

FILE G:\USERS\MOHENSCH\ONE DRIVE\STATE OF ALASKA\58976 PARKS HWY BRIDGE REPLACEMENT MONTANA GK SHEEP
G:\CA\CH3D19\PLANS\58976 A1 N A2 ILL.DWG

DATE/TIME 9/9/2020 9:41 AM LAYOUT A1

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STATE OF ALASKA

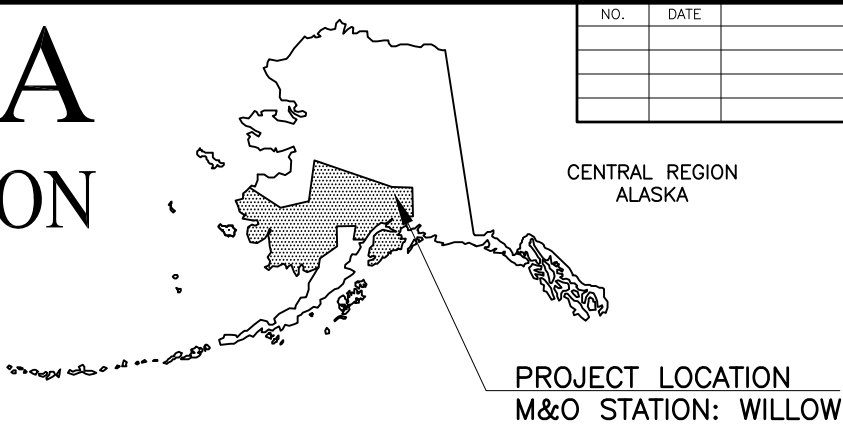
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

PROPOSED HIGHWAY PROJECT

PARKS HIGHWAY BRIDGE REPLACEMENTS: MONTANA CREEK, SHEEP CREEK, AND GOOSE CREEK

**PROJECT NO. 0A41034/Z589760000 &
PROJECT NO. 0A41036/CFHWY00217**

GRADING, BRIDGES, DRAINAGE, PAVING, GUARDRAIL, SIGNING,
AND STRIPING

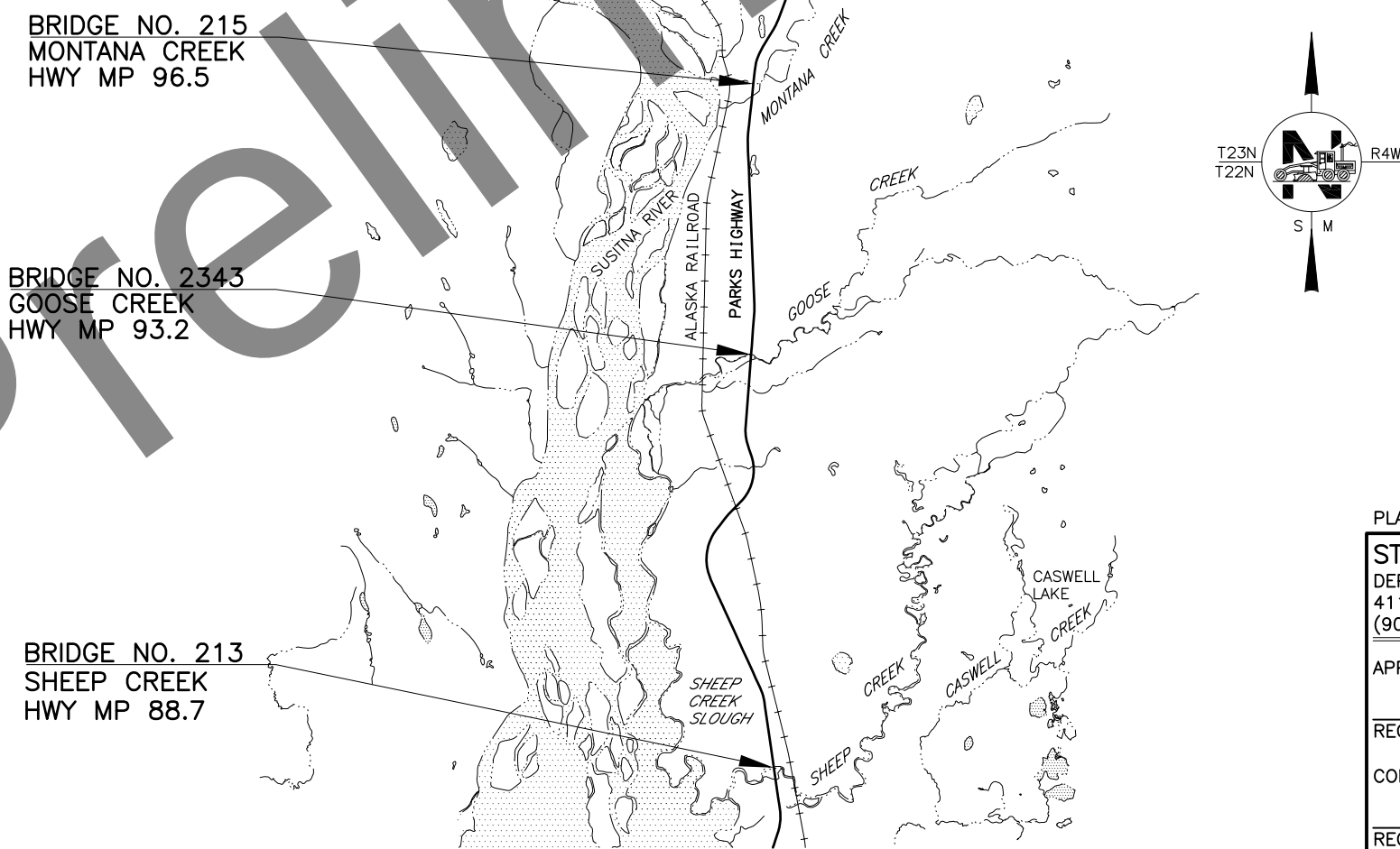


NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0A41034/Z589760000 0A41036/CFHWY00217	2021	A1	A4
			ROUTE ID	1140000I000	MILEPOINT	53.0 - 61.4	
			LATITUDE	62.061492	LONGITUDE	-150.060583	

PROJECT SUMMARY		
ROADWAY	WIDTH	LENGTH
PARKS HIGHWAY MP 88.7 BRIDGE NO. 213 (SHEEP CREEK)	40 FT 54.3 FT	2,075 FT 234 FT
PARKS HIGHWAY MP 93.2 BRIDGE NO. 2343 (GOOSE CREEK)	40 FT 43 FT	1,450 FT 150 FT
PARKS HIGHWAY MP 96.5 BRIDGE NO. 215 (MONTANA CREEK)	40 FT 54.3 FT	3,820 FT 246 FT

DESIGN DESIGNATIONS	
PARKS HIGHWAY	
FUNCTIONAL CLASS	RURAL PRINCIPAL ARTERIAL
AADT (2016)	3,517
AADT (2038)	4,397
DESIGN SPEED (V) (MPH)	70
DHV (2016) (%)	17.2
DHV (2038) (%)	17.2
T-PERCENT COMMERCIAL TRUCKS (%)	16.5
D-DIRECTIONAL DISTRIBUTION (%)	60/40

**PS&E REVIEW
2020**



PLANS DEVELOPED BY:

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
4111 AVIATION AVENUE, ANCHORAGE, AK 99502
(907)269-0590

APPROVED:

REGIONAL PRE-CONSTRUCTION ENGINEER	DATE
CONCUR:	
REGIONAL CONSTRUCTION ENGINEER	DATE

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A41034/Z589760000 0A41036/CFHWY00217	2021	A2	A4

THERE SHALL BE NO PAYMENT FOR ADDITIONAL WORK CAUSED BY FAILURE TO ADJUST PAVEMENT PENETRATIONS TO FINAL GRADE.

INDEX	
SHEET NO.	DESCRIPTION
A1	TITLE SHEET
A2	SHEET LAYOUT, INDEX, AND GENERAL NOTES
A3	LEGEND
A4	SURVEY CONTROL SHEET(S)
B1-B2	TYPICAL SECTIONS
C1-C2	ESTIMATE OF QUANTITIES
D0-D3	SUMMARY TABLES
E1-E6	DETAIL SHEETS
F1-F8	PLAN AND PROFILE, MAINLINE
F9-F11	PLAN AND PROFILE, APPROACH, SHEEP CREEK
F12-F14	PLAN AND PROFILE, PATH, SHEEP CREEK
F15-F16	PLAN AND PROFILE, APPROACH, GOOSE CREEK
F17-F20	PLAN AND PROFILE, APPROACH, MONTANA CREEK
F21-F23	PLAN AND PROFILE, PATH, MONTANA CREEK
H1-H10	SIGNING AND STRIPING
N1-N26	BRIDGE SHEETS - SHEEP CREEK
N27-N51	BRIDGE SHEETS - MONTANA CREEK
N52-N69	BRIDGE SHEETS - GOOSE CREEK

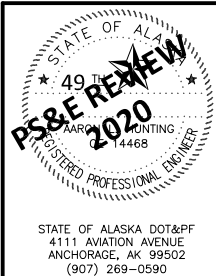
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IN THE EVENT OF CONFLICT, CENTRAL REGION STANDARD DETAILS
SUPERSEDE ALASKA STANDARD PLANS, STANDARD MODIFICATIONS, AND
STANDARD SPECIFICATIONS. PLANS AND SPECIAL PROVISIONS
SUPERSEDE CENTRAL REGION STANDARD DETAILS.

D-01.02, D-04.22, D-06.10, D-07.00, D-30.11
G-00.05, G-05.11S, G-05.11W, G-10.20, G-20.12, G-29.00, G-32.01
S-00.12, S-05.02, S-30.05, S-31.02, S-32.02
T-25.10

ASP = ALASKA STANDARD PLANS
CL = CENTERLINE
OHW = ORDINARY HIGH WATER
PH = PARKS HIGHWAY
ROW = RIGHT-OF-WAY

CONSTRUCT THE IMPROVEMENTS COVERED BY THESE PLANS IN ACCORDANCE WITH THE ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES 2020 STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION AND THE PROJECT SPECIAL PROVISIONS.



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

**PARKS HWY BRIDGE REPLACEMENTS:
MONTANA CREEK, SHEEP CREEK,
AND GOOSE CREEK**

SHEET LAYOUT, INDEX, AND GENERAL NOTES

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FILE\CA\CA3D19\PLANSET\58976-A3-LGND.DWG

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LAYOUT

ROADWAY

	EXISTING	PROPOSED
EDGE OF PAVEMENT		
LIMIT OF CUT SLOPE & FILL SLOPE		
GRAVEL EDGE		
SIDEWALK AND PATH/TRAIL		
CONCRETE CURB & GUTTER		
CONCRETE CURB CUT		
PARALLEL CURB RAMP PERPENDICULAR CURB RAMP		
UNIDIRECTIONAL CURB RAMP & MID-BLOCK CURB RAMP		
DETECTABLE WARNING TILE		
BRIDGE		
TUNNEL		
GUARDRAIL		
END & PARALLEL END SECTIONS		
ROADWAY OBLITERATION		
FENCE		
STONE FENCE		
NOISE BARRIER		
RETAINING WALL		
HEADWALL & WINGWALL		
BOTTOM OF DITCH		
SPECIAL DITCH		
FLAT BOTTOM DITCH		
BERM		
RIPRAP		
BOULDER OR BOULDERS		
PRIVATE SIGN, MAILBOX		
POST, BOLLARD		
PEDESTRIAN RAILING		
MISC-WOOD-STRUCTURES		
JERSEY BARRIER		

TOPOGRAPHY

	EXISTING
LAKE OR POND, WETLANDS	
TREE (CONIFER/DECIDUOUS) TREELINE (EDGE OF VEGETATION)	
PLANTER	
BUILDING OR FOUNDATION	

	EXISTING	PROPOSED
STORM DRAIN		
STORM DRAIN MANHOLE, CLEANOUT		
CURB INLET CATCH BASIN FIELD INLET CATCH BASIN		
PIPE CULVERT WITH END SECTION		
SANITARY SEWER		
SANITARY SEWER MANHOLE, CLEANOUT		
SEPTIC VENT, SEWER SERVICE CONNECTION		
WATER		
FIRE HYDRANT, VALVE OR RISER		
WELL, WATER SERVICE CONNECTION		
NATURAL GAS		
OIL OR GASOLINE PIPELINE		
TANKS (ABOVE GROUND, UNDERGROUND)		
ELECTRIC		
UTILITY POLE, POLE WITH LUMINAIRE		
GUY POLE, GUY WIRE ANCHOR		
TRANSMISSION TOWER (WOOD, STEEL)		
ELECTRIC PEDESTAL, TRANSFORMER		
ELECTRIC MANHOLE, METER		
ELECTRIC OUTLET, LANDSCAPE LIGHT		
TELEPHONE		
TELEPHONE MANHOLE, PEDESTAL		
FIBER OPTIC		
FIBER OPTIC MANHOLE		
CABLE TV		
CABLE TV PEDESTAL, SATELLITE DISH		
UNDERGROUND DUCT, UTILIDOR (ELECTRIC, TELEPHONE, FIBER OPTIC)		
VENT		

UTILITIES

TRAFFIC

LOAD CENTER		
STATE TRAFFIC, MOA TRAFFIC, & BEACON CONTROLLER ARROW INDICATES DOOR LOCATION		
TYPE 1A, II, III, IV JUNCTION BOX		
FIBER OPTIC VAULT		
ELECTROLIER		
HIGHTOWER		
SIGNAL POLE WITH MASTARM		
PEDESTRIAN PUSH BUTTON & SIGNAL		
VEHICULAR SIGNAL		
VEHICULAR SIGNAL LEFT & RIGHT		
OPTICAL, CAMERA, RADAR, AND GPS DETECTOR		
LOOP DETECTOR		
COMMUNICATION ANTENNA		
MASTARM BEACON		
RURAL & SCHOOL ZONE BEACON		
LOOP DETECTOR CONDUIT		
SIGNAL CONDUIT		
LIGHTING CONDUIT		
SIGNAL & LIGHTING CONDUIT		
CONDUIT BORING		
CONDUIT SIZE IN INCHES		
INTERCONNECT		
SIGN POST		

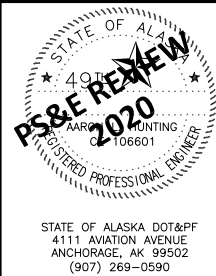
PAVEMENT MARKINGS

	PROPOSED
TRAFFIC PROJECT CENTERLINE	
8" & 4" WHITE SOLID STRIPE	
4" WHITE SKIP STRIPE 10' STRIPES AND 30' SPACES	
8" WHITE LANE GUIDE SKIP LANE CONTINUATION OR TURN SKIP 1' STRIPES AND 3' SPACES	
8" & 4" YELLOW SOLID STRIPE	
4" YELLOW SKIP STRIPE 10' STRIPES AND 30' SPACES	
STRIPING CHANGE STATION INTERVAL	
2' CROSSWALK OR STOPBAR	
LADDER CROSSWALK LAYOUT 2' WIDE RUNGS WITH 2' SPACES ALIGNED TO AVOID TIRE PATHS	
TYPICAL PAINTED MEDIAN	

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A41034/Z589760000 0A41036/CFHWY00217	2021	A3	A4

RIGHT-OF-WAY

	RECOVERED	SET THIS PROJECT
FEDERAL GOV'T SURVEY MONUMENT		
GOV'T CONTROL STATION		
PRIMARY MONUMENT (BRASS/AL CAP)		
MISC SECONDARY CORNER		
PRIMARY CENTERLINE MONUMENT		
SECONDARY CENTERLINE MONUMENT		
RANDOM CONTROL MONUMENT		
PRIMARY GPS CONTROL POINT		
HORIZONTAL CONTROL POINT		
SECONDARY CONTROL POINT		
VERTICAL BENCHMARK		
TEMPORARY BENCHMARK		
TOWNSHIP AND RANGE LINES		
SECTION LINE		
1/4 SECTION LINE		
1/16 SECTION LINE		
CORPORATE or CITY LIMITS		
EXISTING RIGHT-OF-WAY		
RIGHT-OF-WAY OR EASEMENT REQUIRED		
PROJECT RIGHT-OF-WAY LINE		
EXISTING RIGHT-OF-WAY EASEMENT		
EXISTING PROPERTY LINE		
CONTROLLED ACCESS LINE		
EXISTING UTILITY EASEMENT		
PROPOSED UTILITY EASEMENT		
EXISTING CENTERLINE		
RAILROAD CENTERLINE		
TEMPORARY CONSTRUCTION EASEMENT		
TEMPORARY CONSTRUCTION PERMIT		



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
**PARKS HWY BRIDGE REPLACEMENTS:
MONTANA CREEK, SHEEP CREEK,
AND GOOSE CREEK**

LEGEND

G:\USERS\MBHENSON\DRIVE - STATE OF ALASKA\58976 PARKS HWY BRIDGE REPLACEMENT MONTANA CREEK SHEEP
FILE: ICA-GW3D19-PLANSET-58976-B1-B3_TYP.DWG

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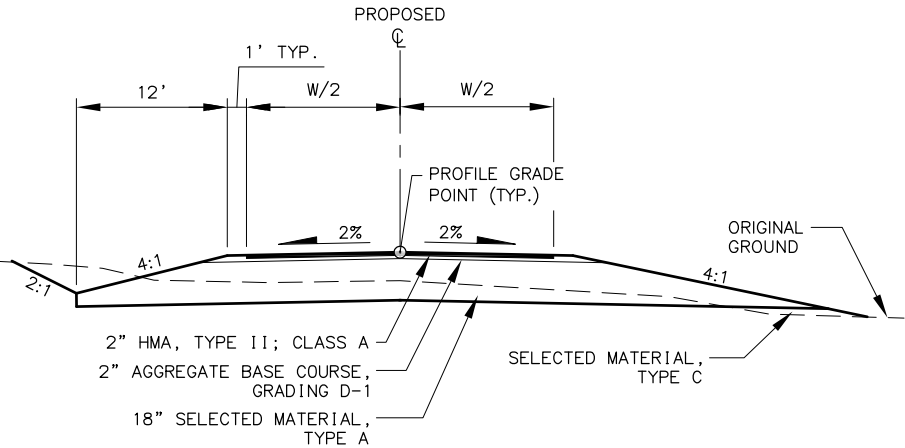
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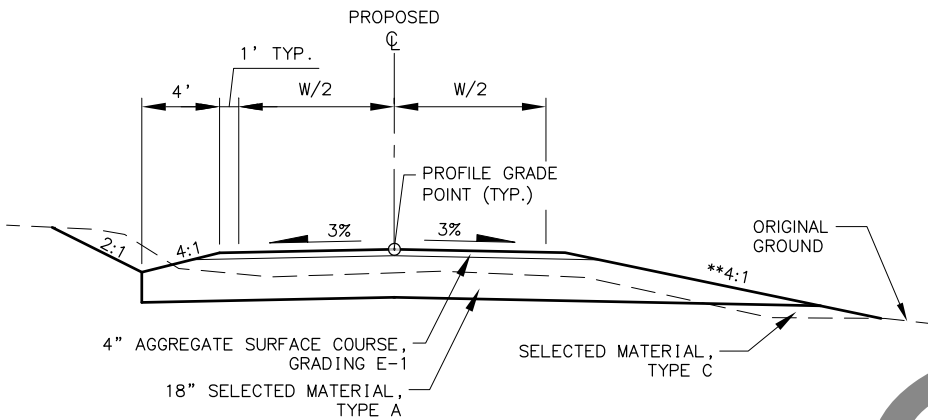
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	OA41034/Z589760000 OA41036/CFHWY00217	2021	B2	B2

APPROACH NOTES:

1. SEE APPROACH SUMMARY TABLE FOR WIDTH (W) AT FURTHEST RADIUS RETURN.



PAVED APPROACH

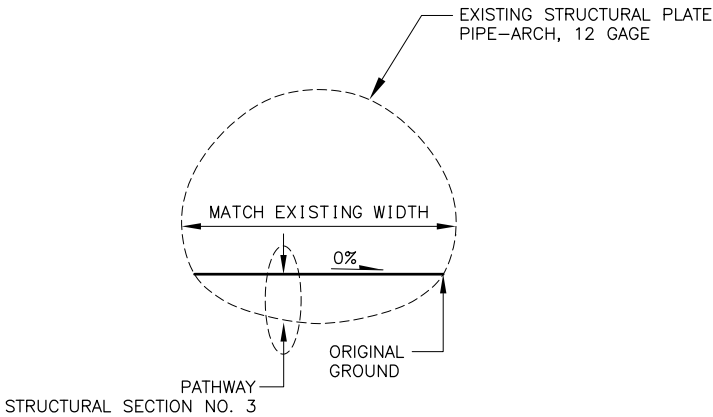


UNPAVED APPROACH

**SEE APPROACH PLAN AND PROFILE SHEETS FOR SLOPE EXCEPTIONS

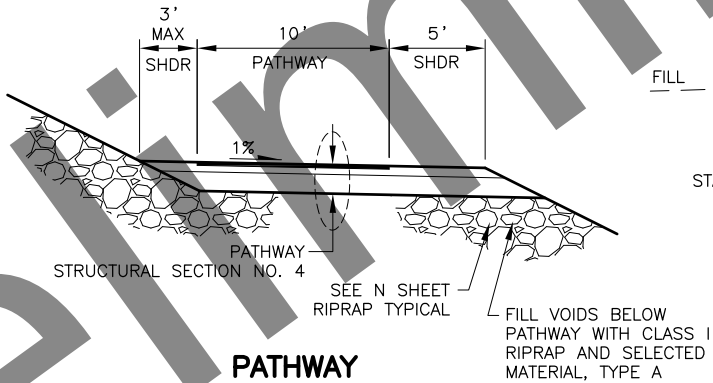
PATHWAY NOTES:

1. SEE SHOULDER LAYOUT SCHEDULE IN THE PATHWAY F SHEETS FOR SHOULDER TAPERS.
2. FOR SHOULDER, USE AGGREGATE BASE COURSE, GRADING D-1.
- ③ USE 10% FILL SLOPE WHEN SHOULDER HINGE IS BELOW ORIGINAL GROUND.
- ④ USE 2:1 FILL SLOPE FOR STA. 104+02.09 RT. TO STA. 107+20.79 RT.
- ⑤ TARGET LEFT SHOULDER HINGE OF SAME PROPOSED PATHWAY (AS IT LOOPS AROUND). SLOPES VARY. GRADE TO DRAIN AWAY FROM ROADWAY.
- ⑥ USE A MINIMUM TRANSITION LENGTH OF 5 FT. FOR EACH 1 PERCENT CHANGE IN CROSS SLOPE.
7. SEE N SHEETS FOR PATHWAY STRUCTURAL SECTION ON THE BRIDGES.



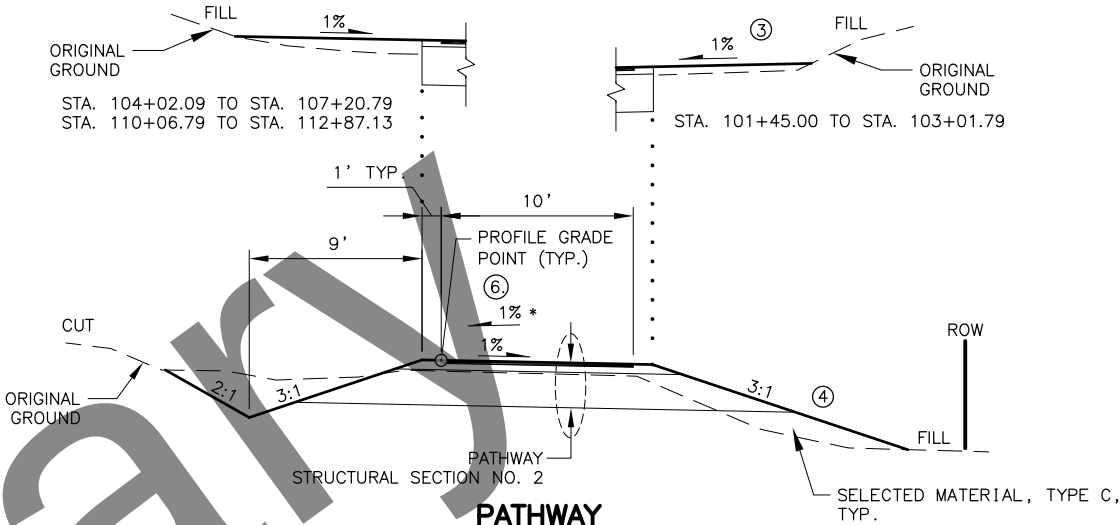
PEDESTRIAN UNDERCROSSING

SHEEP CREEK SITE
STA. 1+09.85 TO STA. 2+17.20
MONTANA CREEK SITE
STA. 103+01.79 TO STA. 104+02.09
STA. 112+87.13 TO STA. 113+94.24



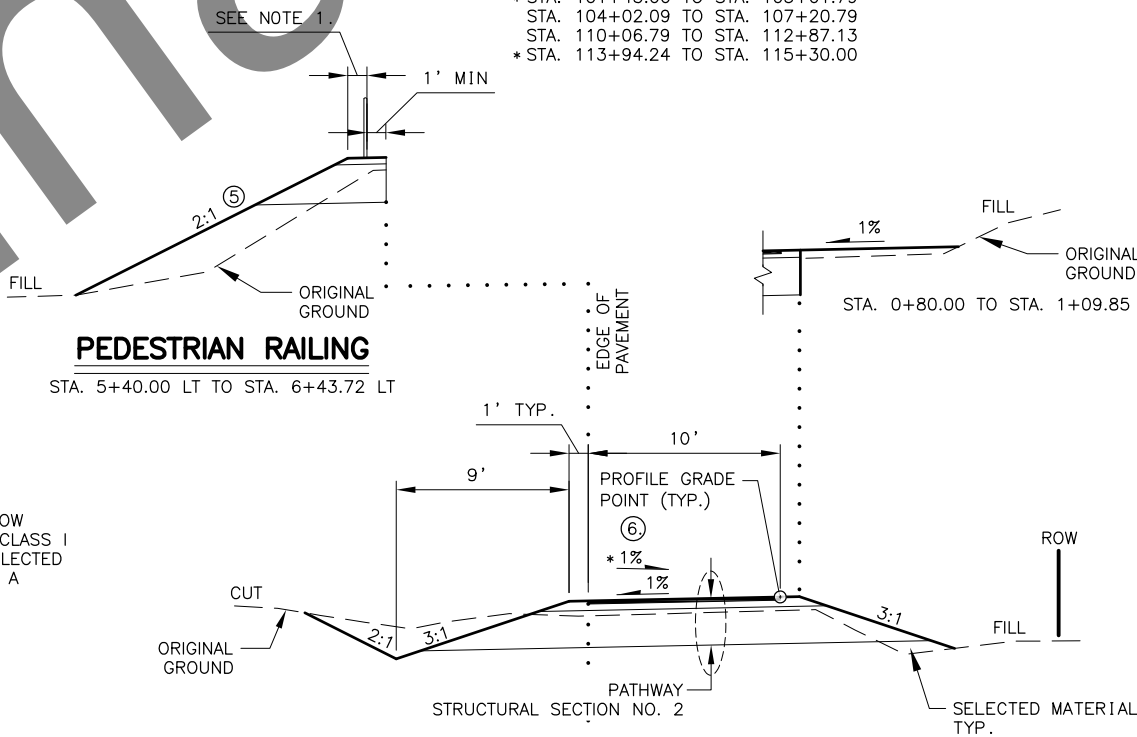
PATHWAY

SHEEP CREEK SITE
STA. 13+20.87 TO STA. 13+75.21



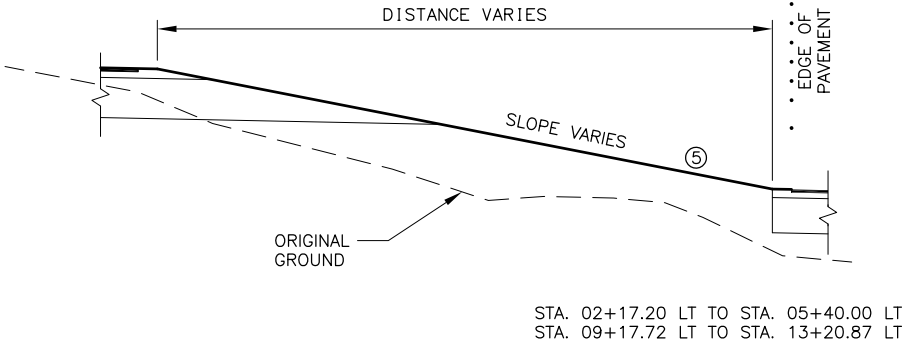
PATHWAY

MONTANA CREEK SITE
* STA. 101+45.00 TO STA. 103+01.79
STA. 104+02.09 TO STA. 107+20.79
STA. 110+06.79 TO STA. 112+87.13
* STA. 113+94.24 TO STA. 115+30.00



PEDESTRIAN RAILING

STA. 5+40.00 LT TO STA. 6+43.72 LT



STA. 02+17.20 LT TO STA. 05+40.00 LT
STA. 09+17.72 LT TO STA. 13+20.87 LT



STATE OF ALASKA DOT&PF
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ANCHORAGE, AK 99502
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STATE OF ALASKA
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**PARKS HWY BRIDGE REPLACEMENTS:
MONTANA CREEK, SHEEP CREEK,
AND GOOSE CREEK**

TYPICAL SECTIONS

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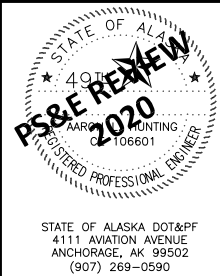
DATE/TIME

STATE OF ALASKA\58976 PARKS HWY BRIDGE REPLACEMENT MONTANA GK SHEEP

FILE

ESTIMATE OF QUANTITIES					
ITEM NO.	ITEM DESCRIPTION	PAY UNIT	QUANTITIES		
			SHEEP & MONTANA	GOOSE	TOTAL
201.0003.0000	CLEARING AND GRUBBING	ACRE	22.4	6.4	28.8
202.0001.0000	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	L.S.	ALL REQ'D	-	ALL REQ'D
202.0002.0000	REMOVAL OF PAVEMENT	S.Y.	25,700	5,600	31,300
202.0004.0000	REMOVAL OF CULVERT PIPE	L.F.	550	110	660
202.0018.0000	REMOVAL OF CULVERT PIPE - BRIDGE NO. 4040	L.S.	-	ALL REQ'D	ALL REQ'D
202.0023.0000	REMOVAL OF BRIDGE - NO. 1984, PEDESTRIAN	L.S.	ALL REQ'D	-	ALL REQ'D
202.0023.0000	REMOVAL OF BRIDGE - NO. 1992, PEDESTRIAN	L.S.	ALL REQ'D	-	ALL REQ'D
202.0023.0000	REMOVAL OF BRIDGE NO. 213	L.S.	ALL REQ'D	-	ALL REQ'D
202.0023.0000	REMOVAL OF BRIDGE NO. 215	L.S.	ALL REQ'D	-	ALL REQ'D
203.0003.0000	UNCLASSIFIED EXCAVATION	C.Y.	99,000	24,500	123,500
203.0006.0000	BORROW	TON	76,000	17,600	93,600
205.0006.0000	STRUCTURAL FILL	C.Y.	3,150	1,550	4,700
206.0001.0000	FILTER BLANKET	C.Y.	-	413	413
301.0001.00D1	AGGREGATE BASE COURSE, GRADING D-1	TON	6,750	1,600	8,350
301.0003.00E1	AGGREGATE SURFACE COURSE, GRADING E-1	TON	1,400	203	1,603
306.0001.0000	ATB	TON	2,700	970	3,670
306.0002.5240	ASPHALT BINDER, GRADE PG 52-40	TON	143	51	194
306.2002.0000	ASPHALT MATERIAL PRICE ADJUSTMENT	C.S.	ALL REQ'D	ALL REQ'D	ALL REQ'D
401.0001.002A	HMA, TYPE II; CLASS A	TON	4,350	880	5,230
401.0004.5240	ASPHALT BINDER, GRADE PG 52-40	TON	231	47	278
401.2022.0000	COMBINED PRICE ADJUSTMENT	C.S.	ALL REQ'D	ALL REQ'D	ALL REQ'D
406.0006.0000	RUMBLE STRIPS, SHOULDERS	STA.	90	22	112
501.0001.0000	CLASS A CONCRETE	L.S.	ALL REQ'D	ALL REQ'D	ALL REQ'D
501.0007.0000	PRECAST CONCRETE MEMBER, 115'-6" DECKED BULB-TEE	EACH	20	-	20
501.0007.0000	PRECAST CONCRETE MEMBER, 121'-6" DECKED BULB-TEE	EACH	20	-	20
501.0007.0000	PRECAST CONCRETE MEMBER, 147'-6" DECKED BULB-TEE	EACH	-	8	8
503.0001.0000	REINFORCING STEEL	L.S.	ALL REQ'D	ALL REQ'D	ALL REQ'D
503.0002.0000	EPOXY-COATED REINFORCING STEEL	L.S.	ALL REQ'D	ALL REQ'D	ALL REQ'D
505.0005.1417	FURNISH STRUCTURAL STEEL PILES, HP 14X117	L.F.	1,631	1,281.2	2,912.2
505.0005.2405	FURNISH STRUCTURAL STEEL PILES, 2'-0" DIA x 1/2" PIPE	L.F.	1,462	-	1,462
505.0005.3675	FURNISH STRUCTURAL STEEL PILES, 3'-0" DIA x 3/4" PIPE	L.F.	1,284	-	1,284
505.0006.1417	DRIVE STRUCTURAL STEEL PILES, HP 14X117	EACH	16	14	30
505.0006.2405	DRIVE STRUCTURAL STEEL PILES, 2'-0" DIA x 1/2" PIPE	EACH	16	-	16
505.0006.3675	DRIVE STRUCTURAL STEEL PILES, 3'-0" DIA x 3/4" PIPE	EACH	11	-	11
507.0001.0002	STEEL BRIDGE RAILING, 2-TUBE	L.F.	560	380	940
507.0001.0003	STEEL BRIDGE RAILING, 3-TUBE	L.F.	560	-	560
507.0002.0000	PEDESTRIAN RAILING	L.F.	560	-	560
508.0001.0000	WATERPROOFING MEMBRANE, SPRAY-APPLIED	L.S.	ALL REQ'D	ALL REQ'D	ALL REQ'D
520.0001.0000	TEMPORARY CROSSINGS - GOOSE CREEK	L.S.	-	ALL REQ'D	ALL REQ'D
520.0001.0000	TEMPORARY CROSSINGS - MONTANA CREEK	L.S.	ALL REQ'D	-	ALL REQ'D
520.0001.0000	TEMPORARY CROSSINGS - SHEEP CREEK	L.S.	ALL REQ'D	-	ALL REQ'D
602.0002.1011	STRUCTURAL PLATE PIPE-ARCH 10'-11" SPAN, 7'-1" RISE, 10 GAGE	L.F.	-	226	226
603.0001.0024	CSP 24 INCH	L.F.	191	120	311
603.0001.0048	CSP 48 INCH	L.F.	340	-	340
603.0003.0024	END SECTION FOR CSP 24 INCH	EACH	6	6	12
603.0003.0048	END SECTION FOR CSP 48 INCH	EACH	4	-	4
606.0001.0000	W-BEAM GUARDRAIL	L.F.	1,687.5	437.5	2,125
606.0006.0000	REMOVING AND DISPOSING OF GUARDRAIL	L.F.	1,988	-	1,988

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0A41034/Z589760000 0A41036/CFHWY00217	2021	C1	C2



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

PARKS HWY BRIDGE REPLACEMENTS:
MONTANA CREEK, SHEEP CREEK,
AND GOOSE CREEK

ESTIMATE OF QUANTITIES

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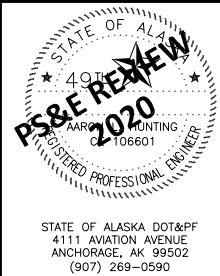
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ESTIMATE OF QUANTITIES					
ITEM NO.	ITEM DESCRIPTION	PAY UNIT	QUANTITIES		
			SHEEP & MONTANA	GOOSE	TOTAL
606.0013.0000	PARALLEL GUARDRAIL TERMINAL	EACH	8	4	12
606.0016.0000	TRANSITION RAIL	EACH	8	4	12
608.2002.0000	ASPHALT PATHWAY	TON	407	-	407
610.0002.0000	DITCH LINING	TON	40	2,350	2,390
611.0002.0001	RIPRAP, CLASS I	TON	5,950	1,050	7,000
611.0002.0002	RIPRAP, CLASS II	TON	770	2,250	3,020
611.0002.0003	RIPRAP, CLASS III	TON	-	3,800	3,800
611.0002.0004	RIPRAP, CLASS IV	TON	12,400	-	12,400
615.0001.0000	STANDARD SIGN	S.F.	130	14	144
615.0006.0000	SALVAGE SIGN	EACH	30	3	33
618.0002.0000	SEEDING	POUND	870	118	988
620.0001.0000	TOPSOIL	S.Y.	78,000	10,500	88,500
625.0001.0000	PIPE HAND RAIL	L.F.	140	-	140
630.0001.0003	GEOTEXTILE, SEPARATION, CLASS 3	S.Y.	5,350	35,478	40,828
630.0003.0001	GEOTEXTILE, REINFORCEMENT - TYPE 1	S.Y.	470	-	470
631.0002.0001	GEOTEXTILE, EROSION CONTROL, CLASS I	S.Y.	3,000	1,500	4,500
633.0001.0000	SILT FENCE	L.F.	2,500	470	2,970
639.2000.0000	APPROACH	EACH	11	4	15
640.0001.0000	MOBILIZATION AND DEMOBILIZATION	L.S.	ALL REQ'D	ALL REQ'D	ALL REQ'D
640.0004.0000	WORKER MEALS AND LODGING, OR PER DIEM	L.S.	ALL REQ'D	ALL REQ'D	ALL REQ'D
641.0001.0000	EROSION, SEDIMENT AND POLLUTION CONTROL ADMINISTRATION	L.S.	ALL REQ'D	ALL REQ'D	ALL REQ'D
641.0005.0000	TEMPORARY EROSION, SEDIMENT AND POLLUTION CONTROL BY DIRECTIVE	C.S.	ALL REQ'D	ALL REQ'D	ALL REQ'D
641.0006.0000	WITHHOLDING	C.S.	ALL REQ'D	ALL REQ'D	ALL REQ'D
641.0007.0000	SWPPP MANAGER	L.S.	ALL REQ'D	ALL REQ'D	ALL REQ'D
642.0001.0000	CONSTRUCTION SURVEYING	L.S.	ALL REQ'D	ALL REQ'D	ALL REQ'D
642.0003.0000	THREE PERSON SURVEY PARTY	HOURL	100	50	150
642.2006.0000	CONTRACTOR-FURNISHED ENGINEERING TOOLS	C.S.	ALL REQ'D	ALL REQ'D	ALL REQ'D
643.0002.0000	TRAFFIC MAINTENANCE	L.S.	ALL REQ'D	ALL REQ'D	ALL REQ'D
643.0003.0000	PERMANENT CONSTRUCTION SIGNS	L.S.	ALL REQ'D	ALL REQ'D	ALL REQ'D
643.0023.0000	TRAFFIC PRICE ADJUSTMENT	C.S.	ALL REQ'D	ALL REQ'D	ALL REQ'D
643.0025.0000	TRAFFIC CONTROL	C.S.	ALL REQ'D	ALL REQ'D	ALL REQ'D
643.0032.0000	FLAGGING	C.S.	ALL REQ'D	ALL REQ'D	ALL REQ'D
644.0001.0000	FIELD OFFICE	L.S.	ALL REQ'D	ALL REQ'D	ALL REQ'D
644.0002.0000	FIELD LABORATORY	L.S.	ALL REQ'D	ALL REQ'D	ALL REQ'D
644.0015.0000	NUCLEAR TESTING EQUIPMENT STORAGE SHED	EACH	1	0	1
644.2004.0000	ENGINEERING COMMUNICATIONS	C.S.	ALL REQ'D	ALL REQ'D	ALL REQ'D
644.2007.0000	VEHICLE (LT/SUV)	EACH	2	1	3
645.0001.0000	TRAINING PROGRAM, 1 TRAINEES/APPRENTICES	LABOR HOUR	2,000	1,000	3,000
646.0001.0000	CPM SCHEDULING	L.S.	ALL REQ'D	ALL REQ'D	ALL REQ'D
646.2000.0000	SCHEDULE PRICE ADJUSTMENT	C.S.	ALL REQ'D	ALL REQ'D	ALL REQ'D
647.2002.0000	BACKHOE, 4WD, 1 CY BUCKET, 75 HP MINIMUM, 15 FT DEPTH	C.S.	ALL REQ'D	ALL REQ'D	ALL REQ'D
670.2006.0000	MMA PAVEMENT MARKINGS, LONGITUDINAL INLAID	L.F.	23,700	5,800	29,500
682.2000.0000	VAC-TRUCK POTHOLE	C.S.	ALL REQ'D	ALL REQ'D	ALL REQ'D

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0A41034/Z589760000 0A41036/CFHWY00217	2021	C2	C2

TABLE OF ESTIMATING FACTORS		
ITEM NO.	ITEM DESCRIPTION	UNIT
203.0006.0000	BORROW	144 LB./FT. ³
301.0001.00D1	AGGREGATE BASE COURSE, GRADING D-1	144 LB./FT. ³
301.2003.00E1	AGGREGATE SURFACE COURSE, GRADING E-1	144 LB./FT. ³
306.0001.0000	ATB	151 LB./FT. ³
306.0002.5240	ASPHALT BINDER, GRADE PG 52-40	5.3% OF TOTAL WEIGHT OF 306.0001.0000
401.0001.002A	HMA, TYPE II; CLASS A	151 LB./FT. ³
401.0004.5240	ASPHALT BINDER, GRADE PG 52-40	5.3% OF TOTAL WEIGHT OF 401.0001.002A
608.2002.0000	ASPHALT PATHWAY	151 LB./FT. ³
610.0002.0000	DITCH LINING	110 LB./FT. ³
611.0002.0001	RIPRAP, CLASS I	108 LB./FT. ³
611.0002.0002	RIPRAP, CLASS II	108 LB./FT. ³
611.0002.0003	RIPRAP, CLASS III	108 LB./FT. ³
611.0002.0004	RIPRAP, CLASS IV	108 LB./FT. ³



STATE OF ALASKA
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AND PUBLIC FACILITIES

PARKS HWY BRIDGE REPLACEMENTS:
MONTANA CREEK, SHEEP CREEK,
AND GOOSE CREEK

ESTIMATE OF QUANTITIES

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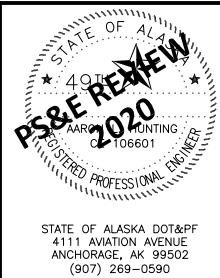
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0A41034/Z589760000 0A41036/CFHWY00217	2021	D0	D3

EARTHWORK SUMMARY																		
SHEET	STATION		ROADWAY		PATHWAY		CREEK		DITCH	RIPRAP ²	APPROACHES		ESTIMATED EXCAVATION			ESTIMATED EMBANKMENT		REMARKS
			CUT	FILL	CUT	FILL	CUT	FILL	CUT	CUT	CUT	FILL	UNCLASSIFIED EXCAVATION	USABLE ³ =.85*UNCLASSIFIED EXCAVATION	SHRUNK UNCLASSIFIED EXCAVATION = .85*USABLE	SELECTED MATERIAL , TYPE C	SELECTED MATERIAL , TYPE A	
			(CY)	(CY)	(CY)	(CY)	(CY)	(CY)	(CY)	(CY)	(CY)	(CY)	(CY)	(CY)	(CY)	(CY)	(CY)	
	FROM	TO	A		C		E	F	G	H	I	J	K=A+C+E+G+H+I	L=.85*K	M=.85*L			
F1	1000+00	1006+00	3,406	5,181	781	3,595	1,243	108		2,353	289	637	8,072	6,861	5,832	4,463	5,058	SHEEP CREEK SITE
F1-F2	1008+34	1020+75	2,605	33,132	797	3,264				3,918	205	13,198	7,525	6,396	5,437	39,338	10,256	SHEEP CREEK SITE
F3-F4	1255+75	1261+56	2,594	3,738					10,675	5,027	55	163	18,351	15,598	13,259	699	3,202	GOOSE CREEK SITE
F4	1263+06	1270+25	5,897	4,591			2,593	38		3,120	2,588	520	14,198	12,068	10,258	283	4,866	GOOSE CREEK SITE
F5-F6	1406+52	1419+14	6,148	21,041	689	2,039				1,299	697	1,352	8,833	7,508	6,382	16,376	8,056	MONTANA CREEK SITE
F6	1421+60	1426+00	2,284	12,433	388	4,801	12,007			3,092	160	10,506	17,931	15,241	12,955	24,197	3,543	MONTANA CREEK SITE
F7	1426+00	1439+00	54,434	17,674							2,473	9,833	56,907	48,371	41,115	18,982	8,525	MONTANA CREEK SITE
F8	1439+00	1442+72	9,075	2,763							1,243	154	10,318	8,770	7,455	209	2,708	MONTANA CREEK SITE
SUBTOTALS (CY) =			86,443	100,553	2,655	13,699	15,843	146	10,675	18,809	7,710	36,363	142,135	120,815	102,693	104,547	46,214	
													-18,809					
													123,326 ⁴					

NOTES:

1. FILL IS SELECTED MATERIAL TYPE C AND TYPE A ADDED TOGETHER.
2. RIPRAP EXCAVATION IS SUBSIDIARY TO 611 PAY ITEM.
3. ASSUME 15% OF UNCLASSIFIED EXCAVATION IS WASTE.
4. SUBTRACTING RIPRAP EXCAVATION FROM UNCLASSIFIED EXCAVATION EQUALS THE PAY ITEM UNCLASSIFIED EXCAVATION.

FOR REVIEW ONLY.
THIS SHEET WILL BE REMOVED FOR ADVERTISEMENT.



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
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PARKS HWY BRIDGE REPLACEMENTS:
MONTANA CREEK, SHEEP CREEK,
AND GOOSE CREEK

SUMMARY TABLES

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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0A41034/Z589760000 0A41036/CFHWY00217	2021	D1	D3

201.0003.0000

CLEARING AND GRUBBING						
SHEET	STATION		OFFSET	SHEEP & MONTANA	GOOSE	REMARKS
	FROM	TO		AREA (ACRES)	AREA (ACRES)	
F1	1000+00	1006+65	LT	1.17		
F1	1000+00	1006+65	RT	0.85		
F1-F2	1007+56	1020+75	LT	3.43		
F1-F2	1007+60	1020+75	RT	2.18		
F3-F4	1255+75	1262+00	LT		1.15	
F3-F4	1244+52	1262+00	RT		3.06	
F4	1262+50	1270+25	LT		1.35	
F4	1262+50	1270+25	RT		0.77	
F5-F6	1406+52	1419+25	LT	2.37		
F5-F6	1406+52	1419+14	RT	2.19		
F6-F8	1420+70	1444+72	LT	4.76		
F6-F8	1420+70	1444+72	RT	4.88		
F6-F7	1423+00	1434+85	RT	0.51		UTILITY CLEARING
TOTAL:				22.35	6.33	
PAY ITEM QUANTITY:				22.40	6.40	

202.0001.0000

REMOVAL OF STRUCTURES AND OBSTRUCTIONS					
SHEET	STATION	OFFSET	SHEEP & MONTANA	GOOSE	REMARKS
			REMARKS	REMARKS	
F1	1005+47	LT	PEDESTRIAN RAILING		
F1	1005+89	LT	MISC-WOOD-STRUCTURES		
PAY ITEM QUANTITY:			LUMP SUM (ALL REQ'D)	0	

202.0002.0000

REMOVAL OF PAVEMENT					
SHEET	STATION		SHEEP & MONTANA	GOOSE	REMARKS
	FROM	TO	AREA (SY)	AREA (SY)	
F1-F2	1000+00	1020+75	9,235		
F1	1004+17	1008+85	1,186		PATHWAY
F3-F4	1255+75	1270+25		5,592	
F5-F8	1406+52	1444+72	13,847		
F6	1414+86	1417+79	1,369		PATHWAY
TOTAL:			25,636	5,592	
PAY ITEM QUANTITY:			25,700	5,600	

202.0004.0000

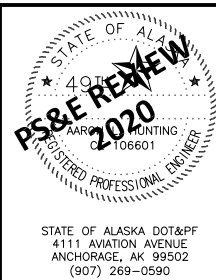
REMOVAL OF CULVERT PIPE					
SHEET	STATION	OFFSET	SHEEP & MONTANA	GOOSE	REMARKS
			LENGTH (FT)	LENGTH (FT)	
F2	1014+92	CL	120.0		
F4	1263+53	RT		37.2	
F4	1264+48	LT		30.5	
F4	1269+81	LT		41.0	
F5	1412+50	CL	100.8		
F6	1415+46	RT	93.7		
F6	1423+21	RT	26.5		
F7	1434+65	LT	38.1		
F7	1437+26	CL	77.5		
F8	1442+02	CL	92.5		
TOTAL:			549.1	108.7	
PAY ITEM QUANTITY:			550	110	

202.0023.0000

REMOVAL OF BRIDGE			
SHEET	ITEM DESCRIPTION	LENGTH (FT)	REMARKS
F6	REMOVAL OF BRIDGE - NO. 1984, PEDESTRIAN	202	MONTANA CREEK
F1	REMOVAL OF BRIDGE - NO. 1992, PEDESTRIAN	134	SHEEP CREEK
F1	REMOVAL OF BRIDGE - NO. 213	126	SHEEP CREEK
F6	REMOVAL OF BRIDGE - NO. 215	141	MONTANA CREEK

406.0002.0000

RUMBLE STRIPS, SHOULDERS						
SHEET	STATION		OFFSET	SHEEP & MONTANA	GOOSE	REMARKS
	FROM	TO		STATION (100 FT)	STATION (100 FT)	
F1-F2	1000+00	1020+75	RT/LT	28.6		
F3-F4	1255+75	1270+25	RT/LT		22.0	
F5-F8	1406+52	1444+72	RT/LT	61.4		
TOTAL:				90	22	
PAY ITEM QUANTITY:				90	22	



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
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**PARKS HWY BRIDGE REPLACEMENTS:
MONTANA CREEK, SHEEP CREEK,
AND GOOSE CREEK**

SUMMARY TABLES

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507.000_.000_						
STEEL BRIDGE RAILING						
SHEET	STATION		507.0001.0002	507.0001.0003	507.0002.0000	REMARKS
	FROM	TO	STEEL BRIDGE RAILING, 2-TUBE (LF)	STEEL BRIDGE RAILING, 3-TUBE (LF)	PEDESTRIAN RAILING (LF)	
F1	1005+80	1008.54	274	274	274	
F4	1261+36	1263+26	380			
F6	1418+94	1421+80	286	286	286	
SHEEP & MONTANA PAY ITEM QUANTITY:			560	560	560	
GOOSE PAY ITEM QUANTITY:			380	0	0	

608.2002.0000					
ASPHALT PATHWAY					
SHEET	STATION		WIDTH	QUANTITY (TON)	REMARKS
	FROM	TO			
F1-F2	1003+94	1009+66	10'	175	SHEEP CREEK SITE
F6	1415+35	1423+26	10'	232	MONTANA CREEK SITE
SHEEP & MONTANA PAY ITEM QUANTITY:				407	
GOOSE PAY ITEM QUANTITY:				0	

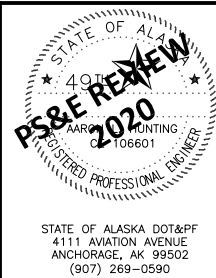
611.0002.000_										
RIPRAP										
SHEET	STATION		VOLUME (YD³)	VOLUME (FT³)	WEIGHT (TON)	611.0002.0001	611.0002.0002	611.0002.0003	611.0002.0004	REMARKS
	FROM	TO				CLASS I	CLASS II	CLASS III	CLASS IV	
										SHEEP CREEK SITE
F1	999+40	1001+40	526	14,206	767		X			RT EMBANKMENT
F1	1005+75	1006+53	1,396	37,692	2,035				X	SOUTH ABUTMENT
F1	1005+75	1006+53	679	18,333	990	X				SOUTH ABUTMENT
F1	1007+61	1008+58	3,427	92,529	4,997				X	NORTH ABUTMENT
F1	1007+61	1008+58	1,376	37,152	2,006	X				NORTH ABUTMENT
										GOOSE CREEK SITE
F4	1258+84	1259+60	527	14,228	768		X			RT APRON/EMBANKMENT
F4	1258+94	1259+50	479	12,924	698		X			LT APRON/EMBANKMENT
F4	1260+58	1262+02	1,600	43,200	2,333			X		SOUTH ABUTMENT
F4	1260+58	1262+02	400	10,800	583	X				SOUTH ABUTMENT
F4	1260+53	1262+02	530	14,310	773		X			SOUTH ABUTMENT RT
F4	1262+50	1263+28	1,000	27,000	1,458			X		NORTH ABUTMENT
F4	1262+50	1263+28	320	8,640	467	X				NORTH ABUTMENT
										MONTANA CREEK SITE
F6	1418+89	1419+64	2,032	54,864	2,963				X	SOUTH ABUTMENT
F6	1418+89	1419+64	1,203	32,481	1,754	X				SOUTH ABUTMENT
F6	1421+05	1421+85	1,610	43,470	2,347				X	NORTH ABUTMENT
F6	1421+05	1421+85	814	21,978	1,187	X				NORTH ABUTMENT
SHEEP & MONTANA PAY ITEM QUANTITY:						5,950	770	0	12,400	(TON)
GOOSE PAY ITEM QUANTITY:						1,050	2,250	3,800	0	(TON)

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0A41034/Z589760000 0A41036/CFHWY00217	2021	D2	D3

618.0002.0000				
SEEDING				
SHEET	STATION		WEIGHT (LB)	REMARKS
	FROM	TO		
F1-F2	1000+00	1020+75	299	SHEEP CREEK SITE
F3-F4	1255+75	1270+25	117	GOOSE CREEK SITE
F5-F8	1406+52	1444+72	565	MONTANA CREEK SITE
SHEEP & MONTANA PAY ITEM QUANTITY:			870	
GOOSE PAY ITEM QUANTITY:			118	

625.0001.0000					
PIPE HAND RAIL					
SHEET	STATION		OFFSET	LENGTH (FT)	REMARKS
	FROM	TO			
F1	1004+80	1005+80	LT	100	PATHWAY, SHEEP CREEK SITE
F1	1008+54	1008+94	LT	40	PATHWAY, SHEEP CREEK SITE
SHEEP & MONTANA PAY ITEM QUANTITY:				140	
GOOSE PAY ITEM QUANTITY:				0	

639.2000.0000										
APPROACH										
SHEET	STATION	OFFSET	SKEW ANGLE (90° TYP.)	TYPE			WIDTH (FT)	LENGTH (FT)	LENGTH (FT)	REMARKS
				PUB.	RES.	COM.				
F1, F9	1002+43.00	RT	80	X			24	225		
F2, F10	1011+19.00	RT			X		18	220		
F2, F11	1012+00.00	LT			X		20	450		
F2, F9	1014+72.00	LT		X			24	260		EAST AUDUBON DRIVE
F4, F15	1259+91.00	LT			X		20		105	
F4, F15	1264+74.00	RT			X		20		115	
F4, F16	1265+79.00	LT			X		20		242	
F4, F16	1269+82.00	LT			X		18		105	
F6, F17	1413+78.00	RT				X	24	275		
F6, F17	1414+76.00	LT				X	24	190		
F6, F18	1424+83.00	RT				X	24	450		
F7, F19	1427+70.00	LT				X	24	400		
F7, F19	1427+70.00	75' LT			X		14	190		
F7, F20	1434+65.00	LT			X		14	156		
F8, F20	1438+60.00	RT			X		14	205		
SHEEP & MONTANA PAY ITEM QUANTITY:								11		(EACH)
GOOSE PAY ITEM QUANTITY:									4	(EACH)



STATE OF ALASKA
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**PARKS HWY BRIDGE REPLACEMENTS:
MONTANA CREEK, SHEEP CREEK,
AND GOOSE CREEK**

SUMMARY TABLES

606.00___.0000

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OWH

DATE/TIME

10/21/2020 8:42 AM

LAYOUT

D3

G:\USERS\MBHENSCH\ONEDRIVE\STATE OF ALASKA\58976 PARKS HWY BRIDGE REPLACEMENT MONTANA GK SHEEP

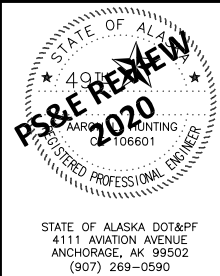
FILE

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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0A41034/Z589760000 0A41036/CFHWY00217	2021	D3	D3

606.00___.0000								
GUARDRAIL SUMMARY								
SHEET	STATION TO STATION			606.0001.0000	606.0006.0000	606.0013.0000	606.0016.0000	REMARKS
	FROM	TO	OFFSET	W-BEAM GUARDRAIL (FT)	REMOVING & DISPOSING OF GUARDRAIL (FT)	PARALLEL GUARDRAIL TERMINAL (EACH)	TRANSITION RAIL (EACH)	
F1	1003+61.6	1006+40.6	RT		279.0			
F1	1002+95.0	1003+45.0	RT			1		
F1	1003+45.0	1005+57.5	RT	212.5				
F1	1005+57.5	1005+80.0	RT				1	
F1	1002+94.7	1006+40.5	LT		345.8			
F1	1004+11.0	1004+61.0	LT			1		
F1	1004+61.0	1005+61.0	LT	100.0				
F1	1005+61.0	1005+80.0	LT				1	
F1	1007+72.0	1009+61.3	RT		189.3			
F1	1008+54.0	1008+76.5	RT				1	
F1	1008+76.5	1009+14.0	RT	37.5				
F1	1009+14.0	1009+64.0	RT			1		
F1	1007+72.2	1008+88.2	LT		116.0			
F1	1008+54.0	1008+73.0	LT				1	
F1-F2	1008+73.0	1010+85.5	LT	212.5				
F2	1010+85.5	1011+35.5	LT			1		
F3-F4	1258+38.5	1258+88.5	RT			1		
F4	1258+88.5	1261+13.5	RT	225.0				
F4	1261+13.5	1261+36.0	RT				1	
F4	1260+26.0	1260+76.0	LT			1		
F4	1260+76.0	1261+13.5	LT	37.5				
F4	1261+13.5	1261+36.0	LT				1	
F4	1263+26.0	1263+48.5	RT				1	
F4	1263+48.5	1263+73.5	RT	25.0				
F4	1263+73.5	1264+23.5	RT			1		
F4	1263+26.0	1263+48.5	LT				1	
F4	1263+48.5	1264+98.5	LT	150.0				
F4	1264+98.5	1265+48.5	LT			1		
CONTINUED								

606.00___.0000								
GUARDRAIL SUMMARY								
SHEET	STATION TO STATION			606.0001.0000	606.0006.0000	606.0013.0000	606.0016.0000	REMARKS
	FROM	TO	OFFSET	W-BEAM GUARDRAIL (FT)	REMOVING & DISPOSING OF GUARDRAIL (FT)	PARALLEL GUARDRAIL TERMINAL (EACH)	TRANSITION RAIL (EACH)	
F6	1415+71.5	1419+03.9	RT		332.4			
F6	1414+37.5	1414+87.5	RT			1		
F6	1414+87.5	1418+75.0	RT	387.5				
F6	1418+75.0	1418+94.0	RT				1	
F6	1415+71.8	1419+03.8	LT		331.9			
F6	1415+46.5	1415+96.5	LT			1		
F6	1415+96.5	1418+71.5	LT	275.0				
F6	1418+71.5	1418+94.0	LT				1	
F6	1420+62.4	1421+56.0	RT		93.6			
F6	1421+80.0	1421+99.0	RT				1	
F6	1421+99.0	1423+74.0	RT	175.0				
F6	1423+74.0	1424+24.0	RT			1		
F6	1420+62.5	1423+62.1	LT		299.6			
F6	1421+80.0	1422+02.5	LT				1	
F6	1422+02.5	1424+90.0	LT	287.5				
F6	1424+90.0	1425+40.0	LT			1		
SHEEP & MONTANA PAY ITEM QUANTITY:				1,687.5	1,988.0	8.0	8.0	
GOOSE PAY ITEM QUANTITY:				437.5	0.0	4.0	4.0	

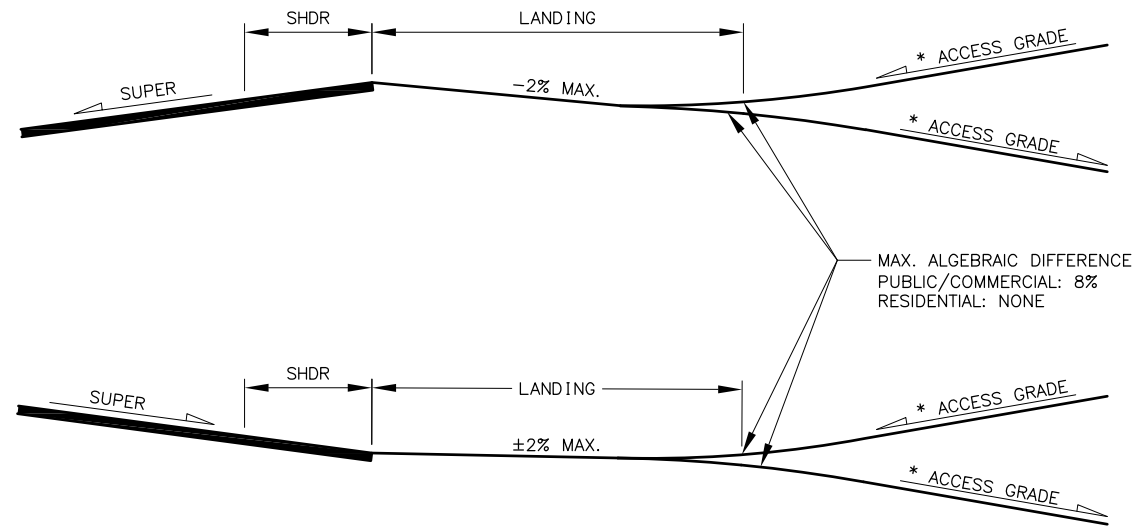


STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

**PARKS HWY BRIDGE REPLACEMENTS:
MONTANA CREEK, SHEEP CREEK,
AND GOOSE CREEK**

SUMMARY TABLES

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0A41034/Z589760000	2021	E1	E6
				0A41036/CFHWY00217			

