



US Army Corps
of Engineers
Alaska District

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

Public Notice of Application for Permit

PUBLIC NOTICE DATE:	April 7, 2023
EXPIRATION DATE:	April 24, 2023
REFERENCE NUMBER:	POA-2023-00152
WATERWAY:	Glacier Stream

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

All comments regarding this public notice 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. All comments should include the public notice reference number listed above.

All comments should reach this office no later than the expiration date of this public notice to become part of the record and be considered in the decision. Please contact Andrew Gregory at (907) 753-2791, toll free from within Alaska at (800) 478-2712, or by email at Andrew.W.Gregory@usace.army.mil if further information is desired concerning this public notice.

APPLICANT: City of Valdez; P.O. Box 307, Valdez, Alaska 99686.

AGENT: DOWL; 5015 Business Park Boulevard, Suite 4000, Anchorage, Alaska 99503.

LOCATION: Section A, T. 9 S., R. 6 W., Copper River Meridian; Latitude 61.121225° N., Longitude 146.216136° W.; near Valdez, Alaska.

PURPOSE: The applicant's stated purpose is streambank stabilization from erosion and flood control.

PROPOSED WORK: Discharge of 22,000 cubic yards of rip rap and 37,200 cubic yards of alluvial fill material into 7-acres into riverine waters below the Ordinary High Water mark of Glacier Stream for construction of six spur dikes and an access ramp. Specifically, the work includes construction of spur dike one approximately 650-foot-long by 132-foot-wide, spur dike two approximately 430-foot-long by 108-foot-wide, spur dike three approximately 500-foot-long by 108-foot-wide, spur dike four 400-foot-long by 108-foot-wide, spur dike five 365-foot-long by 108-foot-wide, spur dike six 370-foot-long by 108-foot-wide, and an access ramp 300-foot-long by 75-foot-wide.

All work would be performed in accordance with the enclosed plan (pages 1-26), dated March 3, 2023.

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

a. Avoidance: Avoidance of waters the U.S. is not practicable to meeting the project purpose of redirecting erosive streamflows.

b. Minimization: Streamflow will be diverted away from the project area temporarily using existing stream bed material and constructing a temporary diversion berm. Fill material will be stockpiled in uplands on existing gravel pads offsite. Clean fill will be utilized and sourced from an existing, permitted material site and alluvial fill from the project site. Trees will be protected in place and all disturbed areas will be reseeded with native vegetation.

c. Compensatory Mitigation: No compensatory mitigation is proposed for stream impacts.

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 no cultural resources in the permit area or within the vicinity of the permit area. The permit area has been determined to be entire the area encompassing the flood control structure and upland staging area. Consultation of the AHRs constitutes the extent of cultural resource investigations by the U.S. Army Corps of Engineers (Corps) at this time, and we are otherwise unaware of the presence of such resources. The Corps has made a No Potential to Cause Effects determination for the proposed project. Consultation with the State Historic Preservation Office (SHPO), Federally recognized Tribes, and other consulting parties is not required. However, any comments SHPO, Federally recognized Tribes, and other consulting parties 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.

ENDANGERED SPECIES: No threatened or endangered species are known to use the project area.

ESSENTIAL FISH HABITAT: The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), as amended by the Sustainable Fisheries Act of 1996, requires all Federal agencies to consult with the National Marine Fisheries Service 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 not within mapped EFH.

TRIBAL CONSULTATION: The Corps 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 Corps, 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 public notice 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 rights or resources. 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 are enclosed with this public notice.

District Commander
U.S. Army, Corps

Enclosure

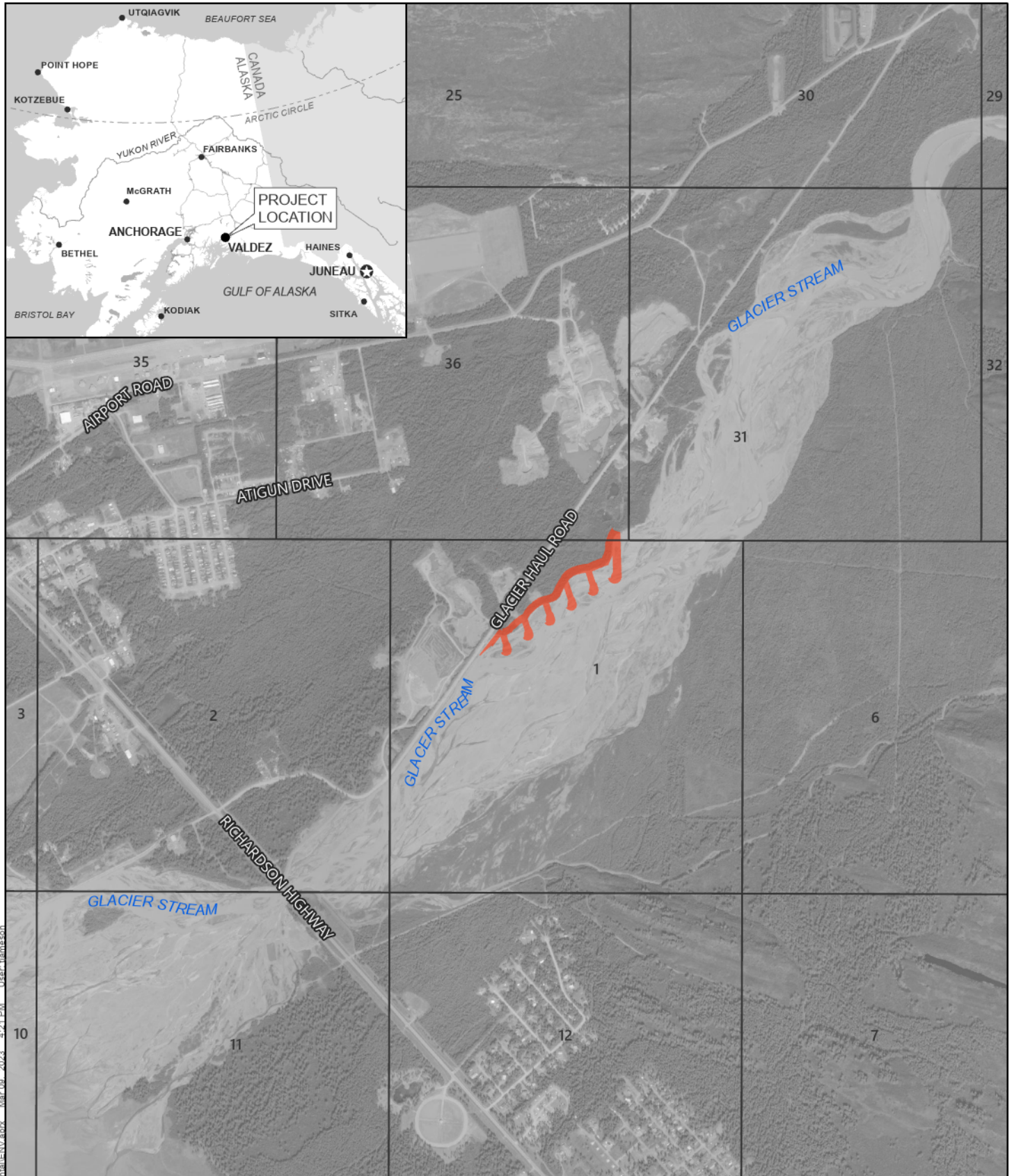


FIGURE 1: Project Location & Vicinity

POA-XXXX-XXXXX

Applicant: City of Valdez

Proposed Activity: Erosion Protection

T 8S, 9S R 6W Section 36, 1 Copper River Meridian

Latitude: 61.120801° N Longitude: 146.216226° W

Sheet: 1 of 5

Date: 3/9/2023

Proposed Project Extent

PLSS Section



0 500 1,000 2,000 Feet

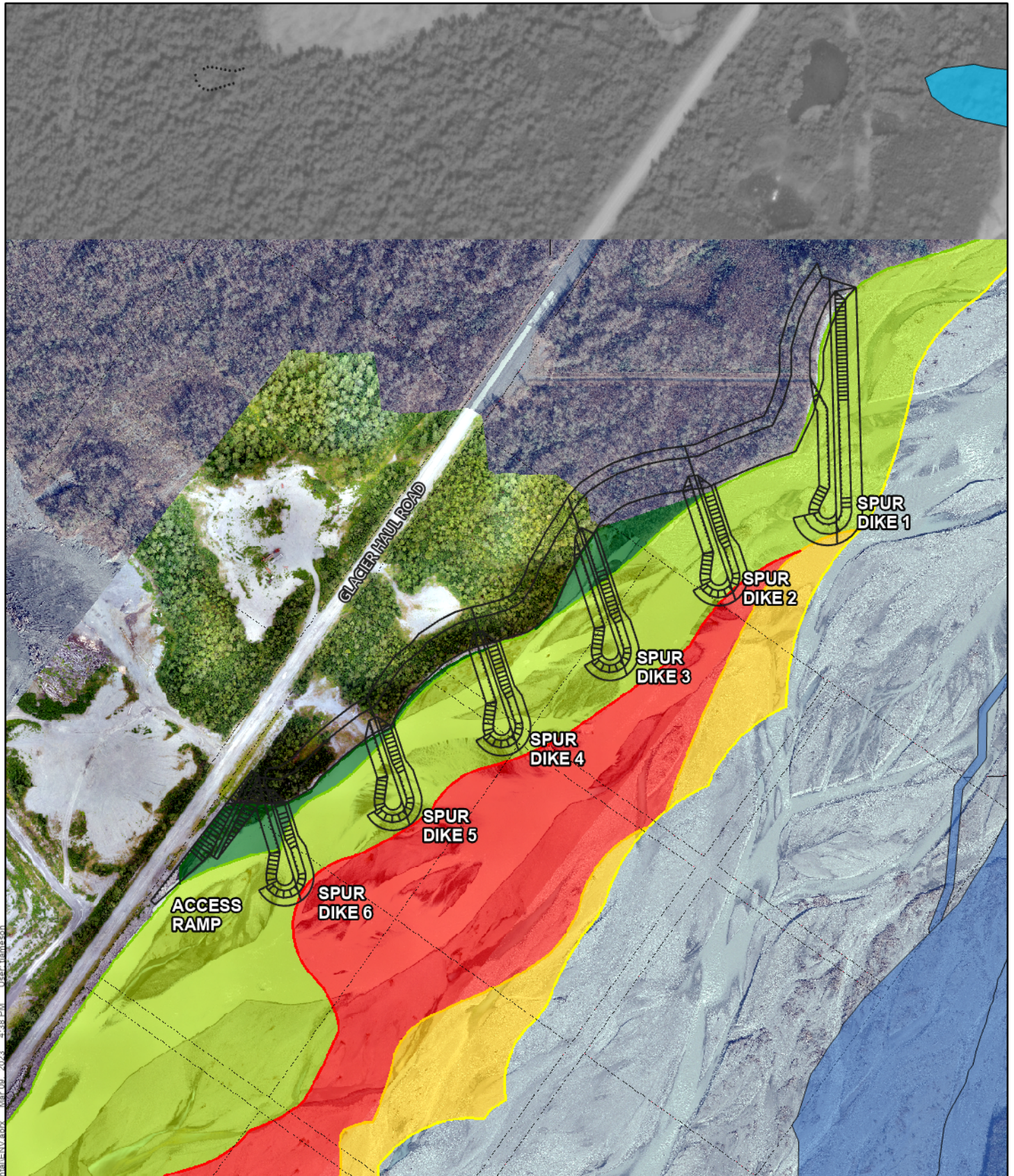


FIGURE 2: Existing Conditions

POA-XXXX-XXXXX

Applicant: City of Valdez

Proposed Activity: Erosion Protection

T 8S, 9S R 6W Section 36,1 Copper River Meridian

Latitude: 61.120801° N Longitude: 146.216226° W

Sheet: 2 of 5

Date: 3/9/2023

- Proposed Project
- City of Valdez Parcel Boundary
- NWI Wetland Type 1978**
 - Freshwater Pond
 - Riverine

