



US Army Corps  
of Engineers  
Alaska District

Regulatory Division (1145)  
CEPOA-RD  
Post Office Box 6898  
JBER, Alaska 99506-0898

# Public Notice of Application for Permit

<b>PUBLIC NOTICE DATE:</b>	<b>November 21, 2018</b>
<b>EXPIRATION DATE:</b>	<b>December 20, 2018</b>
<b>REFERENCE NUMBER:</b>	<b>POA-2018-00438</b>
<b>WATERWAY:</b>	<b>Lowe River</b>

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Interested parties are hereby notified that a Department of the Army permit application has been received for work in waters of the United States (U.S.) as described below and shown on the enclosed project drawings.

All comments regarding this Public Notice (PN) should be sent to the address noted above. If you desire to submit your comments by email, you should send it to the Project Manager's email as listed below or to [regpagemaster@usace.army.mil](mailto:regpagemaster@usace.army.mil). All comments should include the PN reference number listed above.

All comments should reach this office no later than the expiration date of this PN to become part of the record and be considered in the decision. Please contact Estrella Campellone at (907) 753-753-2518, toll free from within Alaska at (800) 478-2712, by fax at (907) 753-5567, or by email at [Estrella.f.campellone@usace.army.mil](mailto:Estrella.f.campellone@usace.army.mil) if further information is desired concerning this notice.

**APPLICANT:** Rochelle Rollenhagen, City of Valdez ([alain@ci.valdez.ak.us](mailto:alain@ci.valdez.ak.us))

**AGENT:** Adam Morril, DOWL ([amorill@Dowl.com](mailto:amorill@Dowl.com))

**LOCATION:** The project site is located within Section 30, 31, T. 9 S., R. 4 W.; Latitude 61.0491° N., Longitude 148.9978° W.; South on the Richardson Highway toward Valdez. Near Mile Post 10 and Alpine Woods Community; Mile Post 10 Pit, near Valdez, Alaska.

**PURPOSE:** The applicant's stated purpose is to mitigate flood and channel migration hazards for the Alpine Woods community. The project is needed as the Lowe River main channel has migrated towards the levees protecting Alpine Woods. This migration has caused localized

scour that is undercutting the levees and exacerbating the risk of avulsion of the channel into the Alpine Woods community (See Lowe River Extraction Plan Memo October 23, 2018).

PROPOSED WORK: To excavate material from the Lowe River to re-direct approximately 30% of the two-year flow away from the Alpine Woods community starting upstream of the 10 Mile Creek confluence. The constructed channel should mimic comparable reaches of the Lowe River. The excavation limits are anticipated to be approximate 2,900-feet long x 123-feet wide at the top and 75-feet wide at the base of the channel. The channel would be between 8-12 feet deep with side slopes of 3:1. Excavation of the constructed channel would be conducted when the area is dry and accessible. The excavated material (100,000 cubic yards) would occur in approximately 8.2 acres of active floodplain and would be stocked piled at the 10-Mile Pitt and used to increase the height of the existing dikes and other City of Valdez projects. All work would be performed in accordance with the enclosed plan (sheets 1-2), dated October 25, 2018.

The proposed project would also require the discharge approximately 142 cubic yards of Class 3 rock to stabilize an access ramp for construction equipment to access the Lowe River floodplain in approximately 0.02-acre below Ordinary High Water Mark.

ADDITIONAL INFORMATION: The applicant is also applying for a Land Use Permit and a Material Sale permit from Alaska Department of Natural Resources and a Habitat Permit from Alaska Department of Fish and Game

APPLICANT PROPOSED MITIGATION: The applicant proposes the following mitigation measures to avoid, minimize, and compensate for impacts to waters of the U.S. from activities involving discharges of dredged or fill material.

a. Avoidance: The City of Valdez is proposing to avoid placement of excavated material in wetlands, using uplands for storage of excavated material. Excavated material would be used to improve existing road systems and to reconstruct a system of levees that protect the Alpine Woods Community that have been undercut by the dominant Lowe River channel migrating toward the Alpine Woods Community.

b. Minimization: The City of Valdez would be conducting excavation when the floodplain is dry or during fish spawning or migration periods. Care should be taken to establish a single rock-stabilized access point for each gravel extraction site to reduce degradation of riparian habitat. Undercut or incised vegetated banks should not be altered. Likewise, vegetated or riparian areas adjacent the creek should be left undisturbed to the extent practicable. Also, the depth and slope of the excavated channel should not exceed that of the adjacent dominant channels in the cross section; the upstream edge of the excavation should not be lower than the thalweg of the dominant channels in the cross section; the upstream side of the excavation should daylight to the existing ground level at a 10H:1V slope

or flatter to limit local channel erosion upstream; and the downstream edge of the excavated area should feather into the active channel at a comparable slope in order to avoid creating an isolated pool or stranding fish.

c. Compensatory Mitigation: The City of Valdez is not proposing compensatory mitigation.

WATER QUALITY CERTIFICATION: A permit for the described work will not be issued until a certification or waiver of certification, as required under Section 401 of the Clean Water Act (Public Law 95-217), has been received from the Alaska Department of Environmental Conservation.

CULTURAL RESOURCES: The latest published version of the Alaska Heritage Resources Survey (AHRs) has been consulted for the presence or absence of historic properties, including those listed in or eligible for inclusion in the National Register of Historic Places. There are cultural resources within the vicinity, but outside of the permit area. The permit area has been determined to be the floodplain where the excavation is to occur and the area where the excavated gravel would be stored. The Corps of Engineers (Corps) has made a No Historic Properties Affected (No Effect) determination for the proposed project. This application is being coordinated with the State Historic Preservation Office (SHPO). Any comments SHPO may have concerning presently unknown archeological or historic data that may be lost or destroyed by work under the requested permit will be considered in our final assessment of the described work. The Corps is requesting the SHPO's concurrence with this determination.

