



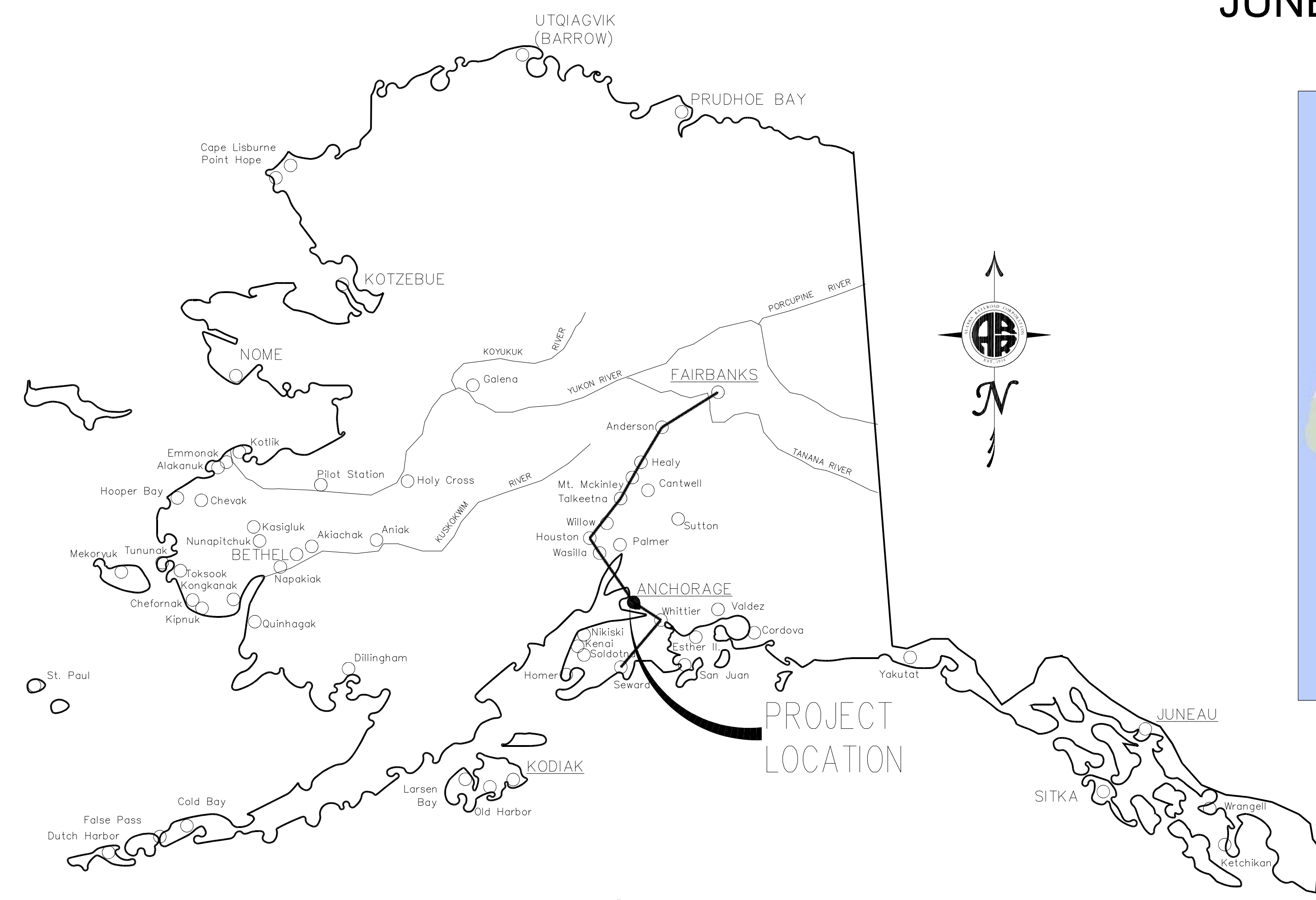
**ALASKA RAILROAD CORPORATION**  
**ENGINEERING SERVICES**

P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500

# ARCTIC AND DOWLING CROSSING

## 2020 SAFETY IMPROVEMENTS

JUNE 2020



**ALASKA MAP**  
NOT TO SCALE



**LOCATION MAP**

SCALE: 1" = 1 mile

**INDEX OF DRAWINGS**

SHEET	TITLE
1	COVER SHEET
2	EXISTING CONDITIONS & SURVEY CONTROL
3	GENERAL NOTES, QUANTITIES & DEMOLITION PLAN
4	PROPOSED SITE PLAN
5	DETAILS - Streets and Signage
6	DETAILS - Gate and Crash Cushion
7	UTILITY PLAN

CONSULTANT:

**ALL POINTS NORTH**  
 ALL POINTS NORTH LLC  
 17600 E. RAMBLING ROAD  
 PALMER, AK 99645-4207  
 (907) 746-4185  
 www.allpointsnorth.us

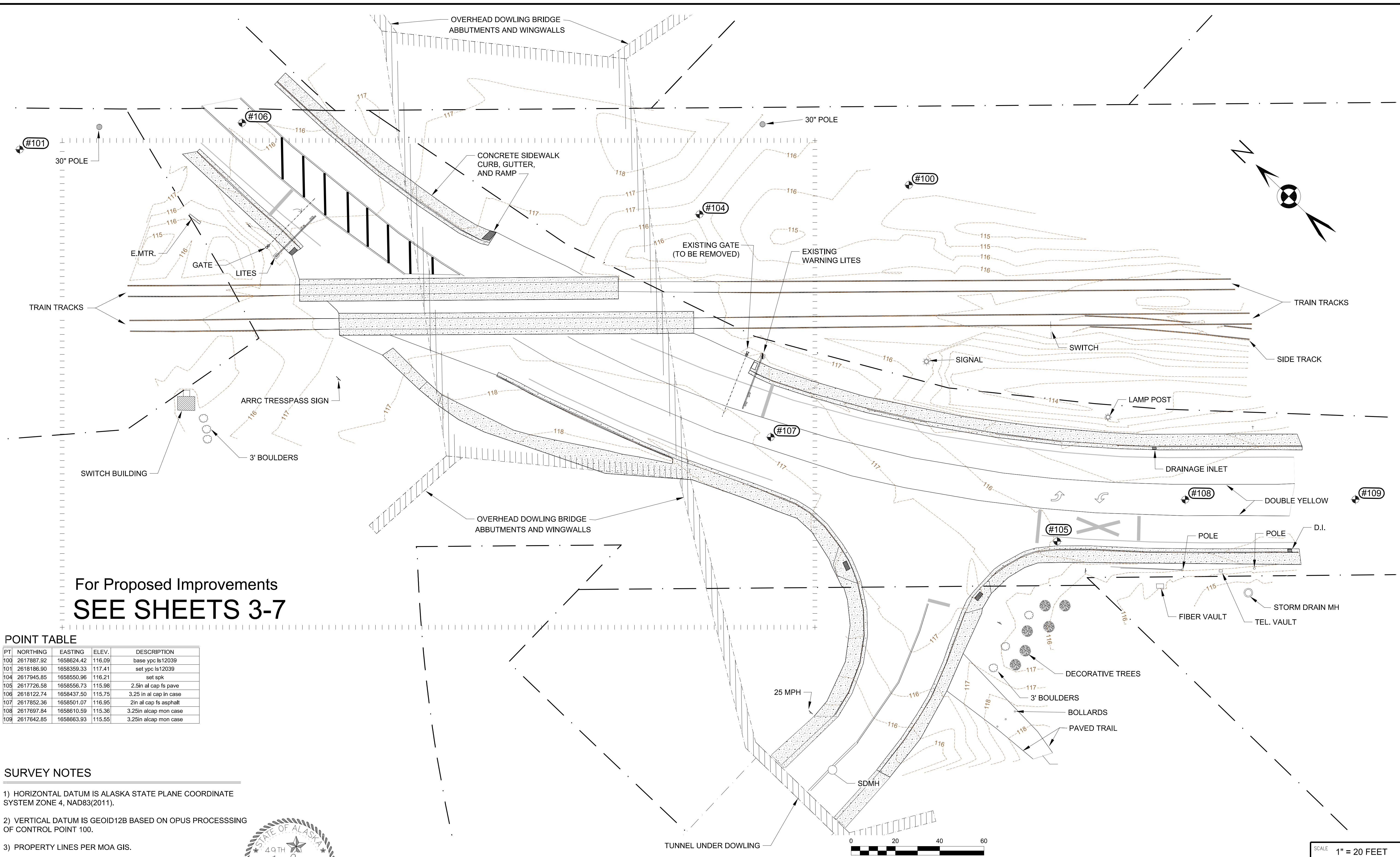


6-19-2020

REV.	DATE	BY	REVISION

<b>ALASKA RAILROAD CORPORATION</b> ENGINEERING SERVICES P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500		
PROJECT : <b>ARCTIC AND DOWLING CROSSING 2020 SAFETY IMPROVEMENTS</b>		
TITLE: <b>COVER SHEET</b>		
DESIGNED BY: MAS	SCALE : AS NOTED	APP. NO.: -
DRAWN BY: MAS	DATE : 6-19-2020	ACAD FILE: 20-16
CHECKED BY: JS		DWG NO. <b>1</b> OF <b>7</b>
APPROVED BY: DR		