- Stream Channel Erosion**
 - 2008
 - 2009
 - 2013
 - 2019
 - 2022



0 100 200 400 Feet

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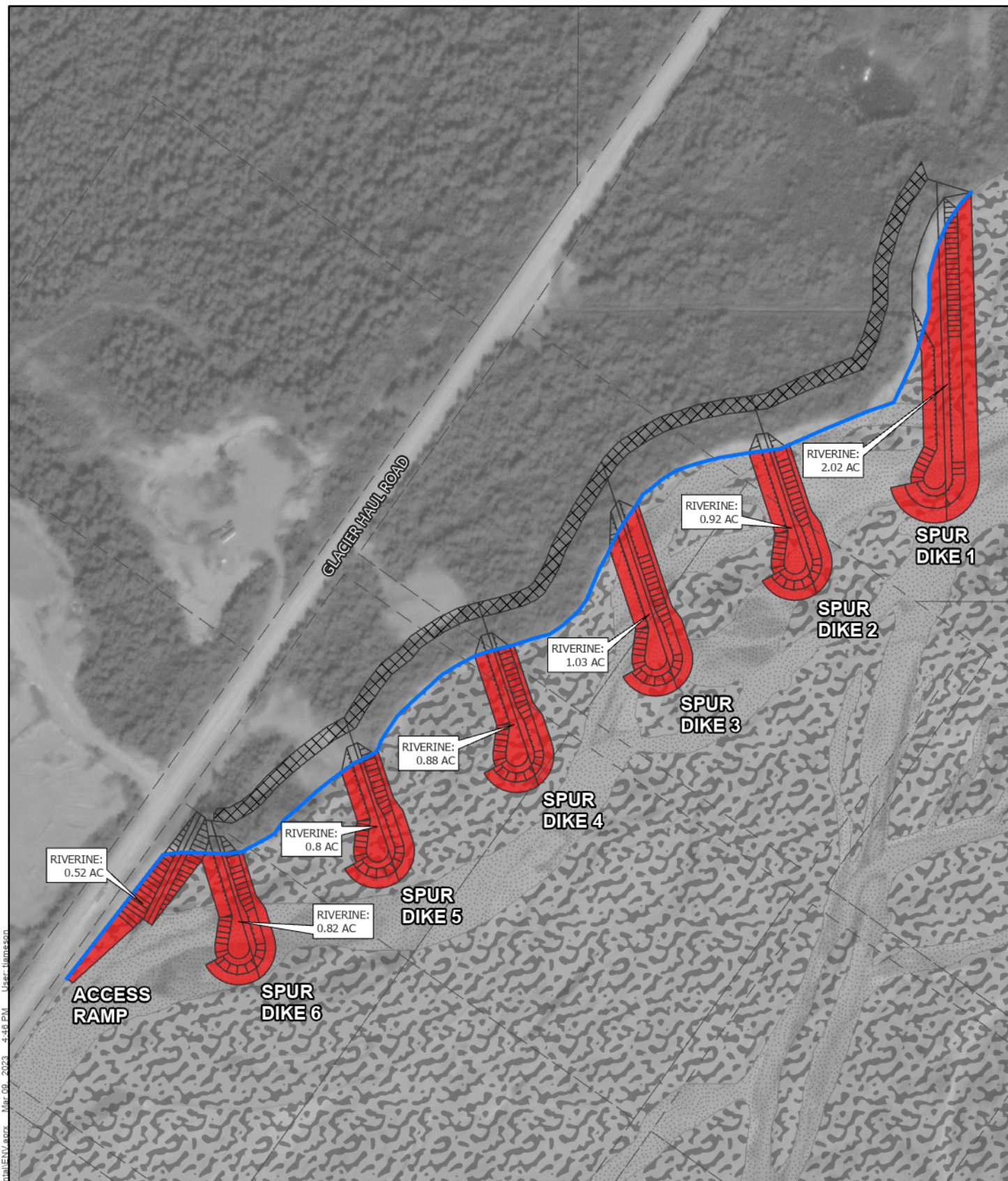


FIGURE 3: Plan View

POA-XXXX-XXXXX

Applicant: City of Valdez

Proposed Activity: Erosion Protection

T 8S, 9S R 6W Section 36, 1 Copper River Meridian

Latitude: 61.120801° N

Longitude: 146.216226° W

Sheet: 3 of 5

Date: 3/9/2023

- Proposed Project
- Proposed Tree Clearing
- City of Valdez Parcel Boundary
- Ordinary High Water
- Stream Impact
- DOWL Mapped Stream Channel
- Riverine
- Riverine Shore

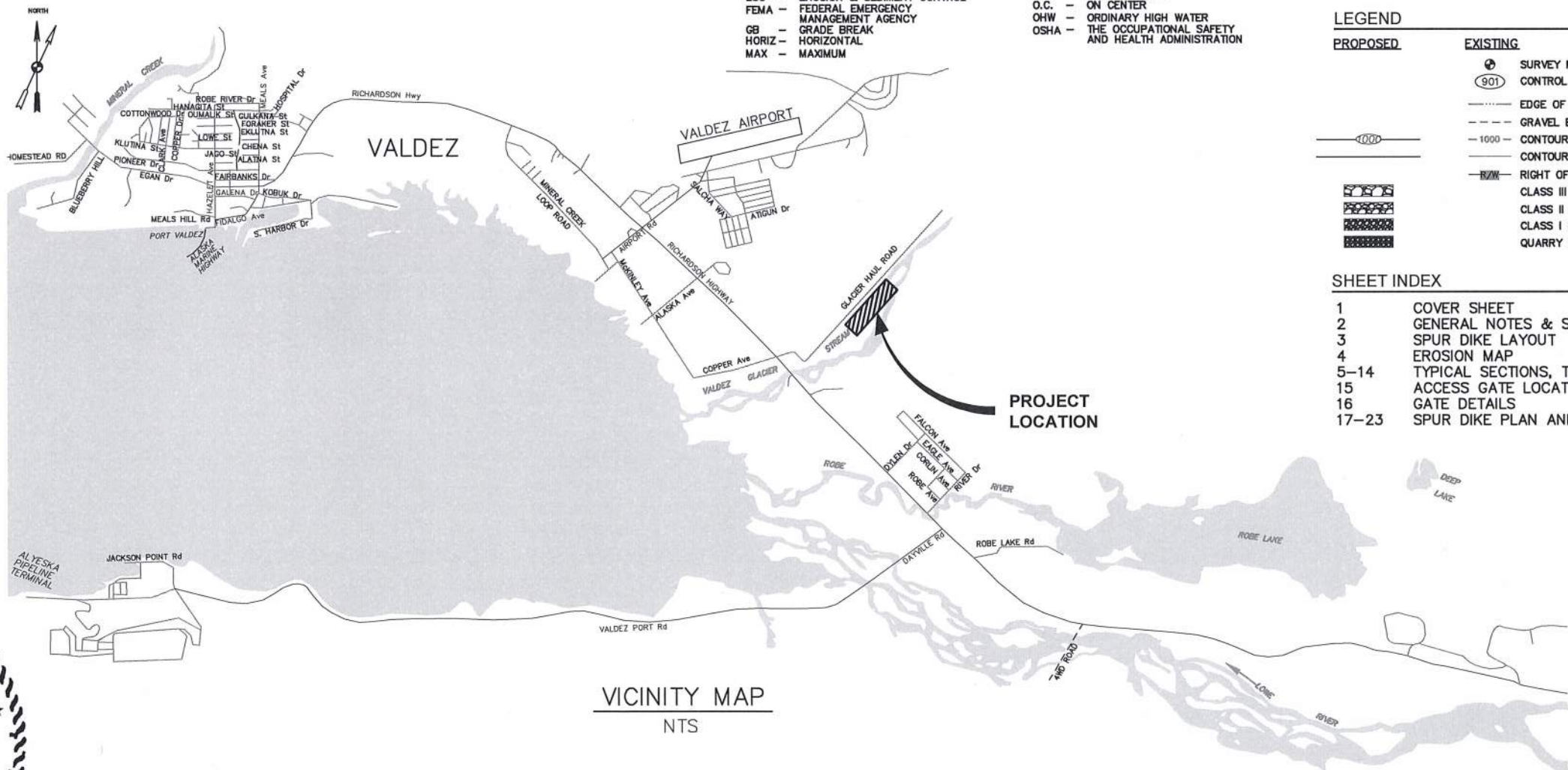


0 75 150 300 Feet

CITY OF VALDEZ GLACIER HAUL ROAD EROSION MITIGATION PROJECT VALDEZ, ALASKA



LOCATION MAP
NTS



VICINITY MAP
NTS

ABBREVIATIONS

C	- CENTERLINE	ME	- MATCH EXISTING
ELEV	- ELEVATION	MIN	- MINIMUM
ESC	- EROSION & SEDIMENT CONTROL	NTS	- NOT TO SCALE
FEMA	- FEDERAL EMERGENCY MANAGEMENT AGENCY	O.C.	- ON CENTER
GB	- GRADE BREAK	OHW	- ORDINARY HIGH WATER
HORIZ	- HORIZONTAL	OSHA	- THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
MAX	- MAXIMUM		

SPECIFICATIONS:

1. ALL CONSTRUCTION SHALL BE COMPLETED IN ACCORDANCE WITH THE CURRENT CITY OF VALDEZ STANDARD SPECIFICATIONS & STANDARD DETAILS.

LEGEND

PROPOSED	EXISTING
	⊕ SURVEY MONUMENT
	901 CONTROL POINTS
	— EDGE OF WATER
	- - - GRAVEL EDGE
	-1000- CONTOURS MAJOR(5)
	- CONTOURS MINOR(1)
	— RIGHT OF WAY
	CLASS III RIPRAP
	CLASS II RIPRAP
	CLASS I RIPRAP
	QUARRY SPALLS

SHEET INDEX

1	COVER SHEET
2	GENERAL NOTES & SURVEY CONTROL
3	SPUR DIKE LAYOUT
4	EROSION MAP
5-14	TYPICAL SECTIONS, TRANSITIONS, AND PROFILES
15	ACCESS GATE LOCATIONS
16	GATE DETAILS
17-23	SPUR DIKE PLAN AND PROFILES



PREPARED BY: DOWL

DOWL FILE No.

