of Kentucky

The Honorable Daniel P Bowen, 32º

Colonel of the Commonwealth of Kentucky

907-232-2301

Matanuska-Susitna Borough

350 E. Dahlia Avenue
Palmer, AK 99645

RE: Opposition to Earth Material Extraction Conditional Use Permit (CUP) for Central Gravel Products, Application #MSB 17.30

Dear Leadership of the Matanuska Borough and Members of the Planning Commission,

I am writing to formally oppose the application for a Conditional Use Permit (CUP) submitted by Central Gravel Products to operate a gravel extraction site at 7955 E. Bogard Rd., 3182 N. Trunk Rd., and 7801 E. Glade Ct. (Tax ID #s 18N01E27A002, 18N01E27D001, and 18N01E27D002) in the Matanuska-Susitna Borough.

Impact on Vulnerable Populations

The site of the proposed gravel pit is located in close proximity to residential areas that are home to a significant population of disabled veterans, elderly retirees, and other vulnerable groups. Federal law and local statutes provide protections for such populations when their health, safety, and welfare are at risk. The proposed operation would create serious health hazards, which fall under the Americans with Disabilities Act (ADA) (42 U.S. Code §12101), as well as the Fair Housing Amendments Act of 1988 (FHAA) (42 U.S.C. § 3601-3619).

Under the FHAA, local governments are prohibited from enacting or maintaining policies or practices that result in discrimination against individuals with disabilities, including creating living conditions that would disproportionately affect their quality of life. The introduction of a large-scale gravel pit in close proximity to this residential area would result in significant noise pollution, dust, air quality degradation, and increased traffic, all of which would disproportionately impact disabled veterans and elderly residents with respiratory or mobility issues.

Case law has reinforced this protection, including Henderson v. Stalder, where courts ruled that governmental action that disproportionately impacts vulnerable groups can be unlawful if it denies these individuals the ability to enjoy their homes in peace (407 F.3d 351, 5th Cir. 2005).

Health and Safety Concerns

The proposed gravel pit operation would emit particulate matter and dust, which has been linked to respiratory diseases, especially in elderly and immunocompromised populations. According to the Clean Air Act (42 U.S.C. §7401 et seq.), the Environmental Protection Agency (EPA) regulates particulate matter as a harmful pollutant. It is widely documented that proximity to industrial operations like gravel pits increases the risk of respiratory problems, particularly for sensitive populations like the elderly and disabled veterans.

In Citizens Against Ruining the Environment v. EPA (535 F.3d 670, 7th Cir. 2008), the court held that agencies must give proper weight to the adverse health effects of pollution when issuing permits. As the borough considers this permit application, it must account for the increased health risks for nearby residents, particularly those who already have compromised health.

Noise Pollution and Vibration

While Central Gravel Products claims to comply with the Matanuska-Susitna Borough's noise regulations, the intensity of noise generated by continuous gravel extraction and heavy

machinery can cause significant disturbances in residential communities. The Noise Control Act of 1972 (42 U.S.C. §4901-4918) mandates that noise pollution be controlled in a way that does not harm public health or welfare.

Studies show that long-term exposure to moderate-to-high levels of noise pollution can exacerbate conditions such as anxiety and PTSD, which is prevalent among veterans. In Village of Euclid v. Ambler Realty Co., 272 U.S. 365 (1926), the U.S. Supreme Court upheld the use of zoning ordinances to regulate the compatibility of land use, finding that industrial operations that interfere with residential enjoyment can be prohibited under local zoning regulations.

Inadequate Buffer for Residential Zoning

Under the Matanuska-Susitna Borough's current land use regulations, gravel extraction sites must provide adequate buffers between industrial operations and residential zones. Central Gravel Products plans to operate within 100 feet of nearby creeks, lakes, and residential properties, which raises concerns about the adequacy of the buffer zone. This proximity fails to ensure protection for nearby residents and ecosystems, which could be subject to runoff contamination and environmental degradation.

A similar case, Tallahassee Memorial Regional Medical Center, Inc. v. Bowen, 815 F.2d 1435 (11th Cir. 1987), established that governmental bodies must act to protect residents from foreseeable environmental and public health hazards. The current proposal does not meet the requirements of responsible zoning or protection for the surrounding communities and ecosystems.

Traffic and Infrastructure Strain

Central Gravel Products asserts that there will be limited traffic impact; however, the increased presence of heavy trucks transporting gravel on already congested roads poses an infrastructure strain, potentially endangering nearby residents. Increased truck traffic will also exacerbate road wear and tear, further burdening taxpayers in these residential areas. Under the National

Environmental Policy Act (NEPA) (42 U.S.C. §4321 et seq.), local governments are required to assess the environmental and infrastructural impacts of large-scale projects like this one.

As cited in Save Our Community v. U.S. EPA, 971 F.2d 1155 (5th Cir. 1992), local governments have an obligation to mitigate traffic and infrastructural impacts that disproportionately affect residential communities.

Conclusion

While I understand the importance of gravel extraction for infrastructure and community growth, the proposed site for this operation is unsuitable due to its proximity to residential areas with a high population of disabled veterans, retirees, and other vulnerable groups. The environmental, health, and infrastructural impacts make this a poor choice of location. The potential harms to air quality, noise levels, and community safety should be of paramount concern.

In light of the legal precedents set by Henderson v. Stalder, Citizens Against Ruining the Environment v. EPA, and Village of Euclid v. Ambler Realty Co., I urge the Matanuska-Susitna Borough Planning Commission to deny this Conditional Use Permit application to safeguard the health, safety, and well-being of the residents.

Thank you for your consideration.

Sincerely,

Hon. Daniel P Bowen, 32º
Colonel of the Commonwealth of Kentucky
Representing resident near the proposed site
(Col. Catherine Bowen located at 3500 North Calder rd, Wasilla AK 99654)

Addendum

Health Studies and Legal Framework on Gravel Pit Operations Near Residential Areas

Health Studies and Environmental Impact Assessments (EIA)

Respiratory Health Risks from Dust Exposure: A study conducted by the National Institute for Occupational Safety and Health (NIOSH) on particulate matter generated by gravel pits concluded that long-term exposure to silica dust can result in silicosis, a severe lung disease, as well as other respiratory illnesses like asthma and chronic obstructive pulmonary disease (COPD). These risks are significantly higher for individuals with pre-existing health conditions, such as the elderly and disabled veterans living near the proposed site. (Source: "NIOSH Hazard Review: Health Effects of Occupational Exposure to Respirable Crystalline Silica" – DHHS (NIOSH) Publication No. 2002-129).

Psychological and Physical Impact of Noise Pollution

A study published in The Lancet highlights the impact of chronic exposure to noise pollution on psychological well-being and cardiovascular health. It found that consistent exposure to moderate noise levels (like those produced by gravel extraction operations) correlates with elevated stress levels, sleep disturbances, and an increased risk of heart disease and hypertension. (Source: Münzel, T., et al. "Environmental Noise and the Cardiovascular System." The Lancet, 2018).

Dust and Air Quality in Residential Areas

Research conducted by the Environmental Health Perspectives journal on communities living near similar extraction operations has shown a strong correlation between particulate matter from gravel pits and adverse respiratory health outcomes, especially in populations more vulnerable to

poor air quality. In many cases, children and the elderly were found to be most susceptible to exacerbated asthma symptoms and respiratory infections. (Source: "Air Pollution and Children's Health in the United States," Environmental Health Perspectives, Volume 113, Number 3, March 2005).

Environmental Impact on Water Resources

Studies on gravel pit operations near water bodies, such as the one conducted by the U.S. Geological Survey (USGS), demonstrate potential contamination risks. Even though containment methods are often cited, improper management or heavy rainfall could still lead to runoff contamination of lakes, creeks, and groundwater, impacting drinking water quality for nearby residents. This is particularly concerning given the proximity to Gooding Lake, Finger Lake, and Cornelius Lake. (Source: USGS Report 96-4297: "Hydrologic Effects of Sand and Gravel Mining").

Additional Legal Framework and Case Law

Alaska Statutes on Air Quality Control: Under Alaska Statutes (AS) 46.03.710-46.03.790, the state imposes air quality control regulations to protect public health from pollution caused by industrial operations. The gravel pit's potential to produce airborne particulate matter, which can exacerbate respiratory conditions, directly conflicts with these statutes. The Alaska Department of Environmental Conservation (ADEC) mandates that any industrial operation ensure compliance with air quality standards to safeguard public health, particularly in residential areas.

Americans with Disabilities Act (ADA) – 42 U.S.C. §12101: As mentioned previously, under the ADA, any development that disproportionately affects individuals with disabilities, including disabled veterans, must take extra precautions to avoid discrimination in terms of environmental impacts. Gravel extraction near populations known to have respiratory vulnerabilities or other medical conditions violates the principles of reasonable accommodation under the ADA. The

borough may face litigation for failing to protect the rights of disabled residents, as per the ADA's Title II provisions, which prohibit discrimination by public entities.

Fair Housing Amendments Act (FHAA) – 42 U.S.C. §3601-3619: As a federal law designed to ensure that housing is available on equal terms to all individuals, the FHAA prohibits actions by local governments that negatively impact residents based on disability or health. As established in Henderson v. Stalder, local governments must take into account how zoning decisions, like the approval of industrial permits, could disproportionately impact disabled residents. Gravel pits in close proximity to such populations violate this legal principle.

Clean Air Act – 42 U.S.C. §7401 et seq.: The Clean Air Act requires local and state authorities to ensure air quality standards are not exceeded by industrial operations. If particulate matter from gravel extraction exceeds EPA or ADEC limits, the permit could be legally challenged on these grounds. The borough has a duty to assess the long-term environmental and public health impact of particulate emissions before granting any CUP.

Noise Control Act of 1972 (42 U.S.C. §4901-4918): Federal law protects public welfare from excessive noise. Gravel extraction is known to produce noise levels that exceed acceptable thresholds in residential areas, and vulnerable populations, such as those suffering from PTSD, are particularly at risk. Village of Euclid v. Ambler Realty Co. (272 U.S. 365) set the precedent for using zoning laws to restrict industrial activities that could cause harm to residents.

Zoning and Public Welfare – State of Alaska Law: Under Alaska Statutes Title 29, Municipal Government, local governments, including boroughs like Matanuska-Susitna, have a duty to maintain zoning regulations that protect public welfare. The proposed gravel pit, located within a residential zone, contradicts the objectives of state and local zoning laws meant to preserve the quality of life for residents. Alaska Statute AS 29.35.180 specifically allows local governments to regulate land use in the interest of public health and safety, which should guide the Borough’s decision-making process in this instance.

Precedent Cases

Village of Euclid v. Ambler Realty Co., 272 U.S. 365 (1926): This landmark case upheld the use of zoning laws to restrict industrial activities in residential areas. The court found that municipalities have a vested interest in ensuring industrial developments do not harm the residential character of an area or impair the health and safety of residents.

Citizens Against Ruining the Environment v. EPA, 535 F.3d 670 (7th Cir. 2008): This case reinforced that federal agencies and local governments must weigh public health concerns when issuing permits for potentially harmful operations. Failure to mitigate the public health impacts of particulate emissions and environmental hazards can result in legal action under the Clean Air Act.

Henderson v. Stalder, 407 F.3d 351 (5th Cir. 2005): The court in this case held that municipalities must consider how industrial developments will affect disabled residents under the ADA. It establishes that discrimination includes environmental hazards that prevent disabled individuals from enjoying their homes in peace and safety.

Conclusion

The studies and legal precedents cited in this addendum underscore the public health, environmental, and legal concerns associated with permitting a gravel pit in close proximity to residential areas, particularly those housing vulnerable populations like disabled veterans and retirees. The Borough must take these concerns into account and uphold its responsibility to protect the public health, safety, and welfare by denying the Conditional Use Permit for Central Gravel Products.

From: Khloe Willison
To: Peggy Horton
Subject: MSB 17.30
Date: Wednesday, October 2, 2024 2:53:19 PM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Hello, my name is Khloe Willison and I am reaching out to let you know I am in support of MSB 17.30. Central Gravel Products has been a long-running gravel pit in the Mat-Su Valley and I am in support of this development for the longevity and ongoing development of our Mat-Su Valley. Without this, prices on everything go up, which hurts the pockets of every single resident living in the Mat-Su Valley. We talk up and down about how we want things to stay local, and this is how we do this by allowing this project to move forward. Central Gravel Products runs a fine operation here in the Mat-Su Valley and deeply cares about its community and its employees. I couldn't imagine anyone else taking on such a project and running it the way it should be run. They have proposed a great plan to keep things local for the residents of our wonderful valley. Thank you

From: Scott Ogan
To: Peggy Horton
Subject: Central Gravel pit please make this a public comment for the record
Date: Wednesday, October 2, 2024 11:22:02 AM

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

Dear members of the Mat Su Planning Commission,

My name is Scott Ogan. I'm writing in support of Central Gravel Products expansion to open a new gravel pit across the intersection from their existing pit. I own a small dump truck and regularly get gravel at Central Gravel's pit.

Recently, I missed getting there in time when they closed early on Saturday. So I figured I'd go to one of the other operators. I won't mention names, but there was a marked difference in attitude, quality and price with their competitors. It was so bad I took the load back, demanded a refund and dumped gravel back in their pit. They said they had a minimum charge and charged me twice as much as Central does. Plus, the quality of the material wasn't nearly as good as Central's product. I could hear all the boulders pounding my, truck when the loader dumped it. I complained to the gal when I checked out. She could care less. I came away from that experience with an even greater appreciation of the service that Central provide's the community.

I think the difference is, Central is owned and operated by local family. They treat me, with my little 5 yard dump truck, like I'm one of their bigger customers. I get a great product for a reasonable price. I think the Valley would not be well served by an oligarch type scenario with only big corporate gravel pit owners, not feeling the heat of competition. Prices would skyrocket, and all would suffer, including the cost of building much needed roads in the May-Su. Higher cost, fewer roads.

I'd also like to point out that the property that they are looking at is most likely pre-statehood patented land with mineral rights. The Havelmisters worked that land hard, and I doubt if they ever made any real money from it. Farming is a lifestyle, especially in Alaska. They should not be deprived from the retirement income because their newby neighbors may not like it. The code puts sideboards to protect adjacent landowners property values and life style. Let those protections work.

Thanks for listening. Please vote to allow Central to expand their operation to this new venture. We need local competition to keep the Valley strong and growing. There is the law of unintended consequences for denying development. Inflation is already bad enough, don't make it worse.

Senator (Ret) Scott Ogan
907.982.2469

Sent from my iPad

From: Kylie Willison
To: Peggy Horton
Subject: MSB 17.30
Date: Thursday, October 3, 2024 6:22:12 AM

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

Hello, my name is Kylie Willison and I am reaching out to let you know I am in support of MSB 17.30. Central Gravel Products has been a long-running gravel pit in the Mat-Su Valley and I am in support of this development for the longevity and ongoing development of our Mat-Su Valley. Without this, prices on everything go up, which hurts the pockets of every single resident living in the Mat-Su Valley. We talk up and down about how we want things to stay local, and this is how we do this by allowing this project to move forward. Central Gravel Products runs a fine operation here in the Mat-Su Valley and deeply cares about its community and its employees. I couldn't imagine anyone else taking on such a project and running it the way it should be run. They have proposed a great plan to keep things local for the residents of our wonderful valley.

Thank you
Sent from my iPhone

Matanuska-Susitna Borough
Development Services Division
350 E. Dahlia Avenue
Palmer, Alaska 99645

64 1344B14L013
FLEURY LANCE T
PO BOX 2566
PALMER, AK 99645

The Matanuska-Susitna Borough Planning Commission will consider the following:

Dan Steiner, P.E., acting for Central Gravel Products, submitted an application for an Earth Material Extraction Conditional Use Permit under MSB 17.30 – Conditional Use Permit (CUP) for Earth Material Extraction Activities for the extraction of 230,000 cubic yards annually through 2054. The site is located on 153 acres within three properties totaling 235 acres, at 7955 E Bogard Rd., 3182 N. Trunk Rd., 7801 E Glade Ct., Tax ID #s 18N01E27A002, 18N01E27D001, and 18N01E27D002.

The Matanuska-Susitna Borough Planning Commission will conduct a public hearing concerning the application on ***Monday, November 18, 2024***, at 6:00 p.m. in the Borough Assembly Chambers located at 350 E. Dahlia Avenue in Palmer. This may be the only presentation of this item before the Planning Commission, and you are invited to attend. Planning Commission members may not receive or engage in ex-parte contact with the applicant, other interested parties in the application, or members of the public concerning the application or issues presented in the application.

Application materials may be viewed online at www.matsugov.us by clicking on "All Public Notices & Announcements." For additional information, you may contact Peggy Horton, Current Planner, by phone: 907-861-7862. Provide written comments by e-mail to peggy.horton@matsugov.us or by mail to MSB Development Services Division, 350 E. Dahlia Avenue, Palmer, AK 99645.

The public may provide verbal testimony at the meeting or telephonically by calling 1-855-290-3803. In order to be eligible to file an appeal from a decision of the Planning Commission, a person must be designated an interested party. See MSB 15.39.010 for the definition of an interested party. The procedures governing appeals to the Board of Adjustment and Appeals are contained in MSB 15.39.010-250, which is available on the Borough home page: www.matsugov.us, in the Borough Clerk's office, and at various libraries within the borough.

Comments are due on or before ***October 28, 2024***, and will be included in the Planning Commission packet. Please be advised that comments received from the public after that date will not be included in the staff report but will be provided to the Commission at the meeting.

Name: Lance T. Fleury ***Mailing Address:*** Box 2566 Palmer 99645

Location/Legal Description of your property: Shoreacres # BLK 14 LOT 13

Comments: 7700 E. Destin Dr.

NO PIT!!

Note: Vicinity Map Located on Reverse Side

213 1344B07L018
FLEURY VICTOR T & IRENE
PO BOX 2566
PALMER, AK 99645-2566

The Matanuska-Susitna Borough Planning Commission will consider the following:

Dan Steiner, P.E., acting for Central Gravel Products, submitted an application for an Earth Material Extraction Conditional Use Permit under MSB 17.30 – Conditional Use Permit (CUP) for Earth Material Extraction Activities for the extraction of 230,000 cubic yards annually through 2054. The site is located on 153 acres within three properties totaling 235 acres, at 7955 E Bogard Rd., 3182 N. Trunk Rd., 7801 E Glade Ct., Tax ID #s 18N01E27A002, 18N01E27D001, and 18N01E27D002.

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Name: VICTOR-Irene Fleury ***Mailing Address:*** BOX 2566 Palmer, AK. 99645

Location/Legal Description of your property:

Comments: Shorewood Block7 Lot18
3801 N. Breeze Ct. No pit

Note: Vicinity Map Located on Reverse Side

October 4th, 2024

To Whom It May Concern,

MSB 17.30-Conditional Use Permit for Earth Materials Extraction

Central Gravel Products

I'm writing this letter to let you know we are lending our full support for the approval of Central Gravel Products MSB 17.30 Conditional Use Permit for Earth Materials Extraction.

It's hard to put in words how much Central Gravel Products means to our programs and our community. Having their support was an absolute blessing to both the Colony Middle School and Colony High School Softball programs. Jade and his crew continuously donated materials needed for field improvement and maintenance for us throughout the year. The central location is key to that donation, as we have construction crews willing to lend their trucks within city limits for hauling. Without that proximity there would have been an additional cost to our programs.

Local materials/gravel operations are imperative to keeping costs low for community members as well as the local nonprofits that benefit from their support. Not approving their permit means they have to establish their business on the outskirts in Sutton or Houston and then charge additional fees for delivery that go above and beyond what most people can afford.

We all know costs have risen considerably for building materials, please don't add more costs by not approving their permit.

They are a good family-owned company that supports the folks of this community not only by keeping prices low, but by donating to programs like ours for our children!

We are forever grateful for CGP and the thousands of dollars in materials he donated. Please join us in lending support to those businesses that support our community. Approve their permit and let's keep business in the core Valley!

Sincerely,

Tamara Finley, Head Coach Colony High School Softball Program

Alisa Parrent, Head Coach Colony Middle School Softball Program

Lady Knights Softball Booster Club

Matanuska-Susitna Borough
Development Services Division
350 E. Dahlia Avenue
Palmer, Alaska 99645

ALSO, SEEMS REALLY CLOSE TO WASILLA CREEK - AND THE LAKES. PLUS, LOSS IN PROPERTY VALUES.

296 1344B05L007
HOWE WAYNE R, DUFRESNE-HOWE JENNY M
4001 N MISTY LN
WASILLA, AK 99654-4614

The Matanuska-Susitna Borough Planning Commission will consider the following:

Dan Steiner, P.E., acting for Central Gravel Products, submitted an application for an Earth Material Extraction Conditional Use Permit under MSB 17.30 – Conditional Use Permit (CUP) for Earth Material Extraction Activities for the extraction of 230,000 cubic yards annually through 2054. The site is located on 153 acres within three properties totaling 235 acres, at 7955 E Bogard Rd., 3182 N. Trunk Rd., 7801 E Glade Ct., Tax ID #s 18N01E27A002, 18N01E27D001, and 18N01E27D002.

The Matanuska-Susitna Borough Planning Commission will conduct a public hearing concerning the application on ***Monday, November 18, 2024***, at 6:00 p.m. in the Borough Assembly Chambers located at 350 E. Dahlia Avenue in Palmer. This may be the only presentation of this item before the Planning Commission, and you are invited to attend. Planning Commission members may not receive or engage in ex-parte contact with the applicant, other interested parties in the application, or members of the public concerning the application or issues presented in the application.

Application materials may be viewed online at www.matsugov.us by clicking on "All Public Notices & Announcements." For additional information, you may contact Peggy Horton, Current Planner, by phone: 907-861-7862. Provide written comments by e-mail to peggy.horton@matsugov.us or by mail to MSB Development Services Division, 350 E. Dahlia Avenue, Palmer, AK 99645.

The public may provide verbal testimony at the meeting or telephonically by calling 1-855-290-3803. In order to be eligible to file an appeal from a decision of the Planning Commission, a person must be designated an interested party. See MSB 15.39.010 for the definition of an interested party. The procedures governing appeals to the Board of Adjustment and Appeals are contained in MSB 15.39.010-250, which is available on the Borough home page: www.matsugov.us, in the Borough Clerk's office, and at various libraries within the borough.

Comments are due on or before ***October 28, 2024***, and will be included in the Planning Commission packet. Please be advised that comments received from the public after that date will not be included in the staff report but will be provided to the Commission at the meeting.

Name: WAYNE R. HOWE ***Mailing Address:*** 4001 N. MISTY LN. WASILLA, AK 99654
Location/Legal Description of your property: LOT 7, BLOCK 5 - SHOREWOOD SUBDIVISION
Comments: THIS SEEMS LIKE A BAD IDEA. WORRIED ABOUT GROUND WATER. SILICA DUST FROM PREVAILING WINDS RIGHT INTO THE SUBDIVISION. WHICH HAS OVER 1,000 HOMES. ALSO, NOISE! HALF OF THIS NEIGHBORHOOD IS RETIRED - WE ARE HERE ALL DAY, ALMOST EVERYDAY.

Note: Vicinity Map Located on Reverse Side

From: gabbe Blackwell
To: Peggy Horton
Subject: MSB 17.30
Date: Saturday, October 5, 2024 12:44:52 PM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Hello, my name is Gabbe Blackwell, and I am reaching out to let you know I am in support of MSB 17.30.

Central Gravel Products has been a long-running gravel pit in the Mat-Su Valley and I am in support of this development for the longevity and ongoing development of our Mat-Su Valley. Without this, prices on everything go up, which hurts the pockets of every single resident living in the Mat-Su Valley. We talk up and down about how we want things to stay local, and this is how we do this by allowing this project to move forward. Central Gravel Products runs a fine operation here in the Mat-Su Valley and deeply cares about its community and its employees. I couldn't imagine anyone else taking on such a project and running it the way it should be run. They have proposed a great plan to keep things local for the residents of our wonderful valley.