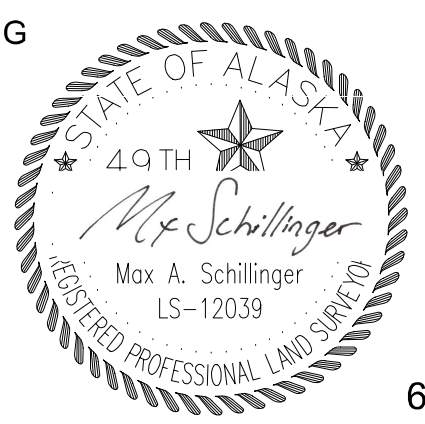
For Proposed Improvements  
**SEE SHEETS 3-7**

**POINT TABLE**

PT	NORTHING	EASTING	ELEV.	DESCRIPTION
100	2617887.92	1658624.42	116.09	base ypc ls12039
101	2618186.90	1658359.33	117.41	set ypc ls12039
104	2617945.85	1658550.96	116.21	set spk
105	2617726.58	1658556.73	115.98	2.5in al cap fs pave
106	2618122.74	1658437.50	115.75	3.25 in al cap in case
107	2617852.36	1658501.07	116.95	2in al cap fs asphalt
108	2617697.84	1658610.59	115.36	3.25in alcap mon case
109	2617642.85	1658663.93	115.55	3.25in alcap mon case

**SURVEY NOTES**

- 1) HORIZONTAL DATUM IS ALASKA STATE PLANE COORDINATE SYSTEM ZONE 4, NAD83(2011).
- 2) VERTICAL DATUM IS GEOID12B BASED ON OPUS PROCESSING OF CONTROL POINT 100.
- 3) PROPERTY LINES PER MOA GIS.
- 4) CONTOUR INTERVAL IS 1FT.
- 5) FIELD SURVEY CONDUCTED IN APRIL 2020.

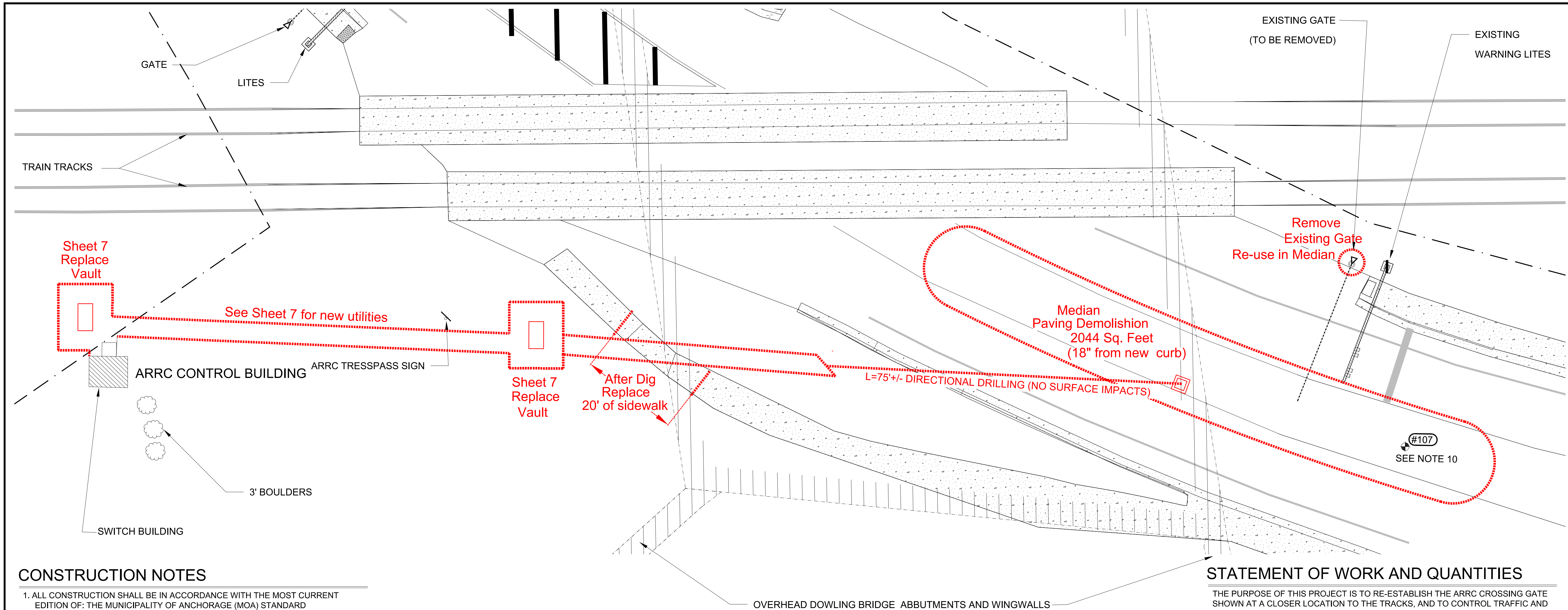


6/19/2020



	CLIENT	ALASKA RAILROAD	JOB NUMBER	20-16	
	PROJECT	ARCTIC AND DOWLING CROSSING			
	SHEET TITLE	EXISTING CONDITIONS, SURVEY CONTROL			
SCALE	1" = 20 FEET (22"x34" Sheet)			DATE	6/19/2020
				SHEET NO	2 of 7





**CONSTRUCTION NOTES**

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE MOST CURRENT EDITION OF: THE MUNICIPALITY OF ANCHORAGE (MOA) STANDARD SPECIFICATION (MASS), MOA DESIGN CRITERIA MANUAL (DCM), MOA TITLE 21, MOA DRAINAGE DESIGN (OCPM) AND ANCHORAGE WATER AND WASTEWATER UTILITY (AWWU) DESIGN AND CONSTRUCTION PRACTICES MANUAL (OCPM),
2. COORDINATE SITE ACCESS WITH THE ALASKA RAILROAD CORPORATION.
3. THE CONTRACTOR IS REQUIRED TO COMPLY WITH MUNICIPALY NOISE AND HOURS OF OPERATION REQUIREMENTS.
4. HOURS OF CONSTRUCTION SHALL BE FROM 7 A.M. TO 8 P.M., UNLESS AUTHORIZED/REQUIRED
5. ONLY CLASSIFIED FILL MATERIALS SHALL BE USED.
6. ALL MATERIALS REMOVED FROM THE SITE SHALL BE DISPOSED OF IN A LEGAL MANNER. CONTRACTOR IS TO PROVIDE CERTIFICATION AND RECEIPTS OF THE DISPOSAL LOCATION(S) TO THE OWNER.
7. THE CONTRACTOR IS RESPONSIBLE FOR DUST CONTROL ALONG ALL HAUL ROUTES, AND SHALL IMPLEMENT APPROPRIATE ACTIONS TO MINIMIZE DUST AND TRACKING ONTO THE STREETS. ALL STREETS ARE TO BE KEPT CLEAR OF DIRT AND DEBRIS. STREETS SHALL BE SWEEP IMMEDIATELY WHEN DIRT HAS BEEN TRACKED ONTO THE PAVED SURFACES.
8. ALL CLASSIFIED FILLS SHALL BE INSTALLED IN 12" LIFTS (MAXIMUM) AND COMPACTED TO 95% OF MAXIMUM DENSITY.
9. CONTRACTOR SHALL PROVIDE ALL REQUIRED TRAFFIC CONTROL. A TRAFFIC CONTROL PLAN SHALL BE SUBMITTED AND APPROVED REGULATORY AGENCIES FOR APPROVAL PRIOR TO CONSTRUCTION.
10. CONTROL POINT #107 SHALL BE PERPETUATED BY THE CONTRACTOR'S SURVEYOR IN ACCORDANCE WITH ALASKA STATUTE 34,65.040.
11. CONSTRUCTION WILL BE SUBJECT TO TRAIN SCHEDULING. "TRACK CONTROL" IS REQUIRED FOR THIS PROJECT AND WILL BE PROVIDED BY ARRC.