SCRIPT FILE

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ESTIMATE OF QUANTITIES				
No.	SPEC REFERENCE	ITEM	PAY UNIT	QUANTITY
1	N/A	MOBILIZATION AND DEMOBILIZATION	LUMP SUM	ALL REQUIRED
2	20.30	ENVIRONMENTAL PROTECTION, SWPPP, PERMITTING	LUMP SUM	ALL REQUIRED
3	20.27	DIVERSION	LUMP SUM	ALL REQUIRED
4	65.02	CONSTRUCTION SURVEY	LUMP SUM	ALL REQUIRED
5	65.02	AS-BUILT SURVEY	LUMP SUM	ALL REQUIRED
6	20.02	CLEARING AND GRUBBING	ACRE	2
7	20.24	QUARRY SPALLS	CUBIC YARD	700
8	20.24	RIPRAP, CLASS I	CUBIC YARD	3,800
9	20.24	RIPRAP, CLASS II	CUBIC YARD	6,500
10	20.24	RIPRAP, CLASS III	CUBIC YARD	19,600
11	20.28	UNCLASSIFIED FILL	CUBIC YARD	72,000
12	N/A	FURNISH AND INSTALL GATE	EACH	2

GENERAL NOTES

SCOPE OF WORK

PROVIDE ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, AND SUPERVISION AS REQUIRED TO:

- DIVERT STREAMFLOW AWAY FROM CONSTRUCTION AREA.
- EXCAVATE AND PLACE RIPRAP SPUR DIKES AS SHOWN IN PLANS.
- PROVIDE AS-BUILT SURVEY OF CONSTRUCTION.

DEWATERING

ISOLATE WORK AREA FROM FLOWING WATER.

RIPRAP

THE RIPRAP SHALL CONSIST OF EVENLY GRADED STONES THAT ARE HARD, ANGULAR, AND HAVE NO MORE THAN 50% WEAR AT 500 REVOLUTIONS AS DETERMINED BY AASHTO T96. THE LEAST DIMENSION OF ANY PIECE OF STONE SHALL BE NOT LESS THAN ONE-FOURTH (1/4) ITS GREATEST DIMENSION. DO NOT USE ROUNDED BOULDERS OR COBBLES.

THE RIPRAP SHALL MEET THE FOLLOWING GRADATION FOR THE CLASS SPECIFIED. PERCENTS ARE BY TOTAL WEIGHT. WEIGHTS ARE FOR EACH STONE:

- A.CLASS I RIPRAP
- 0-50% WEIGHING UP TO 25 POUNDS
 - 0-10% WEIGHING MORE THAN 50 POUNDS
- B.CLASS II RIPRAP
- 0-10% WEIGHING MORE THAN 400 POUNDS
 - 50%-100% WEIGHING 700 POUNDS OR MORE
 - 0-15% WEIGHING UP TO 25 POUNDS
- C.CLASS III RIPRAP
- 0-10% WEIGHING MORE THAN 1,400 POUNDS
 - 50% OR MORE WEIGHING 700 POUNDS OR MORE
 - 15% OR MORE WEIGHING 200 POUNDS OR LESS
 - 0-15% WEIGHING UP TO 25 POUNDS

CONTRACTOR SHALL PROVIDE A LEVEL COMPACT AREA LARGE ENOUGH TO DUMP AND SORT TYPICAL LOADS OF RIPRAP AT APPROVED LOCATIONS. DUMP LOADS SPECIFIED IN THIS AREA AND ASSIST THE ENGINEER AS NEEDED TO SORT AND MEASURE THE STONES IN THE LOAD TO DETERMINE IF THE RIPRAP IS WITHIN SPECIFICATIONS. PROVIDE THE EQUIPMENT AND PERSONNEL NEEDED TO ASSIST IN THIS SORTING.

THE ENGINEER MUST APPROVE OF THE EXCAVATION ELEVATIONS PRIOR TO PLACEMENT OF RIPRAP. LIMIT DROP HEIGHT TO 1 FEET OR LESS. PLACEMENT BY END DUMPING OF ROCK DOWN THE EMBANKMENT OR OTHER METHODS LIKELY TO CAUSE SEGREGATION WILL NOT BE PERMITTED. AREAS COMPOSED PRIMARILY OF EITHER THE LARGER OR SMALLER SIZES OF STONE WILL NOT BE ACCEPTED. WORK LOOSE PIECES OF RIPRAP TO MINIMIZE VOIDS AND OPTIMIZE INTERLOCKING WITHIN RIPRAP LAYER.

QUARRY SPALLS

THE QUARRY SPALLS SHALL CONSIST OF STONES THAT ARE SOUND AND DURABLE, ARE NO LONGER THAN 8 INCHES IN GREATEST DIMENSION, AND NOT MORE THAN 50% BY WEIGHT PASSING A 3-INCH SIEVE, AND NOT MORE THAN 5% PASSING A 1-INCH SIEVE, AS DETERMINED BY ATM 304.

CONSTRUCTION SURVEY

SURVEY CONTROL PROVIDED BY DOWL. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF ALL SITE FEATURES. IF THE CONTRACTOR SHOULD ENCOUNTER CONDITIONS OTHER THAN THOSE SHOWN ON THE PLANS, CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATIVE.

APPLICABLE STANDARDS AND SPECIFICATIONS

ALL FEDERAL, STATE, AND LOCAL CODES, REGULATIONS, AND STANDARDS, PLUS THE FOLLOWING LATEST VERSIONS ARE PART OF THESE PLANS AND SPECIFICATIONS.

- CITY OF VALDEZ STANDARD SPECIFICATIONS
- ASTM, AASHTO STANDARDS AND SPECIFICATIONS
- STATE OF ALASKA 18 AAC 70 WATER QUALITY REGULATIONS

ENVIRONMENTAL PROTECTION

THE CONTRACTOR SHALL PROVIDE ENVIRONMENTAL PROTECTION AND TEMPORARY EROSION AND POLLUTION CONTROL AT ALL EXCAVATION SITES.

PROVISIONS SHALL BE MADE TO MINIMIZE THE INTRUSION OF SEDIMENT INTO THE LOCAL WATER BODIES.

ALL VEGETATION IN THE AREAS NOT AFFECTED BY WORK SHALL BE PRESERVED AND PROTECTED BY THE CONTRACTOR. RESEED ALL DISTURBED AREAS. PROTECT EXISTING TREES IN PLACE.

CONSTRUCTION SAFETY

THE CONTRACTOR IS RESPONSIBLE FOR FOLLOWING OSHA EXCAVATION SAFETY STANDARDS.

OTHER

CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES AND STRUCTURES AND SHALL EXERCISE CAUTION DURING CONSTRUCTION.

COORDINATE CONSTRUCTION STAGING AND MOBILIZATION AREAS AND ACTIVITIES, INCLUDING DAILY WORK SCHEDULES, WITH OWNER'S REPRESENTATIVE.

EXERCISE EXTREME CAUTION AND OBSERVE ALL APPLICABLE OSHA REQUIREMENTS.

ALL PLACED UNCLASSIFIED FILL MATERIAL AND CUT SLOPES TO BE COMPACTED IN ACCORDANCE WITH CITY OF VALDEZ STANDARD SPECIFICATIONS SECTION 20.14, MECHANICAL COMPACTION. ALL CONSTRUCTED AND CUT SLOPES TO BE TRACK WALKED.

SURVEY NOTES:

1. THE INFORMATION SHOWN HEREON IS BASED ON LIDAR SURVEY DATA PERFORMED BY QUANTUM SPATIAL ON SEPTEMBER 2019. BACKGROUND INFORMATION DEPICTED IS SHOWN FOR ORIENTATION PURPOSES ONLY AND SHOULD NOT BE USED FOR ANY OTHER PURPOSE.

2. TITLE RESEARCH WAS NOT PERFORMED AS PART OF THIS SURVEY.

3. PROJECT AND VERTICAL CONTROL NEEDS TO BE VERIFIED BEFORE CONSTRUCTION USE.

4. DUE TO EROSIONAL NATURE OF BANKS AND AND CHANNEL BED, ELEVATIONS OF EXISTING TOPOGRAPHY MAY HAVE CHANGED FROM THE EXISTING GROUND AND EROSION EXTENDS DEPICTED IN THIS PLAN SET.

5. ELEVATIONS OF SPUR DIKES ARE TO BE 10 FEET ABOVE BED ELEVATION (MIN) AT TIME OF CONSTRUCTION SURVEY. ELEVATION OF DIKES TO BE CONFIRMED BY ENGINEER OF RECORD BEFORE CONSTRUCTION.

HORIZONTAL CONTROL:

COORDINATES ARE ASPZ 3(NAD83) IN U.S. FEET AND BASED ON THE URS CONSTRUCTION SURVEY CONTROL DATA AS SHOWN ON THE RECORD OF SURVEY BY WRANGELL MOUNTAIN TECHNICAL SERVICES FILED AS PLAT NO. 2019-1 IN THE VALDEZ RECORDING DISTRICT, THIRD JUDICIAL DISTRICT, STATE OF ALASKA.

BEARINGS ARE BASED ON THE RECORD OF SURVEY BY WRANGELL MOUNTAIN TECHNICAL SERVICES FILED AS PLAT NO. 2019-1 IN THE VALDEZ RECORDING DISTRICT, THIRD JUDICIAL DISTRICT, STATE OF ALASKA.

VERTICAL CONTROL:

ELEVATIONS ARE NAVD88 IN U.S. FEET AND BASED ON THE URS CONSTRUCTION SURVEY CONTROL DATA AS SHOWN ON THE RECORD OF SURVEY BY WRANGELL MOUNTAIN TECHNICAL SERVICES FILED AS PLAT NO. 2019-1 IN THE VALDEZ RECORD DISTRICT, THIRD JUDICIAL DISTRICT, STATE OF ALASKA.



AECL848

DOWL

WWW.DOWL.COM

5015 Business Park Blvd #4000
Anchorage, Alaska 99503
907-562-2000

CITY OF VALDEZ

GLACIER STREAM EROSION PROTECTION

GENERAL NOTES AND SURVEY CONTROL

CHECKED BYBMM

DESIGNED BYEAM

DRAWN BYEAM

DATEMARCH 2023

W.O. NO.1136.63643.01

F.B. NO.

REF. DWG

LOCATIONVALDEZ

ALASKA

SCALE

HORZ.

VERT.