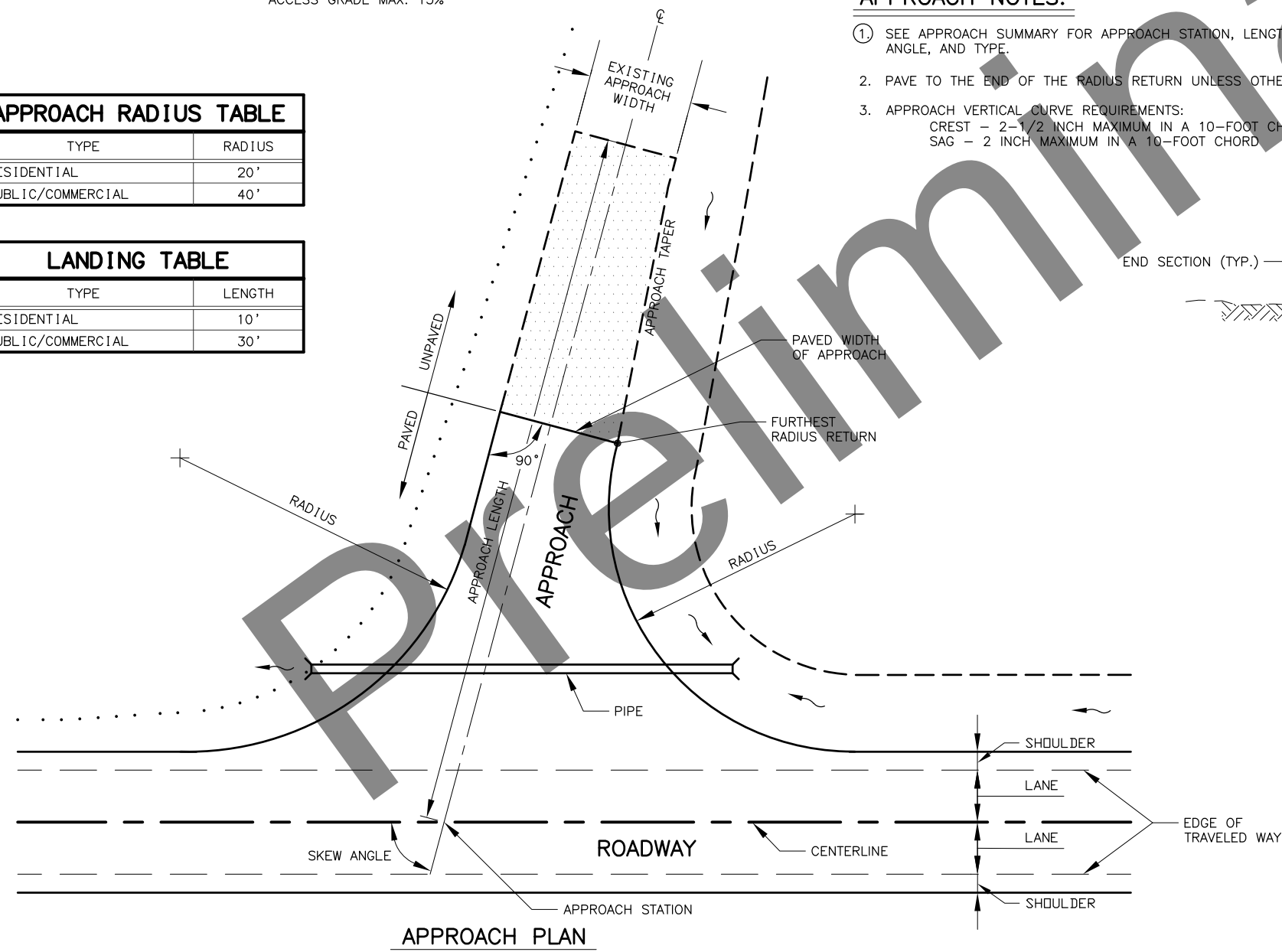


APPROACH PROFILES ON SUPER ELEVATED ROADWAY

* ACCESS GRADE MAX. 15%

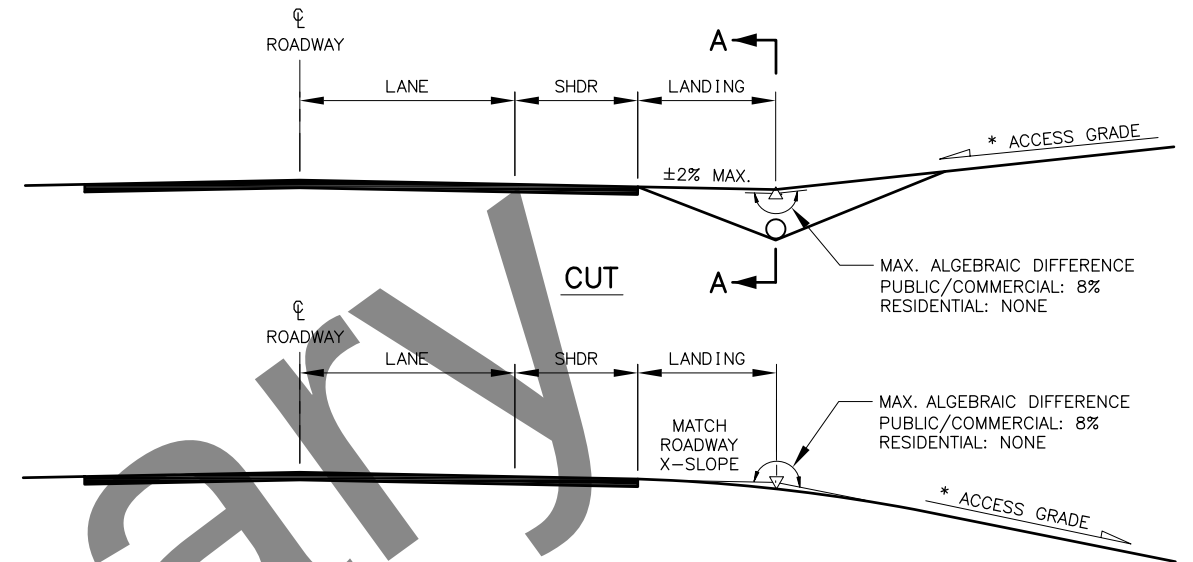
APPROACH RADIUS TABLE	
TYPE	RADIUS
RESIDENTIAL	20'
PUBLIC/COMMERCIAL	40'

LANDING TABLE	
TYPE	LENGTH
RESIDENTIAL	10'
PUBLIC/COMMERCIAL	30'



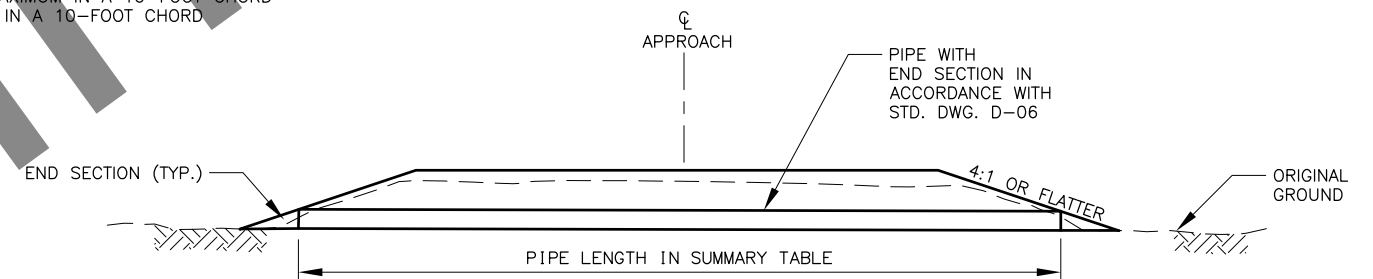
APPROACH NOTES:

- ① SEE APPROACH SUMMARY FOR APPROACH STATION, LENGTH, WIDTH, SKEW ANGLE, AND TYPE.
2. PAVE TO THE END OF THE RADIUS RETURN UNLESS OTHERWISE INDICATED.
3. APPROACH VERTICAL CURVE REQUIREMENTS:
CREST - 2-1/2 INCH MAXIMUM IN A 10-FOOT CHORD
SAG - 2 INCH MAXIMUM IN A 10-FOOT CHORD

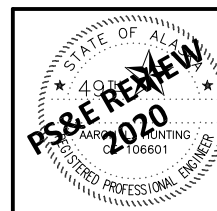


APPROACH PROFILES

* ACCESS GRADE MAX. 15%



SECTION A-A
APPROACH & CULVERT TYPICAL



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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

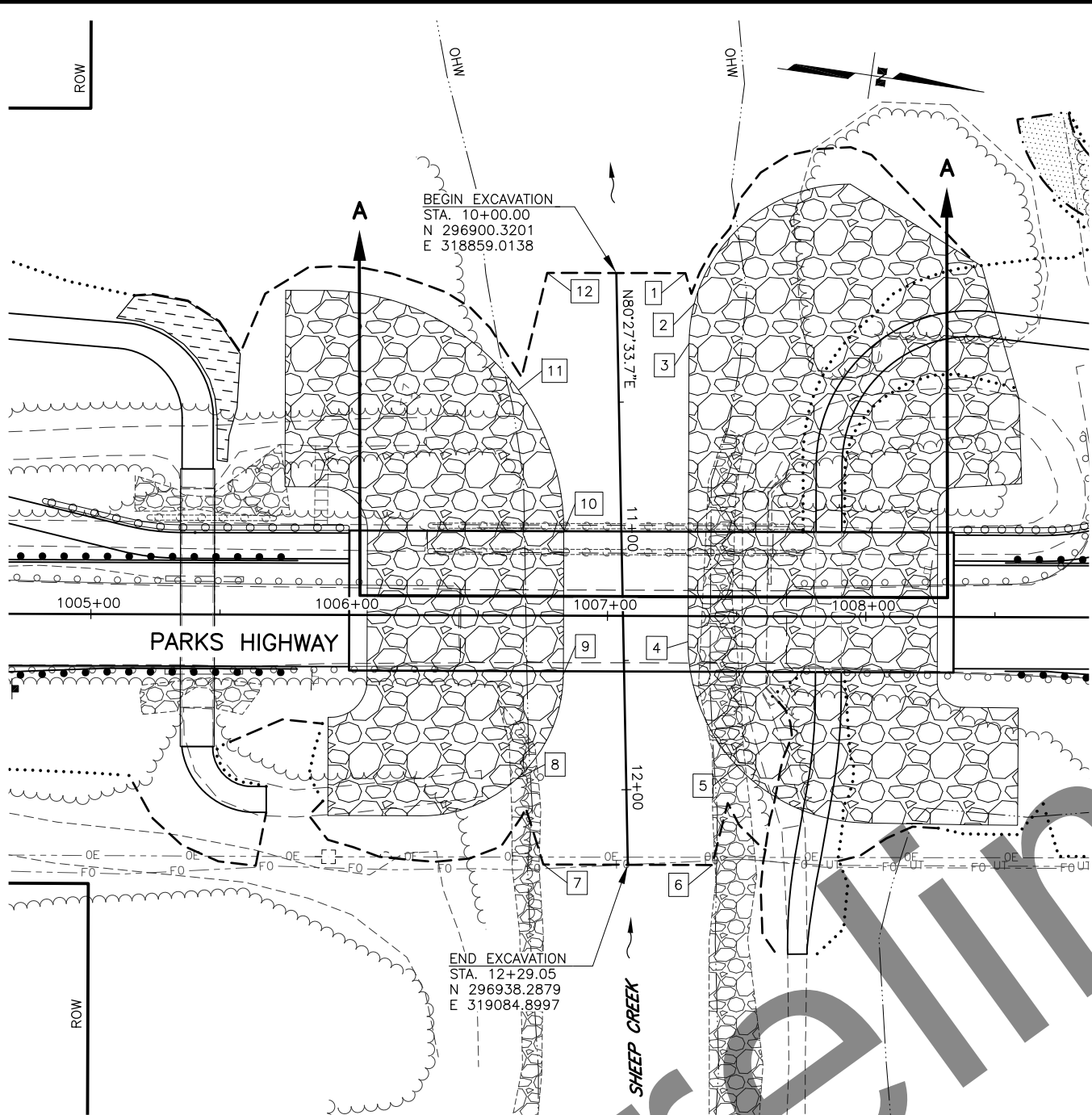
**PARKS HWY BRIDGE REPLACEMENTS:
MONTANA CREEK, SHEEP CREEK,
AND GOOSE CREEK**

APPROACH DETAILS

G:\USERS\MBHENSON\ONE DRIVE\STATE OF ALASKA\58976 PARKS HWY BRIDGE REPLACEMENT MONTANA CK SHEEP
FILE C:\G:\CH3D19\PLANSET\58976 E2 E5 S & M.DWG

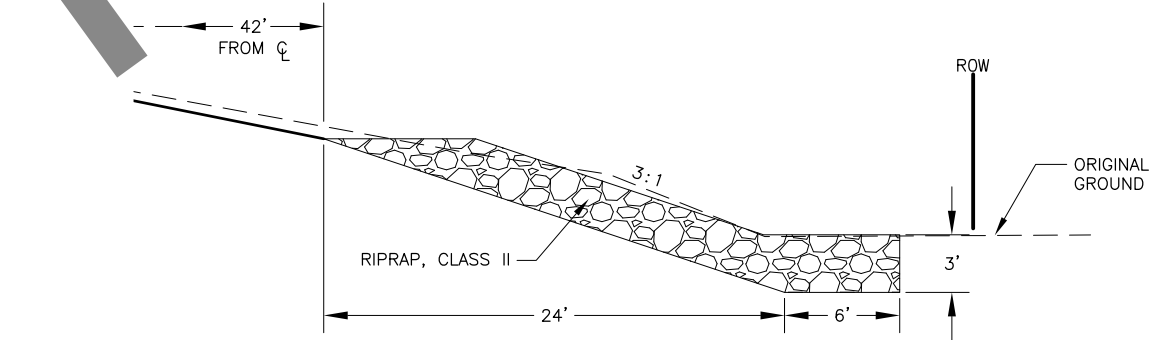
DATE/TIME 11/24/2020 8:21 AM LAYOUT E2 DESIGNED MHB CHECKED ALH DRAFTED CMWH

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0A41034/Z589760000 0A41036/CFHWY00217	2021	E2	E6



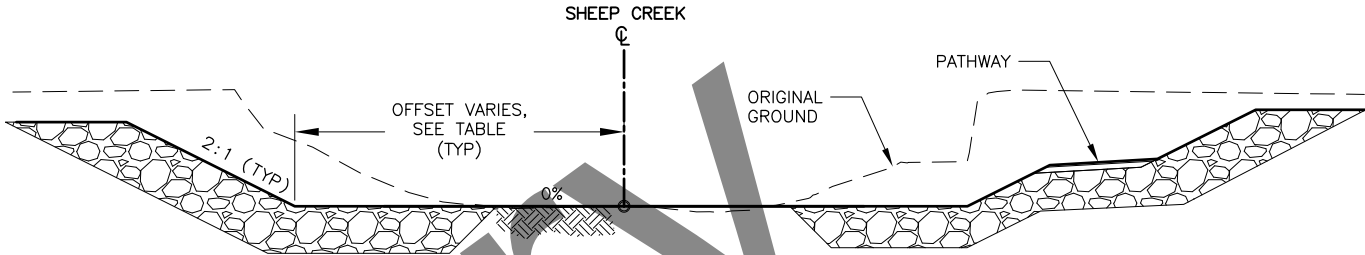
SHEEP CREEK PLAN VIEW

CREEK EXCAVATION TABLE			
POINT	STATION	OFFSET	REMARKS
1	10+00.0	26.7' LT	
2	10+12.5	30.0' LT	
3	10+27.9	27.6' LT	
4	11+43.1	25.0' LT	
5	11+91.7	43.0' LT	
6	12+29.0	32.9' LT	
7	12+29.0	32.5' RT	
8	11+95.0	42.3' RT	
9	11+54.8	23.5' RT	
10	10+99.5	22.3' RT	
11	10+44.5	38.8' RT	
12	10+00.0	26.7' RT	



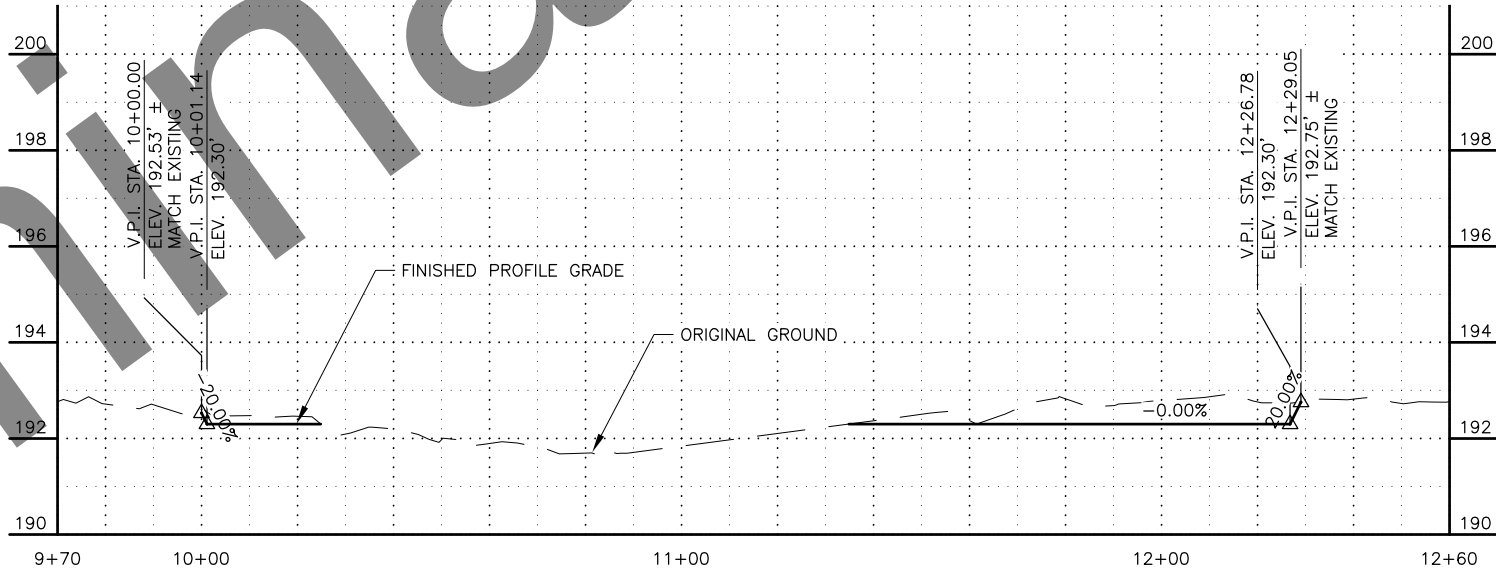
SHEEP CREEK EMBANKMENT

STA. 999+40 RT TO STA. 1001+40 RT

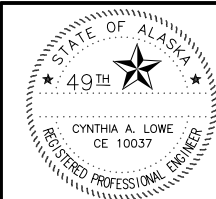


CREEK CROSS SECTION A-A

SEE N SHEETS FOR RIPRAP LAYOUT



SHEEP CREEK PROFILE VIEW

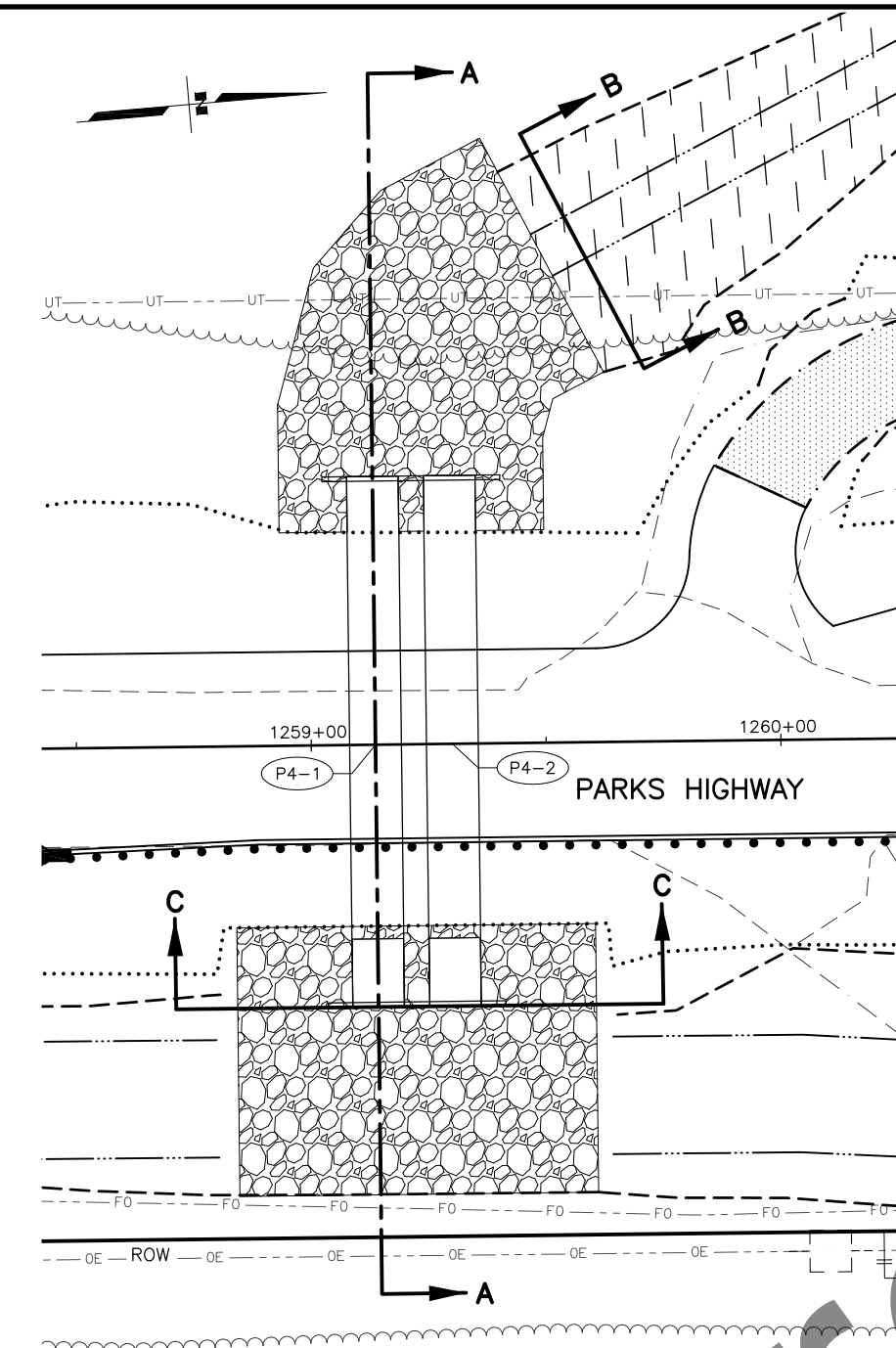


STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
**PARKS HWY BRIDGE REPLACEMENTS:
MONTANA CREEK, SHEEP CREEK,
AND GOOSE CREEK**

**SHEEP CREEK
CHANNEL EXCAVATION DETAILS**

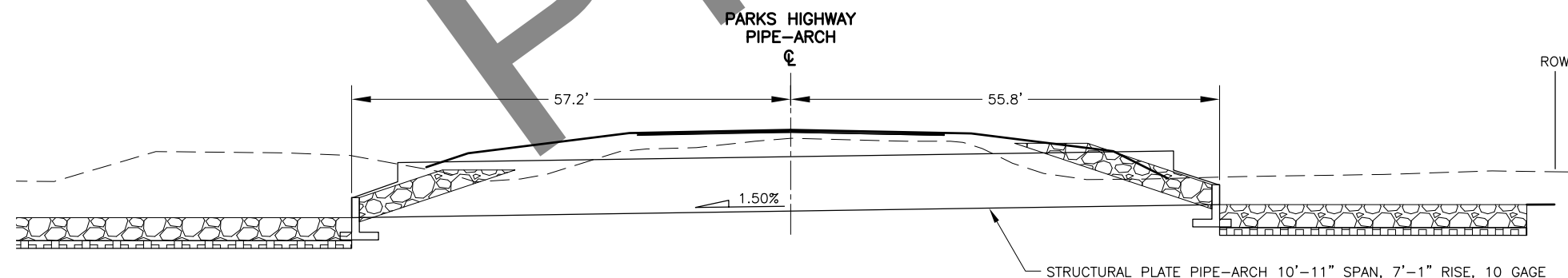
STATE OF ALASKA DOT&PF
4111 AVIATION AVENUE
ANCHORAGE, AK 99502
(907) 269-0590

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0A41034/Z589760000	2021	E3	E6
				0A41036/CFHWY00217			

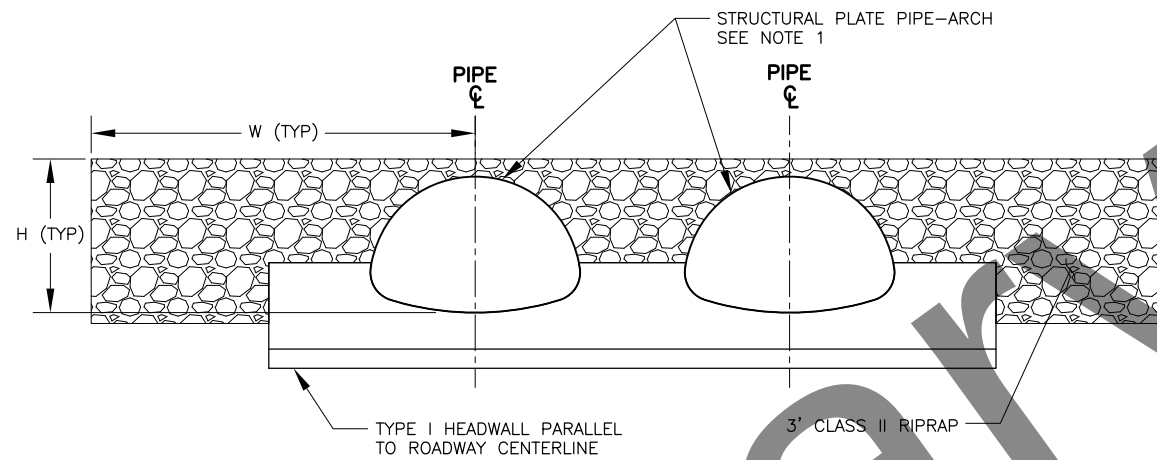


PLAN VIEW

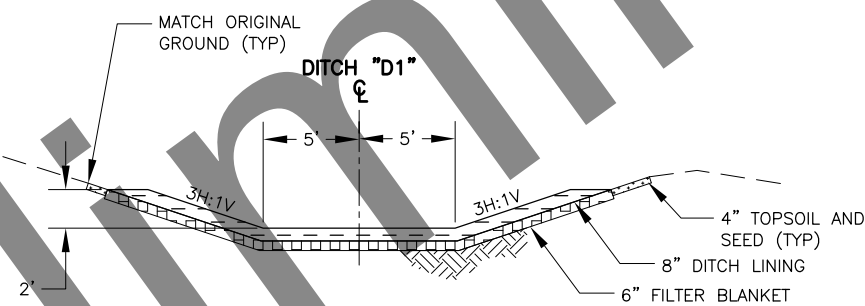
GOOSE CREEK SITE
OVERFLOW CULVERTS



SECTION A-A
TYP

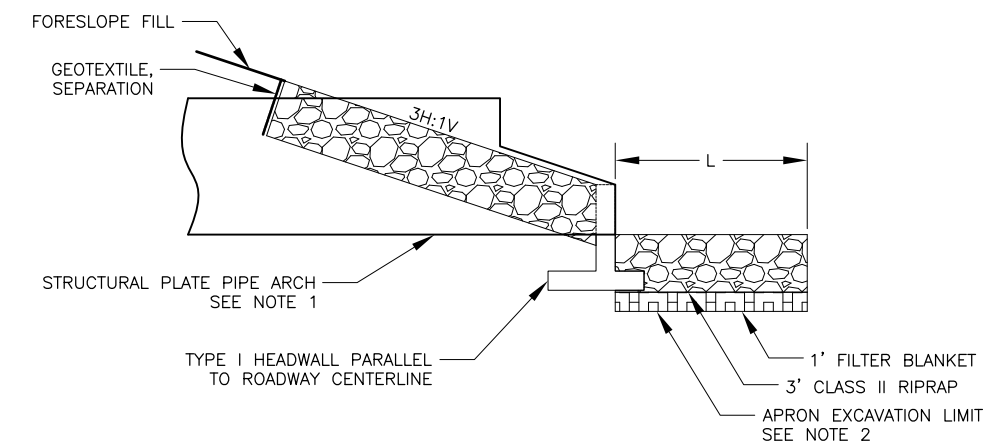


SECTION C-C



SECTION B-B

STA. 1259+50 LT TO STA. 1261+47 LT =
STA. "D1" 1+00 TO STA. "D1" 3+22.
SEE F SHEETS FOR ALIGNMENT AND PROFILE
INFORMATION.



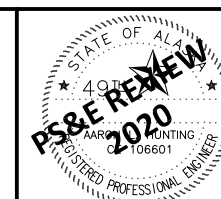
TYPICAL CULVERT END

- CULVERT NOTES:

1. PIPE SHALL BE 10 GAGE OR THICKER WITH 6" BY 2" CORRUGATIONS. BEVEL PIPE 3H:1V AT CULVERT INLETS AND OUTLETS.
2. IN LOCATIONS WHERE SILT/ORGANIC LAYER IS ENCOUNTERED, EXCAVATE BEYOND LIMITS SHOWN TO FIRM BOTTOM AND BACKFILL WITH SELECTED MATERIAL TYPE C AS APPROVED BY THE ENGINEER.

APRON DIMENSIONS		
VARIABLE	UPSTREAM	DOWNSTREAM
H	8.0'	6.2'
W	30'	20'
L*	40'	60'

*LENGTH IS MEASURED ALONG THE APRON CENTERLINE.



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

**PARKS HWY BRIDGE REPLACEMENTS:
MONTANA CREEK, SHEEP CREEK,
AND GOOSE CREEK**

GOOSE CREEK OVERFLOW CULVERTS AND DITCH DETAILS

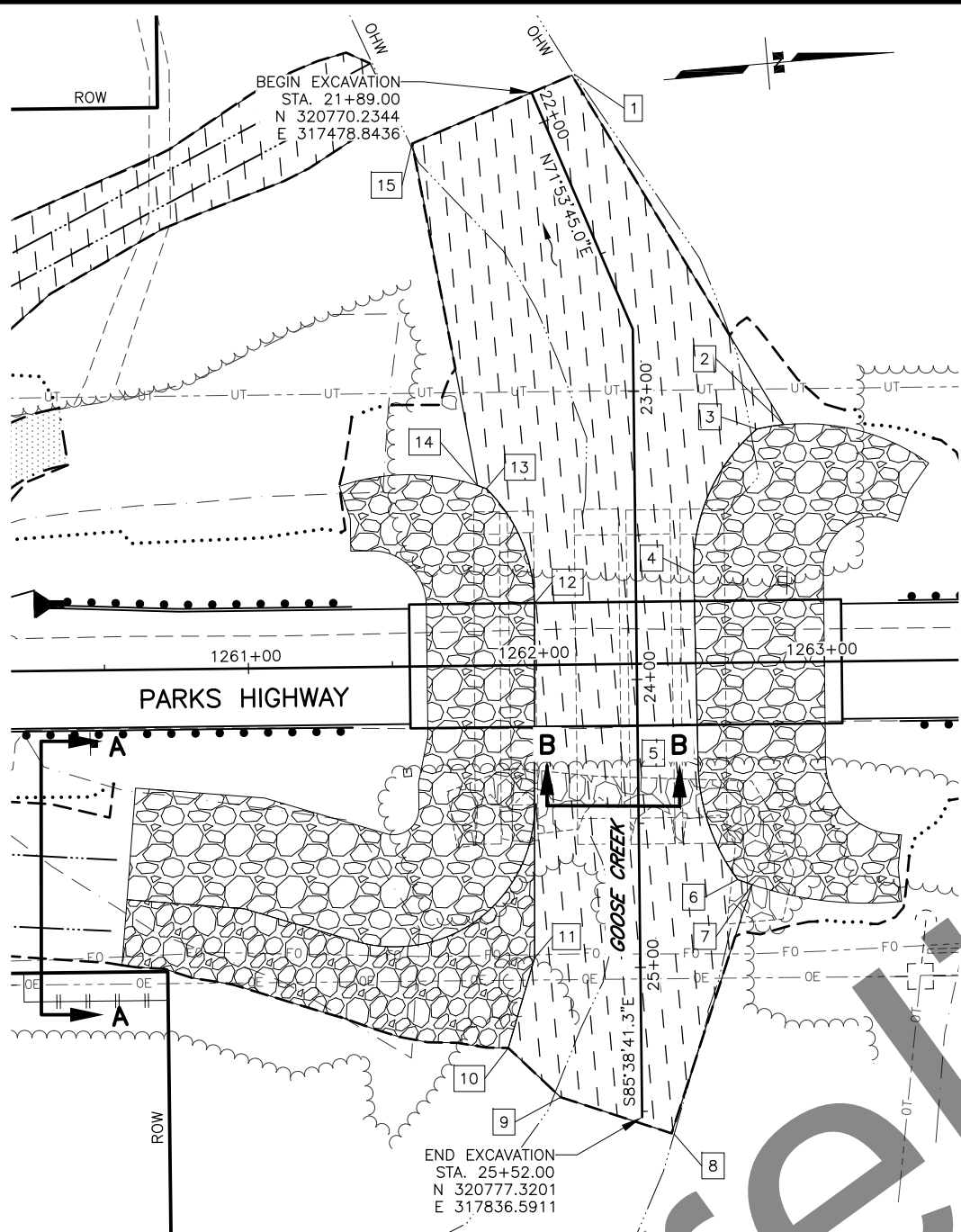
STATE OF ALASKA DOT&PF
4111 AVIATION AVENUE
ANCHORAGE, AK 99502
(907) 269-0590

G:\USERS\MBHENSON\HONEYDRIVE - STATE OF ALASKA\56976 PARKS HWY BRIDGE REPLACEMENT MONTANA CK SHEEP
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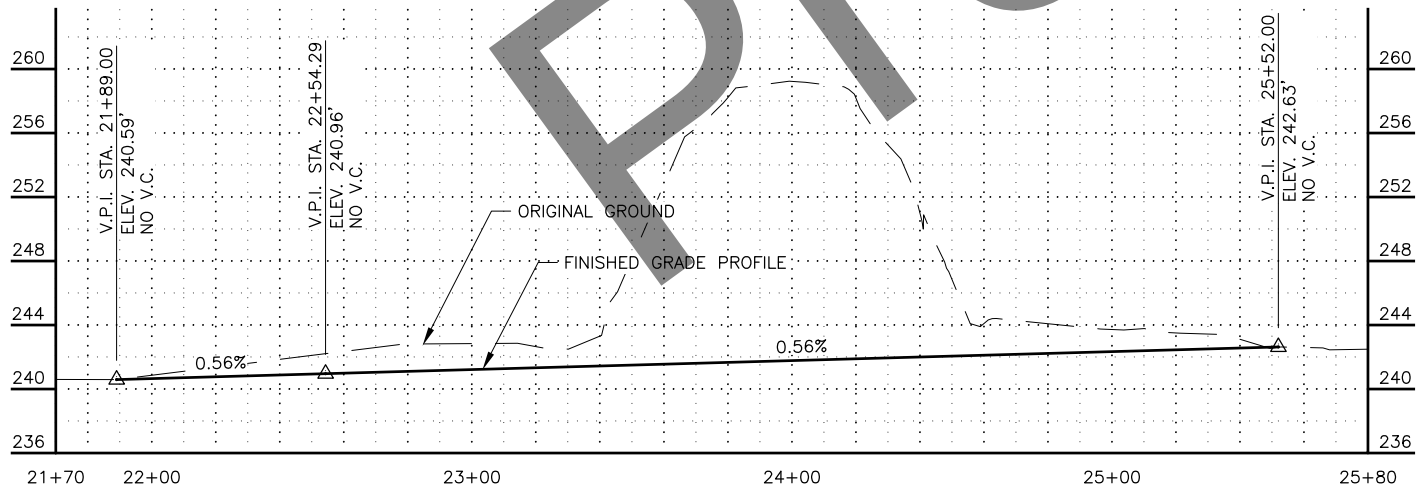
CWVH
DRAFTED
ALH
CHECKED
MHB
DESIGNED
E4
LAYOUT

DATE/TIME 10/12/2020 8:34 AM

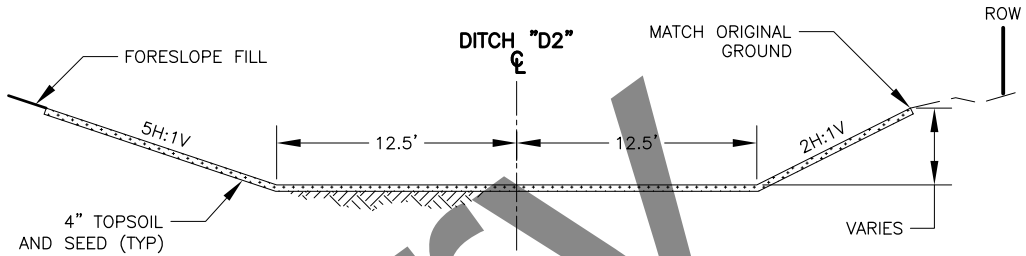
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0A41034/Z589760000 0A41036/CFHWY00217	2021	E4	E6



GOOSE CREEK PLAN VIEW



GOOSE CREEK PROFILE VIEW

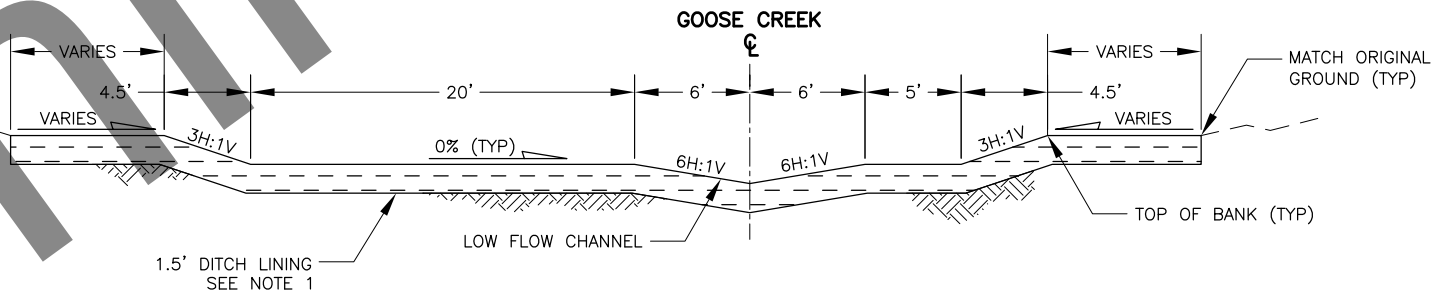


SECTION A-A

SEE F SHEETS FOR ALIGNMENT AND PROFILE INFORMATION.

CROSS SECTION NOTES:

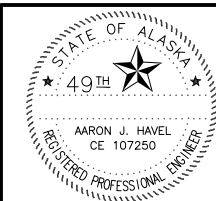
1. AFTER PLACEMENT OF DITCH LINING, FILL VOIDS IN DITCH LINING WITHIN STREAM CHANNEL WITH A UNIFORM MIXTURE OF SAND, GRAVEL, AND COBBLES. BLEND MATERIAL PRIOR TO PLACING IN DITCH LINING. MATERIAL USED TO FILL VOIDS IS SUBSIDIARY TO DITCH LINING.



CREEK CROSS SECTION B-B

CREEK EXCAVATION TABLE

POINT	STATION	OFFSET	REMARKS
1	21+90.0	14.8' LT	
2	23+12.2	52.1' LT	
3	23+13.6	42.7' LT	
4	23+63.4	20.1' LT	
5	24+30.1	20.9' LT	
6	24+69.9	34.1' LT	
7	24+71.8	39.1' LT	
8	25+53.9	11.2' LT	
9	25+44.7	28.2' RT	
10	25+27.4	46.2' RT	
11	24+96.3	36.7' RT	
12	23+73.2	35.3' RT	
13	23+33.1	51.4' RT	
14	23+32.0	51.4' RT	
15	21+78.1	43.7' RT	



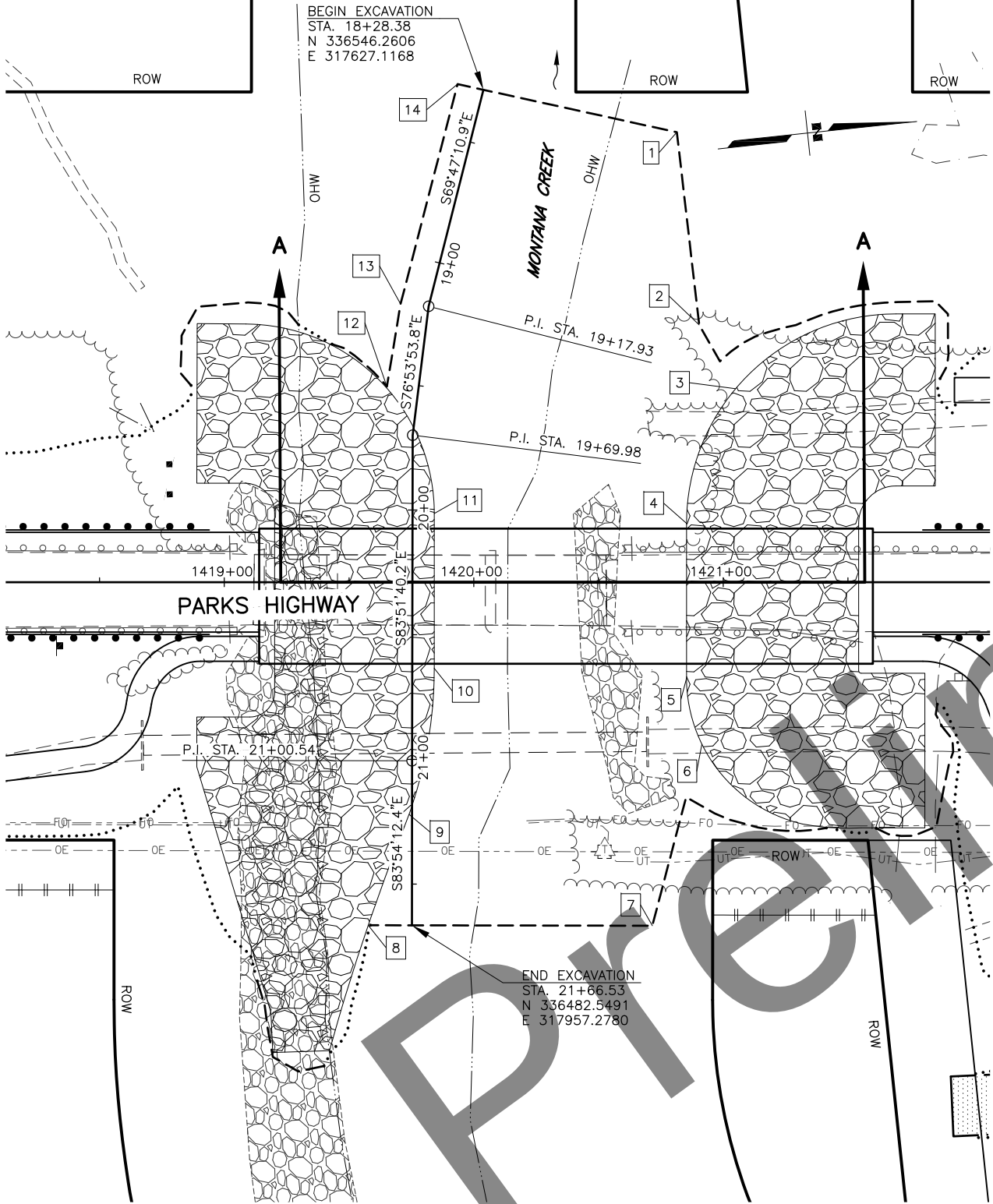
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
**PARKS HWY BRIDGE REPLACEMENTS:
MONTANA CREEK, SHEEP CREEK,
AND GOOSE CREEK**

**GOOSE CREEK
CHANNEL EXCAVATION AND
DITCH DETAILS**

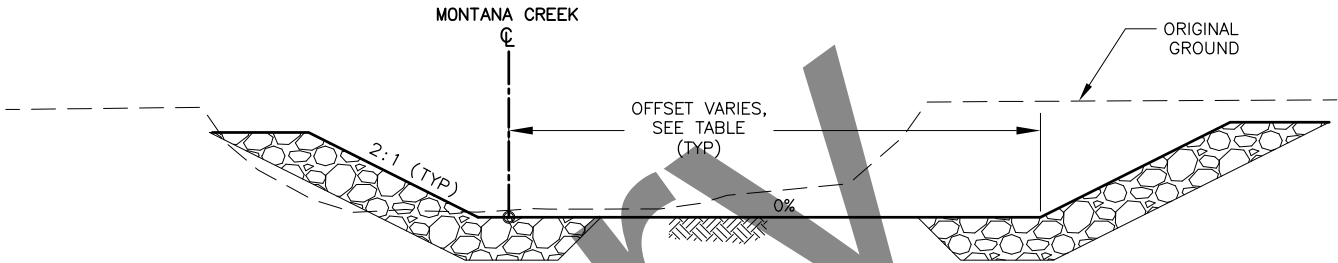
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FILE C:\G:\CH3D19\PLANS\58976 E2 E5 S & M.DWG

DATE/TIME 11/24/2020 8:32 AM
E5
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CHECKED ALH
DRAFTED CMWH

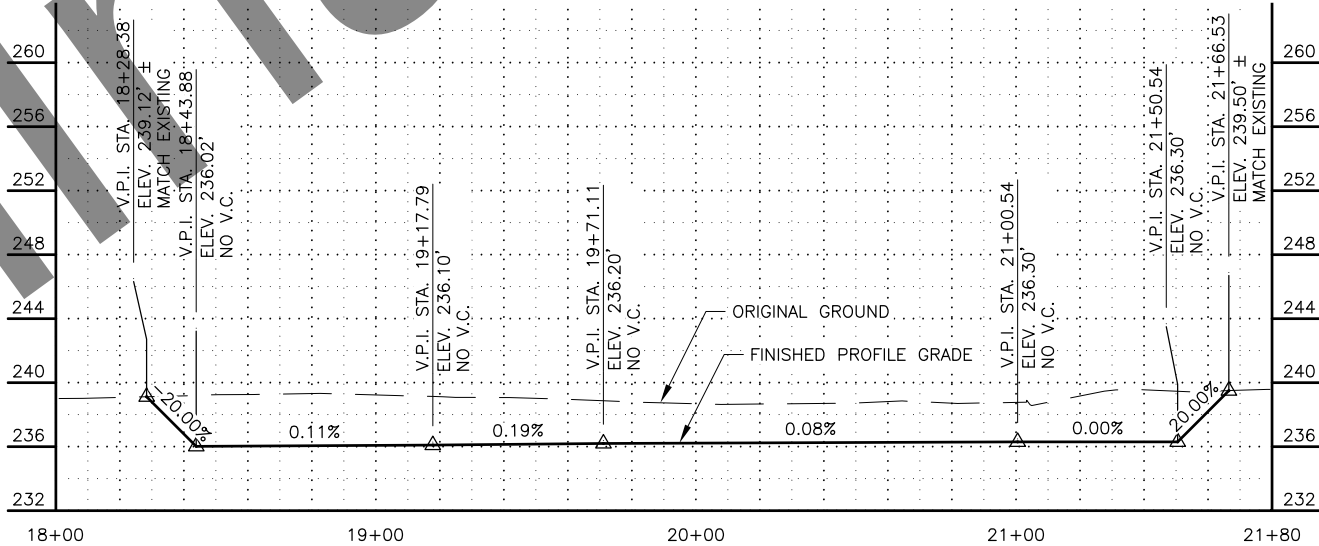
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	OA41034/Z589760000 OA41036/CFHWY00217	2021	E5	E6



MONTANA CREEK PLAN VIEW

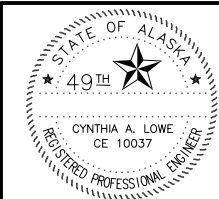


CREEK CROSS SECTION A-A
SEE N SHEETS FOR RIPRAP LAYOUT



MONTANA CREEK PROFILE VIEW

CREEK EXCAVATION TABLE			
POINT	STATION	OFFSET	REMARKS
1	18+25.9	79.4' LT	
2	18+98.6	107.0' LT	
3	19+35.6	126.2' LT	
4	20+05.2	109.8' LT	
5	20+67.2	110.0' LT	
6	20+93.7	116.1' LT	
7	21+66.6	96.4' LT	
8	21+66.5	17.5' RT	
9	21+22.2	1.4' RT	
10	20+63.7	8.8' LT	
11	20+02.4	8.7' LT	
12	19+51.9	12.7' RT	
13	19+18.4	11.3' RT	
14	18+28.4	10.6' RT	



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
**PARKS HWY BRIDGE REPLACEMENTS:
MONTANA CREEK, SHEEP CREEK,
AND GOOSE CREEK**

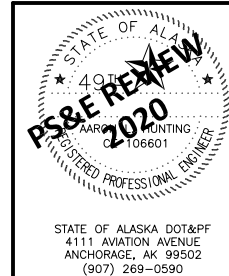
**MONTANA CREEK
CHANNEL EXCAVATION DETAILS**

STATE OF ALASKA DOT&PF
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STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A41034/Z589760000 0A41036/CFHWY00217	2021	E6	E6



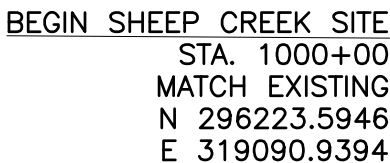
TYPICAL SUPER



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

**PARKS HWY BRIDGE REPLACEMENTS:
MONTANA CREEK, SHEEP CREEK,
AND GOOSE CREEK**

DETAILS



1. UTILITY POLE AT STA. 1010+22 RT WAS ADJUSTED IN 2019. CENTERLINE ROAD ELEVATION IS ASSUMED TO BE THE SAME FROM A 2015 SURVEY.

STA. 1009+96
OVERHEAD ELECTRIC
ELEV. 230.3' ± *

*SEE NOTE 1

SHEET NO.	TOTAL SHEETS
F1	F23
STATE	YEAR
ALASKA	2021
PROJECT DESIGNATION	
0A41034/Z589760000	
0A41036/CFHWY00217	
NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	



STATE OF ALASKA DOT&PF
4111 AVIATION AVENUE
ANCHORAGE, AK 99502
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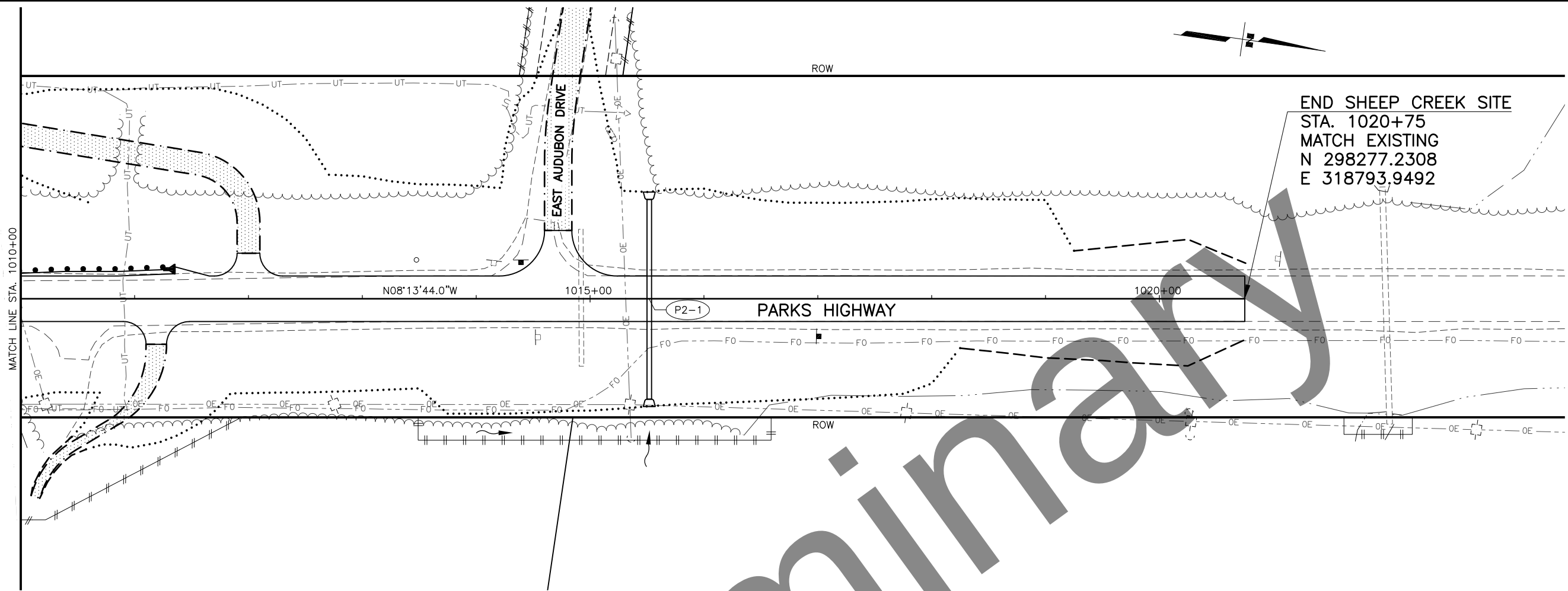
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

**PARKS HIGHWAY BRIDGE
REPLACEMENTS:
MONTANA CREEK, SHEEP
CREEK, AND GOOSE CREEK**

**PLAN AND PROFILE
STA. 997+00 TO
STA. 1010+00**

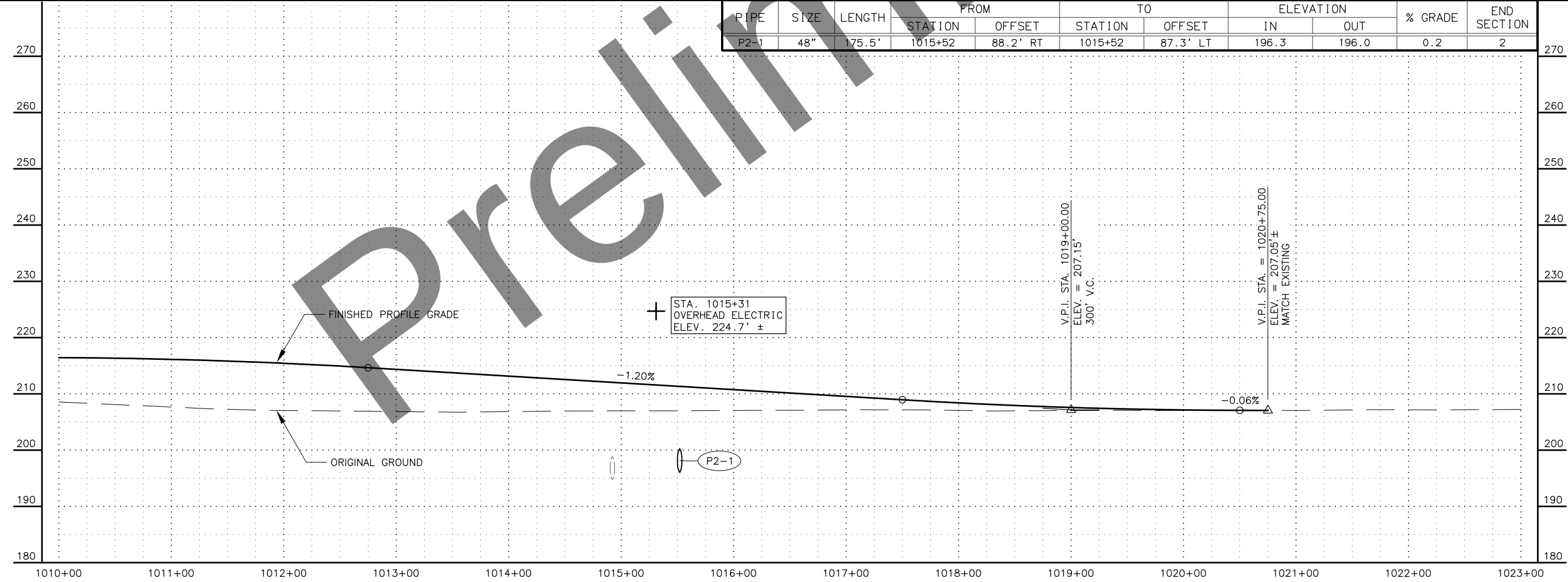
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DATE/TIME 10/28/2020 1:48 PM [LAYOUT] F2 [DESIGNED] MHB [CHECKED] ALH [DRAFTED] CMWH

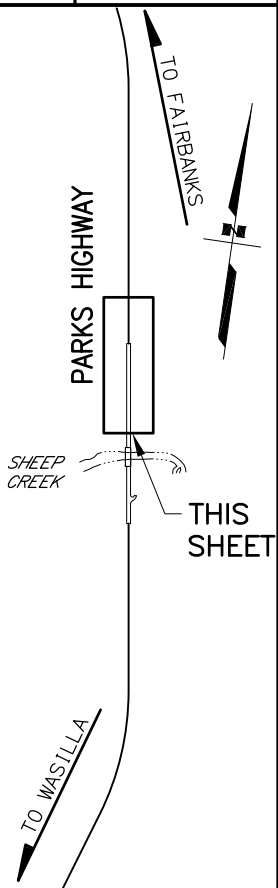


END SHEEP CREEK SITE
STA. 1020+75
MATCH EXISTING
N 298277.2308
E 318793.9492

PIPE	SIZE	LENGTH	FROM		TO		ELEVATION		% GRADE	END SECTION
			STATION	OFFSET	STATION	OFFSET	IN	OUT		
P2-1	48"	175.5'	1015+52	88.2' RT	1015+52	87.3' LT	196.3	196.0	0.2	2



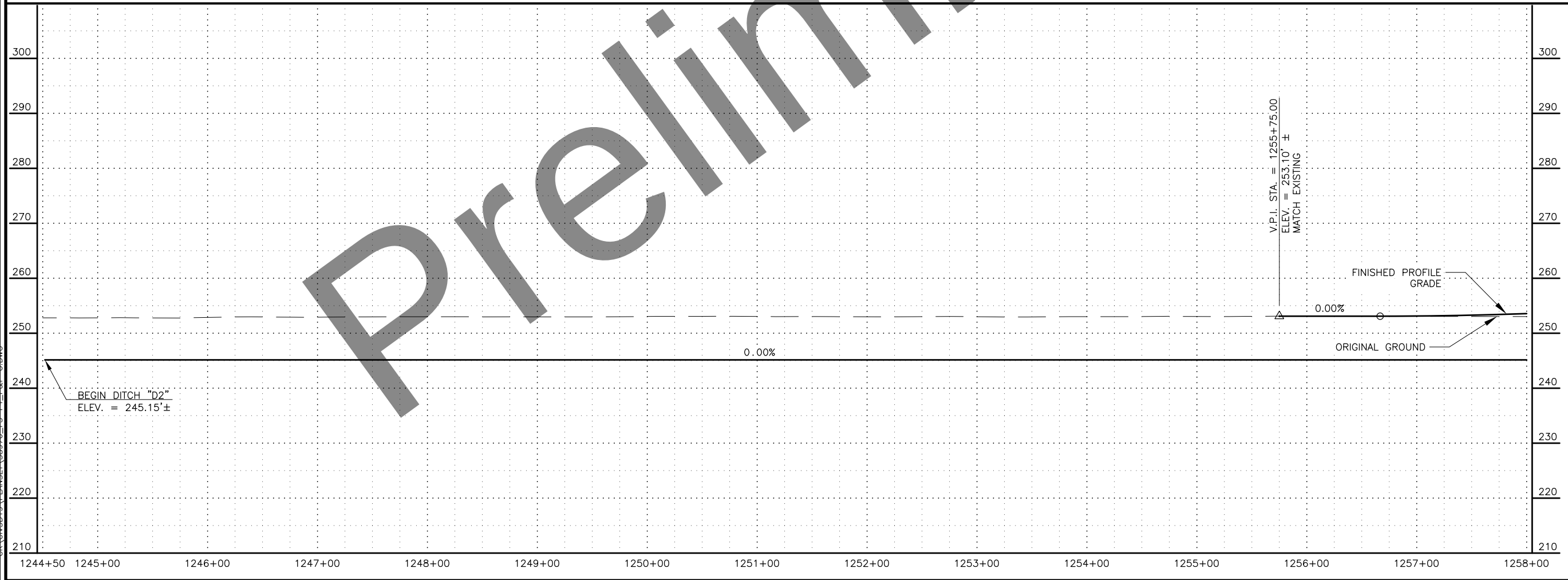
SHEET NO.	TOTAL SHEETS
F2	F23
STATE	YEAR
ALASKA	2021
PROJECT DESIGNATION	
OA41034/Z589760000	
OA41036/CFHWY00217	
NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	



STATE OF ALASKA
49th
PS&E REVIEW
2020
REGISTERED PROFESSIONAL ENGINEER
CE 06601

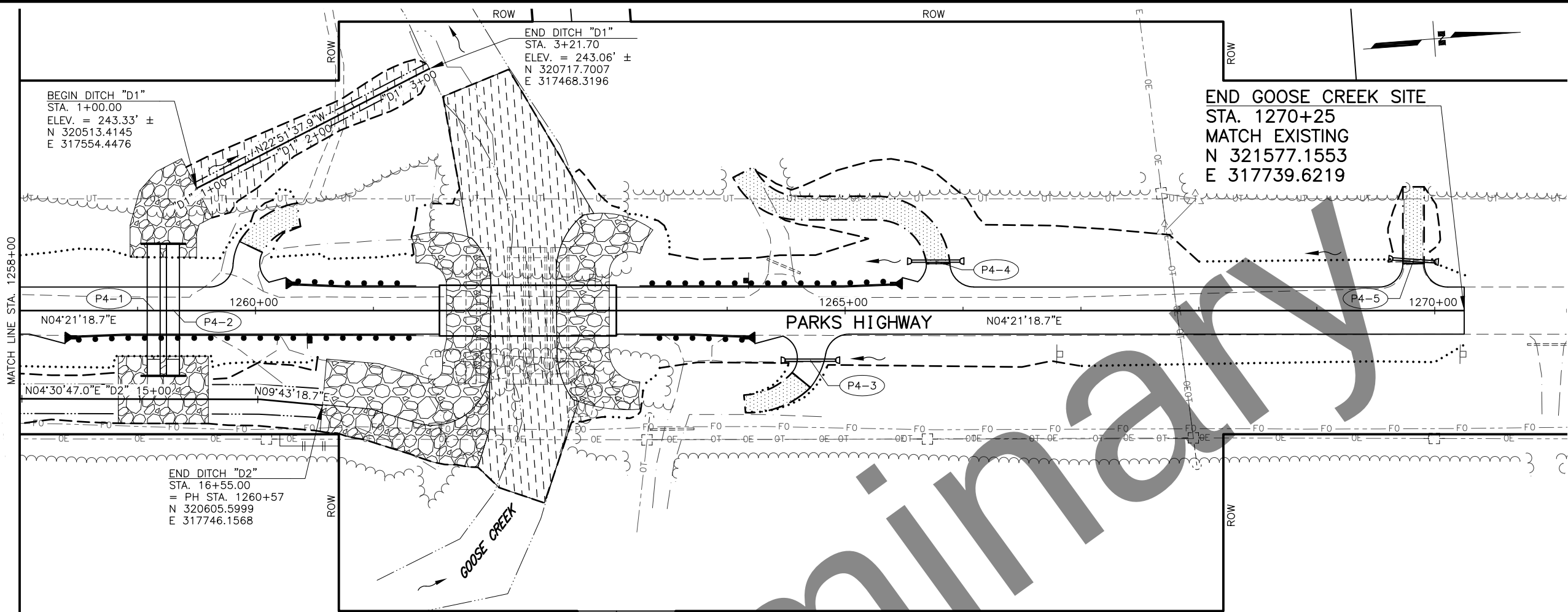
STATE OF ALASKA DOT&PF
4111 AVIATION AVENUE
ANCHORAGE, AK 99502
(907) 269-0590

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
PARKS HIGHWAY BRIDGE
REPLACEMENTS:
MONTANA CREEK, SHEEP
CREEK, AND GOOSE CREEK
PLAN AND PROFILE
STA. 1010+00 TO
STA. 1020+75



G:\USERS\MBHENSON\ONE DRIVE\STATE OF ALASKA\58976 PARKS HWY BRIDGE REPLACEMENT MONTANA CK SHEEP
FILE:CA\CH\3D\19\PLANSET\58976-F3-F4_P&P_C.DWG