ENDANGERED SPECIES: We have determined the described activity would have no effect on any listed or proposed threatened or endangered species and would have no effect on any designated or proposed critical habitat, under the Endangered Species Act of 1973 (87 Stat. 844). Therefore, no consultation with the U.S. Fish and Wildlife Service or the National Marine Fisheries Service (NMFS) is required. However, any comments they may have concerning endangered or threatened wildlife or plants or their critical habitat will be considered in our final assessment of the described work.

ESSENTIAL FISH HABITAT: The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1996, requires all Federal agencies to consult with the NMFS on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH).

The project area is within the known range of the salmonid species including, Chum, Coho, Pink, Sockeye salmon, among others. We have determined the described activity would not adversely affect EFH in the project area.

TRIBAL CONSULTATION: The Alaska District fully supports tribal self-governance and government-to-government relations between Federally recognized Tribes and the Federal government. Tribes with protected rights or resources that could be significantly affected by a

proposed Federal action (e.g., a permit decision) have the right to consult with the Alaska District on a government-to-government basis. Views of each Tribe regarding protected rights and resources will be accorded due consideration in this process. This PN serves as notification to the Tribes within the area potentially affected by the proposed work and invites their participation in the Federal decision-making process regarding the protected Tribal right or resource. Consultation may be initiated by the affected Tribe upon written request to the District Commander during the public comment period.

**PUBLIC HEARING:** Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, reasons for holding a public hearing.

**EVALUATION:** The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts of the proposed activity and its intended use on the public interest. Evaluation of the probable impacts, which the proposed activity may have on the public interest, requires a careful weighing of all the factors that become relevant in each particular case. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. The outcome of the general balancing process would determine whether to authorize a proposal, and if so, the conditions under which it will be allowed to occur. The decision should reflect the national concern for both protection and utilization of important resources. All factors, which may be relevant to the proposal, must be considered including the cumulative effects thereof. Among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people. For activities involving 404 discharges, a permit will be denied if the discharge that would be authorized by such permit would not comply with the Environmental Protection Agency's 404(b)(1) guidelines. Subject to the preceding sentence and any other applicable guidelines or criteria (see Sections 320.2 and 320.3), a permit will be granted unless the District Commander determines that it would be contrary to the public interest.

The Corps is soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

AUTHORITY: This permit will be issued or denied under the following authorities:

(X) Discharge dredged or fill material into waters of the United States – Section 404 Clean Water Act (33 U.S.C. 1344). Therefore, our public interest review will consider the guidelines set forth under Section 404(b) of the Clean Water Act (40 CFR 230).

Project drawings and a Notice of Application for State Water Quality Certification are enclosed with this Public Notice.

District Commander  
U.S. Army, Corps of Engineers

Enclosures

**STATE OF ALASKA**

DEPT. OF ENVIRONMENTAL CONSERVATION

DIVISION OF WATER

Wastewater Discharge Authorization Program (WDAP) / 401 Certification

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

WDAP/401 CERTIFICATION

555 CORDOVA STREET

ANCHORAGE, ALASKA 99501-2617

PHONE: (907) 269-6285 | EMAIL: [dec-401cert@alaska.gov](mailto:dec-401cert@alaska.gov)

**NOTICE OF APPLICATION  
FOR  
STATE WATER QUALITY CERTIFICATION**

Any applicant for a federal license or permit to conduct an activity that might result in a discharge into navigable waters, in accordance with Section 401 of the Clean Water Act of 1977 (PL95-217), also must apply for and obtain certification from the Alaska Department of Environmental Conservation that the discharge will comply with the Clean Water Act, the Alaska Water Quality Standards, and other applicable State laws. By agreement between the U.S. Army Corps of Engineers and the Department of Environmental Conservation, application for a Department of the Army permit to discharge dredged or fill material into navigable waters under Section 404 of the Clean Water Act also may serve as application for State Water Quality Certification.

Notice is hereby given that the application for a Department of the Army Permit described in the Corps of Engineers' Public Notice (PN) Reference Number **POA-2018-00438, Lowe River**, serves as application for State Water Quality Certification from the Department of Environmental Conservation.