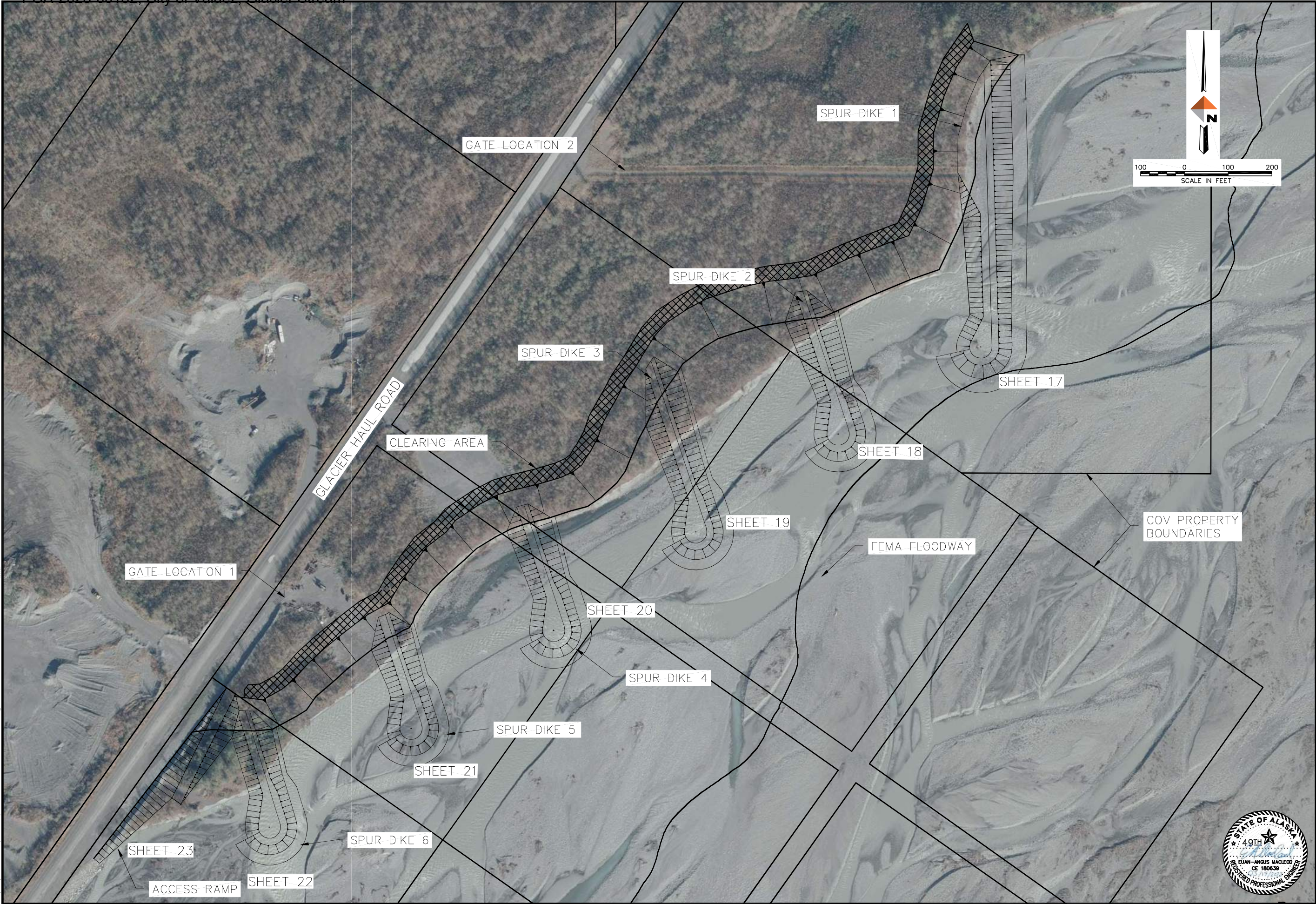
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DATA

Sun. Sewer

Storm Sewer

Water

Gas

Telephone

Electric

Cable TV

Essentials

Footing Elev.

Approved

AECL848

DOWL

5015 Business Park Blvd #4000

Anchorage, Alaska 99503

907-562-2000

WWW.DOWL.COM

CITY OF VALDEZ

GLACIER STREAM EROSION PROTECTION

SPUR DIKE SHEET LAYOUT

CHECKED BY: BMM

DESIGNED BY: EAM

DRAWN BY: EAM

DATE: MARCH 2023

W.O. NO. 1136.63643.01

F.B. NO.

REF. DWG

LOCATION: VALDEZ, ALASKA

SCALE

HORZ.

VERT.

SHEET 3 OF 23

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BY

DATE

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STATE OF ALASKA

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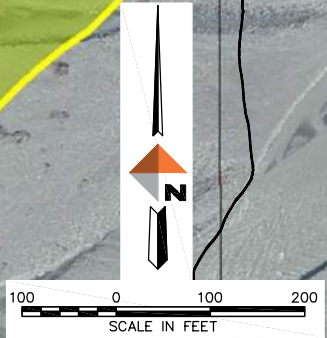
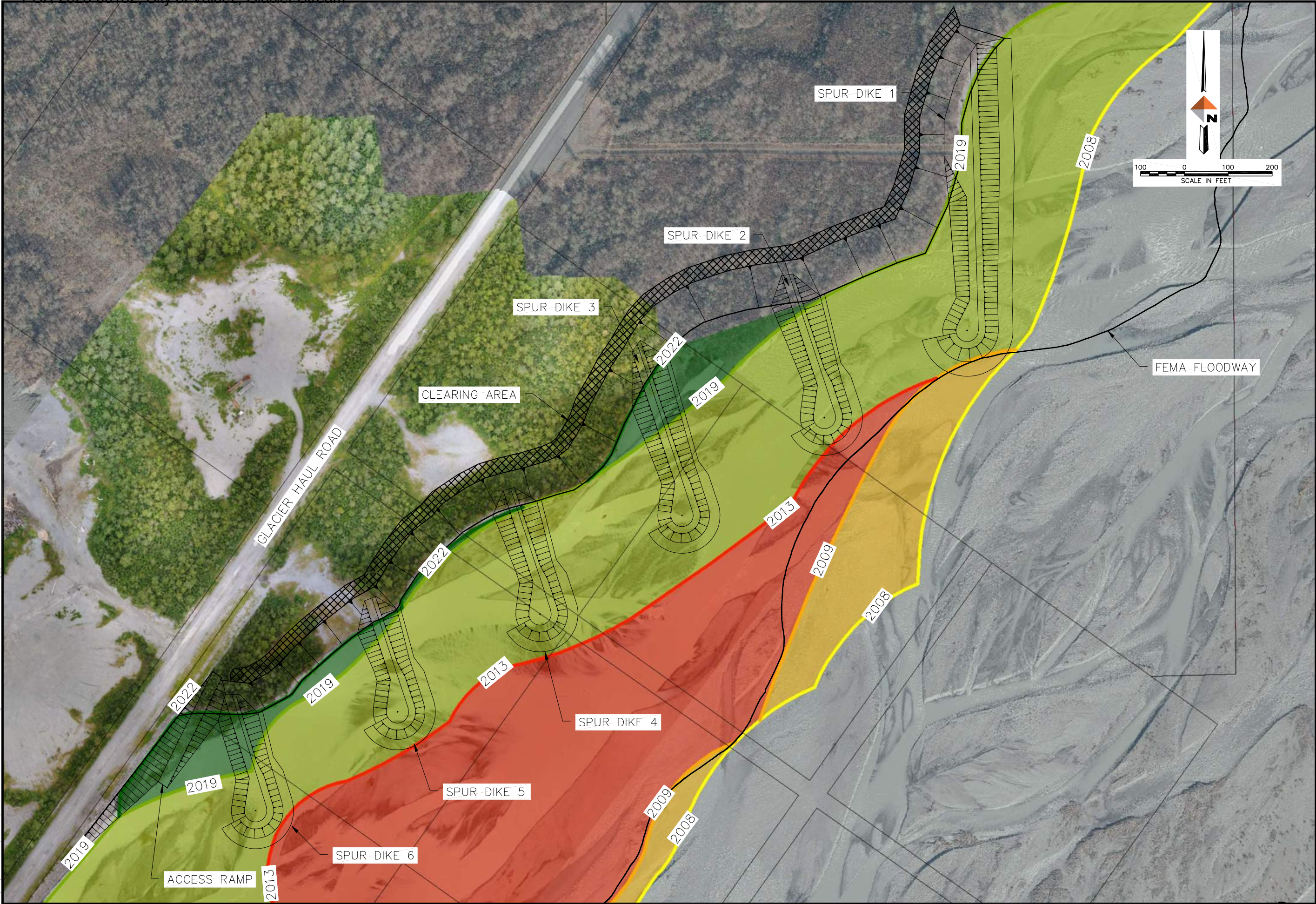
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REGISTERED PROFESSIONAL ENGINEER

Page 6 of 26

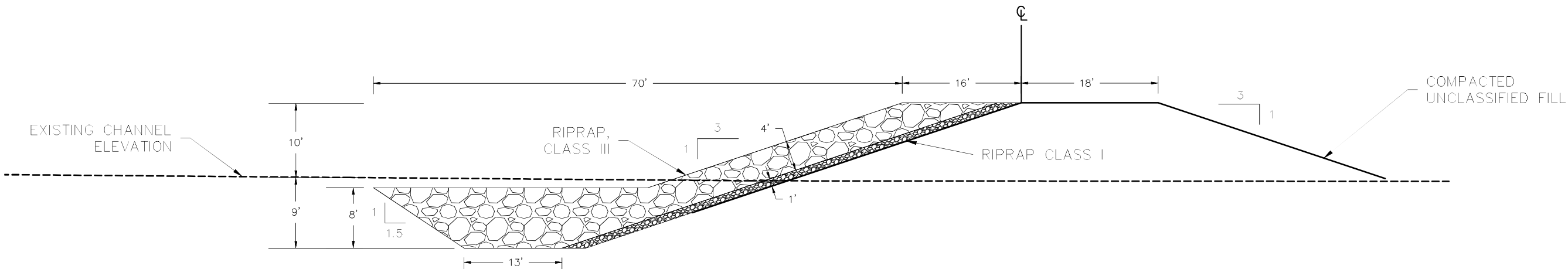
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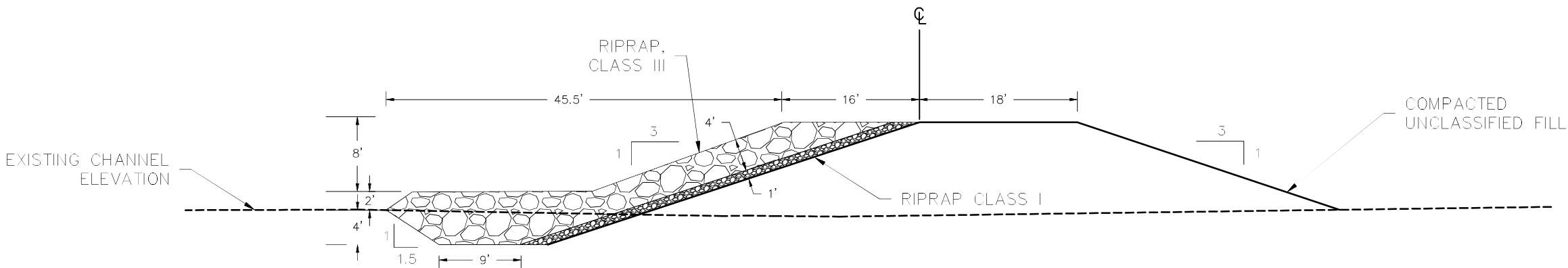


DOWL AECL848		WWW.DOWL.COM 5015 Business Park Blvd #4000 Anchorage, Alaska 99503 907-562-2000	
CITY OF VALDEZ GLACIER STREAM EROSION PROTECTION EROSION MAP			
CHECKED BY BMM		DESIGNED BY EAM	
DRAWN BY EAM		DATE MARCH 2023	
W.O. NO. 1136.63643.01		F.B. NO.	
REF. DWG		LOCATION VALDEZ	
SCALE		ALASKA	
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SPUR DIKE 1 SCOUR TYPICAL SECTION
NTS



SPUR DIKE 2-6 SCOUR TYPICAL SECTION
NTS



DATA

Sun. Sewer
Storm Sewer
Water
Gas
Telephone
Electric
Cable TV
Essements
Footing Elev.
Approved