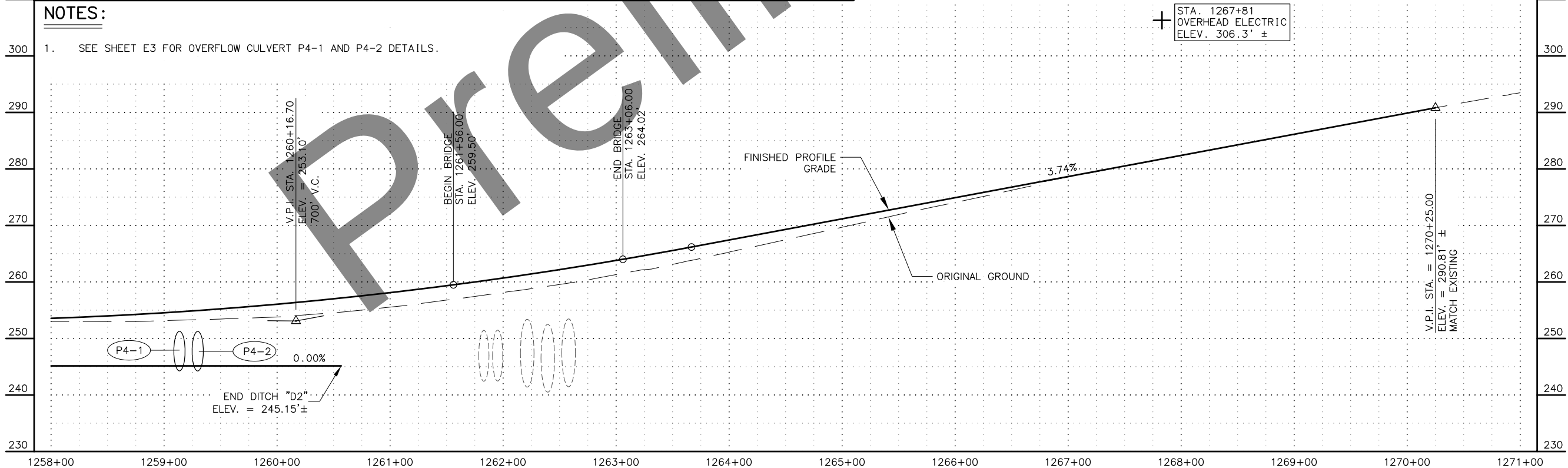
DATE/TIME 10/13/2020 7:08 PM
LAYOUT
F4
DESIGNED
MHB
CHECKED
ALH
DRAFTED
CMWH



	PIPE	SIZE	LENGTH	FROM		TO		ELEVATION		% GRADE	END SECTION
				STATION	OFFSET	STATION	OFFSET	IN	OUT		
320	P4-1	NOTE 1	113'	1259+13.7	55.8' RT	1259+13.7	57.2' LT	245.1'	243.4'	1.5 %	HEADWALL
	P4-2	NOTE 1	113'	1259+30.1	55.8' RT	1259+30.1	57.2' LT	245.1'	243.4'	1.5 %	HEADWALL
	P4-3	24"	43'	1264+92.0	42.1' RT	1264+49.0	42.1' RT	264.7'	264.4'	0.7 %	2
	P4-4	24"	41'	1265+97.3	42.0' LT	1265+56.4	41.9' LT	270.2'	268.8'	3.4 %	2
310	P4-5	24"	36'	1269+99.6	41.4' LT	1269+64.4	43.8' LT	284.8'	283.8'	2.6 %	2

NOTES:

1. SEE SHEET E3 FOR OVERFLOW CULVERT P4-1 AND P4-2 DETAILS.



SHEET NO.	TOTAL SHEETS
F4	F23
STATE	YEAR
ALASKA	2021
PROJECT DESIGNATION	
OA41034/Z589760000	
OA41036/CFHWY00217	
NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	

TO FAIRBANKS

TO WASILLA

PARKS HIGHWAY

GOOSE CREEK

THIS SHEET

STATE OF ALASKA
49TH
PS&E REVIEW
2020
REGISTERED PROFESSIONAL ENGINEER
CE 206601

STATE OF ALASKA DOT&PF
4111 AVIATION AVENUE
ANCHORAGE, AK 99502
(907) 269-0590

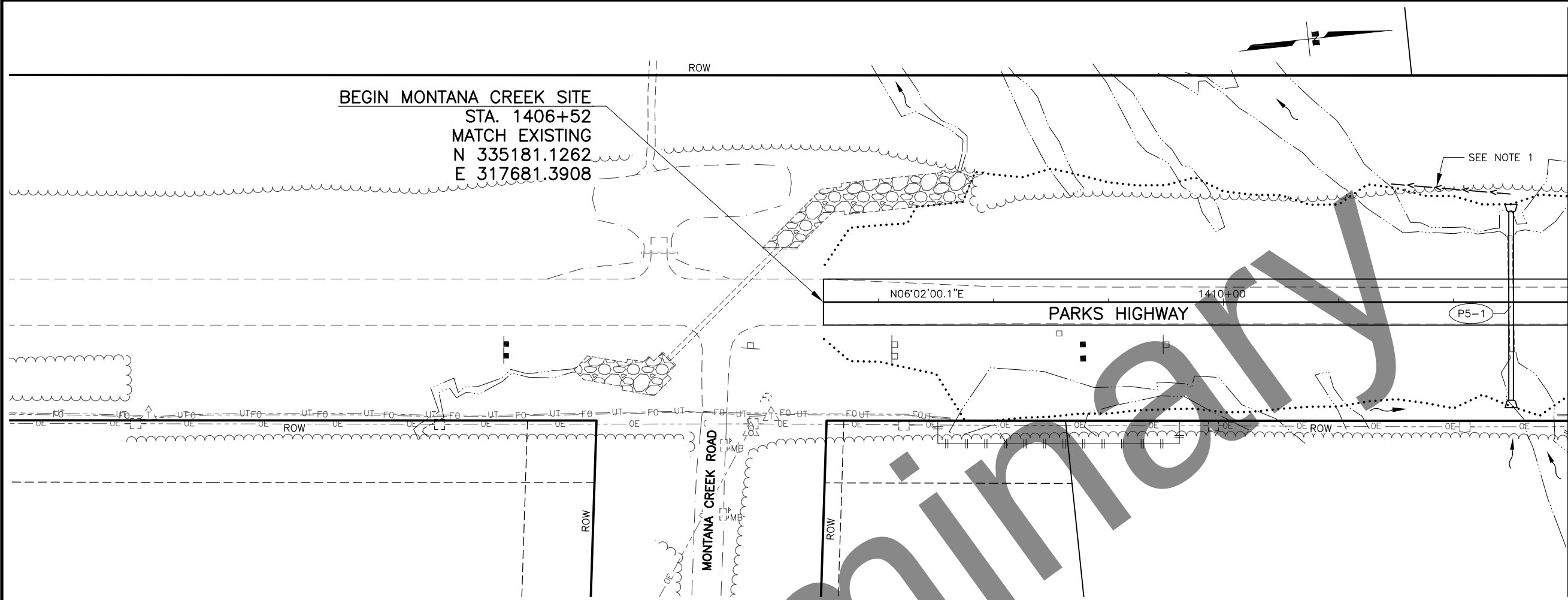
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

PARKS HIGHWAY BRIDGE
REPLACEMENTS:
MONTANA CREEK, SHEEP
CREEK, AND GOOSE CREEK

PLAN AND PROFILE
STA. 1258+00 TO
STA. 1270+25

G:\USERS\MBHENSON\ONE DRIVE\STATE OF ALASKA\58976 PARKS HWY BRIDGE REPLACEMENT MONTANA GK SHEEP
FILE: C:\G:\3D\19\PLANSET\58976-F5-F8-P&P-MDWG

DATE/TIME 10/27/2020 9:01 PM LAYOUT F5 DESIGNED MHB CHECKED ALH DRAFTED CMWH

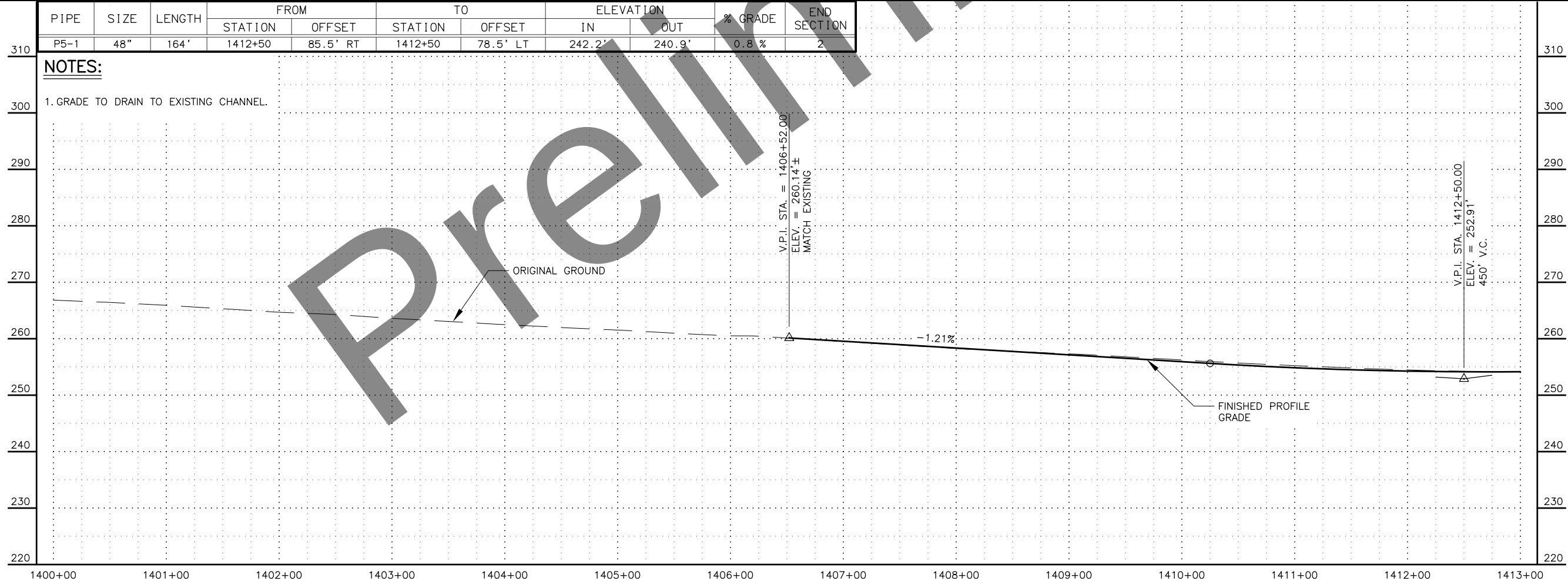


MATCH LINE STA. 1413+00

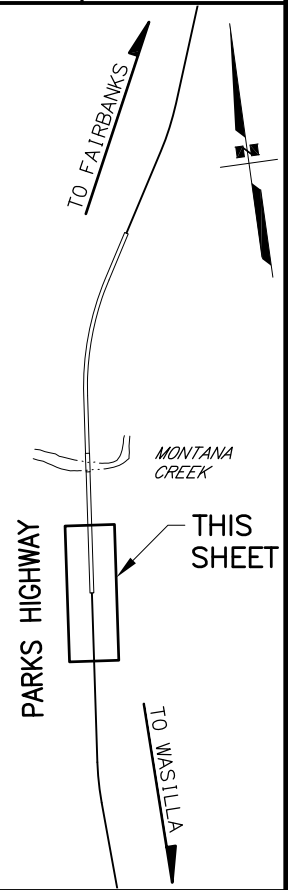
PIPE	SIZE	LENGTH	FROM		TO		ELEVATION		% GRADE	END SECTION
			STATION	OFFSET	STATION	OFFSET	IN	OUT		
P5-1	48"	164'	1412+50	85.5' RT	1412+50	78.5' LT	242.2'	240.9'	0.8 %	2

NOTES:

1. GRADE TO DRAIN TO EXISTING CHANNEL.



SHEET NO.	TOTAL SHEETS
F5	F23
STATE	YEAR
ALASKA	2021
PROJECT DESIGNATION	
OA41034/Z589760000	
OA41036/CFHWY00217	
NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	

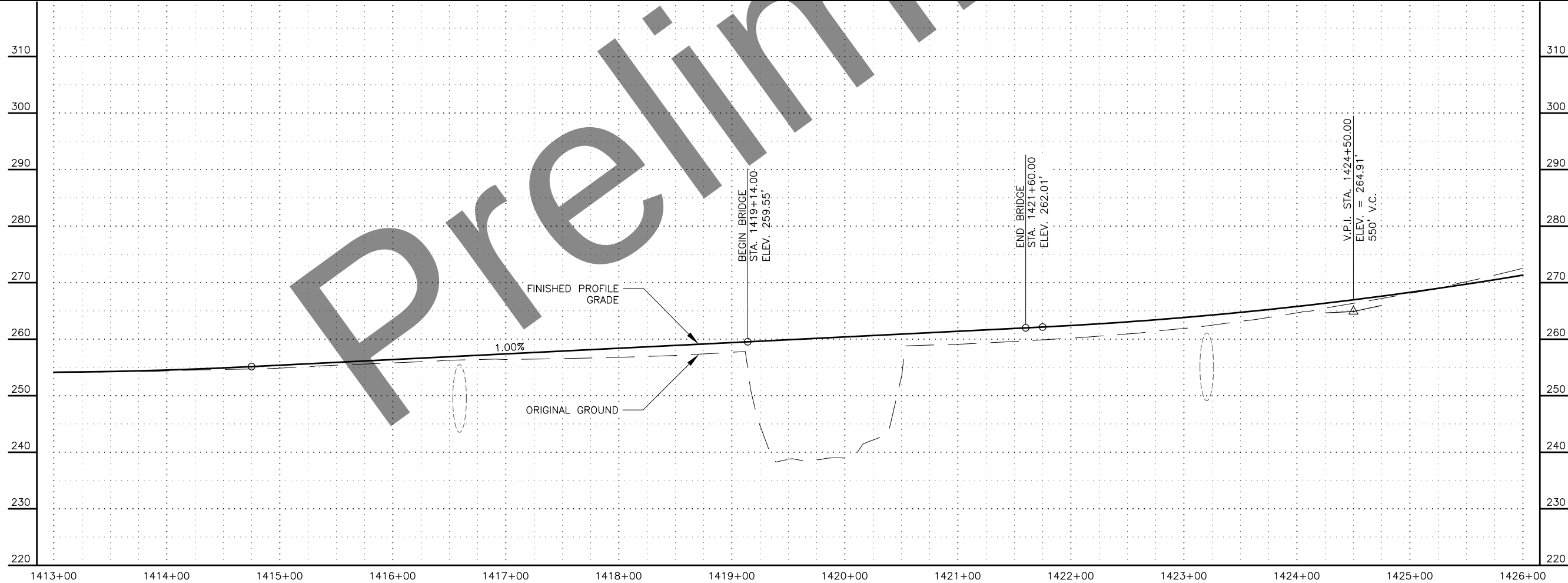
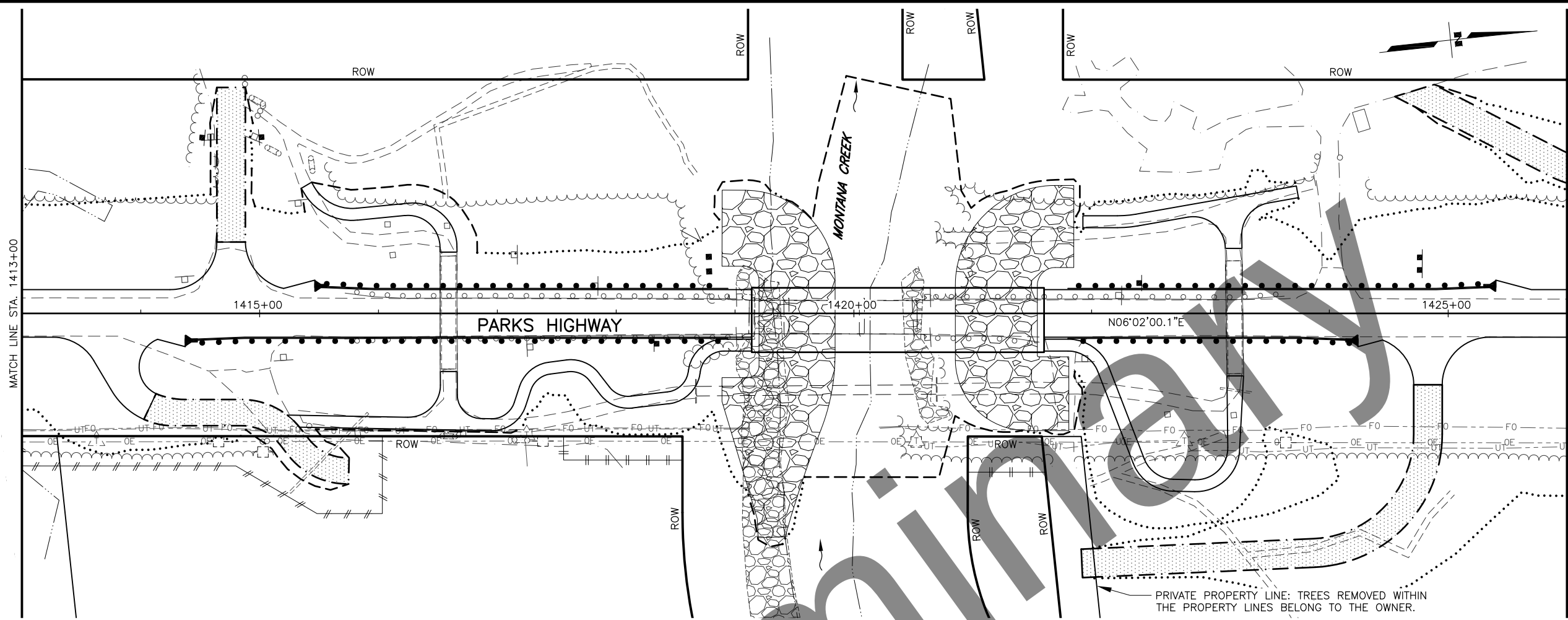


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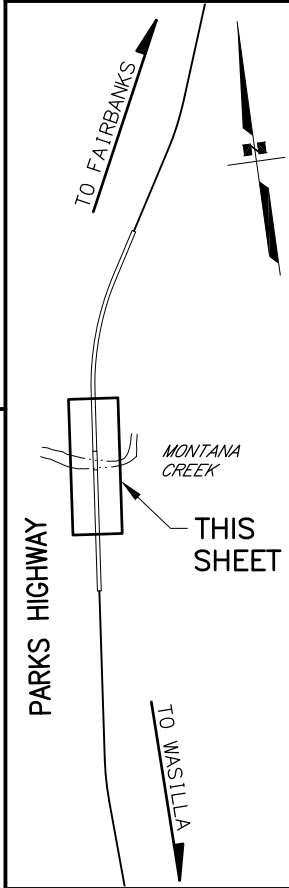
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
PARKS HIGHWAY BRIDGE
REPLACEMENTS:
MONTANA CREEK, SHEEP
CREEK, AND GOOSE CREEK
PLAN AND PROFILE
STA. 1406+52 TO
STA. 1413+00

G:\USERS\MBHENSCH\ONE DRIVE\STATE OF ALASKA\58976 PARKS HWY BRIDGE REPLACEMENT MONTANA GK SHEEP
FILE:CA\31019\PLANSET\58976-F5-F8-P&P-MDWG

DATE/TIME 11/25/2020 7:35 AM [LAYOUT] F6 [DESIGNED] MHB [CHECKED] ALH [DRAFTED] CWH



SHEET NO.	TOTAL SHEETS
F6	F23
STATE	YEAR
ALASKA	2021
PROJECT DESIGNATION	
0A41034/Z589760000	
0A41036/CFHWY00217	
NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	

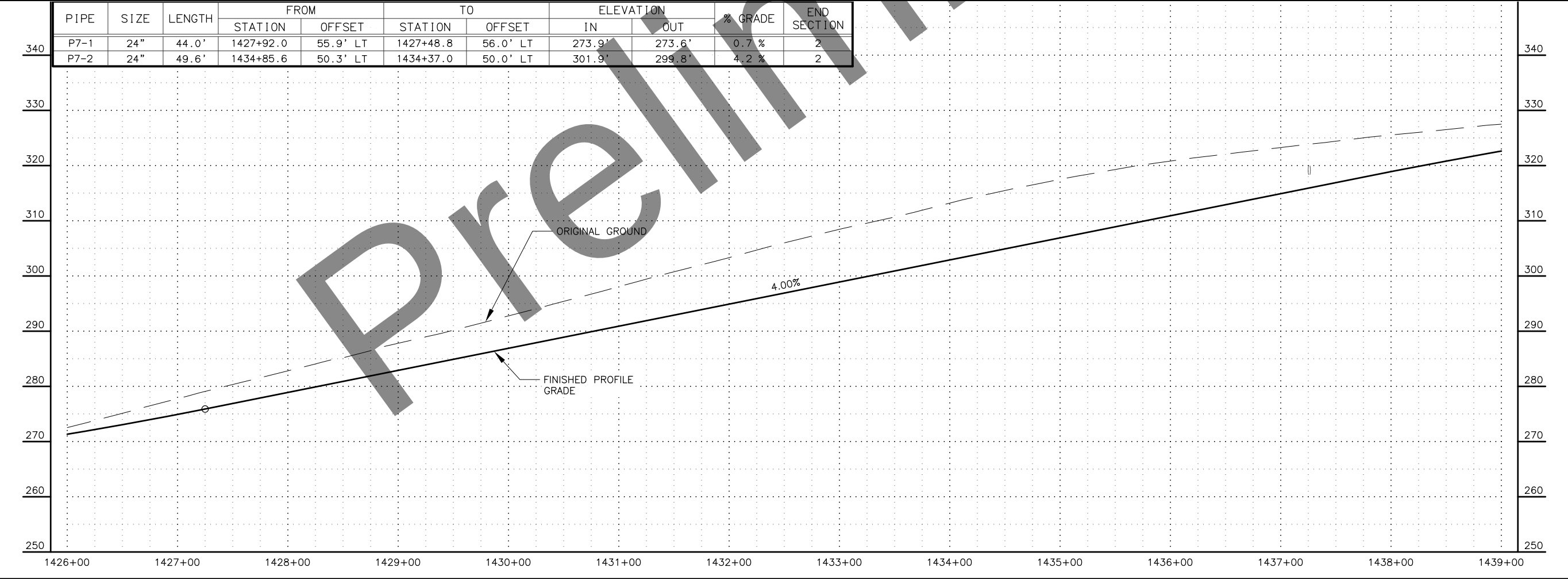
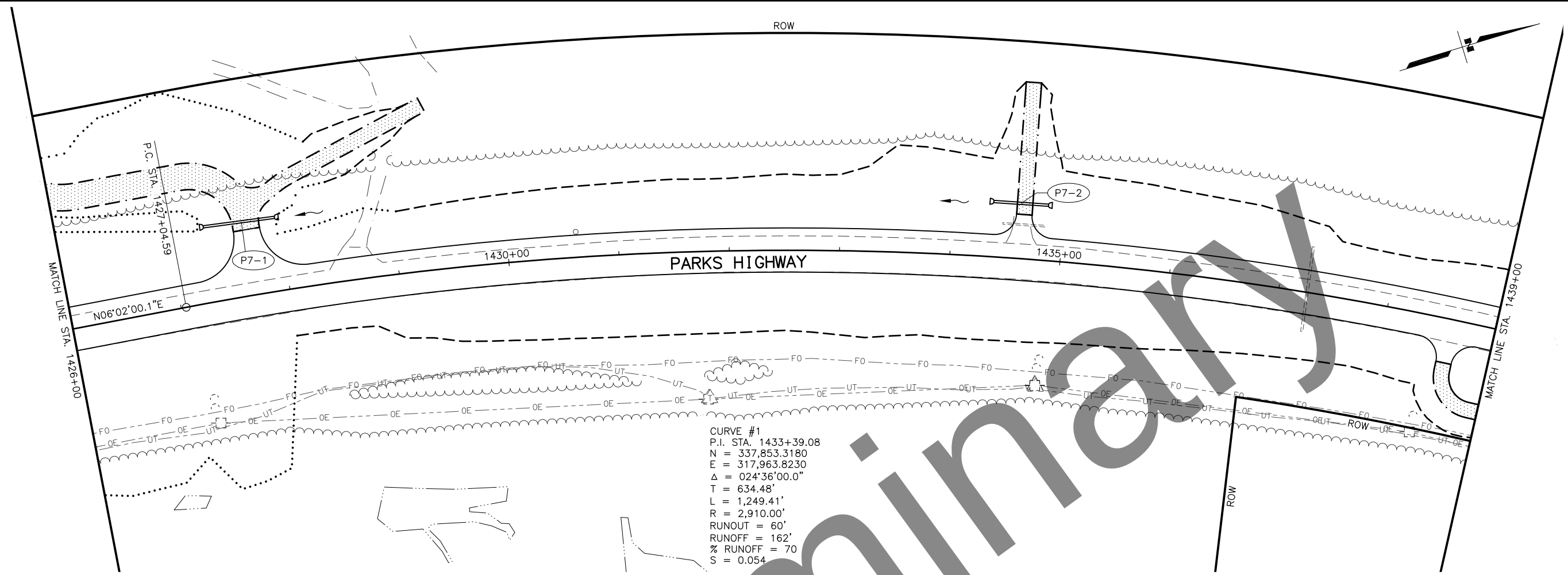


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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
PARKS HIGHWAY BRIDGE
REPLACEMENTS:
MONTANA CREEK, SHEEP
CREEK, AND GOOSE CREEK
PLAN AND PROFILE
STA. 1413+00 TO
STA. 1426+00

G:\USERS\MBHENSON\ONE DRIVE\STATE OF ALASKA\58976 PARKS HWY BRIDGE REPLACEMENT MONTANA CREEK SHEEP
FILE: C:\G:\3D\19\PLANSET\58976-F5-P&P.MDWG

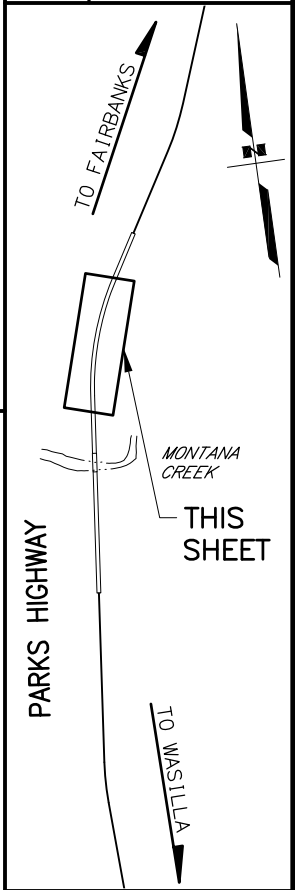
DATE/TIME 10/14/2020 8:14 AM [LAYOUT] F7 [DESIGNED] MHB [CHECKED] ALH [DRAFTED] CMWH



SHEET NO.	TOTAL SHEETS
F7	F23
STATE	YEAR
ALASKA	2021

PROJECT DESIGNATION
OA41034/Z589760000
OA41036/CFHWY00217

NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	



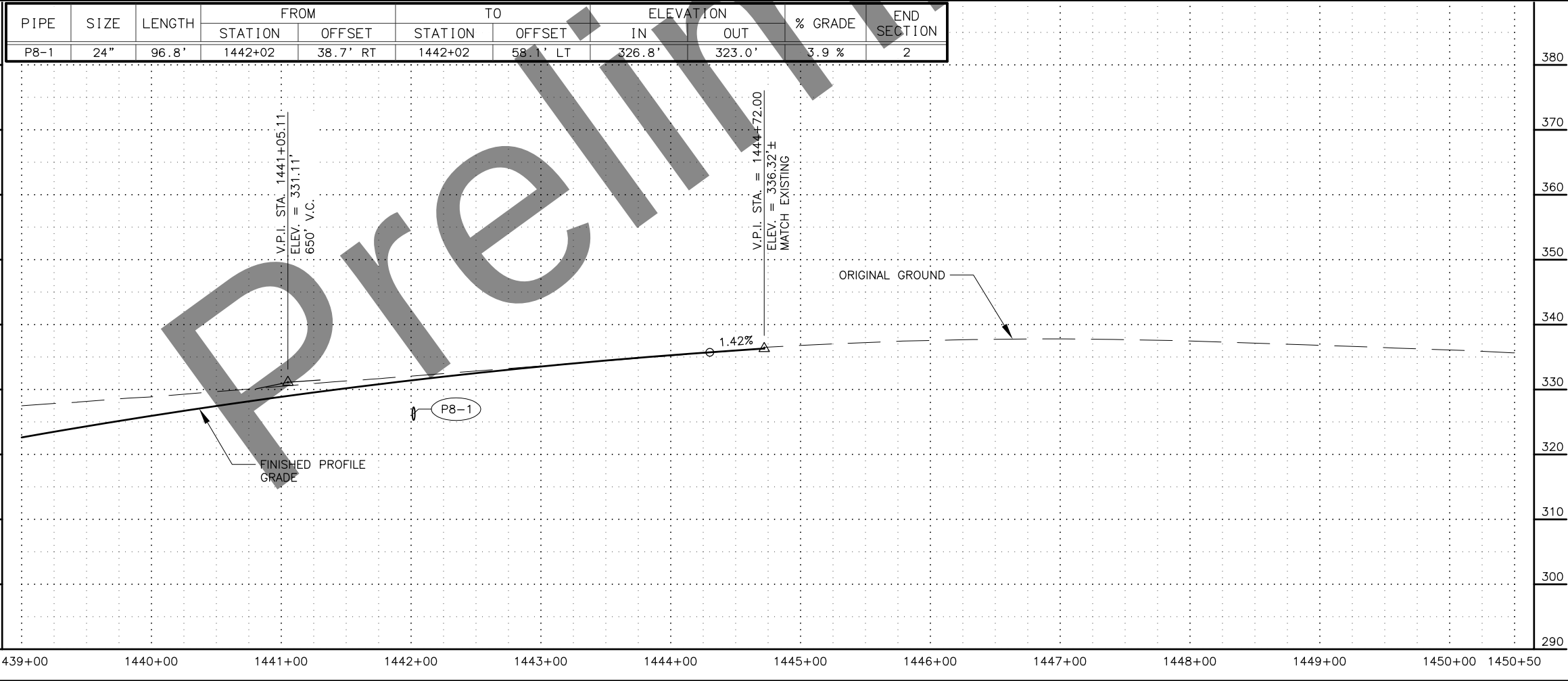
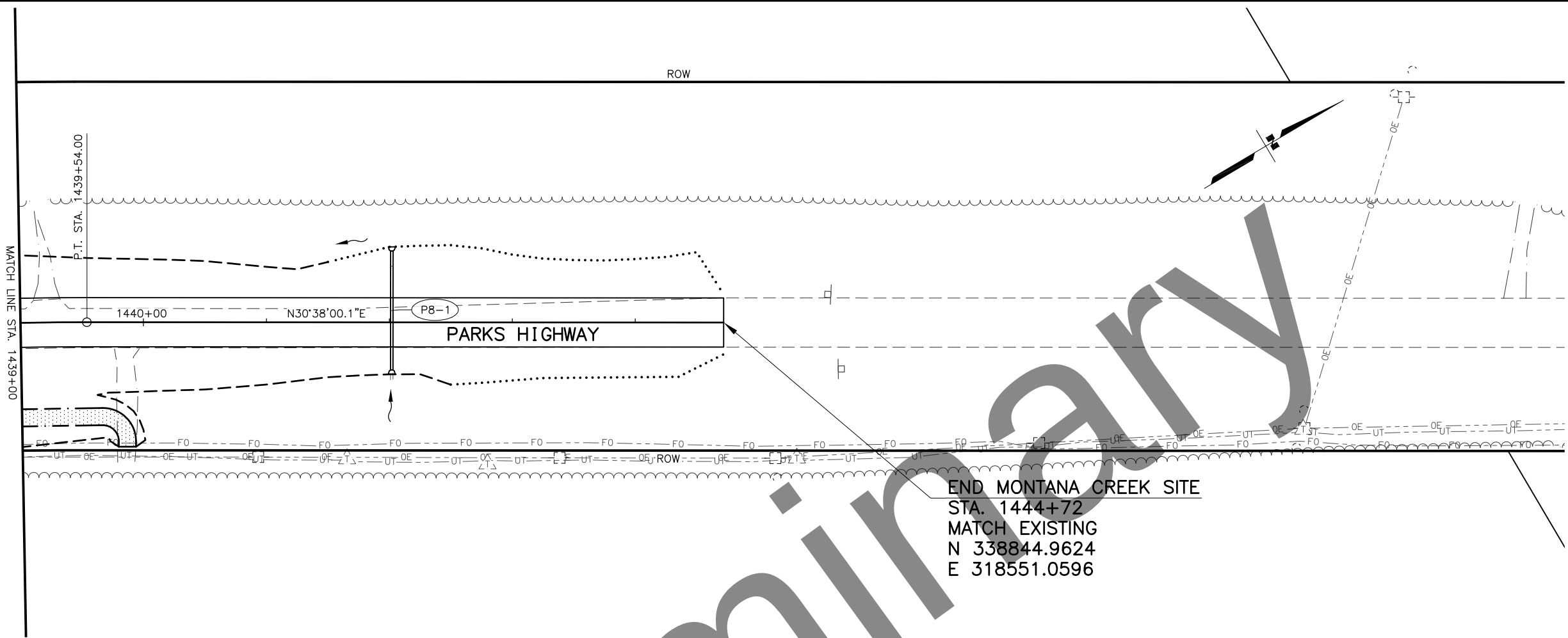
STATE OF ALASKA
49TH
PS&E REVIEW
2020
ARON W. SMITH
CE 06601
REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA DOT&PF
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ANCHORAGE, AK 99502
(907) 269-0590

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
PARKS HIGHWAY BRIDGE
REPLACEMENTS:
MONTANA CREEK, SHEEP
CREEK, AND GOOSE CREEK
PLAN AND PROFILE
STA. 1426+00 TO
STA. 1439+00

G:\USERS\MBHENSON\ONE DRIVE\STATE OF ALASKA\58976 PARKS HWY BRIDGE REPLACEMENT MONTANA GK SHEEP
FILE C:\G:\CH3D19\PLANSET\58976-F5-F8-P&P-MDWG

DATE/TIME 10/14/2020 9:22 AM
LAYOUT F8
DESIGNED MHB
CHECKED ALH
DRAFTED CMWH



SHEET NO.	TOTAL SHEETS
F8	F23
STATE	YEAR
ALASKA	2021
PROJECT DESIGNATION	
OA41034/Z589760000 OA41036/CFHWY00217	
NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	

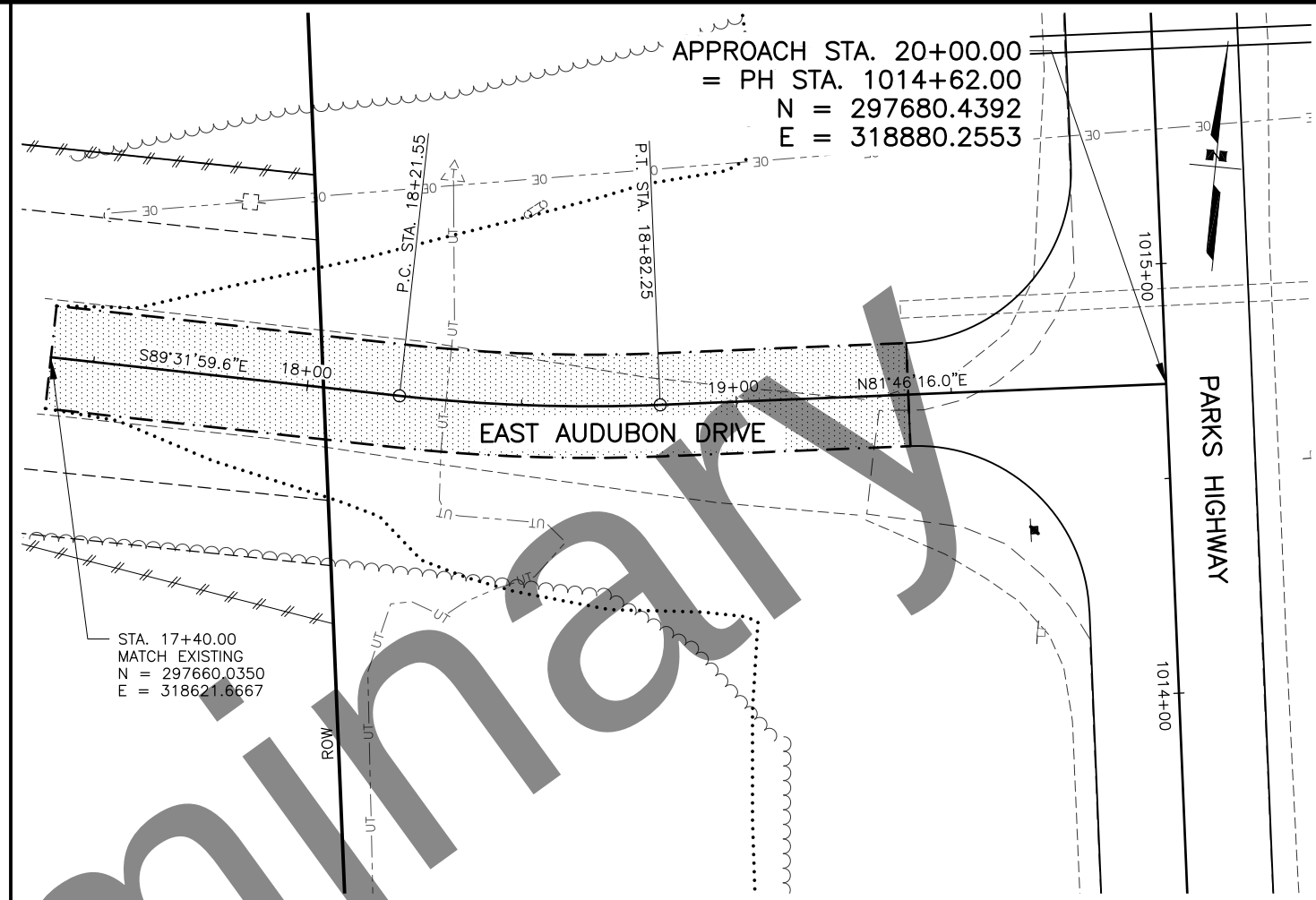
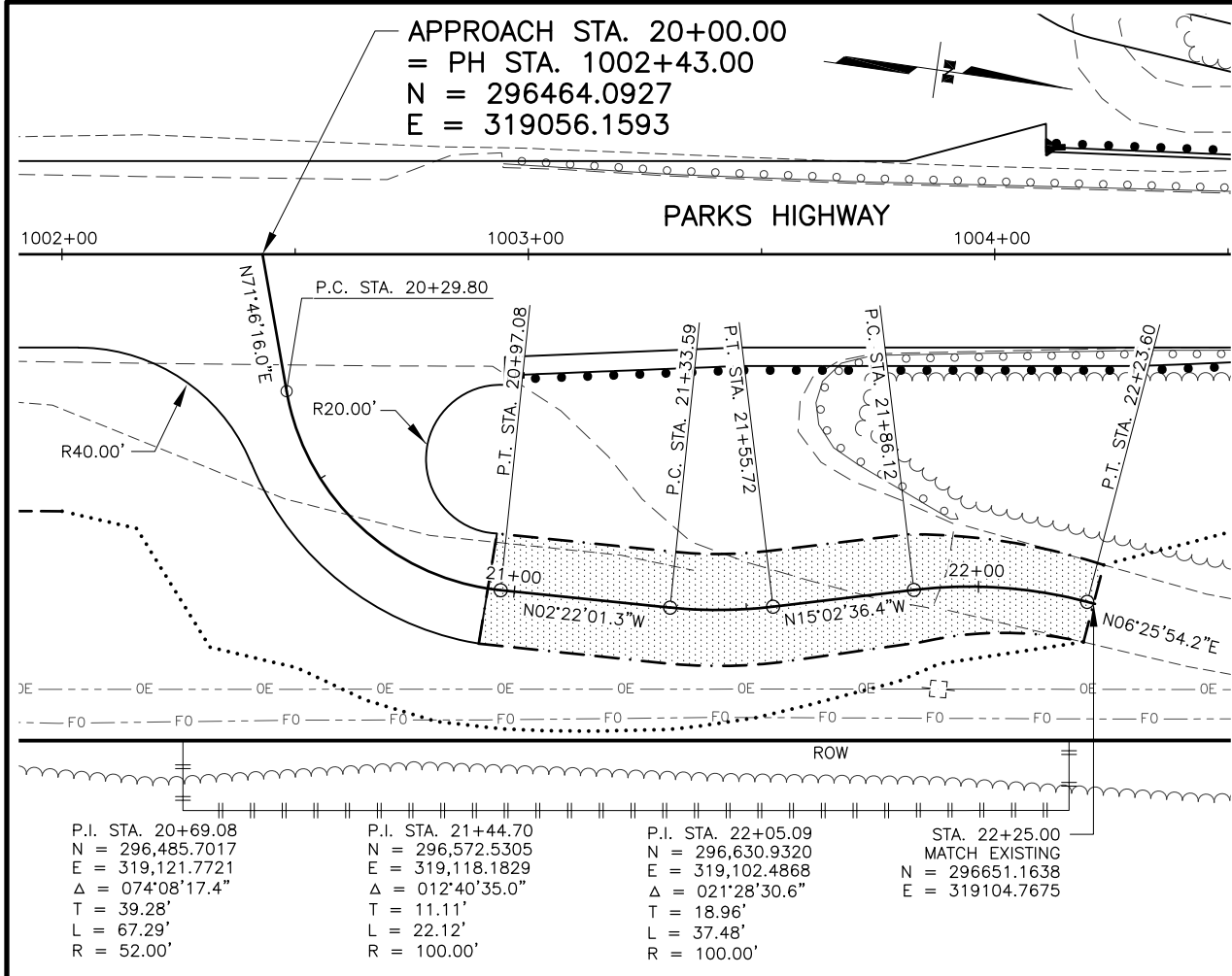
STATE OF ALASKA
49TH
PS&E REVIEW
2020
ANCHOR ENGINEERING
CE 06601
REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA DOT&PF
4111 AVIATION AVENUE
ANCHORAGE, AK 99502
(907) 269-0590

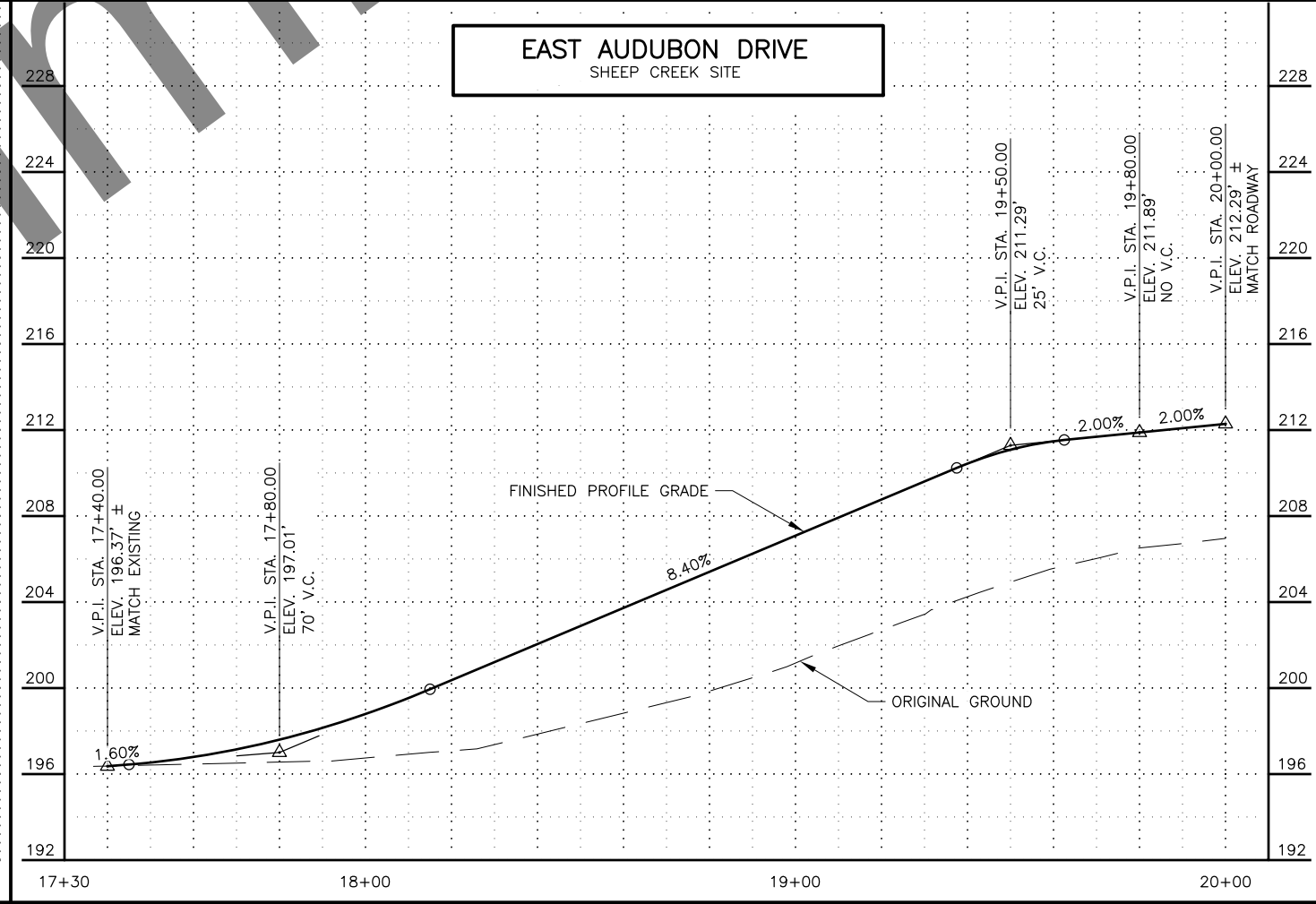
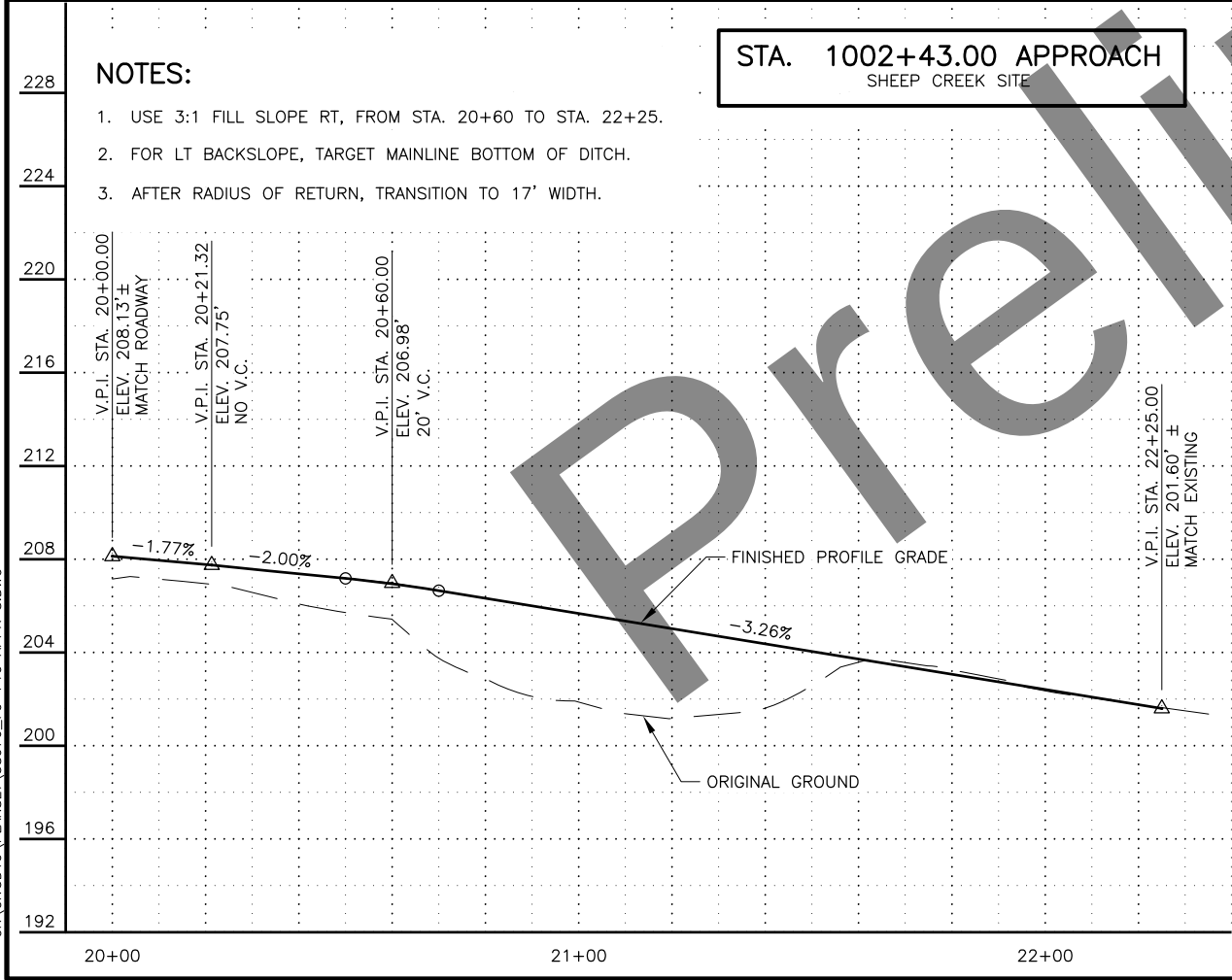
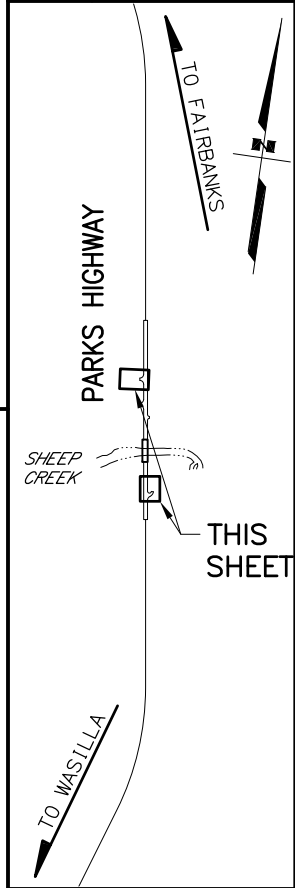
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
PARKS HIGHWAY BRIDGE
REPLACEMENTS:
MONTANA CREEK, SHEEP
CREEK, AND GOOSE CREEK
PLAN AND PROFILE
STA. 1439+00 TO
STA. 1444+72

G:\USERS\MOHENSCH\ONEDRAW - STATE OF ALASKA\58976 PARKS HWY BRIDGE REPLACEMENT MONTANA CRK SHEEP
FILE C:\K\CH3D19\PLANSET\58976 F9 - F10 APPR S.DWG

DATE/TIME 10/14/2020 9:55 AM
F9
LAYOUT
DESIGNED
MHB
CHECKED
ALH
DRAFTED
CMWH



SHEET NO.	TOTAL SHEETS
F9	F23
STATE	YEAR
ALASKA	2021
PROJECT DESIGNATION	
0A41034/Z589760000	
0A41036/CFHWY00217	
NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	



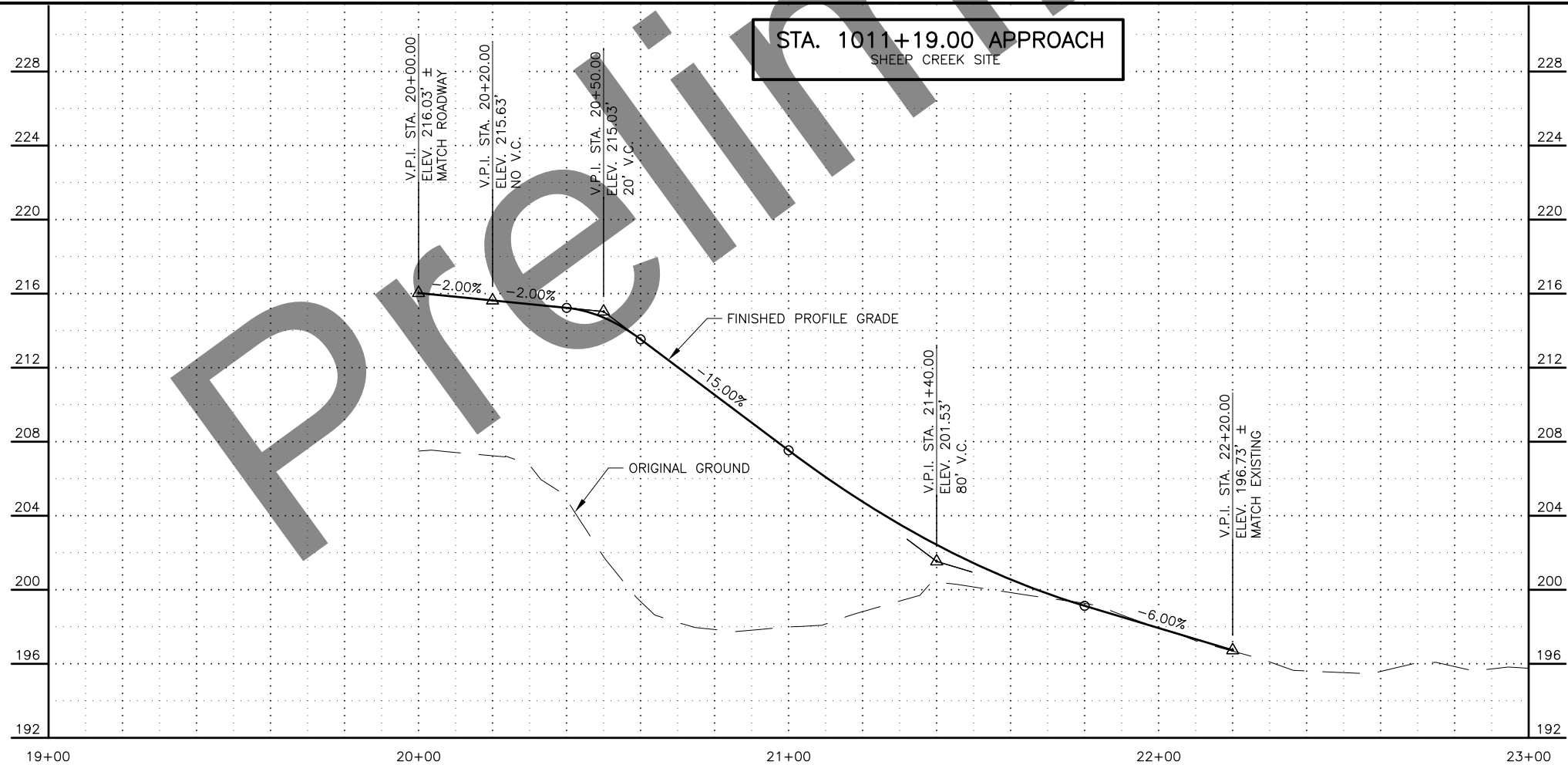
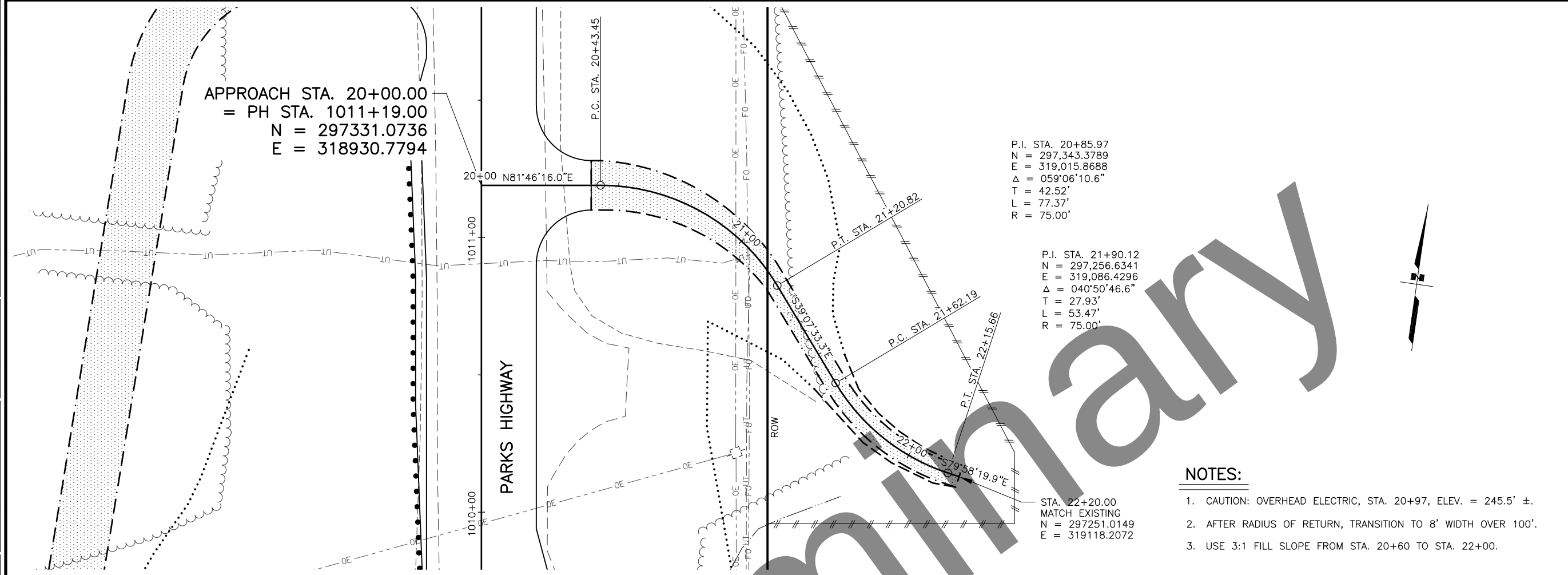
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ANCHORAGE, AK 99502
(907) 269-0590

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
PARKS HIGHWAY BRIDGE
REPLACEMENTS:
MONTANA CREEK, SHEEP
CREEK, AND GOOSE CREEK

APPROACH
PLAN AND PROFILE

G:\USERS\MBHENSON\ONE DRIVE - STATE OF ALASKA\58976 PARKS HWY BRIDGE REPLACEMENT MONTANA GK SHEEP
FILE G:\CA\3D\19\PLANSET\58976 F9 F10 APPR S.DWG

DATE/TIME 10/14/2020 10:11 AM [LAYOUT] F10 [DESIGNED] MHB [CHECKED] ALH [DRAFTED] CMWH



SHEET NO.	TOTAL SHEETS
F10	F23
STATE	YEAR
ALASKA	2021
PROJECT DESIGNATION	
0A41034/Z589760000	
0A41036/CFHWY00217	
NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	

PARKS HIGHWAY

TO FAIRBANKS

THIS SHEET

TO WASILLA

SHEEP CREEK

STATE OF ALASKA
49th
PS&E REVIEW
2020
REGISTERED PROFESSIONAL ENGINEER
CE 06601

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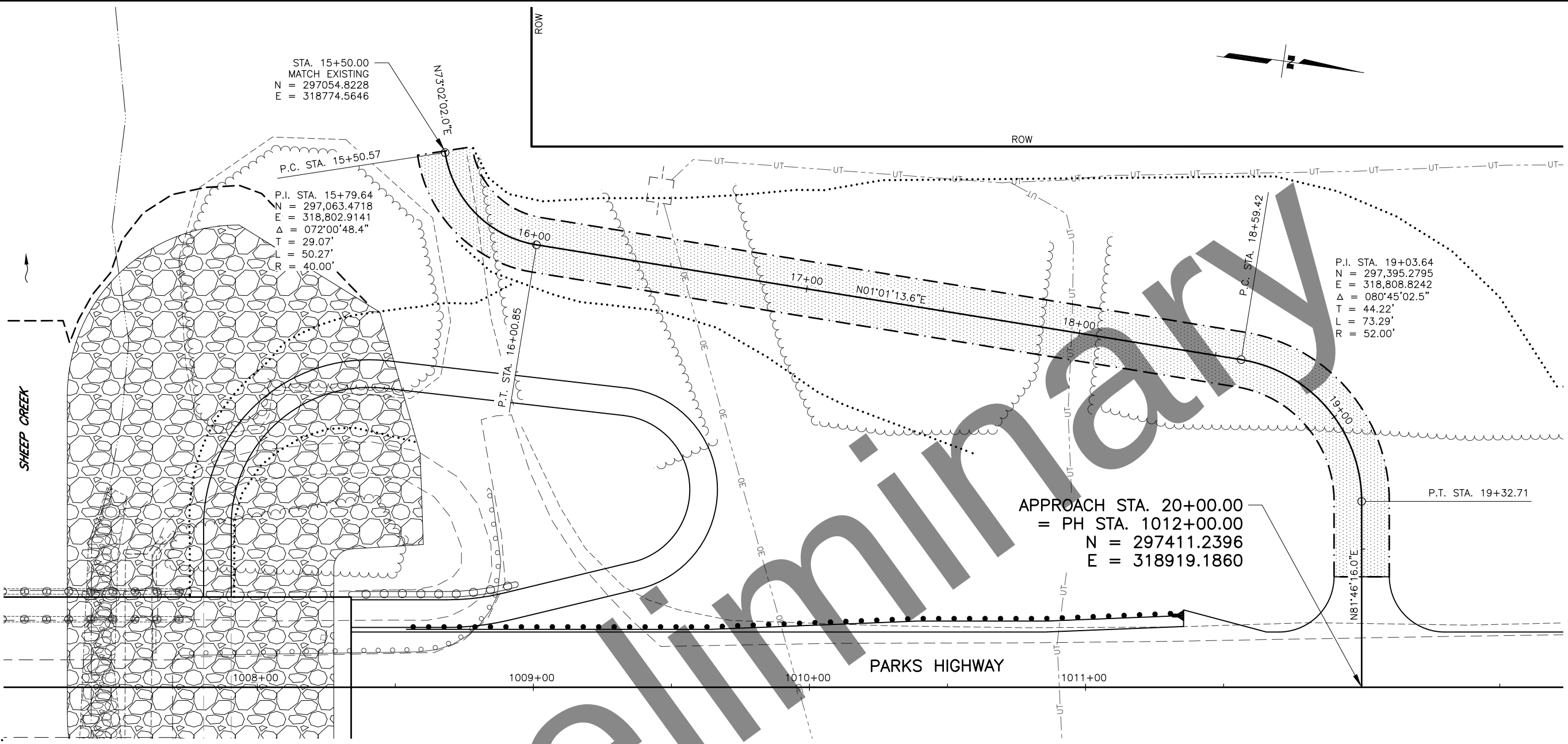
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

PARKS HIGHWAY BRIDGE
REPLACEMENTS:
MONTANA CREEK, SHEEP
CREEK, AND GOOSE CREEK

APPROACH
PLAN AND PROFILES

G:\USERS\MOHENSCH\ONEDRAIVE\STATE OF ALASKA\58976 PARKS HWY BRIDGE REPLACEMENT MONTANA GK SHEEP
FILE G:\G:\3D\19\PLANSET\58976 F11 APPR S.DWG

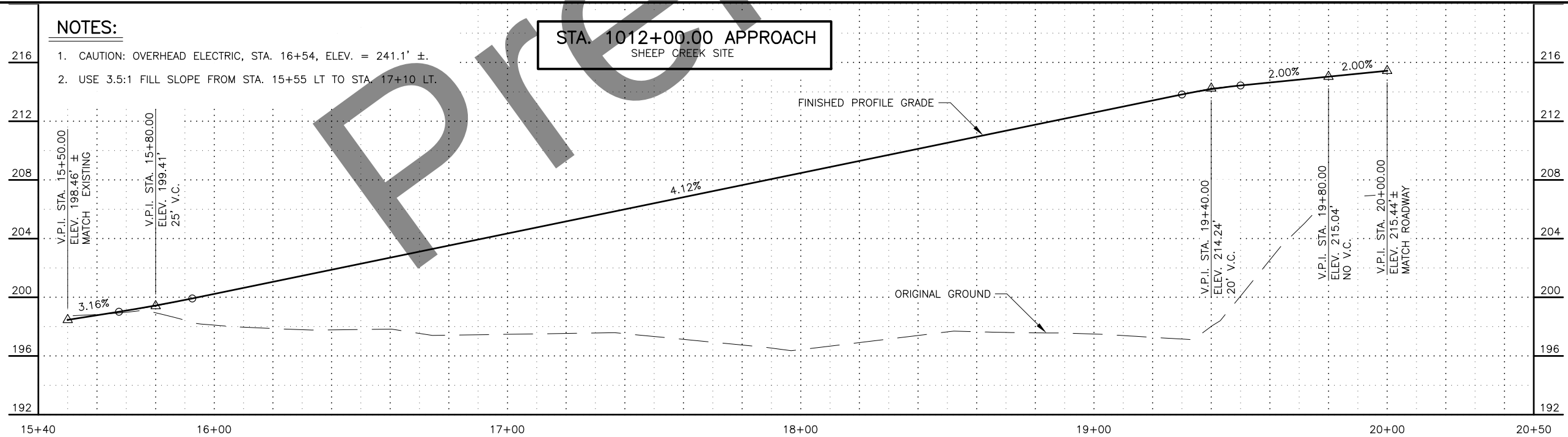
DATE/TIME 10/14/2020 10:17 AM [LAYOUT] F11 DESIGNED MHB CHECKED ALH DRAFTED CMWH



NOTES:

- CAUTION: OVERHEAD ELECTRIC, STA. 16+54, ELEV. = 241.1' ±.
- USE 3.5:1 FILL SLOPE FROM STA. 15+55 LT TO STA. 17+10 LT.