Thank you for taking the time to read this letter & have a wonderful day.

From: Mike Spotto
To: Peggy Horton
Subject: Central gravel products new location
Date: Monday, October 7, 2024 3:41:18 PM

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

Dear Peggy,

I'm writing in support of Jade Laughlin's Central gravel products move to the new location next to the dairy.

I've known Jade and his family for many years now and I know they are upstanding citizens and members of our community.

I'm confident they will do a conscientious job of setting up and running the gravel pit in the new location such as to minimize any negative impact on the neighborhood.

Furthermore, I believe having a small, family run gravel pit in the local area will help keep delivery fees down for the community since the source of gravel will be much closer to where it's being used here in the local neighborhood.

Please allow Central gravel products move to the new location.

Thank you.

Mike Spotto
4871 N Skyvan Circle
Wasilla
907 315 7771

From: Nan
To: Peggy Horton
Subject: Conditional Use Permit for Central Gravel
Date: Wednesday, October 9, 2024 11:51:36 AM

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

Our residence is at Block 8, Lot 3 of Shorewood Subdivision. We would like to object to the conditional use of three parcels of land near us (Bogard, Trunk Road, and Glade Court) for earth material extraction.
1. It may make our property value go down.
2. Although there are rules about noise levels, noise can still be very annoying even if it is not at an illegal level.
3. Dust can happen at times when they are not there to water down the area they are working in. Especially in winter time.
4. Engstrom is narrow and prone to potholes. It is a nightmare to try to make a left onto Bogard. Even after the new roundabout is put in, there will still be problems with Engstrom.

Thank you,
Ronald and Nanette Bennett
PO Box 3690
Palmer, AK 99645

Res: 7530 E Springwood Drive, Wasilla

Matanuska-Susitna Borough
Development Services Division
350 E. Dahlia Avenue
Palmer, Alaska 99645

305 1344B09L010
LEOPOLD GUY A & ALTHEA V
3660 N EBRO CIR
WASILLA, AK 99654

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Name: Althea Leopold ***Mailing Address:*** 3660 N Ebro Cir Wasilla

Location/Legal Description of your property: Shorewood Block 9 Lot 10

Comments: I have concerns about air quality of air the wind is always making drifts through there. I also would like to know where they will access the gravel pit. Engstrom or Bogard aren't equiped to handle the big trucks.

Note: Vicinity Map Located on Reverse Side

From: R Conger
To: Peggy Horton
Subject: Public Comment
Date: Wednesday, October 9, 2024 6:08:09 PM

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

Hello,

My name is Ryan Conger and I would like to provide comment to the Planning Commission. My comment is regarding the proposed development of the “Havemeister Field” into a gravel pit. The properties are 7955 E. Bogard Rd., 3182 N. Trunk Rd. and 7801 E. Glade Ct.

I live with my family just to the north of these properties and I was alarmed to hear that a gravel pit could be put in this location. I am completely opposed to this plan. This is a residential area and there should not be any kind of industrial development taking place.

Thank you.

Ryan Conger

Sent from my iPhone

From: Stephanie Conger
To: Peggy Horton
Subject: Public comment for proposed gravel pit off of Engstrom
Date: Thursday, October 10, 2024 2:17:44 PM

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

Hello,

My name is Stephanie Conger. I am writing this as to provide you with a public comment to the Planning Commission in regards to the proposed development of the Havemeister Field off of Engstrom Rd. There has been discussion with the Borough about turning this beautiful field into a gravel pit.

My family built a house in 2018 north of the field and the field was one of the selling factors for me in the drive back towards our property. I am absolutely opposed to this plan as this is a residential area with tons of homes surrounding the field and using Engstrom as their only source to the main roads from the surrounding subdivisions. This should not be an industrial area, there are plenty of those near by off of Trunk and surrounding areas.

Thank you for your time,

Stephanie Conger

From: sarah blackstone
To: Peggy Horton
Subject: Central Gravel Products Conditional Use Permit Comment
Date: Monday, October 14, 2024 9:35:08 AM

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

As a resident of the Matsu Valley I really can't fathom why replacing usable farmland with a gravel pit is even being considered. For an area that already has numerous gravel pits why consider another? Gravel pits destroy local ecology, create dust issues in a high wind area, and are unsightly and excessively loud. Why make the valley uglier?

Even considering another gravel pit seems like a waste of resources and time. Do better for Matsu residents.

Sarah Blackstone.
Sent from my iPhone

From: William Munro
To: Peggy Horton
Subject: MSB 17.30 - Conditional Use Permit for Earth Materials Extraction
Date: Monday, October 14, 2024 9:13:56 AM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Hello,

I am writing about my support for the gravel extraction permit at the Havemeister dairy farm.

I have lived in the Palmer Wasilla area since 2011. The valley keeps growing and we need local gravel pits to keep the cost of expansion down.

I don't think I'm the only one who thinks we have many roads in poor shape, and removing locally sourced gravel will only make it more expensive to fix our infrastructure. As well as keeping the cost of building down.

I have personally put in a septic system in this fall and the customer service and quality of product is at the highest level.

Let's not have another family business disappear. Keep our valley locally owned and support our small business.

Kind regards,
William Munro

From: Martin Burzynski
To: Peggy Horton; Centralgravelproducts@hotmail.com
Subject: Central Gravel
Date: Tuesday, October 15, 2024 11:37:10 AM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]

Good Morning, Peggy and the Mat-Su Planning Commission,

I am writing in strong support of Central Gravel Products and their proposed relocation for gravel extraction at the Havemeister Dairy Property. As a frequent observer of their operations and a supporter of local business, I believe their new facility represents not only a continuation of their high-quality service but also a significant benefit to the surrounding community.

Central Gravel Products has consistently demonstrated a commitment to environmentally responsible practices. At their current facility, and with plans for the new location, they employ a water truck system to mitigate dust, ensuring minimal disruption to nearby residents and properties. Additionally, both the current and planned sites are carefully graded, and all water runoff will be collected to prevent any potential contamination of local water sources.

Their fuel storage is another area where Central Gravel Products has taken precautions. The fuel tank is fully contained to avoid contamination, and no rock washing will occur at the site, which eliminates the risk of sludge creation—an important measure to maintain the environmental integrity of the area.

The proposed location for the new facility is critical to the local community, as it will substantially reduce transportation costs for gravel products, representing significant savings for both businesses and residents who rely on these materials. By keeping their operation local, Central Gravel Products is directly contributing to the economic well-being of the community, providing high-quality gravel at competitive rates with the added benefit of reduced delivery costs.

In summary, I believe the development of this new facility is in the best interest of the Matanuska-Susitna Borough. Central Gravel Products has shown that they prioritize both quality service and environmental stewardship, and I encourage the Commission to approve this project. Please feel free to contact me if I can provide any further information or assistance in this matter.

Sincerely,
Martin Burzynski

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Martin A. Burzynski Esq.
Jones Bedinger, LLC
907-301-7793

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Martin A. Burzynski Esq.
Jones Bedinger, LLC
907-301-7793

From: Barb Doty
To: Peggy Horton
Subject: CUP for Earth Material Extraction over 30 years at former Havermeister Farm
Date: Tuesday, October 15, 2024 3:53:06 PM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Dear Ms. Horton:
I am writing regarding the proposed CUP for the former Havermeister Farm for use for 30 years of gravel extraction, as requested by Dan Steiner on behalf of Central Gravel. As a former MSB Assembly member, I am disappointed that MSB leadership has failed to control the gravel extraction efforts in the core area of our borough, especially where multiple new subdivisions have been developed and in one of the most rapidly growing sections of the core area. Infrastructure has not been able to keep up regarding roads and storm water drainage in the Engstrom and Trunk road area, so much so that the Bogard/Engstrom round-about, funded during my term as Assembly member in 2017, is not slated to be initiated until 2026, and remains one of the most accident-prone intersections throughout the valley. Adding the dust, noise, and heavy equipment impact on these overused roads is a traffic and safety nightmare. I would strongly insist on a detailed traffic impact study before considering approval of such a CUP. I also am wondering where this gravel is intended to be used, given that there are no large road projects in the immediate vicinity to my knowledge that require more gravel than is already available in the current Central Gravel Pit next to Colony High. This property is ideal for a school site, a greenbelt, or small parcel agriculture that would be an added value to the local community.

Given the 30 year proposed use, what route would gravel trucks take to access this property, and are those roads capable of handling the known increased residential use along with heavy truck use? What impact on property values, and thus on the MSB tax base, will placing a gravel pit in the middle of new single family home subdivisions have? Is approval of this CUP fiscally sound from the MSB point of view? There is currently no tax on gravel that provides revenue to the MSB economy, and there are several nearby gravel operations already in place that can supply the local population growth. What is the rationale for adding this large and long-term gravel extraction operation in the midst of mutiple new houses?

I am the owner of Wolf Lake Airport, the largest private general aviation residential/commercial airport in our borough. Wolf Lake Airport is an economic stimulus for the MSB, attracting multiple general aviation operations serving the greater Mat Su Borough. During summer operations, we have over 75 daily landings of general aviation aircraft that are landing within 2 miles of this proposed CUP property. What precautions are being put into place to assure that dust control and flight visibility will not be hindered? Is there going to be an appropriate environmental study to address air quality and visibility before approval is given?

I strongly encourage that the request for this CUP is denied, for the multiple reasons described. This is not the highest and best use of this picturesque and centrally-

situated piece of property. It is the responsibility of the Planning Commission to make recommendations on behalf of the people of Mat Su that provide economic and social benefit to the community. This project is not one of them.

Conditional Use Permit (CUP) for Earth Material Extraction Activities for the extraction of 230,000 cubic yards annually through 2054. The site is located on 153 acres within three properties totaling 235 acres, on 7955 E Bogard Rd., 3182 N. Trunk Rd., 7801 E Glade Ct., Tax ID #s 18N01E27A002, 18N01E27D001, and 18N01E27D002.

Barbara Doty M.D.

From: Adam Ferguson
To: Peggy Horton
Subject: Central Gravel
Date: Tuesday, October 15, 2024 1:24:09 PM

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

Hi Peggy,

This is a quick note to say, having a local gravel source is a very nice benefit for me to have nearby. It is my understanding that Central Gravel is advocating for a change of location due to available resources.

I only support responsible development of resources that are needed for community development, not private mega-profit enterprises.

My support of this project would be on the premise that it can be executed with respect to the environment, and those potentially impacted nearby. What type of impact will it have on the already bottle-necked traffic in the area?

Thanks,

Adam Ferguson
907-795-26987

From: Johnathan Hulsey
To: Peggy Horton
Subject: MSB 17.30
Date: Tuesday, October 15, 2024 8:39:04 AM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
As a resident just up Engstrom from Bogard I support this new permit for a new gravel pit to operate.

Johnathan Hulsey
(707)349-2513

From: Kevin Clark
To: Peggy Horton
Subject: Support of Central Gravel Products New Proposed Gravel Pit Location
Date: Tuesday, October 15, 2024 11:01:51 AM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]

Good Morning, Peggy and Members of the Mat-Su Planning Commission,

I am writing to express my support for Central Gravel Products and their proposed new location for gravel extraction on the Havemeister Dairy Property.

Remote Alaska Solutions (RAS), a Palmer-based general contractor, is a frequent customer of Central Gravel Products. In the course of our operations, which include commercial developments, custom residential projects, and large-scale subdivisions, we rely heavily on quality gravel products across the Matanuska-Susitna Borough. Although we have numerous options for sourcing materials based on price, proximity, and quality, we consistently choose to work with Central Gravel Products. Their centralized location, superior product quality, and the professionalism of Jade, Kelly, and their team make them stand out. The family-oriented atmosphere they cultivate adds a personal touch that is both refreshing and valuable to our business relationships.

The development plan proposed by Central Gravel Products for their new site demonstrates a clear commitment to environmentally responsible practices. I am confident that this project will be executed with the utmost consideration for environmental impact, while delivering significant benefits to the broader community.

In conclusion, I firmly believe that approving this development will positively contribute to the overall prosperity of the region. Should you have any questions or require further information regarding my support for this project, please feel free to contact me.

Best regards,
Kevin
Remote Alaska Solutions

Kevin D. Clark
Vice President
Website: www.remoteAK.com \ **Cell:** 517-285-3400 \ **Office:** 907-406-4545
instagram | facebook | youtube

From: Taylor Wilson
To: Peggy Horton
Subject: Havemeister Gravel Pit
Date: Tuesday, October 15, 2024 3:22:43 PM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Dear Peggy,

The last thing we need is another gravel pit, especially on good agricultural land. Why not lease it to farmers? Alaska has become far too reliant on imported food. What is our plan for food security in Alaska? Are you guys aware Alaska cannot feed itself? Why are we okay with turning fertile soil into subdivisions and gravel pits? What we need is more incentives for young farmers. Farming up here is WAY TOO EXPENSIVE and extremely risky. Why is no one fighting to resolve this problem? Are you waiting for a food crisis to hit before doing something about it?

Another thing to note is nobody wants an eye sore like that in a beautiful area. That area has been ruined enough by all the new subdivisions. Alaskans want to preserve their land but unfortunately the only land that gets preserved is conservations ran by rich "non-profits". Our beautiful Mat-Su Valley is getting destroyed by new developments every day. Please don't let us lose this part of Alaska's agricultural history.

Could you lease to the Experimental Farm? What about an agriculture museum with active fields?

From: Edwina Burt
To: Peggy Horton
Subject: MSB 17.30 - Conditional Use Permit for Earth Materials Extraction
Date: Wednesday, October 16, 2024 10:21:02 PM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]

Hi Peggy, I am writing this about Central Gravel Products request for permit.

I have gotten gravel and dirt from them several times. Sometimes 5 gallon buckets. Sometimes in my pickup bed, also had truckloads delivered. They have always been very helpful, loading the buckets for me into my car trunk , helping me with putting a tarp on to cover load anchored down.
The pit is kept clean and watered to keep the dust down as needed. You very seldom hear the equipment (crusher, screener as they are very quiet) the trucks that come and go are good about keeping speed down. The loaders keep their speed down and are relatively quiet for being big .
If the pit is closed then we will have to get our gravel, dirt from a much farther distance and it will be a lot more expensive for everyone if we have to deal with a large commercial pit as compared to local owners in the community.
Thank you for considering and hopefully granting CGP the permit .

Thank you, Edwina Burt
1727 N Pioneer Peak Dr, Wasilla, AK 99654

Not without Purpose does God write the music of our life
Anonymous

From: John Klapperich
To: Peggy Horton
Subject: RE: Strong Support Central Gravel Products CUP MSB 17.30
Date: Thursday, October 17, 2024 4:25:46 PM
Attachments: image001.png

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]

Resent

Jk

AdXcelerant **John Klapperich**
Senior Sales Executive
AdXcelerant, Inc.

907-355-9970
jklapperich@adgorilla.com
https://www.adxcelerant.com/adgorilla
Wasilla, AK

'peggy.horton@matsugov.us '

10/17/24 2:53 PM
Peggy,

Being a 44 year MSB resident, and past 6 yr, P.C. Chairman, I strongly support and highly encourage the Planning Commission's approval of the CGP expansion with the Earthly Extraction Permit up Engstrom Road, MSB 17.30

Additional gravel products are essential for continuation of thousands of my neighbor's family wage jobs, equipment operators, builders, pavers, painters, plumbers, electrical, roofers, lenders and more. I have lived on Bogard and Earl Drive, less than one mile from Engstrom and Bogard for over 40 years, drive it several times a day, I understand and am experiencing the increased traffic growth. We are fortunate to have a locally owned company Central Gravel Products implementing this needed expansion. A company that we can examine historical integrity, to do what they say they will do. And deliver more than they promise regarding "Good Neighbor" policies, practices, and procedures.

Additional gravel products are needed now, CGP is the best option by far.

John

John Klapperich

Klapperich & Associates LLC

2951 North Earl Drive

Wasilla, AK. 99654

johnk@mtaonline.net

(907) 355 9970

www.jklapperich.com

From: Heath Hamblen
To: Peggy Horton
Subject: Proposed Gravel Pit Engstrom Area
Date: Thursday, October 17, 2024 9:51:29 PM

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

Hi, this message is in regard to the proposed future gravel pit located off Bogard / Engstrom road area. I am in favor for the approval of the future gravel site. I live up Engstrom road in the Hart Lake area and know that most all of those house sites over the years were completed utilizing gravel / soil products from the current Central Gravel Pit location. With the future growth in the valley both residential, commercial and roads that need addressed there is and will be a need for gravel. I have purchase gravel from Central and had it delivered on many occasions. The coordination, equipment utilized and products are top notch. Visiting the gravel pit it is clean, tidy and well put together. Talking with the owners and the plans they have to develop are well thought out and put together. I don't see how moving the gravel pit from its current to the new proposed location would be an issue. The gravel has to come from some where to continue servicing the valley and it is a centrally located and utilized gravel pit.

Thank you

Heath Hamblen

From: morgan baker
To: Peggy Horton
Subject: Conditional Use Permit for Earth Materials Extraction for central gravel
Date: Saturday, October 19, 2024 10:47:39 AM

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

Hello,
I would like my voice to be heard on this subject. There are positive and negative feedback for almost any big change made to an area within a dense population. As a land owner and personal home developer I use central gravel to import materials to my property off of palmar fishhook road. I work for the state in Thompson Pass, this past summer I bought myself a dump truck to start my own business here in the valley to live on my property and provide for my family. Central Gravel Products has been the most reliable source of work and has the largest selection of products/materials at the most reasonable price. I feel if the borough doesn't give out permits to members of the community and average citizens like Jade and Kelly, it will allow the bigger corporations to control the market which will make the price of these products much more expensive for people like you and me. Also as a sub contractor it will be harder to find work and support my family. People like myself enjoy working with employers like Central Gravel because they care about us rather than working for a corporation/large company or a city department where you are pretty much just another number on the payroll and are considered replaceable by the higher ups in the company! I hope you make the right choice in supporting the community members, not the corporation's because we are the ones that really care about our neighbors and where we live.

Best regards
Morgan baker

Sent from my iPhone

To: Peggy Horton / Matsu-Borough

Subject: MSB 17.30 / Conditional Use Permit For Earth Extraction
Central Gravel Product

From: Marc Hamblen, Owner Operator of Hamblen Enterprises, LLP

Date: October 20, 2024

I am writing this letter in support of Central Gravel Products request for earth extraction permit by Bogard and Trunk road (MSB 17.30). I own and operate a landscaping and dirt work company here in the Matsu-Valley. I have done a lot of business at the end of Engstrom in the new subdivisions that have been built up there. All of my products, Top Soil, B-Chip, D-1 and 2 inch minus have come from Central Gravel Products. Without Central Gravel Products the cost of doing business would have been much higher for my customers. Currently Central Gravel has some of the lowest gravel products in the Valley.

There are many other reasons for my support of the earth extraction permit and are listed below.

- We do not have many gravel pits. Most are running out of product. Such has K&H Gravel products. While they are still in business they do not have many of the products on hand that are needed to complete customers landscaping, driveways or home improvement projects.
- On small projects a dump trailer is needed or required. Central Gravel Products will load a dump trailer. The other large corporately owned gravel pits will not allow dump trailers. When at Central Gravel Products one will see 4-5 dump trailers at a time lined up at the gravel pit for home improvement products. These are small businesses and residents of the community with dump trailers. Where will these residents go if we do not have a private locally owned gravel pit.
- There is not enough product in the valley to complete landscaping for all the new homes being built. There has been summers when I cannot get any top soil for my customers other than Central Gravel. The pressure of all the new homes in the Matsu-Borough has put a big demand on Top Soil. Some of the gravel pits are now charging $25 a yard for Top Soil. The going rate seems to be $22 a yard. Central Gravel sells top soil for $17 a yard. Customers are benefiting with lower prices from Central Gravel Products. I can already tell you what will happen if Central Gravel Products were not in operation. Prices of top soil will soar to over $30 a yard. Also the other pits will not be able to produce enough top soil to cover the loss of Central Gravel Products.
- Central Gravel Products runs a well organized professional business. I have been dealing with them for five years now. Their operation is safe and efficient. Safety is top concern and they are always watching and aware of trucks leaving the pit that might have gravel or rock on tail gate etc. They will stop them and ensure safe transportation of product.

In closing I ask that the Matsu-Borough approve the earth extraction permit for Central Gravel Products. We need them for competition to help keep prices down for consumers. We need them to help provide all the products needed to build houses, roads and landscaping for all the new homes that have been built and are still being built in the valley. We need them to continue to support the small business and residents with dump trailers. They provide a service at a price that other gravel pits in the valley can't or won't provide. I thank you for your consideration and attention in approving the earth extraction permit MSB 17.30.

Sincerely

Marc Hamblen, Owner Operator
Hamblen Enterprises, LLP
Cell: 907-841-3049
Email: Marchamblen@me.com

From: Michael York
To: Peggy Horton
Subject: Bogard gravel pit comment
Date: Sunday, October 20, 2024 3:43:53 PM

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

To all it concerns:

I'm writing to express my steadfast opposition to the proposed gravel pit at Bogard/Engstrom.

My wife and I are 36 and 39 years old; a young family chasing the American dream. Overcrowding, traffic, increasing rent, and shrinking backyards and opportunities in the lower 48 finally brought us permanently to Alaska in 2017. I had been working a seasonal job as a fishing and ecotourism guide in remote southeast Alaska since 2011, and my wife joined me in 2016. We moved to the valley in 2017 and searched patiently for the right home in which to build our future. We rented three different places in Palmer and Wasilla until we found our perfect place, a 1.4 acre lot on Engstrom with a two bedroom home in need of love.

We were drawn to the property not for the house itself, but everything else. We wake up in the winter with a beautiful view across the field at Pioneer Peak and the surrounding mountains. Moose wander through our open yard unmolested by development. The air is crisp and perfectly clear, bird life is abundant, and there is no indication that we are just a short drive from the downtowns of Wasilla and Palmer. We have poured our souls and every hard-earned dollar into our home, the foundation of our dreams for the future.

The proposed gravel pit puts everything we moved to the valley for in jeopardy. It's a rare thing in this expanding world find a place like so many of us have found in the Shorewood community, and so incredibly un-Alaskan to compromise it with a gravel pit.

Anyone who has ever tried to turn from Engstrom on to Bogard can attest to the already out of control traffic problem. Adding large trucks to the mix would make it exponentially worse, making it more challenging for parents to get their kids to school on time, increasing backups, and creating an unsafe environment for everyone. It takes a lot longer for a large truck to turn on Bogard than a family vehicle, and it's already a dangerous turn. Big trucks don't slow down as fast as family vehicles, putting kids, pets, cyclists, walkers, and wildlife at increased risk. Our neighborhood simply cannot handle any more traffic.

In addition to the traffic, we all know how the wind blows in the valley. The annual snowdrifts on Engstrom are locally famous indicators of the excessive gusting in the this area. A gravel operation creates dust… lots of it. I work a job governed by MSHA regulation (underground mining), and I can attest to the amount of dust created by rock crushing operations even if they fall within the MSHA guidelines. It's a lot. The noticeably clear air that we are so lucky to breathe and see through will be a thing of the past. Our white snowdrifts will be black with the fine dust coming from this operation, even when they aren't operating. The dust we don't see will end up in our lungs and the lungs of the children playing in the neighborhoods. The regulations that the gravel company claims will control pollution will help them avoid fines, but won't help our local air quality.

The gravel company mentioned in an online response to the overwhelming opposition that their operating hours would be geared towards reducing noise to allowable levels during the day, but nobody wants the noise at all, no matter the time of day. Again, noise levels allowed by government regulation are still incredibly loud and will be constant. There will no longer be peace on a beautiful summer afternoon. Backyard get-togethers will be plagued by a symphony of back-up alarms, revving of diesel equipment, and constant hum of crushers and conveyer belts. Tending the garden and feeding the chickens with just the rustling of leave and chittering of squirrels will be a thing of the past. We use the same equipment under the same noise regulations at my workplace, and the volume is still more than enough to drown out any of the beautiful noises of nature that currently exist in the Shorewood community. If people could experience the noise they are actually agreeing to before they agree to it, nobody would.