5015 Business Park Blvd #4000
Anchorage, Alaska 99503
907-562-2000

AECL848

DOWL

WWW.DOWL.COM

CITY OF VALDEZ


GLACIER STREAM EROSION PROTECTION

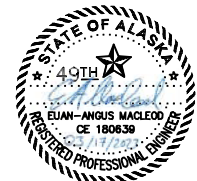
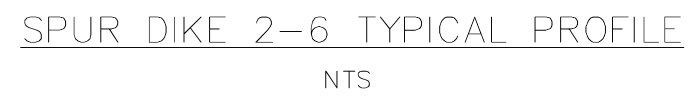
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CHECKED BY	BMM
DESIGNED BY	EAM
DRAWN BY	EAM
DATE	MARCH 2023
W.O. NO.	1136.63643.01
F.B. NO.	
REF. DWG	
LOCATION	VALDEZ ALASKA
SCALE	
HORZ. NTS	
VERT. NTS	
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CITY OF VALDEZ		DATA Son. Sewer Storm Sewer Water Gas Telephone Electric Cable TV Essements Footing Elev. Approved	/BY	
GLACIER STREAM EROSION PROTECTION	AECL848	WWW.DOWL.COM	REV	DATE
TYPICAL SECTIONS		5015 Business Park Blvd #4000 Anchorage, Alaska 99503	DESCRIPTION	
		907-562-2000	REVISIONS	
CHECKED BY BMM	DESIGNED BY EAM	DRAWN BY EAM		
DATE MARCH 2023	W.O. NO. 1136.63643.01	F.B. NO.		
REF. DWG	LOCATION VALDEZ	ALASKA		
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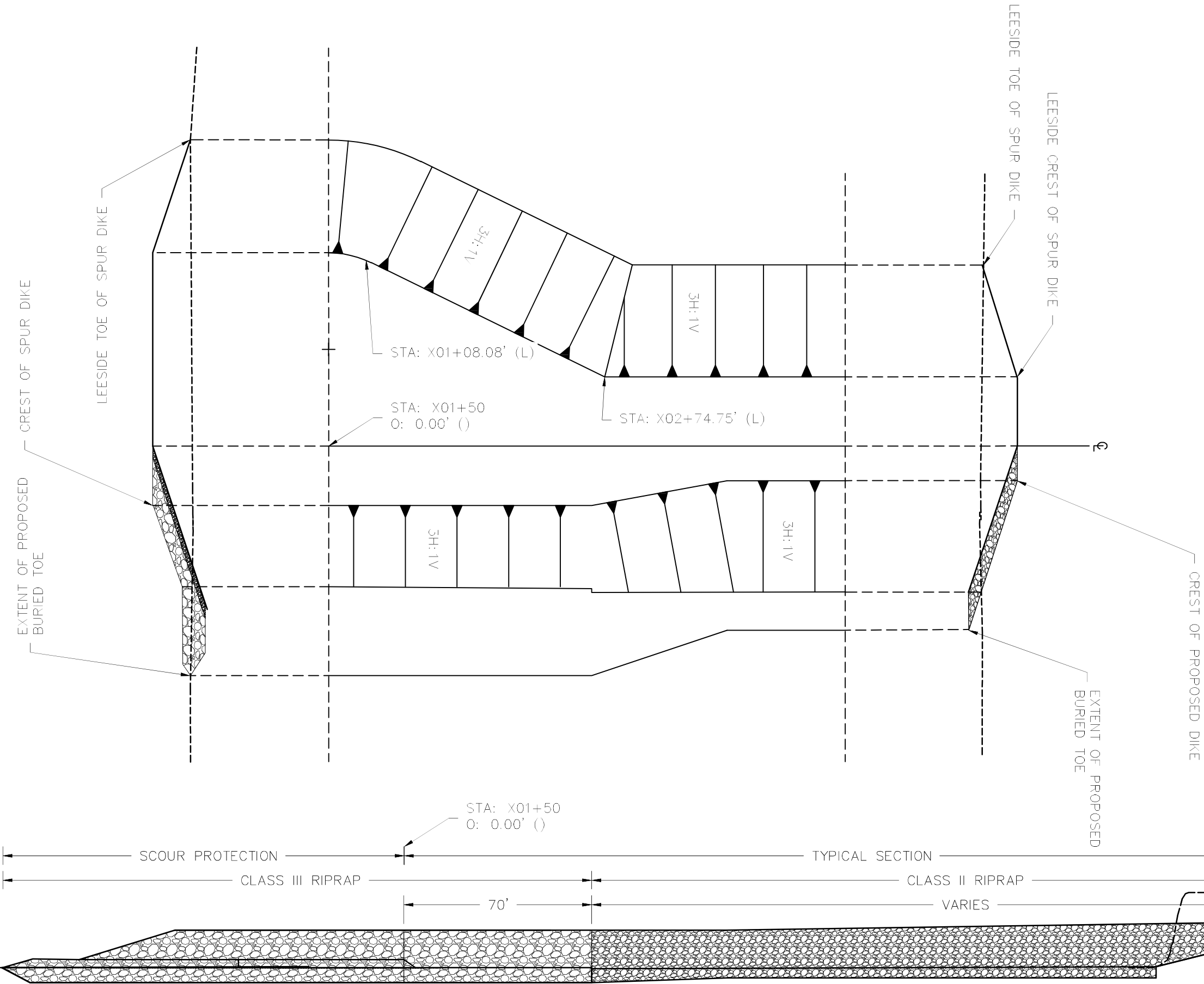


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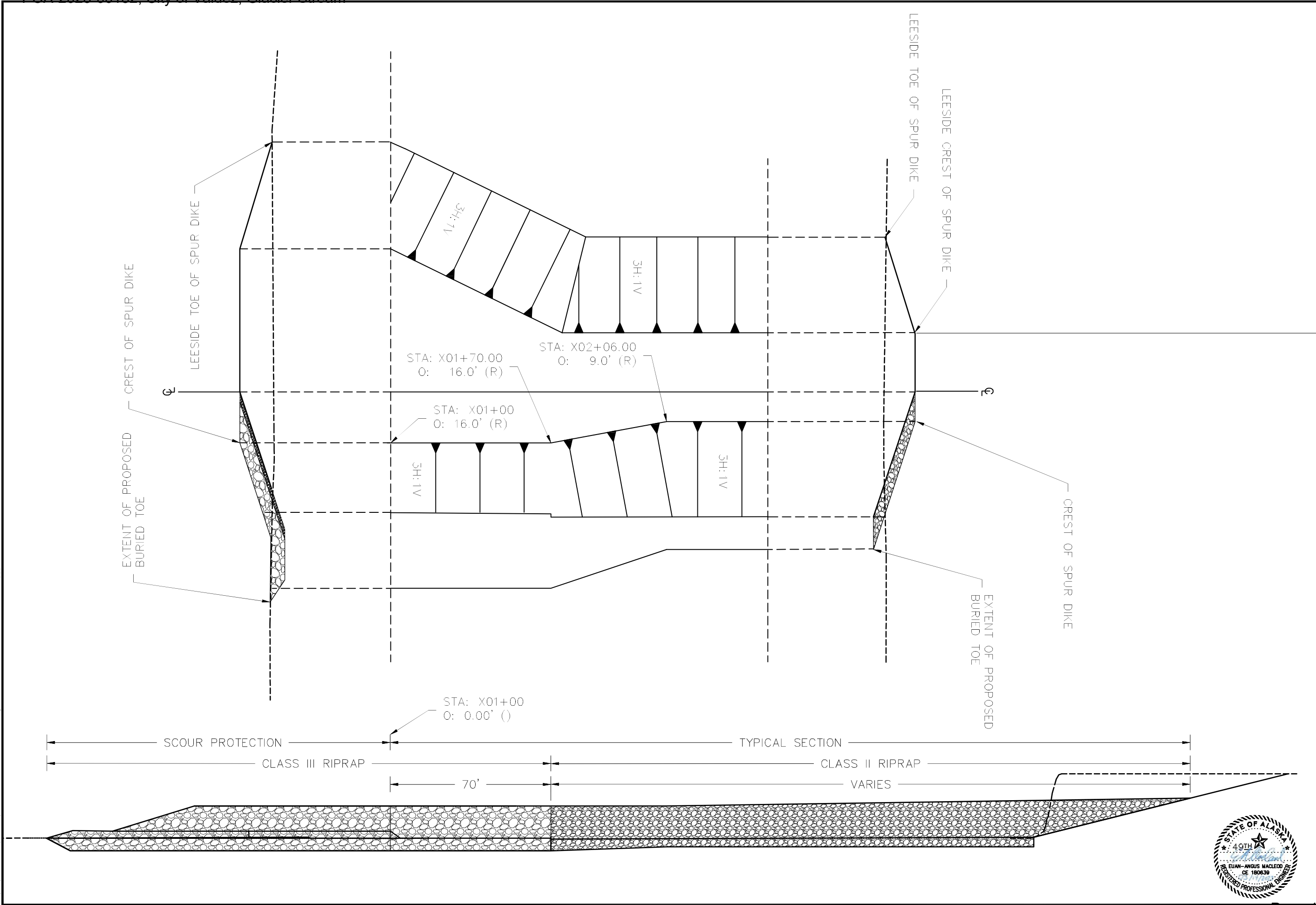
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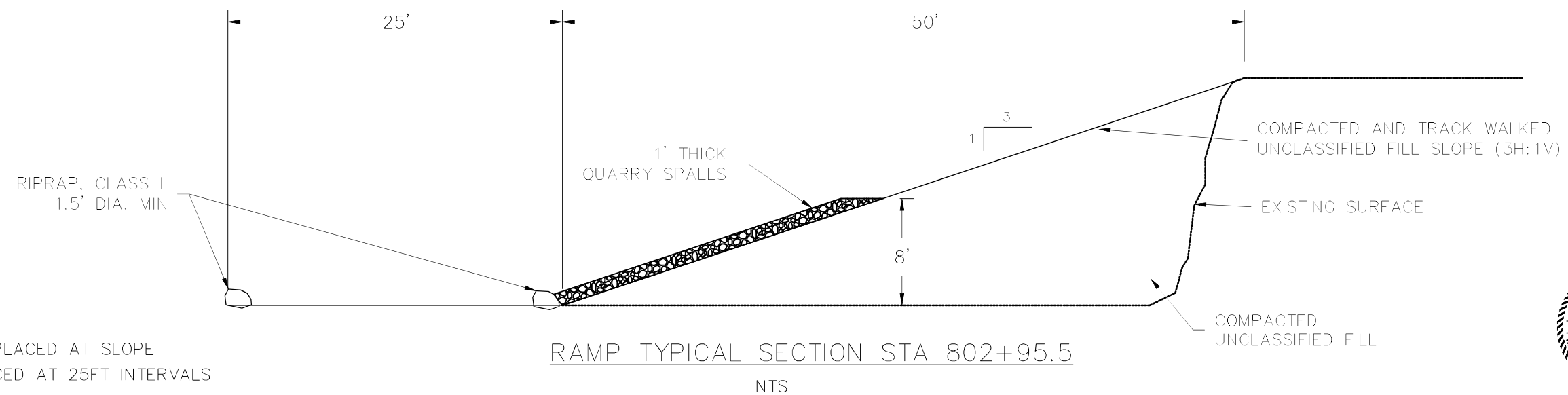