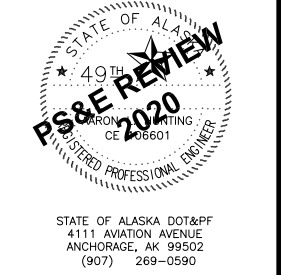
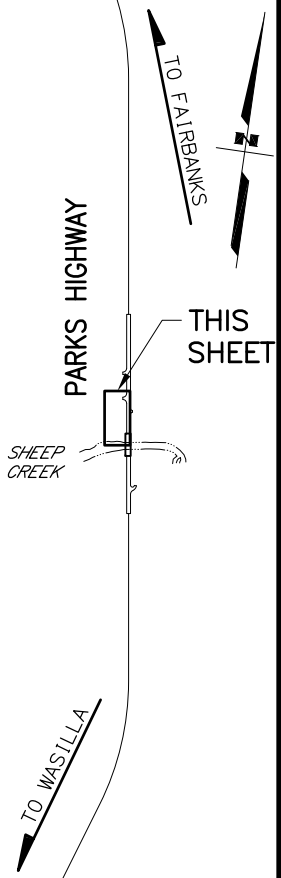
STA. 1012+00.00 APPROACH
SHEEP CREEK SITE



SHEET NO.	TOTAL SHEETS
F11	F23
STATE	YEAR
ALASKA	2021

PROJECT DESIGNATION
OA41034/Z589760000
OA41036/CFHWY00217

NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	

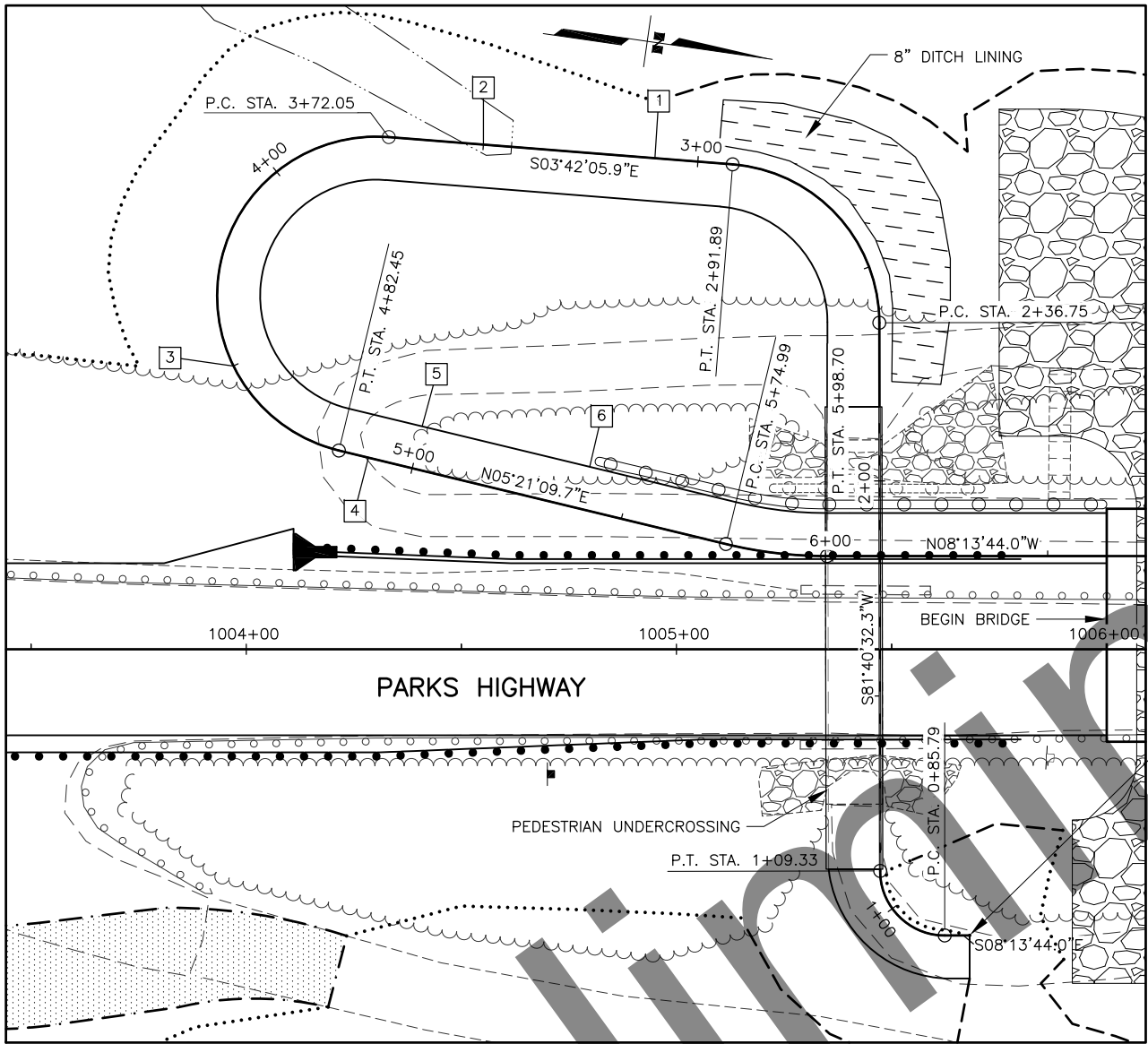


STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
PARKS HIGHWAY BRIDGE
REPLACEMENTS:
MONTANA CREEK, SHEEP
CREEK, AND GOOSE CREEK
APPROACH
PLAN AND PROFILE

CURVE 2
P.I. STA. 2+70.88
N = 296,749.2990
E = 318,903.7418
Δ = 085°22'38.1"
T = 34.13'
L = 55.13'
R = 37.00'

CURVE 3
P.I. STA. 4+27.25
N = 296,168.9171
E = 318,941.2900
Δ = 170°56'44.5"
T = 467.30'
L = 110.39'
R = 37.00'

CURVE 4
P.I. STA. 5+86.90
N = 296,738.1773
E = 318,994.6267
Δ = 013°34'53.6"
T = 11.91'
L = 23.70'
R = 100.00'



NOTES:

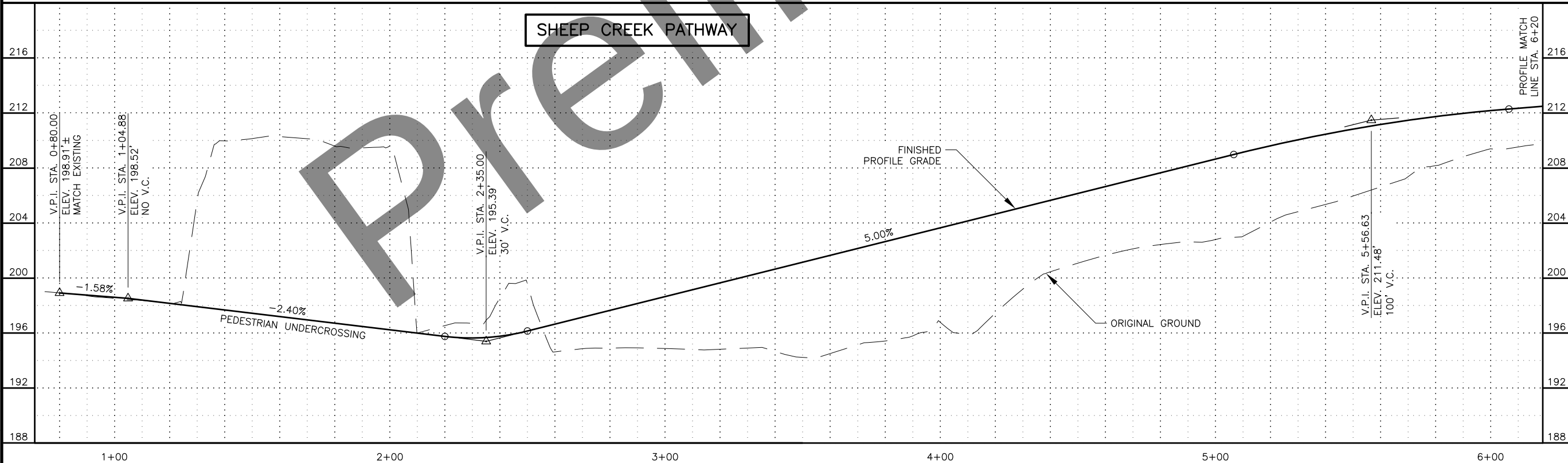
1. THE PATHWAY WIDTH TRANSITIONS TO 12 FT ± TO MATCH THE PEDESTRIAN UNDERCROSSING WIDTH BETWEEN STATIONS 0+80 AND 2+94.
2. SHOULDER HINGE IS NOT SHOWN.
3. BRIDGE RAILING IS NOT SHOWN.

SHOULDER LAYOUT SCHEDULE

POINT	STATION	OFFSET	REMARKS
1	3+10	1' RT	BEGIN TAPER
2	3+50	5' RT	END TAPER
3	4+50	5' RT	BEGIN TAPER
4	4+90	1' RT	END TAPER
5	5+00	11' LT	BEGIN TAPER
6	5+40	12' LT	END TAPER

BEGIN PATHWAY
STA. 0+80.00
MATCH EXISTING
N 296795.4091
E 319075.4372

CURVE 1
P.I. STA. 1+00.77
N = 296,774.8561
E = 319,078.495
Δ = 089°54'16.2"
T = 14.98'
L = 23.54'
R = 15.00'



SHEET NO.	TOTAL SHEETS
F12	F23
STATE	YEAR
ALASKA	2021
PROJECT DESIGNATION	
0A41034/Z589760000 0A41036/CFHWY00217	
NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	

TO FAIRBANKS

PARKS HIGHWAY

SHEEP CREEK

THIS SHEET

TO WASILLA

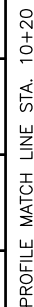
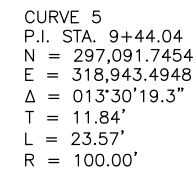
STATE OF ALASKA
49TH ANNUAL
PS&E REVIEW
2020
REGISTERED PROFESSIONAL ENGINEER
CE 266601

STATE OF ALASKA DOT&PF
4111 AVIATION AVENUE
ANCHORAGE, AK 99502
(907) 269-0590

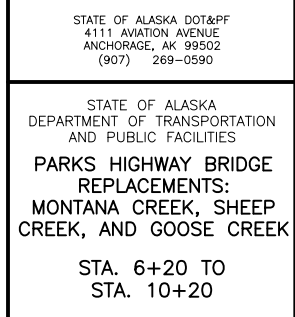
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

PARKS HIGHWAY BRIDGE
REPLACEMENTS:
MONTANA CREEK, SHEEP
CREEK, AND GOOSE CREEK

STA. 0+80 TO
STA. 6+20



A map of the Fairbanks area. A vertical line represents 'PARKS HIGHWAY'. A horizontal line crosses it, with a small rectangle on the highway labeled 'THIS SHEET'. To the left of the intersection is 'SHEEP CREEK'. Above the intersection, a compass rose points towards the top right, labeled 'TO FAIRBANKS'.



CURVE 7
P.I. STA. 12+61.13
N = 296,978.1513
E = 318,854.7263
Δ = 096°28'52.4"
T = 67.20'
L = 101.03'
R = 60.00'

CURVE 8
P.I. STA. 14+01.85
N = 297,003.0277
E = 319,027.0269
Δ = 009°44'29.5"
T = 17.04'
L = 34.00'
R = 200.00'

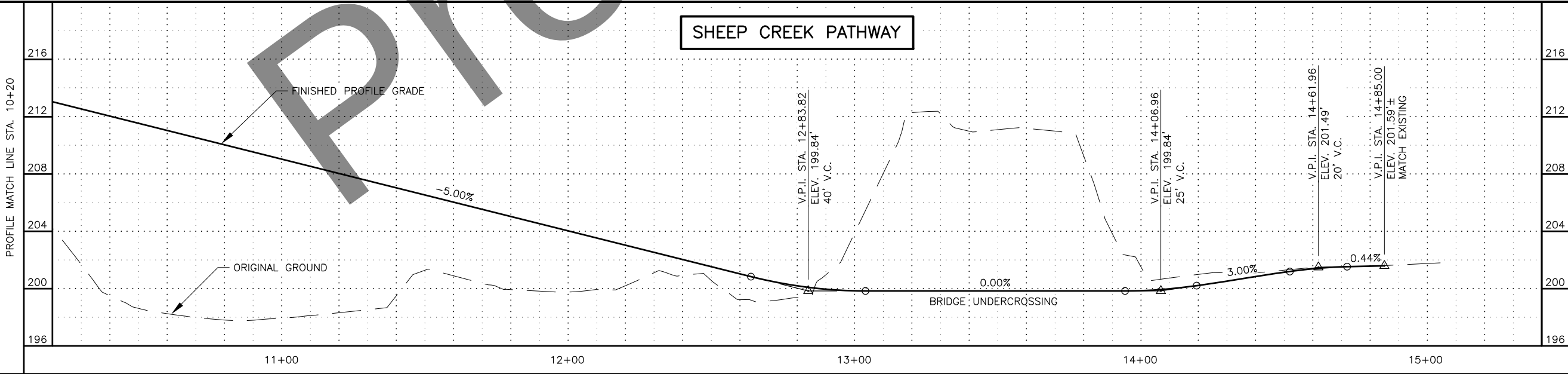
CURVE 9
P.I. STA. 14+64.73
N = 297,001.3507
E = 319,089.9706
Δ = 010°35'37.5"
T = 18.54'
L = 36.98'
R = 200.00'

CURVE 6
P.I. STA. 10+55.23
N = 297,342.0629
E = 318,843.7081
Δ = 160°00'00.0"
T = 209.84'
L = 103.32'
R = 37.00'

SHOULDER LAYOUT SCHEDULE			
POINT	STATION	OFFSET	REMARKS
1	9+90	1' RT	BEGIN TAPER
2	10+30	5' RT	END TAPER
3	12+80	15' LT	BEGIN TAPER
4	13+20	11' LT	END TAPER
5	13+80	11' LT	BEGIN TAPER
6	14+20	15' LT	END TAPER

NOTES:

- CAUTION; OVERHEAD ELECTRIC, STA. 14+47, ELEV. = 224.9' ±.
- SHOULDER HINGE IS NOT SHOWN.
- BRIDGE RAILING IS NOT SHOWN.



SHEET NO. F14

TOTAL SHEETS F23

STATE ALASKA

YEAR 2021

PROJECT DESIGNATION

0A41034/Z589760000

0A41036/CFHWY00217

NO.

REVISION

DATE

NO.

REVISION

DATE

NO.

REVISION

DATE

TO FAIRBANKS

TO WASILLA

PARKS HIGHWAY

SHEEP CREEK

THIS SHEET

STATE OF ALASKA

49TH

PS&E REVIEW

2020

REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA DOT&PF

4111 AVIATION AVENUE

ANCHORAGE, AK 99502

(907) 269-0590

STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

PARKS HIGHWAY BRIDGE REPLACEMENTS:

MONTANA CREEK, SHEEP CREEK, AND GOOSE CREEK

STA. 10+20 TO STA. 14+85

G:\USERS\MBHENSON\ONE DRIVE - STATE OF ALASKA\58976 PARKS HWY BRIDGE REPLACEMENT MONTANA GK SHEEP
FILE C:\G:\CH3D\19\PLANSET\58976 F15-16 APPR.GDWG

DATE/TIME 10/16/2020 6:48 PM [LAYOUT] F15 DESIGNED MHB CHECKED ALH DRAFTED CMWH

P.I. STA. 19+41.20
N = 320,551.7987
E = 317,586.8129
Δ = 081°34'58.3"
T = 44.87'
L = 74.04'
R = 52.00'

STA. 18+95.00
MATCH EXISTING
N = 320597.8806
E = 317583.5405

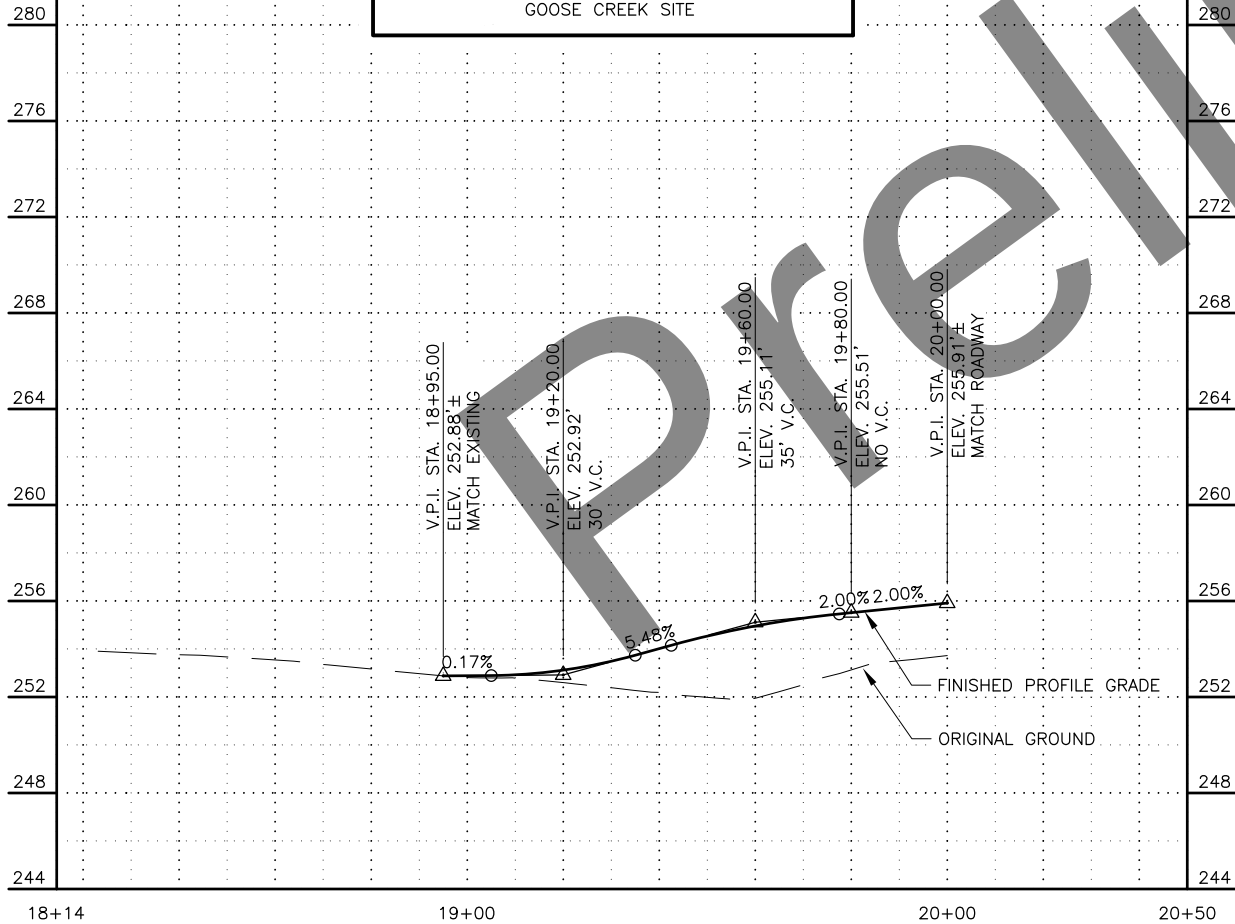
APPROACH STA. 20+00.00
= PH STA. 1259+91.00
N = 320546.1410
E = 317661.1008

P.T. STA. 19+70.37

S85°38'41.3"E

PARKS HIGHWAY

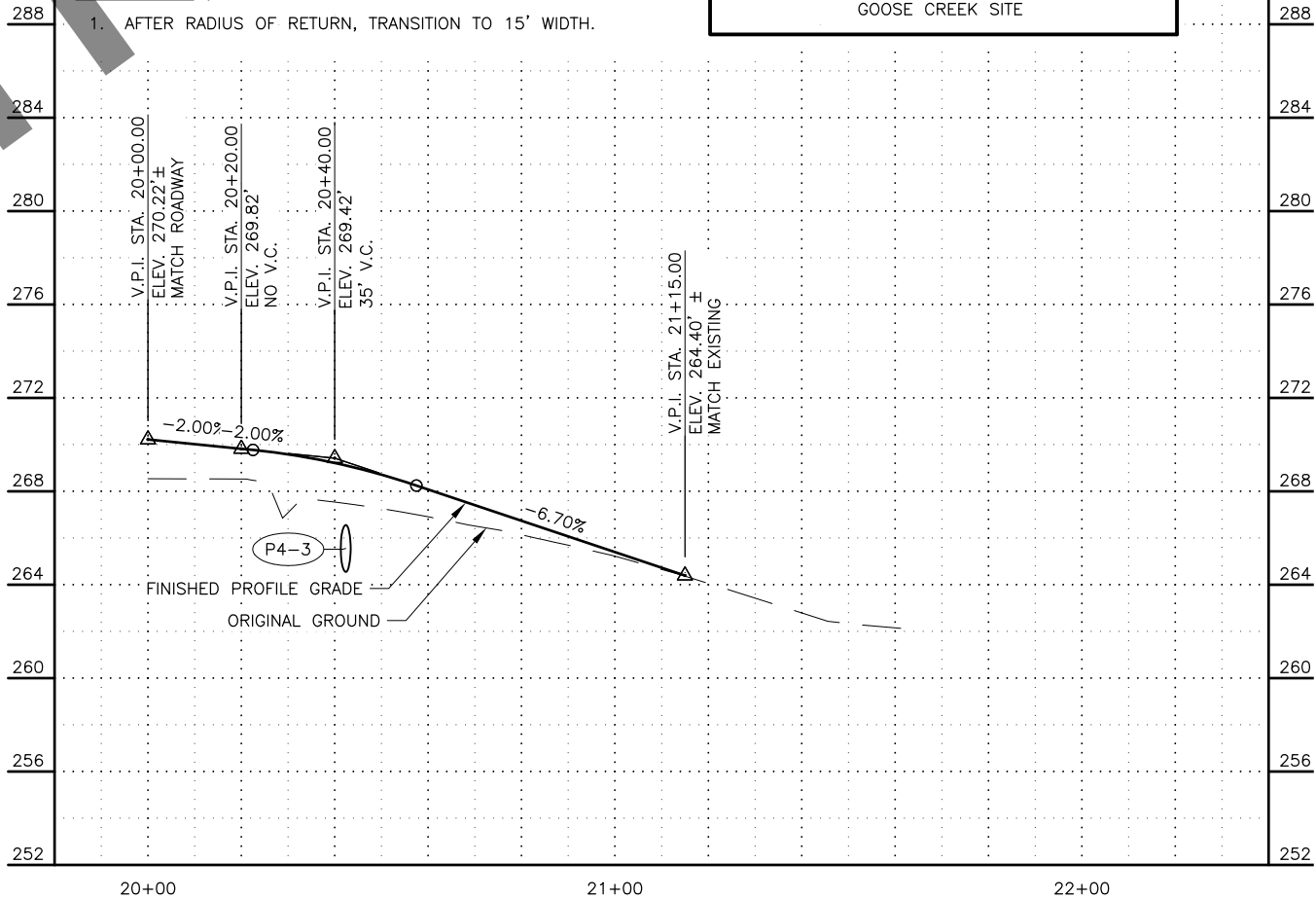
STA. 1259+91.00 APPROACH
GOOSE CREEK SITE



NOTES:

1. AFTER RADIUS OF RETURN, TRANSITION TO 15' WIDTH.

STA. 1264+74.00 APPROACH
GOOSE CREEK SITE



APPROACH STA. 20+00.00
= PH STA. 1264+74.00
N = 321027.7464
E = 317697.7794

P.I. STA. 20+73.46
N = 321,022.1679
E = 317,771.0264
Δ = 084°35'30.3"
T = 47.31'
L = 76.77'
R = 52.00'

STA. 21+15.00
MATCH EXISTING
N = 320962.7911
E = 317772.1178

P.T. STA. 21+02.92

PARKS HIGHWAY

SHEET NO.	TOTAL SHEETS
F15	F23
STATE	YEAR
ALASKA	2021
PROJECT DESIGNATION	
0A41034/Z589760000	
0A41036/CFHWY00217	
NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	

TO FAIRBANKS

TO WASILLA

PARKS HIGHWAY

GOOSE CREEK

THIS SHEET

STATE OF ALASKA
49TH
PS&E REVIEW
2020
REGISTERED PROFESSIONAL ENGINEER
CE 206601

STATE OF ALASKA DOT&PF
4111 AVIATION AVENUE
ANCHORAGE, AK 99502
(907) 269-0590

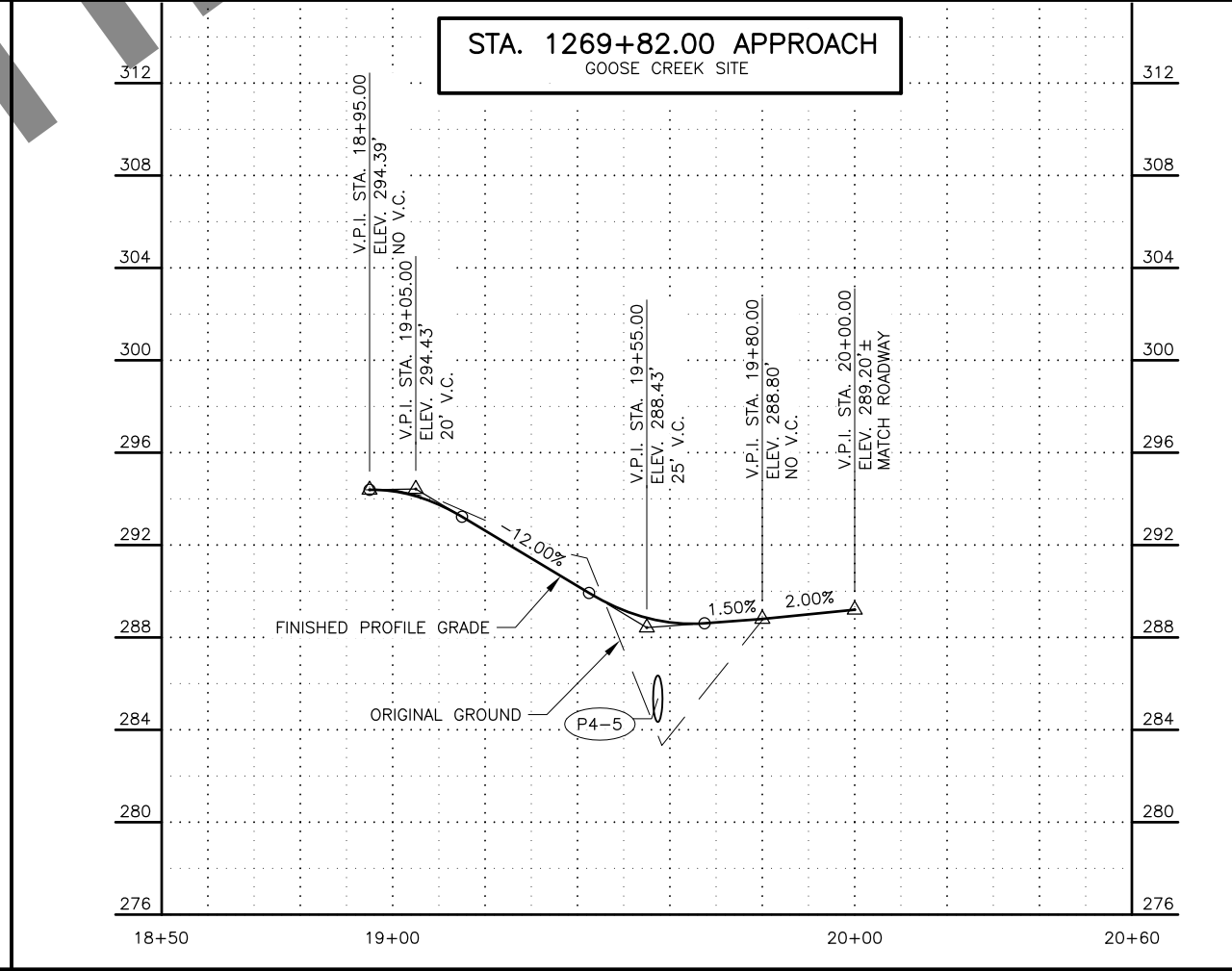
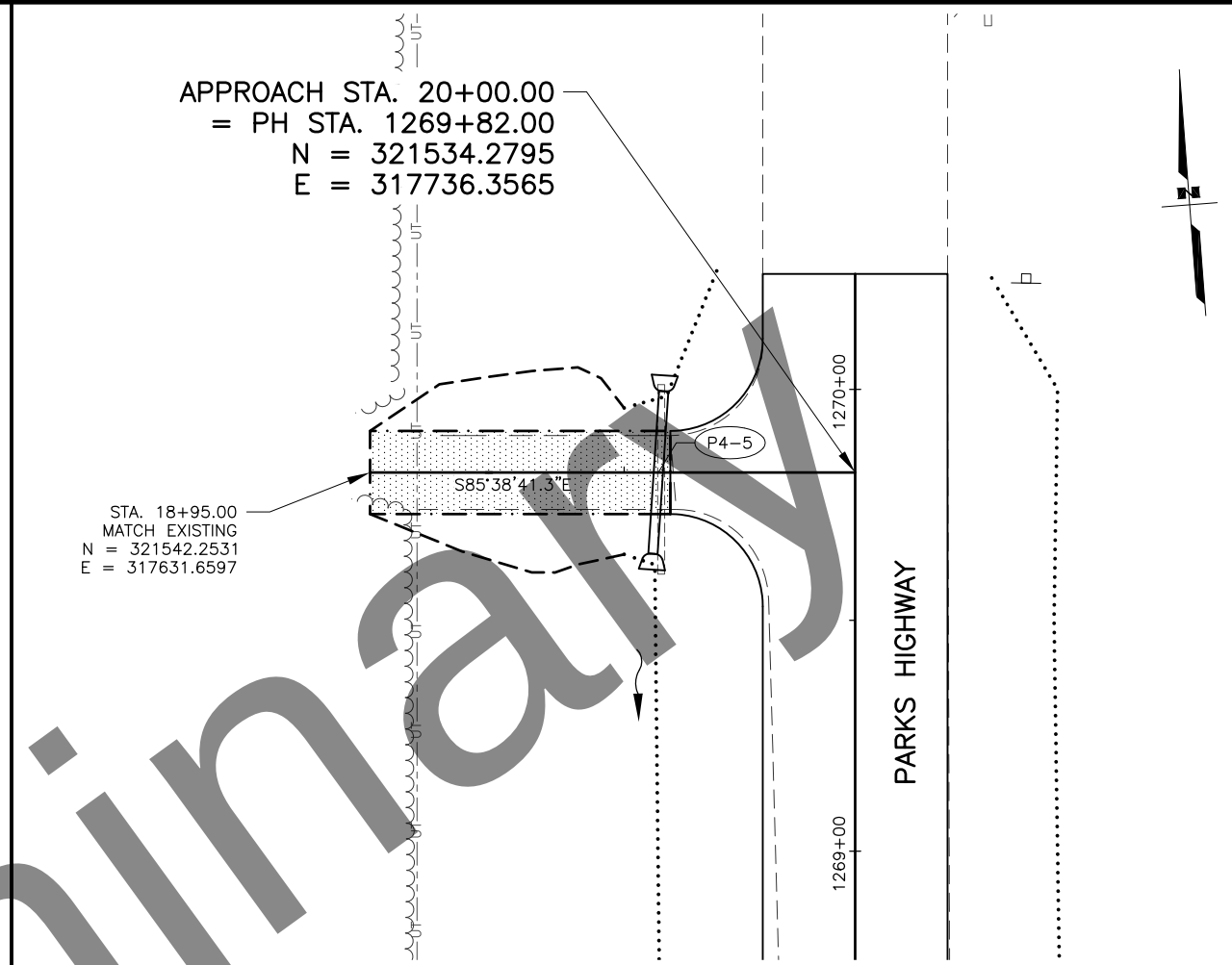
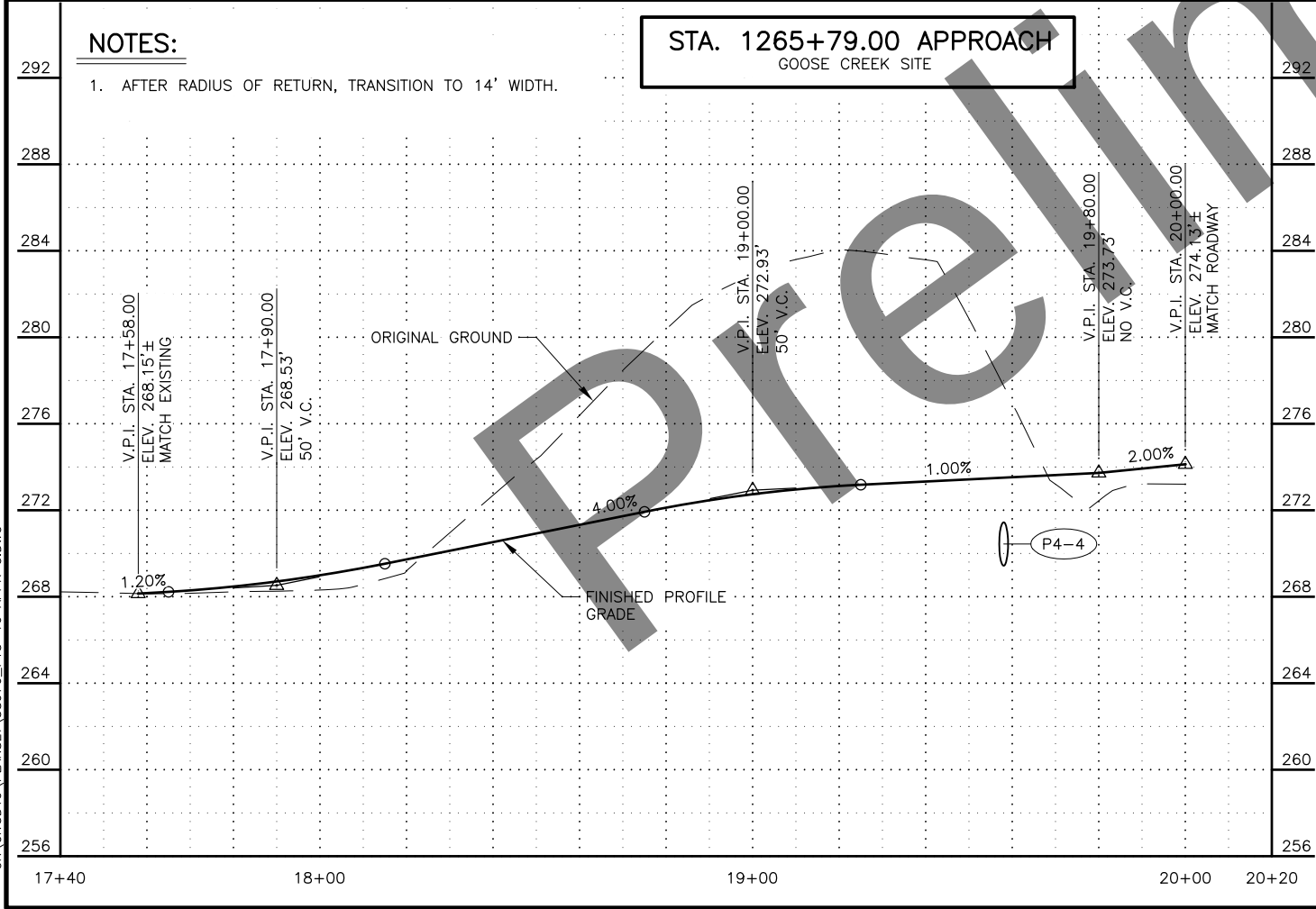
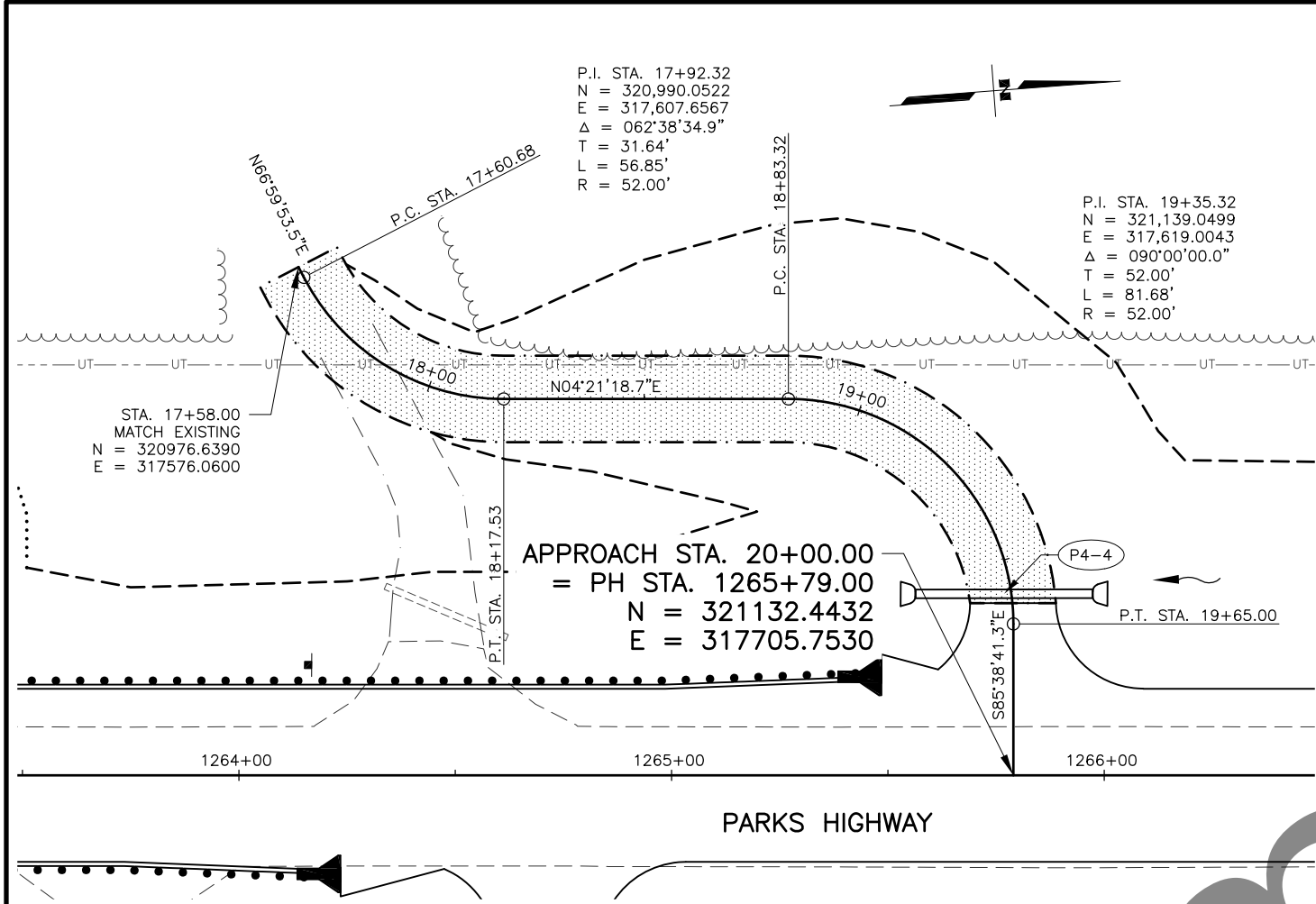
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

PARKS HIGHWAY BRIDGE
REPLACEMENTS:
MONTANA CREEK, SHEEP
CREEK, AND GOOSE CREEK

APPROACH
PLAN AND PROFILE

G:\USERS\MOHENSCH\ONEDRAW - STATE OF ALASKA\58976 PARKS HWY BRIDGE REPLACEMENT MONTANA GK SHEEP
FILE:CA\CH3D19\PLANSET\58976-F15-16-APPR-G.DWG

DATE/TIME 10/16/2020 6:58 PM [LAYOUT] F16 DESIGNED MHB CHECKED ALH DRAFTED CMWH



SHEET NO.	TOTAL SHEETS
F16	F23
STATE	YEAR
ALASKA	2021
PROJECT DESIGNATION	
0A41034/Z589760000 0A41036/CFHWY00217	
NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	

TO FAIRBANKS

TO WASILLA

PARKS HIGHWAY

THIS SHEET

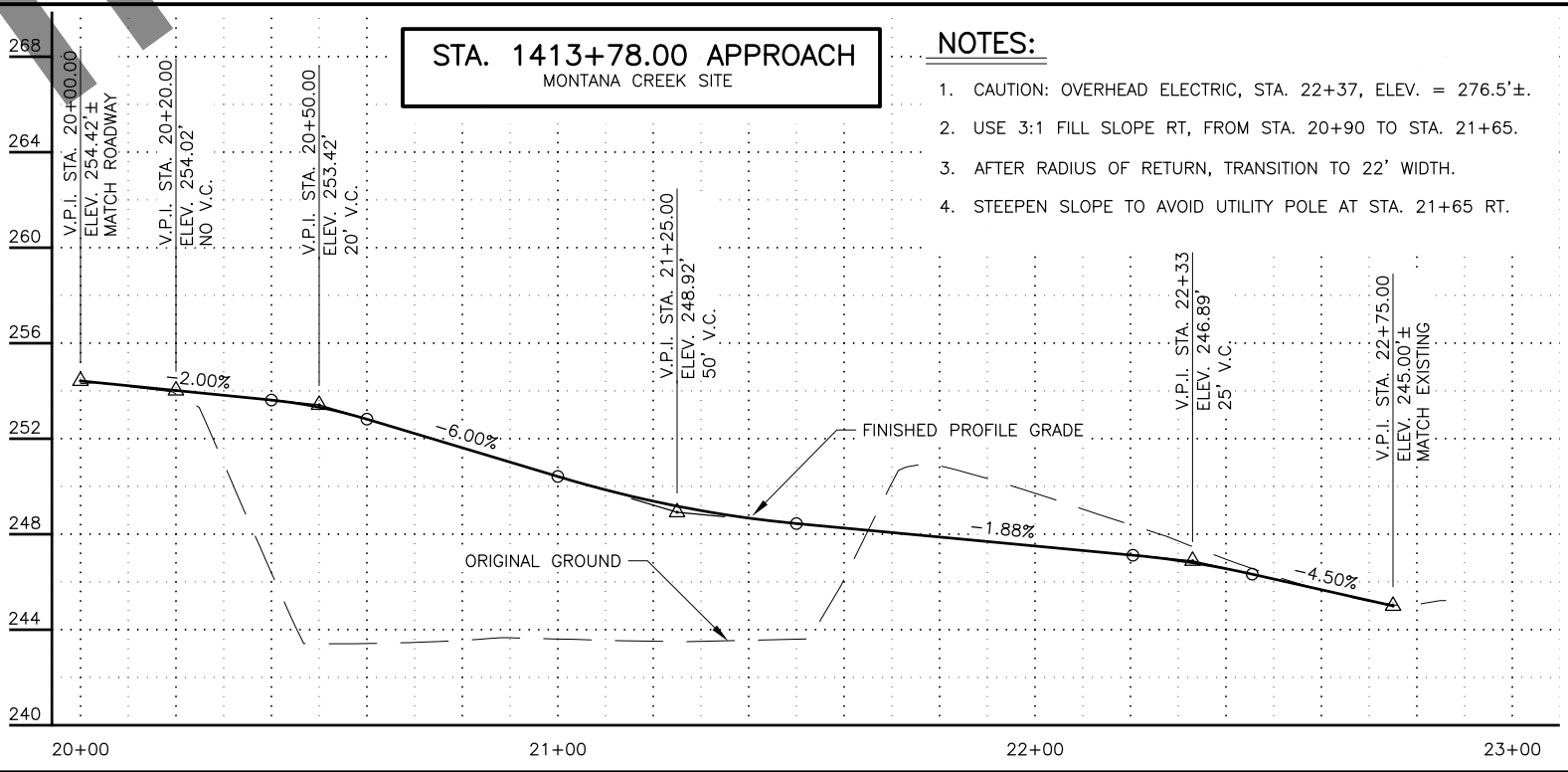
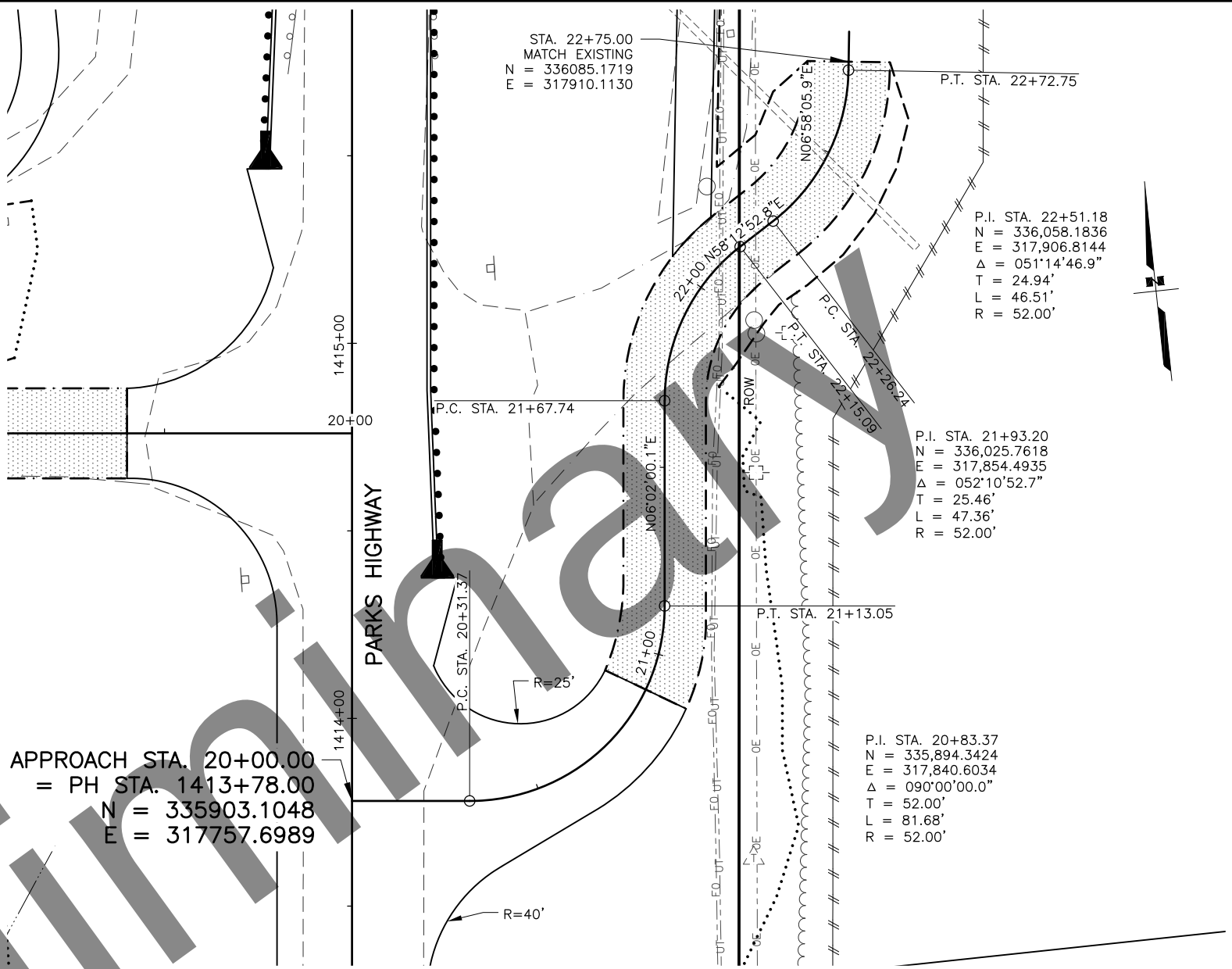
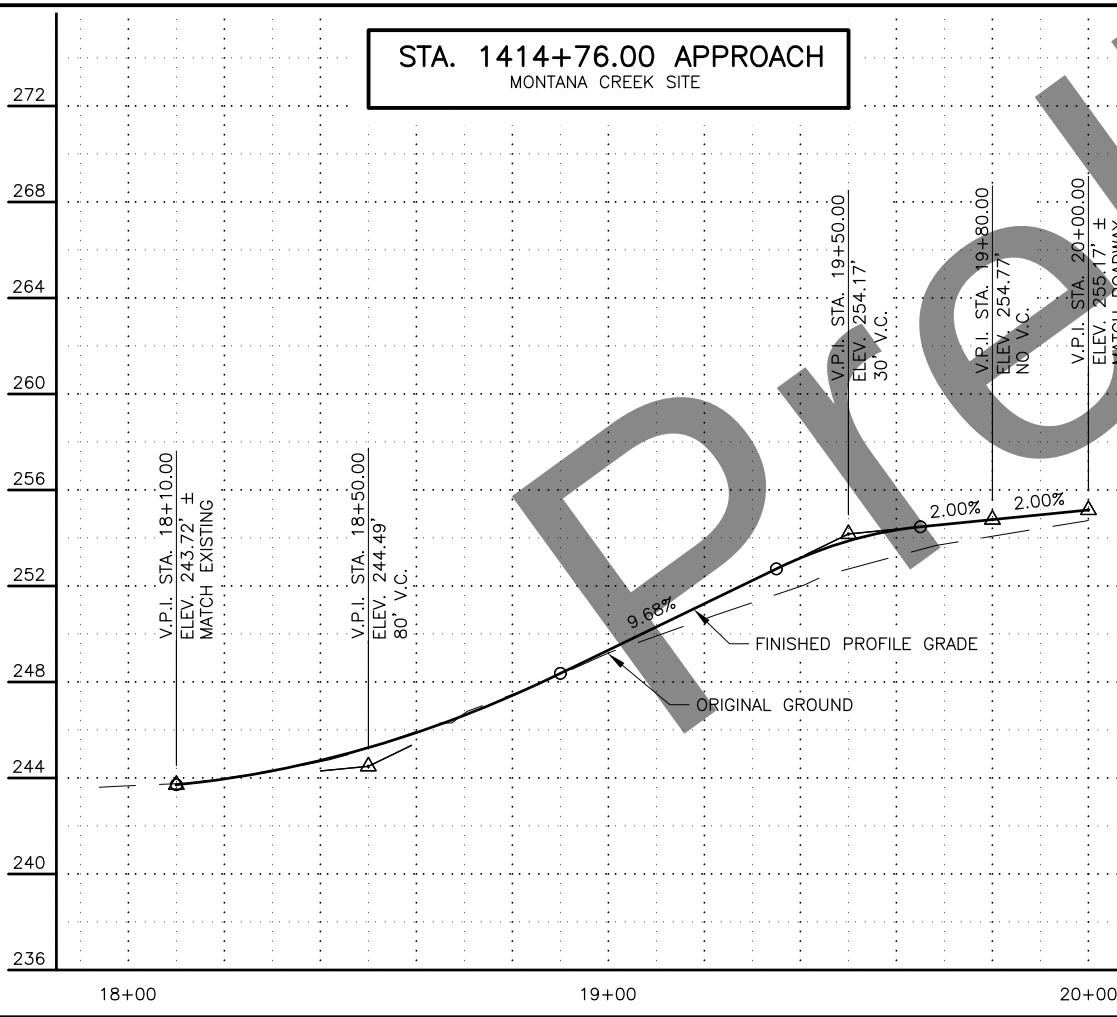
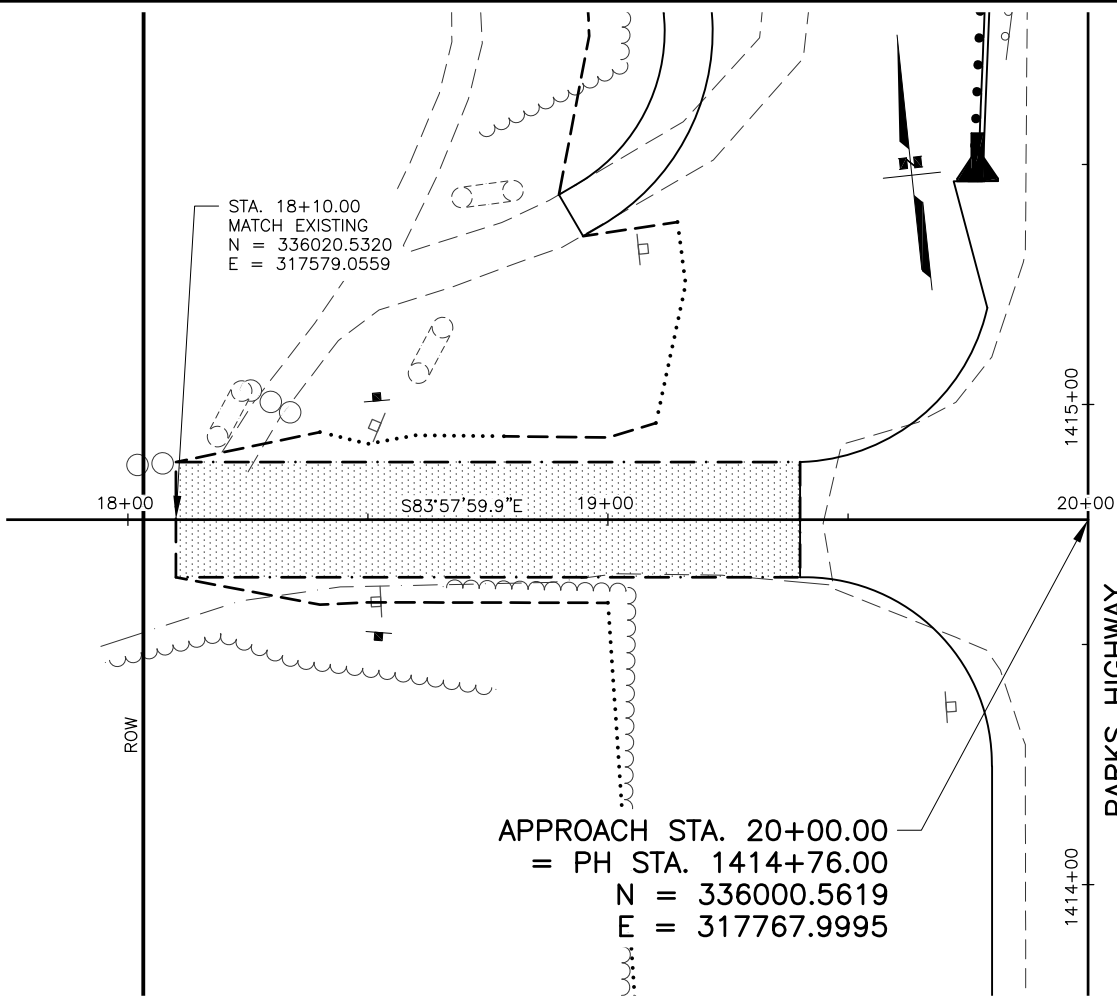
GOOSE CREEK

STATE OF ALASKA
49TH
PS&E REVIEW
2020
REGISTERED PROFESSIONAL ENGINEER
CE 06601

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
PARKS HIGHWAY BRIDGE
REPLACEMENTS:
MONTANA CREEK, SHEEP
CREEK, AND GOOSE CREEK

APPROACH
PLAN AND PROFILE



NOTES:

- CAUTION: OVERHEAD ELECTRIC, STA. 22+37, ELEV. = 276.5'±.
- USE 3:1 FILL SLOPE RT, FROM STA. 20+90 TO STA. 21+65.
- AFTER RADIUS OF RETURN, TRANSITION TO 22' WIDTH.
- STEEPEN SLOPE TO AVOID UTILITY POLE AT STA. 21+65 RT.