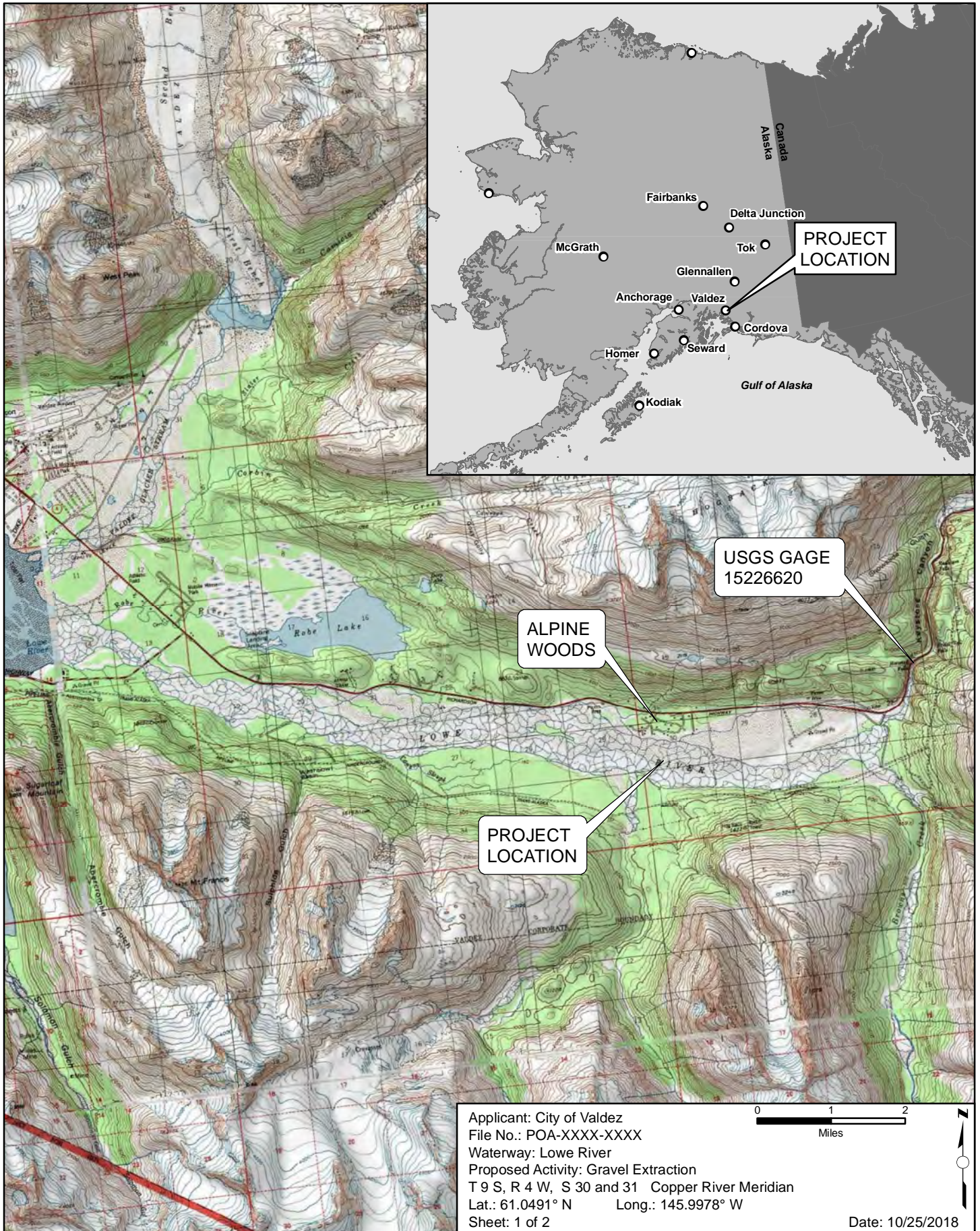
After reviewing the application, the Department may certify there is reasonable assurance the activity, and any discharge that might result, will comply with the Clean Water Act, the Alaska Water Quality Standards, and other applicable State laws. The Department also may deny or waive certification.

Any person desiring to comment on the project with respect to Water Quality Certification, may submit written comments to the address above or via email to [dec-401cert@alaska.gov](mailto:dec-401cert@alaska.gov) by the expiration date of the Corps of Engineer's Public Notice. All comments should include the PN reference number listed above. Mailed comments must be postmarked on or before the expiration date of the public notice.

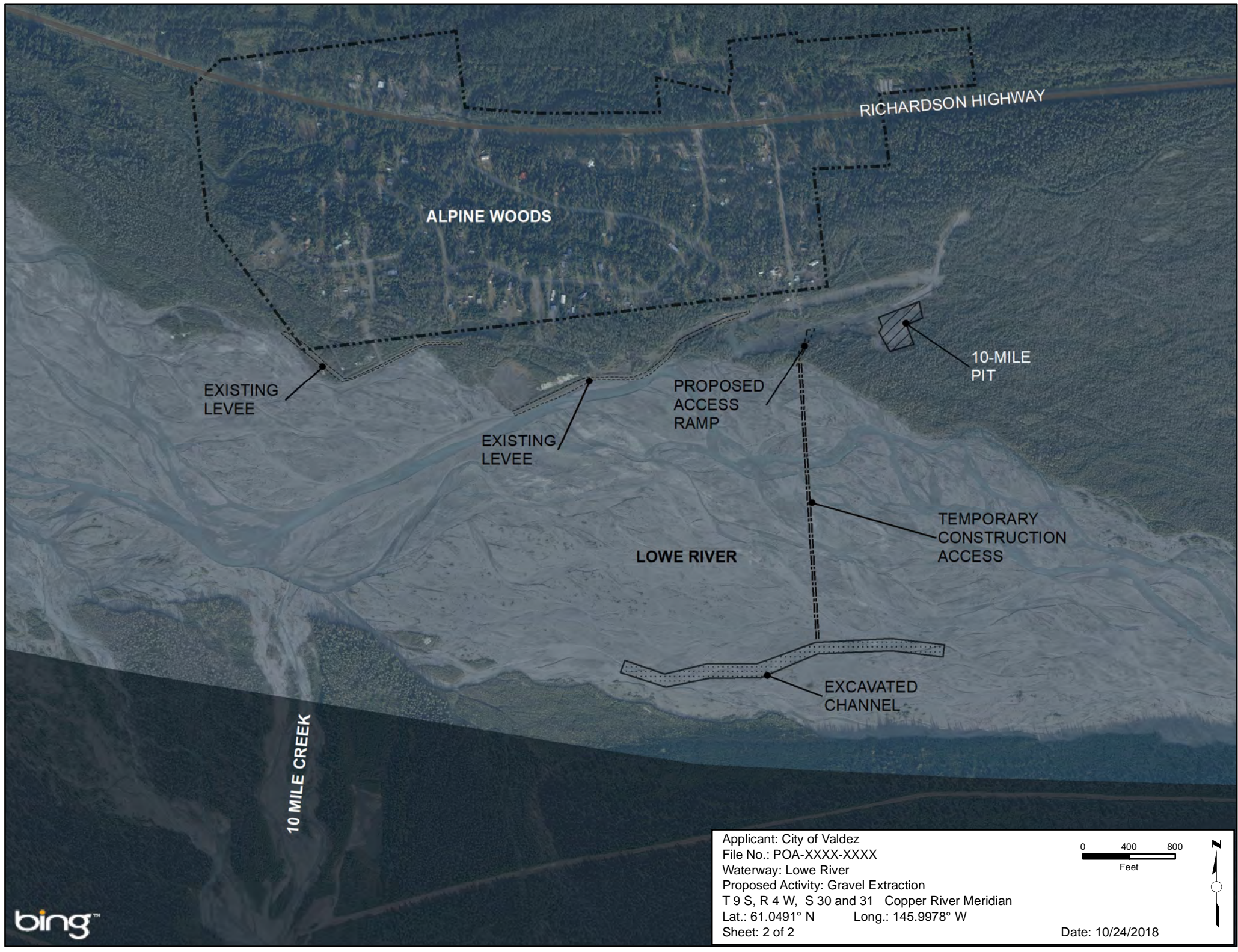
### Disability Reasonable Accommodation Notice