CITY OF VALDEZ		GLACIER STREAM EROSION PROTECTION		SPUR 2-6 SCOUR APRON LAYOUT	
CHECKED BY		BMM		DESIGNED BY	
EAM		DRAWN BY		EAM	
DATE		MARCH 2023		W.O. NO.	
1136.63643.01		F.B. NO.		REF. DWG	
LOCATION		VALDEZ		ALASKA	
SCALE		HORIZ. NTS		VERT. NTS	
SHEET		10 OF 23		FILE NO.	
DATA		San. Sewer		Storm Sewer	
Water		Gas		Telephone	
Electric		Cable TV		Essements	
Footing Elev.		Approved		Vertical Datum:	
907-562-2000		5015 Business Park Blvd #4000		Anchorage, Alaska 99503	
AECL848		DOWL		WWW.DOWL.COM	
5015 Business Park Blvd #4000		Anchorage, Alaska 99503		907-562-2000	
REVISIONS		DESCRIPTION		BY	
REV		DATE		BY	

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CITY OF VALDEZ		GLACIER STREAM EROSION PROTECTION		SPUR 2-6 SCOUR APRON LAYOUT	
CHECKED BY: BMM		DESIGNED BY: EAM		DRAWN BY: EAM	
DATE: MARCH 2023		W.O. NO. 1136.63643.01		F.B. NO.	
REF. DWG		LOCATION: VALDEZ		ALASKA	
SCALE		HORIZ. NTS		VERT. NTS	
SHEET		11		OF 23	
FILE NO.		DOWL		WWW.DOWL.COM	
5015 Business Park Blvd #4000		Anchorage, Alaska 99503		907-562-2000	
AECL848		DATA		Sun. Sewer Storm Sewer Water Gas Telephone Electric Cable TV Essements Footing Elev. Approved	
JBY		REV		DATE	
DESCRIPTION		REVISIONS		BY	
Vertical Datum:					


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1. ALL CUT SLOPES AND CONSTRUCTED SLOPES TO BE COMPACTED IN ACCORDANCE WITH CITY OF VALDEZ SPECIFICATIONS SECTION 20.14, MECHANICAL COMPACTION. AND TRACK WALKED.
2. CLASS III ROCK AT SLOPE CREST TO BE PLACED AT 50FT INTERVALS.
3. ANY SURPLUS FILL MATERIAL IS TO BE PLACED AND COMPACTED AT THE BASE OF THE CUT SLOPE BETWEEN SPUR DIKES.



<div> DOWL WWW.DOWL.COM AECL948</div>		DATA		/BY
		Son. Sewer Storm Sewer Water Gas Telephone Footing Elev. Cable TV Easements Approved		
<div>CITY OF VALDEZ GLACIER STREAM EROSION PROTECTION CUT SLOPE TYPICAL SECTION</div>		5015 Business Park Blvd #4000 Anchorage, Alaska 99503 907-562-2000		Vertical Datum:
		CHECKED BY BMM DESIGNED BY EAM DRAWN BY EAM DATE MARCH 2023 W.O. NO. 1136.63643.01 F.B. NO. REF. DWG LOCATION VALDEZ ALASKA		
SCALE		SHEET		
HORZ. NTS		14 OF 23		
VERT. NTS		FILE NO.		

DRAWN FILE NO.


SCRIPT FILE

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NOTES:
1. LOCATION OF GATES TO BE CONFIRMED ON SITE BY ENGINEER
2. SURPLUS RIPRAP/BOULDERS TO BE PLACED EITHER SIDE OF GATE POSTS TO PREVENT TRESPASSING WITH VEHICLES





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DATA

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Storm Sewer
Water
Gas
Telephone
Electric
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Essentials
Footing Elev.
Approved

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CITY OF VALDEZ

GLACIER STREAM EROSION PROTECTION

ACCESS GATE LOCATIONS

CHECKED BY BMM

DESIGNED BY EAM

DRAWN BY EAM

DATE MARCH 2023

W.O. NO. 1136.63643.01

F.B. NO.

REF. DWG

LOCATION VALDEZ

ALASKA

SCALE

HORZ.

VERT.

SHEET

15 OF 23

FILE NO.

REVISIONS

DESCRIPTION

BY

DATE

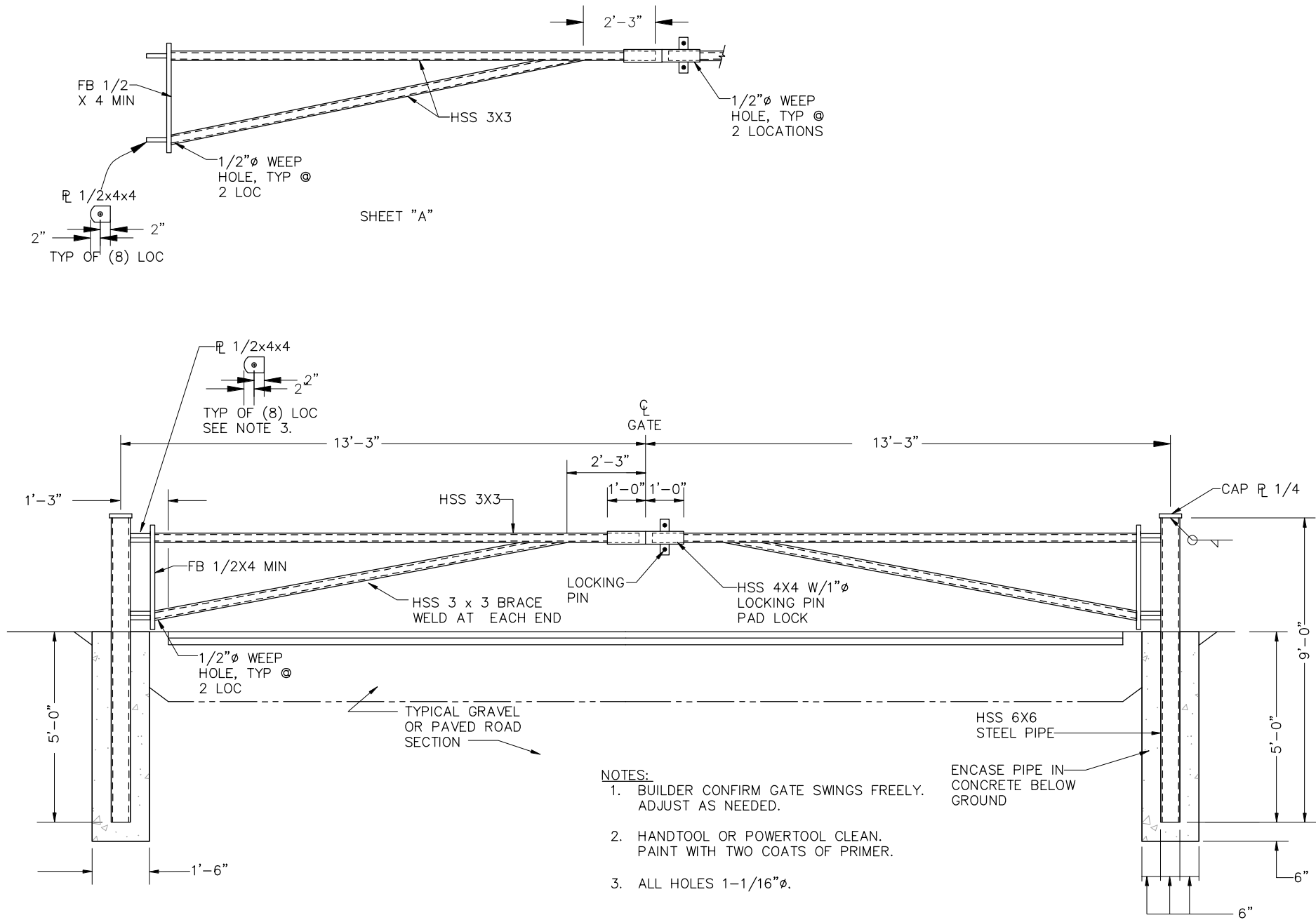
Vertical Datum:

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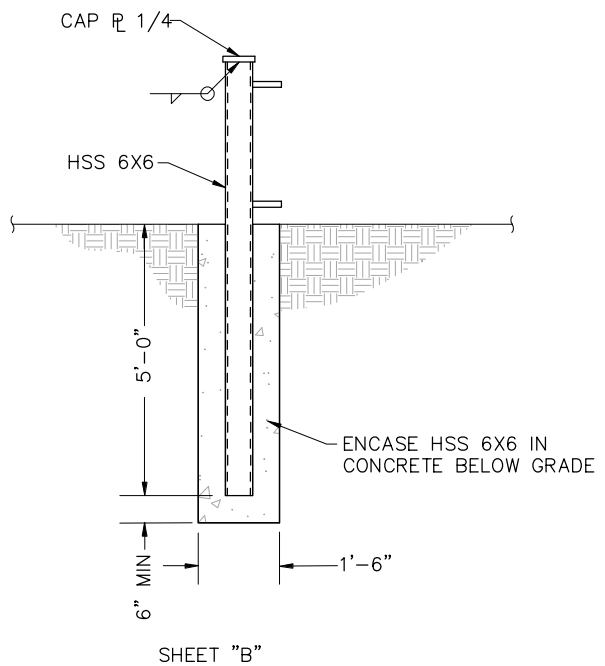
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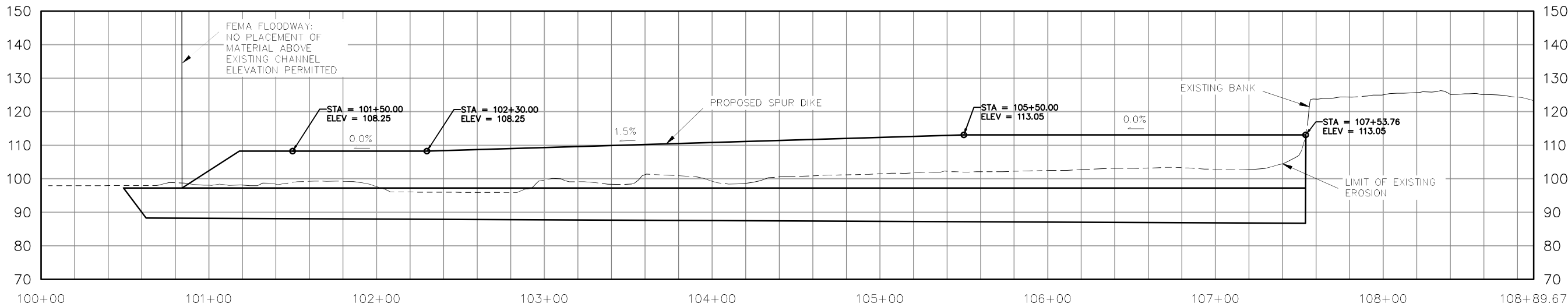
- NOTES:
1. BUILDER CONFIRM GATE SWINGS FREELY. ADJUST AS NEEDED.
 2. HANDTOOL OR POWERTOOL CLEAN. PAINT WITH TWO COATS OF PRIMER.
 3. ALL HOLES 1-1/16"Ø.