**BURIED UTILITIES NOTE**  
 UNDERGROUND UTILITY SURVEY NOT CONDUCTED. CALL THE ALASKA DIGLINE (811) AND VERIFY ALL UNDERGROUND UTILITIES PRIOR TO DIGGING

**GENERAL NOTES & DEMOLITION PLAN**

Demolition and affected work area is shown in RED



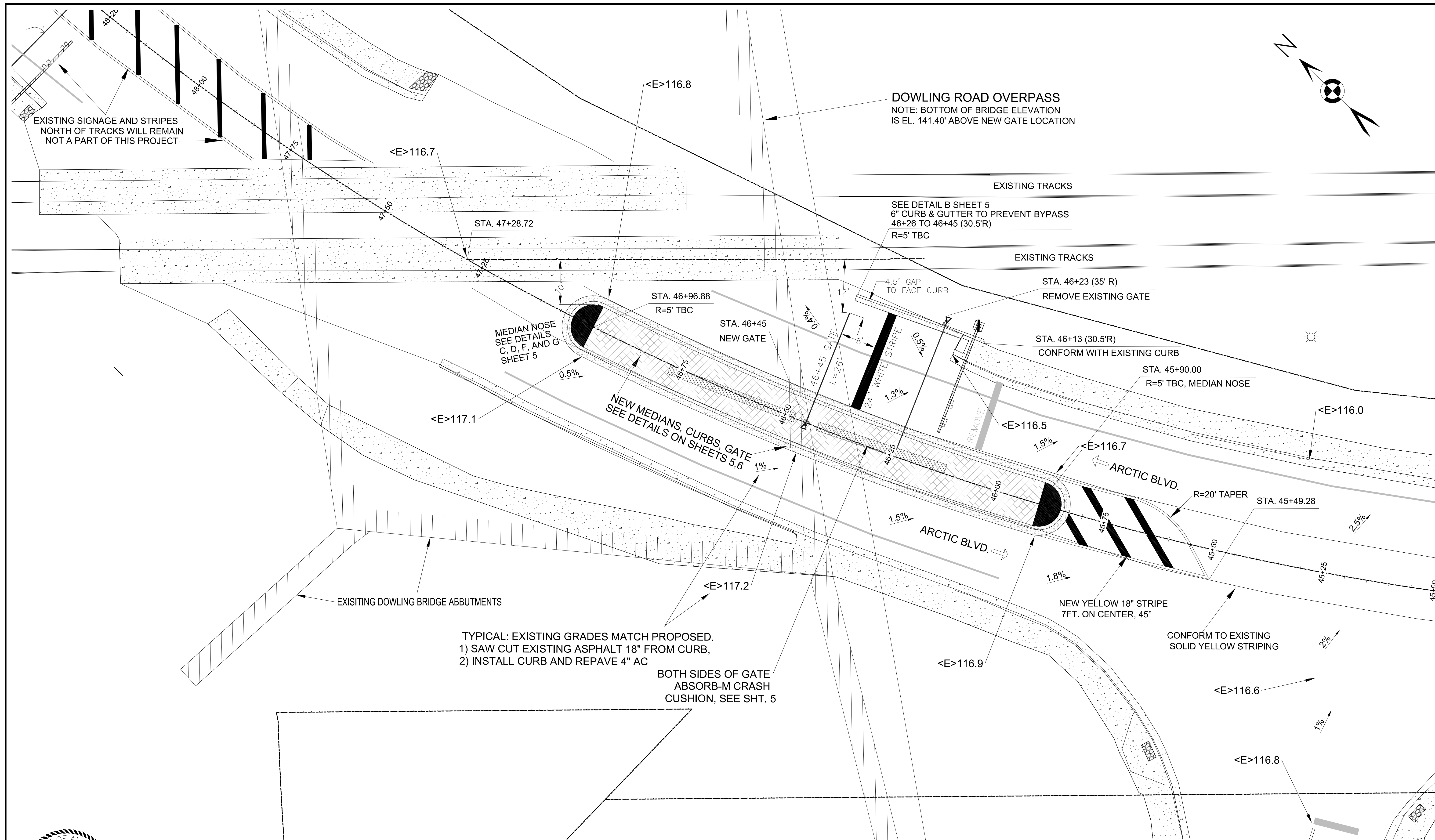
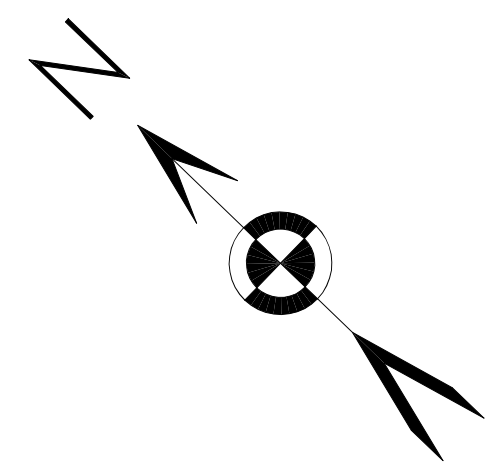
**STATEMENT OF WORK AND QUANTITIES**

THE PURPOSE OF THIS PROJECT IS TO RE-ESTABLISH THE ARRC CROSSING GATE SHOWN AT A CLOSER LOCATION TO THE TRACKS, AND TO CONTROL TRAFFIC AND PROTECT THE GATE WITH A MEDIAN. THIS PROJECT WILL REQUIRE:

QUANTITY	DESCRIPTION (SHEET SHOWN)
ALL REQ'D	TRAFFIC CONTROL (ALL SHEETS)
ALL REQ'D	CONSTRUCTION SURVEYING (ALL SHEETS)
<b>DEMOLITION ITEMS</b>	
2044 S.F.	SAW CUT/DEMOLITION/DISPOSAL OF PAVING (SHEET 3)
20 L.F.	SAW CUT/DEMOLITION/DISPOSAL OF SIDEWALK (SHEET 3)
2 EA.	REMOVE TYPE 1 J-BOXES AS SHOWN (SHEET 7)
1 EA.	REMOVE EXISTING GATE (SHEET 3)
<b>UTILITY ITEMS</b>	
1 EA.	TYPE 1 J-BOX (SHEET 7)
2 EA.	TYPE II J-BOXES (SHEET 7)
250 L.F.	4" PVC CONDUIT (SHEET 7)
30 C.Y.	SELECT BEDDING MATERIAL, (3'x1'x250L.F./27, SHEET 7)
75 L.F. +/-	DIRECTIONAL DRILLING FOR 4" CONDUIT
NOTE: ELECTRICAL CONTROLS SETUP TO BE PROVIDED BY ARRC.	
<b>ROADWAY ITEMS</b>	
260 L.F.	CURB AND GUTTER (DETAIL A SHEET 5)
30 L.F.	CURB AND GUTTER (DETAIL B SHEET 5)
20 L.F.	REPLACE AS FOUND EXISTING 5' SIDEWALK (SHEET 3)
16 C.Y.	MEDIAN CONCRETE (DETAIL C,D,E SHEET 5)
30 C.Y.	4" BASE GRADING, D-1 (.33x2400S.F./27, ALL PAVED/CONC AREAS)
ALL REQ'D	TRAFFIC PAINT (SHEETS 4 & 5)
2 EA.	MUTCD SIGN R4-7 (DETAIL G SHEET 5)
8 EA.	FLEXIBLE POST DELINEATOR (DETAIL F SHEET 5)
<b>ARRC GATE ITEMS</b>	
ALL REQ'D	ALL WORK ASSOCIATED WITH INSTALLING GATE AT NEW LOCATION (SHT. 6)

SYM.	REVISIONS	DATE	BY		CLIENT	ALASKA RAILROAD	JOB NUMBER	20-16		
					PROJECT	ARCTIC AND DOWLING CROSSING				
					SHEET TITLE	GENERAL NOTES, QUANTITIES, & DEMOLITION PLAN				
									SCALE	1" = 20 FEET (22"x34" Sheet)
									DATE	6/19/2020
									SHEET NO	3 of 7





EXISTING SIGNAGE AND STRIPES NORTH OF TRACKS WILL REMAIN NOT A PART OF THIS PROJECT

**DOWLING ROAD OVERPASS**  
NOTE: BOTTOM OF BRIDGE ELEVATION IS EL. 141.40' ABOVE NEW GATE LOCATION

SEE DETAIL B SHEET 5  
6" CURB & GUTTER TO PREVENT BYPASS  
46+26 TO 46+45 (30.5'R)  
R=5' TBC

STA. 47+28.72

STA. 46+96.88  
R=5' TBC

STA. 46+45  
NEW GATE

STA. 46+23 (35' R)  
REMOVE EXISTING GATE

STA. 46+13 (30.5'R)  
CONFORM WITH EXISTING CURB

STA. 45+90.00  
R=5' TBC, MEDIAN NOSE

MEDIAN NOSE  
SEE DETAILS  
C, D, F, AND G  
SHEET 5

NEW MEDIANS, CURBS, GATE  
SEE DETAILS ON SHEETS 5,6

ARCTIC BLVD.