The State of Alaska, Department of Environmental Conservation complies with Title II of the Americans with Disabilities Act of 1990. If you are a person with a disability who may need special accommodation in order to participate in this public process, please contact Theresa Zimmerman at 907-465-6171 or TDD Relay Service 1-800-770-8973/TTY or dial 711 within 5 days of the expiration date of this public notice to ensure that any necessary accommodations can be provided.

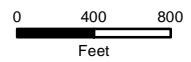








Applicant: City of Valdez  
File No.: POA-XXXX-XXXX  
Waterway: Lowe River  
Proposed Activity: Gravel Extraction  
T 9 S, R 4 W, S 30 and 31 Copper River Meridian  
Lat.: 61.0491° N Long.: 145.9978° W  
Sheet: 2 of 2



Date: 10/24/2018



Low River along Alpine Woods comparison photos.



Low water on 9/26/18 at 2280 CFS



High water on 10/16/18 at 9570 CFS

TO: Nathan Duval  
FROM: Bradley Melocik, P.E., P.H  
DATE: 23<sup>rd</sup> October 2018  
SUBJECT: Lowe River Extraction Plan

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## 1.0 Purpose

The City of Valdez has developed a plan for gravel removal from the Lowe River. The current phase requests the removal of up to 85,000 cubic yards (CY) of material. The City of Valdez intends to use the material for increasing the height of the existing dikes. The purpose of this document is to provide the resource agency with information in order to approve the request to extract gravel in a responsible and sustainable manner. This plan identifies extraction areas and practices to mitigate upstream and downstream impacts directly resulting from changes in channel geometry due to gravel extraction.

## 2.0 Background

Alpine Woods is located off the Richardson highway approximately 10 miles outside of the city of Valdez. The elevation of the community is relatively low compared to the Lowe River - approximately 10 ft above the flood plain.

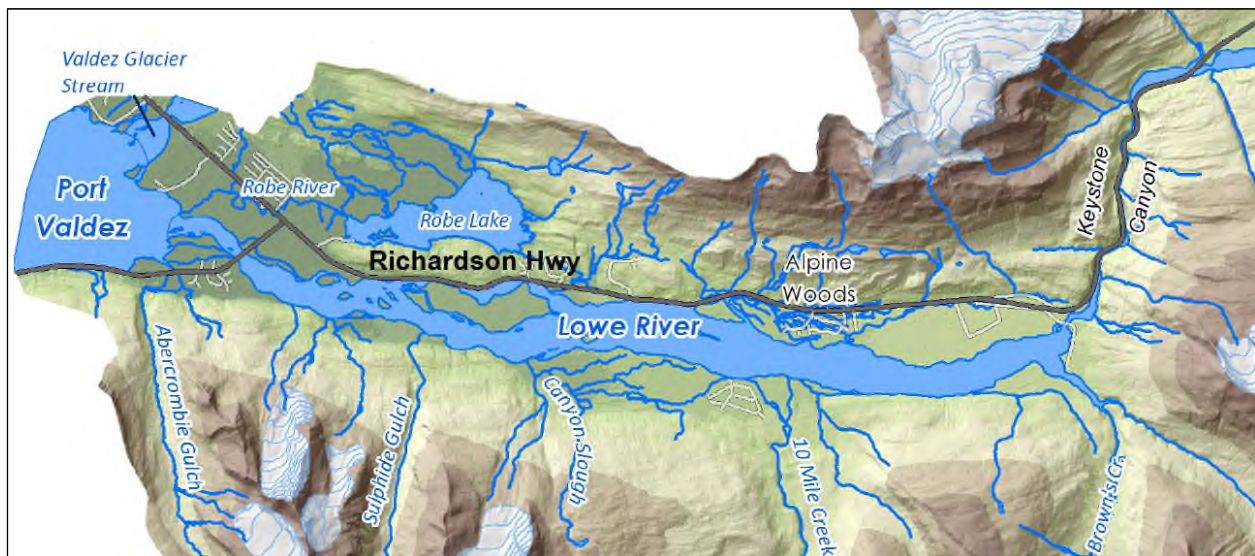


Figure 1: Location of Alpine Woods, Valdez (5m IFSAR data and ASTER global DEM)

A system of levees was constructed in 1985 (Groin 1 & 2) and 2010 (Groin 3). The levees act as spur dikes that deflect the flow downstream of their tips. Due to the localized scour at the levee tips caused by the redirected flow, the dominant channel has migrated towards the levees, which in turn exacerbates the risk of avulsion of the channel into the Alpine Woods community.