1 SQUARE TUBE GATE DETAIL
16 NTS

- NOTES:
1. CONTRACTOR TO SUBMIT GATE MANUFACTURER SHOP DRAWING TO ENGINEER OF RECORD FOR REVIEW AND APPROVAL.

DATA		BY
Sun. Sewer	Storm Sewer	Water
Gas	Telephone	Electric
Cable TV	Essements	Footing Elev.
Approved	Vertical Datum:	
REV		DATE
DESCRIPTION		REVISIONS
DOWL		
5015 Business Park Blvd #4000 Anchorage, Alaska 99503 907-562-2000		
CITY OF VALDEZ GLACIER STREAM EROSION PROTECTION GATE DETAILS		
CHECKED BY	BMM	
DESIGNED BY	EAM	
DRAWN BY	EAM	
DATE	MARCH 2023	
W.O. NO.	1136.63643.01	
F.B. NO.		
REF. DWG		
LOCATION	VALDEZ	
SCALE	ALASKA	
HORZ.		
VERT.		
SHEET		
16 OF 23		
FILE NO.		



NOTES:

1. EXISTING SURFACE PROFILE ESTIMATED FROM EXTENT OF 2022 EROSION AND 2019 LIDAR DATA



DATA

Sun. Sewer
Storm Sewer
Water
Gas
Telephone
Electric
Cable TV
Essements
Footing Elev.
Approved

DATE

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CITY OF VALDEZ

GLACIER STREAM EROSION PROTECTION

SPUR DIKE 1 PLAN & PROFILE

CHECKED BY BMM

DESIGNED BY EAM

DRAWN BY EAM

DATE MARCH 2023

W.O. NO. 1136.63643.01

F.B. NO.

REF. DWG

LOCATION VALDEZ
ALASKA

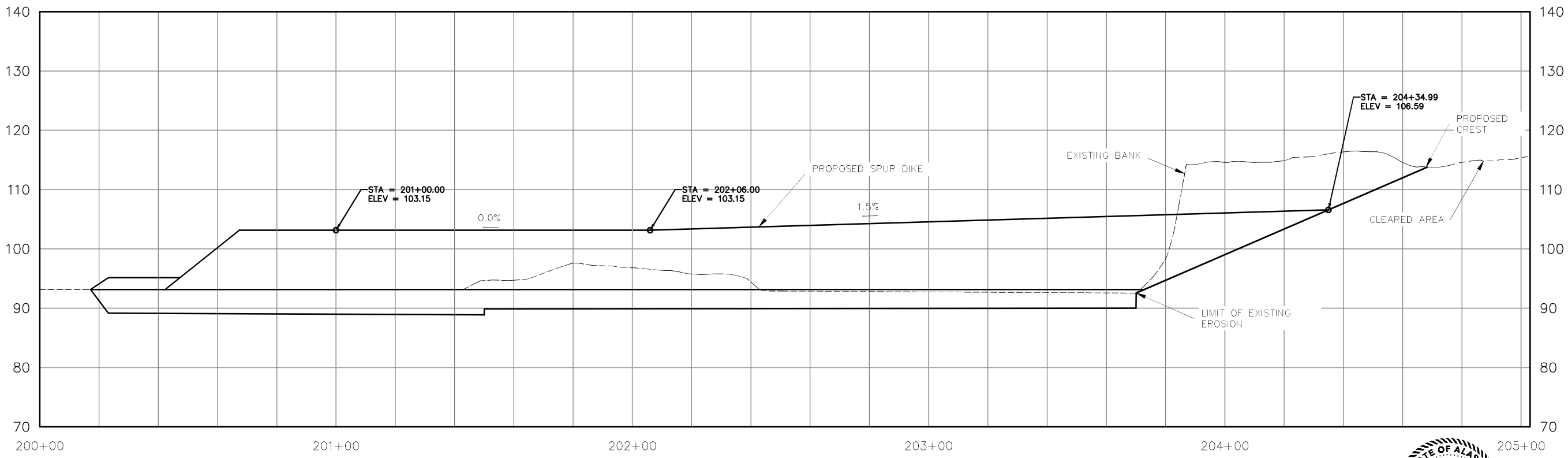
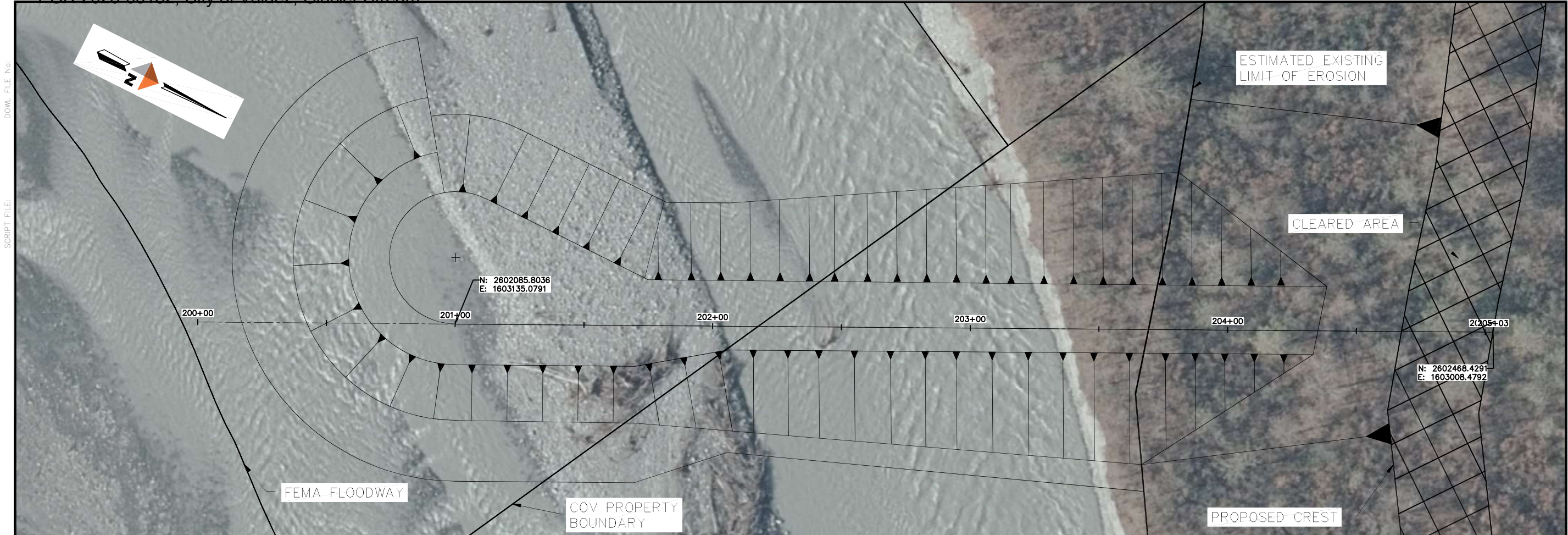
SCALE

HORZ.

VERT.

SHEET
17 OF 23

FILE NO.



NOTES:

1. EXISTING SURFACE PROFILE ESTIMATED FROM EXTENT OF 2022 EROSION AND 2019 LIDAR DATA



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CITY OF VALDEZ

GLACIER STREAM EROSION PROTECTION

SPUR DIKE 2 PLAN & PROFILE

CHECKED BY: BMM

DESIGNED BY: EAM

DRAWN BY: EAM

DATE: MARCH 2023

W.O. NO.: 1136.63643.01

F.B. NO.:

REF. DWG:

LOCATION: VALDEZ, ALASKA

SCALE:

HORZ.:

VERT.:

SHEET: 18 OF 23

FILE NO.:

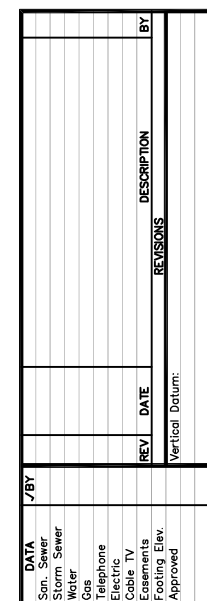
DATA: San. Sewer, Storm Sewer, Water, Gas, Telephone, Electric, Cable TV, Easements, Footing Elev., Approved


REVISIONS

REV. DATE DESCRIPTION BY

Vertical Datum:

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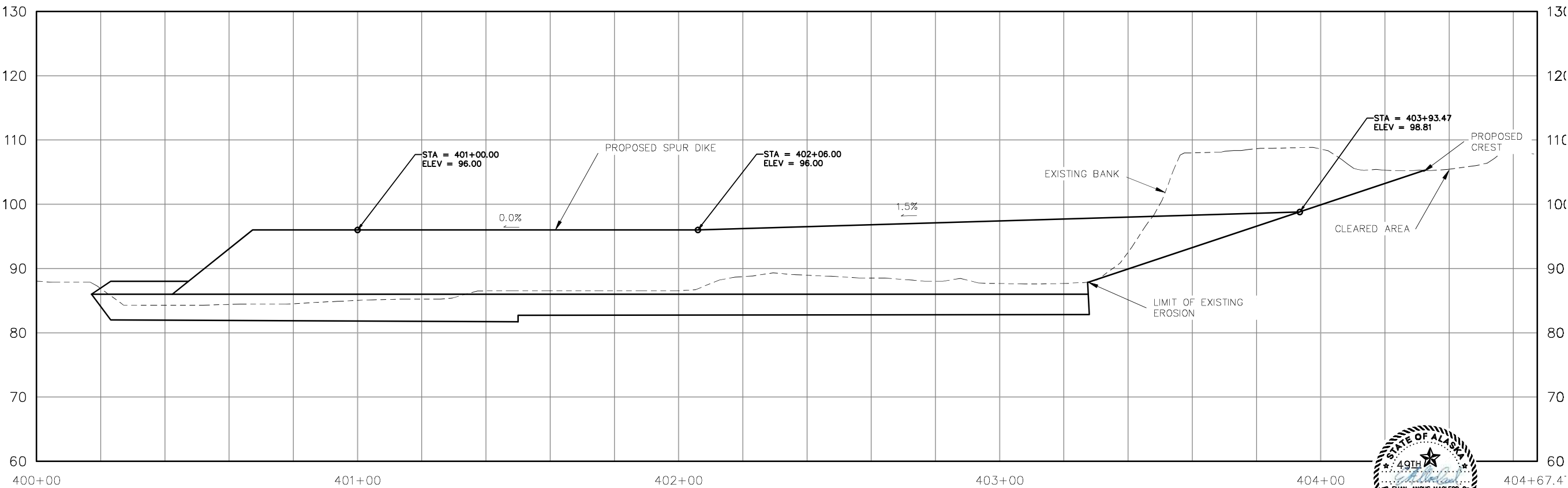
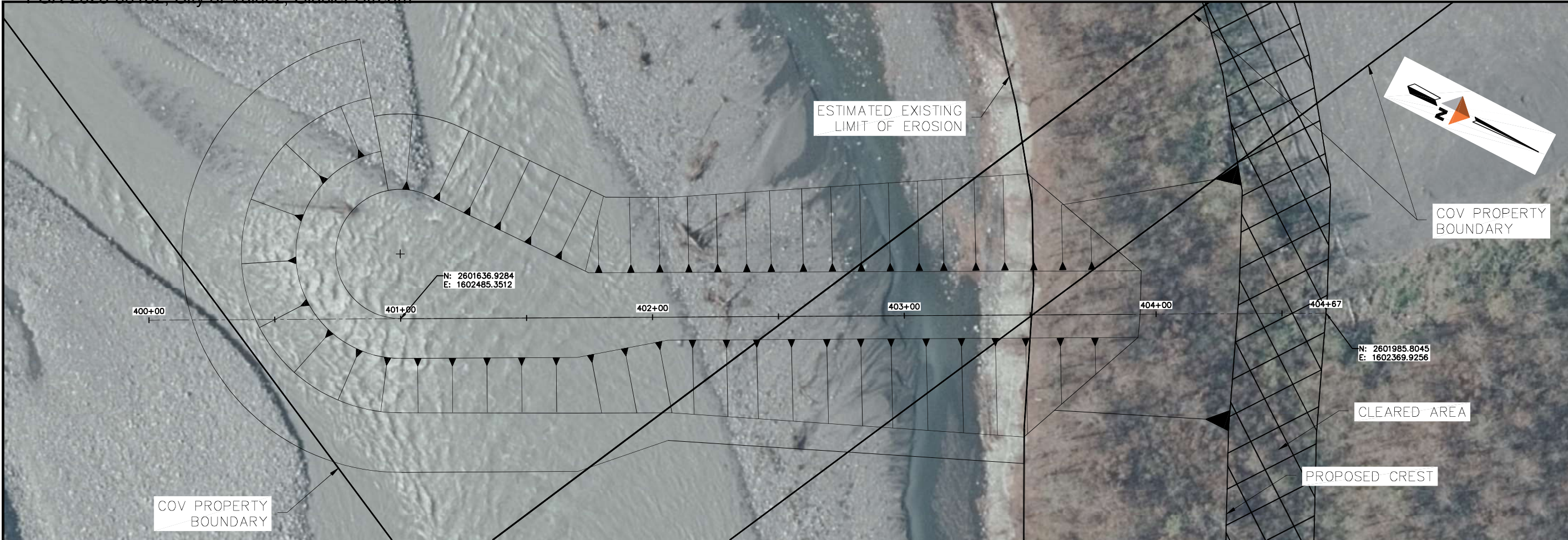
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CITY OF VALDEZ
GLACIER STREAM EROSION PROTECTION
SPUR DIKE 3 PLAN & PROFILE