ARCTIC BLVD.

R=20' TAPER  
STA. 45+49.28

EXISTING DOWLING BRIDGE ABUTMENTS

TYPICAL: EXISTING GRADES MATCH PROPOSED.  
1) SAW CUT EXISTING ASPHALT 18" FROM CURB,  
2) INSTALL CURB AND REPAVE 4" AC

BOTH SIDES OF GATE  
ABSORB-M CRASH  
CUSHION, SEE SHT. 5

NEW YELLOW 18" STRIPE  
7FT. ON CENTER, 45°

CONFORM TO EXISTING  
SOLID YELLOW STRIPING



6-19-2020

**BURIED UTILITIES NOTE**  
UNDERGROUND UTILITY SURVEY NOT CONDUCTED. CALL THE ALASKA DIGLINE (811) AND VERIFY ALL UNDERGROUND UTILITIES PRIOR TO DIGGING



SYM.	REVISIONS	DATE	BY

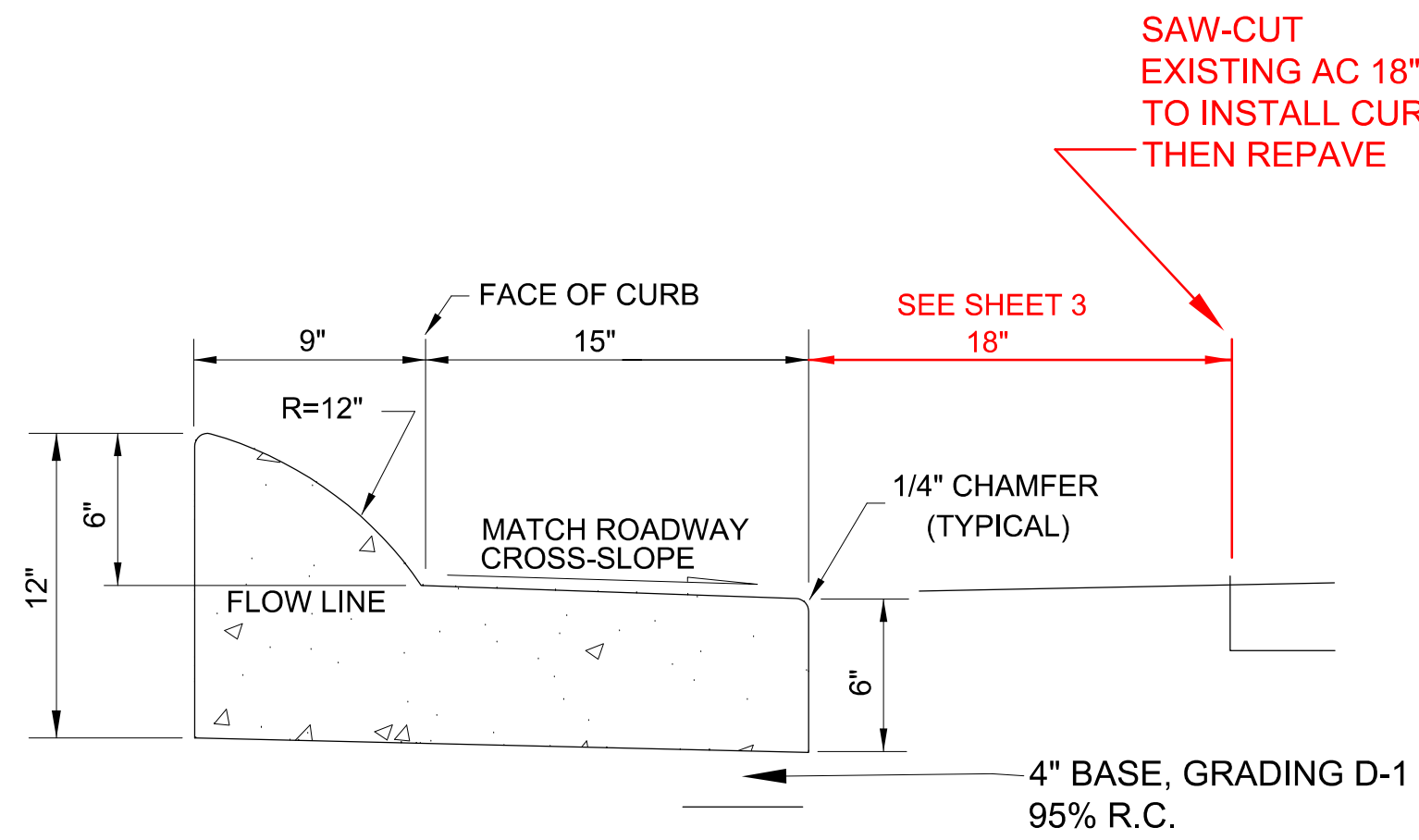


CLIENT: ALASKA RAILROAD  
 PROJECT: ARCTIC AND DOWLING CROSSING  