In addition to the increases in traffic, dust, and noise that come with a gravel pit, there is the undeniable effect on

our property values. The free buckets and pickup beds of gravel that Central Gravel uses as their argument that they are community-minded ignores the fact that homeowners in Shorewood and beyond will see a significant depreciation in home value. Will we be compensated for our losses? I don't think so. Nobody wants to live next to such an operation.

There are few places in the country where people can find what we have in Shorewood; affordability, views, peace and quiet, wildlife. There may not be a more Alaskan scene than a late July on Engstrom Road… people pulled over to take pictures or simply soak in the view of the majestic fireweed in full bloom against a backdrop of brilliant green grass and the deep black and purples of the Chugach Range. There is nothing less Alaskan and more disgraceful than allowing a gravel pit to be slapped on that scene.

Expansion away from Anchorage is inevitable, but squeezing a gravel pit into our beautiful little neighborhood when there are so many other unpopulated places nearby is totally unnecessary, unsafe, unsupported by the local community, and 100% against everything Alaska stands for to so many of us.

PLEASE do not allow this project to go through.

Sincerely,
Shorewood residents Michael and Cate York
(970)631-3919

170 6323000L005
R&K Family TR
4320 NE Engstrom Rd
Wasilla,Ak 99654

This Letter in response to the Gravel Extraction permit under MSB17.30 off of Bogard ,Trunk and Engstrom in the North Lakes Community. Our family moved to this area in 2001 because of the beauty of the area ,the open fields the numerous lakes, and the wildlife and fishing. With this proposal this is going to disturb all this beauty!! As we have seen over the last 20 years we have become a fast growing residential community with plenty of new traffic concerns that have come with this. Our community is strong and we will get our round about at the corner of Engstrom and Bogard some day. But we will never be able to maintain our beautiful fields with a Gravel Pit and all the Dust and noise we will have to put up withThe idea of a "Access road "onto Engstrom Rd is a big no go as well!!! This will put so much pressure on our road and further create Dangerous situation..If this application should pass, I would suggest an access from OldTrunk road or N Old Homestead Rd!! How many Gravel Pits do we really need! This was zoned agricultural for many years! and I am sure the tax benefits have worked for them. Hopefully taxes will increase for this project , the added congestion & the dangerous use of residential roads for

this proposed gravel pit.We are not in support of this idea

Robert Huppert / Kathryn Roberts

From: H Peters
To: Peggy Horton
Subject: Earth Material Extraction Conditional Use Permit for the gravel pit on Bogard/Engstrom/Trunk
Date: Wednesday, October 23, 2024 7:14:06 AM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Mat Su Borough:

This is concerning the permit for the Earth Material Extraction Conditional Use Permit for the gravel pit on Bogard/Engstrom/Trunk.
Does anyone other than the people profiting from this truly believe this is a good plan? The amount of traffic at Bogard/Engstrom is overwhelming and nothing has been done to alleviate it. More than 200+ homes have been built back off of Engstrom and yet, with 300+ more vehicles traveling to and from this intersection, someone thinks having a gravel pit at the location is a good idea.

Now, if there were a way to get to Trunk via Settlement and also a way to get to Palmer Fishhook from Engstrom this would relive some of the congestion. But this is not the case. I am always astounded by the Boroughs planning and development.

With all of the land in AK, this is NOT the place to put this proposed gravel pit.

Holly Peters

From: Mitchell Haasl
To: Peggy Horton
Subject: Central Gravel gravel extraction permit
Date: Monday, October 28, 2024 2:57:31 PM

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

Good afternoon Peggy,

I wanted to reach out to you and show my support for Central Gravels new location. I have worked for Central Gravel for the past 8 years. I love my job, and without the this new location my job will not be around for much longer as we are running out of gravel at our current location.

This new location is important for so many more reasons though, than just my job. Central Gravel is important for the community, we provide gravel and great customer service. Without small family owned gravel pits like Central Gravel, gravel prices are going to go through the roof, along with our taxes to support local road jobs having to pay higher gravel prices, and delivery prices coming from out of town.

Without small family owned gravel pits, gravel is going to have to start coming from out of town (Sutton or Willow). It is important for my friends and family, and the community to be able to walk into our office and get a pickup load, dump truck load, or even a bucket full of whatever they need, and without small family owned gravel pits like Central Gravel, that soon won't be possible.

I hope you take all of this into consideration, thank you for your time.

Kind regards,
Mitchell Haasl

From: Zach Korsmo
To: Peggy Horton
Subject: MSB Development/Havemeister farm
Date: Friday, October 25, 2024 3:23:12 PM
Attachments: Central Gravel Products, Letter.pdf

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Hello Ms. Horton,

I read that this is where to direct concerns regarding the use of the Havemeister farm as an extraction site for Central Gravel Products. I have attached a letter with my thoughts on this development, as I understand the borough is accepting public comment.

Thank you,

Karen Clement

October 20, 2024

To Whom It May Concern,

Like many others in our community, I have recently become aware of the proposed gravel extraction site located at what many of us know as the Havemeister Dairy farm. Although the farm has closed, this is a cherished historical piece of our community with beautiful rolling fields and the memory of Palmer tradition. I am disappointed that the borough is considering the development of this property for an extraction site.

The traffic at Engstrom and Bogard is a high traffic area with many motor vehicle accidents. Adding to this with commercial vehicles at a "peak of 12 trucks per hour" on a residential street is unacceptable. The beginning of Engstrom is also a high wind area which would contribute to worsened air quality and visibility. Drivers already are pelted by sand and rock as we drive past the current Central Gravel Products location on Trunk & Bogard. Although seemingly less important to the borough, this proposed project would also turn a lovely field into a commercial gravel pit. Palmer's landscape is part of why I choose to reside in this community that I was born and raised in; however, I must question how much of the "real Palmer" that we love will be left if we continue to allow projects such as this. While I recognize the need for development in a constantly progressing world, there are times when the borough must choose whether these developments are the best for our community.

It is my request that the borough deny the use of this land for gravel extraction.

Sincerely,

Karen Clement

From: Darin Markwardt
To: Peggy Horton
Subject: MSB 17.30 - Conditional Use Permit for Earth Materials Extraction
Date: Sunday, October 27, 2024 9:04:47 PM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
MSB 17.30 - Conditional Use Permit for Earth Materials Extraction

Good Evening,

My name is Darin Markwardt. I am opposed to a Conditional Use Permit for Earth Materials in the proposed area. My main concerns/objections are: 1) Safety, and 2) Quality of life. I will address the second objection first.

Quality of life:

I currently reside on East Sandstone Drive, about 2 miles from the proposed gravel pit. I spent my middle and high school years (in the 1990s) living on Almanor Circle, which is also near Engstrom. During my high school years, I would often run along Engstrom, next to the farm fields. It is one of the most breathtaking views in the world.

A gravel pit, in the former farm fields, would ruin this beautiful piece of the Valley. Not to mention, the sounds of the gravel pit would be non-stop and grating (during their business hours).

Yes, gravel pits are needed for construction, and they help the economy (although, property values nearby would plummet). But, is yet another gravel pit needed -- in the heart of Matanuska Valley? There are better places.

Bottom line: our quality of life should not be for sale.

My second objection: Safety.

I drive to work (I am a teacher at Colony High School, but am writing in a purely individual capacity). Every morning, I dread the intersection at Engstrom and Bogard. Put simply, it is treacherous.

If a gravel pit is approved, such danger will only increase. The gravel pit business will be open during weekdays, well past school hours. This means that buses, children, parents, teachers will all have to compete with myriad large gravel trucks at the Engstrom/Bogard intersection. This safety risk is unacceptable.

Another safety objection: flying rocks. The farm fields near Engstrom are infamous for their ferocious winds. If a gravel pit is approved in this area, Engstrom would become a veritable asteroid belt during the winter months.

Alternatives:

I realize that despite the above objections, a gravel pit may be approved. If so, there needs to be a large buffer zone, between the gravel pit and the road. Whether in the form of raised earth, trees, or large boulders, there needs to be physical barriers to protect the road and nearby homes from sound and flying debris.

Furthermore, there needs to be a large roundabout at Engstrom and Board -- *before* -- any gravel pit is approved. Our community's safety must be the first priority. Always.

Thanks for reading and considering this message.

All the best,

Darin Markwardt

From: Margaret Groth
To: Peggy Horton
Subject: Earth material Extraction Conditional Use Permit for Central Gravel Products at 7955 E Bogard Road.
Date: Monday, October 28, 2024 11:20:04 AM

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

My property is at 7600 E Sarasota Dr
Account number 53144
Parcel number 41322
TRS S18N01E27
Shorewood Block 10 Lot 3

I want to present this as a strong protest against this permit. It's too close to the subdivision and houses.
Too much noise, too much dust to live comfortably along with the reduction of value to the homes located there.

Margaret W Groth.

James Klauder
PO Box 524
Palmer, AK 99645

Property location /legal description of my property
7440 E Shorewood Drive
Parcel ID 2408
TRS - S18N01E27
Shorewood Block 5 Lot 12

The following are my comments on the proposed conditional use permit for Earth Material Extraction on 3 properties at 7955 E Board Rd., 3182 N Trunk Rd., and E Glade Ct. Tax ID#s 18N01E27A002, 18N01E27D001, and 18n01E27D002.

Quoting from 17.30.010 Intent and Purpose.

It is the intent of the Matanuska-Susitna Borough to recognize the value and importance of promoting the utilization of natural resources within its boundaries. The purpose of this chapter is to allow resource extraction activities while promoting the public health, safety, order, prosperity, and general welfare of the Matanuska-Susitna Borough through regulation of land use to reduce the adverse impacts of land uses and development between and among properties. It is the further purpose of this chapter to promote compatible, orderly development. These purposes are accomplished by:

(1) allowing for a public review process for earth materials extraction activities in the Matanuska-Susitna Borough;

(2) enhancing the character and stability of residential, agricultural, business, commercial, and industrial areas, promoting the orderly and beneficial development of such areas by the owner/permittee in a manner that will not devalue the extraction site or neighboring properties for future beneficial uses upon completion of gravel extraction;

(3) promoting diversified land use and economic opportunity;

(4) encouraging the most appropriate uses of land;

(5) enhancing the natural, manmade, and historical amenities of the Matanuska-Susitna Borough;

(6) recognizing and preserving traditional uses of land within the Matanuska-Susitna Borough; and

(7) protecting and enhancing the quality, peace, quiet and safety of the Matanuska-Susitna Borough neighborhoods.

These purposes are not accomplished in #2, #4, #5, #6, & #7.

#2 the development should not devalue neighboring properties. A good portion of Shorewood Subdivision houses can and probably will lose value, especially those bordering the three properties.

#4 encouraging the most appropriate uses. This is not the most appropriate use in a residential neighborhood.

#5 enhancing the natural, manmade, and historical amenities There is no enhancement of anything with this proposed plan.

#6 recognizing and preserving traditional uses of land The 3 properties have been agricultural land for more than 80 years.

#7Protecting and enhancing the quality, peace, quiet, and safety of the Matanuska -Susitna Borough neighborhoods. The quality of our neighborhood will definitely be worse. The peace and quiet will not be enhanced and the safety will be lessened because of the increased truck traffic.

Quoting from17.30.060 General Standards For Approval

In granting an administrative permit or a conditional use permit, the director or commission must make the following findings:

(1) that the use is not inconsistent with the applicable comprehensive plan;

(2) that the use will preserve the value, spirit, character, and integrity of the surrounding area;

(3) that the applicant has met all other requirements of this chapter pertaining to the use in question;

(4) that granting the permit will not be harmful to the public health, safety and general welfare; and

(5) that the sufficient setbacks, lot area, buffers or other safeguards are being provided to meet the conditions listed in MSB 17.30.050(B).

This proposed project can not meet these standards for #2 and #4.

#2 that the use will preserve the value, spirit, character, and integrity of the surrounding area This project does not even come close to preserving these.

#4 that granting the permit will not be harmful to the public health, safety and general welfare This project will be harmful to all of these. As we all know this area gets a lot of wind. We will get much more airborne particulates from an Earth Material Extraction project. This is a health hazard. Central Gravel Says they will use a water truck to keep all dust mitigated. That will only be during operating hours, the wind does not stop blowing when the work day is done.

Thank you for considering my comments.

Jim Klauder

From: Hannah Knecht
To: Peggy Horton
Subject: Public Comment: MSB 17.30 - Conditional Use Permit for Earth Materials Extraction
Date: Monday, October 28, 2024 12:35:29 PM

Hi Peggy,

Please see my notes below for inclusion in the public comment for the above referenced permit application.

Public Comment:
There are many reasons adding another gravel pit in a 3-mile radius is a bad idea. A land use term of 30 years with operations that including of rock crushing, commercial vehicle traffic, noise nuisance and pollution, ground water, drinking water, and surface water pollution and disturbance, air pollution, road and infrastructure impacts and damage, as well as the negative impacts to property owners, home prices and the local area economy will have devastating results for three decades to the community. This undoubtedly will be a 30-year nightmare for the area. I have included reasoning below for consideration in the land use, proposal for: MSB17.30 – Conditional Use Permit for Earth Materials Extraction. Matanuska-Susitna Borough - MSB 17.30 - Conditional Use Permit for Earth Materials Extraction (matsugov.us) The bottom of the line is that there is plenty of land that can be used for this purpose that is not surrounded by residentially used land as well as businesses and busy, heavily traveled roads. The application is otherwise incomplete – with many questions that state “I am still working on this.” This does not seem like a very well thought out plan for an entity who has claimed to have a very well thought out process regarding rock crushing, and earth material extraction. With the reasoning and evidence below, I urge the borough planning and permitting department to deny this permit request and encourage alternative use of this land.

Ground Water Disturbance & Pollution
The community in this area has wells that depend on groundwater. The agitation and vibration of earth moving equipment, rock crushers or other gravel / dirt producing equipment will disturb and cause sediment in well water which will impact those who have purchased property in the area. There is no way to contain the impacts of groundwater to simply “the site.” This has far and wide-ranging impacts. Per the application submitted by the property no study or approvals have been reviewed or provided by the Alaska Department of Environmental conservation as to the impact or control of impact to surface, drinking OR groundwater. The ADEC should certainly be weighing-in before any decisions are made to alter this area in an industrial manner. If approved, it is proposed that his site have an individual storm water permit, to include best management practices, with stringent water quality sampling of both surface and groundwater, which include more than turbidity.

Noise Nuisance & Noise Pollution
The noise that will be generated from the earth moving equipment, commercial vehicles, rock crushing, ang soil making equipment will cause undue harm to the homeowners nearby. While the decibels may not reach actionable levels, the constant churning and hum of equipment and additional traffic will cause a noise nuisance that would be considered noise pollution. Much different from the noise generated when the land was used for a dairy farm.

Air Pollution – increased emissions
The dust, debris, and other material that will be generated during the rock crushing and soil making process will cause air pollution that will impact local homeowners. There is no way to promise that dust and dirt will be kept wet and the air free from excess air contaminants. The wind in this area will additionally complicate this. Additionally, the increased traffic in the area by diesel powered commercial vehicles will kick up dust as well as increase emissions in the area.

Impacts to wildlife
The footprint of the project site and map used to identify the impacted area/neighborhoods is enormous – with laws that protect and prohibit hundreds of animal species which include birds /waterfowl, it is questionable if such land use should be permitted. No guarantees can be made that Lune habitat and nesting, and Eagle habitat and nesting would not be impacted, and larger animals hazed by the noise, extra traffic, people, and pollution.

Road/Infrastructure
The roads and infrastructure in this area cannot currently handle the level of cars and existing traffic. Bogard, and Engstrom which will have additional commercial vehicle traffic as well as additional private vehicle traffic will further destroy the integrity of the road infrastructure, which is already deplorable, will worsen it. The added traffic will make the area – homeowners trying to get from Engstrom to Bogard will be made much more dangerous than it already is. The proposed access point to Engstrom is already a heavily traveled and extraordinarily dangerous intersection onto Bogard. Commercial vehicle use/access will make it more dangerous; loss of life is inevitable. Adding to this would be negligent on the part of the contractor, property owner, state and borough planning department.

Agriculture Commercial vs. industrial Commercial
Previously this land was used in a commercial capacity for Dairy Farming with livestock, people 100+ homeowners have purchased homes knowing that there is /was a dairy farm at the end of Engstrom and could anticipate what the impacts of homeownership would be at the location. To take that location and now call it an industrial commercial parcel is an egregious muscularization of land use. How do you jump from animals to construction? Using this land in a commercial industrial fashion will cause hardship to the local property owners whose investments will be negatively impacted by the addition of a construction site with endless commercial vehicle traffic. They did not choose this, do not choose to devalue the neighborhood.

Additional viable options
The Matsu valley is one of the fastest growing communities in the entire nation. Because of the vastness and abundance of land there are MANY MANY other options for this type of industrial activity that would have zero impact on homeowners and residential communities without causing astronomical impacts to gravel prices which we all understand is for the community.

Respectfully,

Hannah Knecht
907-250-4104

From: info mailboxes-r-us.net
To: Peggy Horton
Subject: Central Gravel Products Proposed Pit
Date: Monday, October 28, 2024 12:52:18 PM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]

We support this project.

The community needs to use our natural resources to support the economy.

Scott Lapiene

907-373-7568
Mailboxes R Us Inc
1964 S Cotten Dr
Wasilla AK 99654
www.mailboxes-r-us.net

From: Philip Markwardt
To: Peggy Horton
Subject: MSB 17.30 - Conditional Use Permit for Earth Materials Extraction
Date: Sunday, October 27, 2024 7:16:36 PM

We live about 2 miles up Engstrom Road and drive the road at least a couple times daily.

I would like to address several areas of concern:

It is very discouraging to see that a huge gravel pit will be potentially replacing beautiful farmland and woodland. If taxes are an issue, could the borough give a break to owners of farmland? Once it's gone, it's gone.

#16 states there is no control over the route customers take. Signage should help customers understand the traffic flow.

RECLAMATION - What will reclamation look like? I may have missed it, but I didn't see any details. As I drive past Central Gravel's current location, I don't see any reclamation. Are there different regulations for that area? There should be a detailed reclamation plan to be accomplished for every 10 acres of mined land.

Who will be the inspector and enforcer for the permit? What teeth does the borough have and how tightly will they monitor and enforce?

Regarding traffic flow, a roundabout needs to be constructed on Bogard and Engstrom. There are continual close calls at that intersection and this development will only increase the traffic.

Earlier this year, I saw a proposed road extending Glade Court to Trunk Road, which would go directly through this gravel pit. Is that still proposed?

I'm very concerned about the impact of dust on drivers and home owners along Engstrom Road. Much of the dust would occur when the ground is partially or completely frozen when there are high winds for a 6 month period.

I would like to see a buffer zone next to Engstrom so the mining doesn't extend to the road.

I am also concerned about the plans after the gravel pit is mined out. What will the residential subdivision(s) look like? Does the borough have any process for what is allowed? Single family housing on 1 acre lots would be ideal, however high-density housing would not be favorable.

Thank you for the opportunity to respond,
Phil Markwardt

From: Ryan Ralston
To: Peggy Horton
Subject: Bogard Gravel Pit
Date: Saturday, October 26, 2024 6:17:46 PM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Hello,

We are submitting some concerns about the proposed gravel mining at Trunk Rd. And Bogard.
Our first concern is the possibility of ground water contamination and / or changes in the depth of the water table. With the location being so close to residential water wells and also potential associated costs to current homeowners. There have been issues near the AS&G pit in Palmer with residential water well being affected. In the North Lakes Community Council meeting Central Gravel Products stated they would not be mining within 20 feet of the water table. The permit allows within four feet of the water table. The borings in the early phases did not go to the water table. How do we know what the water table depth is in this area?
Second is flooding. In the engineer's narrative page two it states that the areas to be mined are out of the 100-year floodplain. Our family has lived in the immediate area since 1979. In that time, we have seen Wasilla creek flood over the roadway several times. After the excavation of phase one and two the potential for flooding into the area has a high potential. This could also adversely affect the residential drinking water aquifer. In recent history we have seen this kind of problem near the AS&G pit near Palmer.
Third is traffic congestion. The intersection of Engstrom and Bogard is extremely congested, any weekday during the school year between the hours of 1 and 4. Adding semi-trucks into this close proximity of that intersection would compound the issue.
Fourth is the drifting snow/ sand that will occur in the winter months. With the operation closed down for the season who would be responsible for mitigation?
Fifth is the homeowner's property values will plumet due to a 30-year construction zone in their back yard. One thought is for a bond cover the potential water contamination and loss of property value for the surrounding residents. We are by no means anti-development. We just see some possible issues that could arise. In conclusion we believe at a minimum more discussion needs to be had prior to any approval of this project. Thank you,

The Ralston Family
3901 Ebbtide Ct.

Change.org Central Gravel Products Petition
Received by MSB on 10-28-29 via email from Ryan Ralston

	A	B	C	D	E	F	G
1	Name	City	State	Postal Code	Country	Commented Date	Comment
2	Angie Lenard	Palmer		99645	US	9/24/2024	"The Matsu planning commission is considering an application for a conditional use permit for earth material extraction of 230,000+ cubic yards to be mined in 235 acres of which what is now farmland and borders Shorewood subdivision, which is where my family's home and land is located. I am gravely concerned about the imminent destruction of our health quality of life and peace of mind. Noise pollution from generators, rock trucks, equipment will be an ever present feature of our lives if we don't take action, we will be forced to endure this constant nerve, wrenching sound day and day out over the next 30 years. Studies show that gravel pits impact groundwater quality with potential negative implications for human health this vital resource, which is our drinking water will be at risk! On top of that there will be financial impacts of this development leading to depreciation of property values, which is an unfair burden to those who have purchased this property and worked hard for all their lives. Gravel extraction in and near streams and lakes (Wasilla Creek, Gooding and Cornelius Lakes) can cause adverse impact to fish and their habitats. potential impacts include direct harm to trust species, loss or degradation of spawning, rearing, resting and staging habitat, migration delay, blockages, widening, shallowing, ponding, loss of channels, stability loss of pool structure, increased turbidity, and sediment transport increased bank, erosion or stream downcutting, degradation of riparian habitat. The impact extend far beyond the mining site and the stream recovery can take decades! Given the significant potential impact it is important for us to unite and call for a halt in the development of this gravel pit in our area. We must protect our health, our tranquility and our environment."
3	Lauren Thompson	Denver	CO	80230	US	9/25/2024	"Just moved into this neighborhood, off Destin. I would hate to see this area be turned into a dusty gravel pit! As a homeowner there are some things out of our control but the value of our homes is super important and I can't imagine this would help people around here. That farm is absolutely stunning and it would be devastating to have it destroyed in my opinion. It's already so very windy and dusty in this neighborhood also. Very very poor way to treat the community members if this is supported and allowed. I am all for people doing what they want with their land BUT this severely impacts hundreds of people right across the road from that farm. Please consider leaving residential areas for families. Engstrom is also a huge hazard already and bogard has the worst ruts and pot holes and clogging the only in and out for engstrom is not ideal."
4	Brandon Hicks	Wasilla	AK	99654	US	9/25/2024	"Keep the gravel pits off the main roads we have enough eyesores"
5	Cassidi O'Brien	Wasilla	AK	99654	US	9/25/2024	"I do not agree with farmland being converted to a gravel pit. This will also create more traffic on Bogard rd which is already a safety concern to the public. This gravel pit will also be located in close proximity to multiple schools. Not to mention, Cottonwood Creek is located on this plot of land and is a known salmon spawning ground. This may interfere with precious resources we Alaskans depend on for our livelihood."
6	Mikala Simpson	Wasilla	AK	99654	US	9/25/2024	"I live in the neighborhood and do not want mineral extraction performed in my immediate area. The view and noise would be awful."
7	Sean Simpson	Wasilla	AK	99654	US	9/25/2024	"This would be a huge eye sore and add a lot of noise pollution to a nice quiet neighborhood."
8	Sandra Huffman	Wasilla	AK	99654	US	9/25/2024	"I live across from the farm field on the corner of Engstrom and Sebastian and do not want to deal with the noise, even more traffic than there already is, or the dust/potential gravel flying when the high winds show up (which we all know is very common in this area). There are enough gravel pits in the surrounding area as is, we truly don't need anymore. Especially in a residential neighborhood!"