CHECKED BY	BMM
DESIGNED BY	EAM
DRAWN BY	EAM
DATE	MARCH 2023
W.O. NO.	1136.63643.01
F.B. NO.	
REF. DWG	
LOCATION	VALDEZ
	ALASKA

SCALE
HORIZ.
VERT.
SHEET
19 OF 23
FILE NO.

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NOTES:
1. EXISTING SURFACE PROFILE ESTIMATED FROM EXTENT OF 2022 EROSION AND 2019 LiDAR DATA



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CITY OF VALDEZ

GLACIER STREAM EROSION PROTECTION

SPUR DIKE 4 PLAN & PROFILE

CHECKED BY: BMM

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DRAWN BY: EAM

DATE: MARCH 2023

W.O. NO. 1136.63643.01

F.B. NO.

REF. DWG

LOCATION: VALDEZ, ALASKA

SCALE

HORIZ.

VERT.

SHEET: 20 OF 23

FILE NO.

DATA

Sun. Sewer

Storm Water

Water

Gas

Telephone

Electric

Cable TV

Essentials

Footing Elev.

Approved

REVISIONS

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DATE

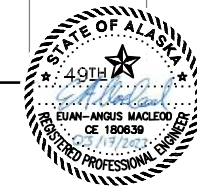
DESCRIPTION

BY

Vertical Datum:

907-562-2000

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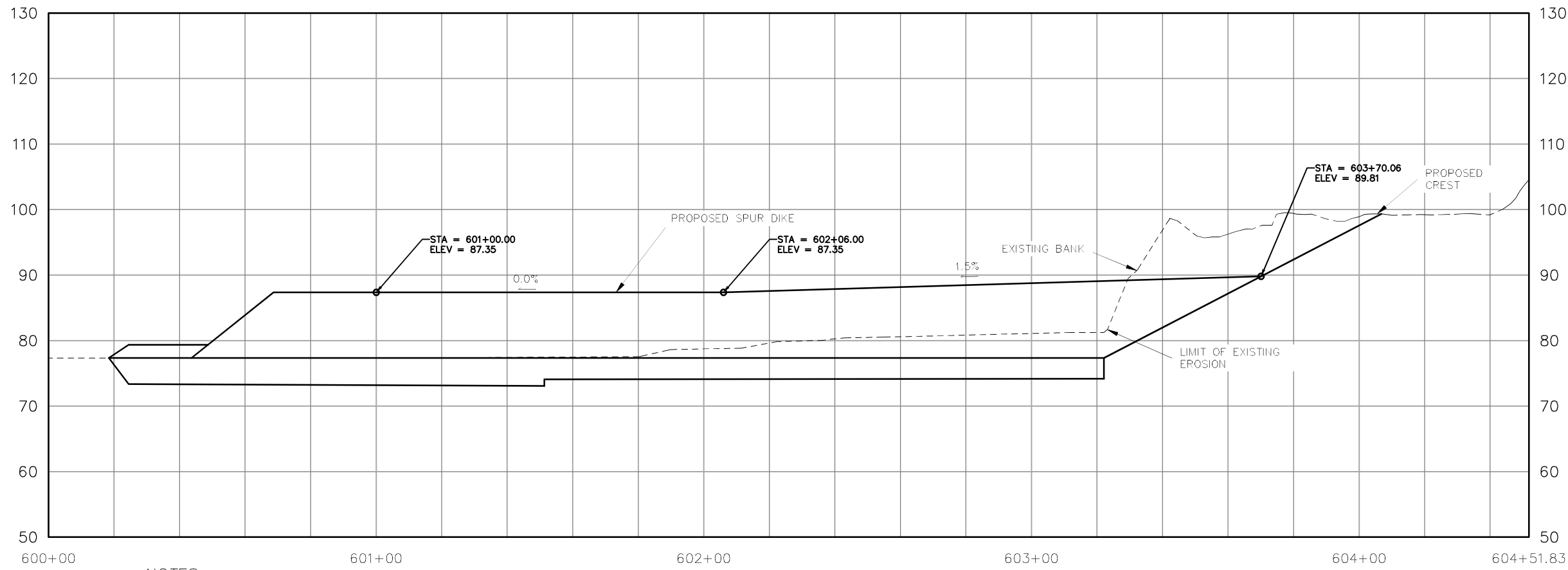
1. EXISTING SURFACE PROFILE ESTIMATED FROM EXTENT OF 2022 EROSION AND 2019 LiDAR DATA

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NOTES:
1. EXISTING SURFACE PROFILE ESTIMATED FROM EXTENT OF 2022 EROSION AND 2019 LiDAR DATA



DATA

Sun. Sewer
Storm Sewer
Water
Gas
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Electric
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CITY OF VALDEZ

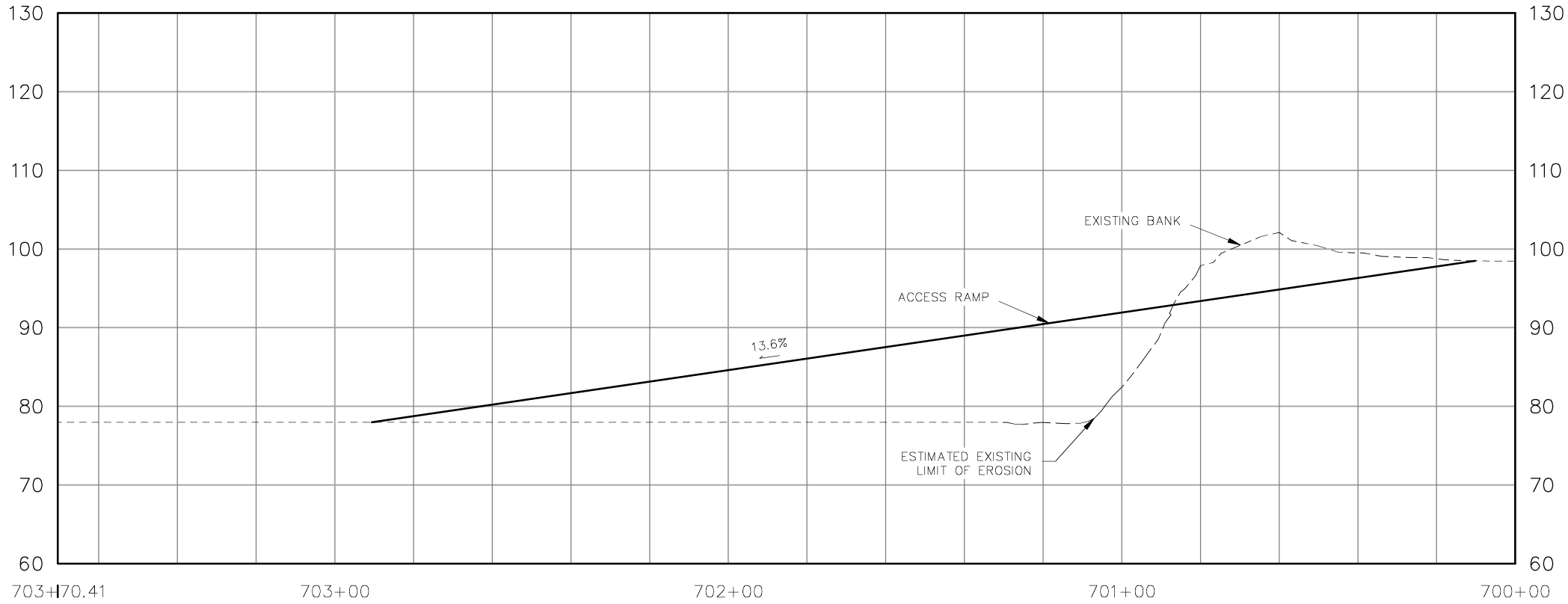
GLACIER STREAM EROSION PROTECTION

SPUR DIKE 6 PLAN & PROFILE

BY	DESCRIPTION	REVISIONS
REV	DATE	Vertical Datum:

CHECKED BY	BMM
DESIGNED BY	EAM
DRAWN BY	EAM
DATE	MARCH 2023
W.O. NO.	1136.63643.01
F.B. NO.	
REF. DWG	VALDEZ
LOCATION	ALASKA
SCALE	
HORZ.	
VERT.	
SHEET	22 OF 23
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NOTES:
1. EXISTING SURFACE PROFILE
ESTIMATED FROM EXTENT OF 2022
EROSION AND 2019 LIDAR DATA



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CITY OF VALDEZ		GLACIER STREAM EROSION PROTECTION	
ACCESS RAMP PLAN & PROFILE		CHECKED BY: BMM DESIGNED BY: EAM DRAWN BY: EAM DATE: MARCH 2023 W.O. NO. 1136.63643.01 F.B. NO. REF. DWG LOCATION: VALDEZ, ALASKA	
HORIZ. SCALE		VERT. SCALE	
SHEET		23 OF 23	
FILE NO.		23 OF 23	