 SHEET TITLE: PROPOSED SITE PLAN

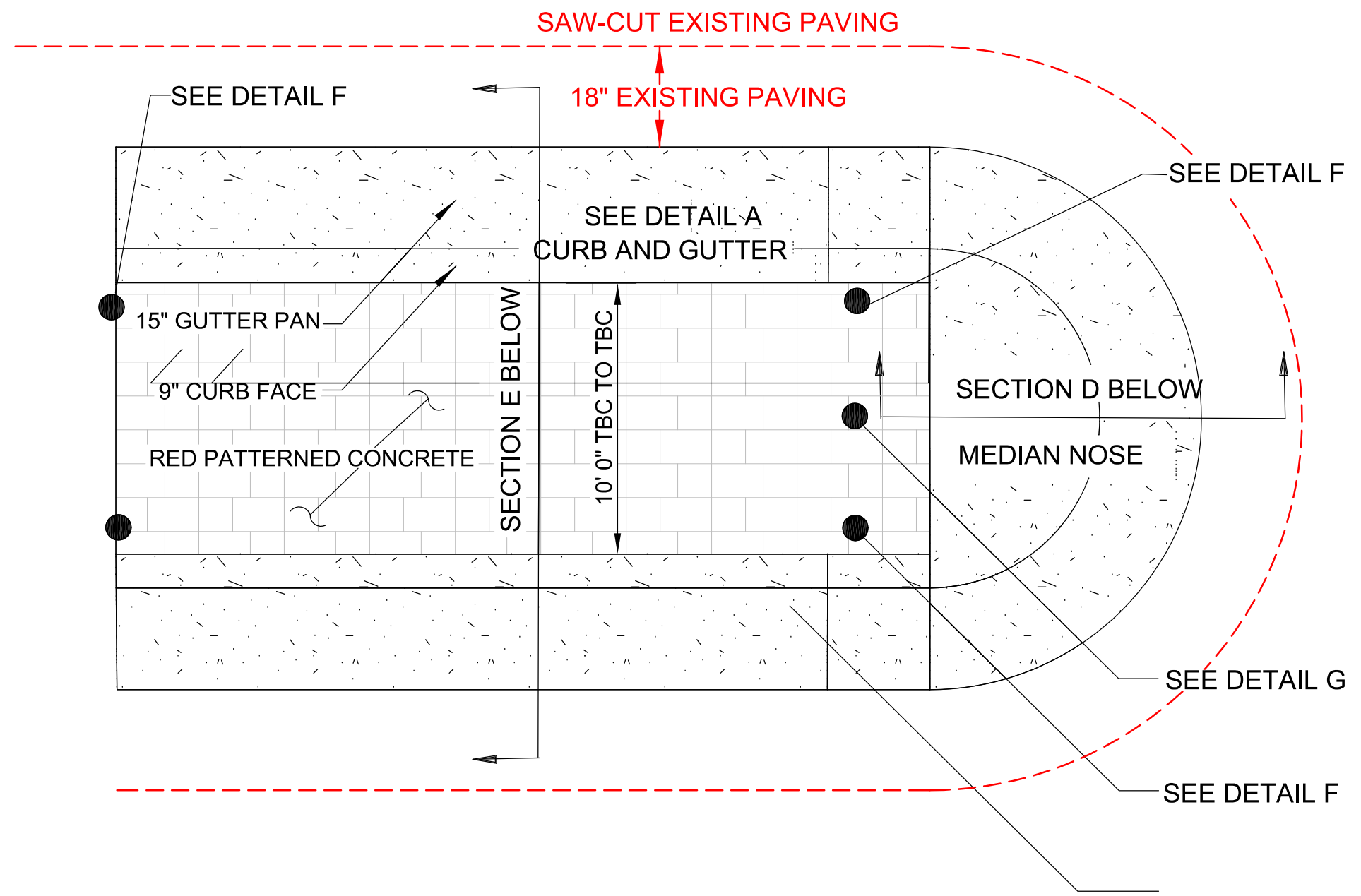
JOB NUMBER: 20-16

SCALE: 1" = 10 FEET (22"x34" Sheet)  
 DATE: 6/19/2020  
 SHEET NO: 4 of 7

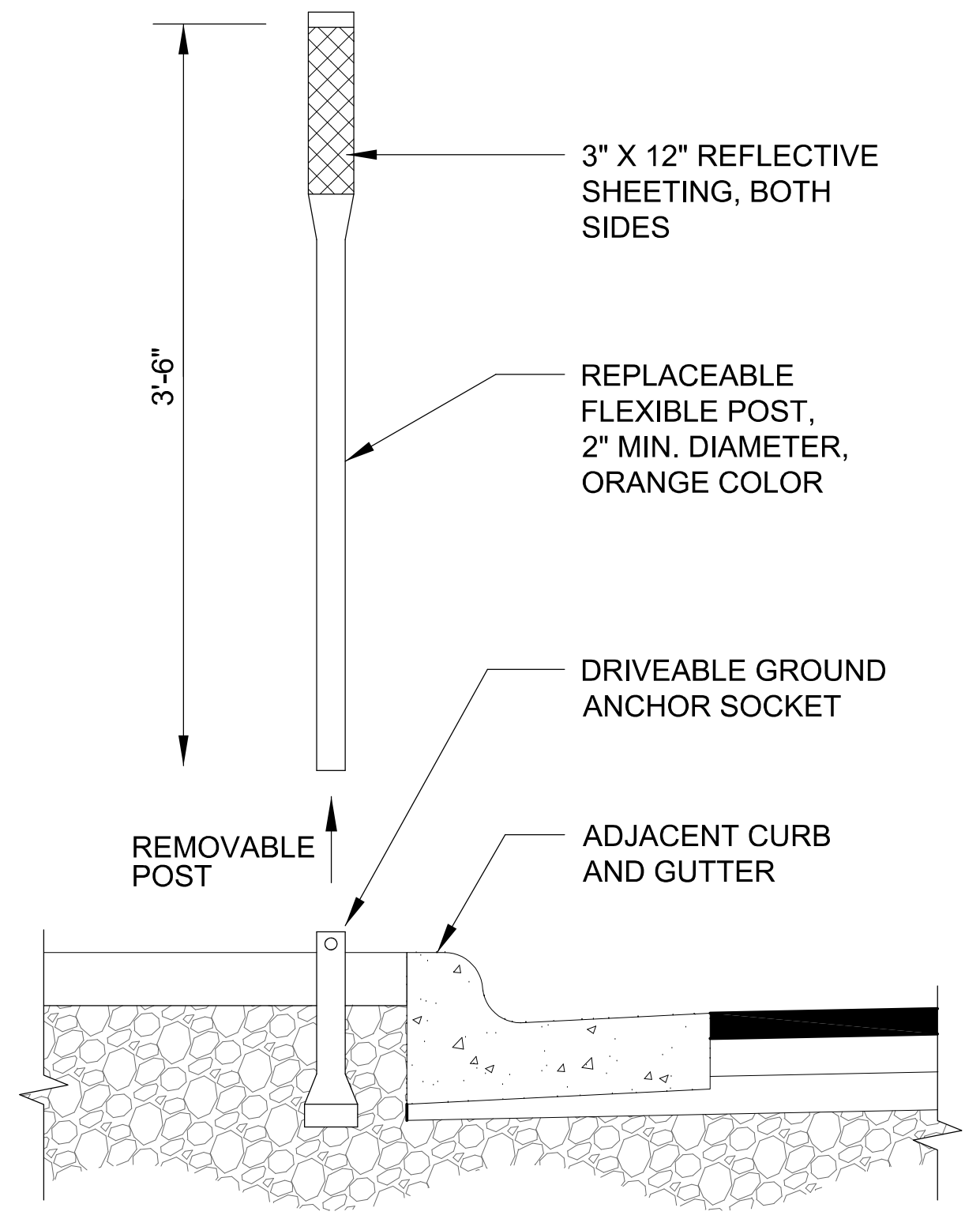




**A** ISLAND CURB AND GUTTER

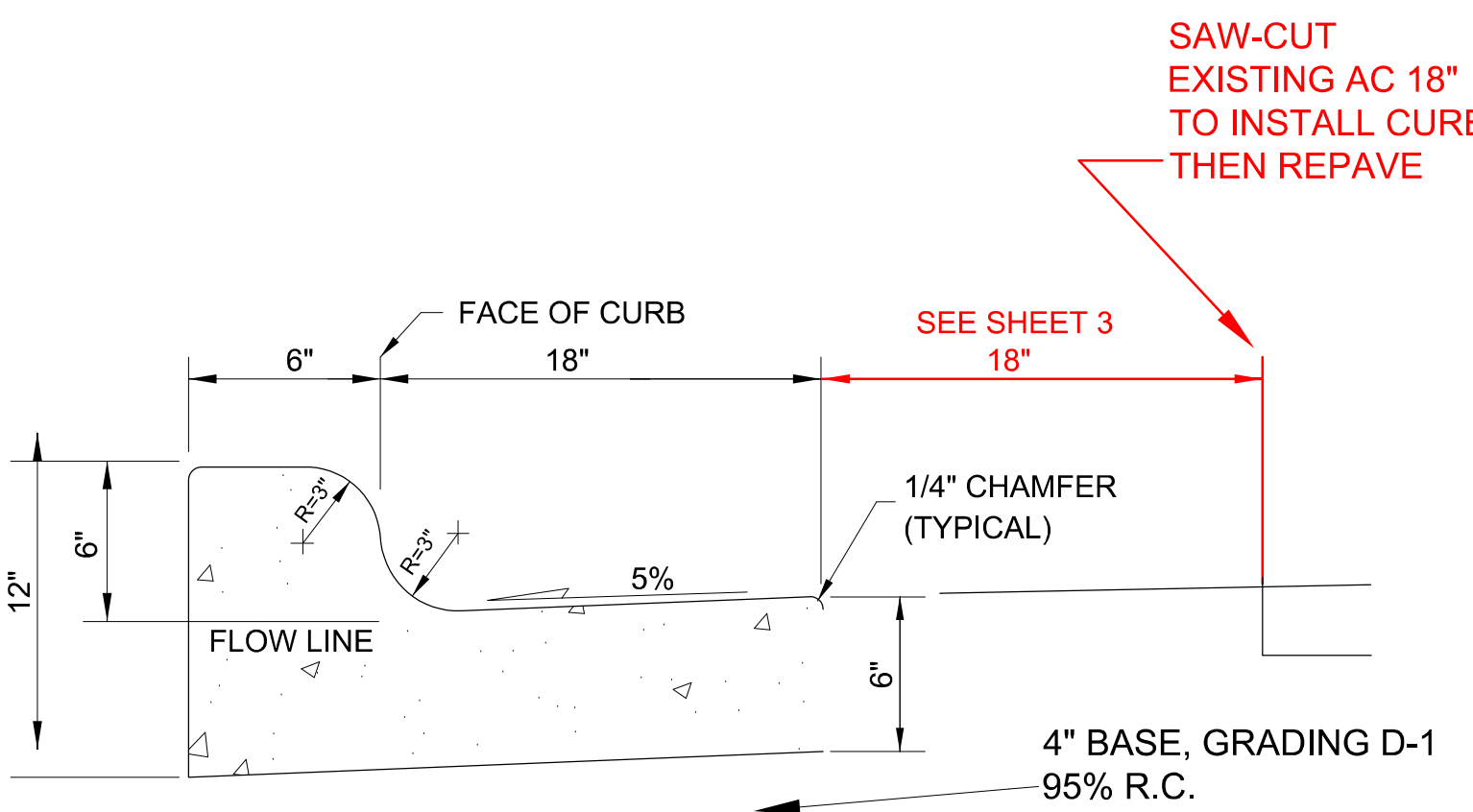


**C** MEDIAN AND NOSE PLAN DETAIL

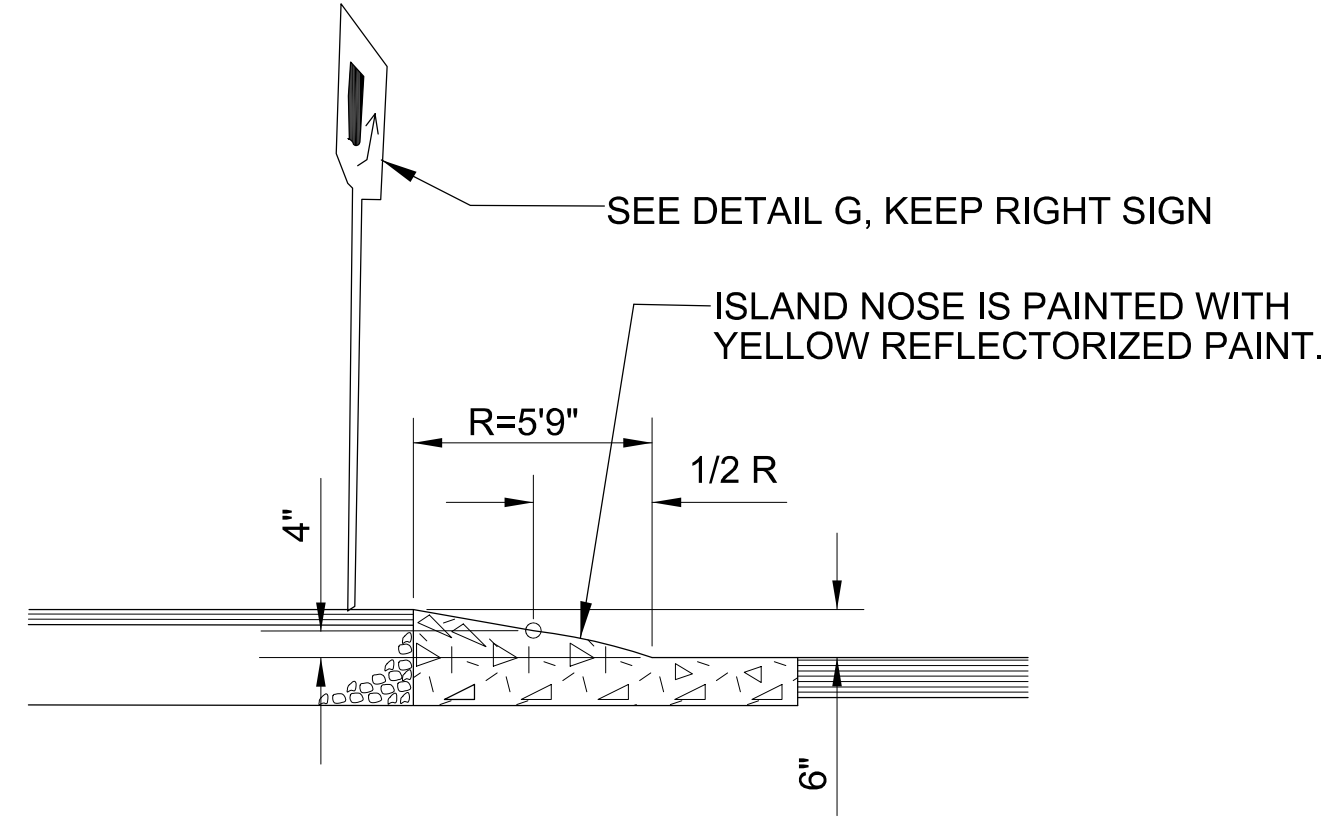


1. INSTALL FLEXIBLE DELINEATORS AS SHOWN ON DETAIL C AND AS DIRECTED BY THE ENGINEER. 8 TOTAL REQUIRED.
2. CENTER POINT OF THE DELINEATOR IS MEASURED 6" FROM THE BACK OF CURB.
3. WHEN DELINEATORS ARE SET IN CONCRETE PAVEMENT, PLACE THEM IN EXPANSION JOINTS IF POSSIBLE.