Change.org Central Gravel Products Petition
Received by MSB on 10-28-29 via email from Ryan Ralston

	A	B	C	D	E	F	G
9	Alexander Lowe	Wasilla	AK	99654	US	9/25/2024	"The Valley was founded as farmland. Very little of it remains and the plan is to turn it into a rock pit? Not only is it an offense to the tradition and history of the area, nor is it only an environmental disaster waiting to happen--it is a complete disregard for the people that live in the area. The Valley is a huge place, larger than some States, there is not necessity to dig for gravel next door to people's homes that predate said gravel pit by decades. Worth mentioning is the sheer infrastructural impact; the area already lacks sufficient roadways and properly constructed intersections for the people who live there."
10	Joseph Jeffrey	Papillion	NE	68046	US	9/25/2024	"I can think of a few hundred ways to utilize this land better than a gravel pit. Besides, there's already a massive gravel pit not even 0.1 miles away."
11	Ian Starks	Anchorage	AK	99504	US	9/25/2024	"I wish to end the gravel pit"
12	Nikki Hyson	Wasilla	AK	99654	US	9/25/2024	"Stop digging up our farmland and putting pits in neighborhoods"
13	Sharon Weber	Wasilla	AK	99654	US	9/25/2024	"This is already a dangerous road to drive on. It is very windy and narrow. I've seen truck drivers going over the speed limit and crossing over the lines so they can get to their destination asap. One tried to run me off the road. There is already 3 gravel pits in this area. I fear for our lives and well being. Allowing this gravel pit to be put in well destroy lives, land, roads and habitat."
14	EVAN WINN	WASILLA	AK	99654	US	9/25/2024	"I have lived on E. Sarasota Dr. Since 1997. My house is very close to this proposed gravel pit. The prevailing winds will undoubtedly blow alot of dust my way. I certainly don't want to have to look at an ugly gravel pit every time to go home. Being so close to hundreds of homes is a very bad idea and I oppose this project. Also, this can't be good for our property values. Many of us will potentially lose money because of this. Not fair!!!!!"
15	Jack Weber	Wasilla	AK	99654	US	9/25/2024	"My biggest concern is Engstrom road. This road is already busted up from all the gravel trucks. Who pays for the repair/replacement of the asphalt, the tax payers? Now there is two new subdivisions going in around Wolf lake area, who is going to pay for the roads when the thousands of gravel truck traffic busts up those roads? The potholes the trucks create wreak havoc on our vehicles. Sometimes the pot holes are large enough that a person has to swerve to avoid them. Road maintenance sends out a crew to throw a cheap asphalt patch in them which has the perfect size stones to crack our windshields. Also when it rains, the weight of vehicles passing over them forces the water into them and busts them up again. Our personal vehicles are not busting up the roads, it's the heavy trucks filled with gravel and concrete thats doing it. My question would be, do the companies who use these roads with these heavy trucks that bust up the roads help pay for the road repairs/replacement? Is it our responsibility to pay for it through our property taxes? I know that by adding more subdivisions with a couple hundred new homes create more property taxes for the borough, but does that include compensation to fix the roads the trucks bust up? N green Forest road off Bogard is probably the worst road of all for being busted up from heavy traffic. Road maintenance patches the potholes as quickly and inefficiently as possible. They seem to always miss the biggest pot holes to fix. Another thing, these roads are narrow with no shoulders. What does a driver do when they hit one of those potholes or tries to swerve to miss one? Quite a few people are walking along side these roads. What happens when large trucks are flying by them? Do they get to dodge the vehicles trying to dodge the potholes? None of the side roads were made for the heavy traffic."
16	Amile Summers	Wasilla	AK	99654	US	9/25/2024	"I moved to tis are for the peace and serenity. This project would greatly deteriorate these conditions. The increadsed traffic, noise, environment erosion and wildlife moving away is not what I believe, IMHO, what the alaskan lifestyle should be about. We have lost far to much farmland and natural environment already. Please-no more."

Change.org Central Gravel Products Petition
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	A	B	C	D	E	F	G
17	Cassidi O'Brien	Wasilla	AK	99654	US	9/25/2024	"We are loosing valuable farmland to industry which has more impact than what is seen on the surface. This land could be used to benefit the community, as it once did. Cottonwood Creek runs through this property and is a known salmon spawning ground. We Alaskans value our precious resources that allow us it live a life of subsistence. Bogard and Engstrom roads already have excessive amounts of traffic that had caused an increase in the number of accidents in this area in recent years. Allowing a barrage of these heavy loaded trucks will increase the risk for more accidents and even death. In addition, there are also a number of schools in the area and new housing developments going in which will only add to the number of people on these limited roadways. This gravel pit will not add a positive influence to this area in the least. Please listen to the people and not the money."
18	Jessica Zeffery	Wasilla	AK	99654	US	9/26/2024	"There are nearby spawning streams and already hazardous road conditions due to heavy traffic in that area"
19	Aaron Krome	Wasilla	AK	99654	US	9/26/2024	"6.9 million cubic yards is a simply staggering amount of material. The area is already congested with enough traffic. Do we really want YEARS of heavy hauling trucks diverting the flow of traffic, and damaging our roads? Our roads are bad enough!"
20	James Krome	Wasilla	AK	99654	US	9/26/2024	"That would be far too much traffic on an already stressed road. Bogard road already backs way up around Engstrom the way it is, we don't need to help it."
21	Vasudha Duggirala	Redwood City	CA	94061	US	9/26/2024	"No land really needs to be mined for gravel."
22	Vasudha Duggirala	Redwood City	CA	94061	US	9/26/2024	"{"videoUrl":"https://customer-g2wndu9j9b1p498o.cloudflarestream.com/f475a2d2a1b1a30c55c24a1109eeffe6/downloads/default.mp4","cloudflareUid":"f475a2d2a1b1a30c55c24a1109eeffe6"}"
23	Mitchell St. Clair	Wasilla	AK	99654	US	9/26/2024	"We already have enough gravel pits in Wasilla, geez. Keep some trees to help block us from the valley wind."
24	Jean Kudyba	Wasilla	AK	99654	US	9/27/2024	"It is unthinkable to imagine this incredible land could be chopped up for gravel. It would be a blight upon our community. Others have already shared their concerns with traffic and gravel dust etc. The wind gets really nasty here so much so that there is a detour suggested when the wind is blowing. Please do not approve the permit for gravel extraction from this land for numerous good reasons."
25	Tim Anderson	wasilla	AK	99654	US	9/27/2024	"Developing a gravel pit near Bogard Road would be disastrous given the current traffic, elementary, middle and high schools in the area. Congestion on Bogard is already a problem at Engstrom to Valley Country store."
26	Theresa Imlach	Wasilla	AK	99654	US	9/27/2024	"Eye soar."
27	Kim Kubena	Port Ludlow	WA	98365	US	9/30/2024	"As someone who has been actively looking for a home in the Wolf Lake area, I can tell you that this gravel pit would be a deal breaker for me in terms of purchasing a home in the area now. Not only would it negatively impact the ecosystem and the water table, but it would destroy the peaceful environment that is the Alaskan experience that I'm looking for."
28	Barbara Sampson	Wasilla	AK	99687	US	9/30/2024	"We live on Calder at the end of Sarasota. the wind comes right down Sarasota and hits my home with force. I can't imagine how much worse it will be with a gravel pit at the end of Sarasota on that property that at the moment is grass, how much silt? how much dirt? how many toxins that will impact health I will flow in the wind what health issues will it have on me and my family if they move forward with this and allow gravel pit to be built there."
29	Ethan Sheppard	bothell	WA	98012	US	10/8/2024	"Fuck the government and fuck the fat greedy cock blowers that ruin the environment. I hope every single one of these people stub their toes the gravel in their driveway"
30	Kevin Gilmore	Wasilla	AK	99654	US	10/20/2024	"This will decrease the surrounding home values for sure. Who wants their backyard a gravel pit?"

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	A	B	C	D	E	F
1	Name	City	State	Postal Code	Country	Signed On
2	Angie Lenard				US	9/23/2024
3	Ryan Ralston	Wasilla	AK	99654	US	9/24/2024
4	Angie Lenard	Wasilla	AK	99654	US	9/24/2024
5	Barbara Montagne	Wasilla	AK	99654	US	9/24/2024
6	Pamela Ness	Wasilla	AK	99654	US	9/24/2024
7	Mary Bixby	Wasilla	AK	99654	US	9/24/2024
8	Allen Shepherd	Wasilla	AK	99654	US	9/24/2024
9	Kaitlin B	Wasilla	AK	99654	US	9/24/2024
10	Ryan Moe	Wasilla	AK	99654	US	9/24/2024
11	Windy Adams	Seattle	WA	98160	US	9/24/2024
12	Jeff Carncross	Wasilla	AK	99687	US	9/24/2024
13	Jessica Maynard	Wasilla	AK	99687	US	9/24/2024
14	Curtis Ahvakana	Seattle	WA	98160	US	9/24/2024
15	Steph Wright	Palmer	AK	99645	US	9/25/2024
16	LuAnne Moeller	Wasilla	AK	99654	US	9/25/2024
17	Bryanna Buchanan	Wasilla	AK	99623	US	9/25/2024
18	Criss Adams	Seattle	WA	98160	US	9/25/2024
19	Brad Whyne	Palmer	AK	99645	US	9/25/2024
20	Craig Rivas	Wasilla	AK	99654	US	9/25/2024
21	Jeanette Smith	Anchorage	AK	99504	US	9/25/2024
22	Dixie Brock	Palmer	AK	99645	US	9/25/2024
23	Kelly Hoylman	Seattle	WA	98122	US	9/25/2024
24	Patrick Peryea	Wasilla	AK	99654	US	9/25/2024
25	David Alvarez	Wasilla	AK	99645	US	9/25/2024
26	Melody McCullough	Wasilla	AK	99654	US	9/25/2024
27	patricia haugom	palmer	AK	99645	US	9/25/2024
28	Amber Sanchez	Anchorage	AK	99514	US	9/25/2024
29	Renee Croom	Seattle	WA	98160	US	9/25/2024
30	Lauren Thompson	Wasilla	AK	99654	US	9/25/2024
31	Rebecca Moffat	Wasilla	AK	99654	US	9/25/2024
32	Jessica Simasko	Wasilla	AK	99654	US	9/25/2024
33	Andréa Branco	Sao Paulo		4110	Brazil	9/25/2024
34	diana kolaski	Chicago	IL	60610	US	9/25/2024
35	Georgiana Gooch	Wasilla	AK	99654	US	9/25/2024
36	Carrie Hufford	Wasilla	AK	99654	US	9/25/2024
37	Jamie Jokhy	Wasilla	AK	99654	US	9/25/2024
38	Jerry Gooch	Wasilla	AK	99654	US	9/25/2024
39	Constance Fredenberg	Palmer	AK	99645	US	9/25/2024
40	david gilroy	Wasilla	AK	99654	US	9/25/2024
41	John Hooten	Auburn	WA	98002	US	9/25/2024
42	Jenn Tope	Wasilla	AK	99654	US	9/25/2024
43	Pete LaPella	Wasilla	AK	99654	US	9/25/2024

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	A	B	C	D	E	F
44	Jennifer Zigurs	Wasilla	AK	99654	US	9/25/2024
45	Lorraine Cutler	Wasilla	AK	99654	US	9/25/2024
46	Tracy Wyrick-Holmberg	Willow	AK	99688	US	9/25/2024
47	Leslie Lajeunesse	Wasilla	AK	99654	US	9/25/2024
48	Scott Montagne	Wasilla	AK	99654	US	9/25/2024
49	Rebecca Richardson	Wasilla	AK	99654	US	9/25/2024
50	Tori Schmidt	Wasilla	AK	99654	US	9/25/2024
51	Lea Kahler	Wasilla	AK	99654	US	9/25/2024
52	Tamara Schmidt	Wasilla	AK	99687	US	9/25/2024
53	Teri King	Wasilla	AK	99654	US	9/25/2024
54	Ben Schmidt	Wasilla	AK	99654	US	9/25/2024
55	Pauline Saladin	Anchorage	AK	99515	US	9/25/2024
56	John Martucci	Wasilla	AK	99654	US	9/25/2024
57	Haley Neumann	Wasilla	AK	99654	US	9/25/2024
58	Brigitte Winter	Palmer	AK	99645	US	9/25/2024
59	Tarah Vinciguerra	Palmer	AK	99645	US	9/25/2024
60	Nora Delolli	Seattle	WA	98160	US	9/25/2024
61	Kimberly Martucci	Wasilla	AK	99654	US	9/25/2024
62	Lindsay Gatch	Anchorage	AK	99504	US	9/25/2024
63	Andrea Pickens	Wasilla	AK	99654	US	9/25/2024
64	Kyle Hinds	Wasilla	AK	99654	US	9/25/2024
65	Benson Hoover	Wasilla	AK	99654	US	9/25/2024
66	Sara Clemons	Wasilla	AK	99654	US	9/25/2024
67	ken widmer	Wasilla	AK	99687	US	9/25/2024
68	Jennifer Johnson	Anchorage	AK	99654	US	9/25/2024
69	Jess Hall	Portland	OR	97209	US	9/25/2024
70	Lynn Hoover	Wasilla	AK	99654	US	9/25/2024
71	Victor Vandebogart	Wasilla	AK	99654	US	9/25/2024
72	Tracey Baskett	Wasilla	AK	99654	US	9/25/2024
73	Amanda Ralston	Palmer	AK	99645	US	9/25/2024
74	Trudy Rinear Tharp	Seattle	WA	98160	US	9/25/2024
75	Garrett Pace	Wasilla	AK	99654	US	9/25/2024
76	Samara Naranjo	QuerÃ©taro City		76146	Mexico	9/25/2024
77	David Osborn	Wasilla	AK	99654	US	9/25/2024
78	Ashlee Carlson	Palmer	AK	99645	US	9/25/2024
79	Brandon Hicks	Wasilla	AK	99654	US	9/25/2024
80	Nina Shaw	Wasilla	AK	99654	US	9/25/2024
81	Cassidi O’Brien	Wasilla	AK	99654	US	9/25/2024
82	Jackie Hermans	Wasilla	AK	99654	US	9/25/2024
83	Nick Weseman	Palmer	AK	99645	US	9/25/2024
84	Jan Weaver	Big Lake	AK	99502	US	9/25/2024
85	Neil Arneson	Wasilla	AK	99654	US	9/25/2024
86	Etta Maillard	Fairbanks	AK	99705	US	9/25/2024

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	A	B	C	D	E	F
87	Amanda Rose	Palmer	AK	99645	US	9/25/2024
88	Ashley Wagner	Wasilla	AK	99654	US	9/25/2024
89	John Egger	Wasilla	AK	99654	US	9/25/2024
90	Aaron Daniels	Wasilla	AK	99654	US	9/25/2024
91	Jennifer Brager	Palmer	AK	99654	US	9/25/2024
92	Heather DeRemer	Portland	OR	97267	US	9/25/2024
93	Hunter Sasser	Anchorage	AK	99504	US	9/25/2024
94	Stephen Shelters	Wasilla	AK	99654	US	9/25/2024
95	Jesse Brock	Wasilla	AK	99654	US	9/25/2024
96	Caitlin Kelley Rose	Wasilla	AK	99654	US	9/25/2024
97	Cynthia Lysdahl	Wasilla	AK	99654	US	9/25/2024
98	Laurie Calandri	Wasilla	AK	99654	US	9/25/2024
99	Michael Hofmann	Wasilla	AK	99654	US	9/25/2024
100	Logan Hufford	Wasilla	AK	99654	US	9/25/2024
101	Rich Harris	Wasilla	AK	99654	US	9/25/2024
102	Amanda McFarland	Wasilla	AK	99654	US	9/25/2024
103	Amanda Lance	Wasilla	AK	99654	US	9/25/2024
104	Jordann Reynolds	Wasilla	AK	99654	US	9/25/2024
105	Cyn Holtmann	Wasilla	AK	99623	US	9/25/2024
106	Donald Yunker	Wasilla	AK	99654	US	9/25/2024
107	Chelsea Haskell	Wasilla	AK	99654	US	9/25/2024
108	Jason Ralston	Palmer	AK	99645	US	9/25/2024
109	Desiree Bundy	Wasilla	AK	99654	US	9/25/2024
110	Louie Calandri	Wasilla	AK	99654	US	9/25/2024
111	Sofina Pico	Palmer	AK	99645	US	9/25/2024
112	Melody Mann	Wasilla	AK	99654	US	9/25/2024
113	Gabrielle Field	Wasilla	AK	99654	US	9/25/2024
114	Mikala Simpson	Wasilla	AK	99654	US	9/25/2024
115	Cheryl Denkenberger	Anchorage	AK	99514	US	9/25/2024
116	Terry Slaven	Wasilla	AK	99654	US	9/25/2024
117	Sean Simpson	Wasilla	AK	99654	US	9/25/2024
118	Chuck Stiver	Wasilla	AK	99654	US	9/25/2024
119	Robert Buck	Wasilla	AK	99654	US	9/25/2024
120	Elizabeth Paeazoo	Wasilla	AK	99654	US	9/25/2024
121	Tara Clark	Wasilla	AK	99654	US	9/25/2024
122	Roberta Cannon	Eagle River	AK	99577	US	9/25/2024
123	Jon Buchanan	Anchorage	AK	99504	US	9/25/2024
124	Sandra Huffman	Wasilla	AK	99654	US	9/25/2024
125	Sarah Thomas	Wasilla	AK	99654	US	9/25/2024
126	Jason Fedeli	Seattle	WA	98188	US	9/25/2024
127	Brandi Cook	Wasilla	AK	99654	US	9/25/2024
128	Alexander Lowe	Wasilla	AK	99654	US	9/25/2024
129	Janelle Liermann	Wasilla	AK	99654	US	9/25/2024

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	A	B	C	D	E	F
130	Joseph Jeffrey	Wasilla	AK	99654	US	9/25/2024
131	Uwe Vietzke				Germany	9/25/2024
132	Dylan Haskell	Wasilla	AK	99654	US	9/25/2024
133	Luke Htar	Wasilla	AK	99654	US	9/25/2024
134	Hanneke Mol	Poortvliet	NE	4693EG	US	9/25/2024
135	Sharon Weber	Wasilla	AK	99654	US	9/25/2024
136	Sarah Kincheloe	Kansas City	MO	64131	US	9/25/2024
137	Elizabeth C Krome	Wasilla	AK	99654	US	9/25/2024
138	Ian Starks	Anchorage	AK	99504	US	9/25/2024
139	Joshua Sieler	Wasilla	AK	99654	US	9/25/2024
140	Leanna Hunter	Trapper Creek	AK	99683	US	9/25/2024
141	Kelly Neeser	Palmer	AK	99645	US	9/25/2024
142	Heather Crawford	Atlanta	GA	30345	US	9/25/2024
143	Adrienne Powell	Wasilla	AK	99654	US	9/25/2024
144	Emily Ripley	Wasilla	AK	99654	US	9/25/2024
145	Nikki Hyson	Wasilla	AK	99654	US	9/25/2024
146	Michael Criss	Wasilla	AK	99654	US	9/25/2024
147	EVAN WINN	WASILLA	AK	99654	US	9/25/2024
148	Bobbie Sampson	Wasilla	AK	99654	US	9/25/2024
149	Cassie Schaefer	Wasilla	AK	99654	US	9/25/2024
150	Amber Stromberg	Wasilla	AK	99654	US	9/25/2024
151	Mary Hutchins	Wasilla	AK	99654	US	9/25/2024
152	William Krostek	Wasilla	AK	99654	US	9/25/2024
153	Jack Weber	Wasilla	AK	99654	US	9/25/2024
154	Charity Osborn	Wasilla	AK	99654	US	9/25/2024
155	Elizabeth Potter	Palmer	AK	99645	US	9/25/2024
156	susan devereaux	new castle	DE	19720	US	9/25/2024
157	Pam Randol	Wasilla	AK	99654	US	9/25/2024
158	Jennifer Bryant	Wasilla	AK	99654	US	9/25/2024
159	Marcia Hansen	Wasilla	AK	99654	US	9/25/2024
160	Raymond Lapinskas	Wasilla	AK	99654	US	9/25/2024
161	Sandy Chadwell	Wasilla	AK	99654	US	9/25/2024
162	Elizabeth Marsh	Trapper Creek	AK	99683	US	9/25/2024
163	Melissa Anderson	Willow	AK	98160	US	9/25/2024
164	James Krome	Wasilla	AK	99654	US	9/25/2024
165	Melanie Schoppe	Wasilla	AK	99654	US	9/25/2024
166	Laura Hines	Wasilla	AK	99654	US	9/25/2024
167	Autumn Hajdari	Wasilla	AK	99654	US	9/25/2024
168	Michele Coker	Wasilla	AK	99654	US	9/25/2024
169	Paolina MULLENEIX	Seattle	WA	98160	US	9/25/2024
170	Maddison Vickrey	Palmer	AK	99645	US	9/25/2024
171	Melanie Bouchard	Wasilla	AK	99654	US	9/25/2024
172	Amile Summers	Wasilla	AK	99654	US	9/25/2024

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	A	B	C	D	E	F
173	Tonja Hammer	Wasilla	AK	99654	US	9/25/2024
174	Olena Hardy	Wasilla	AK	99654	US	9/25/2024
175	Brian Dixon	Clearfield	PA	16830	US	9/25/2024
176	Jane Plank	Wasilla	AK	99654	US	9/25/2024
177	Hope Ronne	Wasilla	AK	99654	US	9/25/2024
178	Terri-Jo Ewing	Wasilla	AK	99654	US	9/25/2024
179	Jane Bennett	Eagle River	AK	99577	US	9/25/2024
180	Jean Kudyba	Wasilla	AK	99654	US	9/25/2024
181	Lindsey Robinson	Wasilla	AK	99654	US	9/25/2024
182	Cindy Lee	Wasilla	AK	99654	US	9/25/2024
183	Angelina Barbin	Wasilla	AK	99654	US	9/25/2024
184	Ani Horner	Wasilla	AK	99654	US	9/25/2024
185	Robert Ralston	Bishop	CA	93514	US	9/25/2024
186	Lawrence Sherman	Wasilla	AK	99654	US	9/26/2024
187	Lance Swick	Wasilla	AK	99654	US	9/26/2024
188	Jessica Zeffery	Wasilla	AK	99654	US	9/26/2024
189	Angela Turner	Anchorage	AK	99516	US	9/26/2024
190	Erika Mitchell	Wasilla	AK	99654	US	9/26/2024
191	Nathan Mitchell	Wasilla	AK	99654	US	9/26/2024
192	Aaron Krome	Wasilla	AK	99654	US	9/26/2024
193	Lela Sieler	Wasilla	AK	99654	US	9/26/2024
194	Vasudha Duggirala	Redwood City	CA	94061	US	9/26/2024
195	JILL BENNETT	Wasilla	AK	99654	US	9/26/2024
196	Edith Whitted	Wasilla	AK	99654	US	9/26/2024
197	Marylin Farnsworth	Wasilla	AK	99654	US	9/26/2024
198	Erika Rikhiram	Clermont	FL	34711	US	9/26/2024
199	Vic Smith	Seattle	WA	98160	US	9/26/2024
200	April Eichhorn	Wasilla	AK	99654	US	9/26/2024
201	Hart Nilsen	Wasilla	AK	99654	US	9/26/2024
202	Mitchell St. Clair	Wasilla	AK	99654	US	9/26/2024
203	Jan Affinito	Wasilla	AK	99654	US	9/26/2024
204	Nancy Durand	Anchorage	AK	99514	US	9/26/2024
205	Jerry Nash	Wasilla	AK	99654	US	9/26/2024
206	Sarah Husted	Wasilla	AK	99654	US	9/26/2024
207	William LeDoux	Anchorage	AK	99514	US	9/26/2024
208	Luccas Mendez	Fort Lauderdale	FL	33313	US	9/26/2024
209	Debra Dunsford	Wasilla	AK	99654	US	9/26/2024
210	Natalie Nash	Wasilla	AK	99654	US	9/26/2024
211	Rebecca Norvell	Palmer	AK	99645	US	9/26/2024
212	LTC (R) Vincent A Memole Jr.	Wappingers Falls	NY	12590	US	9/26/2024
213	Kelly Lehman	Wasilla	AK	99654	US	9/26/2024
214	Benjamin Grunwald	Wasilla	AK	99654	US	9/26/2024
215	Sarah Bowman	Miami	FL	33179	US	9/27/2024