Figure 2: Alpine Woods, Valdez (City of Valdez, 2018)

A sediment budget analysis was completed by DOWL and NHC in 2016 to evaluate the feasibility of using gravel extraction to manage flood and channel migration hazards. The conceptual diagram below shows the resulting completed sediment budget, which suggests a total bed material input of approximately 537,000 yd<sup>3</sup>/yr, output of 194,000 yd<sup>3</sup>/yr, and change in storage of 292,000 yd<sup>3</sup>/yr along the Lowe River and 51,000 yd<sup>3</sup>/yr on the alluvial fans of Browns and 10 Mile Creeks.

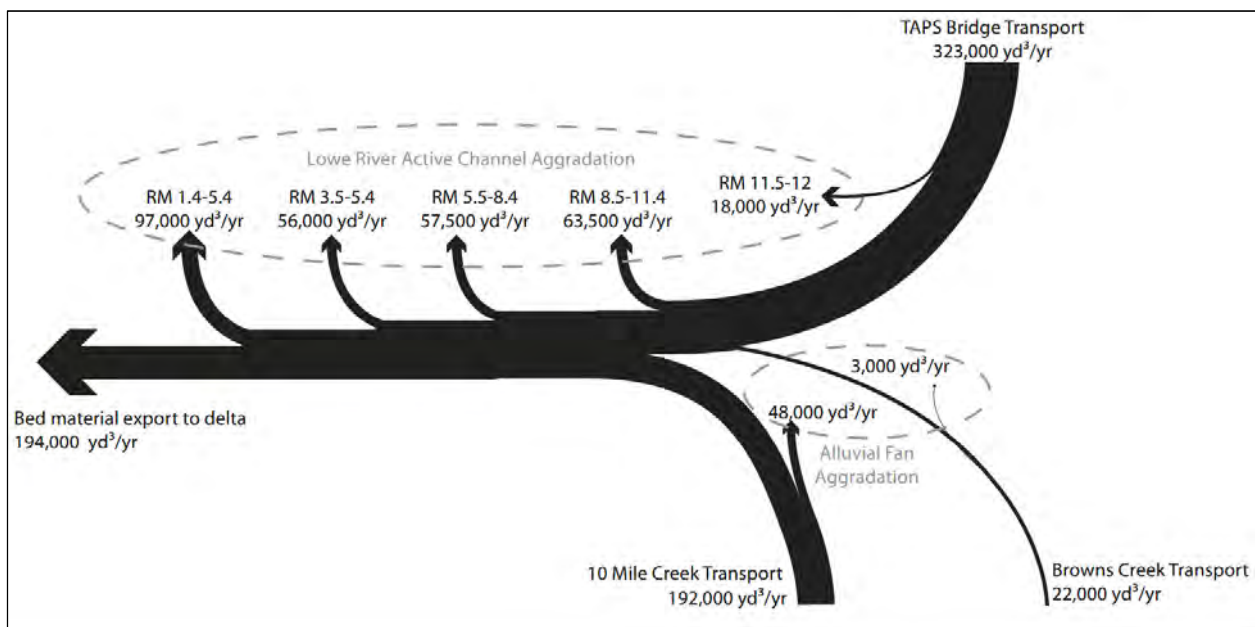


Figure 3: Sediment Budget Summary for the Lowe River (NHC, 2016)

A gravel extraction concept plan was developed in 2017 to mitigate the issues of channel migration and sediment aggradation that face Alpine Woods. However, due to the dynamic nature of braid channels, the proposed channel was altered to reflect the change in morphology of the river.

### 3.0 Permit Conditions

All work pertaining to the extraction of material from the Lowe River must comply with permit conditions and all local, state, and federal regulations. Permits anticipated to be applicable to gravel extraction in the Lowe River include:

- Department of the Army Permit (United States Army Corps of Engineers)
- Fish Habitat Permit (Alaska Department of Fish and Game)
- Material Sales Permit (Alaska Department of Natural Resources)
- Land Use Permit (Alaska Department of Natural Resources)

Although a Fish Habitat Permit will be required, excavation should not take place within the active channel or during spawning and fish migration windows. Care should be taken to establish a single rock-stabilized access point for each gravel extraction site to reduce degradation of riparian habitat. Undercut or incised vegetated banks should not be altered. Likewise, vegetated or riparian areas adjacent the creek should be left undisturbed to the extent practicable.

Extracted material should not be sieved on-site so that gravel is removed while sand is left in place. If sorting is to occur, the total extraction volume should be reduced by 30 percent to account for the subsequent loss of material when the sand is washed out of the extraction site by natural processes.

### 4.0 Extract Geometry

The recommended location for gravel extraction is the wide gravel bar located along the left bank upstream of the confluence with 10-Mile Creek. The resulting excavated area should mimic comparable reaches of the Lowe River and exhibit the following qualities:

- The depth and slope of the excavated channel should not exceed that of the adjacent dominant channels in the cross section.
- The upstream edge of the excavation should not be lower than the thalweg of the dominant channels in the cross section.
- The upstream side of the excavation should daylight to the existing ground level at a 10H:1V slope or flatter to limit local channel erosion upstream.
- The downstream edge of the excavated area should feather into the active channel at a comparable slope in order to avoid creating an isolated pool or stranding fish.

The Lowe River's dominant channels vary considerably, with a mean channel width of 70ft with a corresponding standard deviation of 50ft . Estimated water depths are four to eight feet. Thus, the excavated channel should have approximate dimensions of 75 feet wide and eight feet deep. A cross section with 1H:3V sloping walls and a floor gently sloping to a thalweg located approximately one foot below the toe of the walls results in an area of 850 SF. This cross-section correlates to a requisite length of 2,900 feet to attain the permitted quantity of 85,000 CY. The channel would be expected to convey approximately 30 percent of the 2-year flow. The alignment of the channel includes moderate sinuosity to match the existing meander bends conveying similar amounts of flow. Left and right pool sections are included in the meanders, where a 25-



foot bottom width is shifted towards the outer bank. A plan view of the proposed extraction area is included under Attachment 2.