SHEET NO.	TOTAL SHEETS
F17	F23
STATE	YEAR
ALASKA	2021
PROJECT DESIGNATION	
0A41034/Z589760000	
0A41036/CFHWY00217	
NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	

TO FAIRBANKS

TO WASILLA

PARKS HIGHWAY

MONTANA CREEK

SHEEP CREEK

GOOSE CREEK

THIS SHEET

STATE OF ALASKA
49th
PS&E REVIEW
2020
REGISTERED PROFESSIONAL ENGINEER
CE 106601

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4111 AVIATION AVENUE
ANCHORAGE, AK 99502
(907) 269-0590

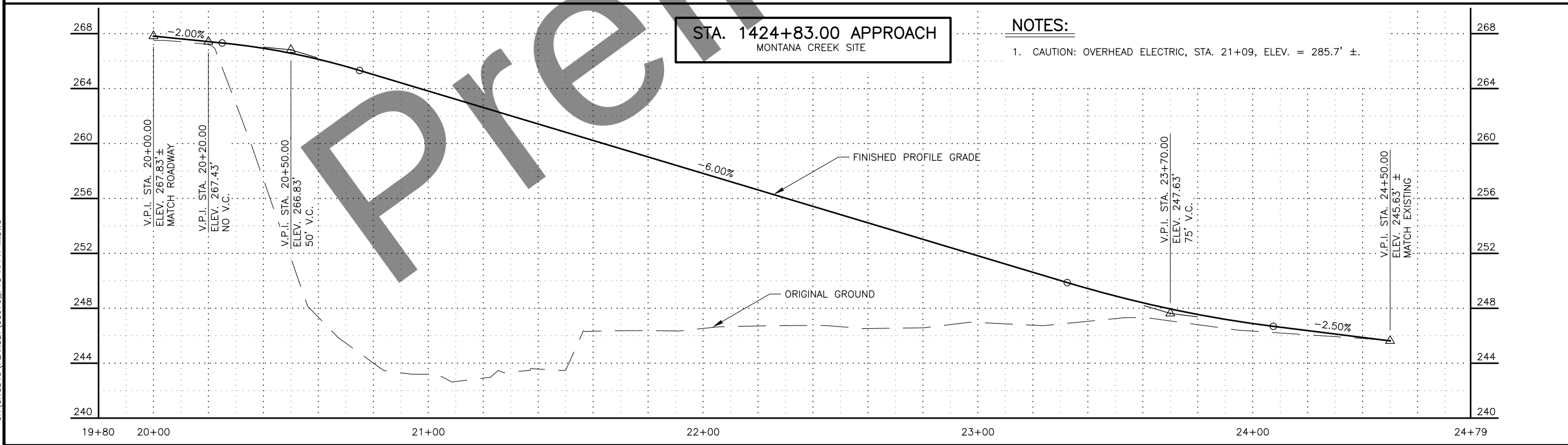
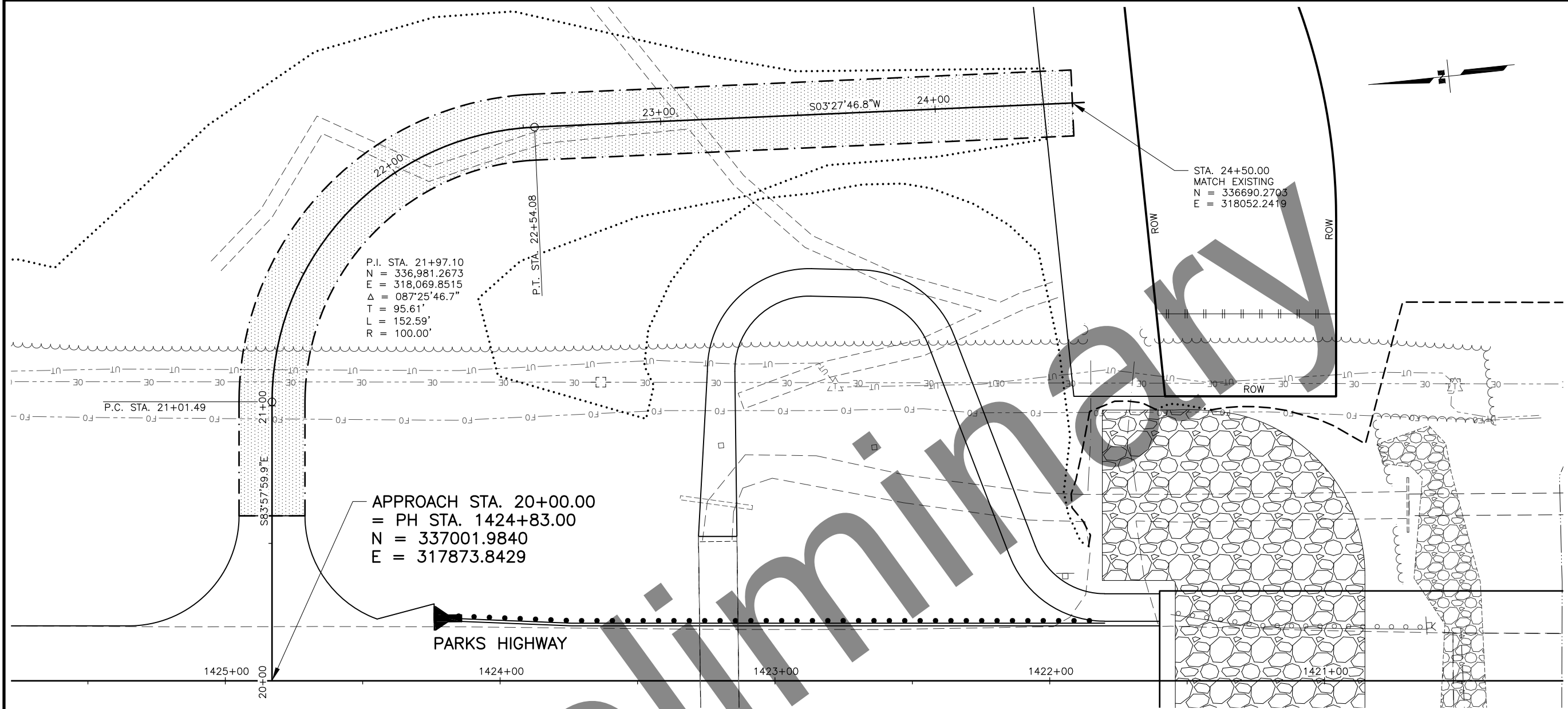
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

PARKS HIGHWAY BRIDGE
REPLACEMENTS:
MONTANA CREEK, SHEEP
CREEK, AND GOOSE CREEK

APPROACH
PLAN AND PROFILE

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DATE/TIME 11/25/2020 8:00 AM [LAYOUT] F18 DESIGNED MHB CHECKED ALH DRAFTED CMWH



SHEET NO.	TOTAL SHEETS
F18	F23
STATE	YEAR
ALASKA	2021
PROJECT DESIGNATION	
OA41034/Z589760000	
OA41036/CFHWY00217	
NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	

TO FAIRBANKS

THIS SHEET

MONTANA CREEK

PARKS HIGHWAY

TO WASILLA

STATE OF ALASKA
49th
PS&E REVIEW
2020
REGISTERED PROFESSIONAL ENGINEER
ARON W. SMITH
CE 06601

STATE OF ALASKA DOT&PF
4111 AVIATION AVENUE
ANCHORAGE, AK 99502
(907) 269-0590

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

PARKS HIGHWAY BRIDGE
REPLACEMENTS:
MONTANA CREEK, SHEEP
CREEK, AND GOOSE CREEK

APPROACH
PLAN AND PROFILE

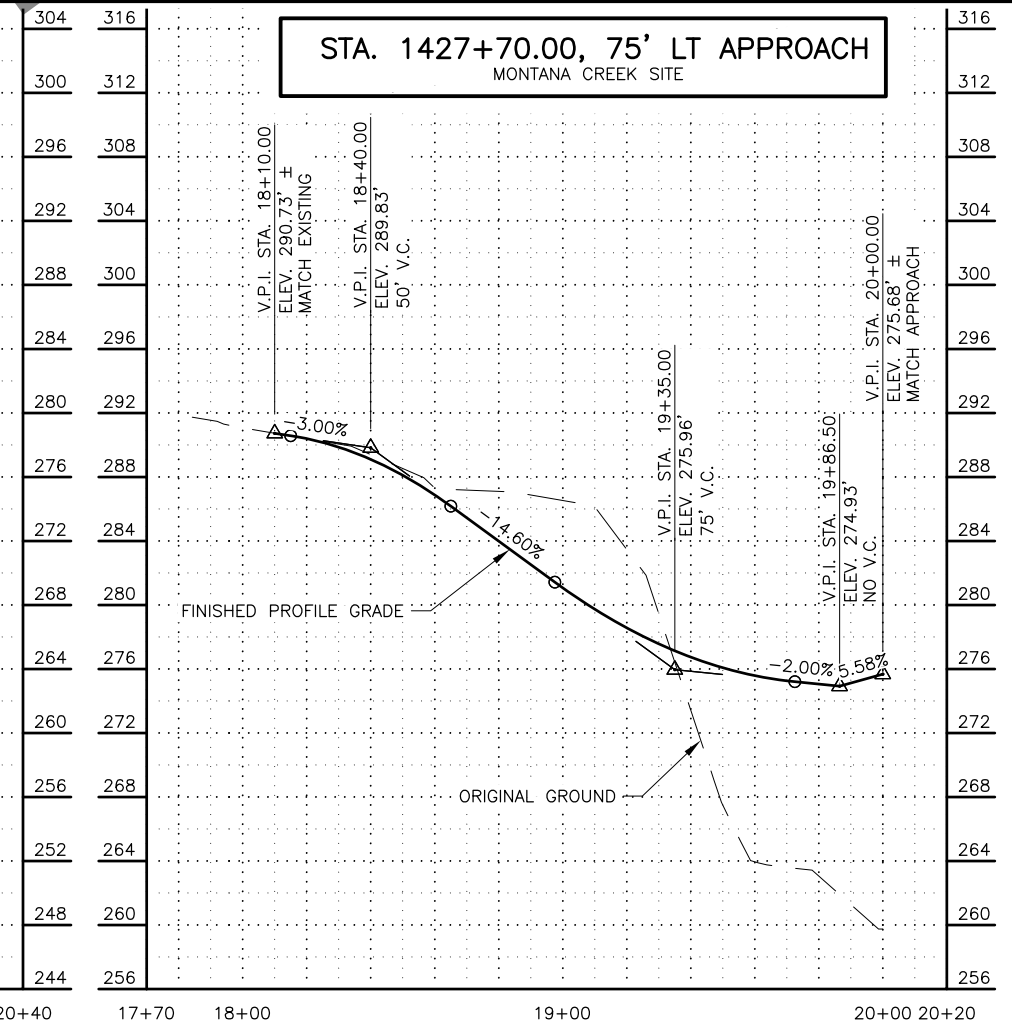
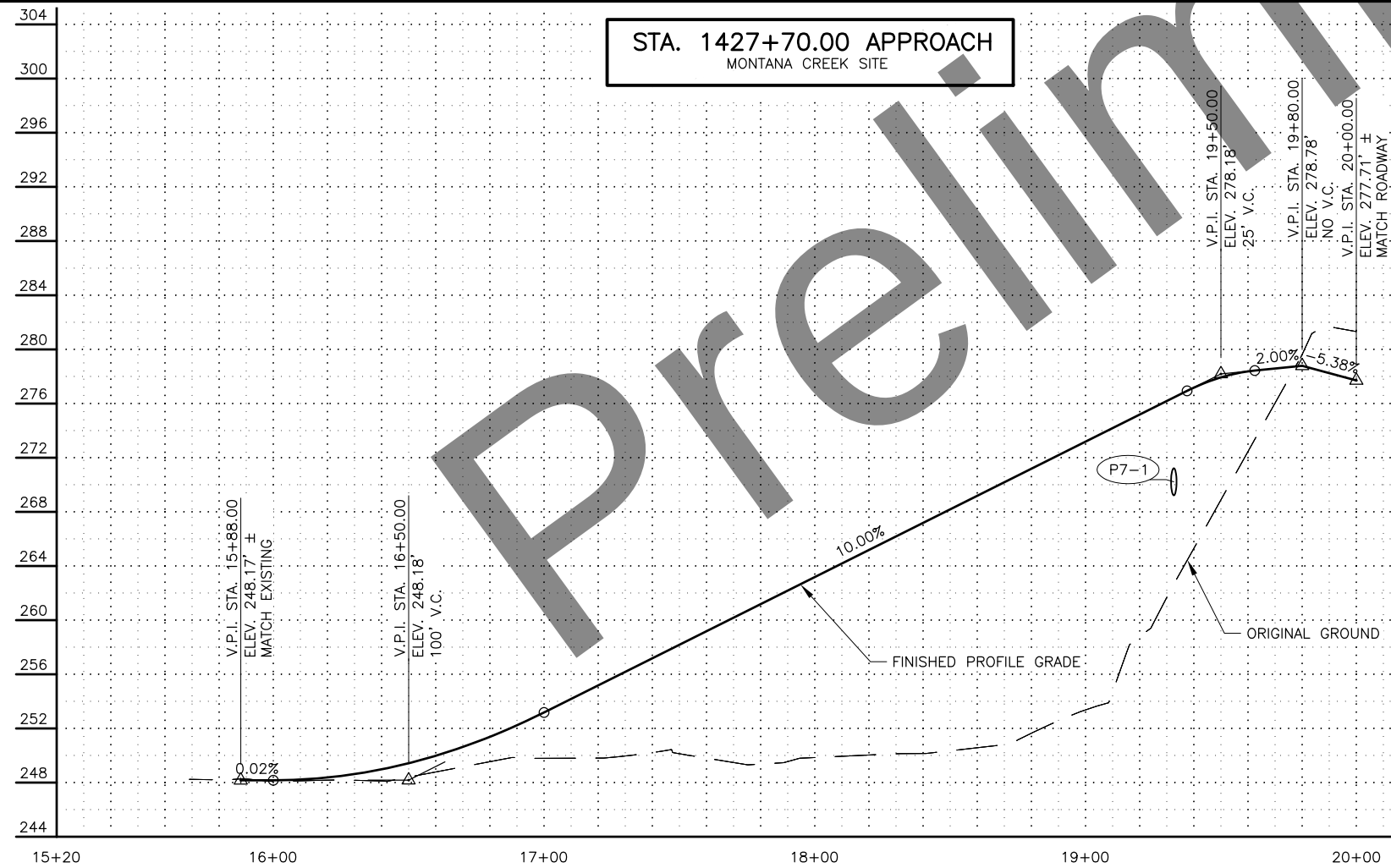
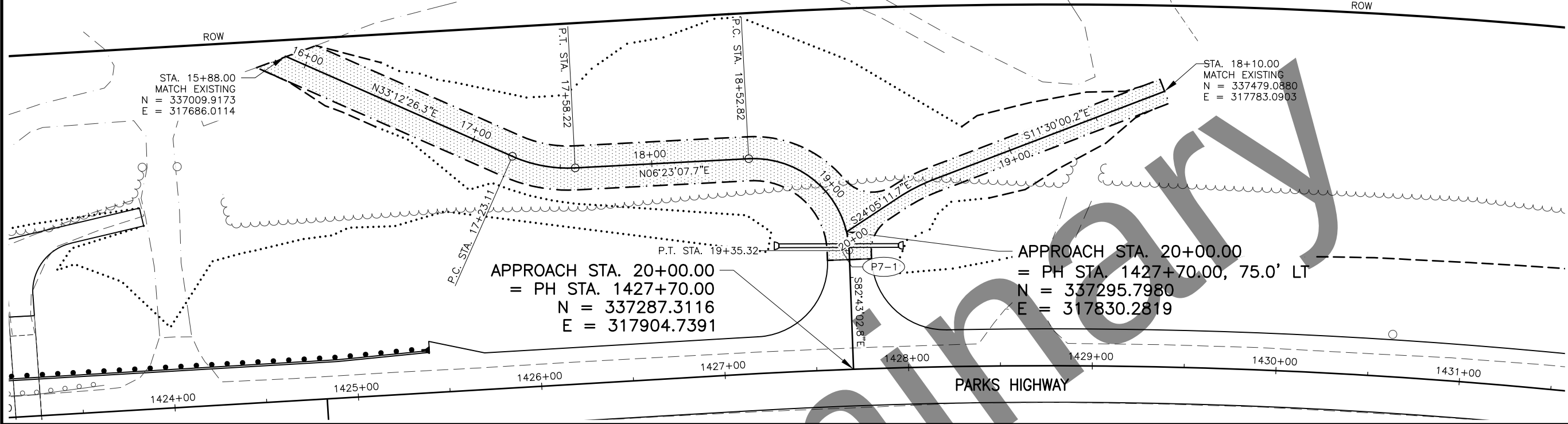
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FILE C:\G:\58976\19\PLANSET\58976 F19 APPR.MDWG

DATE/TIME 10/20/2020 9:35 AM
LAYOUT F19
DESIGNED MHB
CHECKED ALH
DRAFTED CMWH

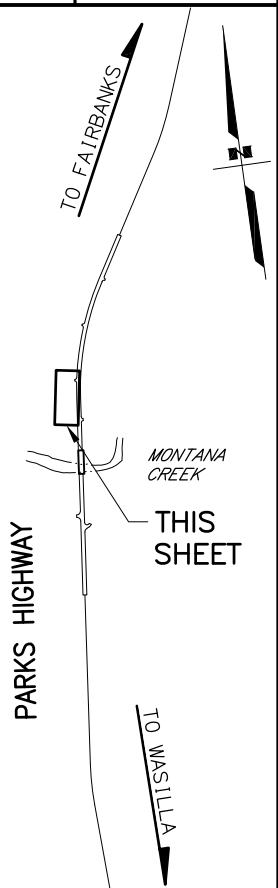
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N = 337,137.9235
E = 317,769.7996
Δ = 026°49'18.5"
T = 17.88'
L = 35.11'
R = 75.00'

P.I. STA. 19+05.64
N = 337,302.2064
E = 317,788.1847
Δ = 090°53'49.4"
T = 52.82'
L = 82.50'
R = 52.00'

P.I. STA. 19+55.57
N = 337,336.4432
E = 317,812.1118
Δ = 012°35'11.5"
T = 11.03'
L = 21.97'
R = 100.00'



SHEET NO.	TOTAL SHEETS
F19	F23
STATE	YEAR
ALASKA	2021
PROJECT DESIGNATION	
0A41034/Z589760000	
0A41036/CFHWY00217	
NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	

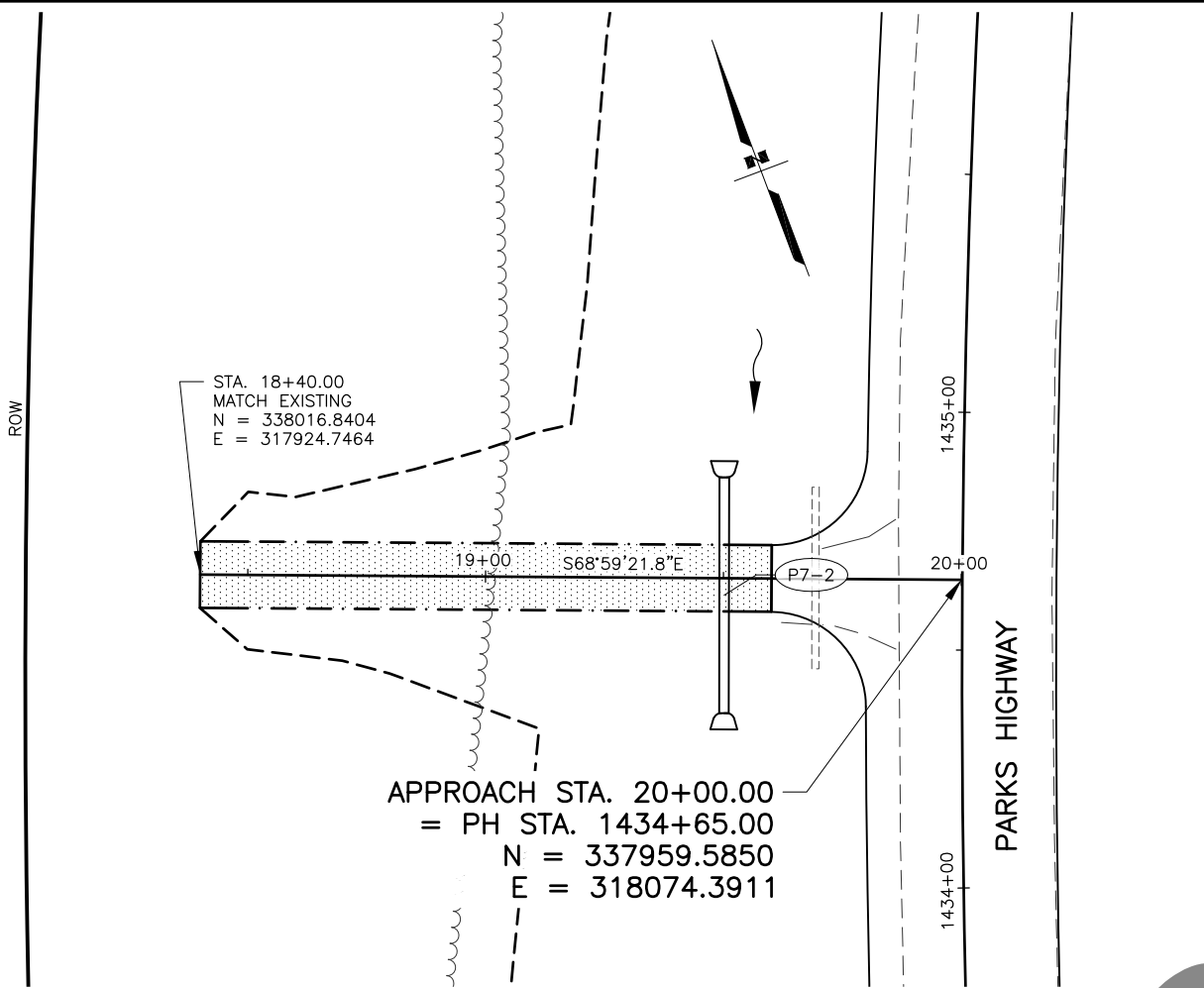


STATE OF ALASKA
49TH
PS&E REVIEW
2020
REGISTERED PROFESSIONAL ENGINEER
CE 06601

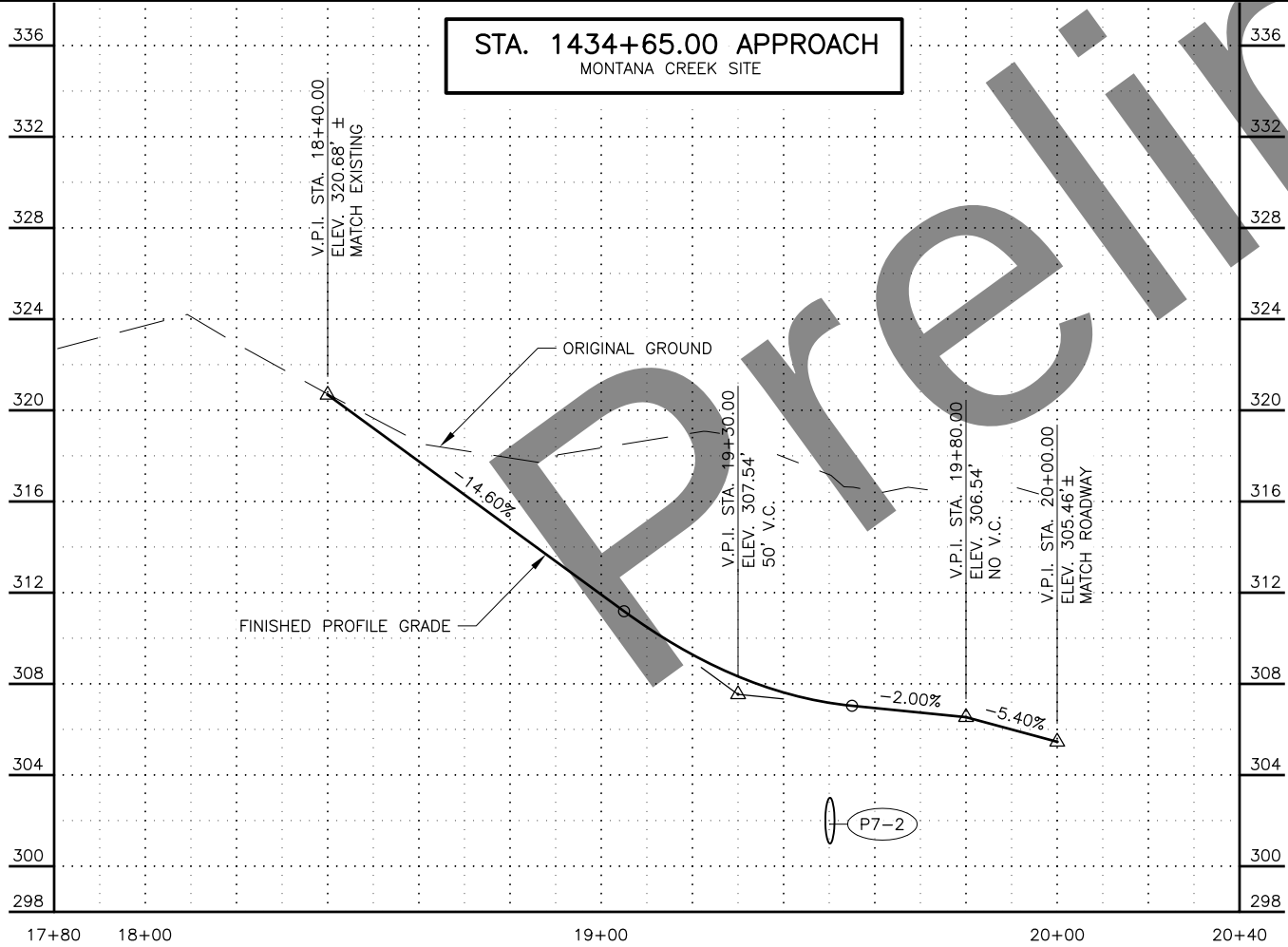
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(907) 269-0590

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DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
PARKS HIGHWAY BRIDGE
REPLACEMENTS:
MONTANA CREEK, SHEEP
CREEK, AND GOOSE CREEK

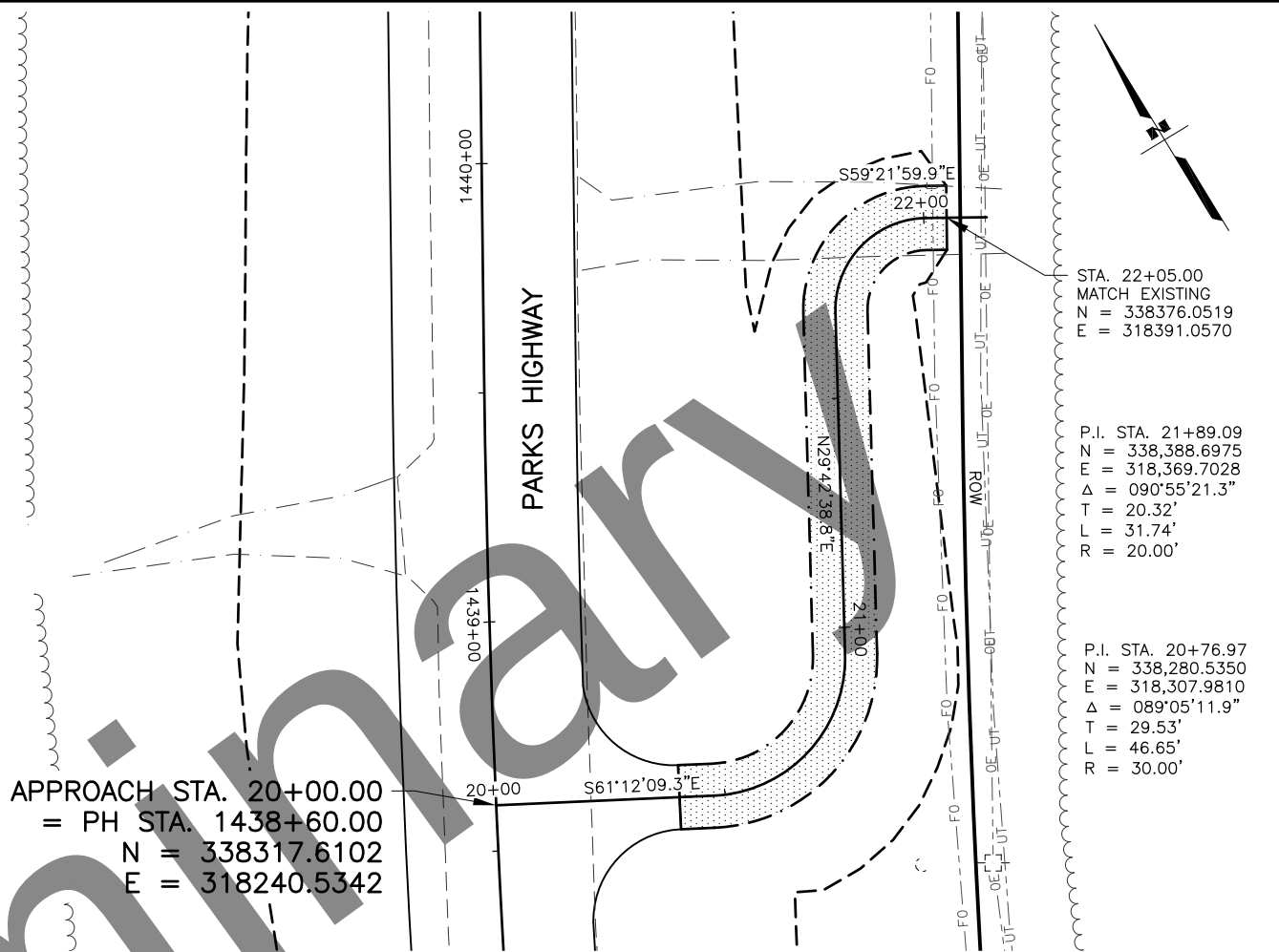
APPROACH
PLAN AND PROFILE



APPROACH STA. 20+00.00
= PH STA. 1434+65.00
N = 337959.5850
E = 318074.3911



STA. 1434+65.00 APPROACH
MONTANA CREEK SITE

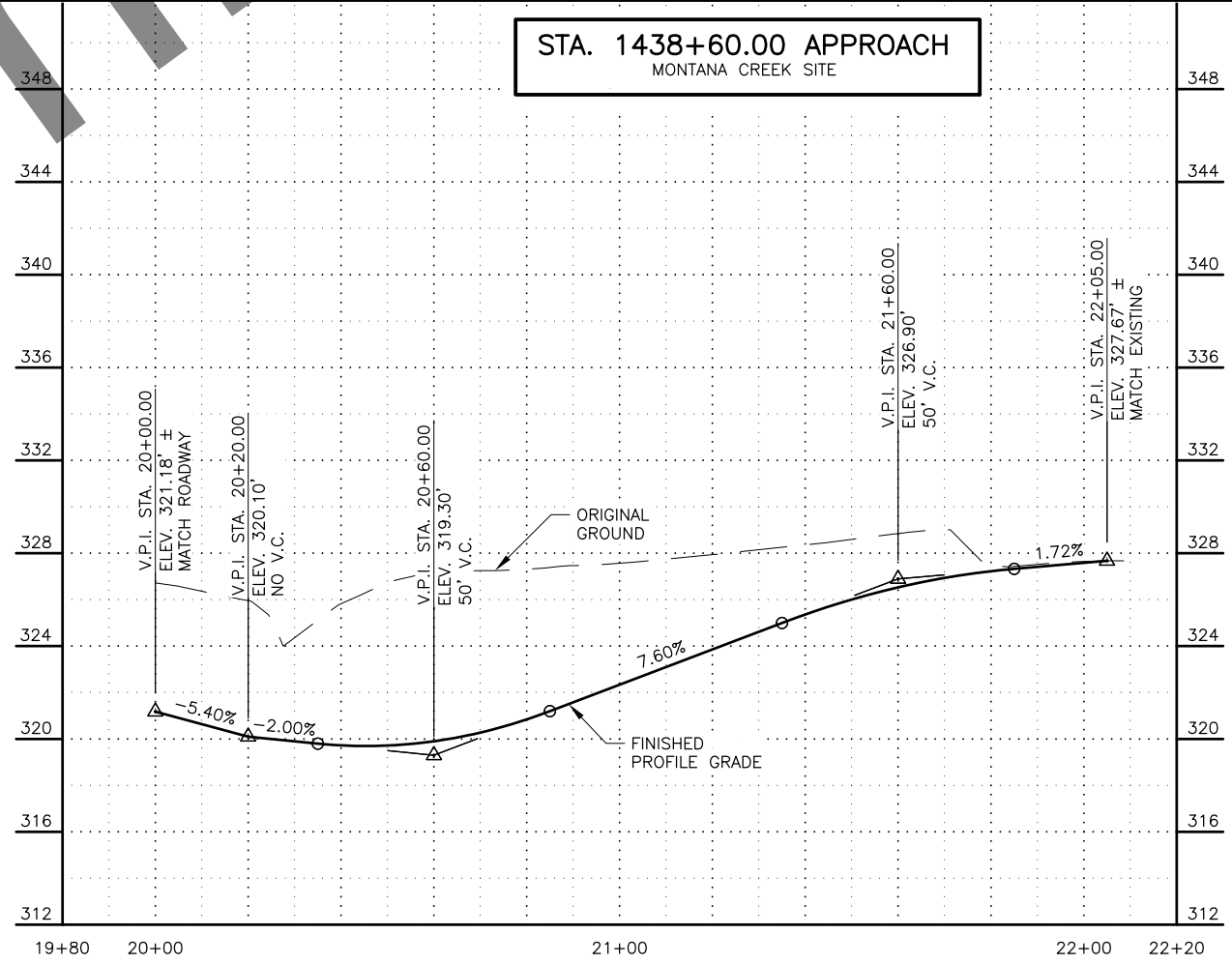


APPROACH STA. 20+00.00
= PH STA. 1438+60.00
N = 338317.6102
E = 318240.5342

STA. 22+05.00
MATCH EXISTING
N = 338376.0519
E = 318391.0570

P.I. STA. 21+89.09
N = 338,388.6975
E = 318,369.7028
Δ = 090°55'21.3\"/>

P.I. STA. 20+76.97
N = 338,280.5350
E = 318,307.9810
Δ = 089°05'11.9\"/>



STA. 1438+60.00 APPROACH
MONTANA CREEK SITE

SHEET NO.	TOTAL SHEETS
F20	F23
STATE	YEAR
ALASKA	2021
PROJECT DESIGNATION	
OA41034/Z589760000	
OA41036/CFHWY00217	
NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	

TO FAIRBANKS

THIS SHEET

MONTANA CREEK

TO WASILLA

PARKS HIGHWAY

STATE OF ALASKA
49th
PS&E REVIEW
2020
ARON SWINING
CE 06601
REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA DOT&PF
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ANCHORAGE, AK 99502
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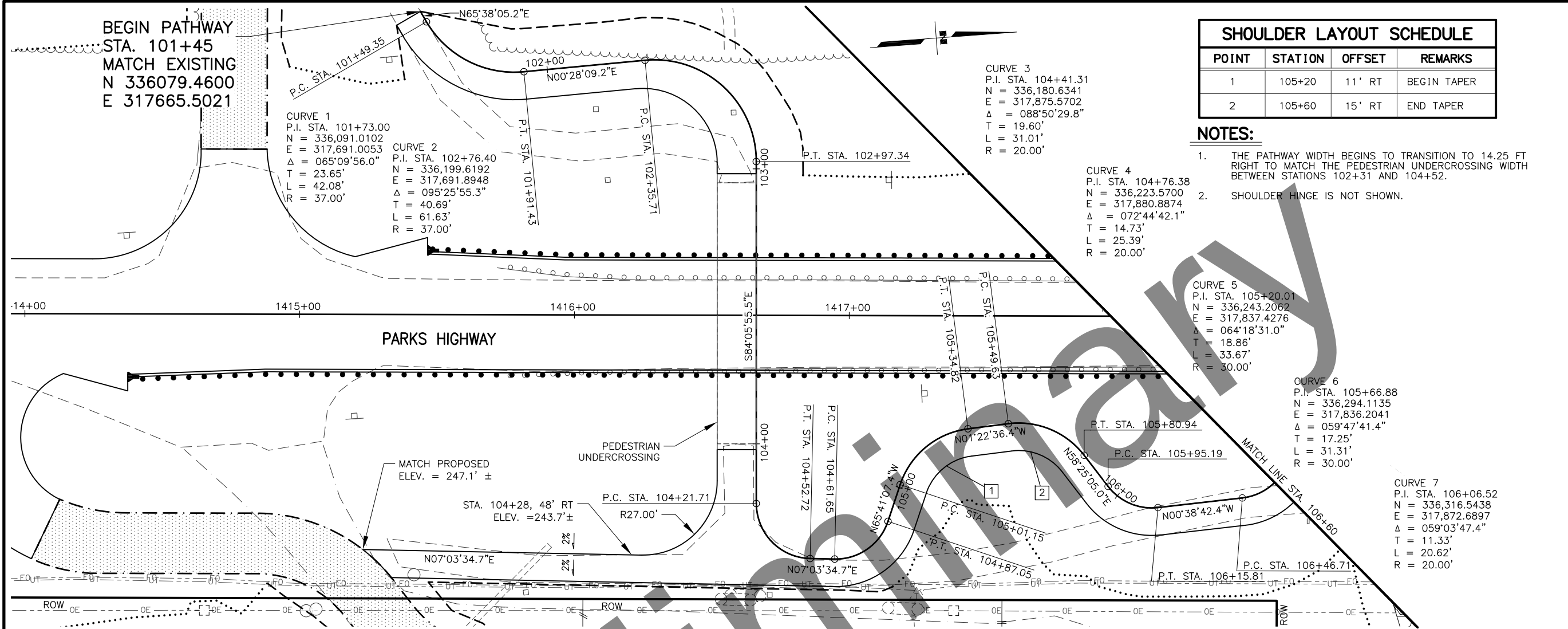
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

PARKS HIGHWAY BRIDGE
REPLACEMENTS:
MONTANA CREEK, SHEEP
CREEK, AND GOOSE CREEK

APPROACH
PLAN AND PROFILE

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FILE:CA\CH3D19\PLANSET\58976 F21-F23.MPDWG

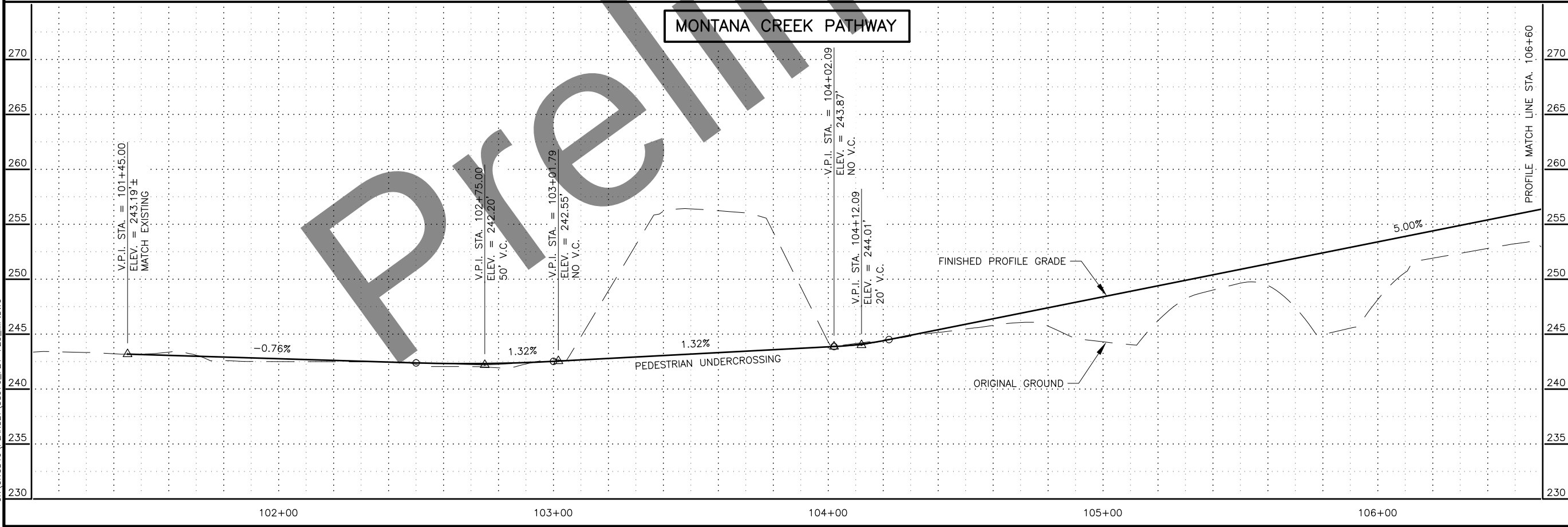
CWVH
DRAFTED
ALH
CHECKED
MHB
DESIGNED
F21
DATE/TIME 10/20/2020 1:34 PM LAYOUT



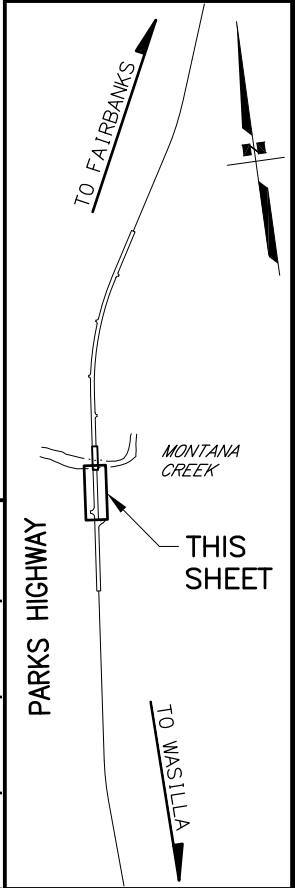
SHOULDER LAYOUT SCHEDULE			
POINT	STATION	OFFSET	REMARKS
1	105+20	11' RT	BEGIN TAPER
2	105+60	15' RT	END TAPER

NOTES:

1. THE PATHWAY WIDTH BEGINS TO TRANSITION TO 14.25 FT RIGHT TO MATCH THE PEDESTRIAN UNDERCROSSING WIDTH BETWEEN STATIONS 102+31 AND 104+52.
2. SHOULDER HINGE IS NOT SHOWN.



SHEET NO.	TOTAL SHEETS
F21	F23
STATE	YEAR
ALASKA	2021
PROJECT DESIGNATION	
0A41034/Z589760000 0A41036/CFHWY00217	
NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	



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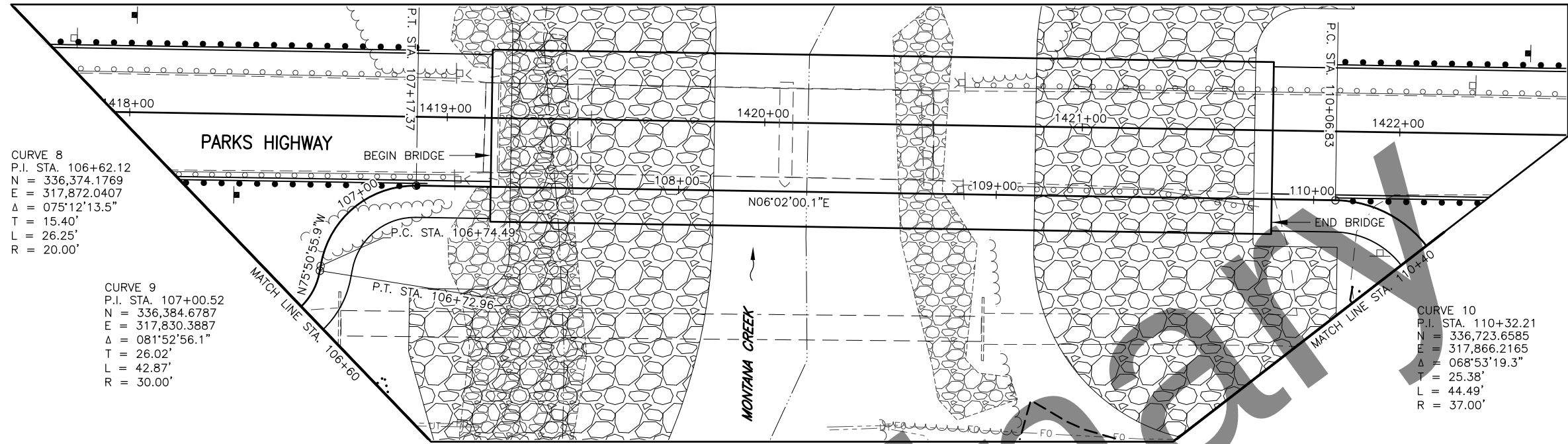
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

PARKS HIGHWAY BRIDGE
REPLACEMENTS:
MONTANA CREEK, SHEEP
CREEK, AND GOOSE CREEK

STA. 101+45 TO
STA. 106+60

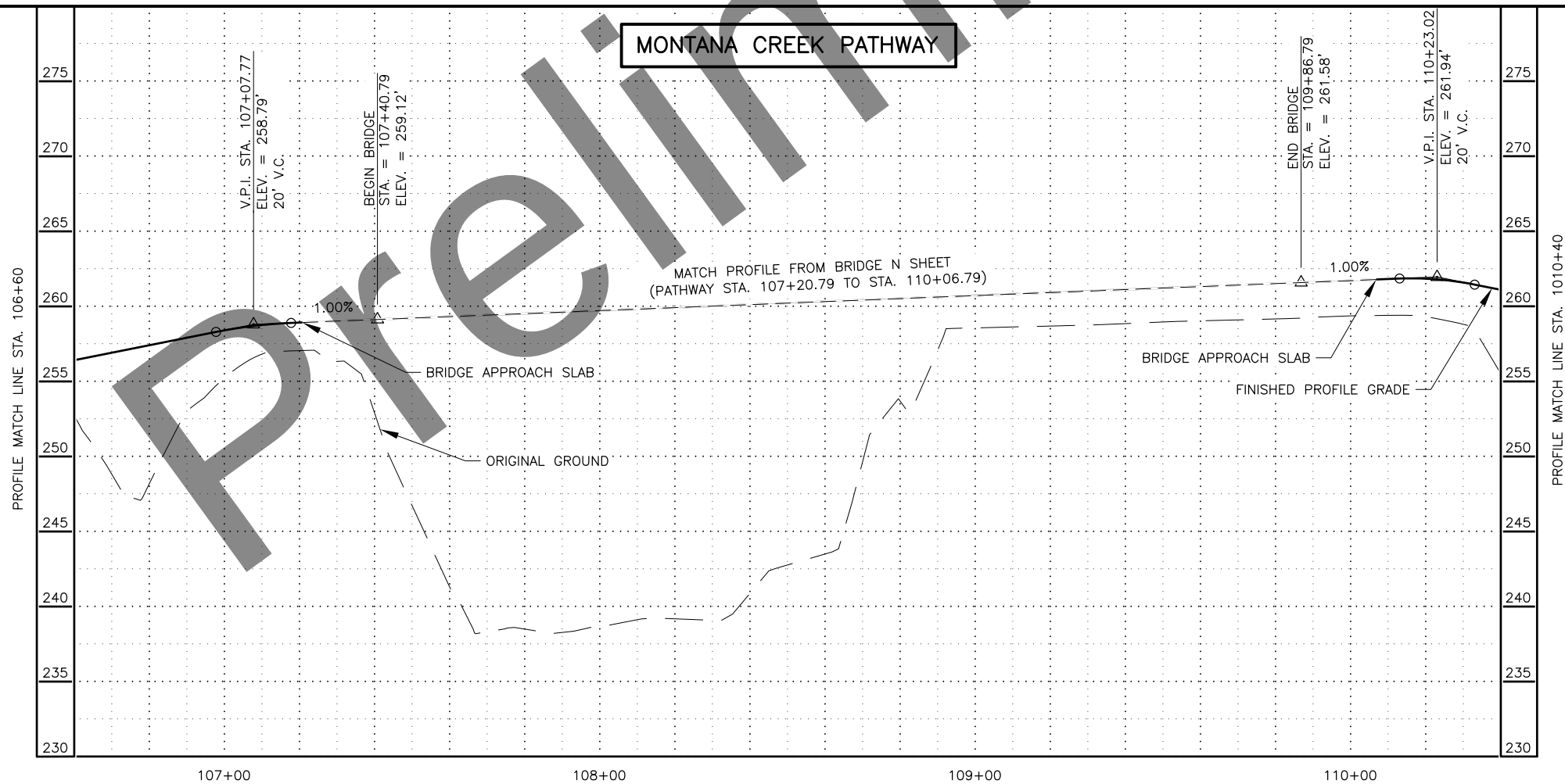
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FILE G:\CA\CH3D19\PLANSET\58976 F21-F23.MPDWG

DATE/TIME 10/20/2020 1:17 PM
LAYOUT F22
DESIGNED MHB
CHECKED ALH
DRAFTED CDM/H



NOTES:

1. BRIDGE RAILING IS NOT SHOWN.



SHEET NO.	TOTAL SHEETS
F22	F23
STATE	YEAR
ALASKA	2021
PROJECT DESIGNATION	
0A41034/Z589760000	
0A41036/CFHWY00217	
NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	

TO FAIRBANKS

TO WASILLA

PARKS HIGHWAY

MONTANA CREEK

THIS SHEET

STATE OF ALASKA

49TH

PS&E REVIEW

2020

REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA DOT&PF
4111 AVIATION AVENUE
ANCHORAGE, AK 99502
(907) 269-0590

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

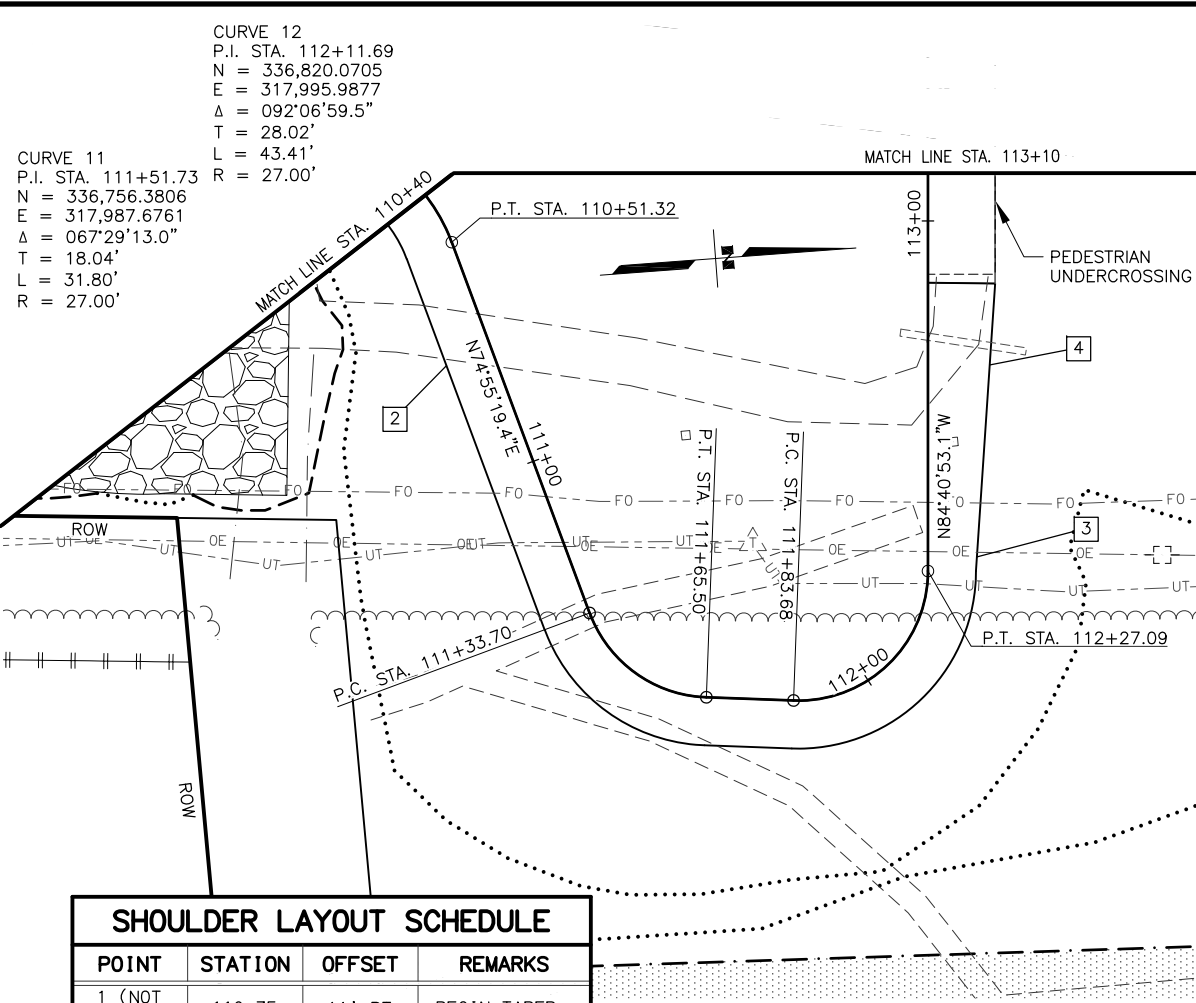
PARKS HIGHWAY BRIDGE REPLACEMENTS:
MONTANA CREEK, SHEEP CREEK, AND GOOSE CREEK

STA. 106+60 TO STA. 110+40

G:\USERS\MOHENSCH\ONE DRIVE\STATE OF ALASKA\58976 PARKS HWY BRIDGE REPLACEMENT MONTANA GK SHEEP
FILE:CA\G:\3D\19\PLANSET\58976 F21-F23.MP.DWG

DATE/TIME 11/25/2020 10:40 AM [LAYOUT] F23

DESIGNED MHB CHECKED ALH DRAFTED CMWH



C:\USERS\MBHENSON\ONE DRIVE\STATE OF ALASKA\58976 PARKS HWY BRIDGE REPLACEMENT MONTANA CREEK SHEEP
FILE LOC\GV3D19\PLANSET\58976-H1-TRAFF LEGEND.DWG

DATE/TIME 9/3/2020 10:22 AM LAYOUT H1 DESIGNED MHB CHECKED ALH DRAFTED CMWH

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0A41034/Z589760000 0A41036/CFHWY00217	2021	H1	H10

SIGNING & STRIPING NOTES:

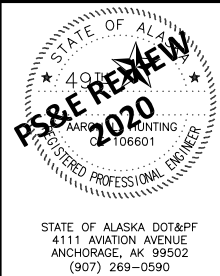
- ALL STATION LOCATIONS FOR SIGN INSTALLATION ARE APPROXIMATE. INSTALL SIGNS AT LOCATIONS AS DIRECTED BY THE ENGINEER.
- USE THE FOLLOWING DEFINITIONS TO DECIPHER THE ABBREVIATED SIGN POST TYPES IN THE SIGN SUMMARY SHEETS.
A. PT MEANS A PERFORATED STEEL TUBE.
B. T MEANS A SQUARE STEEL TUBE.
C. P MEANS A ROUND STEEL PIPE.
D. W MEANS A WIDE FLANGE BEAM.
E. POPL MEANS A POLE PLATE INSTALLED PER ITS ALASKA STANDARD PLAN S-23.
- FABRICATE ALL SIGNS FROM 0.125" THICK ALUMINUM SHEETING, UNLESS STATED ELSEWHERE.
- FOR SIGNS SUPPORTED BY MULTIPLE POSTS, FABRICATE THE POSTS WITH THEIR TOPS LEVEL WITH ONE ANOTHER.
- FOR PERFORATED STEEL TUBE SIGNPOSTS, INSTALL THE CONCRETE FOUNDATION OPTION SHOWN ON STANDARD PLAN S-30. TRIM EACH PT POST TO LIMIT THE LENGTH INSERTED INTO THE FOUNDATION TO 12 INCHES.
- FABRICATE GUIDE SIGNS ACCORDING TO THE SHOP DRAWINGS INCLUDED IN THE APPENDICES OF PART 4, CONTRACT PROVISIONS AND SPECIAL PROVISIONS. TRIM THE CORNERS OF ALL SIGNS TO THE RADIUS SHOWN ON EACH SHOP DRAWING.
- ERECT NEW SIGNS BEFORE REMOVAL OF EXISTING SIGNS WITH SIMILAR MESSAGE. NOTIFY THE ENGINEER A MINIMUM OF 14 DAYS PRIOR TO BEGINNING SIGN REMOVAL AND SALVAGE OR DISPOSAL ACTIVITIES.
- FOR SIGNS SUPPORTED BY MULTIPLE TUBES OR PIPES, LOCATE THE OUTER POSTS ON MAXIMUM SIX FEET CENTERS. INSTALL ADJACENT WIDE FLANGE POSTS ON MINIMUM EIGHT FEET CENTERS.
- SELECTIVE AND HAND CLEARING SHALL BE PERFORMED AT THE DISCRETION OF THE ENGINEER, IN ACCORDANCE WITH SECTION 201, UPSTREAM OF ALL SIGN INSTALLATION LOCATIONS TO ACHIEVE MINIMUM SIGN VISIBILITY REQUIREMENTS. IF NOT INCLUDED AS A SEPARATE ITEM, THIS WORK SHALL BE SUBSIDIARY TO THE SIGN INSTALLATION ITEMS AND WORK.
- FOR ALL FINAL PAVEMENT MARKINGS USE METHYLMETHACRYLATE MATERIALS. LONGITUDINAL, TRANSVERSE AND SYMBOL MARKINGS SHALL BE INLAID AND GORE STRIPES SHALL BE SURFACE APPLIED AS SPECIFIED IN SECTION 670 OF THE SPECIFICATIONS.
- DIMENSIONS REFER TO THE CENTER OF STRIPE AND THE EDGE OF PAVEMENT OR FACE OF CURB WHEN PRESENT.
- IF THE NEW AND EXISTING PAVEMENT MARKINGS ARE NOT ALIGNED AT MATCH LINE, TRANSITION BETWEEN THE TWO USING A 100:1 TAPER ON THE NEW PAVEMENT.
- WHERE NEW STRIPING IS TO EXTEND BEYOND PAVING LIMITS, REMOVE EXISTING STRIPING IN ACCORDANCE WITH SUBSECTION 670-3.04 TO THE EXTENT OF STRIPING LIMITS.

CALL BEFORE YOU DIG!

CONTRACTOR SHALL CALL A MINIMUM OF
3 DAYS IN ADVANCE OF CONSTRUCTION

ALASKA DIGLINE....907-278-3121 OR 800-478-3121

CALL OR GO TO WWW.AKONECALL.COM/STATEWIDE.HTM
FOR MEMBER LIST OF WHO WILL BE NOTIFIED



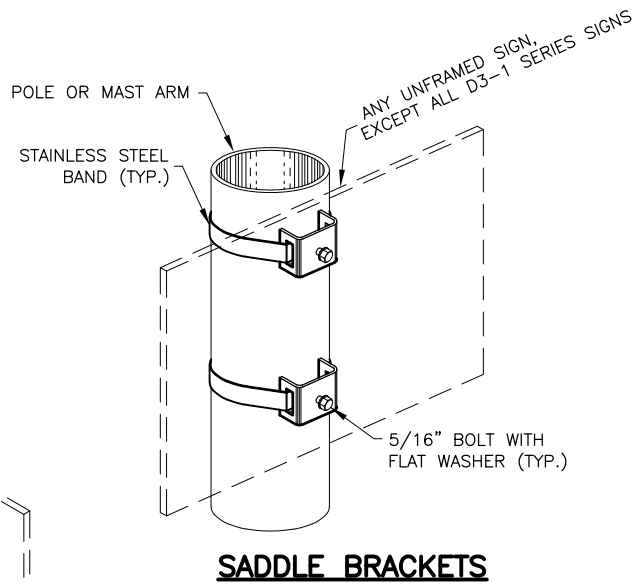
STATE OF ALASKA DOT&PF
4111 AVIATION AVENUE
ANCHORAGE, AK 99502
(907) 269-0590

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

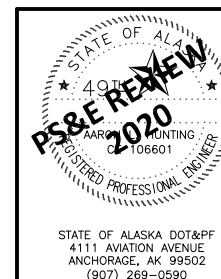
PARKS HWY BRIDGE REPLACEMENTS:
MONTANA CREEK, SHEEP CREEK,
AND GOOSE CREEK

TRAFFIC LEGEND AND NOTES

TOTAL SHEETS
H10



FASTENER SPECIFICATION TABLE			
FASTENERS		STEEL	STAINLESS STEEL
BOLTS		ASTM A 307	ASTM F 593
NUTS	REGULAR LOCK	ASTM A 563	ASTM F 594
WASHERS		ASTM A 36	ASTM A 480
POST CLIPS			



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

**PARKS HWY BRIDGE REPLACEMENTS:
MONTANA CREEK, SHEEP CREEK,
AND GOOSE CREEK**

SIGN ATTACHMENT DETAILS

C:\USERS\MOHENSCH\ONE DRIVE\STATE OF ALASKA\58976 PARKS HWY BRIDGE REPLACEMENT MONTANA CK SHEEP
FILE LCA\CH\3D\19\PLANSET\58976-H3-LIGHT SIGN FRM.DWG

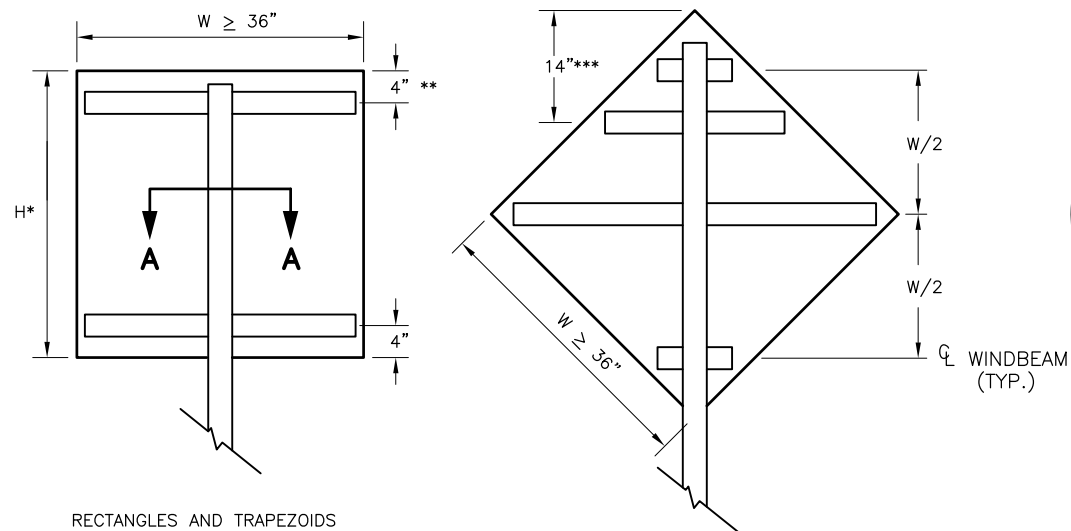
CNVH
DRAFTED
ALH
CHECKED
MHB
DESIGNED
H3
LAYOUT
9/3/2020 4:19 PM

DATE/TIME

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0A41034/Z589760000 0A41036/CFHWY00217	2021	H3	H10

NOTES:

- EXCEPT FOR POLES AND MAST ARMS, ONLY USE SQUARE STEEL TUBES TO SUPPORT SIGNS MOUNTED ON SINGLE POSTS.
- 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.
- IN HIGH WIND AREAS, THE PLANS MAY REQUIRE SIGNS SMALLER THAN THOSE LISTED IN NOTE 2 BE FRAMED AS SHOWN HERE IN.
- 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.
- 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.
- USE FRAMING MEMBERS MADE FROM ALUMINUM ALLOY 6061-T6.
- EACH FRAMING MEMBER SHALL BE ONE CONTINUOUS PIECE.
- ATTACH FRAMING MEMBERS TO THE SIGN PANELS WITH RIVETS OR AN ENGINEER APPROVED, DOUBLE SIDED, HIGH STRENGTH, ADHESIVE TAPE.
- 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.
- WHEN RIVETS ARE USED TO ATTACH FRAMING MEMBERS, INSTALL 2 RIVETS IN EACH END AND THE BALANCE ON 8" MAXIMUM CENTERS.
- USE 3/16" DIAMETER RIVETS CONFORMING TO ALUMINUM ALLOY 6061-T6 FOR COLD DRIVEN RIVETS, OR ALUMINUM ALLOY 6061-T43 FOR HOT DRIVEN RIVETS.
- THE BRACKETS USED ON EVEN INCH SIZE TUBES MAY ALSO BE USED ON TUBES 1/2" SMALLER IN SIZE.



ROUNDS AND OCTAGONS

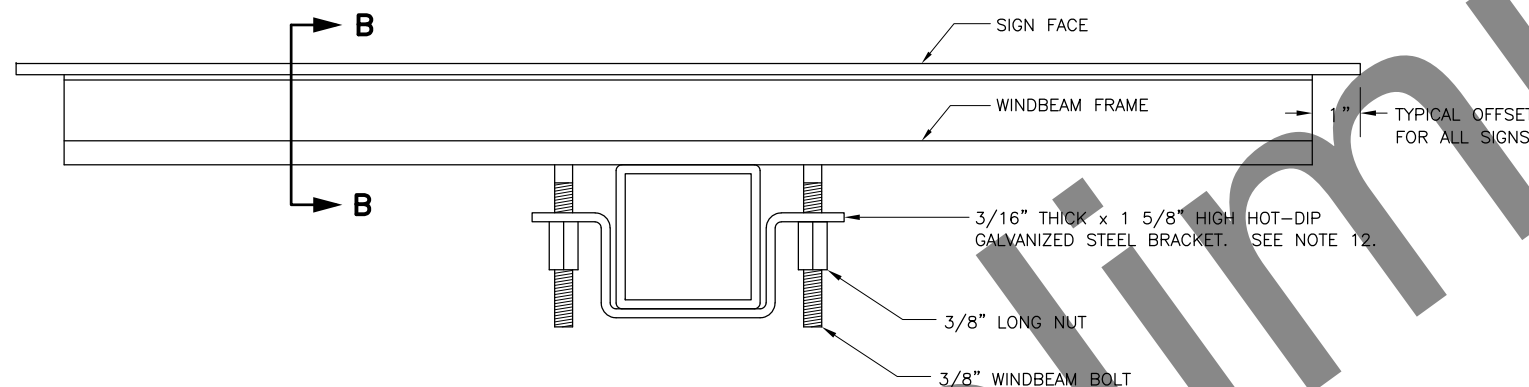
RECTANGLES AND TRAPEZOIDS

- * 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" .

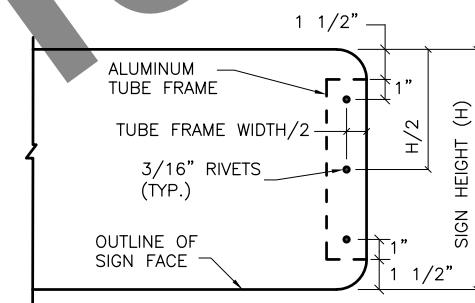
- *** FOR WARNING SIGNS MOUNTED ON FLASHING BEACON POSTS, USE THE 14" OFFSET. OTHERWISE, USE W/2.