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	A	B	C	D	E	F
216	Karen Nealon	Wasilla	AK	99654	US	9/27/2024
217	Angela Werner	Anchorage	AK	99514	US	9/27/2024
218	Tim Anderson	wasilla	AK	99654	US	9/27/2024
219	Alana Preziosi	Swedesboro	NJ	8085	US	9/27/2024
220	Larry Walters	Wasilla	AK	99654	US	9/27/2024
221	Sitka Beech	Wasilla	AK	99654	US	9/27/2024
222	Travion Trefon	Palmer	AK	99645	US	9/27/2024
223	Jack DeLisle	Austin	TX	78733	US	9/27/2024
224	Theresa Imlach	Wasilla	AK	99654	US	9/27/2024
225	Maddie Murdock	Manchester	CT	6042	US	9/27/2024
226	Steve Ouellette	Wasilla	AK	99654	US	9/27/2024
227	terry nichols	Wasilla	AK	99654	US	9/28/2024
228	Lianne Coslic	Wasilla	AK	99654	US	9/28/2024
229	Kit Kennedy	Wasilla	AK	99654	US	9/28/2024
230	Christopher Lister	Seattle	WA	98133	US	9/28/2024
231	Justin Born	Wasilla	AK	99654	US	9/28/2024
232	Valerie Brock	Wasilla	AK	99654	US	9/28/2024
233	DeAnna Schaefer	Palmer	AK	99645	US	9/29/2024
234	Diane Rose	Wasilla	AK	99654	US	9/29/2024
235	KleSahra Davis	91502	CA	74133	US	9/29/2024
236	Aaron Lewis	Wasilla	AK	99654	US	9/29/2024
237	Leah Sadykov	Seattle	WA	98160	US	9/29/2024
238	Christine Ewing	Wasilla	AK	99654	US	9/29/2024
239	Corinne Kubena	Wasilla	AK	99654	US	9/29/2024
240	Evan Kubena	Seattle	WA	98146-1617	US	9/29/2024
241	Jacqueline Corbin	Florissant	CO	80816	US	9/29/2024
242	Michelle Carter	Tampa	FL	33604	US	9/29/2024
243	Amanda Bartleski	Washington	DC	20001	US	9/30/2024
244	Joella Solus	Mazama	WA	98833	US	9/30/2024
245	Kim Kubena	Port Ludlow	WA	98365	US	9/30/2024
246	Robin Schroeder	Snohomish	WA	98296	US	9/30/2024
247	Alexis Hickle	Wasilla	AK	99654	US	9/30/2024
248	Tamara Wilson	Palmer	AK	99645	US	9/30/2024
249	Ruthann Austin	Anchorage	AK	99502	US	9/30/2024
250	Rory Ruiz	Wasilla	AK	99654	US	9/30/2024
251	Ethan Lopez	Wasilla	AK	99654	US	9/30/2024
252	Jessica Colby	North Pole	AK	99705	US	9/30/2024
253	Kristen Murray	Wasilla	AK	99654	US	9/30/2024
254	Deborah Currier	Wasilla	AK	99654	US	9/30/2024
255	David lance million	Kent	WA	98032	US	9/30/2024
256	Cynthia Lee	Wasilla	AK	99654	US	9/30/2024
257	Lauren Casey	Wasilla	AK	99654	US	9/30/2024
258	Ashley Diumenti	Wasilla	AK	99654	US	9/30/2024

Change.org Central Gravel Products Petition
Received by MSB on 10-28-24 via email from Ryan Ralston

	A	B	C	D	E	F
259	Miranda Peratrovich	Anchorage	AK	99518	US	9/30/2024
260	poop fart	tits	NY	12345	US	9/30/2024
261	Antonia Nance	Wasilla	AK	99654	US	9/30/2024
262	Julie Bazan	Wasilla	AK	99654	US	9/30/2024
263	Kimberly Danford	Ocoee	FL	34761	US	9/30/2024
264	Monica Dudley	Houston	TX	77007	US	9/30/2024
265	Robert Peek	Seattle	WA	98133	US	9/30/2024
266	laci neely	Mineral Wells	TX	76067	US	9/30/2024
267	Thalisa Orn	Seattle	WA	98126	US	9/30/2024
268	Katie Ihde	Anchorage	AK	99504	US	9/30/2024
269	Samantha Marshall	Palmer	AK	99645	US	9/30/2024
270	Gabrielle Harris	Wasilla	AK	10128	US	9/30/2024
271	Ethan Papcke	Mount Prospect	IL	60056	US	9/30/2024
272	Adam Kaluba	Burleson	TX	76028	US	9/30/2024
273	Ralphie Beam	Cumberland	MD	21502	US	9/30/2024
274	Lisa Leavitt	Haverhill	MA	1832	US	10/1/2024
275	Charlee Pine	Essex	MD	21221	US	10/1/2024
276	Destiny Dickens	enfield	NC	27823	US	10/1/2024
277	Curtis Asplund	Skwentna	AK	99667	US	10/1/2024
278	Lisa Kelsey	Wasilla	AK	99654	US	10/1/2024
279	Lula Sheldon	Anchorage	AK	99508	US	10/1/2024
280	Mark Allen	Edmonds	WA	98020	US	10/1/2024
281	Caitlyn Beeler	Blackwood	PA	8012	US	10/1/2024
282	M. Browning	Chandler	AZ	85224	US	10/2/2024
283	Erin Adams	Geneva	IL	60134	US	10/3/2024
284	Angie Goss	Wasilla	AK	99654	US	10/3/2024
285	Maria Wade	Wasilla	AK	99654	US	10/3/2024
286	Matt Murray	Federal Way	WA	98023	US	10/3/2024
287	Angie Brennan	Kenai	AK	99611	US	10/3/2024
288	Michael Eakens	Wasilla	AK	99654	US	10/4/2024
289	Matthew Horner	Wasilla	AK	99657	US	10/4/2024
290	Richard Stermer	Wasilla	AK	99654	US	10/4/2024
291	Ariel Stermer	Wasilla	AK	99654	US	10/4/2024
292	C Sullivan				US	10/4/2024
293	Jake Murray	New York	NY	10040	US	10/4/2024
294	Sarah White	Palmer	AK	99645	US	10/4/2024
295	Gabriel Hammett	Phoenix	AZ	85085	US	10/4/2024
296	Natalie Perez	Bronx	NY	10472	US	10/4/2024
297	Matthew Small	Hot Springs	AR	71913	US	10/5/2024
298	Jessie Burbank	Wasilla	AK	99654	US	10/5/2024
299	Steve Miresse	Wasilla	AK	99654	US	10/5/2024
300	J F		NY		US	10/5/2024
301	Linda Hernandez	Fort Worth	TX	76137	US	10/5/2024

Change.org Central Gravel Products Petition
Received by MSB on 10-28-24 via email from Ryan Ralston

	A	B	C	D	E	F
302	Ashley Murray	Tucson	AZ	85712	US	10/7/2024
303	Kashoni Wayd	Page	AZ	86040	US	10/7/2024
304	Anna Deforest				US	10/7/2024
305	Ethan Sheppard	bothell	WA	98012	US	10/8/2024
306	Lauryn Ickes	Wasilla	AK	99654	US	10/9/2024
307	Martin Blake	Los Angeles	CA	90060	US	10/10/2024
308	Giacomo Camporeale	Boulder	CO	80304	US	10/10/2024
309	Mauri-Lynne Heller				US	10/11/2024
310	Charles Simson	Wausau	WI	54403	US	10/12/2024
311	lola mcdonald	Bellingham	WA	98225	US	10/12/2024
312	Ennie Nguyen	Fort Worth	TX	76177	US	10/14/2024
313	Joshua Mead	Wasilla	AK	99654	US	10/15/2024
314	April wright	Wasilla	AK	99654	US	10/15/2024
315	Melanie Nunez	Perris	CA	92570	US	10/15/2024
316	Lori Washington	Ocean springs	MS	39564	US	10/15/2024
317	Pam Thiele	Palmer	AK	99645	US	10/15/2024
318	walter schultz	galesburg		61401	US	10/16/2024
319	Orion Foldessy	Akron	OH	44312	US	10/16/2024
320	Jenifer Borovy	Palm Beach	FL	33410	US	10/16/2024
321	Sarah Leinart	Knoxville	TN	37912	US	10/16/2024
322	Angelie Sandoya	Syracuse	NY	13208	US	10/17/2024
323	Dianelys Nunez Fuentes	Miami	FL	33175	US	10/17/2024
324	Gemasty Briones	Boise	ID	83702	US	10/17/2024
325	Joseph Seiler	Rancho Mirage	CA	92270	US	10/17/2024
326	Ayse Dogan	Foster City	CA	94404	US	10/17/2024
327	Ryan Capreece-page	Seattle	WA	98118	US	10/18/2024
328	Michael-James Martin				US	10/18/2024
329	Mark Kidd	South Bend	WA	98586	US	10/18/2024
330	Timothy Tomlinson	Wasilla	AK	99654	US	10/19/2024
331	collin wolff	chico	CA	95988	US	10/19/2024
332	Laura Raschal	Wasilla	AK	99654	US	10/19/2024
333	Carol Schmidt	Houston	TX	77036	US	10/19/2024
334	Beverly Bateman	Milton	FL	32583	US	10/19/2024
335	Nicholas Wernette	Palmer	AK	99645	US	10/20/2024
336	Jason Barthel	Chicago	IL	60647	US	10/20/2024
337	Mary Burnett	Wasilla	AK	99654	US	10/20/2024
338	Stacia Joyce	Wasilla	AK	99654	US	10/20/2024
339	Scott Smith	Wasilla	AK	99654	US	10/20/2024
340	Sue Smith	Wasilla	AK	99654	US	10/20/2024
341	Andrew Mcalister	Wasilla	AK	99654	US	10/20/2024
342	Benjamin Peltier	Wasilla	AK	99654	US	10/20/2024
343	Lee Thompson	Seattle	WA	98188	US	10/20/2024
344	Robbie Cardon	Anchorage	AK	99514	US	10/20/2024

Change.org Central Gravel Products Petition
Received by MSB on 10-28-24 via email from Ryan Ralston

	A	B	C	D	E	F
345	Joseph Alvarado	Wasilla	AK	99654	US	10/20/2024
346	Kevin Gilmore	Seattle	WA	98118	US	10/20/2024
347	Zane Ervin	Seattle	WA	98106	US	10/20/2024
348	Alyssa Ervin	Wasilla	AK	99654	US	10/20/2024
349	David Johnston	Wasilla	AK	99654	US	10/20/2024
350	Christian Justus	Wasilla	AK	99654	US	10/20/2024
351	Michael York	Wasilla	AK	99654	US	10/20/2024
352	George York	Morrison	CO	80465	US	10/20/2024
353	Laurel Mowatt	Wasilla	AK	99654	US	10/20/2024
354	Jennifer Cox	Wasilla	AK	99654	US	10/20/2024
355	Dustin Heaton	Wasilla	AK	99654	US	10/20/2024
356	Joe Rice	Wasilla	AK	99654	US	10/21/2024
357	Jaime Caitlyn	Wasilla	AK	99654	US	10/21/2024
358	Leslie Semler	Wasilla	AK	99654	US	10/21/2024
359	Jesse Huffman	Wasilla	AK	99654	US	10/21/2024
360	Kayla Mitchell	Wasilla	AK	99654	US	10/21/2024
361	Kalon Shampine	Wasilla	AK	99654	US	10/21/2024
362	John Mitchell	Wasilla	AK	99654	US	10/21/2024
363	Dana Dunne	Wasilla	AK	99654	US	10/21/2024
364	David Thomson				Liechtenstein	10/21/2024
365	Ray Singh	New York	NY	10118	US	10/21/2024
366	Sherri Lilly	Wasilla	AK	99654	US	10/21/2024
367	Kalie Bell	Seattle	WA	98106	US	10/21/2024
368	Ashley Fenton	Wasilla	AK	99654	US	10/21/2024
369	Linda Forster	Leander	TX	78209	US	10/22/2024
370	Lou Rhodes	Champaign	IL	61821	US	10/22/2024
371	Faviola Esquivel	Bend	OR	97702	US	10/23/2024
372	Jackie Massey				US	10/23/2024
373	Bob Anderson	Scottsdale	AZ	85255	US	10/23/2024
374	Erika K	North Ridgeville		44039	US	10/23/2024
375	Andrew Floyd	Dover	OH	44622	US	10/23/2024
376	Brian Rasmussen	Downers Grove	IL	60516	US	10/24/2024
377	Deborah Affinito	Palmer	AK	99645	US	10/24/2024
378	Silvio Mazzella	Wasilla	AK	99654	US	10/24/2024
379	Tori Romanowski	Memphis	TN	38138	US	10/24/2024

From: Robert Schwab
To: Peggy Horton
Subject: Oppose Gravel pit
Date: Monday, October 28, 2024 10:25:27 AM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Hello,
I highly advise AGAINST the approve of the proposed gravel pit located on 7955 E Bogard Rd., 3182 N. Trunk Rd., 7801 E Glade Ct. As a resident of the Shorewood subdivision, it is already dangerous enough to exit our neighborhood due to the lack of maintenance and traffic on Bogard. Adding heavy machinery and trucking that would further degrade the roads and increase the amount of accidents is a terrible idea for the city to approve. There is a guarantee of accidents to happen as they already occur. There are hundreds of homes in this area, why allow a dangerous gravel pit to degrade the value of the middle valley? Why push your tax payers out of an area? There are already implications of snow drifts in this exact location, imagine what those will look like without the treeline. The watershed within this property should be protected and kept clean, our ground water should be protected and kept clean. The city needs to do right by their residents and not a corporation, keep the valley clean! The valley already have a dirty enough rep for not being clean, why have hundreds of acres turning into dirt in the smack middle of the valley… I really really hope that the city takes pride in the future of its residents and its reputation. Keep the valley clean!!

3290 N Calder Rd Wasilla, AK 99654

Respectfully,

Robert Schwab

From: esakpls1@mtaonline.net
To: Peggy Horton
Subject: FW: gravel pit at 18N01E27A002, 18N01E27D001, 18N01E27D002.
Date: Sunday, October 27, 2024 7:36:06 PM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]

Reasons for not having a gravel pit at 18N01E27A002, 18N01E27D001, 18N01E27D002.

- Increased dust and dirt on the roads.
- Engstrom is turning into a major access to multiple subdivisions.
- Increase of dust during operating.
- Existing sight distance problem at Engstrom & Bogard which makes a very dangerous intersection.
- increased traffic at Engstrom & Bogard intersection which is scheduled to be constructed.
- eagles' nest across Borgard, at the park headquarters.
- a 90' hole between Wasilla Creek and Gooding Lake and adjacent to a 200+ lot residential neighborhood?
- If aquifer the is disrupted what is the solution to fix the disruption of the water table for the Shorewood Subdivision?
- Winds at 100 mph+ in the area.
- Destin Dr. becoming a bypass for the clogged intersection at Engstrom & Bogard.

These are just a few of the problems that this proposed project would create for the existing homes within the area.

Thank you,

Eric Simons
7560 E Destin Drive
Lot 19, Block 14
Shorewood Subdivision

Eric Simons, P.L.S.
Professional Land Surveyor
(907) 746-4657 Work
esakpls1@mtaonline.net
PO Box 954
Palmer, Ak 99645

From:	Gregory Sindt
To:	Peggy Horton
Cc:	Edna DeVries; Mike Brown; George Hays; Tom Adams; Cole Branham; pesindt@aol.com
Subject:	Nov. 18 Planning Commission Meeting central gravel products conditional use permit
Date:	Monday, October 28, 2024 1:19:05 PM
Attachments:	2024-10-28 Lohmann-Olson Family LLLP Letter to Planning Commission.pdf
Importance:	High

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]

Ms. Horton,

Please confirm receipt of this email and attached document.

Comments from Lohmann – Olson Family LLLP regarding the Central Gravel Products Conditional Use Permit Application public hearing (Nov. 18, 2024 hearing date) are attached.

Please include this letter in the Nov. 18 Planning Commission meeting packet.

Please contact us with any questions.

Thanks,

Patty Sindt

October 28, 2024

Lohmann – Olson Family, LLLP
Patricia Sindt, General Partner
13379 560th Ave.
Story City, IA 50248

Via email: peggy.horton@matsugov.us

Matanuska-Susitna Borough Planning Commission
350 East Dahlia Avenue
Palmer, AK 99645-6488

RE: November 18, 2024 Planning Commission Meeting
Central Gravel Products Application for Earth Material Extraction Conditional Use Permit

Dear Planning Commission:

This letter is a request for the Planning Commission and the Borough Public Works Department to address the traffic congestion issues on Engstrom Road and Bogard Road as a condition for approval of the Central Gravel Products Conditional Use Permit application for the proposed gravel pit.

We suggest that the Borough construct a connector road between Engstrom Road and Trunk Road on the north side of the proposed gravel pit as per the 2021 Transportation Infrastructure Package (TIP) that was approved by the Planning Commission on June 21, 2021 (reference Resolution No. PC 21-12) and approved by voters in November 2021.

The suggested connector location on the north side of the proposed gravel pit is also indicated on the November 2022 Official Street and Highway Plan (Figure 30) and the 2024 Draft Bogard – Seldon Corridor Access Management Plan (Figure 4).

In July 2024, we became aware of an alternate connector route ("North Alignment") that is being considered in lieu of the original concept that was approved by the voters in 2021 ("South Alignment") when we received a request for Right of Entry from the Borough for field investigations of the alternate connector route.

The alternate proposed "North Alignment" cuts through our 245-acre family owned (Lohmann-Olson Family LLLP) undeveloped property on a route which divides the property into several, some nearly unusable, parcels.

The alternate North Alignment will provide little, if any relief from the impacts of the truck traffic at the proposed gravel pit on Enstrom Road and Bogard Road. The original planned South Route would provide significant benefits for both the existing traffic issues and future truck traffic issues.

We submitted formal written comments to the Planning Commission on August 2, 2024 for the August 5 Planning Commission meeting. The Planning Commission was considering revisions to the Official Streets and Highway Plans to include the North Alignment. The Planning Commission removed the item from the August 5, 2024 meeting agenda.

We met with Mayor DeVries and Borough staff on August 19 for discussion of connector road concepts. Borough staff indicated that they will consider alternatives to the North Alignment as discussed during the meeting.

We understand the need for a connector route or Engstrom Road improvements. However, this should be balanced with other factors and all alternative connector routes should be evaluated. It appears that the South Alignment alternative will provide significant benefits, especially with the development of the proposed gravel pit.

We request that the Planning Commission require negotiation and purchase of road right-of-way from the proposed gravel pit property owners as a condition of the Conditional Use Permit. We also request the Borough proceed with the design and construction of the Engstrom Road to Trunk Road connector project using the original South Alignment route as approved by voters in November 2021, as per the November 2022 Official Street and Highway Plan and the 2024 Draft Bogard – Seldon Corridor Access Management Plan in lieu of the North Alignment alternative.

Thank you for your consideration of this request.

Please contact me with discussion and questions.

Sincerely,
LOHMANN-OLSON FAMILY LLLP

Patricia Sindt

Patricia Sindt
General Partner
515-290-0274 (Greg Sindt mobile phone)

C: Mayor Edna DeVries, via email
Mike Brown, Borough Manager, via email
George Hays, Borough Deputy Manager, via email
Tom Adams, PE, Borough Public Works Manager, via email
Cole Branham, EIT, Borough Project Management Division Manager, via email

From: Michael Swart
To: Peggy Horton
Subject: Central Gravel permit, public comment
Date: Sunday, October 27, 2024 8:39:56 PM

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

May Su Planning Commission,

Central Gravel Products gravel extraction permit, I offer some points to ponder.

* Currently operating long-time established business less than half a mile from permit site.

* The most competitive pricing in the valley, with very good quality materials.

* They serve all customers, from a
5-gallon bucket to a side dump. No other gravel pit in the valley offers this variety of material or is as accommodating: very few will even load pickups, utility trailers, small dump trailers etc.

* Central Gravel is community minded, they donate, discount and give free material and or trucking to 4H, youth sports, parks, and ball fields in the area.

* If this permit is denied, property taxes will increase.

* Homes will cost more, traffic will be heavier due to more trucks coming from farther away to accomplish the same result.

* Traffic is one of the main concerns. Only inbound traffic will be on Engstrom
(Empty 95% of the time). The exception would be for new construction and existing homes up the hill. All other loaded vehicles would exit onto Bogard closer to the existing coffee shop. As loaded trucks are slower to get to speed, this would actually give more opportunity to vehicles leaving Engstrom.

Thank you for the opportunity to share,
Michael Swart.
Michael Swart
Sent from my iPhone

From: Brittany Thurstin
To: Peggy Horton
Subject: MSB 17.30 - Conditional Use Permit for Earth Materials Extraction
Date: Saturday, October 26, 2024 8:03:16 PM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Hello,

I highly advise AGAINST the approve of the proposed gravel pit located on 7955 E Bogard Rd., 3182 N. Trunk Rd., 7801 E Glade Ct.

As a resident of the Shorewood subdivision, it is already dangerous enough to exit our neighborhood due to the lack of maintenance and traffic on Bogard. Adding heavy machinery and trucking that would further degrade the roads and increase the amount of accidents is a terrible idea for the city to approve. There is a guarantee of accidents to happen as they already occur. There are hundreds of homes in this area, why allow a dangerous gravel pit to degrade the value of the middle valley? Why push your tax payers out of an area? There are already implications of snow drifts in this exact location, imagine what those will look like without the treeline. The watershed within this property should be protected and kept clean, our ground water should be protected and kept clean. The city needs to do right by their residents and not a corporation, keep the valley clean! The valley already have a dirty enough rep for not being clean, why have hundreds of acres turning into dirt in the smack middle of the valley… I really really hope that the city takes pride in the future of its residents and its reputation. Keep the valley clean!!

Brittany Thurstin
3290 N Calder Rd
Wasilla, AK 99654

Matanuska-Susitna Borough
Development Services Division
350 E. Dahlia Avenue
Palmer, Alaska 99645

261 6111B02L006
DUNN JESSICA R, DUNN RACHEL L & DUNN MICHELLE D
PO BOX 1385
PALMER, AK 99645-1385

The Matanuska-Susitna Borough Planning Commission will consider the following:

Dan Steiner, P.E., acting for Central Gravel Products, submitted an application for an Earth Material Extraction Conditional Use Permit under MSB 17.30 – Conditional Use Permit (CUP) for Earth Material Extraction Activities for the extraction of 230,000 cubic yards annually through 2054. The site is located on 153 acres within three properties totaling 235 acres, at 7955 E Bogard Rd., 3182 N. Trunk Rd., 7801 E Glade Ct., Tax ID #s 18N01E27A002, 18N01E27D001, and 18N01E27D002.

The Matanuska-Susitna Borough Planning Commission will conduct a public hearing concerning the application on ***Monday, November 18, 2024***, at 6:00 p.m. in the Borough Assembly Chambers located at 350 E. Dahlia Avenue in Palmer. This may be the only presentation of this item before the Planning Commission, and you are invited to attend. Planning Commission members may not receive or engage in ex-parte contact with the applicant, other interested parties in the application, or members of the public concerning the application or issues presented in the application.