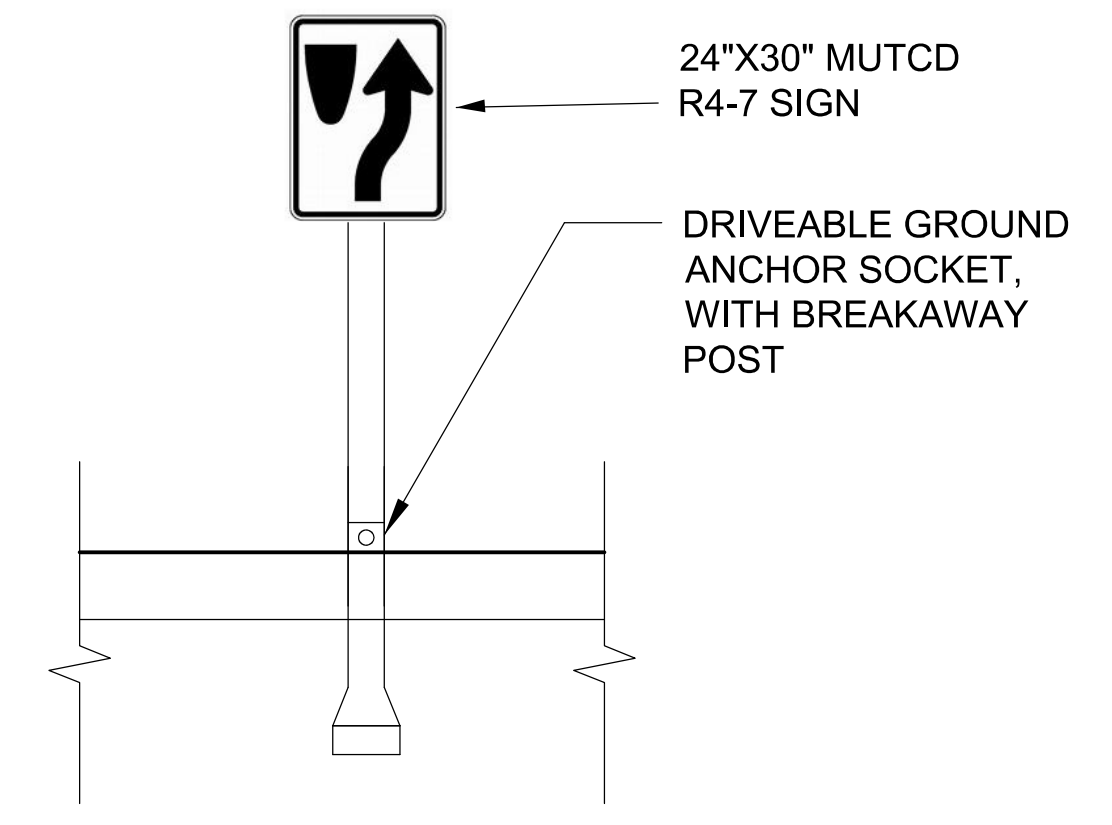
**F** FLEXIBLE POST DELINEATOR



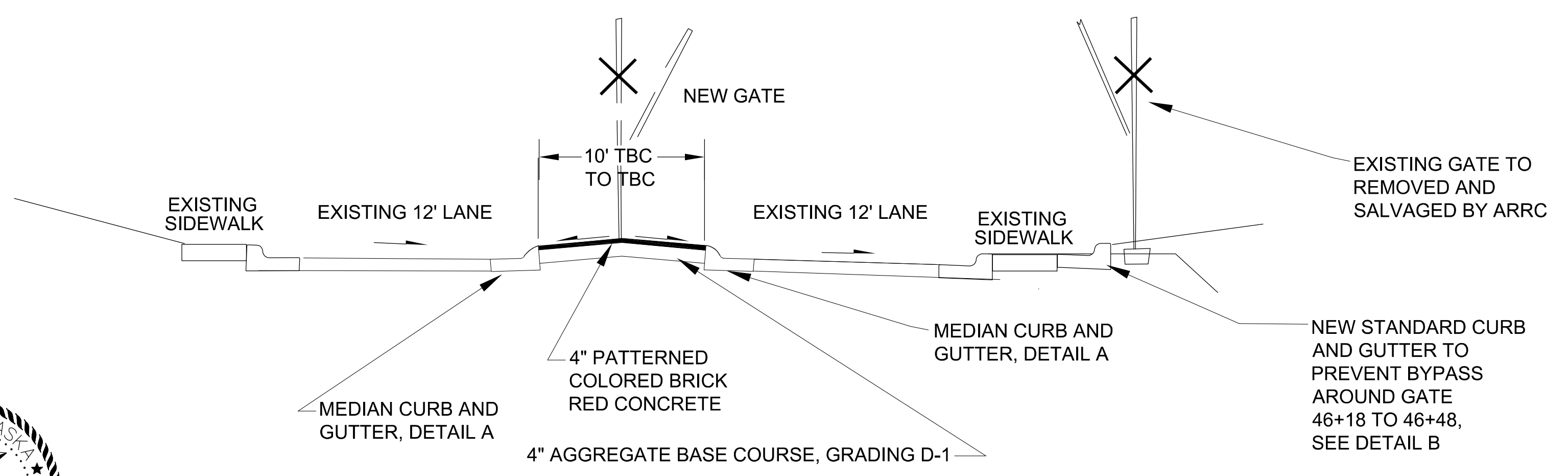
**B** STANDARD CURB AND GUTTER



**D** MEDIAN NOSE CROSS SECTION



**G** MUTCD R4-7 MEDIAN SIGN

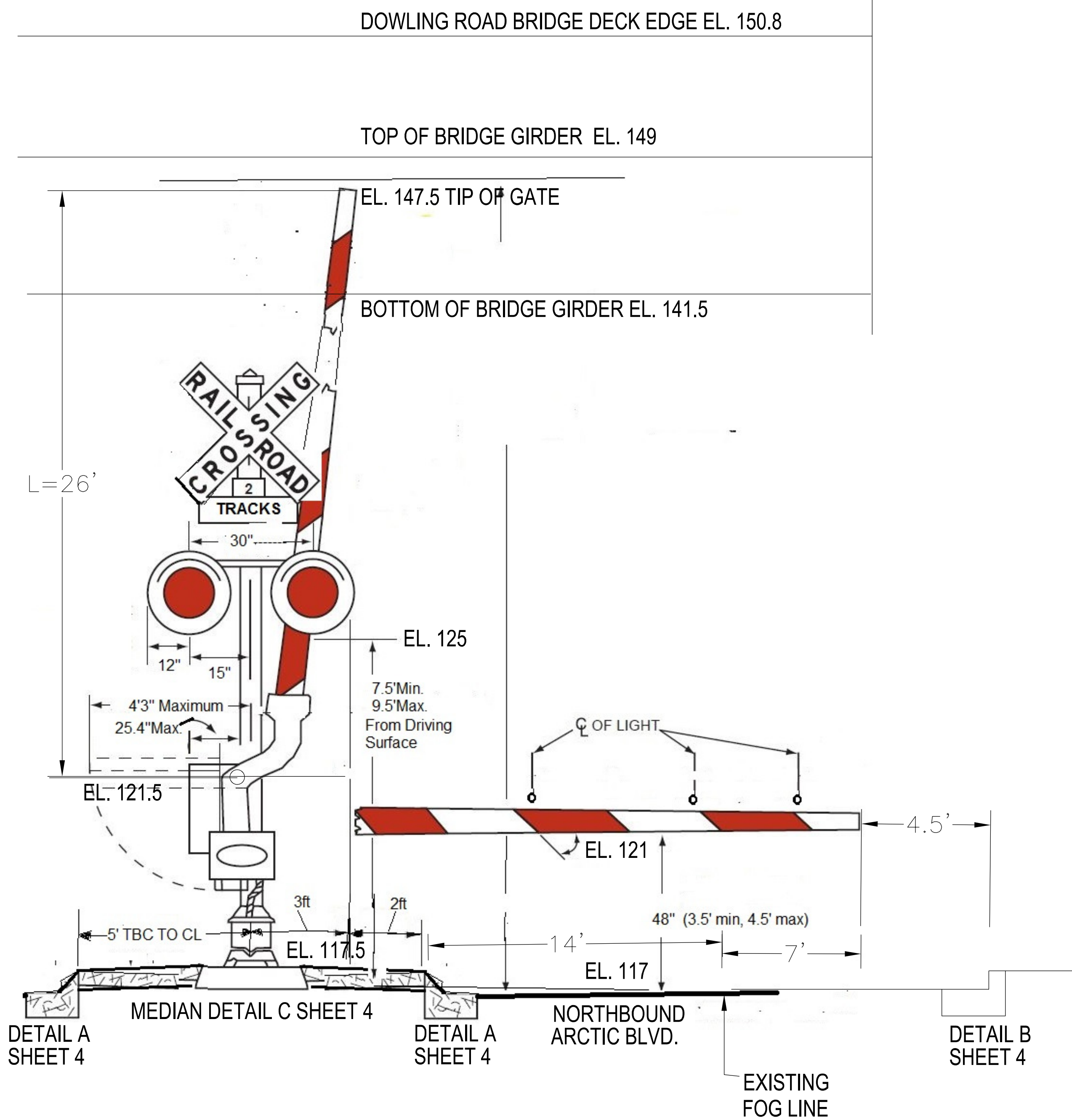


**E** MEDIAN CROSS SECTION, VIEW NORTHERLY



				CLIENT <b>ALASKA RAILROAD</b>	JOB NUMBER 20-16
PROJECT <b>ARCTIC AND DOWLING CROSSING</b>				DATE 6/19/2020	