WINDBEAM LOCATIONS FOR EACH SIGN SHAPE

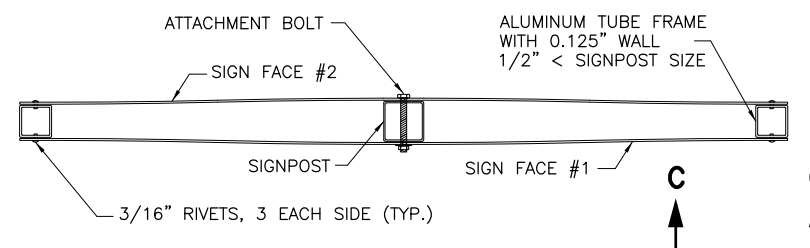
ELEVATION VIEW



SECTION A - A TYPICAL SIGN ATTACHMENT DETAILS AT EACH WINDBEAM

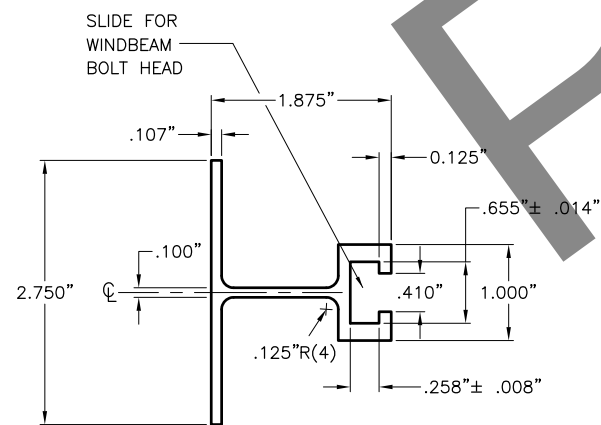


VIEW C - C

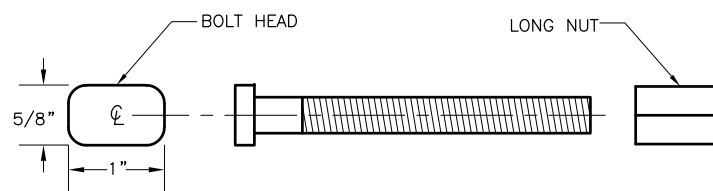


D3-1 STREET NAME SIGN FRAMING DETAIL

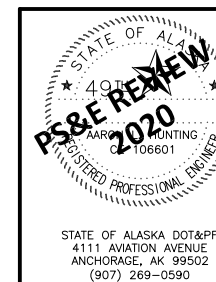
PLAN VIEW



SECTION B - B WINDBEAM CROSS SECTION



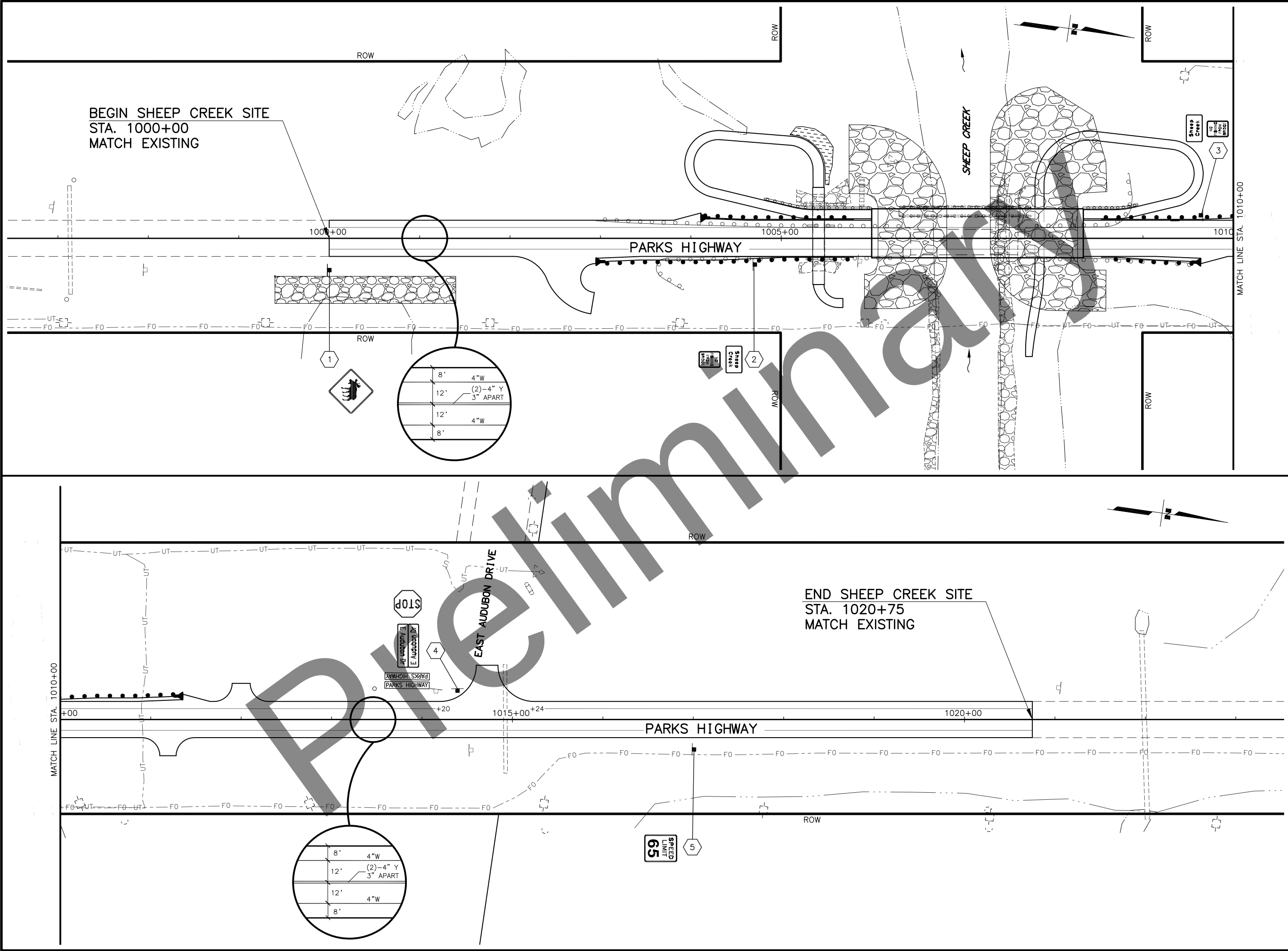
3/8" WINDBEAM BOLT AND LONG NUT



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
**PARKS HWY BRIDGE REPLACEMENTS:
MONTANA CREEK, SHEEP CREEK,
AND GOOSE CREEK**

**LIGHT SIGN FRAMING AND
ATTACHMENT DETAILS**

STATE OF ALASKA DOT&PF
4111 AVIATION AVENUE
ANCHORAGE, AK 99502
(907) 269-0590



SHEET NO.	TOTAL SHEETS
H4	H10
STATE	YEAR
ALASKA	2021
PROJECT DESIGNATION	
OA41034/Z589760000	
OA41036/CFHWY00217	
NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	

TO FAIRBANKS

TO WASILLA

PARKS HIGHWAY

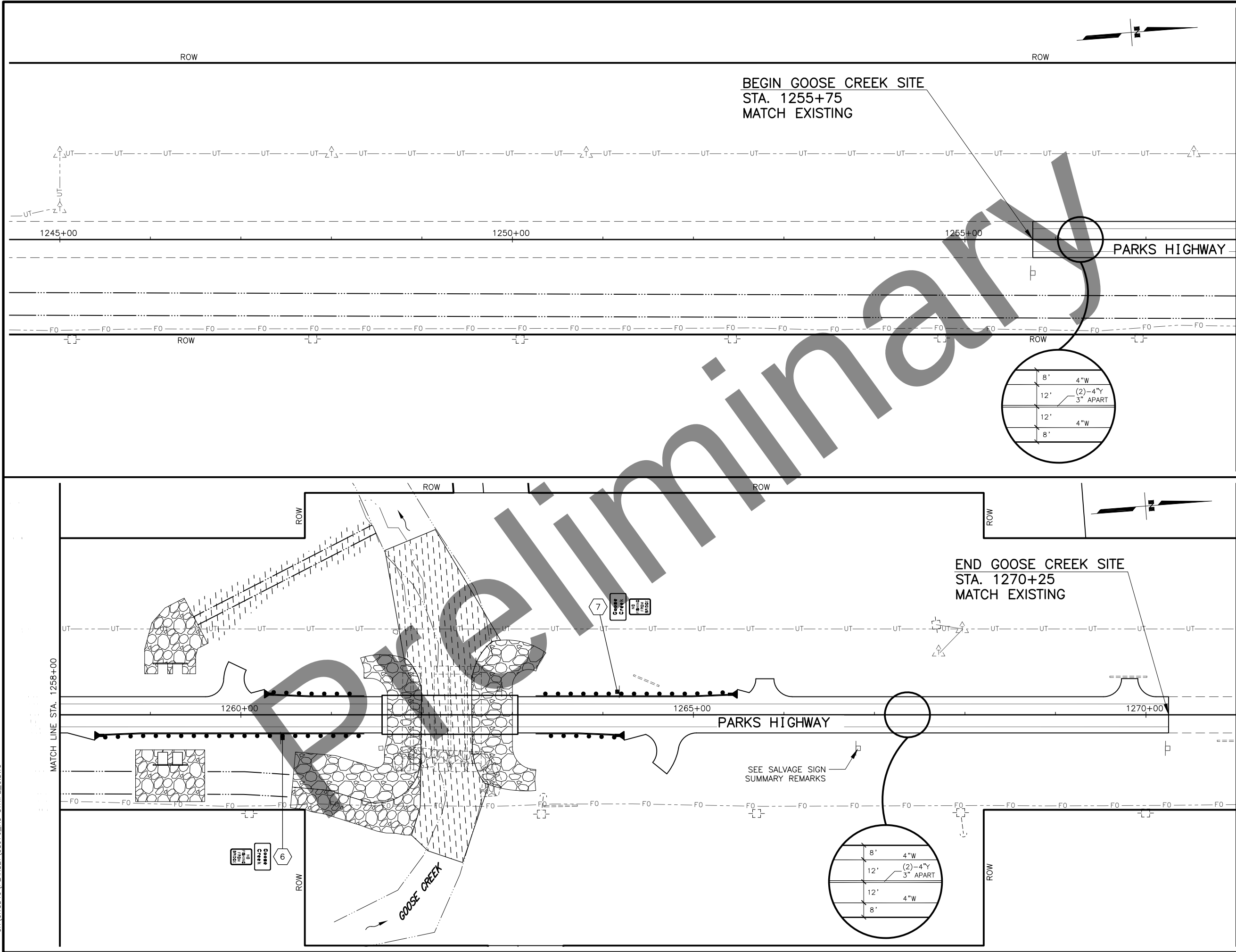
SHEEP CREEK

THIS SHEET

STATE OF ALASKA
49th
PS&E REVIEW
2020
ANCHORAGE DIVISION
CE 206601
REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA DOT&PF
4111 AVIATION AVENUE
ANCHORAGE, AK 99502
(907) 269-0590

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
PARKS HIGHWAY BRIDGE
REPLACEMENTS:
MONTANA CREEK, SHEEP
CREEK, AND GOOSE CREEK
SIGNING AND STRIPING
STA. 1000+00 TO
STA. 1020+75



SHEET NO.	TOTAL SHEETS
H5	H10
STATE	YEAR
ALASKA	2021
PROJECT DESIGNATION	
0A41034/Z589760000	
0A41036/CFHWY00217	
NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	

TO FAIRBANKS
 TO WASILLA

GOOSE CREEK

THIS SHEET

STATE OF ALASKA DOT&PF
4111 AVIATION AVENUE
ANCHORAGE, AK 99502
(907) 269-0590

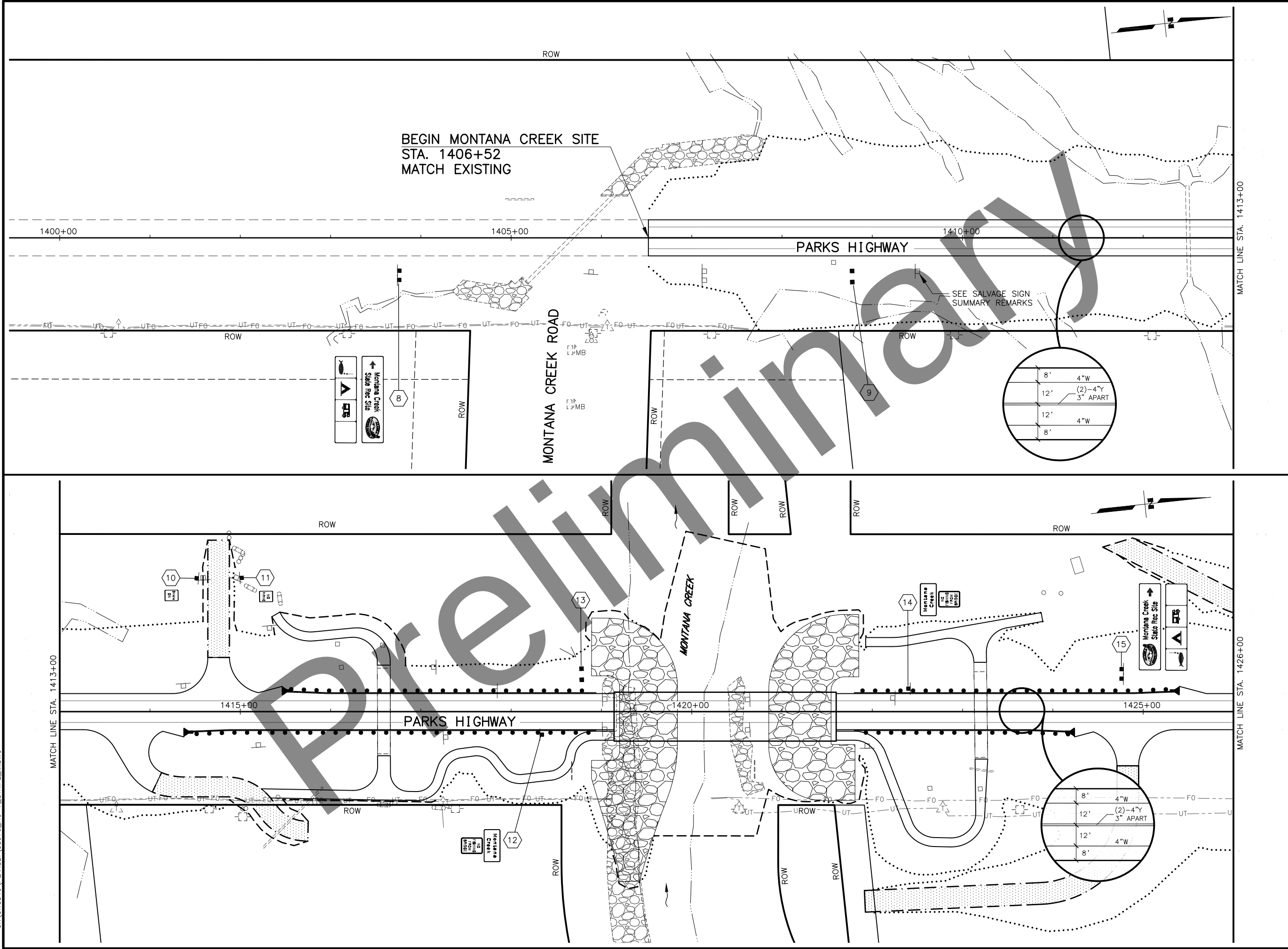
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

**PARKS HIGHWAY BRIDGE
REPLACEMENTS:
MONTANA CREEK, SHEEP
CREEK, AND GOOSE CREEK**

**SIGNING AND STRIPING
STA. 1255+75 TO
STA. 1270+25**

G:\USERS\MBHENSCH\ONE DRIVE\STATE OF ALASKA\58976 PARKS HWY BRIDGE REPLACEMENT MONTANA CK SHEEP
FILE G:\CA\GV3D\19\PLANSET\58976-146-7-STRIP-M.DWG

DATE/TIME 10/27/2020 7:48 PM
LAYOUT H6
DESIGNED MHB
CHECKED ALH
DRAFTED CMWH



SHEET NO.	TOTAL SHEETS
H6	F23
STATE	YEAR
ALASKA	2021
PROJECT DESIGNATION	
OA41034/Z589760000	
OA41036/CFHWY00217	
NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	

TO FAIRBANKS

TO WASILLA

PARKS HIGHWAY

MONTANA CREEK

THIS SHEET

STATE OF ALASKA

49th

PS&E REVIEW

2020

REGISTERED PROFESSIONAL ENGINEER

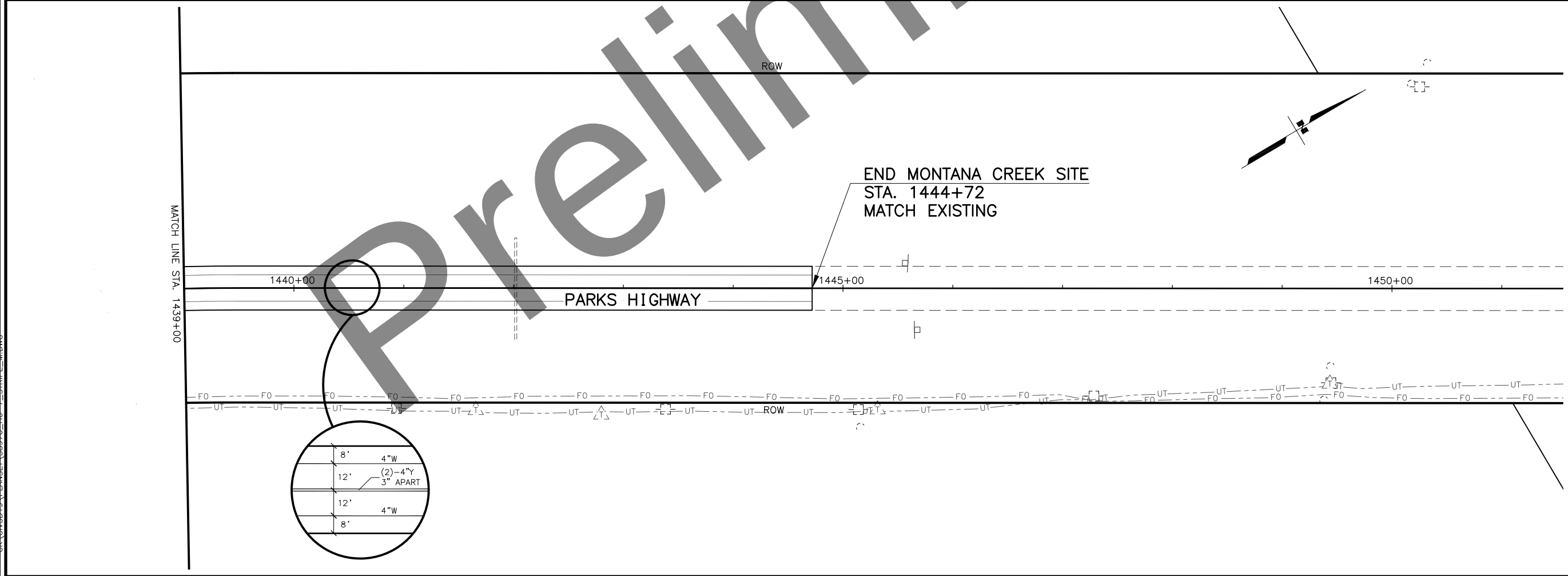
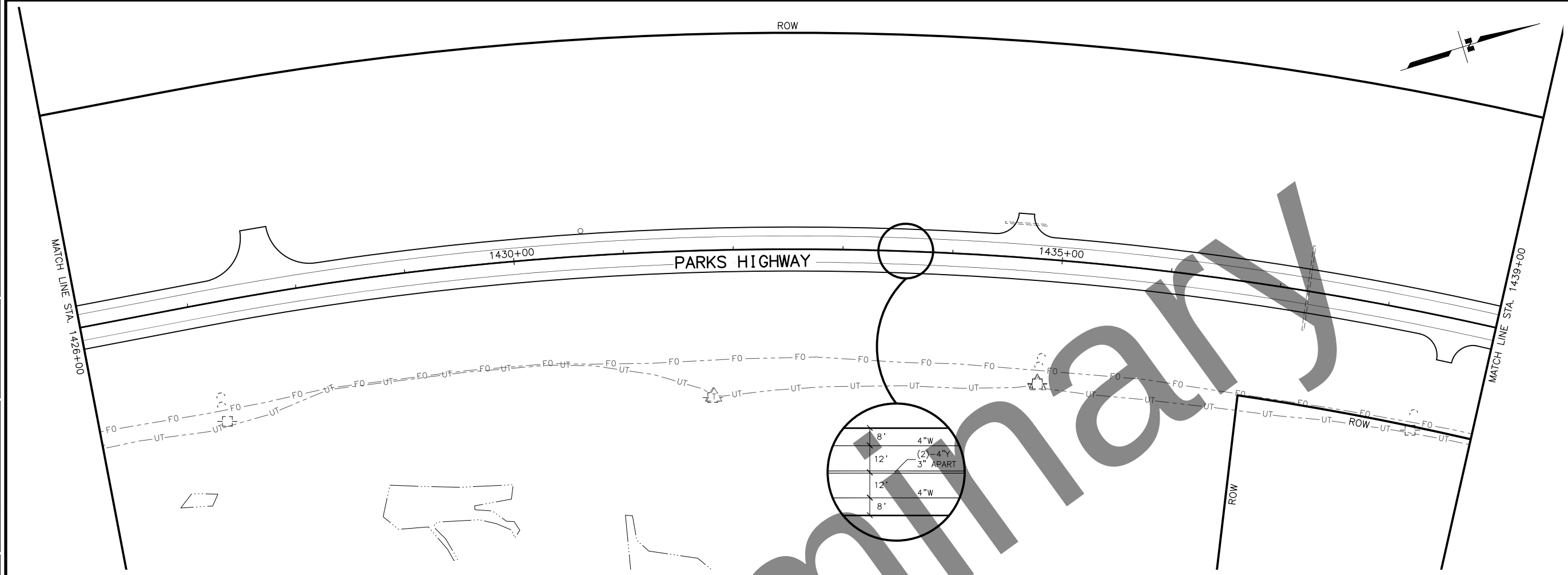
STATE OF ALASKA DOT&PF
4111 AVIATION AVENUE
ANCHORAGE, AK 99502
(907) 269-0590

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

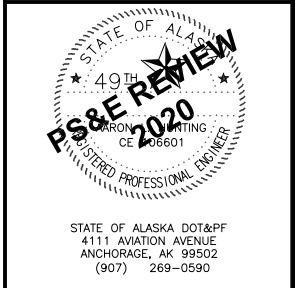
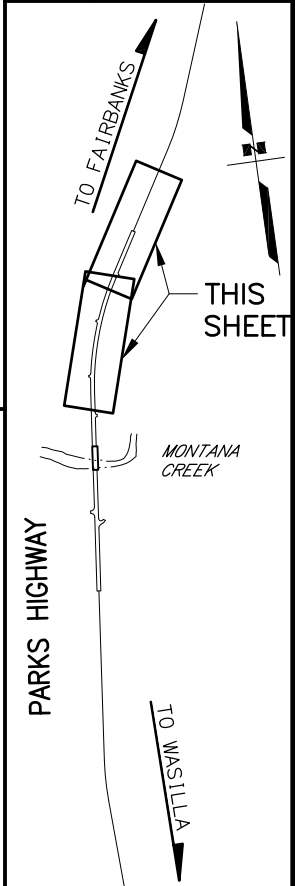
PARKS HIGHWAY BRIDGE
REPLACEMENTS:
MONTANA CREEK, SHEEP
CREEK, AND GOOSE CREEK
SIGNING AND STRIPING
STA. 1406+52 TO
STA. 1426+00

G:\USERS\MBHENSON\ONE DRIVE\STATE OF ALASKA\58976 PARKS HWY BRIDGE REPLACEMENT MONTANA GK SHEEP
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LAYOUT H7
DESIGNED MHB
CHECKED ALH
DRAFTED CMWH



SHEET NO.	TOTAL SHEETS
H7	F23
STATE	YEAR
ALASKA	2021
PROJECT DESIGNATION	
OA41034/Z589760000	
OA41036/CFHWY00217	
NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	



STATE OF ALASKA DOT&PF
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

PARKS HIGHWAY BRIDGE
REPLACEMENTS:
MONTANA CREEK, SHEEP
CREEK, AND GOOSE CREEK
SIGNING AND STRIPING
STA. 1426+00 TO
STA. 1444+72

TOTAL SHEETS	H10
-----------------	-----

615.0001.0000

SUMMARY

SHEET	SIGN NO.	ALIGNMENT STATION	CL REF.	TYPE	LEGEND	SIZE (IN)		AREA (SQ.FT)	SIGN FACES	POSTS NO., SIZE, & TYPE	FRAMED		REMARKS
						WIDTH	HEIGHT				YES	NO	
H4	1	1000+00	RT	W11-103		36	36	9.00	S	1-3.0" T	X		
H4	2	1004+70	RT	I-3		30	18	3.75	S	1-3.0" T		X	REFERENCE ASP S-32
				R16-108		18	24	3.00	S			X	MOUNT BELOW 1-3
H4	3	1009+64	LT	I-3		30	18	3.75	N	1-3.0" T		X	REFERENCE ASP S-32
				R16-108		18	24	3.00	N			X	MOUNT BELOW 1-3
H4	4	1014+39	LT	D3-1		48	12	4.00	S		X		MOUNT SIGNS BACK TO BACK
				D3-1		48	12	4.00	N		X		
				D3-1	PARKS HIGHWAY	42	8	2.33	E	1-3.0" T	X		MOUNT SIGNS BACK TO BACK
				D3-1	PARKS HIGHWAY	42	8	2.33	W		X		
				R1-1		36	36	9.00	W		X		
H4	5	1017+00	RT	R2-1		30	36	7.50	S	1-3.0" T	X		
H5	6	1260+46	RT	I-3		30	18	3.75	S	1-3.0" T		X	REFERENCE ASP S-32
				R16-108		18	24	3.00	S			X	MOUNT BELOW 1-3
H5	7	1264+16	LT	I-3		30	18	3.75	N	1-3.0" T		X	REFERENCE ASP S-32
				R16-108		18	24	3.00	N			X	MOUNT BELOW 1-3
H6	8	1403+76	RT	D7-102L		96	24	16.00	S	2-3.5" T	X		
				D7-102 PLQ		96	16	10.67			X		MOUNT BELOW D7-102L
H6	9	1408+78	RT	—	—	—	—	—	—	2-3.5" T			INSTALL TWO POSTS ONLY (FUTURE TODS)



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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

**PARKS HWY BRIDGE REPLACEMENTS:
MONTANA CREEK, SHEEP CREEK,
AND GOOSE CREEK**

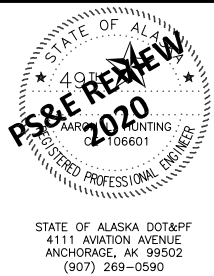
SIGN SUMMARY

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A41034/Z589760000 0A41036/CFHWY00217	2021	H9	H10

615.0001.0000

SUMMARY

SHEET	SIGN NO.	ALIGNMENT STATION	CL REF.	TYPE	LEGEND	SIZE (IN)		AREA (SQ.FT)	SIGN FACES	POSTS NO., SIZE, & TYPE	FRAMED		REMARKS
						WIDTH	HEIGHT				YES	NO	
H6	10	1414+52	LT	R8-3A		24	30	5.00	N	1-2.5" P.T.		X	
H6	11	1415+00	LT	R8-3A		24	30	5.00	S	1-2.5" P.T.		X	
H6	12	1418+34	RT	I-3		36	18	4.50	S	1-3.0" T	X		REFERENCE ASP S-32
				R16-108		18	24	3.00	S			X	MOUNT BELOW I-3
H6	13	1418+78	LT	-	-	-	-	-	-	2-3.5" T			INSTALL TWO POSTS ONLY (FUTURE TODS). REFERENCE ASP S-32
H6	14	1422+40	LT	I-3		36	18	4.50	N	1-3.0" T	X		REFERENCE ASP S-32
				R16-108		18	24	3.00	N			X	MOUNT BELOW I-3
H6	15	1424+76	LT	D7-102R		96	24	16.00	N	2-3.5" T	X		
				D7-102 PLQ		96	16	10.67			X		MOUNT BELOW D7-107R



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

**PARKS HWY BRIDGE REPLACEMENTS:
MONTANA CREEK, SHEEP CREEK,
AND GOOSE CREEK**

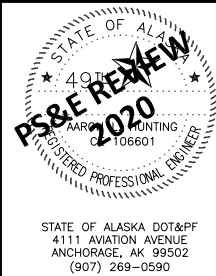
SIGN SUMMARY

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0A41034/Z589760000	2021	H10	H10
				0A41036/CFHWY00217			

615.0006.0000

SALVAGE SIGN SUMMARY						
STATION	CL. REF	TYPE	LEGEND	SALVAGE SIGN (EACH)		REMARKS
				SHEEP & MONTANA	GOOSE	
1000+00	RT	W11-103	MOOSE	1		
1005+87	RT	I-3	SHEEP CREEK	1		
1007+70	LT	OM-3L	OBJECT MARKER	1		
1008+87	RT	R16-108	NO FISHING FROM BRIDGE	1		
1008+24	LT	I-3	SHEEP CREEK	1		
1008+24	LT	R16-108	NO FISHING FROM BRIDGE	1		
1014+16	LT	D1-1	E AUDUBON DR	1		
1014+16	LT	R1-1	STOP	1		
1014+54	RT	R2-1	SPEED LIMIT 65	1		
1262+86	LT	I-3	GOOSE CREEK		1	
1266+82	RT	W11-103	MOOSE		1	REMOVE AND RELOCATE SIGNS. RELOCATE TO SAME STATION. INSTALL ON NEW POST. USE 1-3.0" T. SEE NOTE 1.
		W7-3AP	NEXT 1 MILE		1	
1407+14	RT	D7-102	MONTANA CREEK CAMPGROUND	1		
1409+50	RT	R4-1	DO NOT PASS	1		REMOVE AND RELOCATE SIGN. RELOCATE TO SAME STATION. INSTALL ON NEW POST. USE 1-2.5" P.T. SEE NOTE 1.
1414+37	LT	R1-1	STOP	1		
1414+59	LT	R8-3	NO PARKING	1		
1414+96	LT	R8-3	NO PARKING	1		
1415+20	RT	R1-1	STOP	1		
1416+08	LT	1-2.5" PT	POST	1		ON BIKE PATH
1416+12	LT	1-2.5" PT	POST	1		ON BIKE PATH
1416+58	LT	1-2.5" PT	POST	1		ON BIKE PATH
1417+14	LT	D9-1	(LT ARROW) CAMPGROUNDS (RT ARROW)	1		
1417+27	RT	I-3	MONTANA CREEK	1		
1417+27	RT	R16-108	NO SWIMMING OR FISHING FROM BRIDGE	1		
1419+04	LT	OM-3L	OBJECT MARKER	1		
1419+04	RT	OM-3R	OBJECT MARKER	1		
1420+62	LT	OM-3L	OBJECT MARKER	1		
1420+62	RT	OM-3R	OBJECT MARKER	1		
1421+94	RT	R1-1	STOP	1		
1422+23	LT	I-3	MONTANA CREEK	1		
1422+23	LT	R16-108	NO SWIMMING OR FISHING FROM BRIDGE	1		
1423+63	RT		POST	1		
1423+20	RT		POST	1		
			TOTAL (EACH)	30	3	

NOTE 1: REMOVE AND RELOCATE SIGN IS SUBSIDIARY TO PAY ITEM 615.0006.0000 SALVAGE SIGN.

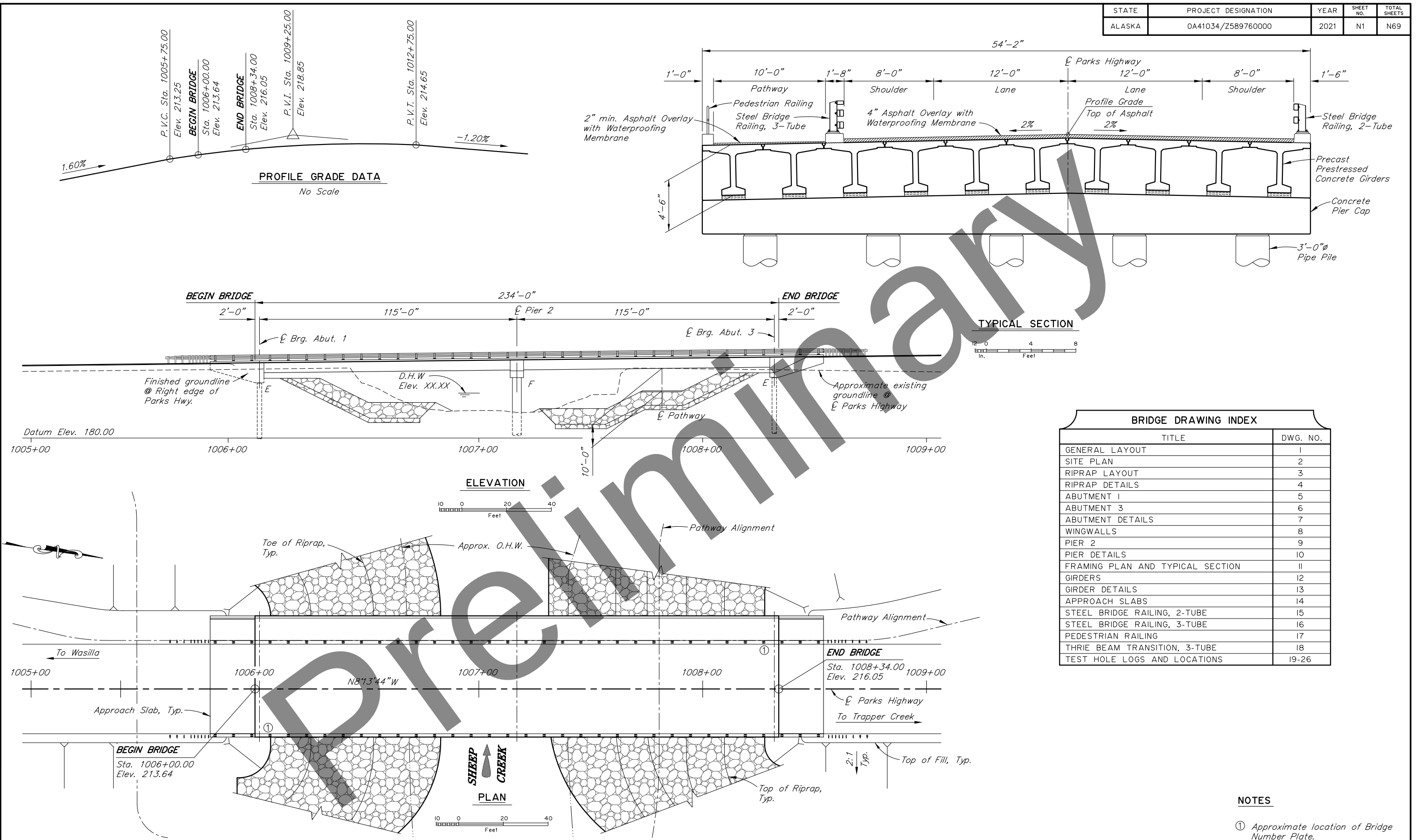


STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

**PARKS HWY BRIDGE REPLACEMENTS:
MONTANA CREEK, SHEEP CREEK,
AND GOOSE CREEK**

SIGN SUMMARY

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A41034/Z589760000	2021	N1	N69



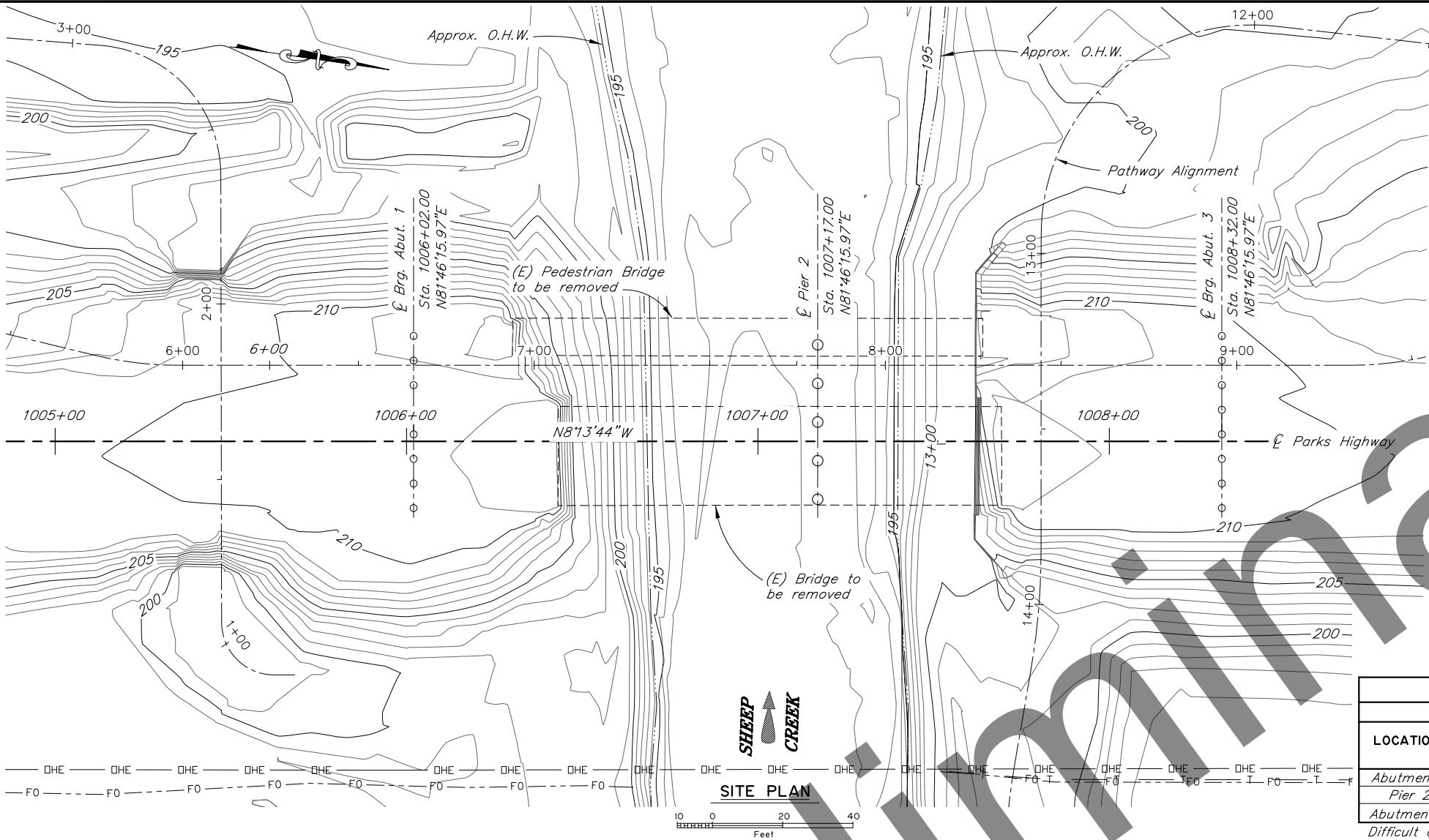
BRIDGE DRAWING INDEX	
TITLE	DWG. NO.
GENERAL LAYOUT	1
SITE PLAN	2
RIPRAP LAYOUT	3
RIPRAP DETAILS	4
ABUTMENT 1	5
ABUTMENT 3	6
ABUTMENT DETAILS	7
WINGWALLS	8
PIER 2	9
PIER DETAILS	10
FRAMING PLAN AND TYPICAL SECTION	11
GIRDERS	12
GIRDER DETAILS	13
APPROACH SLABS	14
STEEL BRIDGE RAILING, 2-TUBE	15
STEEL BRIDGE RAILING, 3-TUBE	16
PEDESTRIAN RAILING	17
THREE BEAM TRANSITION, 3-TUBE	18
TEST HOLE LOGS AND LOCATIONS	19-26

NOTES

① *Approximate location of Bridge Number Plate.*

DESIGNED BY: <i>Elmer Marx</i>	CHECKED: <i>Ben Still</i>	LAYOUT BY: <i>Elmer Marx</i>	CHECKED BY: <i>Ben Still</i>	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION 3132 Channel Drive Juneau, Alaska 99801 907-465-2975	SHEEP CREEK BRIDGE PARKS HIGHWAY GENERAL LAYOUT	 BRIDGE NO. <u>213</u> DWG. NO. <u>1</u>
DRAWN BY: <i>Sam Sollie</i>	CHECKED: <i>Elmer Marx</i>	SPECIFICATIONS BY: <i>Elmer Marx</i>	P S & E COMPARED: <i>Ben Still</i>			
QUANTITIES BY: <i>Elmer Marx</i>	CHECKED: <i>Ben Still</i>	APPROVAL RECOMMENDED BY: <i>Rich Pratt</i>				

R:\cad\213\213-SITE PLAN Mon, Oct/12/20 8:18am



STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A41034/Z589760000	2021	N2	N69

GENERAL NOTES

DESIGN:..... AASHTO LRFD Bridge Design Specifications, 2020 Edition, with latest interim specifications.

Seismic design per AASHTO Guide Specifications for LRFD Seismic Bridge Design, 2011 with latest interim revisions.

LIVE LOAD:..... HL-93

DEAD LOAD:..... Includes 50 psf for all wearing surfaces.

SEISMIC PARAMETERS:..... PGA = 0.52
Ss = 1.10
Si = 0.39
Site Class = D
Liquefaction Potential = High
AASHTO 7% probability of exceedance in 75 years.

ICE LOAD:..... Effective ice crushing strength = 16 ksf.
Design ice thickness = 2 ft.

REINFORCEMENT:..... ASTM A706, Grade 60, Fy = 60,000 psi
ASTM A970 Headed bars, Class HA.
Space reinforcement evenly unless otherwise noted.

PRESTRESSED CONCRETE:..... See "GIRDERS" Dwg.

CONCRETE:..... Class A Concrete unless otherwise noted, f'c = 4000 psi

STRUCTURAL STEEL:..... ASTM A709, Grade 36T3, Fy = 36,000 psi
Galvanize structural steel in accordance with AASHTO M111 unless noted otherwise.

STRUCTURAL STEEL PILING:..... API 5L X52 PSL2, Fy = 52,000 psi. or
ASTM A709, GR50T3, Fy = 50,000 psi.
Open-ended pile tip reinforcing is required.

PILE DATA TABLE

LOCATION	PILE TYPE	DRIVING CRITERIA			DESIGN DATA		
		MINIMUM PENETRATION (ft)	ESTIMATED PILE TIP ELEVATION (ft)	DRIVING RESISTANCE (K)	STRENGTH FACTORED LOAD (K)	NOMINAL RESISTANCE (K)	RESISTANCE FACTOR, φ
Abutment 1	2'-0"Øx1/2" Pipe	55	106	540	350	540	0.65
Pier 2	3'-0"Øx3/4" Pipe	68	92	1,405	875	1,345	0.65
Abutment 3	2'-0"Øx1/2" Pipe	55	121	540	350	540	0.65

Difficult driving conditions are expected. Pilot bore hole required for each pile.

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM	PAY UNIT	ESTIMATING UNIT	SUBST.	SUPERST.	TOTAL QUANTITY
202.0023.0000	Removal of Bridge No. 213	LS	LS	All Req'd	All Req'd	All Req'd
202.0023.0000	Removal of Bridge No. 1992, Pedestrian	LS	LS	All Req'd	All Req'd	All Req'd
205.0006.0000	Structural Fill	CY	CY	1,565	---	1,565
501.0001.0000	Class A Concrete	LS	CY	271.4	199.6	471.0
501.0007.0000	Precast Concrete Member, 115'-6" Decked Bulb-Tee	EA	EA	---	20	20
503.0001.0000	Reinforcing Steel	LS	LBS	68,290	---	68,290
503.0002.0000	Epoxy-Coated Reinforcing Steel	LS	LBS	---	31,075	31,075
505.0005.2405	Furnish Structural Steel Piles, 2'-0" Dia. x1/2" Pipe	LF	LF	1,462	---	1,462
505.0005.3675	Furnish Structural Steel Piles, 3'-0" Dia. x3/4" Pipe	LF	LF	571	---	571
505.0006.2405	Drive Structural Steel Piles, 2'-0" Dia. x1/2" Pipe	EA	EA	16	---	16
505.0006.3675	Drive Structural Steel Piles, 3'-0" Dia. x3/4" Pipe	EA	EA	5	---	5
507.0001.0002	Steel Bridge Railing, 2-Tube	LF	LF	---	274.0	274.0
507.0001.0003	Steel Bridge Railing, 3-Tube	LF	LF	---	274.0	274.0
507.0002.0000	Pedestrian Railing	LF	LF	---	274.0	274.0
508.0001.0000	Waterproofing Membrane, Spray-Applied	LS	SF	---	13,700	13,700
520.0001.0000	Temporary Crossings Sheep Creek	LS	LS	All Req'd	All Req'd	All Req'd
606.0016.0000	Transition Rail	EA	EA	---	4	4
611.0001.0001	Riprap, Class I	CY	CY	500	---	500
611.0001.0003	Riprap, Class III	CY	CY	2,500	---	2,500
631.0002.0001	Geotextile, Erosion Control, Class I	SY	SY	1,500	---	1,500

Item numbers are for reference only. Quantities shown are not necessarily the pay quantities nor the total

DESIGNED BY: Ben Still	CHECKED: Ben Still
DRAWN BY: Sam Solie	CHECKED: Elmer Marx
QUANTITIES BY: Elmer Marx	CHECKED: Ben Still

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION
3132 Channel Drive
Juneau, Alaska 99801
907-465-2975

TBD

ABBREVIATIONS:

CL	= centerline	(E)	= existing	min.	= minimum
PL	= plate	EA	= each	n.f.	= near face
&	= and	Elev.	= elevation	No.	= number
@	= at	Ext.	= exterior	o.c.	= on center
Ø	= diameter	e.f.	= ordinary high water	O.H.W.	= ordinary high water
±	= approximate	e.w.	= each way	OHE	= overhead electrical line
Abut.	= abutment	FO	= fiber optic line	pcf	= pounds per cubic foot
Approx.	= approximate	F	= fixed	psf	= pounds per square foot
b.f.	= back/dirt face	f.f.	= front/air face	psi	= pounds per square inch
bot.	= bottom	f'c	= specified concrete compressive strength	P.V.C.	= point of vertical curve
Br.	= bridge	Fy	= yield stress	P.V.I.	= point of vertical intersection
btwn.	= between	Galv.	= galvanize	P.V.T.	= point of vertical tangent
Brg.	= bearings	Hwy.	= highway	R.O.W.	= right of way
C.G.	= center of gravity	Int.	= interior	Rt.	= right
C.I.P.	= cast in place	Jt.	= joint	Rd.	= road
CJP	= complete joint penetration	K	= 1,000 pounds	spc.	= space, spaces
Clr.	= clear, clearance	ksf	= 1,000 pounds per square foot	Sta.	= station
CY	= cubic yard	LB	= pound	SF	= square feet
D.H.W.	= design high water	LF	= linear foot	Symm.	= symmetric
dia.	= diameter	LS	= lump sum	T	= telephone line
Dwg.	= drawing	Lt.	= left	Typ.	= typical
E	= expansion	max.	= maximum	UT	= ultrasonic testing
				w/	= with

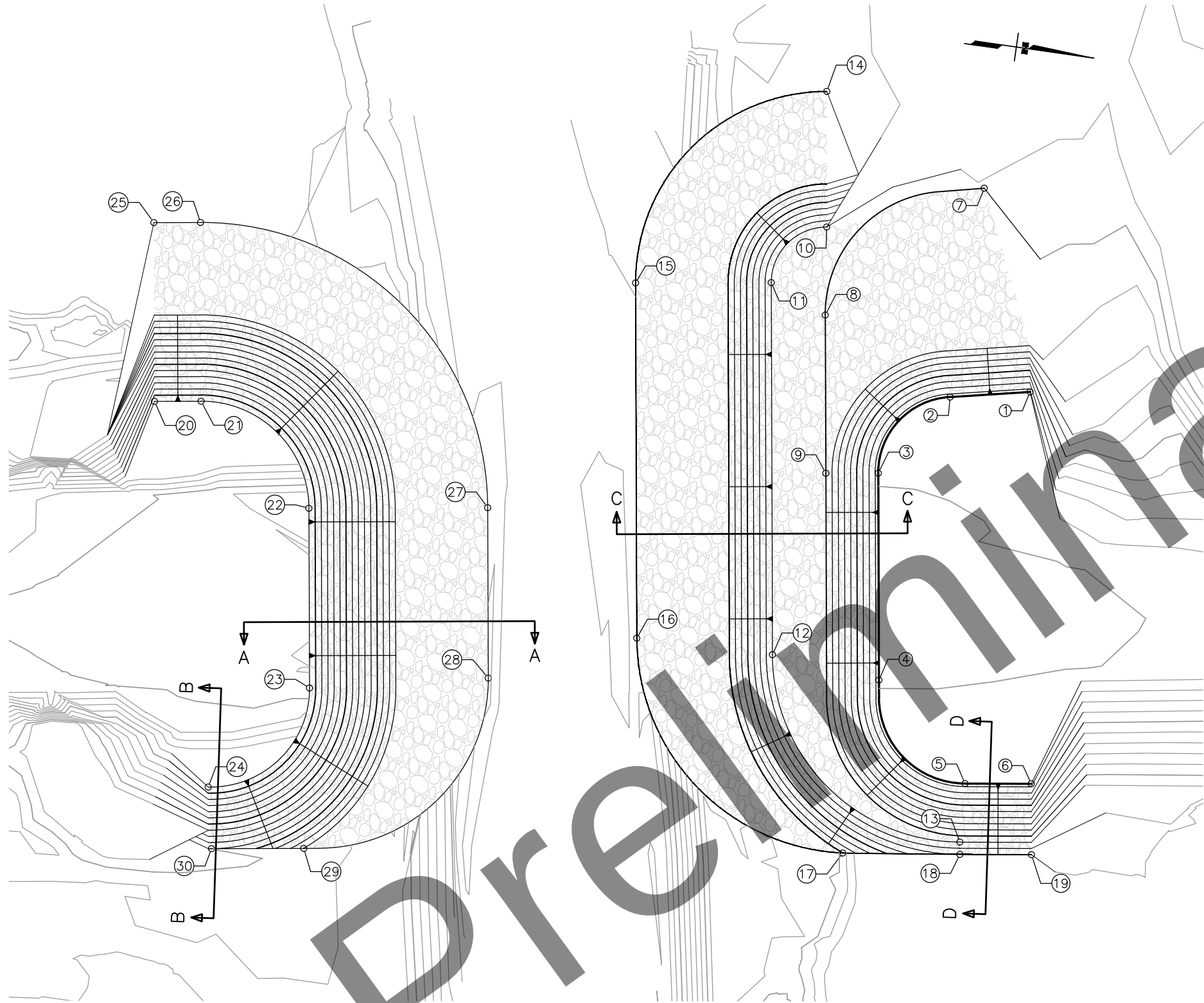
SHEEP CREEK BRIDGE
PARKS HIGHWAY
SITE PLAN



BRIDGE NO. 213
DWG. NO. 2

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STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	OA41034/Z589760000	2021	N3	N69



SHEEP CREEK RIPRAP PLAN

RIPRAP POINT SUMMARY TABLE				
POINT	E (x)	N (y)	ELEV (z)	REMARKS
1	318899.05'	297063.84'	208.5'	TOP OF RIPRAP
2	318904.33'	297038.38'	208.5'	TOP OF RIPRAP
3	318932.04'	297018.76'	208.5'	TOP OF RIPRAP
4	318998.52'	297028.37'	208.5'	TOP OF RIPRAP
5	319027.83'	297060.71'	208.5'	TOP OF RIPRAP
6	319024.90'	297081.99'	208.5'	TOP OF RIPRAP
7	318835.68'	297039.88'	200.0'	TOP OF RIPRAP
8	318883.65'	296994.58'	200.0'	TOP OF RIPRAP
9	318934.48'	297001.93'	200.0'	TOP OF RIPRAP
10	318855.31'	296991.04'	199.0'	TOP OF RIPRAP
11	318875.70'	296975.73'	199.0'	TOP OF RIPRAP
12	318995.18'	296993.01'	199.0'	TOP OF RIPRAP
13	319046.88'	297061.71'	199.0'	TOP OF RIPRAP
14	318811.74'	296984.92'	192.0'	TOP OF RIPRAP
15	318881.95'	296932.18'	192.0'	TOP OF RIPRAP
16	318996.03'	296948.68'	192.0'	TOP OF RIPRAP
17	319055.69'	297024.57'	192.0'	TOP OF RIPRAP
18	319050.84'	297062.25'	197.0'	TOP OF RIPRAP
19	319047.67'	297085.27'	192.0'	TOP OF RIPRAP
20	318941.81'	296783.01'	206.0'	TOP OF RIPRAP
21	318939.64'	296797.97'	206.0'	TOP OF RIPRAP
22	318969.15'	296837.46'	206.0'	TOP OF RIPRAP
23	319026.88'	296845.81'	206.0'	TOP OF RIPRAP
24	319063.27'	296817.75'	206.0'	TOP OF RIPRAP
25	318884.40'	296774.71'	192.0'	TOP OF RIPRAP
26	318882.24'	296789.67'	192.0'	TOP OF RIPRAP
27	318960.85'	296894.87'	192.0'	TOP OF RIPRAP
28	319015.61'	296902.79'	192.0'	TOP OF RIPRAP
29	319078.64'	296851.21'	192.0'	TOP OF RIPRAP
30	319082.92'	296821.58'	196.0'	TOP OF RIPRAP

DESIGNED BY:	CC	CHECKED:	CL
DRAWN BY:	MH	CHECKED:	CL
QUANTITIES BY:		CHECKED:	

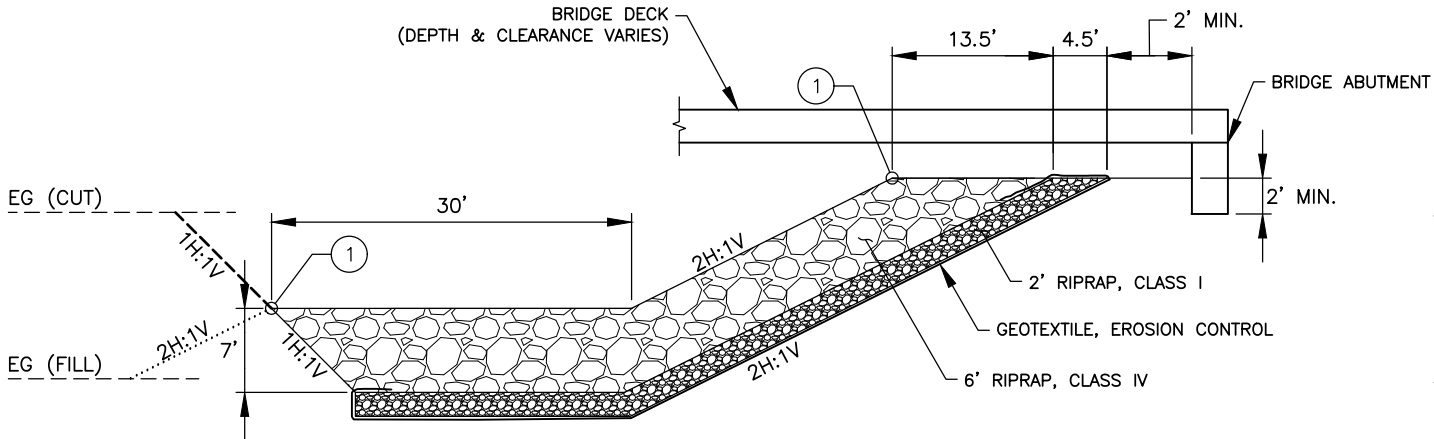
STATE OF ALASKA
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BRIDGE SECTION
3132 Channel Drive
Juneau, Alaska 99801
907-465-2975

SHEEP CREEK BRIDGE
PARKS HIGHWAY
RIPRAP PLAN

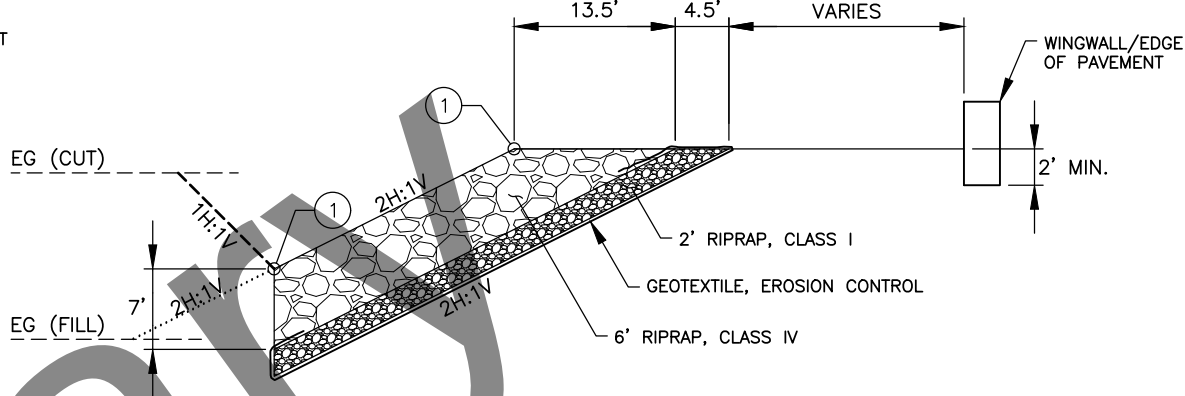


BRIDGE NO. 213
DWG. NO. 3

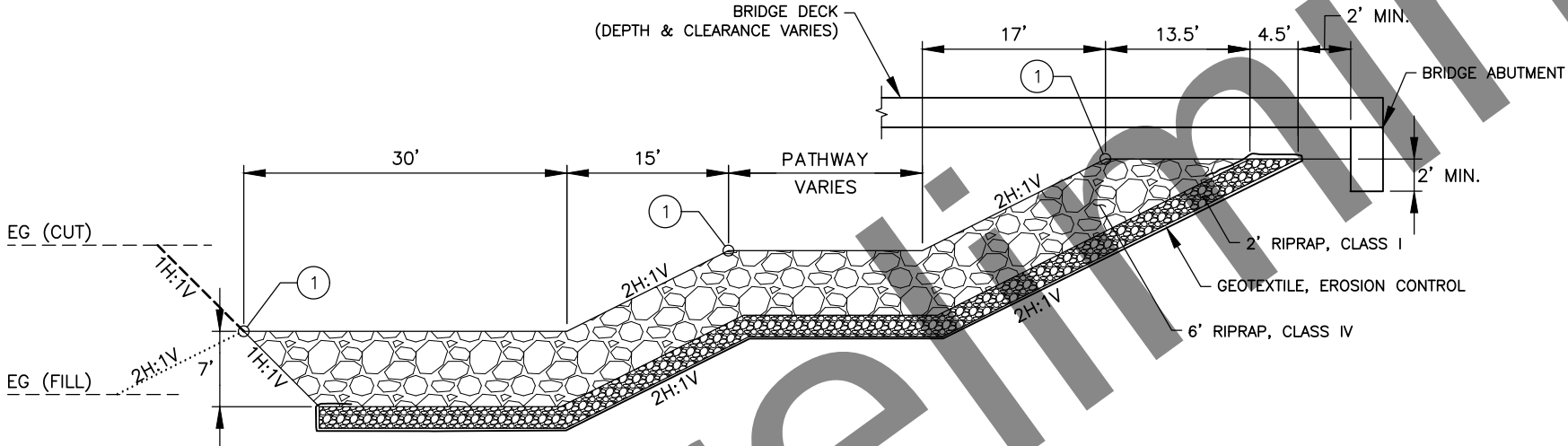
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	OA41034/Z589760000	2021	N4	N69



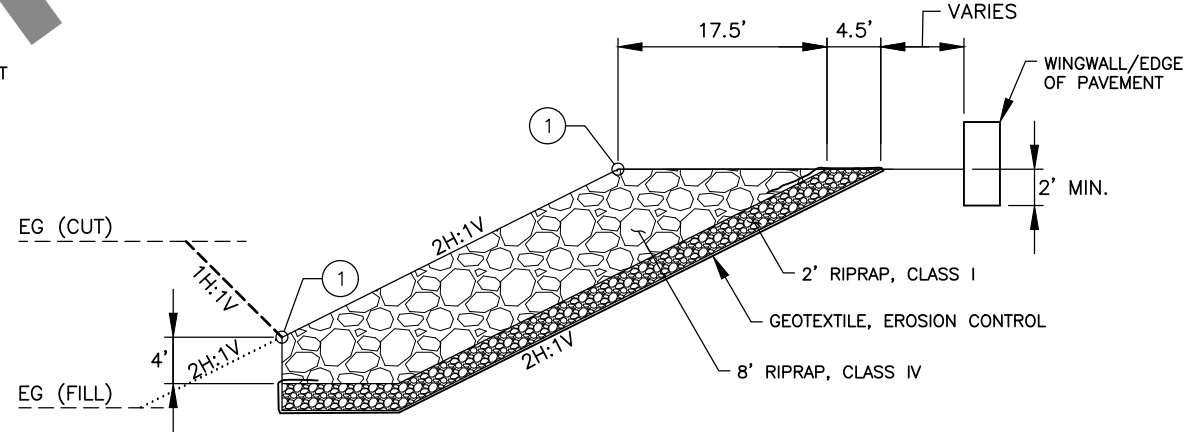
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D

NOTES:

1. FOR LOCATION AND ELEVATIONS, SEE RIPRAP POINT TABLE ON SHEET N3.
2. SMOOTH TRANSITIONS BETWEEN ALL SECTIONS.
3. ALL LINEAR DIMENSIONS HAVE AN ACCEPTANCE TOLERANCE OF $\pm 0.5'$.
4. ALL RIPRAP BELOW OHW WILL BE BACKFILLED WITH NATIVE STREAM MATERIAL AFTER PLACEMENT.