Application materials may be viewed online at www.matsugov.us by clicking on "All Public Notices & Announcements." For additional information, you may contact Peggy Horton, Current Planner, by phone: 907-861-7862. Provide written comments by e-mail to peggy.horton@matsugov.us or by mail to MSB Development Services Division, 350 E. Dahlia Avenue, Palmer, AK 99645.

The public may provide verbal testimony at the meeting or telephonically by calling 1-855-290-3803. In order to be eligible to file an appeal from a decision of the Planning Commission, a person must be designated an interested party. See MSB 15.39.010 for the definition of an interested party. The procedures governing appeals to the Board of Adjustment and Appeals are contained in MSB 15.39.010-250, which is available on the Borough home page: www.matsugov.us, in the Borough Clerk's office, and at various libraries within the borough.

Comments are due on or before ***October 28, 2024***, and will be included in the Planning Commission packet. Please be advised that comments received from the public after that date will not be included in the staff report but will be provided to the Commission at the meeting.

Name: Jessica Walton (Nee: Dunn) ***Mailing Address:*** PO Box 1385

Location/Legal Description of your property: Finger Lake Hts. RSB Block 2 Lot 6 7731 Reisner Loop

Comments: The negative impact on traffic + the water is unacceptable. There are currently many gravel pits in the Valley + builders who choose cheap "unbuildable" land who use far to much gravel. Build on stable ground

Note: Vicinity Map Located on Reverse Side

From: Lindsay Huppert
To: Peggy Horton
Subject: Earth Material Extraction Conditional Use Permit
Date: Monday, October 28, 2024 8:01:01 PM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Dear Planning Committee,

My family and I live on N Engstrom Road. My husband has grown up on Neklason Lake and has the most fond memories driving past the Havemeister Farm. We were notified via letter in the mail that Central Gravel Products has submitted an application for an Earth Material Extraction Conditional Use Permit for 235 acres at 7955 E Bogard Rd, 3182 N Trunk Rd, 7801 E Glade Ct, Tax ID #s 18N01E27A002, 18N01E27D001, and 18N01E27D002. While we hate to see the possibility of losing that beautiful land as it exists today, we understand and appreciate the necessary work that gravel pits bring to our community. However, I have several concerns about this request. My main concern is my family's safety. From the additional information received, I understand Central Gravel has requested that driving access into the pit will be off of Engstrom Road. We, along with all the other residents, struggle daily pulling in and out at the Bogard/Engstrom intersection. The traffic on Engstrom Road is already terrible to say the least. With the additional amount of traffic from a gravel pit, I fear it will cause a future fatality. We have been informed countless times that a roundabout is coming in the future from Alaska DOT, however, that day has yet to come. This construction start date continues to be pushed to the right with no definitive date in sight. I am scared for my family's safety as well as my own, every single day. We ask that you please consider fixing or addressing the existing safety issues before making any decisions that could jeopardize our livelihoods anymore than it already has. We are simply asking for you to please put our community and our safety first.

Thank you for your consideration,
Lindsay Huppert

From: Mary Anderson
To: Peggy Horton
Subject: Central Gravel Products CUP Application
Date: Monday, October 28, 2024 8:25:07 PM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
October 28, 2024

To: Mat Su Borough Planning Commission

RE: Central Gravel Products Application for Conditional Use Permit for Earth Materials Extraction located on former Havermeister Dairy Farm and neighboring property

Dear Planning Commissioners,
I am writing to ask you to deny Central Gravel Products application for a Conditional Use Permit.

According to MSB Code 17.60.100(B)(1) In granting a conditional use permit, the planning commission must make the following findings, that the conditional use will preserve or not detract from the value, character, and integrity of the surrounding area;
Title 17 Zoning Ch 17.125 defines character as "those attributes, qualities, and features that make up and distinguish a development project and give such project a sense of purpose, function, definition, and uniqueness."

The "**character**" of the surrounding area along Enstrom Road is **primarily residential** and agricultural. There are over 200 single family homes alone in the Shorewood Subdivision directly across from the proposed gravel extraction site. Several more residential neighborhoods abut Engstrom Road including Cornelius Lake Subdivision, Stone Creek Subdivision, Hart Lake Subdivision, Wolf Lake Subdivision & Airpark.

The proposed location of CGP's gravel pit is on the land commonly referred to as the Havermeister & Kircher farms. From 1935 until 2021, the Havermeister land was a dairy farm with wide open hay fields and dairy cows out grazing. This was part of the natural beauty and uniqueness of the area. Even after the dairy farm closed, the open space continues to provide unparalleled views and adds to the value and character of the area.

MSB Code 17.60.100(B) (2): states that in granting a conditional use permit, the planning commission must make the following findings, that granting the conditional use permit **will not** be harmful to the public health, safety, convenience, and welfare.

This land is now being proposed as the site of a gravel extraction operation. Gravel extraction development inherently brings noise, dust, truck traffic, and potential impacts to water quality, which can have an adverse effect on those who live in the surrounding residential neighborhoods.

The area where the proposed gravel pit is to be located is known for the high winds that blow across the fields. These winds blow snow onto Engstrom Road causing snow drifts that are dangerous for traffic during the winter months. These same winds will be blowing across the gravel pit and will carry dust and debris across the road and into the nearby homes.

According to the CUP application, there will be two access points into the proposed gravel pit. An “in only” driveway off Engstrom Road and an entrance/exit from the driveway off Bogard Road.

Traffic on Engstrom Road is increasing every year. According to a traffic study by MSB, the average daily traffic volume on Enstrom Road in 2004 was 484 vehicles. In 2019, that average daily traffic volume had increased to 3426 vehicles. And as new subdivisions continue to be developed along Engstrom, this traffic will only get worse.

The intersection of Bogard Road and Engstrom Road is well known for traffic congestion and a higher than average crash rate. On an average day it can take up to 15 minutes to merge from Engstrom to Bogard during the morning/evening commuter/school traffic.

The closely spaced intersections, high speeds, lack of sight distance, and access to the growing number of neighborhoods contribute to the large number of crashes and congestion problems at the intersection. Adding dump trucks and/or belly dumps to this traffic would just magnify the problems and increase the risks to safety.

It is my position that the negative effects of this project outweigh the positive benefits to the local community and that this CUP application should be denied.

Thank you.
Mary Anderson
7826 E. Settlement Ave.
Wasilla, AK 99687
907-232-3328

From: Gretchen Marvin
To: Peggy Horton
Subject: Gravel Pit on Havemeister / Kircher Property
Date: Monday, October 28, 2024 6:58:00 PM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Please do not approve this gravel pit in this location where this is the first thing you see when turning onto Engstrom! It would be as bad an eyesore as a junkyard and should not be located directly across the street from residential housing! We only purchased our house in this neighborhood three years ago and we are extremely concerned about this affecting our property value. We know the air quality will certainly be diminished, especially in the winter. This gravel pit never should have been considered here especially with the serious and dangerous traffic congestion at Engstrom & Bogard. Do not allow this property to be turned into a humongous pit!!

Gretchen Marvin
907-529-6290
E. Sandstone Dr

From: Ty James
To: Peggy Horton
Subject: Public Notice Comments MSB 17.30 - Conditional Use Permit for Earth Materials Extraction
Date: Monday, October 28, 2024 11:44:44 PM
Attachments: MatSu Comments.pdf

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Good evening again, Peggy-

Please disregard my last email, it was sent from the wrong Gmail account. Please see the attached comment letter and let me know if you have any questions.

Thank you for your time,

Tyler Marye

October 28, 2024

Comments on Public Notice
MSB 17.30 - Conditional Use Permit for Earth Materials Extraction

Dear Peggy Horton-

Thank you for the opportunity to provide feedback on this important matter. I appreciate the Borough's commitment to engaging with the public on this issue. I want to state and make clear that my comments reflect only my personal views and do not represent the opinions, positions, or endorsements of my employer.

Having purchased gravel from Central Gravel Products before I support small business and can understand the need for commercial aggregate supplies in the valley. However, this proposed site offers unique natural and historical benefits to the residents of the Borough. This household does not support a gravel pit permit at this location, as it will destroy this unique site.

Nevertheless, if the grave; pit is to move forward there are concerns with the proposed reclamation narrative or lack there of. The supplied reclamation statement will be difficult to meet the standards identified in CHAPTER 17.28: INTERIM MATERIALS DISTRICT and actions to minimize impacts addressed in their application. It is unknown if their current operation has reclamation requirements or not, but review of aerial imagery and driving by the site frequently, it is unknown how they would properly reclaim the site, as it appears all of the organics/topsoil have been stripped and likely sold. Without those, that site will forever remain a scar for decades or centuries. With the current borough code, it should be clearly known and addressed in the application/plans that this operation would be required to follow "all available topsoil shall be retained for reclamation". Their new webpage arguing in support of this project, states they will be selling topsoil to the public. This is the best chance for the site to naturally recover. Topsoil stockpiles should be properly planned around the pits to avoid double handling of them and to not be mixed with other stockpiles.

Engstrom is a high traffic area, so it is unclear why the application and plans say no visual screen method or berm is required on the west side of the project (sheet C1.0). 17.28.060 SITE DEVELOPMENT STANDARDS requires visual screening methods. Driving by the site every day, the claim of topography would handle this is not supported by the cross sections and in actual site conditions. I do not expect the general public wants to look at open pits for the long life of this project. Visual screening methods need to be required. Finished grade/topography (in C2.1) does not support the notion that visual screening methods are not needed, as you could easily look down from the roadway into the site. Additionally, the proposed 3:1 slopes are not sufficient for stability or revegetation as required by 17.28.067 (D) RECLAMATION STANDARDS. Cut or fill slopes which are to be stable/vegetated should not be steeper than 2 horizontal to 1 vertical.

The drifting snow along Engstrom is also not adequately addressed in the application or plans. This is a significant concern for local residents and needs to be properly considered. It is possible that after the project is finished that the finished grade (with stable slopes) could possibly help trap snow from the roadway, but the application does not address during the mining project. With the initial

removal of more forested areas it would be reasonably expected for the snow drifting issue to be worse during the decades long project.

Finally, dust control would be “dealt with the site vegetative buffer” is not supported in the plans, especially as the first few phases appear to begin in the forested areas of the site that offer the little wind protection that exists at the site. This area is notorious for wind gusts throughout the year, and more than a water truck would be needed to handle such a large site. Driving by their existing gravel area on a windy day your vehicle is commonly struck by small debris coming from the mine. This proposed site is closer to traffic and residential housing so dust/ debris control should be more carefully considered.

We support reasonable development to support economic opportunities in the Borough and allow for cheaper aggregate materials for development, but it appears many aspects of this application do not follow CHAPTER 17.28: INTERIM MATERIALS DISTRICT or show much interest in mitigating impacts for the local residents, especially with such a large and long project. Central Gravel Products argues for this project to be against the “corporate conglomerate”, but they need to show the local residents they won’t act like one and mitigate for the impacts of their operation with real and meaningful “GOOD-NEIGHBOR policies” touted on their website. Thank you for the opportunity to provide comment.

Sincerely

Tyler Marye

Tyler Marye
Aspen Ridge Neighborhood Resident &
Homeowner

From: christine morgan
To: Peggy Horton
Subject: Against the gravel pit on Engstrom and Bogard
Date: Monday, October 28, 2024 6:08:48 PM

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

To whom it may concern,

My family is against the conditional permit for the gravel pit proposed on Engstrom and Bogard. We already have so many issues with the traffic, snow drifts, etc. on Engstrom.The winds in the winter are already strong which causes large snow drifts. Disturbing the landscape will cause even more problems. Engstrom already has a large amount of traffic. Large trucks and private vehicles coming to purchase the materials will cause more traffic and damage the entrance to the Shorewood subdivision. I live a quarter of a mile from the site. It will decrease the value of my home.
I have heard that the Havemeister sign over to lease the land was done illegally. A daughter in law talked the elder Mrs. Havemeister to sign over the rights to the land when she was not of sound mind. Mrs. Havemeister did not fully comprehend what she was signing. It was done for greed.

Please do not approve the permit. It will cause more problems for this area. My heart is breaking watching this beautiful field and the history behind it turn into waste land. Please save the farmland. Thanks for hearing our voice.

Christine Morgan
7430 Zephyr Dr.
Wasilla, Ak
99654
907-360-4286

Sent from my iPhone

From: Scott Patridge
To: Peggy Horton
Subject: Gravel Pit
Date: Monday, October 28, 2024 6:37:08 PM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
My name is Scott Patridge I live in the Fishook Area and will be affected by the Havemeister / Kircher Property Gravel Pit. I do not support adding another gravel pit to the area for the following reasons.

1. Additional traffic to an already overcrowded and dangerous area.

2. They will destroy what's left of the fish in Wasilla creek.

3. There are more than enough gravel pits in the area.

4. There is no way they will hold up to "self imposed restrictions"

Scott Patridge

From: Barbara Smith
To: Peggy Horton
Subject: RE Public Notice MSB 17.30 Conditional Use Permit for Earth Materials Extraction
Date: Monday, October 28, 2024 10:52:55 PM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Dear Mat-Su Borough Planning Commission,

The proposed "gravel extraction project to the year 2054" MSB17.30, is a very bad idea. The area includes the vital Wasilla Creek which flows into Neklason Lake on which I live and which is a salmon spawning Lake! Each summer we see salmon coming into our lake to spawn in the cool gravel ares of our Lake. This proposed land use would threaten and adversely affect the waters and salmon habitat in this area. The waters of the south shore of Gooding Lake would similarly be impacted.

Secondly, during the winter the wind blows down from Hatchers Pass and often drifts snow across Engstrom Rd, also within this proposed area. A gravel operation along this road would make this area of Engstrom Rd a nightmare of blowing dirt and sand very near where the proposed new roundabout is to be built at Engstrom and Bogard. Not to mention the noise of gravel pit machinery and the loss of a beautiful view from homes which currently face this area and see a meadow reaching to the surrounding trees and mountains.

I am strongly opposed to this permit which will destroy the habitat for salmon spawning in Wasilla Creek and a quiet residential area as well as, make a future road project hazardous to access.

Sincerely;

Barbara Smith

From: Barbara Smith
To: Peggy Horton
Subject: Correction to my comments: Public Notice MSB 17.30 Conditional Use Permit for Earth Materials Extraction
Date: Monday, October 28, 2024 11:14:30 PM

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

Dear Mat-Su Borough Planning Commission,

The proposed “gravel extraction project to the year 2054” MSB17.30, is a very bad idea. The area includes the vital Wasilla Creek which is a salmon spawning Lake! I live on nearby Neklason Lake also a salmon spawning Lake. Each summer we see salmon coming into our lake to spawn in the cool gravel ares of our Lake. This proposed land use could threaten and adversely affect the waters and salmon habitat in this area. The waters of the south shore of Gooding Lake would similarly be impacted.

Secondly, during the winter the wind blows down from Hatchers Pass and often drifts snow across Engstrom Rd, also within this proposed area. A gravel operation along this road would make this area of Engstrom Rd a nightmare of blowing dirt and sand very near where the proposed new roundabout is to be built at Engstrom and Bogard. Not to mention the noise of gravel pit machinery, air quality and the loss of a beautiful view from homes which currently face this area and see a meadow reaching to the surrounding trees and mountains.

I am strongly opposed to this permit which will destroy the habitat for salmon spawning in Wasilla Creek, air quality and a quiet residential area as well as, make a future road project hazardous to access.

Sincerely;

Barbara Smith

From: Barbara Smith
To: Peggy Horton
Subject: RE: Administrative Permit under MSB 17.30 – Earth Materials Extraction Activities.
Date: Tuesday, October 29, 2024 11:07:48 AM

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

Dear Mat-Su Borough Planning Director,

The proposed “Administrative Permit under MSB 17.30 – Earth Materials Extraction Activities"MSB17.30, is a very bad idea. The area includes the vital Wasilla Creek which is a salmon spawning Lake! I live on nearby Neklason Lake also a salmon spawning Lake. Each summer we see salmon coming into our lake to spawn in the cool gravel ares of our Lake. This proposed land use could threaten and adversely affect the waters and salmon habitat in this area. The waters of the south shore of Gooding Lake would similarly be impacted.

Secondly, during the winter the wind blows down from Hatchers Pass and often drifts snow across Engstrom Rd, also within this proposed area. A gravel operation along this road would make this area of Engstrom Rd a nightmare of blowing dirt and sand very near where the proposed new roundabout is to be built at Engstrom and Bogard. Not to mention the noise of gravel pit machinery, air quality and the loss of a beautiful view from homes which currently face this area and see a meadow reaching to the surrounding trees and mountains.

I am strongly opposed to this Administrative permit which will destroy the habitat for salmon spawning in Wasilla Creek, air quality and a quiet residential area as well as, make a future road project hazardous to access.

I also wanted to add one more comment: What happen after? What would the mitigation of these acres look like? Is there even a plan for easy and pleasant green space access around this area for cyclist, families to walk, runners, children to safely use. These activities already occur and have since the bike lanes were put in along Trunk road. The current gravel pit at Bogardus and Trunk is a hugh eye sore and uncovered trucks with mud and dirt on their tires pulling out into the busy Bogard traffic. I’m sure dinged windshields incurred in more than a few cars following these trucks not to mention the sand blasting that occurs when driving past it on Trunk road.

Please do not allow this commercial enterprise in our residential area. The Mat-Su Valley has more important needs to address like more affordable housing and clean up of derelict properties.

Sincerely;

Barbara Smith

From: Edward Soto
To: Peggy Horton
Subject: Public Notice > MSB 17.30 - Conditional Use Permit for Earth Materials Extraction
Date: Monday, October 28, 2024 5:27:11 PM
Attachments: 20241028 Comments to CGP request for Material Extraction.pdf
20241028 Comments to CGP request for Material Extraction.pdf

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Dear Ms. Horton;

Please accept my attached comments to be included in the Planning Commission packet.

Thank you, Ed Soto

October 28, 2024

Peggy Horton, Planner
MSB Development Services Division
350 E. Dahlia Avenue, Palmer, AK 99645.

RE: Central Gravel Products application for an Earth Material Extraction

Dear Ms. Horton;

I am writing in opposition to the application for an Earth Material Extraction Conditional Use Permit under MSB 17.30—Conditional Use Permit (CUP) for Earth Material Extraction Activities by Central Gravel Products on the Havemeister owned lots adjacent to the Trunk and Bogard intersections.

I understand the Matanuska-Susitna Borough (MSB) has a "blanket zoning" policy that does not separate industrial and residential uses. This is becoming increasingly problematic in the MSB core area as the population base increases with multi-family housing being the new normal and traffic exceeding capacity as is happening on Bogard Road where this project is located. I have concerns with traffic, quality of life for residents, air quality and impacts to anadromous fish habitat.

Bogard Road traffic is an area that needs relief from and not sustained impacts from traffic until adequate improvements are made. The MSB is late to need on the planning for current and future traffic and the mix of State and MSB road jurisdiction is problematic. Heavy truck traffic from Central's current site adds to the issue and the MSB's planning horizon does not address the issue in the imminent future. Heavy truck traffic adds to the congestion, road damage and hazards associated with Bogard road and its arterials.

Quality of life for those that own residences is an issue. While I respect private property rights, industrial uses in and around residential areas impact those residences with dust, noise and visually decrements the community. The air quality from air borne contaminants is likely to impact the downwind community when wintertime windstorms occur. I personally have had my vehicle sand blasted from the existing Central Gravel site while driving down Trunk on a windy day. Nobody should have to put up with that and I expect my government to prevent

that situation on our roads through adequate planning and zoning. Industrial material extraction in and among the residential areas is a public nuisance and impacts our quality of life in many ways decrementing property values for all except the material source owner.

Finally, I have concerns on the impacts to Wasilla Creek (AWC Code 247-50-10260-2019-3076) which is cataloged by the Alaska Dept of Fish & Game as Coho and King Salmon rearing habitat. The applicant states that they will not enter the riparian/flood zone, however sustained use of the area and the stripping of over 100 acres of organics and mineral soil down to erodible gravels through 2054 has an unknown impact on this body of water over time. We are currently experiencing historical lows in Coho and King Salmon returns and need to do everything we can to protect this valuable resource.

In closing, I am in favor or protecting private property rights and providing the Valley's need for gravel building materials, however the nature of our community has changed drastically over my 26 years of living here. Protection of my property values is dependent on maintaining our quality of life and limiting the impacts of industrial and business activities to our neighborhoods and communities. Although a reclamation plan is mentioned, I can't find it in the 396 page permit application. I haven't seen any reclamation activities on the existing Central site southeast of the Bogard-Trunk intersection other than further developing it into a long term industrial site that still produces the impacts listed above. If it means I need to pay more to haul gravel in from outside the core area to maintain the integrity and quality of our communities, then so be it. The MSB Core Area deserves more than to be an open pit that benefits the few that own and operate it.

Thank you for the opportunity to comment. I can be reached at ed-soto@live.com or 907-231-5431 if there any questions.

Sincerely,

Edward Soto
3201 N. Departure Ct
Wasilla, AK 99654

From: Tim Anderson
To: Peggy Horton
Subject: Conditional Use Permit Application for Central Gravel Products Havermister Farm
Date: Monday, October 28, 2024 3:32:57 PM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Please consider this as my comments on the Application for a Conditional Use Permit requested by Central Gravel Products via Dan Steiner, to establish a gravel pit on the Havermister Farm located on Bogard Ave in the Borough.

I want to go on the record opposing issuing this Conditional use Permit. I live within the notification area used by the Borough for this permit. I love having the Havermister farm in my neighborhood, but I recognize that the Havermisters need to be able to make a living with their land. If the Planning Commission chooses to approve this permit, they must also consider the ramifications of allowing a gravel pit in this populated area and place appropriate conditions on the permit to mitigate the negative effects of operating this gravel pit.

The number one reason this permit should be denied is the negative effects it will cause on traffic on Engstrom and Bogard roads. Due to the existing subdivisions around Engstrom Road and Gooding and Corneilus Lakes, and all the new subdivisions around Wolf and Hart Lake and Airstrip, traffic on Engstrom is crazy busy. Engstrom serves as the primary road to access Bogard Road for these subdivisions. It is nearly impossible to turn left onto Bogard from Engstrom now. Adding Side Dumps and Rear Dump trucks to this existing mess is not a good idea. Having loaded gravel trucks directly accessing Bogard in the area between the Trunk Road roundabout and Engstrom is not a good idea either.

If this permit is to be approved there must be a condition that all traffic in and out of this pit must be by an access road from the pit to the new Trunk Road.

There will be noise, dust, water run off which the Central Gravel Products addressed in their application. Those must be added as conditions. Additionally, there must be a condition that prohibits any gravel extraction in the area's water table, and there must be reclamation conditions for the proposed Pit.

I served on the Planning Commission for 7 years and I understand the process and that difficult decisions must be made. Consideration must be given to the CUP applicant, and equal consideration must be given to the residents living in the effected area. Thank You.

Tim Anderson
7826 E. Settlement Ave, on Cornelius Lake
907 232-7332

From: David Zimmer
To: Peggy Horton
Subject: Comment on Public Notice MSB 17.30
Date: Monday, October 28, 2024 10:31:13 PM

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

> I am strongly opposed to allowing a gravel pit to be operating on the shore of Wasilla Creek and Gooding Lake close to the neighborhood where I live. Wasilla Creek is a salmon spawning creek. I don't want to listen to the constant noise of gravel pit machinery nor breathe the dusty air produced there. We already have too many gravel pits in the Mat-Su area, and it abhorrent to turn farm and forest land into another gravel pit. Please do not give a permit for a gravel pit on this property.
> —David Zimmer
>
> iPhone
>
iPhone

From: John Klapperich
To: Peggy Horton
Subject: In strong support of Central Gravel Products Expansion CUP
Date: Wednesday, October 30, 2024 4:17:04 PM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Peggy,

I request this be on the record, please. I **strongly recommend approval** of CGP CUP, as is.