SHEET TITLE <b>DETAILS - Streets and Signage</b>				SHEET NO <b>5 of 7</b>	
SYM.	REVISIONS	DATE	BY		





**TRAFFIC CONTROL GATE**

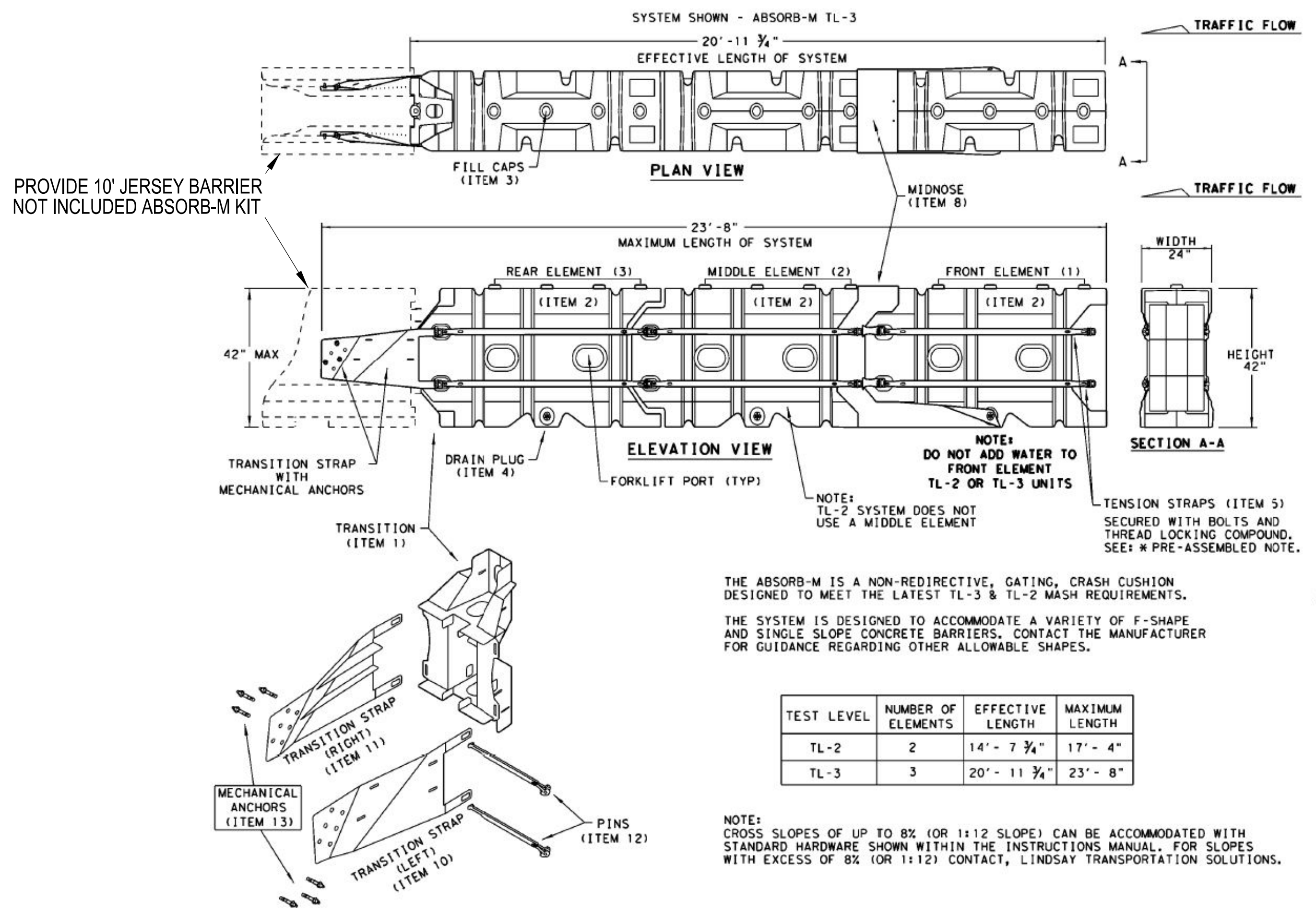
NOTE: GATE INSTALLED BY ARRC  
 GATE PYRAMID FOUNDATION INSTALLED BY CONTRACTOR  
 REFERENCE ARRC STANDARD PLANS: S22-51.04, S22-52.04, S22-24.04



6-19-2020



INSTALL DIAGONAL STRIPES  
 DOWN RIGHT, AS SHOWN,  
 TO INDICATE RIGHT OF STRUCTURE  
 TRAFFIC FLOW.