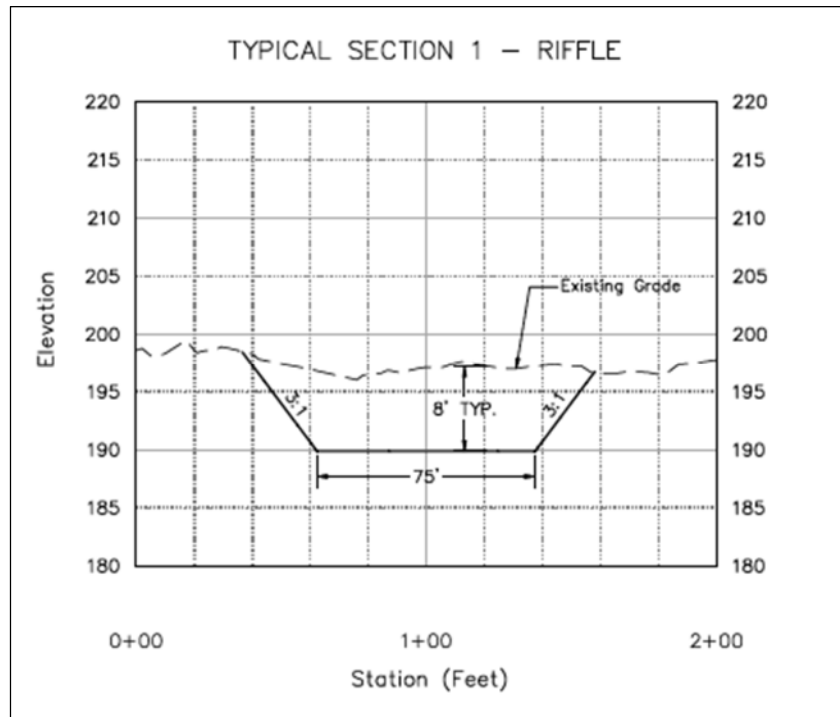


Figure 4: Proposed Excavation Cross-section (DOWL, 2017)

Due to seasonal variance in active channels, the proposed extraction site may periodically be under the water table. Excavation should only be conducted while these areas are dry and accessible. The actual extraction alignment should be verified by the project engineer/geomorphologist in the field prior to beginning excavation.

## 5.0 Monitoring Plan

A monitoring plan should be implemented in conjunction with this gravel extraction plan in order to analyze channel responses to material removal. The monitoring plan should include the survey of initial site conditions prior to excavation, maintenance of complete extraction records, and the periodic collection of monitoring data. Elements to be incorporated in the monitoring plan include:

- Extraction dates, volumes, and excavation footprints,
- Downward-facing, highly overlapping ( $\approx 70\%$  sidelap / 50% forward overlap) aerial images covering the Lowe River's reach from Port Valdez to Keystone Canyon.

A geomorphologist, or other qualified personnel, should periodically review monitoring information to confirm expected channel responses, develop a sediment budget, and to evaluate future potential extraction locations. In particular, the reviewer should confirm that downstream erosive effects do not have an adverse effect on the existing levees at Alpine Woods. Photographs should be collected immediately before and immediately after each extraction program but not during flood conditions. The reviewer should be consulted after orthophotos have been collected and before the next material extraction begins in order to optimize the position and geometry of each gravel extraction cycle. Initially, monitoring data should be reviewed between every gravel

extraction program but may eventually be implemented long term as a periodic review once every three to six years.

### **6.0 References**

NHC (2017). Lowe River Gravel Extraction Concept Plans. Report prepared by Northwest Hydraulic Consultants on behalf of DOWL for the City of Valdez.

NHC (2016). Draft Lowe River Geomorphic Atlas and Sediment Budget. Report prepared by Northwest Hydraulic Consultants on behalf of DOWL for the City of Valdez.

### **7.0 Disclaimer**

This document has been prepared by DOWL for the exclusive use and benefit of the City of Valdez and their authorized representatives. Information in this plan is based on aerial imagery available as of the date of this document. Actual conditions will vary from those shown herein. The contents of this document are not to be relied upon or used, in whole or in part, by or for others without specific written authorization from DOWL. DOWL assumes no responsibility for the reliance upon this document or any of its contents by any parties other than the City of Valdez.