Speaking on behalf of myself, albeit a 40 member of the North Lakes Community Council, (and living on Bogard Road less than a mile from Engstrom & Bogard) I strongly **oppose nearly all of the additional conditions**, that were included in the North Lakes Community Council 's letter of support sent to you on 10/28/24. The 458 pages of conditions that are already written into the CUP, are making it nearly impossible to operate a private unsubsidized business successfully. As past six-year MSB's Planning Commission Chairman, I have presided over past approved CUP's coming back to Planning, to amend because of the in-ability to adhere to the increasing costs to comply with Federal, State, Local, MSB rules, Regulations and Conditions. When a non-compliance issue with a CUP first arises, it is 99% because of too costly.

As a planning Commissioner, I strongly encourage to conduct your due diligence, but you must allow them the ability to be able to perform, if approved. Approving pages of excessive conditions to accommodate all user groups is actually a denial, if applicant complies with current regulations, approve. And delaying action to review all "new conditions" , just brings more "new conditions" .

Thank you ,

John

John Klapperich
2951 North Earl Drive/Bogard
Wasilla, AK. 99654

907 355-9970

From: David & Diane Rose
To: Peggy Horton
Subject: RE: Planning Commission 11/18, Earth Material Extraction Conditional Us Permit
Date: Thursday, November 7, 2024 11:25:13 AM

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

Hello-

Attached is our letter with comments for the Planning Commission Meeting on 11/18. We realize we did not respond in time to get our letter in the packet but would like it to be provided to the Commission at the meeting.

Thank you,

David & Diane Rose

November 7, 2024

David & Diane Rose
7950 E Wolf Creek Rd, Wasilla, AK
Mailing: PO Box 1943, Palmer, AK

via email: peggy.horton@matsugov.us

RE: November 18, 2024 Planning Commission Hearing
Central Gravel Products Application for Earth Material Extraction Conditional Use Permit

To the Planning Commission:

We live in Vail Estates off the very busy Engstrom Road. The projects that are supposed to alleviate some of our bad traffic issues keep getting pushed back from original dates and we are all hoping that the dates given of 2026 will hold.

A gravel pit with increased truck traffic is not a positive announcement for us. We would like to suggest that the Planning Commission and The Mat-Su Borough address the traffic issues on Engstrom as a condition for approval of the above named Conditional Use Permit. The 2021 Transportation Infrastructure Package that was approved by the Commision in June of 2021, and then by voters in November of 2021, had a connector Road between Engstrom Rd and Trunk Rd off of Glade Ct on the north end of the Havemeister farm. This would be the North side of the proposed gravel pit. We feel that project (aready approved) should be considered as a way to alleviate truck traffic on Engstrom Rd. This suggested connector is also indicated on the November 2022 Official Street and Highway Plan (Figure 30) and the 2024 Draft Bogard – Seldon Corridor Access Management Plan (Figure 4).

We hope that you will consider our input. We request that the Planning Commission require the proposed gravel pit owners to negotiate and purchase road right of way as a condition of approval of the Conditional Use Permit and that the Borough proceed with the construction of this already approved South Alignment route as soon as possible.

Thank you for your time.
Sincerely,

David & Diane Rose
907-355-5422 (David cell)

From: Gerald Hooper/Midglen Logistics Sakhalin
To: Peggy Horton; Gerald Hooper
Subject: MSB 17.30 Conditional use Permit
Date: Thursday, November 14, 2024 2:30:00 PM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Peggy It was good to talk to you today. My public comment on the issue is below, thank You
Gerald Hooper

To MATSU Borough Planning Commission:
As a resident of the Borough, I would Like to Speak in Favor of the issuance of a Conditional Use Permit for Central Gravel, at the New Location under consideration. Jade and his wife have provided me many different types of gravel as I have improved my Home property on Lazy Mtn over the last 3 years. Product ordered was always up to specifications.
Jade and his wife, always courteous, providing on time delivery, and will do everything they can to accommodate "add on" orders when I find myself underestimating what I need for the project. The pricing is reasonable and I have never seen a cleaner and more organized Gravel Operation anywhere. Their location is ideal and conveniently located for supplying the needs of both Palmer and Wasilla and the Butte. I support the Commission's approval of this Permit application.

Gerald Hooper
Senior Project Manager
AKAUXPLOR
3735 N. Vista Cir
Palmer, AK 99645

From: Billie Triplett
To: Peggy Horton
Subject: We support Central Gravel!
Date: Wednesday, November 13, 2024 9:59:35 PM

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

Just a letter of support for Central Gravel! We live on Engstrom Rd. and we support CGP's gravel expansion plan CUP MSB 17.30!
Thanks!
The Triplett Family
4616 N Engstrom Rd.
907-406-0743

From: Mark Boydston
To: Peggy Horton
Subject: Fwd: MSB 17.30 - Conditional Use Permit for Earth Materials Extraction
Date: Saturday, November 16, 2024 5:31:21 PM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Fowarded with correct email address
Sent from my iPhone

Begin forwarded message:

From: Mark <mayboy9942@gmail.com>
Date: November 16, 2024 at 4:58:20 PM AKST
To: peggy.horton@matsu.gov.us
Subject: MSB 17.30 - Conditional Use Permit for Earth Materials Extraction

Hi Peggy

I, Mark A. Boydston, own a home at 4533 N Horizon View Dr, Wasilla (Horizon Estates Phase I Lot4, Block2). I'm retired and travel by personal vehicle to Palmer 1-2 times a week throughout the year. The routes I travel pertinent to the proposed new Central Gravel gravel pit on the Havemeister property (hereinafter referred to as the Proposal) to Palmer are: E Hart Lake Loop to N Engstrom to E Bogard Rd or N Engstrom to Trunk Rd.

I bought my property in December 2022 so I know the traffic patterns as they vary over the course of the year, week and time of day. I get updates from the Borough on the planned roundabout at the intersection of N. Engstrom and E. Bogard Rd. As you are aware and anyone who has used that intersection, the intersection is exceedingly dangerous, and more so in the morning commute hours which end sometime around 9-10 am and again in the afternoon from 2 pm (children pickup at school) to at least 6pm) during the afternoon rush hour.

Saturday can have seemingly endless traffic on E Bogard with few and far spaced opportunities to turn left or right on to E. Bogard from N. Engstrom, with turning left across traffic much more difficult than turning right exacerbated by not only the dense traffic but the inadequate sight direction (the small rise in roadway just before the intersection). I plan as much as practical to avoid these times going to and returning home from Palmer, using the routes described above, going so far as to schedule appointments to avoid these times.

If the Proposal is approved by the State and the Borough my comments are the following:

1. The new gravel pit on the Havemeister property cannot under any circumstances be allowed to begin commercial operations until the roundabout at N. Engstrom and E. Bogard Rd is fully completed and fully functional.

2. There should be no entrance to the new gravel pit on Engstrom Rd. Gravel trucks if they turn on to N. Engstrom from E Bogard Rd. will be in first or second gear (lowest gear and gear above) to go up the hill immediately after they turn on to N Engstrom. In my opinion, the slow moving gravel trucks will definitely increase traffic congestion and accident rates, and more so during the commute and school pick up times. If however, the State and Borough approve the gravel pit entrance on N Engstrom, then a

dedicated exit lane must be constructed, not simply a driveway entrance with a flared right shoulder. Otherwise, even more traffic congestion will occur and probably a higher accident rate for that section of N. Engstrom.

3. The Proposal must consider the possibility of higher traffic volumes than exist presently on N. Engstrom from new subdivision development that would use N. Engstrom as a primary transportation route. For example, a currently proposed subdivision on E. Beverly Ann Lane.

4. N Bogard Rd must be rehabilitated to State and Borough road standards before the Proposal becomes commercially functional.

All in all, I cannot envision the Proposal as currently proposed safe traffic wise. With already dense traffic volumes in the area, E Bogard being a road constructed before Statehood with traffic volumes probably exceeding its design traffic capacity from 8am to 6 pm Monday through Saturday, Central gravel with 12 gravel trucks hauling or returning empty per hour, 8am to 4 pm, 6 days a week from April through October, and in all likelihood new subdivisions being constructed that will affect traffic volumes on N Engstrom and E Bogard, I cannot understand how this Proposal is not going to make driving conditions more dangerous and stressful, and congestion and the accident rate higher in the Proposal near vicinity.

From: Brandon
To: Peggy Horton
Subject: Gravel pits
Date: Monday, November 18, 2024 8:42:25 AM

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

Hello, I wanted to throw a couple cents in on tonights gravel meeting for Jade and Kelly.

I grew up riding in a car seat in a dump truck and started driving them on private property as young as about 11 or 12. In that time I have seen many pits come and go. Unfortunately the balance has been more go than come..

In spite of what people have said on social media, there isn't a pit on every corner and we very frequently have to haul gravel at $135hr (give or take a little) for a single dump truck on average of 1/2 hour rounds. That cost adds up, and is absorbed some by contractors and some passed on to the customers making the cost of homes in this area also climb.

I see a lot of concern on environmental issues to the best of my knowledge most local pit owners have done a great job keeping a clean well organized pit, Jade and Kelly are well above average on this issue. In all the years I have been through Central Gravel I have never seen anything alarming about how they handle environmental concerns.

Also I see a lot of people concerned about the reclamation process. They have created a very large acreage of flat gravel based ground by extracting all that gravel. Many developments are built on old gravel pits. Some examples of this are the good will store behind Carrs in Wasilla, Shamrock septics yard, Anchorage Jail, the old Landscape supply building that used to be on the PWH, many many subdivisions, and 3 bears in Huston. I am sure there are many others, but those come to the front of my mind as I type. These properties were all cleaned up and value greatly enhanced because of the extraction of gravel, not in spite of it. I have every confidence that once cleaned up Centrals current location, and the proposed future location will have increased in value due to Jade, Kelly's and Mark and Nickki's (those that owned Central before Jade and Kelly) efforts.

Traffic is a concern for sure.. However to me this seems like a wash, since one pit is closing as the other is opening on the same basic plot of ground. Jade has also mentioned a better traffic pattern for his new pit that I'm not quite privy to, but do trust what he's saying.

The drifts across Engstrom. That is an issue that has been raised.. A major wind break in the form of a gravel pit should help a lot in the drifting that has been occurring for a long time there. That should ease the cost of tax payers (albeit slightly) for the removal of those drifts.

At the end of the day this area relies on our local pits for road sanding, housing construction, road construction, agriculture, and homeowner projects. One of my fears is setting a "case law" after fashion by denying gravel extraction permits. This trend would be devastating to many people who rely on the construction trades to feed their families. It would be akin to shutting down Home Depot, Lowes and Spenards, and making contractors go to Anchorage for their supplies one pickup truck load at a time..

Thanks for your consideration, I hope to see you tonight.

Brandon Fischer -Fischer Bros Excavation

RECEIVED
NOV 18 2024
Mat-Su Borough
Development Services

NLCC Statement - Planning Commission 11/18/24

My name is Rod Hanson (H.A.N.S.O.N.) and I am the President of the North Lakes Community Council. We are here tonight in support of the Central Gravel Products Conditional Use Permit … but also in support of a postponement of your decision, which allows time for the Borough and the developer to consider and incorporate our recommendations.

We reached out to the North Lakes Community with emails to several hundred subscribers and posts in 8 different neighborhood Facebook groups. We also reached out to most of the immediate neighbors bordering the Havemeister property or directly across the street on Engstrom. We even met face-to-face for discussions with some of those property owners.

Most of the written feedback we received was in opposition to the proposed Central Gravel Products Conditional Use Permit. However, we received both written and verbal feedback in support of the business and their proposed development.

We held two Community Council Membership meetings to discuss the development and, in both cases, provided an opportunity for the Central Gravel Products owners to answer questions and explain the measures they will be taking to mitigate community concerns. We were pleased to hear a number of voluntary self-imposed measures that Central Gravel Products would take to mitigate concerns about dust, noise, drifting snow, and water quality. At the second meeting, members voted by unanimous consent to support a Conditional Use Permit, but with several recommendations for the Borough and for the developer to consider as conditions of the permit.

You will find NLCC Resolution Number 24-002 in your meeting packets on page 1014. You will also find a follow-up email clarification on page 1021.

As a Community Council, we respect the right of the Havemeister and Kircher families to generate income off of their property.

We also recognize and support the Mat-Su based, family-owned Central Gravel Products business owners and appreciate their community focus. We will all miss seeing the hayfields and livestock … and we recognize that the Havemeister and Kircher properties will ultimately be developed into residential neighborhoods or commercial property once the gravel has been extracted.

As you will see in our Resolution, the NLCC is strongly advocating for the Borough to move forward with the Southern Alternative for the Engstrom to Trunk Connector Road. A proposed connector road project at this location was approved by the MSB Assembly in August of 2021. It then went to the voters as part of a Bond Proposition in November of 2021 and was approved.

Now is the perfect opportunity for the Borough to construct this southern connector between Engstrom and Trunk. This connection would provide relief for the heavy congestion we are experiencing at the Bogard / Engstrom intersection, which will only be increasing in the future. It would also provide an ideal access point for the Central Gravel Products operation, and eliminate the need for direct access to Bogard Road. After the gravel pit work is complete, this southern connector would serve to provide access to future residential and commercial development rather than Bogard Road.

A Northern Route being considered by Public Works would likely cost 2-3 times more money, and is proposed to cut through large undeveloped land owned by the Lohmann-Olson family. The family strongly objects to selling a portion of their property for such a road ROW. They have met with the Mayor and Borough leadership to express their concerns and I also met with them around my kitchen table.

The Southern Route is, by far, the least cost to the taxpayers … and provides an opportunity for the Borough to solve community transportation concerns in a timely and cost effective manner.

We realize this road issue is not before the Planning Commission tonight. We have reached out to our Assembly members and will continue to push for a timely decision on this important project.

Regardless of whether the Borough constructs this connector road in the near future or waits until future development forces it to be constructed, our Resolution includes several recommendations we would like to see addressed before approval of the Central Gravel Products Conditional Use Permit. We are hopeful that, with some extra time, the developer will be updating their application materials … and will take that opportunity to incorporate the following recommendations.

1. Abandon attempts to obtain a driveway permit from the DOT for direct access to Bogard. A key tenet of the State DOT and Borough developed Bogard-Seldon Corridor Access Management Plan or CAMP, is NO NEW DRIVEWAYS ON BOGARD! The stretch of Bogard between Trunk and Engstrom currently sees over 12,000 vehicles per day and is the most congested section of this unsafe corridor. A new driveway in that section is unacceptable.

2. Request approval from the MSB for a driveway onto Engstrom Road located right where Engstrom turns slightly to the Northwest. This would be the location of a future ROW for the southern connector road between Engstrom and Trunk.

3. Make several changes to the phasing sequence for the gravel pit development plan.

4. Incorporate several Enhancements to better mitigate negative impacts to neighboring property owners and their property values - including visual screening, dust control, noise control, and snow drifting control.

As a Community Council … we look forward to continued positive discussions with the State, the MSB, and with Central Gravel Products as this application gets revised and ultimately approved.

Rod Hanson
NLCC President
rod@nlakes.cc
90-7-841-8735

DRAFT

PLANNING COMMISSION RESOLUTION

By: Peggy Horton
Introduced: October 21, 2024
Postponed: November 18, 2024
Public Hearing: February 3, 2025
Action:

MATANUSKA-SUSITNA BOROUGH
PLANNING COMMISSION RESOLUTION NO. 24-31

A CONDITIONAL USE PERMIT IN ACCORDANCE WITH MSB 17.30 – CONDITIONAL USE PERMIT FOR EARTH MATERIAL EXTRACTION ACTIVITIES, FOR THE EXTRACTION OF APPROXIMATELY 7.5 MILLION CUBIC YARDS OF EARTH MATERIAL FROM AN EXTRACTION SITE OF 153 ARES WITHIN THREE PARCELS TOTALING 235 ACRES ON 7955 EAST BOGARD ROAD, 3182 NORTH TRUNK ROAD, AND 7800 EAST GLADE COURT, TAX ID#S 18N01E27A002, 18N01E27D001, AND 18N01E27D002.

WHEREAS, Dan Steiner, P.E., on behalf of Bob Havemeister and Ralph Kircher, owners of the subject properties, applied for a conditional use permit to extract earth material from Tax ID#s 18N01E27A002, 18N01E27D001, & 18N01E27D002; and

WHEREAS, it is the intent of the Matanuska-Susitna Borough (MSB) to recognize the value and importance of promoting the utilization of natural resources within its boundaries; and

WHEREAS, it is the purpose of MSB Chapter 17.30 to allow resource extraction activities while promoting the public health, safety, and general welfare of the Borough through the regulation of land uses to reduce the adverse impacts of land uses and development between and among property owners; and

WHEREAS, it is further the purpose of MSB 17.30 to promote orderly and compatible development; and

WHEREAS, MSB 17.30.020(E) requires a conditional use permit for the annual extraction of more than 2,000 cubic yards of earth materials; and

WHEREAS, according to the application material, Central Gravel Products will operate the proposed earth material extraction activity; and

WHEREAS, an Alaska State Department of Revenue mining license is not required for this operation because Alaska law was amended in 2012, and rock, sand, and gravel quarries are now exempt from the requirement; and

WHEREAS, an Alaska State Department of Natural Resources (ADNR) mining permit is not required for this application because the extraction activities will not occur on state land; and

WHEREAS, according to the application material, a reclamation plan has been developed as required by the ADNR, pursuant to A.S. 27.19; and

WHEREAS, the applicant provided an ADNR letter of acceptance for the reclamation plan and evidence of payment of financial assurance to the state bonding pool; and

WHEREAS, according to the application material, a Stormwater Pollution Prevention Plan (SWPPP) has been prepared, and a Notice of Intent (NOI) will be filed once the project is approved; and

WHEREAS, according to the application material, material extraction activity will not occur within wetlands, lakes, or streams; and

WHEREAS, the applicant provided a United States Army Corps of Engineers (USACE) jurisdictional determination of a 0.47-acre wetland within one of the subject parcels. The subject wetland was determined to be non-jurisdictional; and

WHEREAS, the subject parcels are located within the North Lakes Community Council planning area. The North Lakes community has not adopted a comprehensive plan; and

WHEREAS, the subject parcels are located within the Matanuska-Susitna Borough Core Area. The Core Area Comprehensive Plan applies to all parcels within the borough's core planning area; and

WHEREAS, the Core Area Comprehensive Plan Land Use Goal 1: "Foster a pattern of land development that protects the appealing features of the Core Area, offers developers and consumers choices in the market place, and allows local government to provide cost-effective infrastructure and services economically;" and

WHEREAS, the Core Area Comprehensive Plan Land Use Policy 1-M: "Collaborate with operators of large earth materials extraction

sites to plan for site reclamation and re-use after earth material extraction activities are finished;" and

WHEREAS, the Core Area Comprehensive Plan Land Use Goal 7: "Protect and conserve the natural resources that support the well-being of residents and the region's tourism and recreation economy;" and

WHEREAS, the Core Area Comprehensive Plan Policy 7-A: "Protect groundwater supplies and quality. Discussion: Many existing and future residences and businesses will depend on on-site groundwater resources for their water supply. Protection of the supply and quality of groundwater is vital to sustain this arrangement;" and

WHEREAS, the Core Area Comprehensive Plan Policy 7-B: "Protect surface water quality. Discussion: The Core Area's many lakes are valuable natural and economic assets. They provide an attractive setting for residential development, enhance property values, support a variety of public and private recreational activities, and provide natural habitat, absorb runoff. These lakes are linked to streams and wetlands with similar positive values. The borough's existing program of lake management plans already provides some protection for surface water quality;" and

WHEREAS, the Core Area Comprehensive Plan Goal 8. Hazards: "Protect life and property from harm from natural and man-made hazards such as floods, erosion, wildfire, earthquakes, air and water pollution, and hazardous materials;" and

WHEREAS, the Core Area Comprehensive Plan Policy 8-B. "Reduce risk to persons and property from natural or man-made hazards and encourage natural hazard mitigation. Discussion: This policy proposes that the borough monitor proposed development that might be exposed to or contribute to hazards such as flooding, erosions, wildfire, and hazardous materials. The borough should discourage development in such hazard-prone areas, or encourage adoption of measures to mitigate hazards. As appropriate, mitigation measures might include floodproof construction, retention of natural vegetation to prevent rapid run-off and erosion, retention of natural drainage ways and wetlands to absorb run-off, and remediation of contaminated sites;" and

WHEREAS, the Economic Development Strategic Plan Strategy 1G in part: "Promote the sustainable development of Mat-Su's natural resources for economic development. The MSB should support sustainable natural resource development and the natural resource industries with an emphasis on meeting local needs and local value-added product manufacturing, as well as ensuring compatibility with other parts of the local economy. Indeed, natural resource

development is a high priority for the Borough Assembly. The main natural resources in Mat-Su, in addition to agricultural land, include coal, gravel, timber, some gold mining, and some metallic mineral potential;" and

WHEREAS, the Economic Development Strategic Plan Action 1G-3, in part: "Work with the gravel mining industry to balance the need for the sector's growth with other economic development considerations, as well as environmental and resource protection. The MSB is developing gravel regulations and guidelines to provide for continued commercial gravel operations while addressing community and other economic development concerns regarding buffers from roadways, water protection, and reclamation. These regulations should balance the concerns of gravel mining businesses with the need to protect the environment and visual beauty of the Borough;" and

WHEREAS, according to the Rutgers Noise Technical Assistance Center, heavy trucks produce approximately 90 decibels (dB) when operating, which falls in the "very loud" category; and

WHEREAS, according to Rutgers Noise Technical Assistance Center, a quiet to noisy home produces sound around 30-60 dB, which falls in the "faint" and "moderate" categories; and

WHEREAS, earth material extraction activities are an industrial use that can cause excessive noise, dust, and heavy truck traffic; and

WHEREAS, according to the application material, the operator plans to extract 7.5 million cubic yards of earth material from the subject properties; and

WHEREAS, according to the application material, the heavy machinery and processing/crushing equipment will be equipped with mufflers and noise dampeners to minimize noise emissions. Additional measures for noise reduction include the construction of a minimum of 10-foot-tall berms at areas around the extraction site, conducting operations at elevations below the surrounding ground level, adhering to the stated operational hours, and ensuring regular maintenance of the equipment; and

WHEREAS, according to the application material, the operation will conduct visual screening by constructing soil berms at least 10 feet high, utilizing existing vegetation, and positioning the operation at a lower elevation than the surrounding grade; and

WHEREAS, during staff's discussion with the applicant, it was agreed that any visual screening implemented along Engstrom Road must not exacerbate the snow drifting problem on the road or adjacent properties; and

WHEREAS, according to the application material, the applicant consulted the document "Controlling Blowing and Drifting Snow with Snow Fences and Road Design" (NCHRP-20-07147) when developing the visual buffer location and height; and

WHEREAS, according to the application material, the visual screening berm would be considered a snow fence with 0% porosity. A 0% porosity snow fence would create a snow drift that is 13 times as long as the berm is high. A berm 10 feet high would create a snow drift on the downwind side of approximately 130 feet; and

WHEREAS, according to the application material, the operation will place the visual screening berm 200 feet from the west property line, which will provide a safety factor of 1.5 against a snowdrift reaching Engstrom Road; and

WHEREAS, according to the application material, the visual screening berm will be removed incrementally during the phases closest to North Engstrom Road; it will remain in place during each phase until all earth materials to the east have been fully extracted. The berm's removal will occur as the extraction of materials beneath and to the west of it begins, provided the elevation of the extraction activities is sufficiently low to render the berm unnecessary; and

WHEREAS, according to the application material, the proposed hours of operation are 8:00 a.m. to 5:30 p.m., Monday through Saturday; and

WHEREAS, according to the application material, water trucks and sweepers will be utilized to control dust during operations; and

WHEREAS, Alaska Department of Environmental Conservation (ADEC) produced a user manual of best management practices for owners and operators of gravel/rock extraction operations to protect surface water and groundwater quality in Alaska; and