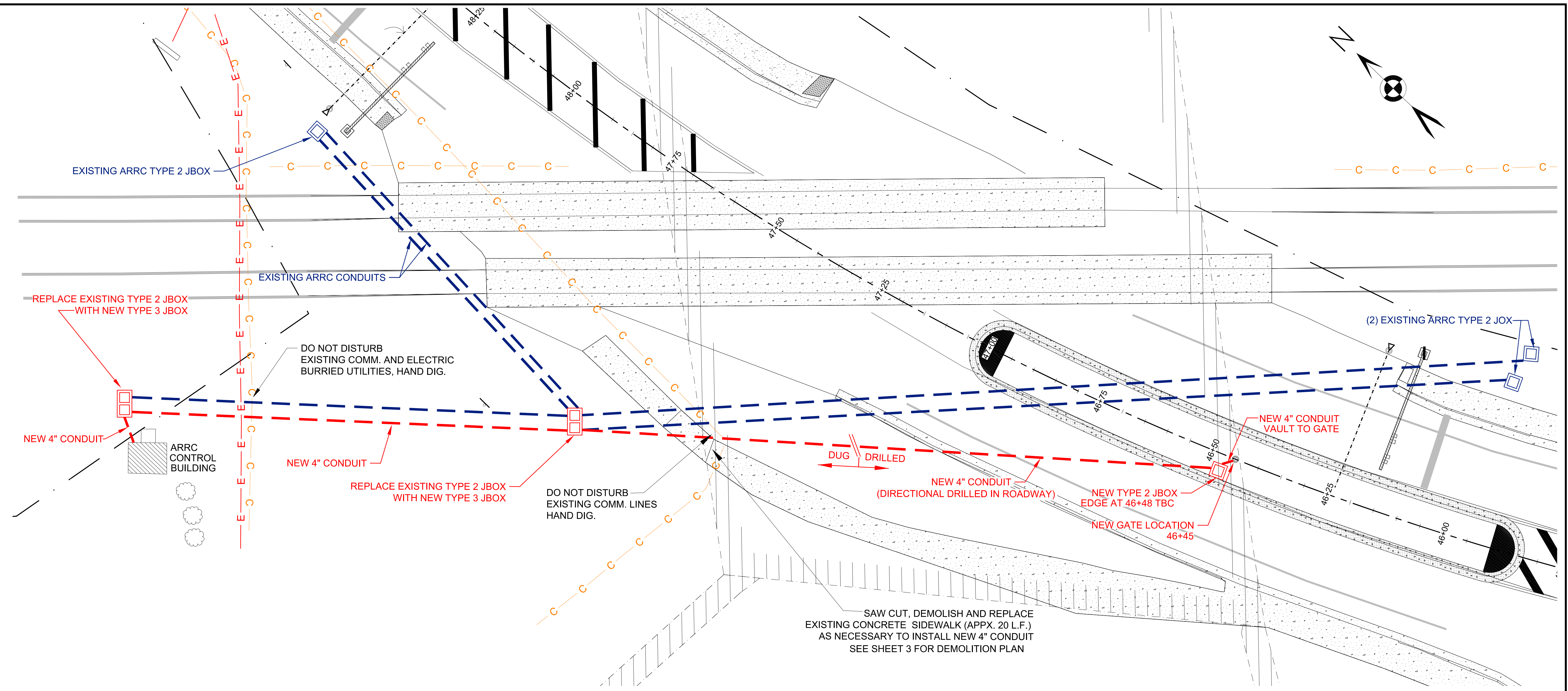
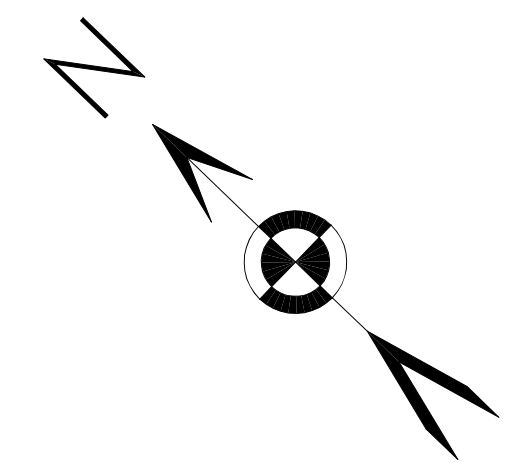


**ABSORB-M TL-3 CRASH CUSHION**

INSTALL PER MANUFACTURERS RECOMMENDATIONS  
 AVAILABLE FROM NORTHWEST BARRIERS LLC, WASILLA, ALASKA  
 OR ENGINEER APPROVED EQUIVALENT

CLIENT	ALASKA RAILROAD	JOB NUMBER	20-16	SCALE	Not To Scale
PROJECT	ARCTIC AND DOWLING CROSSING	DATE	6-19-2020	SHEET NO	6 of 7
SHEET TITLE	DETAILS - Gate and Crash Cushion				
SYM.	REVISIONS	DATE	BY	ALL POINTS NORTH	





REPLACE EXISTING TYPE 2 JBOX WITH NEW TYPE 3 JBOX

EXISTING ARRC CONDUITS

DO NOT DISTURB EXISTING COMM. AND ELECTRIC BURIED UTILITIES, HAND DIG.

NEW 4" CONDUIT



NEW 4" CONDUIT

REPLACE EXISTING TYPE 2 JBOX WITH NEW TYPE 3 JBOX

DO NOT DISTURB EXISTING COMM. LINES HAND DIG.

DUG DRILLED

NEW 4" CONDUIT (DIRECTIONAL DRILLED IN ROADWAY)

NEW TYPE 2 JBOX EDGE AT 46+48 TBC

NEW GATE LOCATION 46+45

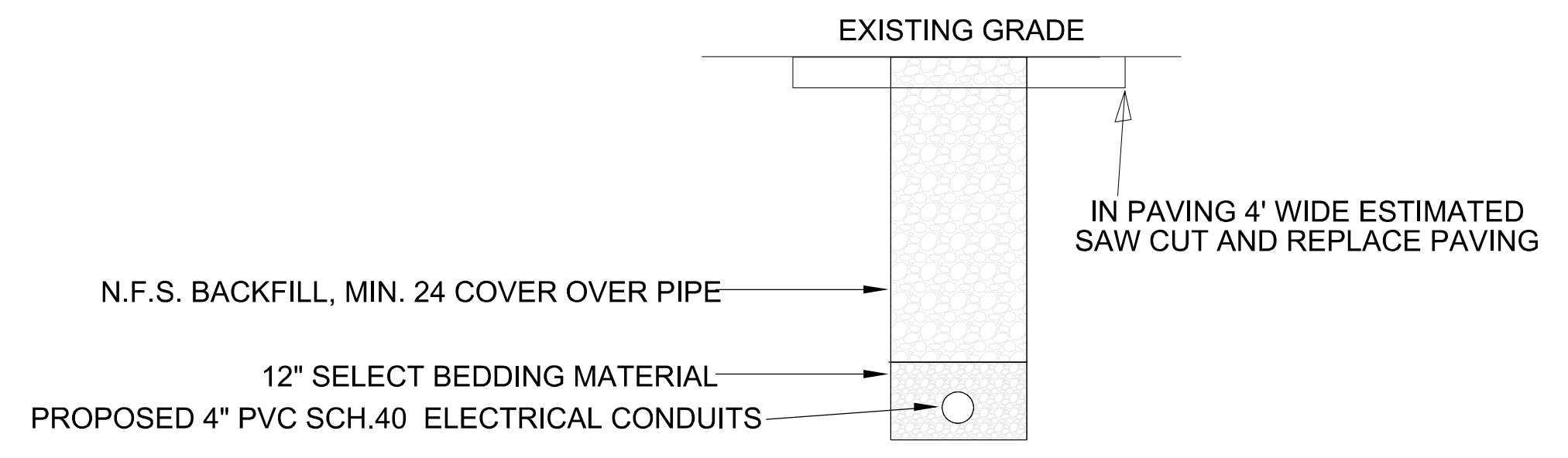
NEW 4" CONDUIT VAULT TO GATE

(2) EXISTING ARRC TYPE 2 JOX

SAW CUT, DEMOLISH AND REPLACE EXISTING CONCRETE SIDEWALK (APPX. 20 L.F.) AS NECESSARY TO INSTALL NEW 4" CONDUIT SEE SHEET 3 FOR DEMOLITION PLAN



UTILITY PLAN



TYPICAL SECTION UTILITY TRENCH  
N.T.S.

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SYM.	REVISIONS	DATE	BY



CLIENT	ALASKA RAILROAD	JOB NUMBER	20-16
PROJECT	ARCTIC AND DOWLING CROSSING		
SHEET TITLE	UTILITY PLAN		

SCALE	1" = 10 FEET (22"x34" Sheet)
DATE	6/19/2020
SHEET NO	7 of 7