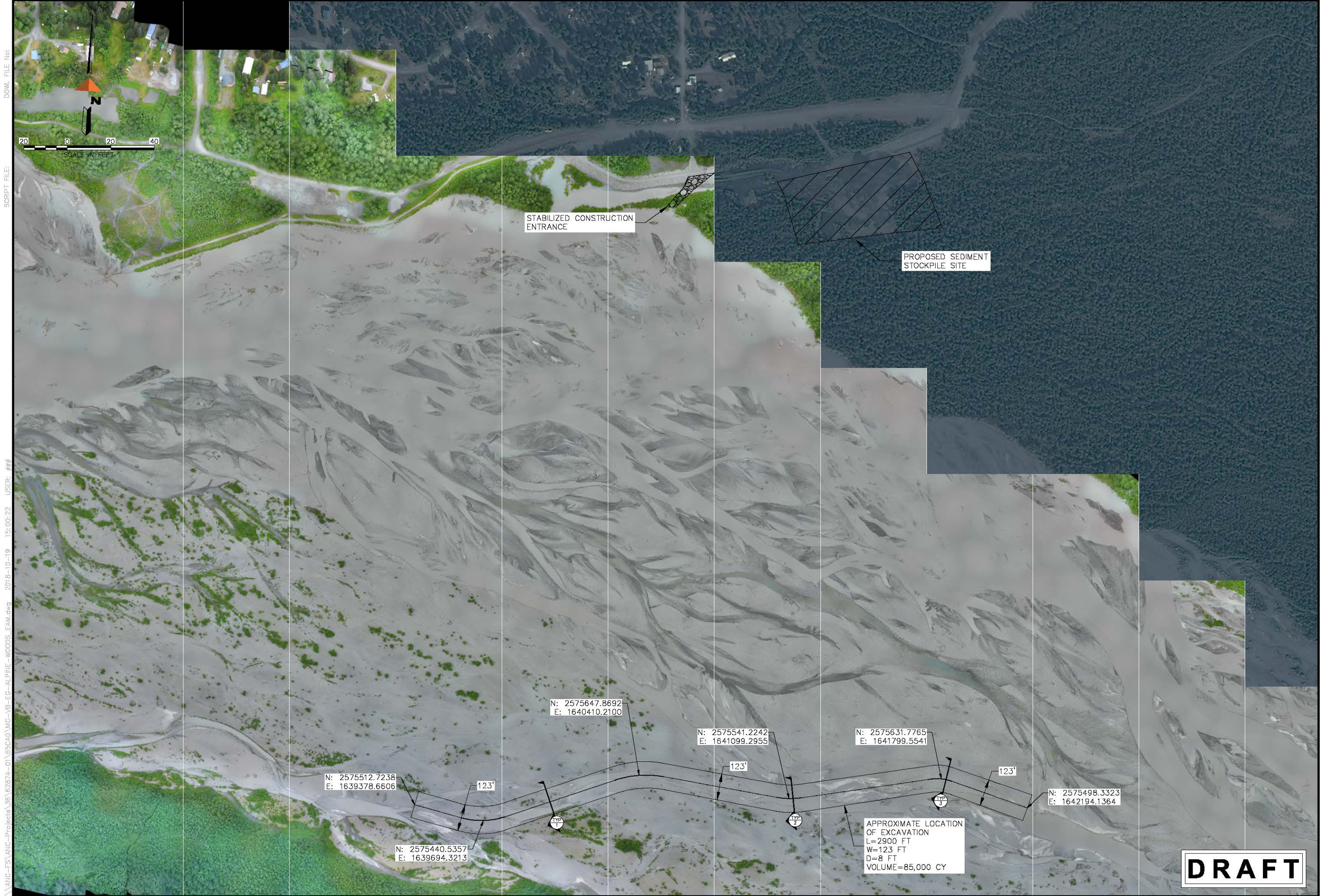


10-MILE PIT  
PROPOSED GRAVEL  
STORAGE AREA

ACCESS


CONCEPT PILOT CHANNEL  
IMAGE DATE: 27TH SEPT 2018





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SCRIPT FILE: DOWL FILE No:



AECL848

CITY OF VALDEZ

LOWE RIVER GRAVEL EXTRACTION

DATA  
Sewer  
Storm Water  
Water  
Gas  
Telephone  
Electric  
Cable TV  
Coastal  
Footing Elev.  
Approved

BY

DATE

REVISIONS

Vertical Datum:

CHECKED BY: BMM

DESIGNED BY: EAM

DRAWN BY: EAM

DATE: OCTOBER 2018

W.O. NO.: 62874

F.B. NO.:

REF. DWG:

LOCATION: VALDEZ ALASKA

SCALE

HORZ. NTS

VERT. NTS

SHEET

1 OF 2

FILE NO.