DESIGNED BY:	CC	CHECKED:	CC
DRAWN BY:	MM	CHECKED:	CC
QUANTITIES BY:		CHECKED:	

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION
3132 Channel Drive
Juneau, Alaska 99801
907-465-2975

SHEEP CREEK BRIDGE
PARKS HIGHWAY
RIPRAP DETAILS



BRIDGE NO. 213
DWG. NO. 4

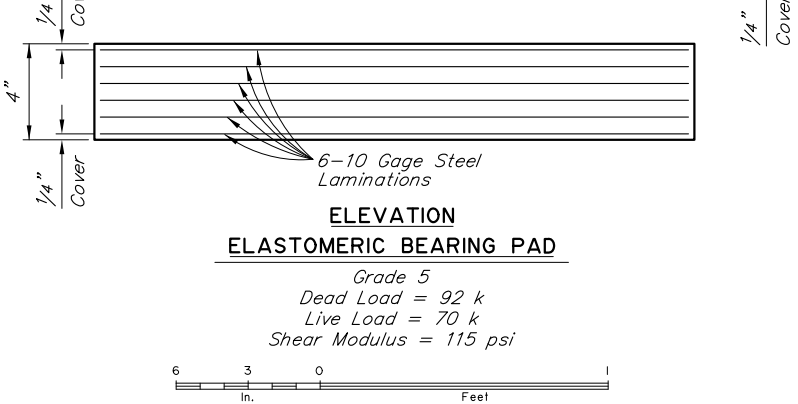
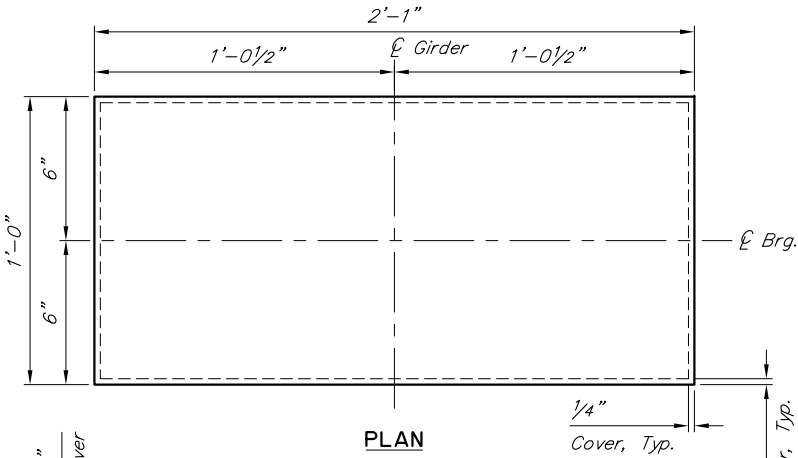
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STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A41034/Z589760000	2021	N6	N69

REINFORCING STEEL - ABUTMENT 3

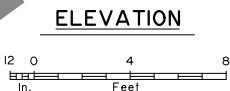
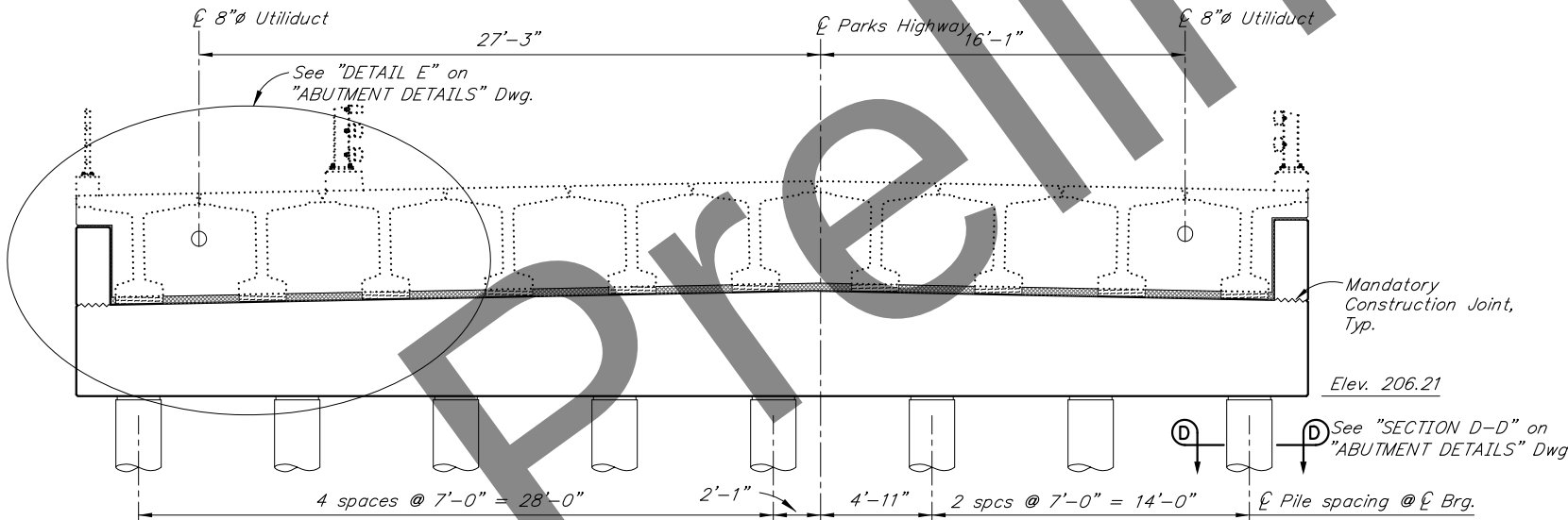
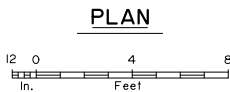
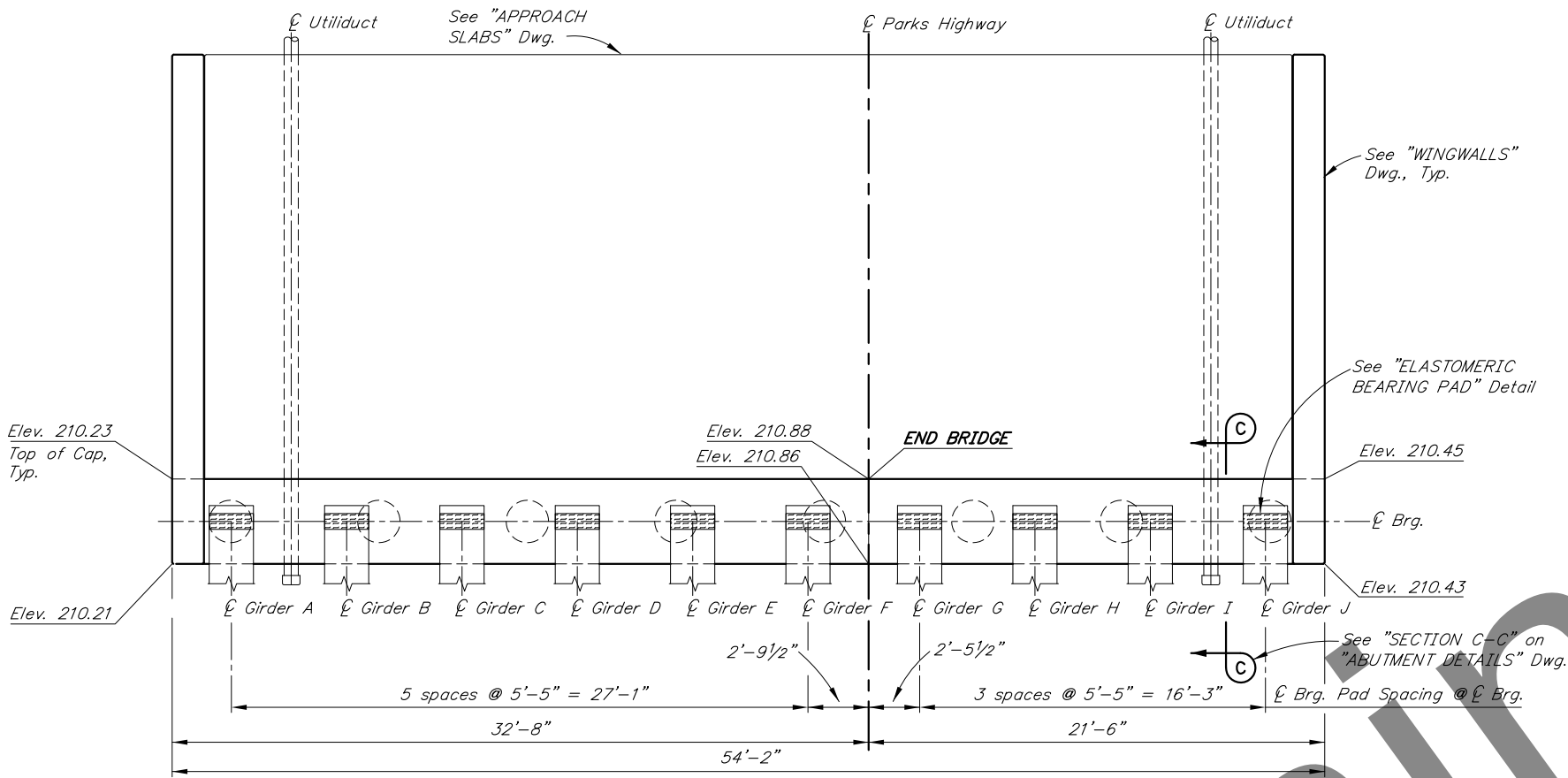
MARK	NOTE	SIZE	NO.	LENGTH	TYPE	BENDING DIAGRAM
A401	S	4	8	271'-10"	SPIRAL	
A402		4	174	VARIES	STIRRUP	
A403		4	48	6'-0"	HOOP	
A404		4	80	4'-8"	BENT	
A501	E	5	72	16'-1"	STIRRUP	
A601		6	10	53'-10"	---	
A602	E,M	6	7	50'-8"	---	
A603	E,M	6	7	53'-10"	---	
A604	E,M	6	9	2'-11"	---	
A701	E	7	8	3'-0"	BENT	
A801		8	64	40'-0"	---	
A1001	H,M	10	14	53'-10"	HEADED	

E - Epoxy-Coated
H - Headed reinforcing steel
M - Field adjust to match cross slope
S - Length does not include splices



ELASTOMERIC BEARING PAD

Grade 5
Dead Load = 92 k
Live Load = 70 k
Shear Modulus = 115 psi



DESIGNED BY:	Elmer Marx	CHECKED:	Ben Still
DRAWN BY:	Sam Solie	CHECKED:	Elmer Marx
QUANTITIES BY:	Elmer Marx	CHECKED:	Ben Still

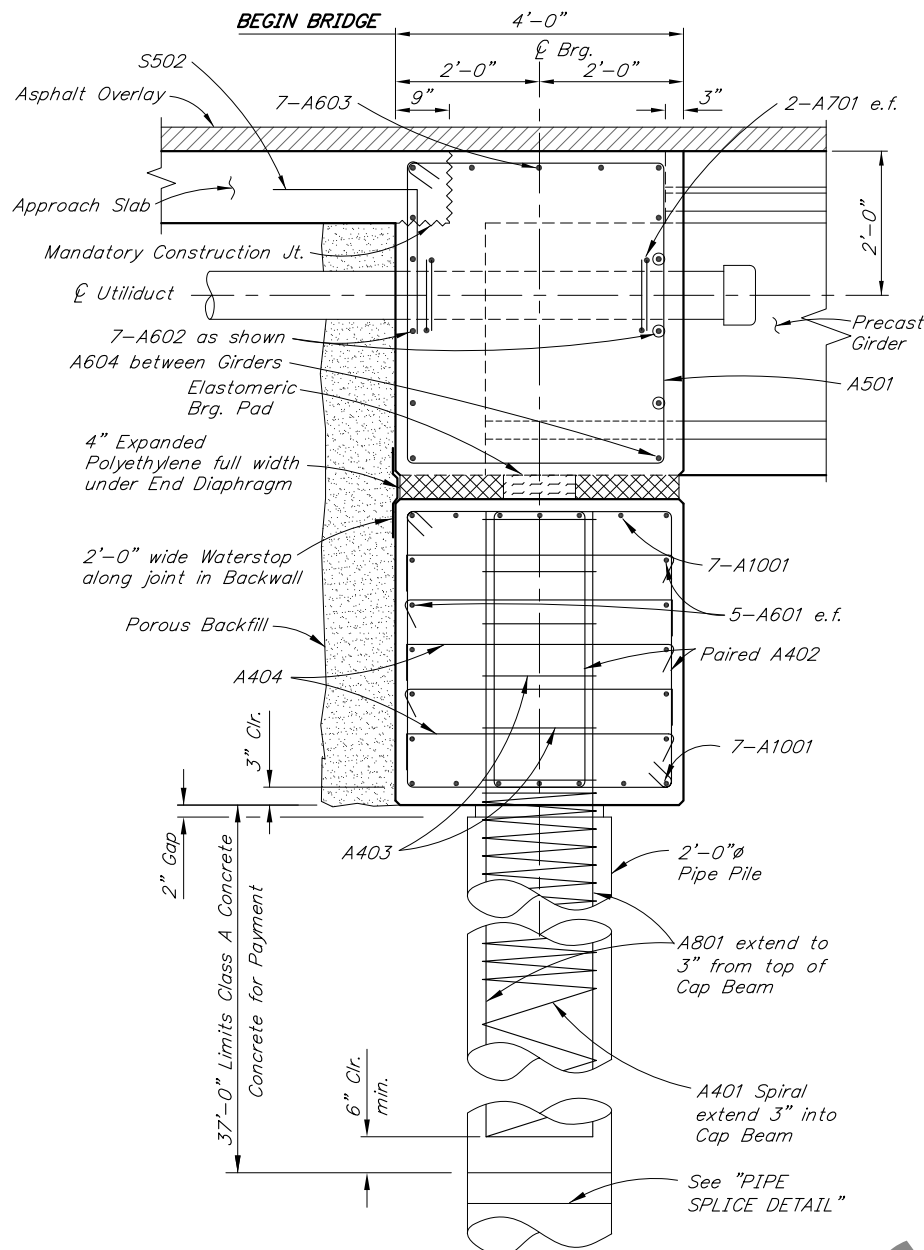
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION
3132 Channel Drive
Juneau, Alaska 99801
907-465-2975

SHEEP CREEK BRIDGE
PARKS HIGHWAY
ABUTMENT 3

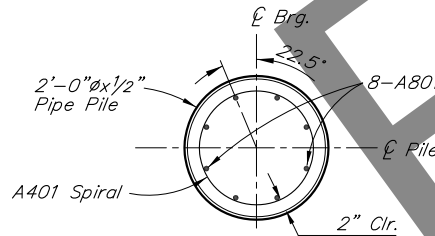
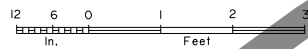


BRIDGE NO. 213
DWG. NO. 6

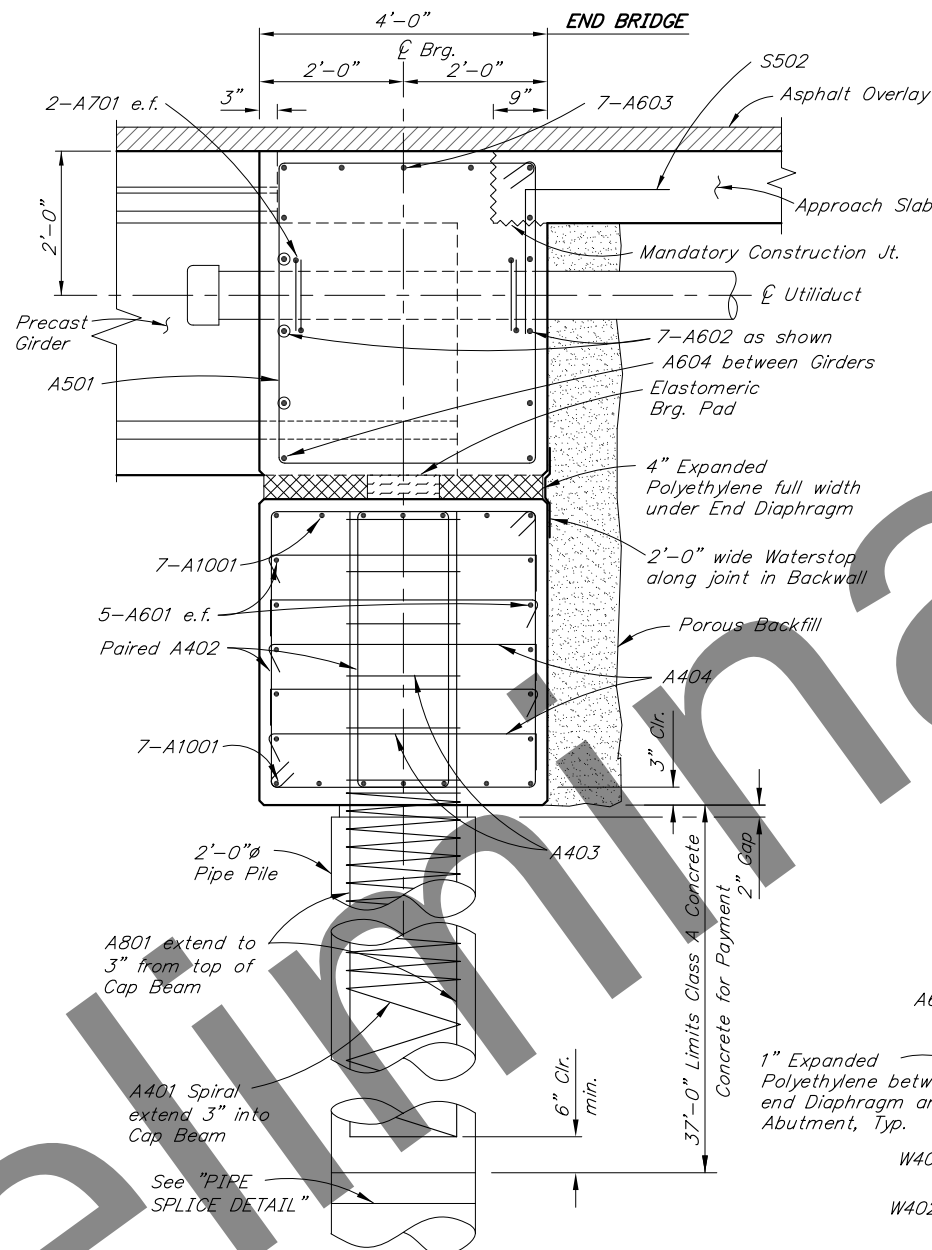
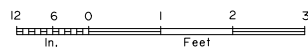
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A41034/Z589760000	2021	N7	N69



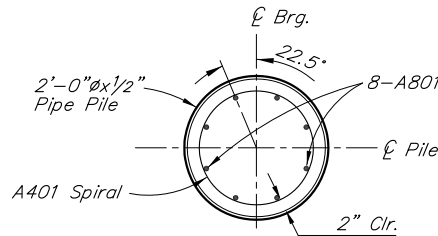
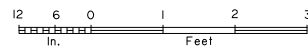
SECTION A-A



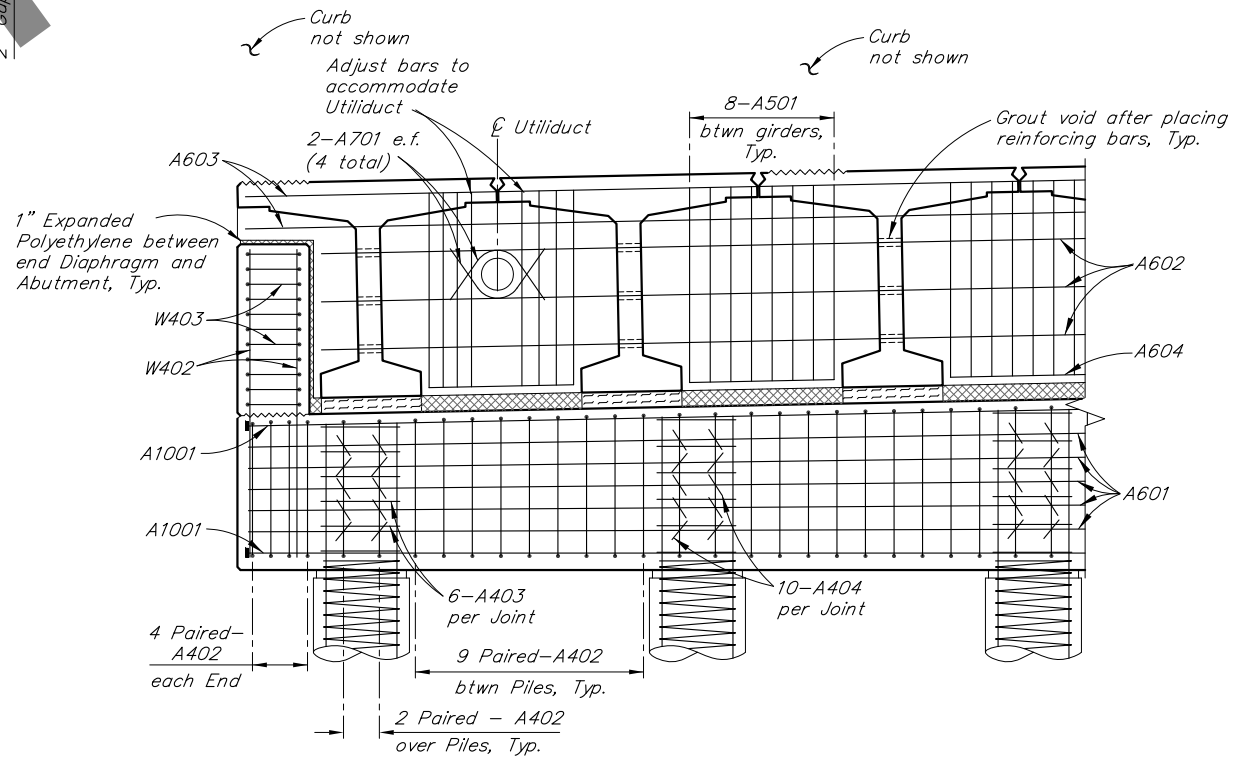
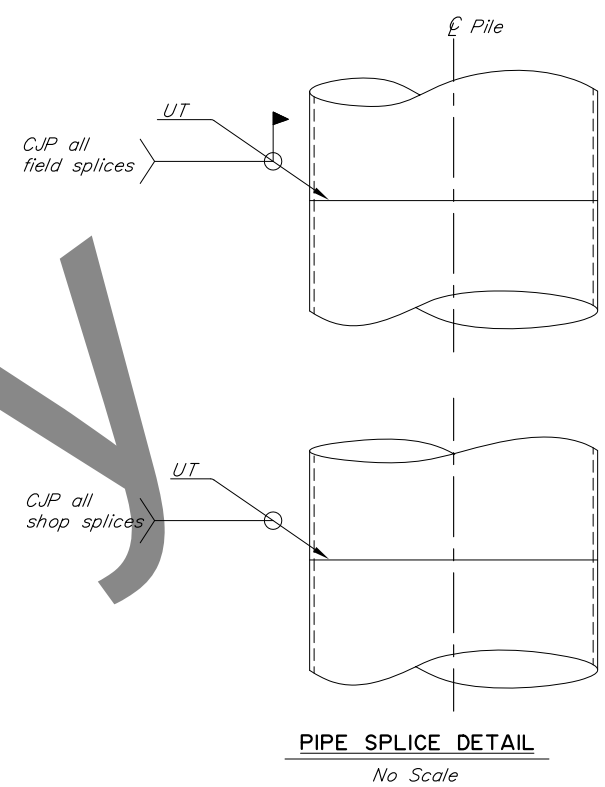
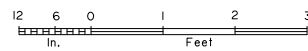
SECTION B-B



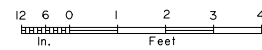
SECTION C-C



SECTION D-D



DETAIL E



DESIGNED BY:	Elmer Marx	CHECKED:	Ben Still
DRAWN BY:	Sam Sollie	CHECKED:	Elmer Marx
QUANTITIES BY:	Elmer Marx	CHECKED:	Ben Still

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
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BRIDGE SECTION
3132 Channel Drive
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907-465-2975

SHEEP CREEK BRIDGE
PARKS HIGHWAY
ABUTMENT DETAILS



BRIDGE NO. 213
DWG. NO. 7

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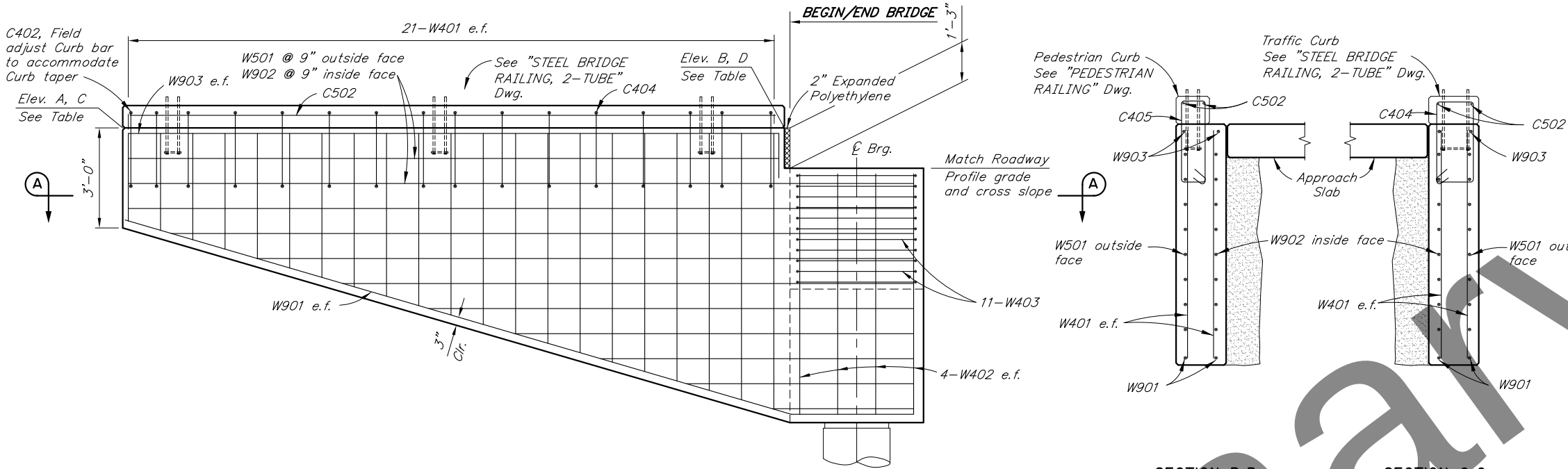
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A41034/Z589760000	2021	N8	N69

REINFORCING STEEL - ONE ABUTMENT

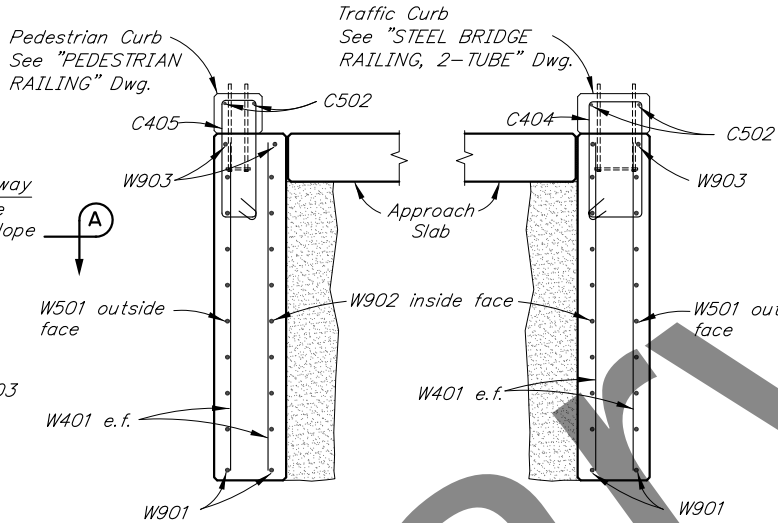
MARK	NOTE	SIZE	NO.	LENGTH	TYPE	BENDING DIAGRAM
W401		4	84	VARIES	---	
W402		4	16	7'-2"	---	
W403		4	22	10'-5"	STIRRUP	
W501		5	22	VARIES	---	
W901		9	4	24'-6"	BENT	
W902		9	22	VARIES	---	
W903		9	4	21'-6"	BENT	
C404	E	4	16	7'-9"	STIRRUP	
C405	E	4	16	6'-11"	STIRRUP	
C502	E	5	4	19'-6"	---	
W401				4'-6" Min. 23'-8" Max.		
W501, W902						

E - Epoxy-Coated

TOP OF WINGWALL ELEVATION TABLE (FT)				
LOCATION	A DOWNSTREAM	B DOWNSTREAM	C UPSTREAM	D UPSTREAM
ABUTMENT 1	212.37	212.68	212.60	212.90
ABUTMENT 3	215.20	215.10	215.42	215.32

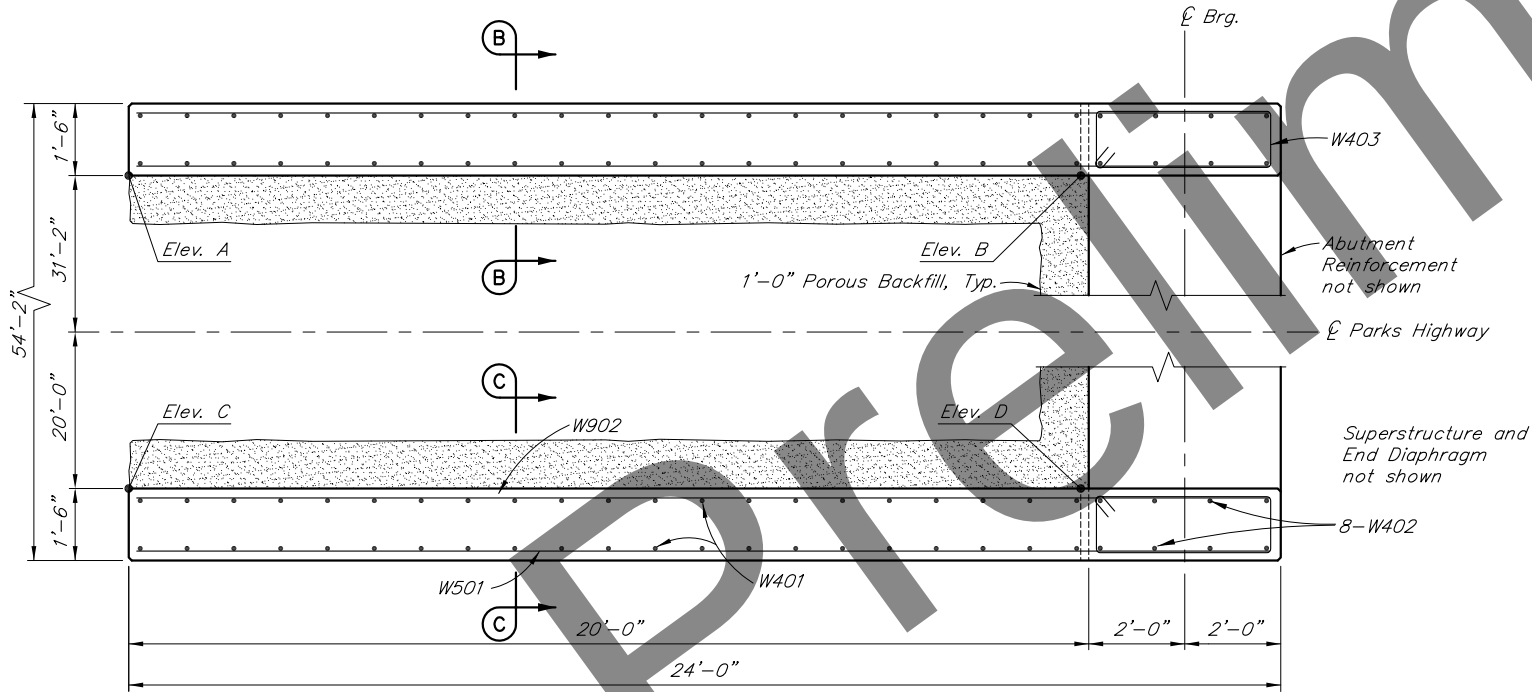


ELEVATION



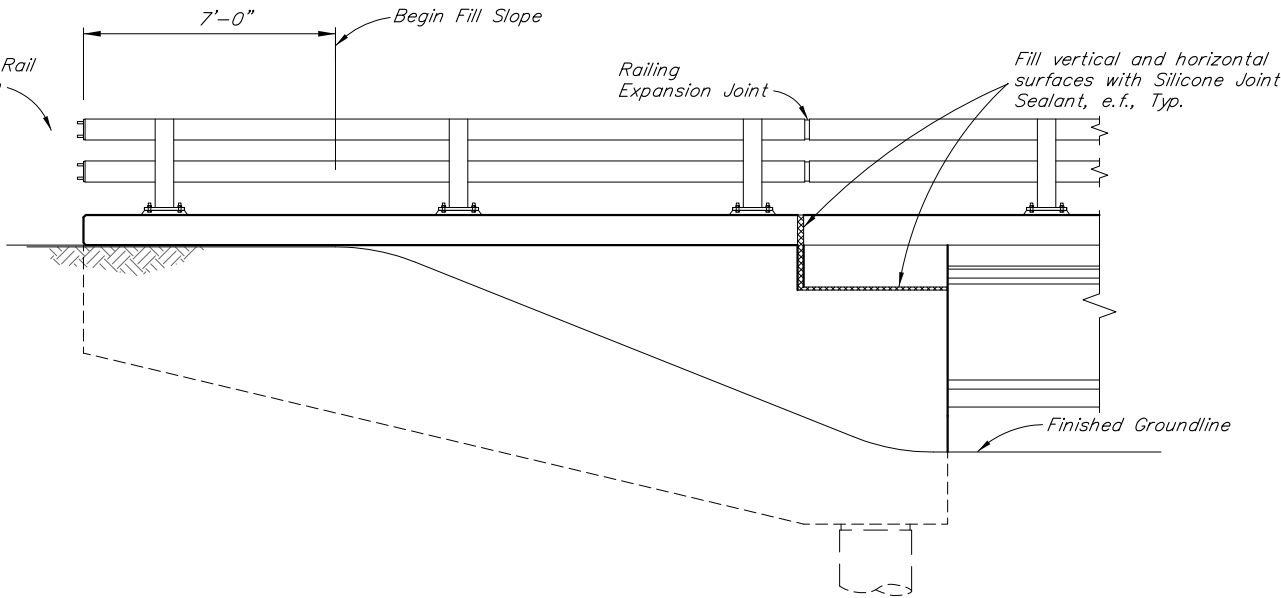
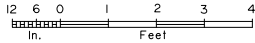
SECTION B-B

SECTION C-C

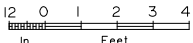


SECTION A-A

(Abut. 1 shown, Abut. 3 similar)



FINISHED ELEVATION



DESIGNED BY:	Elmer Marx	CHECKED:	Ben Still
DRAWN BY:	Sam Solie	CHECKED:	Elmer Marx
QUANTITIES BY:	Elmer Marx	CHECKED:	Ben Still

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
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BRIDGE SECTION
3132 Channel Drive
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907-465-2975

SHEEP CREEK BRIDGE
PARKS HIGHWAY
WINGWALLS



BRIDGE NO. 213
DWG. NO. 8

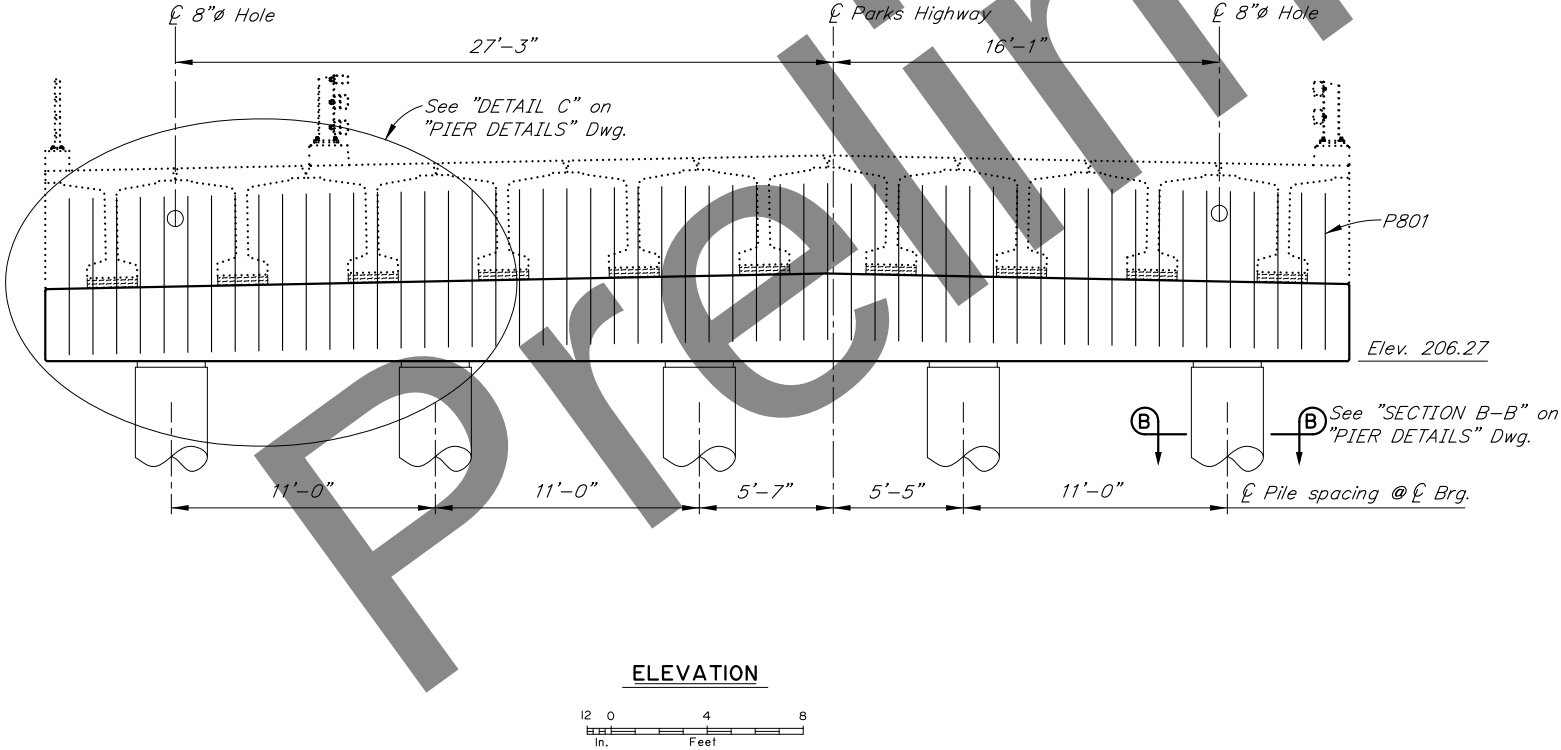
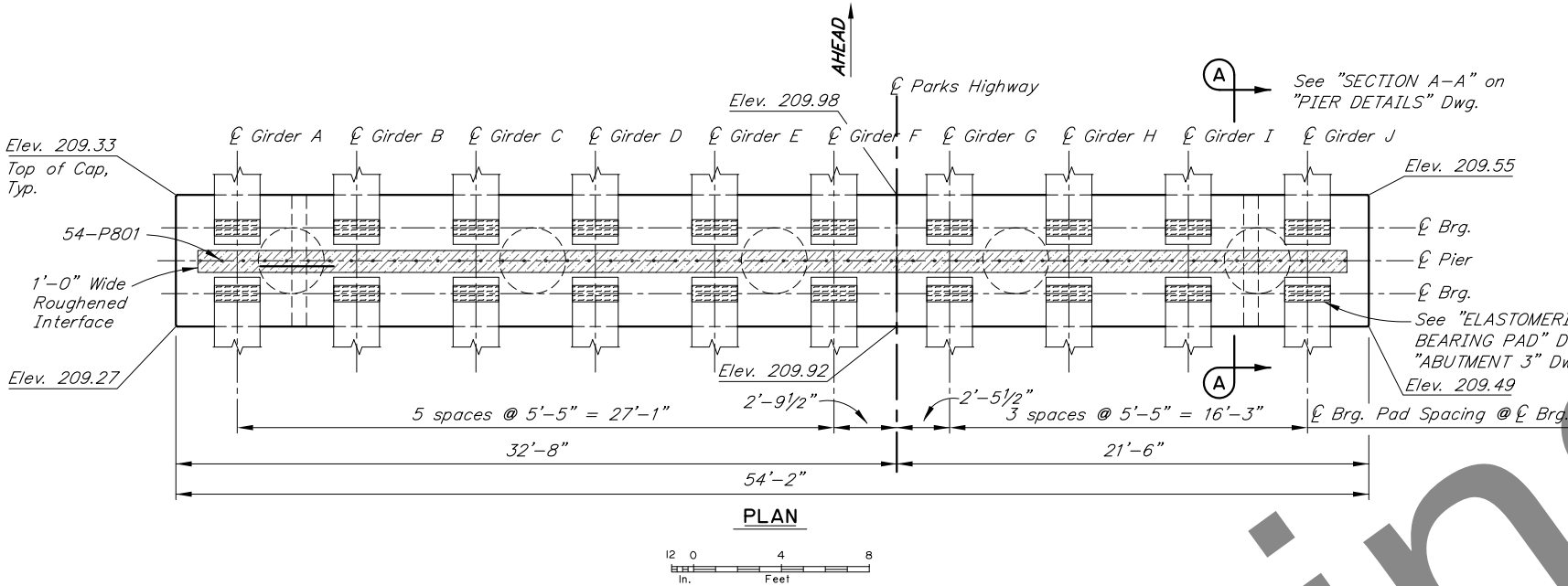
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STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A41034/Z589760000	2021	N9	N69

REINFORCING STEEL - PIER 2					
MARK	NOTE	SIZE	NO.	LENGTH	TYPE
P401		4	50	6'-8"	BENT
P501	S	5	5	686'-5"	SPIRAL
P502		5	40	8'-10"	HOOP
P503	E	5	160	16'-1"	STIRRUP
P601		6	252	VARIES	STIRRUP
P602	E	6	20	53'-10"	---
P701	E	7	8	3'-0"	BENT
P801		8	54	7'-0"	---
P901		9	80	60'-0"	---
P1001	H,M	10	24	53'-10"	HEADED
P1002	M	10	10	53'-10"	---

BENDING DIAGRAM

E - Epoxy-Coated
H - Headed reinforcing steel
M - Field adjust to match crown
S - Length does not include splices



DESIGNED BY:	Elmer Marx	CHECKED:	Ben Still
DRAWN BY:	Sam Solie	CHECKED:	Elmer Marx
QUANTITIES BY:	Elmer Marx	CHECKED:	Ben Still

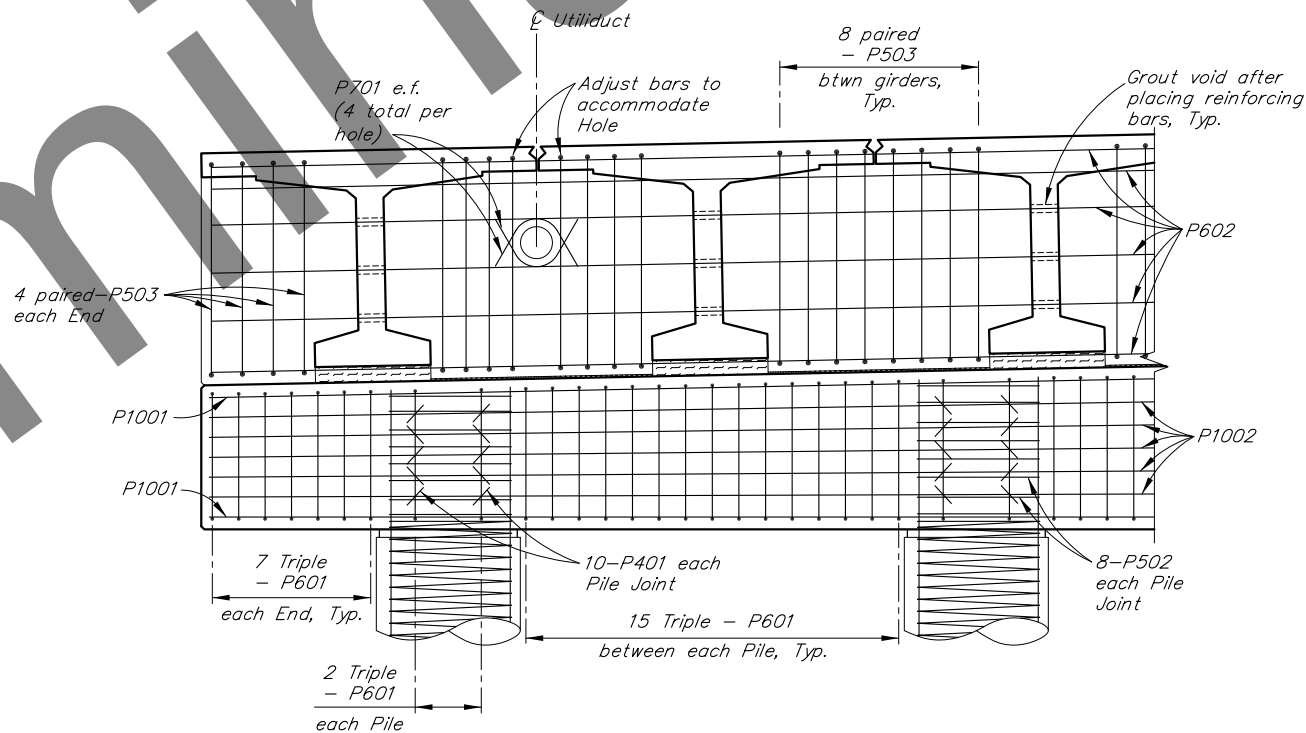
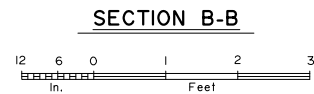
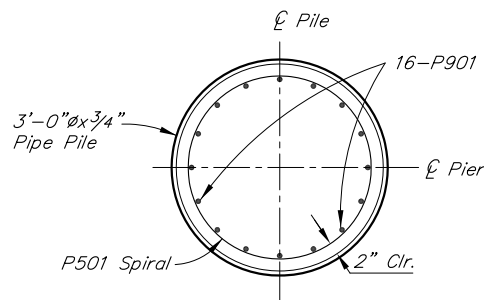
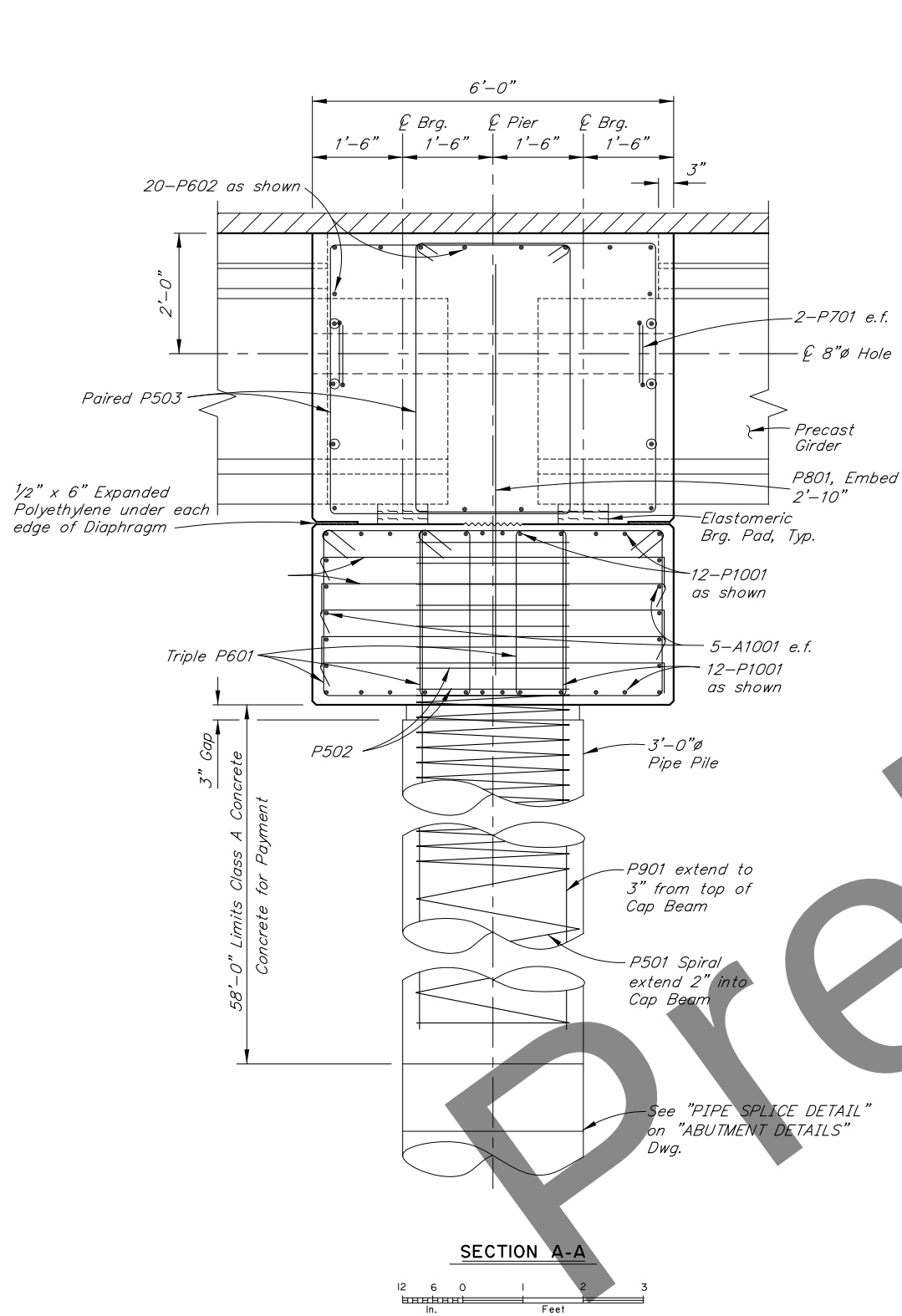
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
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BRIDGE SECTION
3132 Channel Drive
Juneau, Alaska 99801
907-465-2975

SHEEP CREEK BRIDGE
PARKS HIGHWAY
PIER 2



BRIDGE NO. 213
DWG. NO. 9

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A41034/Z589760000	2021	N10	N69



DESIGNED BY:	Elmer Marx	CHECKED:	Ben Still
DRAWN BY:	Sam Solie	CHECKED:	Elmer Marx
QUANTITIES BY:	Elmer Marx	CHECKED:	Ben Still

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
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907-465-2975

SHEEP CREEK BRIDGE
PARKS HIGHWAY
PIER DETAILS



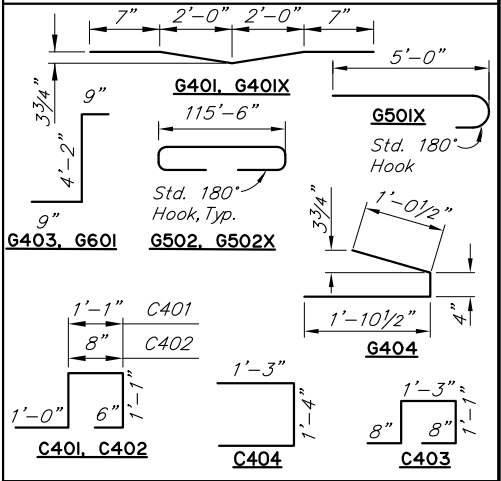
BRIDGE NO. 213
DWG. NO. 10

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A41034/Z589760000	2021	N12	N69

REINFORCING STEEL SCHEDULE
- ONE GIRDER

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
G401	E	4	166	5'-2"	BENT
G401X	E,X	4	190	5'-2"	BENT
G402	E,S	4	8	110'-2"	----
G402X	E,S,X	4	8	110'-2"	----
G403	E	4	348	5'-8"	STIRRUP
G404	E	4	76	3'-3"	STIRRUP
G501	E	5	166	4'-11"	----
G501X	E,X	5	190	5'-7"	BENT
G502	E,S	5	8	116'-8"	BENT
G502X	E,S,X	5	8	116'-8"	BENT
G601	E	6	16	5'-8"	BENT
C401	E,L,X	4	81	4'-9"	BENT
C402	E,L,X	4	81	4'-4"	BENT
C403	E,L,X	4	81	4'-9"	BENT
C404	E,X	4	26	3'-10"	BENT
C405	E,S,X	4	3	273'-8"	----
C501	E,S,X	5	2	233'-8"	----

BENDING DIAGRAM



E - Epoxy-Coated
L - Ship 6 bars loose
S - Length does not include splices. Minimum lap splice length for splices shall be:
2'-0" for #4 bars, 2'-6" for #5 bars.
X - Exterior Girders only

GIRDER NOTES

Use Class P concrete with the following strengths:
At Stress Transfer $f'_{ci} = 6,500$ psi
At 28 days $f'_c = 7,500$ psi

Use $\frac{1}{2}$ " round low relaxation strands with an ultimate strength of 270 ksi and a cross section area of 0.153 in².

Design is based on the following steel stresses:
Pretensioning - Jacking Stress 189 ksi
After initial losses - 171 ksi
After all losses - 141 ksi

Deflect forms to compensate for camber and roadway grade.

Galvanize all steel embedded in girders except for shear connectors.

1" clear on all reinforcing except as noted.

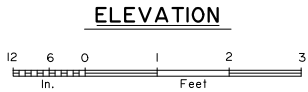
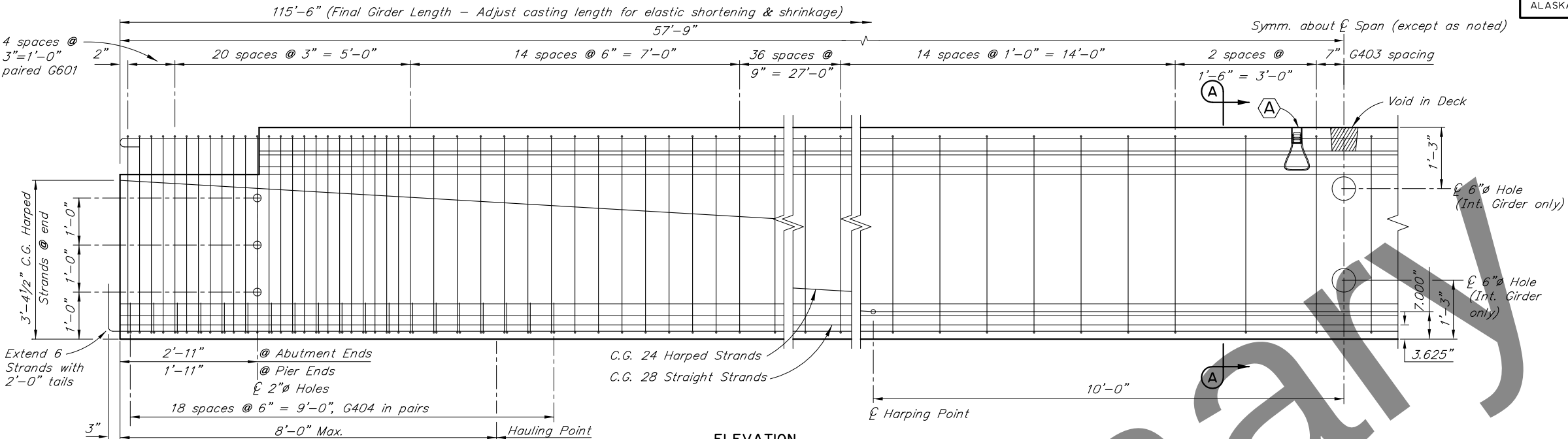
Finish top flange surface with light broom finish. Roughen the surface under the barrier.

Omit Shear Key, Shear Connector, and Deck Voids on outside of exterior girders.

Cast Girder ends plumb with respect to roadway grade. Install web holes and web anchor inserts parallel to $\bar{E}$ bearing.

1"x1'-0" Coil Anchor Insert for vertical adjustment of girders. Recess 2". Prevent concrete from filling hole.

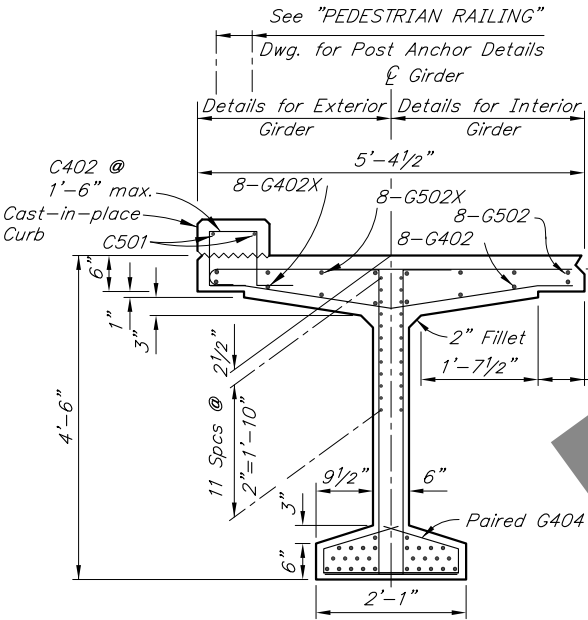
See "FRAMING PLAN AND TYPICAL SECTION" Dwg. for shear connector spacing.



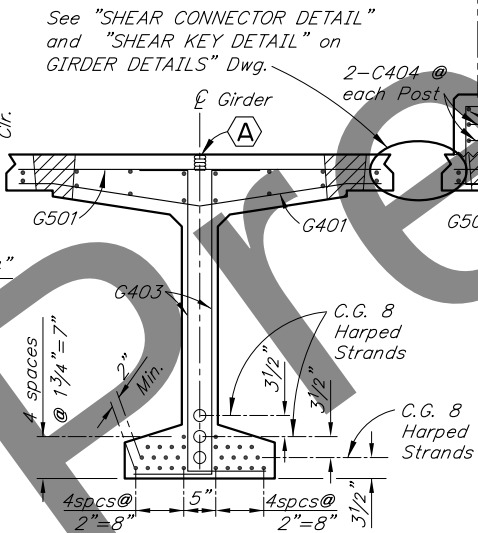
See "STEEL BRIDGE RAILING, 2-TUBE"
Dwg. for Post Anchor Details

See "STEEL BRIDGE RAILING, 3-TUBE"
Dwg. for Post Anchor Details

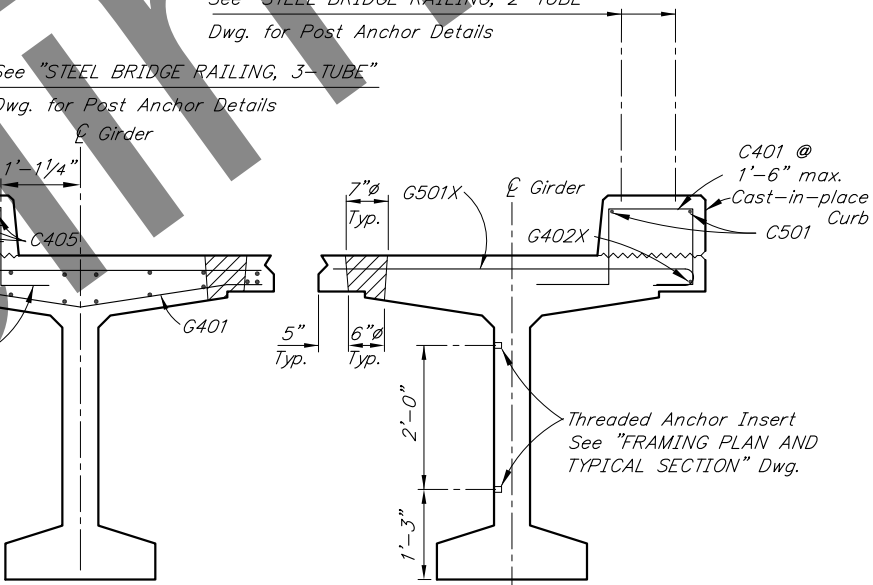
See "SHEAR CONNECTOR DETAIL" and "SHEAR KEY DETAIL" on GIRDER DETAILS" Dwg.