WHEREAS, the ADEC Best Management Practices for Gravel/Rock Aggregate Extraction Projects Manual includes the recommended drinking water buffer zones for Public Water System (PWS) sources; and

WHEREAS, a PWS Drinking Water Protection Area overlies the southeast section of the extraction area; and

WHEREAS, according to the application material, the drinking water protection area is for a public drinking water system approximately one-mile southwest of the site; and

WHEREAS, according to the application material, the 10-foot-tall, 40-foot-wide soil berm and vegetative buffer along Wasilla Creek, in conjunction with the existing and finished topography of

the developed areas, will direct drainage away from the creek; this approach addresses ADEC's concerns regarding the potential turbidity resulting from the operation; and

WHEREAS, while the Cook Inlet Wetlands Inventory (CIWI) map designates two areas on the property where wetlands may be present, a site visit in October 2024 revealed that the smaller wetland is surrounded by a recently harvested hay field, which indicates limited wetland characteristics in that portion; and

WHEREAS, Alaska Department of Fish and Game (ADF&G) stated that Wasilla Creek and Gooding Lake are fish-bearing water bodies; they observed that the applicant's site plan includes a buffer to avoid both water bodies; and

WHEREAS, the applicant is not proposing to mine below or within four feet of the seasonal high-water table; and

WHEREAS, according to the application material, monitoring wells will be installed in areas of material extraction to monitor groundwater levels; and

WHEREAS, the application material includes information about the reclamation plan that meets the requirements of MSB 17.28.067 – Reclamation Standards; and

WHEREAS, according to the application material, final slopes shall not be steeper than 2H:1V or the natural stabilized angle of repose of the existing earth material; and

WHEREAS, according to the application material, finish slopes will be track-walked with equipment, covered with 4 inches of topsoil, and seeded; and

WHEREAS, according to the application material, the applicant has not specified the future use of the property following the completion of the earth material extraction; however, the reclamation plan indicates that the site will be left with a mostly level floor upon completion of the extraction activities; and

WHEREAS, according to the application material, the applicant is seeking approval for a conditional use permit that expires in 2054; and

WHEREAS, located north of the subject properties is a 43-acre residential use and Gooding Lake; to the northwest and west, there are one- to two-acre residential properties and one 14-acre industrial use property; southwest of the properties, there are several commercial uses and a public safety building; south of the subject properties is Bogard Road, across from which is an undeveloped 38-acre parcel as well as single-family and multifamily residential uses; and

WHEREAS, to the southeast is the Trunk Road roundabout and a 131-acre industrial use property currently occupied by Central Gravel Products for earth material extraction; this site has a grandfathered permit issued in 2007; east of the subject properties, Wasilla Creek runs through a 48-acre parcel used for residential and agricultural purposes; further east is Trunk Road, which borders an 85-acre parcel, part of which appears to be in agricultural use; to the northeast is a 146-acre parcel utilized for agriculture; and

WHEREAS, according to the application material, Central Gravel Products will operate the proposed earth material extraction activity; and

WHEREAS, within a one-mile radius, Colony Middle School and Colony High School are located to the east, while Pioneer Peak Elementary School is situated to the south; and

WHEREAS, East Bogard Road's frontage comprises a mix of public land, commercial, industrial, residential, agricultural, and recreational uses, while North Engstrom Road's frontage includes a mix of residential, industrial, vacant, and public land; and

WHEREAS, according to the application material, the subject properties have existing residential structures that will remain in place; and

WHEREAS, according to the application materials, while the visual screening is unlikely to fully prevent snow from drifting onto North Engstrom Road, it may help reduce accumulation by capturing some snow that would otherwise blow onto the road, thereby limiting the amount that settles; and

WHEREAS, according to the application material, the seasonal operation will begin in May and end in November; and

WHEREAS, all of the site plan and site development requirements have been provided; and

WHEREAS, North Engstrom Road is classified as a Major Collector, and East Bogard Road is classified as a Principal Arterial; both classifications are designed to accommodate commercial traffic; and

WHEREAS, according to the application material, the applicant's road and access plan promotes minimizing truck traffic in residential areas; the operation will ensure that trucks do not travel along North Engstrom Road after 4 p.m.; additionally, the plan highlights that frequent starts and stops in residential neighborhoods discourage large trucks from using those routes; and

WHEREAS, according to the application material, the proposed road and access plan includes two access points to the operation; the North Engstrom Road driveway is an in-only access; the East

Bogard Road driveway will require ADOT&PF's approval of a Traffic Control Plan prior to operation; and

WHEREAS, the Borough issued an Authorization to Construct letter for the North Engstrom Road access point as a single-direction (in-only) driveway; and

WHEREAS, according to the application material, the property owners have agreed to the following changes: removal of the easternmost driveway from the Havemeister property, removal of all driveways west of Wasilla Creek on the Kircher property, and removal of the coffee stand; and

WHEREAS, according to a phone discussion with Matt Walsh of ADOT&PF on January 21, 2025, the ADOT&PF driveway permit application for access to East Bogard Road is currently under review; ADOT&PF anticipates issuing an Approval to Construct (ATC) letter shortly, which will include specific conditions; and

WHEREAS, according to emails from ADOT&PF, provided by the applicant, ADOT&PF will allow full access at the Bogard Road driveway for two years, subject to special conditions, including the following:

a. Temporary speed reductions to 45 MPH on East Bogard Road,

b. Installation of truck warning signs for both eastbound and westbound traffic,

c. Use of flaggers to facilitate left-turn movements,

d. Left turns at the Bogard Road driveway will be allowed for two years, and

e. At the end of two years, the applicant will be required to construct a triangular island at the East Bogard Road driveway. This modification will permanently restrict the driveway to right-in, right-out only; and

WHEREAS, an asphalt or hot mix plant is not proposed as part of this application; and

WHEREAS, according to the application material, the site does not discharge stormwater into the waters of the U.S., including jurisdictional wetlands; and

WHEREAS, according to the application material, all stormwater will be contained onsite; and

WHEREAS, according to the site plan, the extraction area is located more than 150 feet from Wasilla Creek and nearly 200 feet from the shoreline of Gooding Lake; and

WHEREAS, the earth material extraction activities will encompass an estimated 153 acres across three properties, with a cumulative area of 235 acres; and

WHEREAS, according to the site plan, the proposed permanent and semi-permanent structures associated with the proposed use will adhere to the setback requirements of MSB 17.55; and

WHEREAS, the record includes maps identifying surrounding property ownership, existing land uses, wetlands, and waterbodies within one-half mile of the proposed site; and

WHEREAS, located north of the subject properties is a 43-acre residential use and Gooding Lake; to the northwest and west, there are one- to two-acre residential properties and one 14-acre industrial use property; southwest of the properties, there are several commercial uses and a public safety building; south of the subject properties is Bogard Road, across from which is an undeveloped 38-acre parcel as well as single-family and multifamily residential uses; and

WHEREAS, to the southeast is the Trunk Road roundabout and a 131-acre industrial use property currently occupied by Central Gravel Products for earth material extraction; this site has a grandfathered permit issued in 2007; east of the subject properties, Wasilla Creek runs through a 48-acre parcel used for residential and agricultural purposes; further east is Trunk Road, which borders an 85-acre parcel, part of which appears to be in agricultural use; to the northeast is a 146-acre parcel utilized for agriculture; and

WHEREAS, the record includes a topographic contour map, bare earth map, and aerial photography; these items show the topographic features and vegetation of the subject property and adjacent properties; and

WHEREAS, the record contains a site plan that shows the earth materials extraction area, the phases of mining within the subject parcels, and the location of the scales, scale house, and office; and

WHEREAS, according to the application material, all processing equipment will be moved as areas are reclaimed and additional areas are developed for extraction; and

WHEREAS, according to the application material, the estimated annual volume of extracted material is 230,000 cubic yards or less; and

WHEREAS, according to the application material, each phase of the operation is expected to take approximately two years; and

WHEREAS, according to the application material, approximately 10 acres will be worked at one time; as more area is opened for material extraction, the previously opened areas will be reclaimed; and

WHEREAS, according to the application material, Central Gravel Products has maintained detailed records of daily truck

traffic for the life of its current facility; this data was used to establish the peak-hour traffic volume; the figures provided (12 trucks in and 12 trucks out) represent the highest traffic levels recorded on their busiest days; and

WHEREAS, according to the application material, the peak hour traffic between 11 a.m. and 12 p.m. is estimated at 24 trips, with an equal split of 12 inbound and 12 outbound truck movements; and

WHEREAS, according to the application material, the proposed operation does not anticipate generating traffic in excess of 100 vehicles during the morning or afternoon peak hour or more than 750 vehicles per day; and

WHEREAS, according to the application material, the truck routes will begin from the driveway onto East Bogard Road; from there, trucks will head east towards North Trunk Road or west towards other locations; and

WHEREAS, MSB Pre-Design and Engineering Division (PD&E) stated the proposed plan involving flagging and speed limit reduction would appropriately mitigate left turns on Bogard Road until the construction of the roundabout and channelization; and

WHEREAS, MSB PD&E recommends that once the Bogard Road at Engstrom Road and Green Forest Drive intersection roundabout is

constructed, the Bogard Road driveway should be right-in, right-out with the construction of a channelizing (porkchop) median; and

WHEREAS, noise levels exceeding the levels in MSB 17.28.060(A)(5)(a) are prohibited; and

WHEREAS, according to the application material, exterior lighting will be mounted on the proposed shop and scale house. These lights will be directed downward and shielded as needed to prevent light spillage on adjacent properties; and

WHEREAS, according to the application material, USACE was asked to determine the jurisdictional status of a surface water connection between a single wetland feature measuring 0.47 acres on the property and Wasilla Creek. USACE did not review any other areas on the subject properties; and

WHEREAS, according to the USACE letter dated June 21, 2024, the wetlands in the review area were determined to be isolated, intrastate, non-navigable, and have no connection to interstate or foreign commerce, and not under the USACE regulatory jurisdiction; and

WHEREAS, the USACE report included a map that showcases the wetlands identified in the CIWI. The map highlights possible wetland areas alongside Wasilla Creek and the surrounding wetland features reviewed by USACE; and

WHEREAS, the borough code requires the extraction activity to maintain a 100-foot undisturbed buffer from any lake, river, stream, or other waterbody, including wetlands; and

WHEREAS, the waterbodies and wetland sheet C0.2 provided by the applicant illustrate wetlands and waterbodies from the National Wetlands Inventory (NWI); and

WHEREAS, the 2012 MSB Wetlands Management Plan says that the NWI in Alaska has limited detail, accuracy, and coverage. It also mentions that USACE has provided extra funding for mapping from 2008 to now; and

WHEREAS, according to the MSB Environment Wetlands Cook Inlet Geographic Information Systems (GIS) map website summary, "To generate the Cook Inlet Wetland Inventory data, stereo paired aerial photos and relatively quick field visits, along with National Wetlands Inventory maps and soils data were used. Wetlands that may be non-jurisdictional are also included, such as depressions, inclusions along rivers and in braided river valleys;" and

NOW, THEREFORE, BE IT RESOLVED, the Matanuska-Susitna Borough Planning Commission hereby adopts the aforementioned findings of fact and makes the following conclusions of law supporting approval of Planning Commission Resolution 24-31.

1. All of the requirements to demonstrate compliance with state and federal laws listed in MSB 17.30.055(A) are met.
2. The proposed use is consistent with the applicable comprehensive plans (MSB 17.30.060(A)(1)).
3. The proposed use will not detract from the value, spirit, character, and integrity of the surrounding area (MSB 17.30.060(A)(2)).
4. The applicant has met all the requirements of this chapter (MSB 17.30.060(A)(3)).
5. The proposed use will not be harmful to public health, safety, convenience, and welfare (MSB 17.30.060(A)(4)).
6. Sufficient setbacks, lot area, buffers, or other safeguards will be provided (MSB 17.30.060(A)(5)).
7. The surrounding property ownership, existing land uses, wetlands, and water bodies within the notification area are identified to the extent possible without a wetlands delineation (MSB 17.28.060(A)(1)).
8. The phases of proposed mining activities, a description of the topography and vegetation, and an approximate time sequence for the duration of the mining activity are identified. Placement of permanent, semi-permanent, or portable equipment will adhere to the minimum setbacks (MSB 17.28.060(A)(2)).

9. The road and access plan includes anticipated routes and traffic volumes that align with the management authority of the roads used. Traffic generated from the proposed use will not exceed 100 vehicles during the morning or afternoon peak hours or more than 750 vehicles a day, as specified in MSB 17.61.090, Traffic Standards (MSB 17.28.060(A)(3)).
10. The operation will utilize berms, vegetation, and below-grade operations to provide visual screening measures, meeting the requirements for visual screening (MSB 17.28.060(A)(4)).
11. Noise mitigation measures, including the use of equipment mufflers and noise dampeners, construction of berms, operating below grade level, and ensuring regular maintenance of equipment will ensure that sound generated from earth material extraction activities does not exceed sound levels set forth in MSB 17.28.060(A)(5)(a). Noise levels exceeding the levels in 17.28.060(A)(5)(a) are prohibited.
12. The proposed operation meets lighting standards in accordance with MSB 17.28.060(A)(6).
13. The operation will not conduct earth material extraction activities within 100 linear feet of any identified wetland, stream, river, or other waterbody, including

wetlands, and the operation will not mine below or within four feet of the seasonal high water table (MSB 17.28.60(A)(7)(a – b)).

NOW, THEREFORE, BE IT FURTHER RESOLVED, that the Matanuska-Susitna Borough Planning Commission hereby finds this application does meet the standards of MSB 17.30 and MSB 17.28 and does hereby approve the conditional use permit for earth material extraction activities with the following conditions:

1. Prior to operation, the applicant will provide Planning Staff with an acknowledgment from Alaska Department of Environmental Conservation (ADEC) of the Notice of Intent (NOI) for a construction general permit or multi-sector general permit.

2. The applicant shall comply with Alasks Department of Transportation and Public Facilities (ADOT&PF) requirements for the East Bogard Road access.

3. The applicant shall comply with the MSB driveway permit requirements for access to North Engstrom Road.

4. Prior to starting extraction activities within 500 feet of the wetlands indicated in the Cook Inlet Wetlands Inventory surrounding Wasilla Creek, a qualified wetland delineator shall identify the boundaries of those wetlands

within the subject property along the west side of Wasilla Creek. Additionally, a licensed land surveyor shall establish and mark a 100-foot undisturbed buffer around the identified wetlands. A detailed wetland delineation report, along with a certification from the licensed land surveyor confirming the 100-foot buffer was marked, shall be submitted to the Borough Planning Staff. These markers shall remain visible for the duration of the permit. No extraction activities shall take place within the buffer zones in accordance with MSB 17.28.060(A)(7)(a).

5. Throughout the operation, the visual screening berm may need to be adjusted periodically to prevent exacerbating snow drifting on North Engstrom Road. Any adjustments to the berm's location or size will be made with approval from the Matanuska-Susitna Borough Department of Public Works (MSB DPW).

6. The visual screening berm will be removed incrementally during the phases closest to North Engstrom Road. It will remain in place during each phase until all earth materials to the east have been fully extracted. The berm's removal will occur as the extraction of materials beneath and to the west of it begins, provided the elevation of the

extraction activities is sufficiently low to render the berm unnecessary.

7. The operation shall comply with all applicable federal, state, and local regulations, including, but not limited to, all commercial vehicle regulations.

8. Each contractor or company working at the site shall be provided with a copy of the approved conditional use permit.

9. All aspects of the operation shall comply with the description detailed in the application material, and an amendment to the Conditional Use Permit shall be required prior to any alteration or expansion of the material extraction operation.

10. Material extraction shall be limited to the approximately 153-acre area identified in the application material and depicted on the applicant's site plan dated January 16, 2025.

11. Vehicles and equipment shall be staged at designated locations, and all equipment shall be inspected for leaks at the end of each day.

13. Vehicle on-site maintenance shall be done in an area where drip pans or other discharge prevention devices can contain all leaks.

14. Any hazardous materials, drips, leaks, or spills shall be promptly attended to and properly treated.

15. Equipment will be maintained to ensure noise reduction features, such as mufflers and noise dampeners, are operating correctly.

16. All construction site exits shall comply with the standard requirements of the Alaska Pollutant Discharge Elimination System to minimize the off-site tracking of sediments and discharges to stormwater.

17. All track-out sediments from the site shall be removed from the right-of-way daily.

18. The operation shall employ dust mitigation techniques as described in the application to minimize dust impacts on the surrounding areas.

19. The operation shall comply with the maximum permissible sound level limits allowed in MSB 17.28.060 – Site Development Standards and MSB 8.52 – Noise, Amplified Sound, and Vibration.

20. All extraction activities, including all those that cause noise, dust, or traffic, shall be limited to Monday through Saturday, 8:00 a.m. to 5:30 p.m.

21. If cultural remains are found during material extraction activities, the MSB Planning Department shall be contacted immediately so the remains can be documented.

22. A four-foot vertical separation shall be maintained between the excavation and the seasonal high water table.

23. Borough staff shall be permitted to enter onto any portion of the property to monitor compliance with permit requirements. Such access will, at minimum, be allowed on demand when activity is occurring, with prior verbal or written notice, and at other times as necessary to monitor compliance. Denial of access to Borough staff shall violate this Conditional Use Permit.

24. The operation shall comply with the reclamation standards of MSB 17.28.067.

25. All junk, trash, and junk vehicles, as defined in MSB 8.50, shall be removed and properly disposed of prior to the completion of reclamation on the subject parcel.

26. Exterior lighting shall be located and shielded to direct the light towards the ground to minimize light

spillage onto adjacent properties and upward into the night sky. Illumination or other fixtures mounted higher than 20 feet or have 150 watts or more wattage shall have downward directional shielding.

27. The authorization for earth material extraction activities approved by this Conditional Use Permit expires on December 31, 2054.

ADOPTED by the Matanuska-Susitna Borough Planning Commission on this 3rd day of February 2025.

CJ KOAN, Chair

ATTEST

Lacie Olivieri, Planning Clerk

(SEAL)

YES:

NO:

CORRESPONDENCE & INFORMATION

(Pages 991-993)

Outlook

FW: SKRCC

From Julie Spackman <julie.spackman@matsugov.us>
Date Wed 1/22/2025 8:09 AM
To Lacie Olivieri <Lacie.Olivieri@matsugov.us>; Alex Strawn <Alex.Strawn@matsugov.us>

Alex and Lacie – please see the request of Mr. Connor below. He would like his comments to be added to the next Planning Commission meeting packet.

Julie Spackman, AICP
Long Range Planner
julie.spackman@matsugov.us
Desk: 907-861-7815
Work Cell: 907-795-6580

Matanuska-Susitna Borough
350 E Dahlia Ave
Palmer, AK 99645

From: MICHAEL CONNER <macc@mtaonline.net>
Sent: Tuesday, January 21, 2025 7:51 PM
To: Julie Spackman <julie.spackman@matsugov.us>
Subject: Re: SKRCC

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Julie, the WHEREAS document i referred to is: SOUTH KNIK RIVER COMMUNITY COUNCIL RESOLUTION NO. 1-2024 dated Feb. 15th 2024 and stamped RECEIVED FEB 2024 CLERKS OFFICE with a blue and red rubber stamp device. i assume the planning department produced this 1 page document for the skrcc. you sent a copy to me Dec. 2024 along with map and an application form. it is signed Wayne Martin and Anne Houseal. it requests AN OFFICIAL SPECIAL LAND USE DISTRICT. if that is really the object of this resolution, then i am not sure just what to make of it, as it includes several other subjects which i have trouble believing is within the MSB scope of jurisdiction or authority such as: limiting and controlling economic development, natural resource development, proactive control of safety, heath, and wellbeing, suppress growth and development, protect and enforce... and probably the worst idea of all, the suppression of the sweetest sounds we will ever hear, the chop of the rotor blades of a MEDEVAC helicopter at full speed to rescue one of us or family. or maybe military helicopters on training or on rescue mission too. tourism is very important to us also, and makes economic life a little better for all of us. the document as written, seems more of a social engineering experiment than any real service at all. the entire community council concept in MSB is about 40 years old. it should be reviewed and then chucked. we already have many lay, more than

enough. layers of government and regulation that could be cleaned up audited and trimmed. please submit this note to the planning commission. and i will submit any clarification needed or requested by them. thank you Julie, please add to the packet. mike conner 907 892 0176

From: "julie spackman" <julie.spackman@matsugov.us>
To: "MICHAEL CONNER" <macc@mtaonline.net>
Sent: Tuesday, January 21, 2025 5:05:16 PM
Subject: RE: SKRCC

Hi Michael – thanks for reaching out.

The SKRCC invited community members to apply to be on the committee to draft Special Use District rules. The first meeting of those applicants will be on January 27, 2025 at the SKR Community Hall. You can find more information from the SKRCC here at their website: https://skrcc.org/special-use-district-info

I believe that the Planning Commission districts are the same as the Assembly Districts, so your Planning Commission member would be in District 1: Doug Glenn. A directory of the Planning Commission can be found here: https://matsugov.us/boards/planningcommission

Can you tell me exactly which piece of legislation you're referencing with the "whereas" statement?

Sincerely,

Julie Spackman, AICP
Long Range Planner
julie.spackman@matsugov.us
Desk: 907-861-7815
Work Cell: 907-795-6580

Matanuska-Susitna Borough
350 E Dahlia Ave
Palmer, AK 99645

From: MICHAEL CONNER <macc@mtaonline.net>
Sent: Tuesday, January 21, 2025 4:18 PM
To: Julie Spackman <julie.spackman@matsugov.us>
Subject: SKRCC

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
hi Julie, would you please update to me, the current status of the council activity and projected filings with the MSB planning commission to seek approval for a plan for the residents of my area, and contact # for this area planning commissioner. also, it is not clear whether the whereas document approved by the assembly intends to delegate enforcement authority of the

complaints delineated in that document to the council as a quasi-governmental agency. thank you. mike conner 907 892 0176

COMMISSION BUSINESS

(Page 995)

MATANUSKA-SUSITNA BOROUGH
Planning and Land Use Department
350 East Dahlia Avenue • Palmer, AK 99645
Phone (907) 861-7822
www.matsugov.us

MEMORANDUM

DATE: January 20, 2025

TO: Planning Commission

FROM: Alex Strawn, Planning and Land Use Director

SUBJECT: Tentative Future PC Items

Upcoming PC Actions

Quasi-Judicial

- Houdini's Herbs – Marijuana Retail Facility; 8164B01L001A (Staff: Peggy Horton)
- The Aardvark – Alcoholic Beverage Dispensary; 1454000L001 (Staff: Peggy Horton)
- Craft Cannabis Cabin – Marijuana Retail Facility; 1842B01L007 (Staff: Rick Benedict)
- Ficklin Gravel Products LLC – Earth Materials Extraction; 16N04W03A009 (Staff: Rick Benedict)
- Butte Land Co. – Earth Materials Extraction; 17N02E35A024 (Staff: Peggy Horton)
- New Horizons Telecom – Tall Structure; 17N03E30A012 (Staff: Rick Benedict)
- Big Dipper – Earth Materials Extraction; 1341000T001 & 1341000T002 (Staff: Rick Benedict)
- Fort Green Alaska – Marijuana Retail Facility; 1818000L001 (Staff: Peggy Horton)
- Silly Bear – Marijuana Retail Facility; 2760B02L002 (Staff: Rick Benedict)
- Harman Northeast – Earth Materials Extraction; 18N01W15B015 (Staff: Peggy Horton)
- Magic Flower – Marijuana Retail Facility; 3209B08L006 (Staff: Rick Benedict)

Legislative

- Historic Preservation Plan (HPP) (Staff: Maggie Brown)
- MSB Borough-Wide Comprehensive Plan (Staff: Jason Ortiz)
- Corridor Studies (Staff: Julie Spackman)
- Transit Development Plan (Staff: Jason Ortiz)
- Amending MSB 17.59 Standardize Definitions for Lake Management Regulations (Staff: Alex Strawn)
- Fuller Lake Management Plan (Staff: Rebecca Skjothaug)