4041 B Street

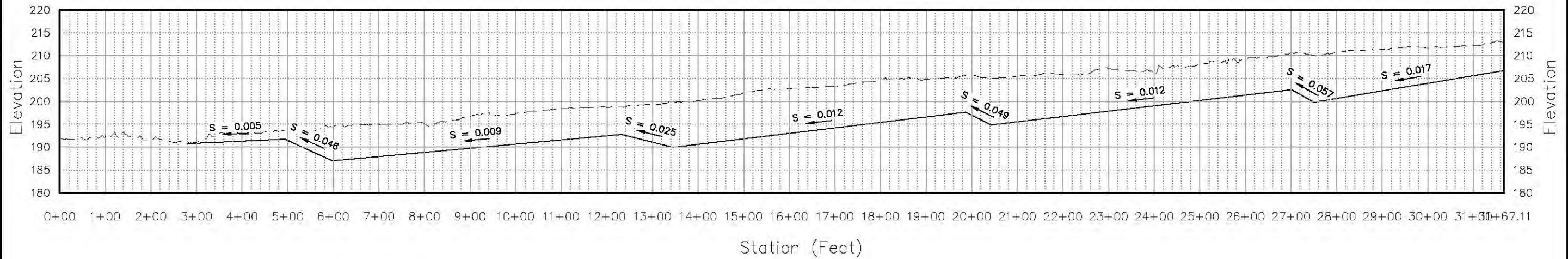
Anchorage, Alaska 99503

907-562-2000

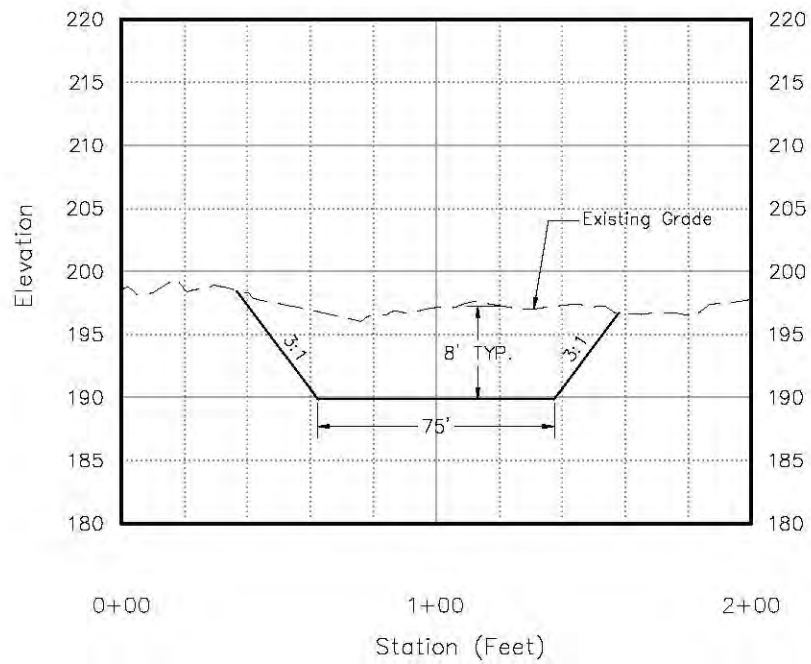
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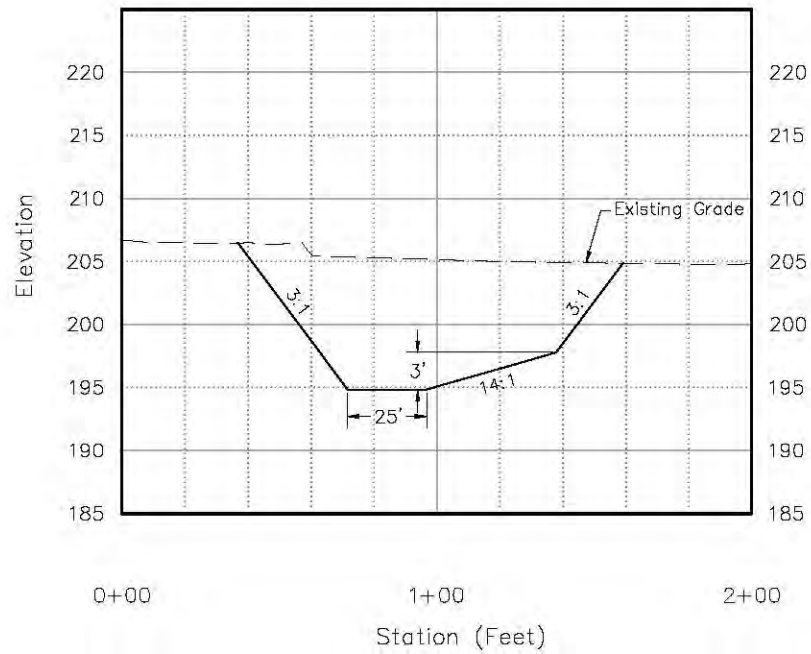
PILOT CHANNEL THALWEG PROFILE



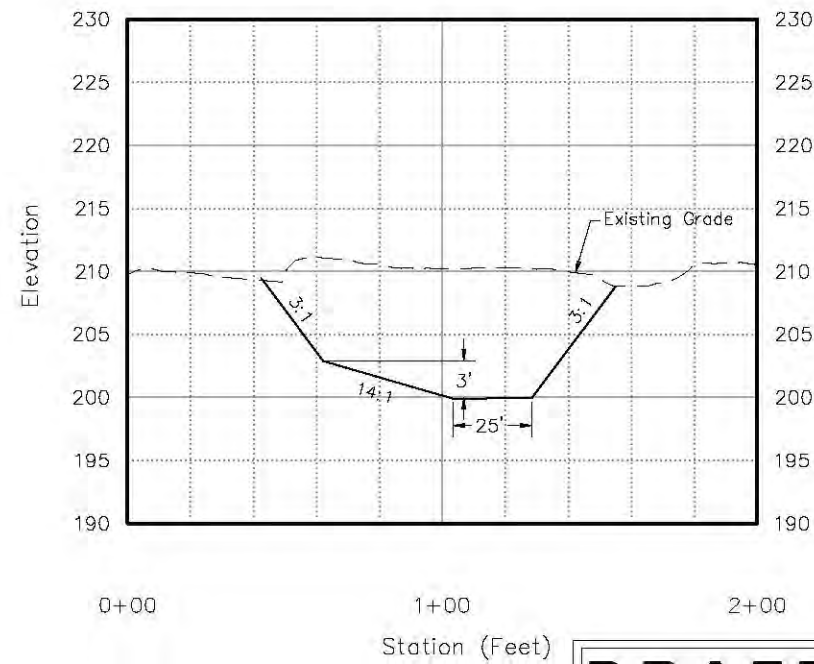
TYPICAL SECTION 1 — RIFFLE



TYPICAL SECTION 2 — LEFT POOL



TYPICAL SECTION 3 — RIGHT POOL



**DRAFT**

CITY OF VALDEZ		LOWE RIVER GRAVEL EXTRACTION	
CHECKED BY: BMM		DESIGNED BY: EAM	
DRAWN BY: EAM		DATE: OCTOBER 2018	
W.O. NO. 62874		F.B. NO.	
REF. DWG		LOCATION: VALDEZ ALASKA	
SCALE		HORIZ. NTS	
VERT. NTS		SHEET	
2 OF 2		FILE NO.	

**DOWL**

AECL848

4041 B Street  
Anchorage, Alaska 99503  
907-562-2000

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DATA	JBY	REV	DATE	DESCRIPTION	BY
Spr. Sees					
Storm Sewer					
Water					
Gas					
Telephone					
Electric					
Cable TV					
Exemptions					
Footprint Elev.					
Approved					