END VIEW



SECTION A-A



GIRDER C

EXTERIOR GIRDER NEAR MID SPAN

(Unrelated Reinforcement not shown)

DESIGNED BY:	Elmer Marx	CHECKED:	Ben Still
DRAWN BY:	Sam Solie	CHECKED:	Elmer Marx
QUANTITIES BY:	Elmer Marx	CHECKED:	Ben Still

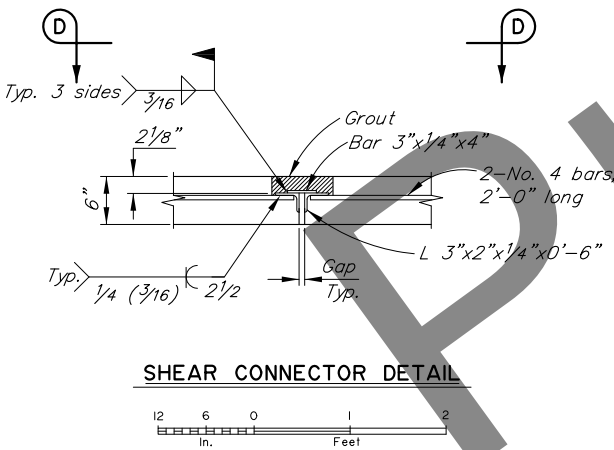
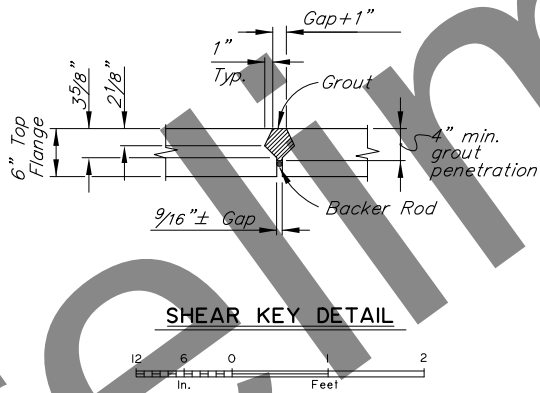
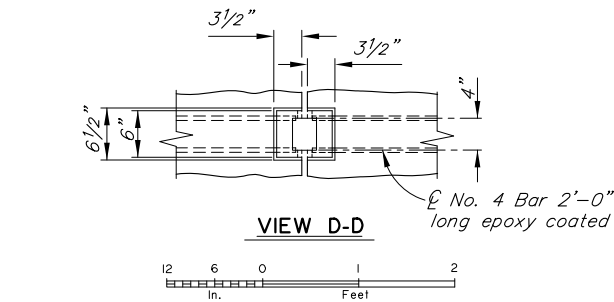
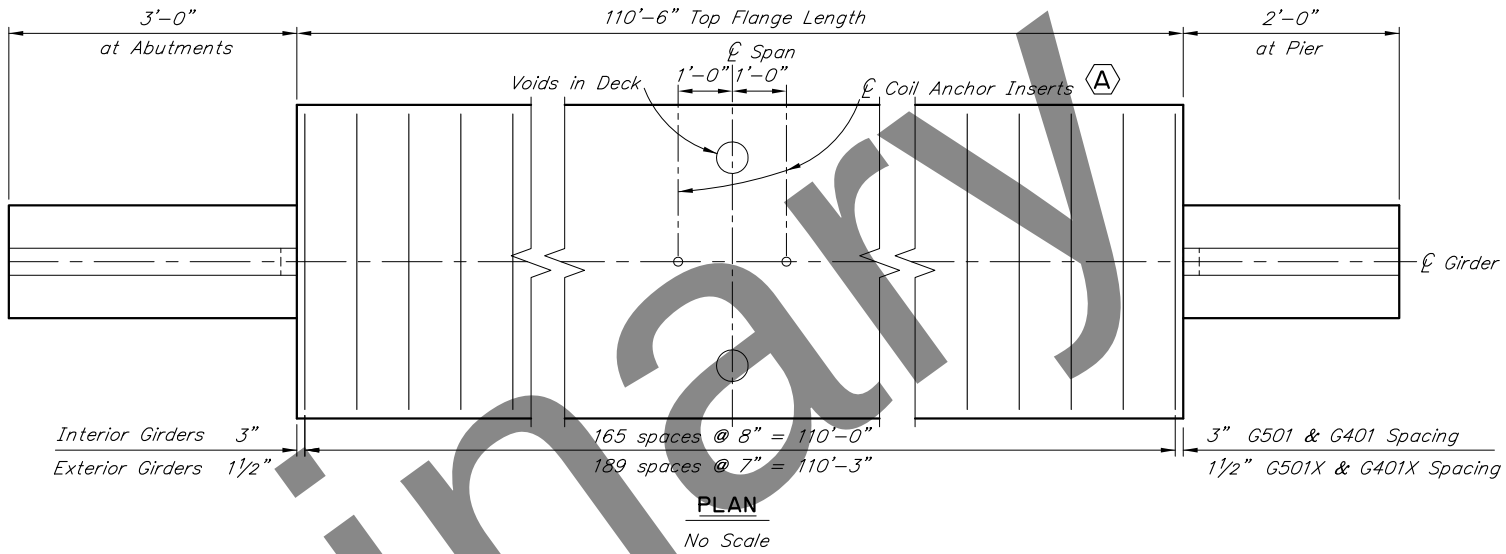
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION
3132 Channel Drive
Juneau, Alaska 99801
907-465-2975

SHEEP CREEK BRIDGE
PARKS HIGHWAY
GIRDERS



BRIDGE NO. 213
DWG. NO. 12

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A41034/Z589760000	2021	N13	N69



DESIGNED BY:	Elmer Marx	CHECKED:	Ben Still
DRAWN BY:	Sam Sollie	CHECKED:	Elmer Marx
QUANTITIES BY:	Elmer Marx	CHECKED:	Ben Still

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION
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SHEEP CREEK BRIDGE
PARKS HIGHWAY
GIRDER DETAILS



BRIDGE NO. 213
DWG. NO. 13

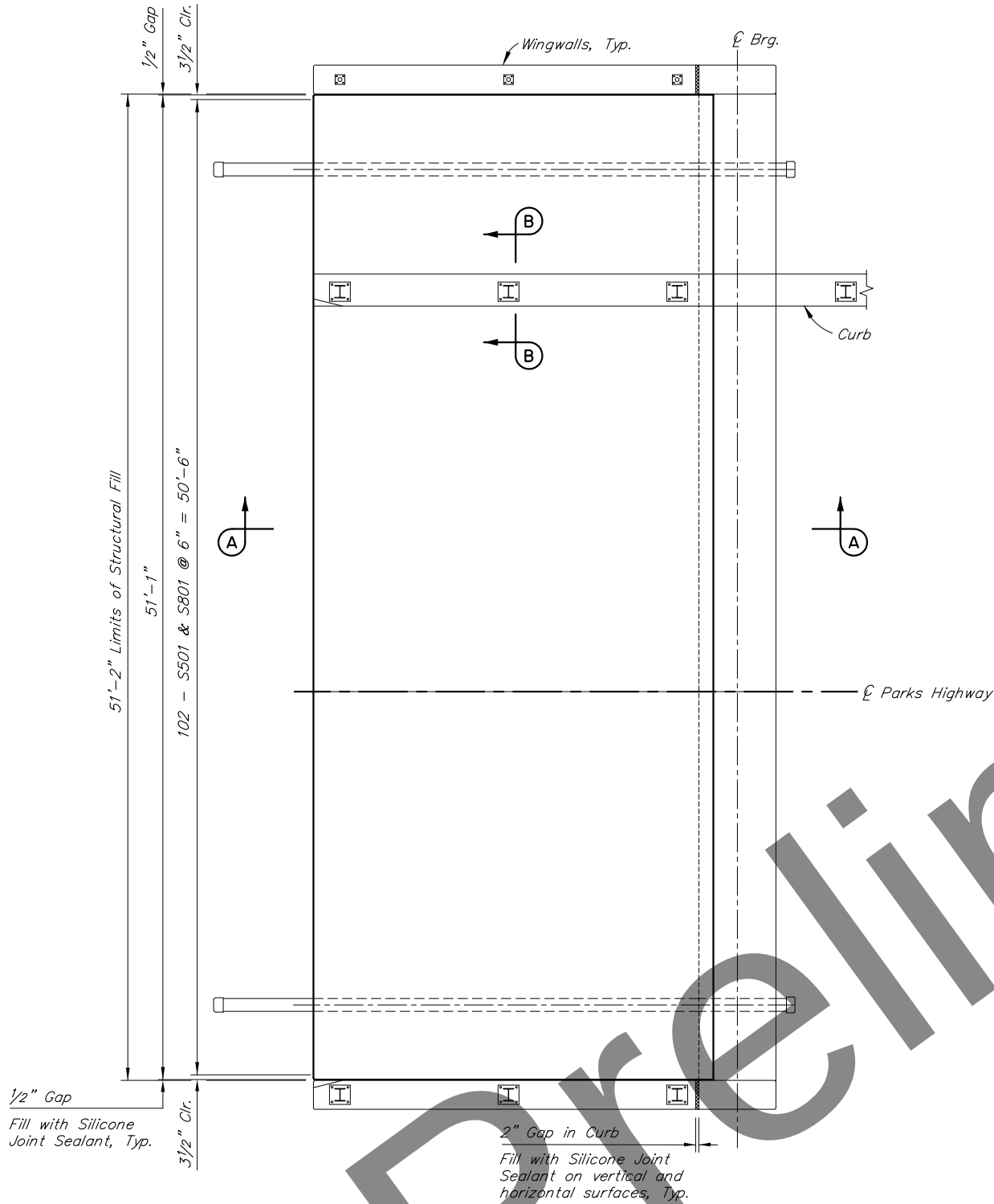
R:\cad\213\213-1-APPROACH Mon, Oct/12/20 8:43am

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A41034/Z589760000	2021	N14	N69

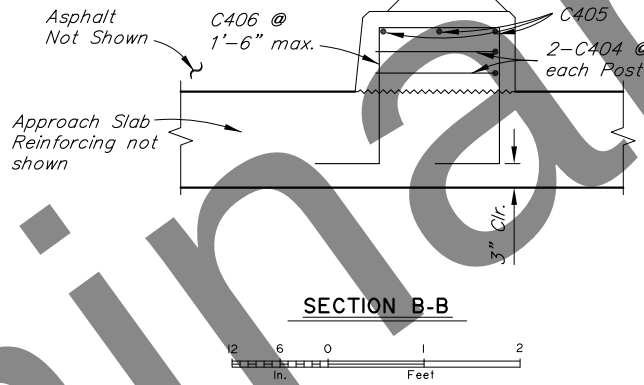
REINFORCING STEEL - ONE APPROACH SLAB					
MARK	NOTE	SIZE	NO.	LENGTH	TYPE
S401	E	4	64	50'-9"	---
S501	E	5	102	20'-5"	---
S502	E	5	51	5'-0"	BENT
S801	E	8	102	20'-5"	---
C404	E	4	6	3'-10"	BENT
C406	E	4	16	5'-5"	BENT

BENDING DIAGRAM	
2'-0"	S502
3'-0"	
1'-3"	
1'-4"	C404
1'-3"	
8"	C406
1'-5"	

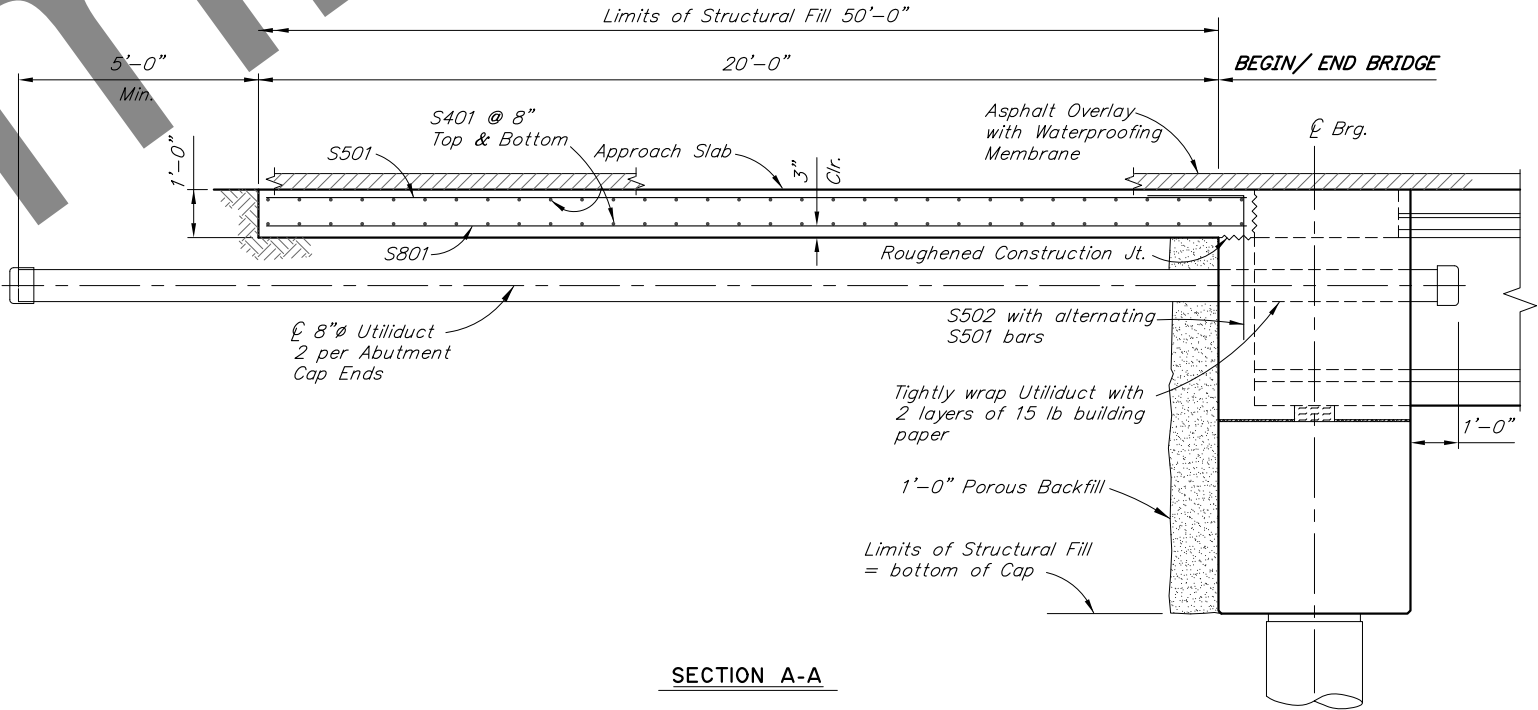
E - Epoxy-Coated
S - Length does not include splices



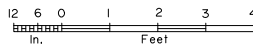
PLAN
(Abutment 1 shown Abutment 3 similar)



SECTION B-B



SECTION A-A



DESIGNED BY:	Elmer Marx	CHECKED:	Ben Still
DRAWN BY:	Sam Solie	CHECKED:	Elmer Marx
QUANTITIES BY:	Elmer Marx	CHECKED:	Ben Still

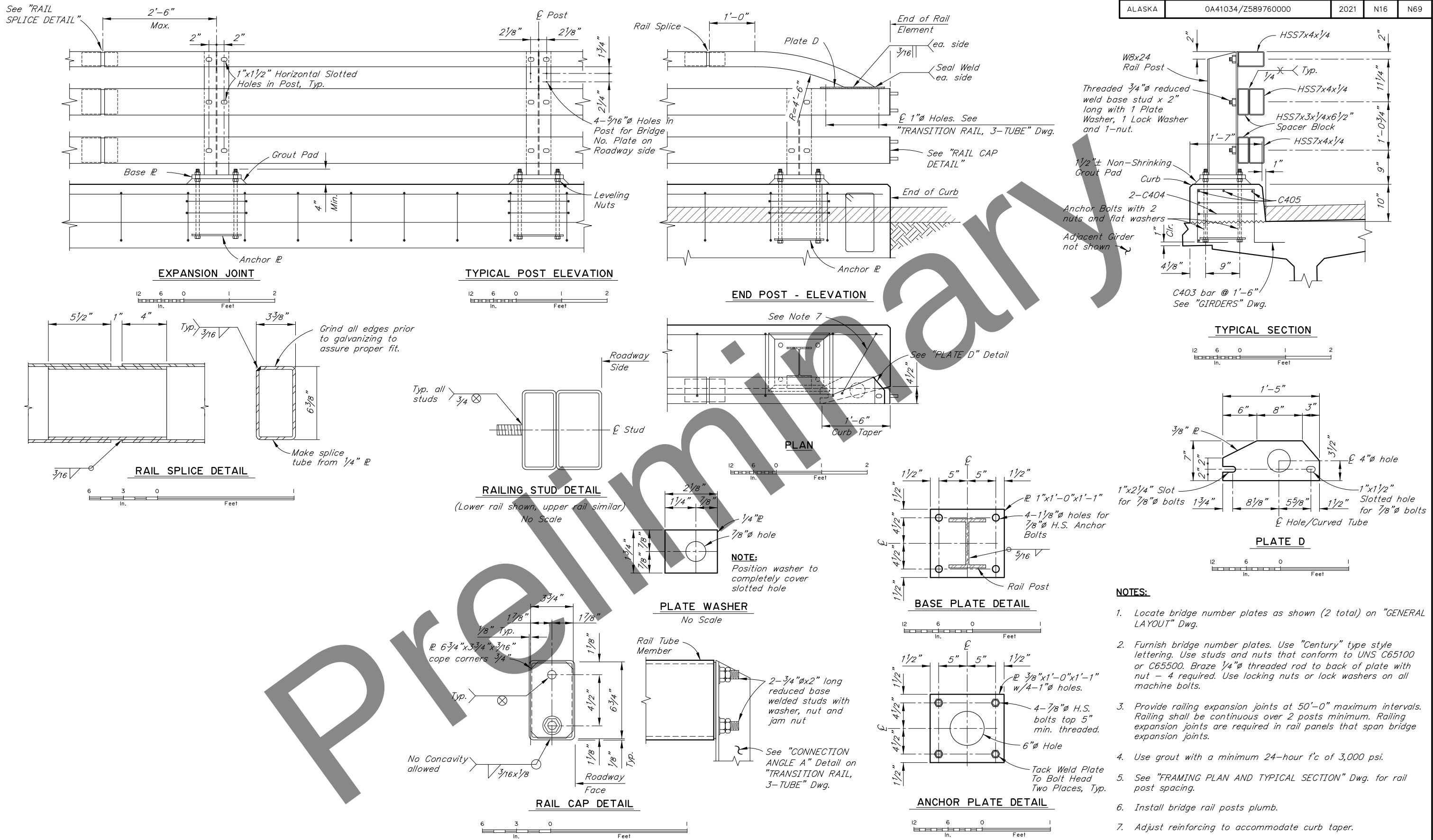
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION
3132 Channel Drive
Juneau, Alaska 99801
907-465-2975

SHEEP CREEK BRIDGE
PARKS HIGHWAY
APPROACH SLABS



BRIDGE NO. 213
DWG. NO. 14

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A41034/Z589760000	2021	N16	N69



DESIGNED BY:	Elmer Marx	CHECKED:	Ben Still
DRAWN BY:	Sam Solie	CHECKED:	Elmer Marx
QUANTITIES BY:	Elmer Marx	CHECKED:	Ben Still

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
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3132 Channel Drive
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907-465-2975

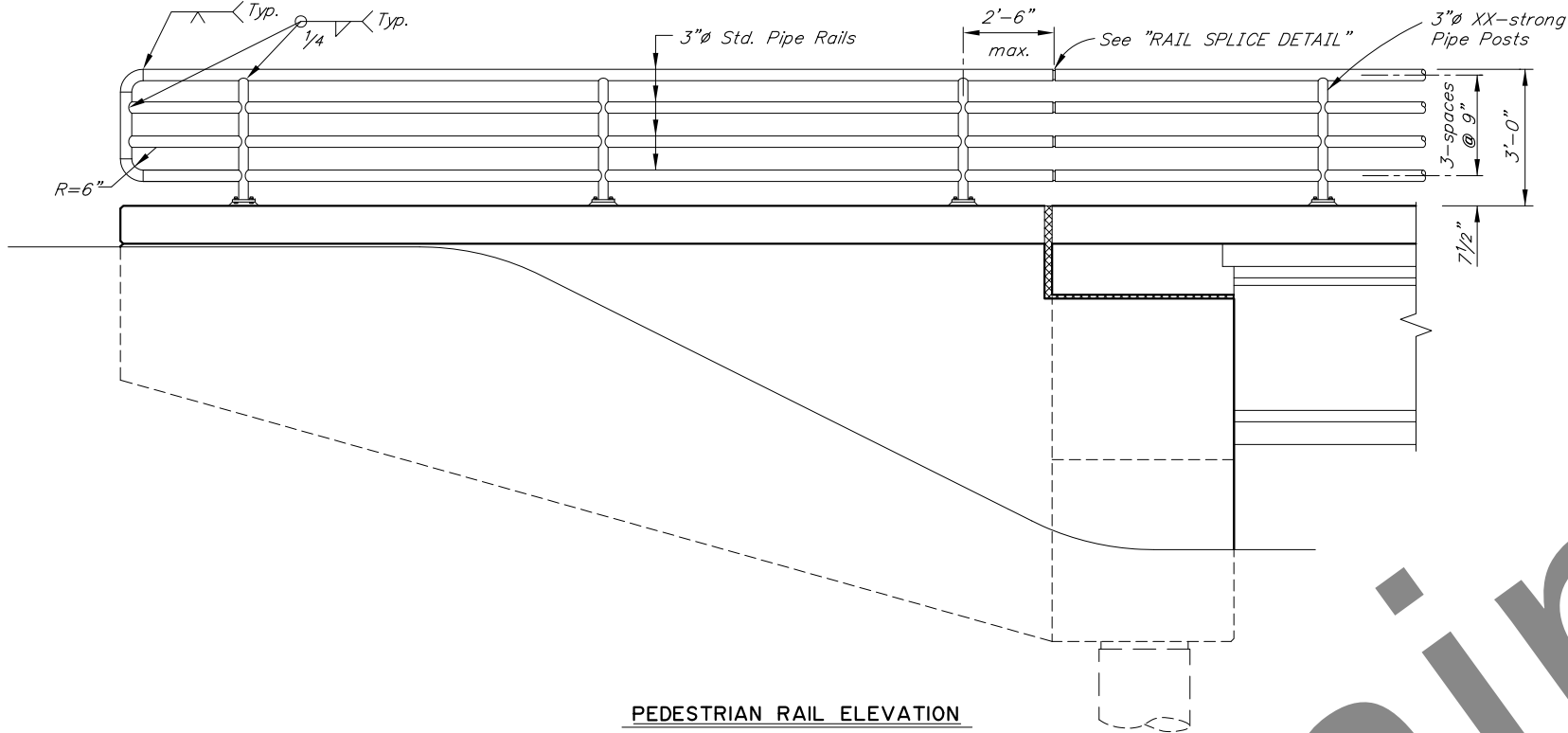
SHEEP CREEK BRIDGE
PARKS HIGHWAY
STEEL BRIDGE RAILING, 3-TUBE



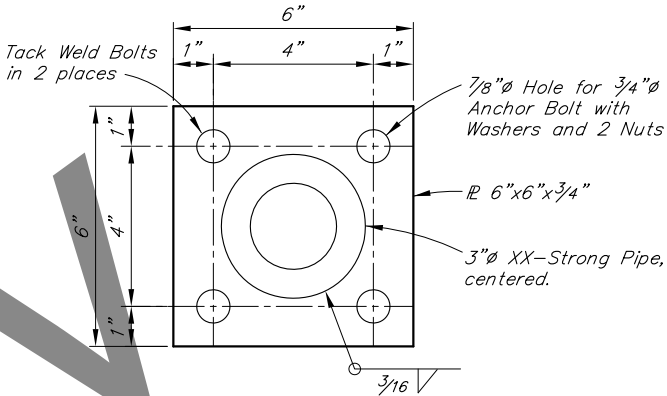
BRIDGE NO. 213
DWG. NO. 16

R:\cad\213\213-1-RAIL 3 Mon, Oct/12/20 8:43am

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A41034/Z589760000	2021	N17	N69

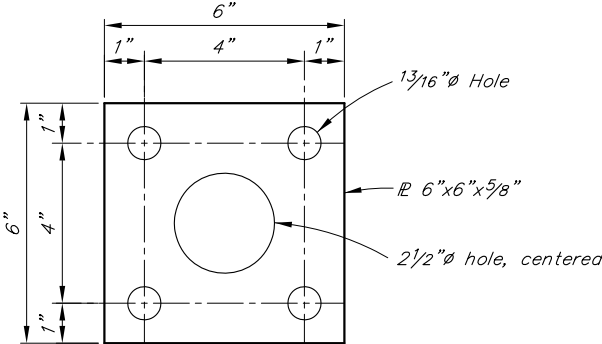


PEDESTRIAN RAIL ELEVATION



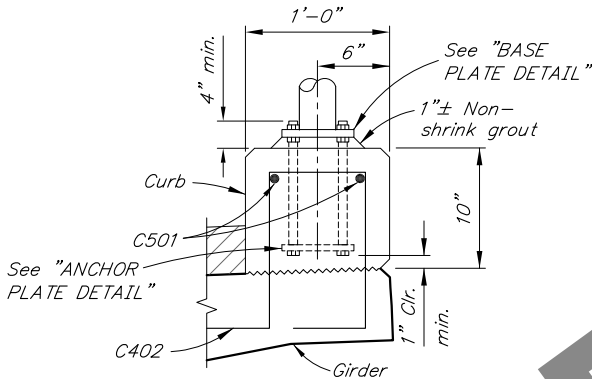
BASE PLATE DETAIL

No Scale

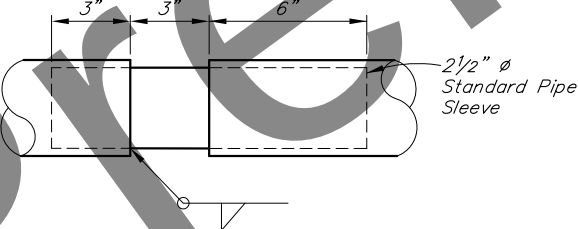
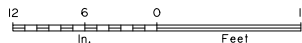


ANCHOR PLATE DETAIL

No Scale



SECTION AT EDGE OF DECK



RAIL SPLICE DETAIL

No scale

- NOTES:**
- Galvanize all steel for railing in accordance with AASHTO M111.
 - Install all rail posts plumb.
 - Provide railing expansion joints at 50'-0" maximum intervals. Railing shall be continuous over 2 posts minimum. Railing expansion joints are required in rail panels that span abutment expansion joints.
 - See "FRAMING PLAN AND TYPICAL SECTION" for rail post layout.

DESIGNED BY:	Elmer Marx	CHECKED:	Ben Still
DRAWN BY:	Sam Sollie	CHECKED:	Elmer Marx
QUANTITIES BY:	Elmer Marx	CHECKED:	Ben Still

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
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907-465-2975

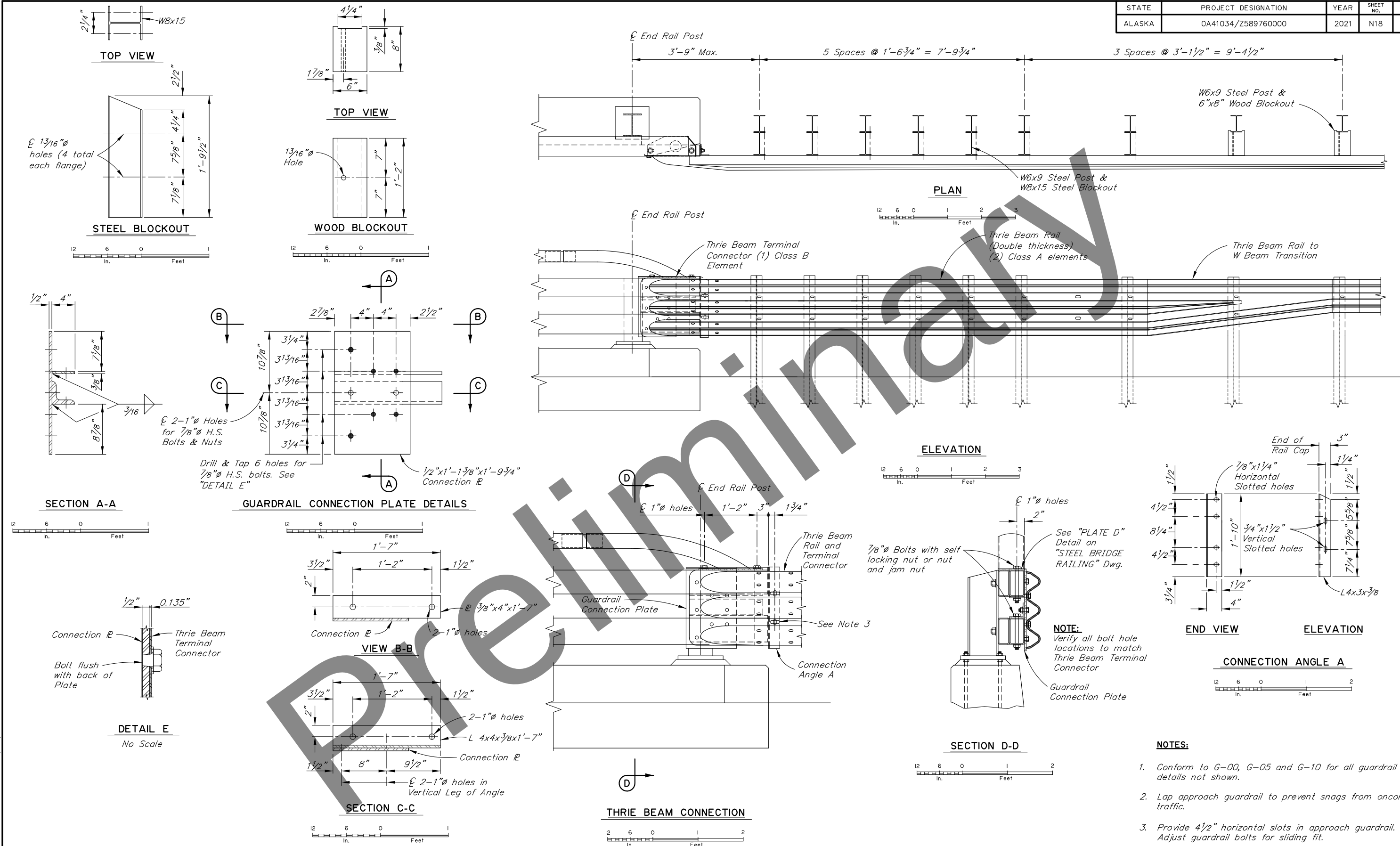
SHEEP CREEK BRIDGE
PARKS HIGHWAY
PEDESTRIAN RAILING



BRIDGE NO. 213
DWG. NO. 17

R:\cad\213\213-1-PED RAIL Mon, Oct/12/20 8:43am

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A41034/Z589760000	2021	N18	N69



- NOTES:**
1. Conform to G-00, G-05 and G-10 for all guardrail details not shown.
 2. Lap approach guardrail to prevent snags from oncoming traffic.
 3. Provide 4 1/2" horizontal slots in approach guardrail. Adjust guardrail bolts for sliding fit.

DESIGNED BY:	Elmer Marx	CHECKED:	Ben Still
DRAWN BY:	Sam Solie	CHECKED:	Elmer Marx
QUANTITIES BY:	Elmer Marx	CHECKED:	Ben Still

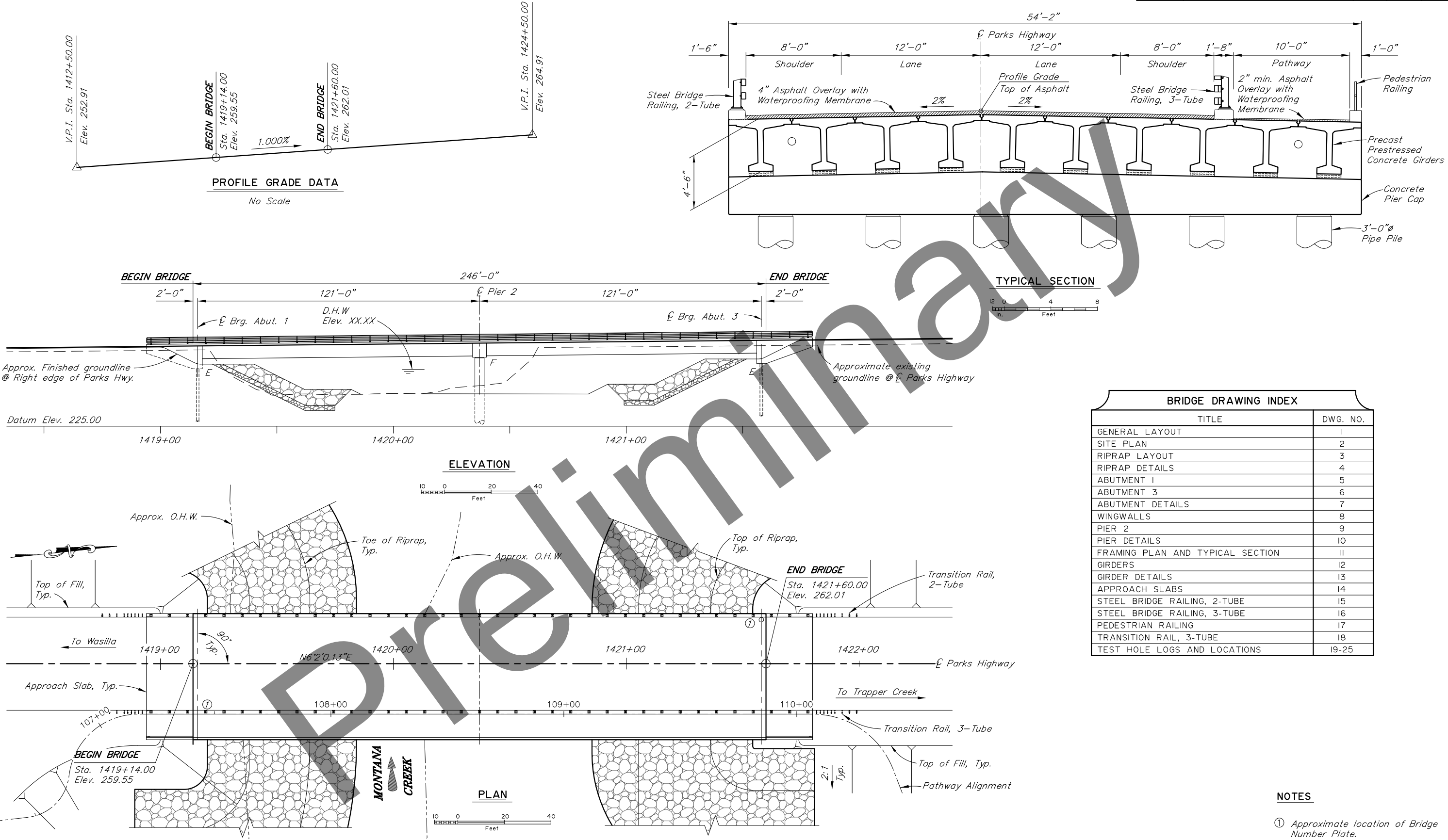
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION
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907-465-2975

SHEEP CREEK BRIDGE
PARKS HIGHWAY
THRIE BEAM TRANSITION, 3-TUBE


BRIDGE NO. 213
DWG. NO. 18

R:\cad\213\213-1-TRANSITION 3TUBE Mon, Oct/12/20 8:43am

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A41034/Z589760000	2021	N27	N69



BRIDGE DRAWING INDEX	
TITLE	DWG. NO.
GENERAL LAYOUT	1
SITE PLAN	2
RIPRAP LAYOUT	3
RIPRAP DETAILS	4
ABUTMENT 1	5
ABUTMENT 3	6
ABUTMENT DETAILS	7
WINGWALLS	8
PIER 2	9
PIER DETAILS	10
FRAMING PLAN AND TYPICAL SECTION	11
GIRDERS	12
GIRDER DETAILS	13
APPROACH SLABS	14
STEEL BRIDGE RAILING, 2-TUBE	15
STEEL BRIDGE RAILING, 3-TUBE	16
PEDESTRIAN RAILING	17
TRANSITION RAIL, 3-TUBE	18
TEST HOLE LOGS AND LOCATIONS	19-25

NOTES

① Approximate location of Bridge Number Plate.

DESIGNED BY:	Elmer Marx	CHECKED:	Ben Fetterhoff	LAYOUT BY:	Elmer Marx	CHECKED BY:	Ben Fetterhoff
DRAWN BY:	Sam Solie	CHECKED:	Elmer Marx	SPECIFICATIONS BY:	Elmer Marx	P S & E COMPARED:	Ben Fetterhoff
QUANTITIES BY:	Elmer Marx	CHECKED:	Ben Fetterhoff	APPROVAL RECOMMENDED BY:	Rich Pratt		

STATE OF ALASKA
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MONTANA CREEK BRIDGE
PARKS HIGHWAY
GENERAL LAYOUT

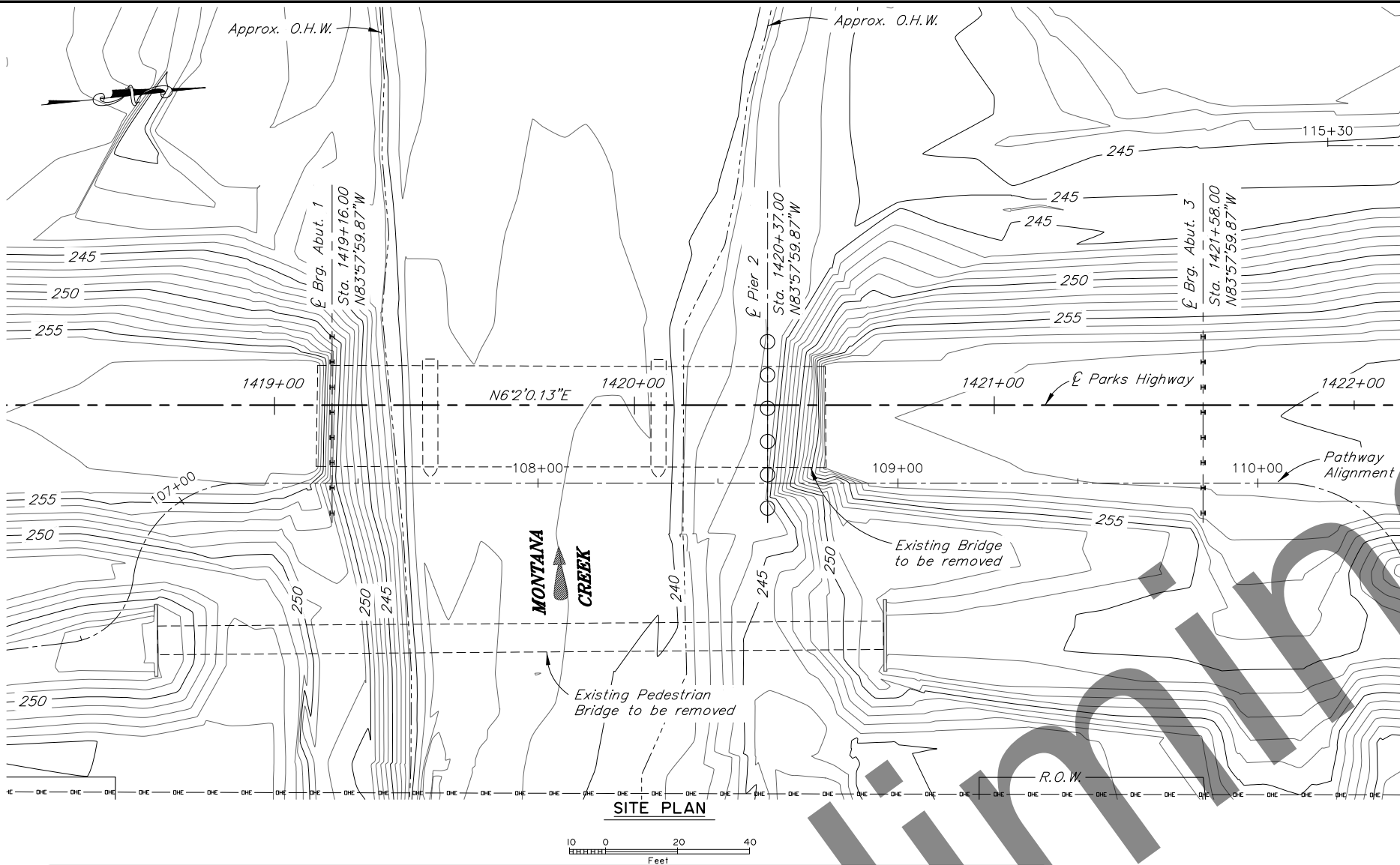


BRIDGE NO. 215

DWG. NO. 1

R:\cad\215\215-GENERAL Mon, Oct/12/20 8:37am

R:\cdd\215\215-SITE PLAN Mon, Oct/12/20 08:37am



ESTIMATE OF QUANTITIES

ITEM NO.	ITEM	PAY UNIT	ESTIMATING UNIT	SUBST.	SUPERST.	TOTAL QUANTITY
202.0023.0000	Removal of Bridge No. 215	LS	LS	All Req'd	All Req'd	All Req'd
202.0023.0000	Removal of Bridge No. 1984, Pedestrian	LS	LS	All Req'd	All Req'd	All Req'd
205.0006.0000	Structural Fill	CY	CY	1,565	---	1,565
501.0001.0000	Class A Concrete	LS	OY	232.2	199.8	432.0
501.0007.0000	Precast Concrete Member, 121'-6" Decked Bulb-Tee	EA	EA	---	20	20
503.0001.0000	Reinforcing Steel	LS	LBS	55,770	---	55,770
503.0002.0000	Epoxy-Coated Reinforcing Steel	LS	LBS	---	31,070	31,070
505.0005.1417	Furnish Structural Steel Piles, HP14x117	LF	LF	1,631	---	1,631
505.0005.3675	Furnish Structural Steel Piles, 3'-0" Dia. x 3/4" Pipe	LF	LF	713	---	713
505.0006.1417	Drive Structural Steel Piles, HP14x117	EA	EA	16	---	16
505.0006.3675	Drive Structural Steel Piles, 3'-0" Dia. x 3/4" Pipe	EA	EA	6	---	6
507.0001.0002	Steel Bridge Railing, 2-Tube	LF	LF	---	286.0	286.0
507.0001.0003	Steel Bridge Railing, 3-Tube	LF	LF	---	286.0	286.0
507.0002.0000	Pedestrian Railing	LF	LF	---	286.0	286.0
508.0001.0000	Waterproofing Membrane, Spray-Applied	LS	SF	---	14,300	14,300
520.0001.0000	Temporary Crossings Montana Creek	LS	LS	All Req'd	All Req'd	All Req'd
606.0016.0000	Transition Rail	EA	EA	---	4	4
611.0001.0001	Riprap, Class I	CY	CY	500	---	500
611.0001.0003	Riprap, Class III	CY	CY	2,500	---	2,500
631.0002.0001	Geotextile, Erosion Control, Class I	SY	SY	1,500	---	1,500

Item numbers are for reference only. Quantities shown are not necessarily the pay quantities nor the total quantity of the particular item.

TBD

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A41034/Z589760000	2021	N28	N69

GENERAL NOTES

DESIGN:..... AASHTO LRFD Bridge Design Specifications, 2020 Edition, with latest interim specifications.

Seismic design per AASHTO Guide Specifications for LRFD Seismic Bridge Design, 2011 with latest interim revisions.

LIVE LOAD:..... HL-93

DEAD LOAD:..... Includes 50 psf for all wearing surfaces.

SEISMIC PARAMETERS:..... PGA = 0.52
Ss = 1.10
Si = 0.39
Site Class = D
Liquefaction Potential = Low
AASHTO 7% probability of exceedance in 75 years.

ICE LOAD:..... Effective ice crushing strength = 16 ksf.
Design ice thickness = 2 ft.

REINFORCEMENT:..... ASTM A706, Grade 60, Fy = 60,000 psi
ASTM A970 Headed bars, Class HA.
Space reinforcement evenly unless otherwise noted.

PRESTRESSED CONCRETE:..... See "GIRDERS" Dwg.

CONCRETE:..... Class A Concrete unless otherwise noted, f'c = 4000 psi

STRUCTURAL STEEL:..... ASTM A709, Grade 36T3, Fy = 36,000 psi
Galvanize structural steel in accordance with AASHTO M111 unless noted otherwise.

STRUCTURAL STEEL PILING:..... Pipe Piles - API 5L X52 PSL2, Fy = 52,000 psi. or
ASTM A709, GR50T3, Fy = 50,000 psi.
H-Piles - ASTM A709, GR50T3, Fy = 50,000 psi.
Pile Tip reinforcing is required.

PILE DATA TABLE

LOCATION	PILE TYPE	DRIVING CRITERIA			DESIGN DATA		
		MINIMUM PENETRATION (ft)	ESTIMATED PILE TIP ELEVATION (ft)	DRIVING RESISTANCE (K)	STRENGTH FACTORED LOAD (K)	NOMINAL RESISTANCE (K)	RESISTANCE FACTOR, φ
Abutment 1	HP14x117	50	159	545	355	545	0.65
Pier 2	3'-0"Øx3/4" Pipe	82	133	1,255	800	1,235	0.65
Abutment 3	HP14x117	50	142	545	355	545	0.65

Difficult driving conditions are expected. Pilot bore hole required for each pile.

ABBREVIATIONS:

CL	= centerline	(E)	= existing	min.	= minimum
R	= plate	EA	= each	n.f.	= near face
&	= and	Elev.	= elevation	No.	= number
@	= at	Ext.	= exterior	o.c.	= on center
Ø	= diameter	e.f.	= each face	O.H.W.	= ordinary high water
±	= approximate	e.w.	= each way	— O.E. — O.E. — O.E. —	= overhead electrical line
Abut.	= abutment	F	= fixed	pcf	= pounds per cubic foot
Approx.	= approximate	f.f.	= front/air face	psf	= pounds per square foot
b.f.	= back/dirt face	f'c	= specified concrete	psi	= pounds per square inch
bot.	= bottom		= compressive strength	R.O.W.	= right of way
Br.	= bridge	Fy	= yield stress	Rt.	= right
btwn.	= between	Galv.	= galvanize	Rd.	= road
Brg.	= bearings	Hwy.	= highway	spc.	= space, spaces
C.G.	= center of gravity	Int.	= interior	Sta.	= station
C.I.P.	= cast in place	Jt.	= joint	SF	= square feet
CJP	= complete joint penetration	K	= 1,000 pounds	Symm.	= symmetric
Clr.	= clear, clearance	ksf	= 1,000 pounds per square foot	Typ.	= typical
CY	= cubic yard	LB	= pound	UT	= ultrasonic testing
D.H.W.	= design high water	LF	= linear foot	V.P.C.	= point of vertical curve
dia.	= diameter	LS	= lump sum	V.P.I.	= point of vertical intersection
Dwg.	= drawing	Lt.	= left	V.P.T.	= point of vertical tangent
E	= expansion	max.	= maximum	w/	= with

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MONTANA CREEK BRIDGE
PARKS HIGHWAY
SITE PLAN

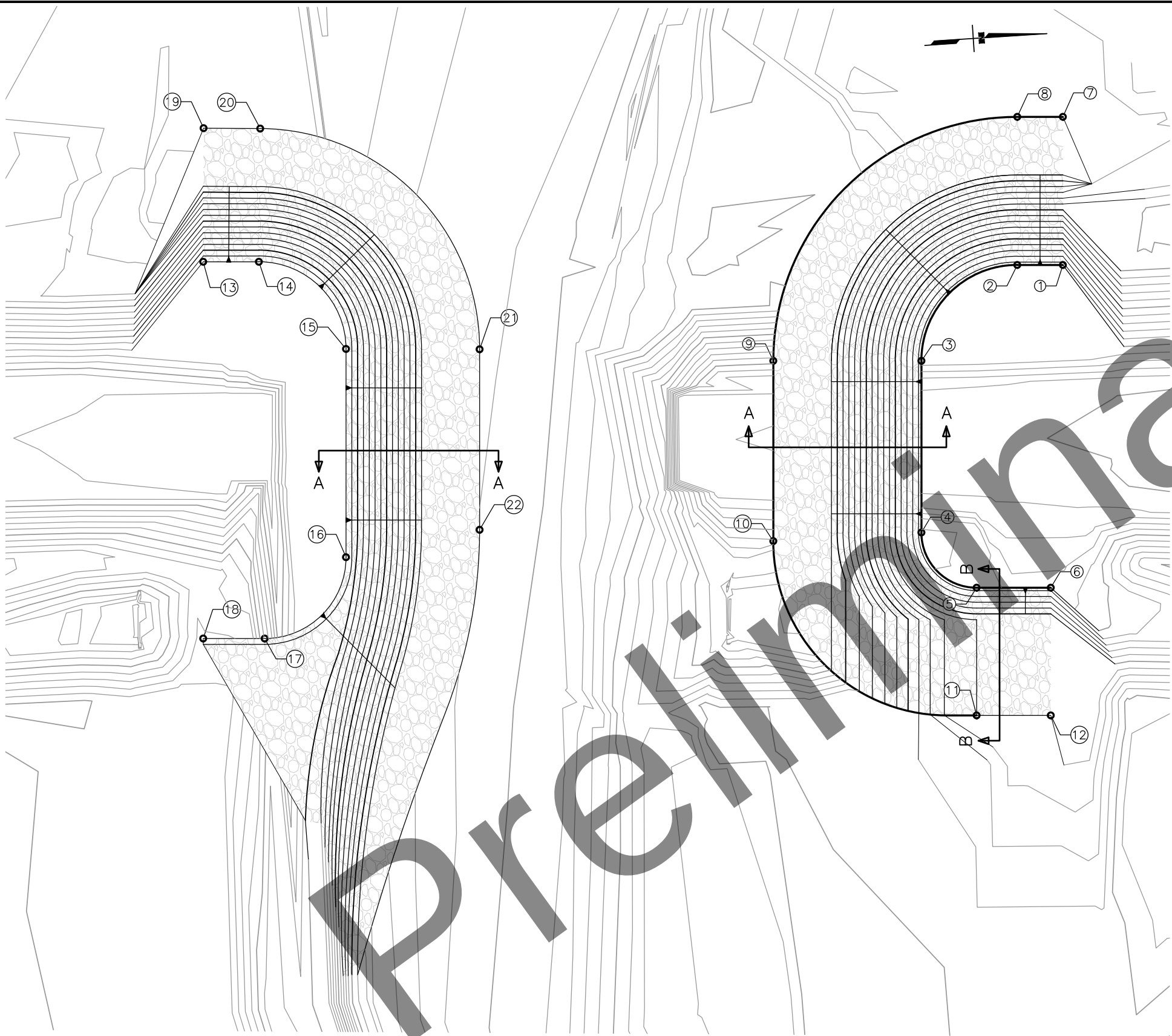


BRIDGE NO. 215

DWG. NO. 2

C:\pwworking\sea\dl1406410\N29-N30_Montana Creek Riprap-N29 Tue, Nov/24/20 03:33pm

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	OA41034/Z589760000	2021	N29	N69



RIPRAP POINT SUMMARY TABLE				
POINT	E (x)	N (y)	ELEV (z)	REMARKS
1	317786.25'	336711.59'	254.5'	TOP OF RIPRAP
2	317784.60'	336695.97'	254.5'	TOP OF RIPRAP
3	317813.95'	336659.69'	254.5'	TOP OF RIPRAP
4	317872.70'	336653.48'	254.5'	TOP OF RIPRAP
5	317893.59'	336670.38'	254.5'	TOP OF RIPRAP
6	317896.28'	336695.79'	254.5'	TOP OF RIPRAP
7	317735.53'	336716.94'	239.0'	TOP OF RIPRAP
8	317733.88'	336701.33'	239.0'	TOP OF RIPRAP
9	317808.58'	336608.97'	239.0'	TOP OF RIPRAP
10	317870.30'	336602.45'	239.0'	TOP OF RIPRAP
11	317937.32'	336665.75'	249.0'	TOP OF RIPRAP
12	317940.02'	336691.16'	249.0'	TOP OF RIPRAP
13	317754.04'	336417.34'	252.0'	TOP OF RIPRAP
14	317756.06'	336436.42'	252.0'	TOP OF RIPRAP
15	317789.04'	336463.10'	252.0'	TOP OF RIPRAP
16	317860.35'	336455.56'	252.0'	TOP OF RIPRAP
17	317885.25'	336424.77'	252.0'	TOP OF RIPRAP
18	317883.02'	336403.71'	252.0'	TOP OF RIPRAP
19	317708.31'	336422.32'	239.0'	TOP OF RIPRAP
20	317710.48'	336441.70'	239.0'	TOP OF RIPRAP
21	317793.00'	336508.83'	239.0'	TOP OF RIPRAP
22	317855.77'	336502.30'	239.0'	TOP OF RIPRAP

MONTANA CREEK RIPRAP PLAN

DESIGNED BY:	CC	CHECKED:	CL
DRAWN BY:	MH	CHECKED:	CL
QUANTITIES BY:		CHECKED:	

STATE OF ALASKA
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3132 Channel Drive
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MONTANA CREEK BRIDGE
PARKS HIGHWAY
RIPRAP PLAN

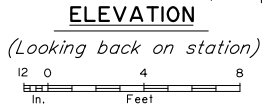
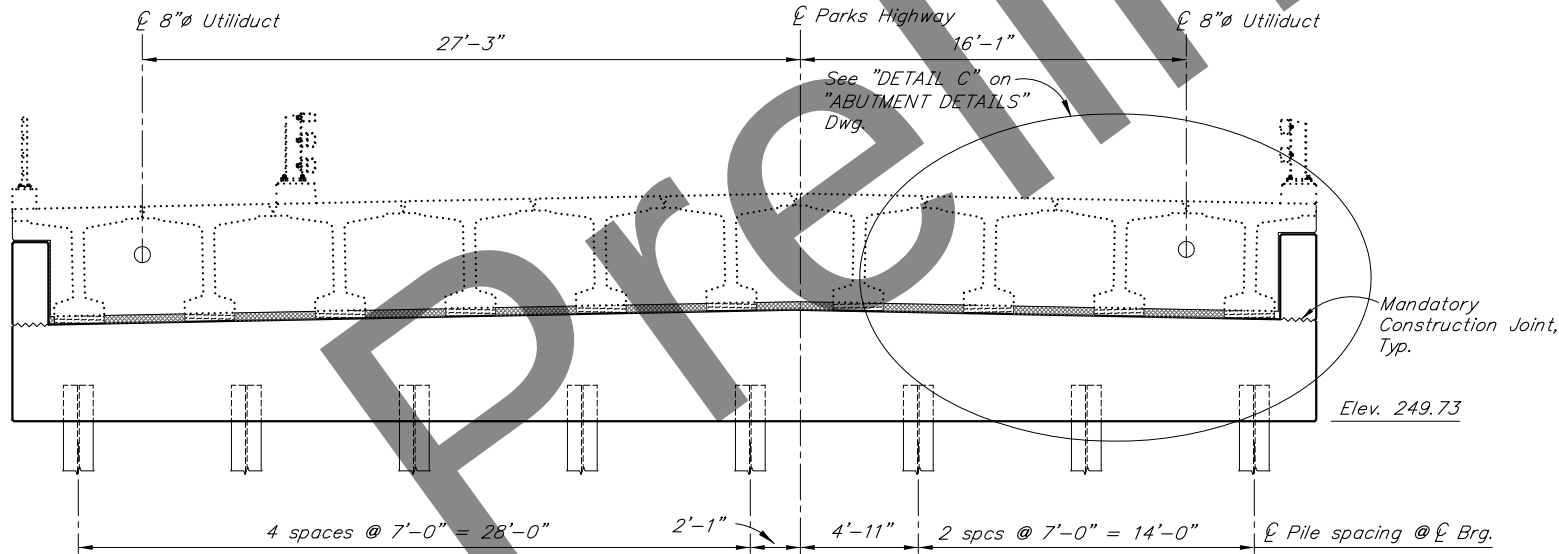
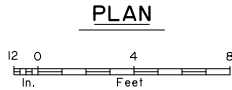
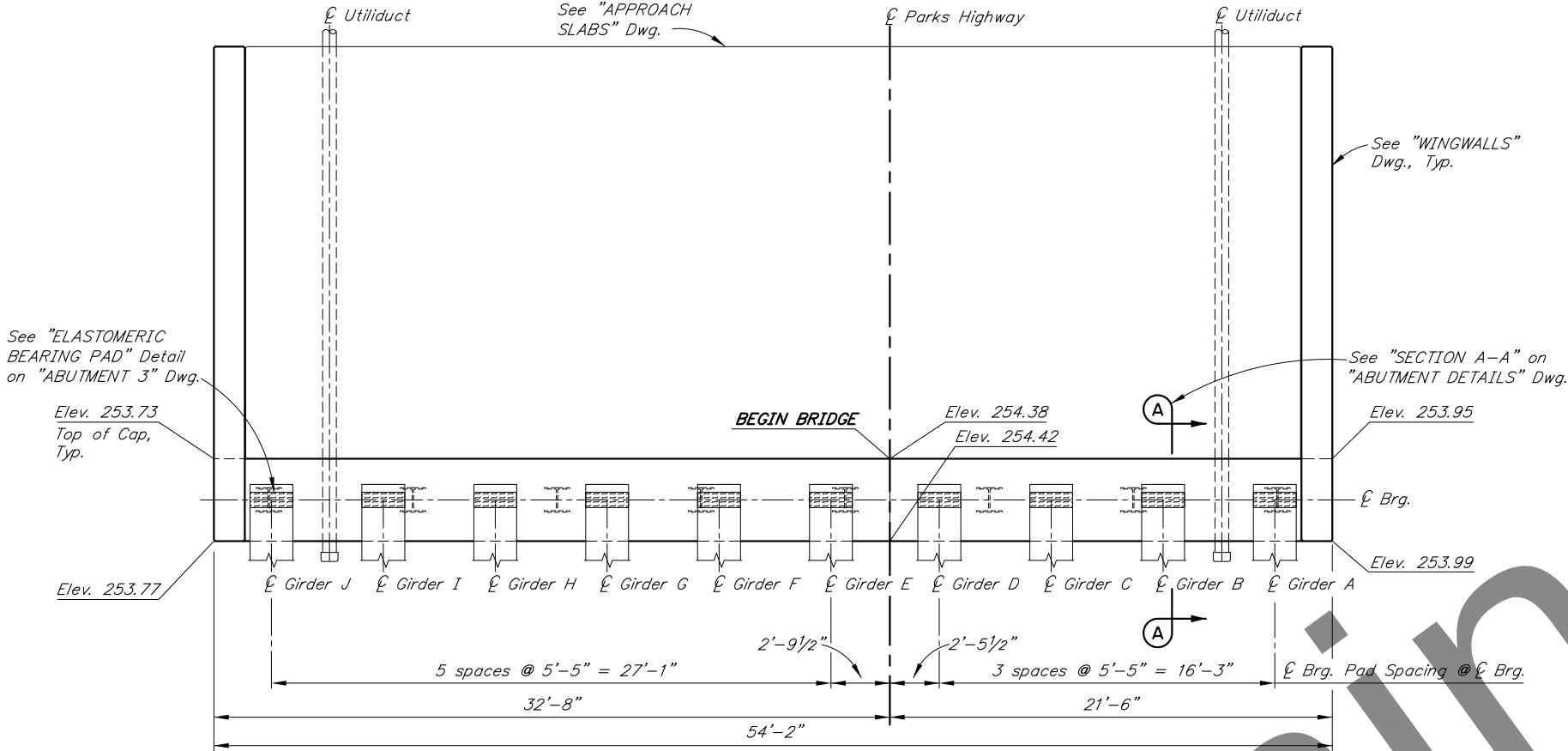


BRIDGE NO. 213
DWG. NO. 3

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A41034/Z589760000	2021	N31	N69

REINFORCING STEEL - ABUTMENT 1						BENDING DIAGRAM
MARK	NOTE	SIZE	NO.	LENGTH	TYPE	
A401		4	188	VARIES	STIRRUP	
A501	E	5	72	16'-1"	STIRRUP	
A601		6	10	53'-10"	---	
A602	E,M	6	7	50'-8"	---	
A603	E,M	6	7	53'-10"	---	
A604	E,M	6	9	2'-11"	---	
A701	E	7	8	3'-0"	BENT	
A1001	H,M	10	14	53'-10"	HEADED	

E - Epoxy-Coated
H - Headed reinforcing steel
M - Field adjust to match cross slope
S - Length does not include splices



DESIGNED BY:	Elmer Marx	CHECKED:	Ben Fetterhoff
DRAWN BY:	Sam Solie	CHECKED:	Elmer Marx
QUANTITIES BY:	Elmer Marx	CHECKED:	Ben Fetterhoff

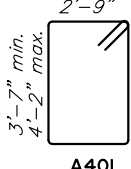
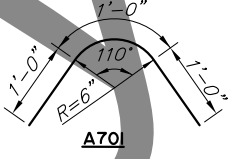
STATE OF ALASKA
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BRIDGE SECTION
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MONTANA CREEK BRIDGE
PARKS HIGHWAY
ABUTMENT 1

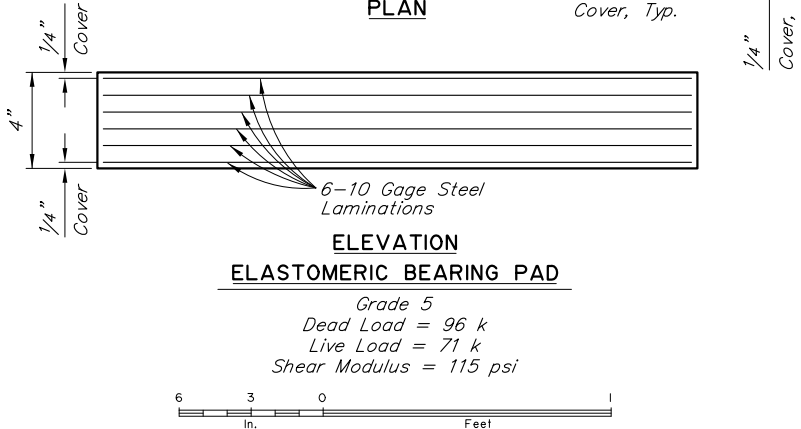
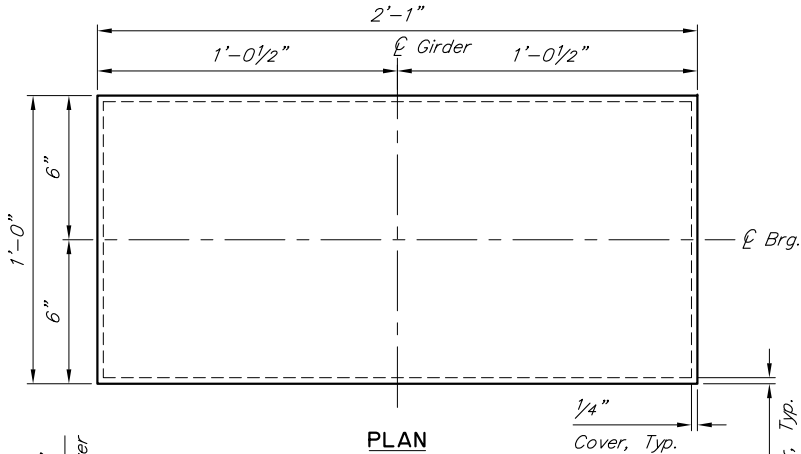
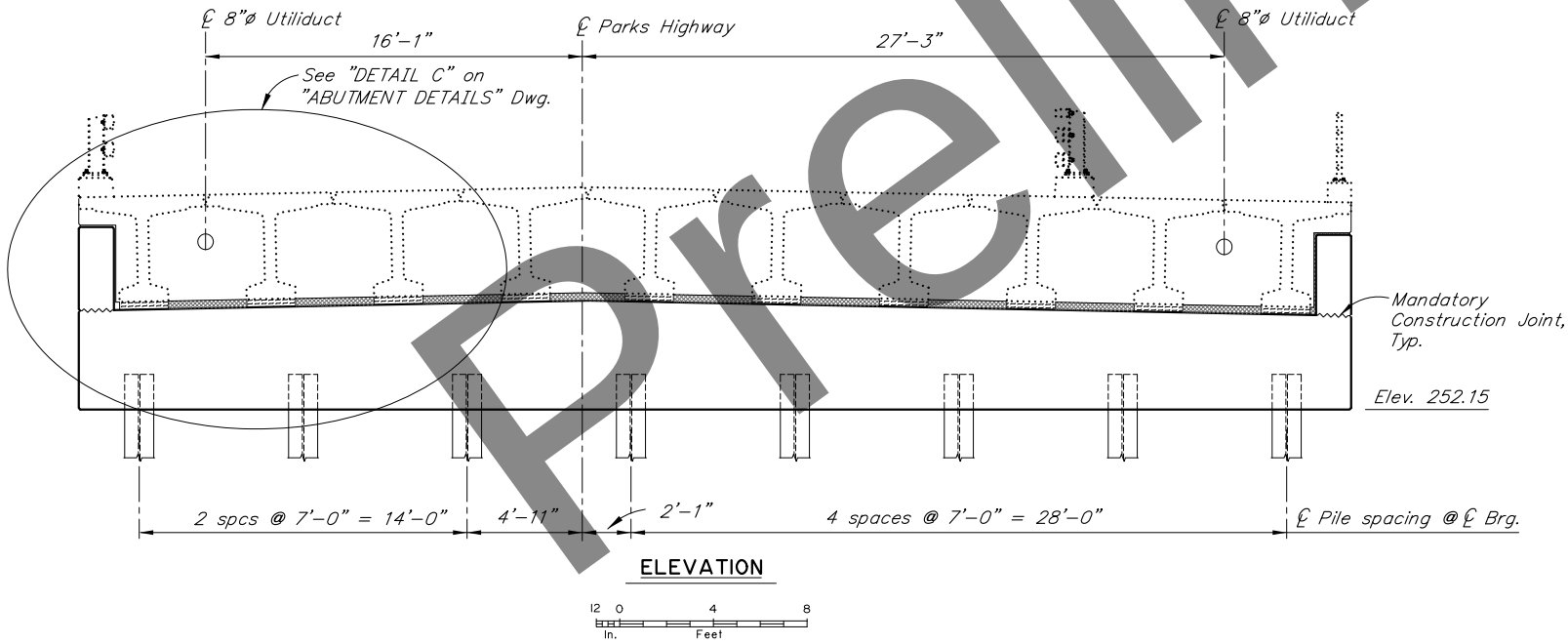
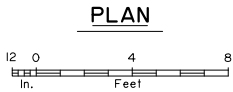
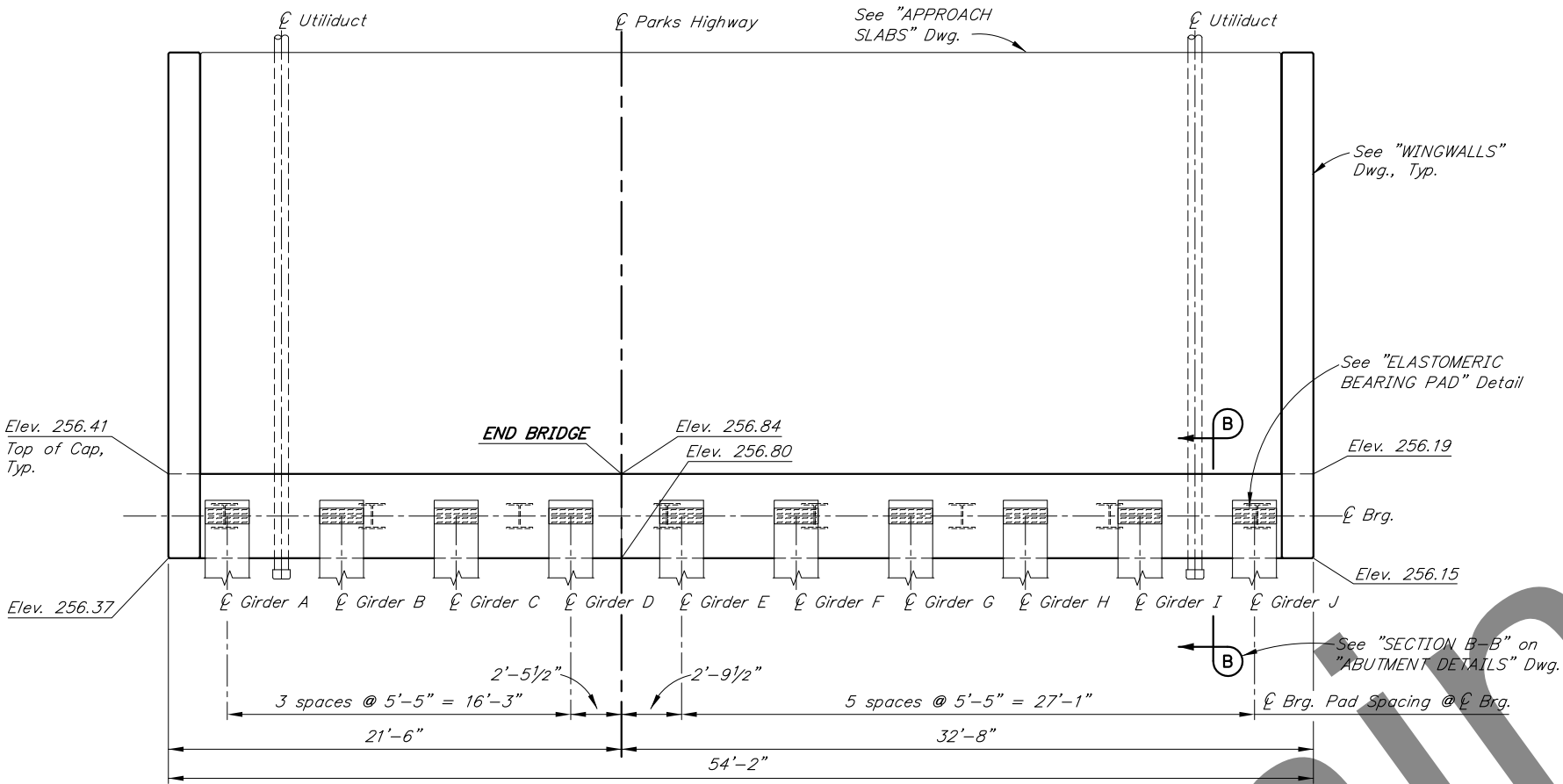


BRIDGE NO. 215
DWG. NO. 5

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A41034/Z589760000	2021	N32	N69

REINFORCING STEEL - ABUTMENT 3						BENDING DIAGRAM
MARK	NOTE	SIZE	NO.	LENGTH	TYPE	
A401		4	188	VARIES	STIRRUP	 A401
A501	E	5	72	16'-1"	STIRRUP	
A601		6	10	53'-10"	---	
A602	E,M	6	7	50'-8"	---	
A603	E,M	6	7	53'-10"	---	 A701
A604	E,M	6	9	2'-11"	---	
A701	E	7	8	3'-0"	BENT	
A1001	H,M	10	14	53'-10"	HEADED	

E - Epoxy-Coated
H - Headed reinforcing steel
M - Field adjust to match cross slope
S - Length does not include splices



ELEVATION
ELASTOMERIC BEARING PAD
Grade 5
Dead Load = 96 k
Live Load = 71 k
Shear Modulus = 115 psi



DESIGNED BY:	Elmer Marx	CHECKED:	Ben Fetterhoff
DRAWN BY:	Sam Solie	CHECKED:	Elmer Marx
QUANTITIES BY:	Elmer Marx	CHECKED:	Ben Fetterhoff

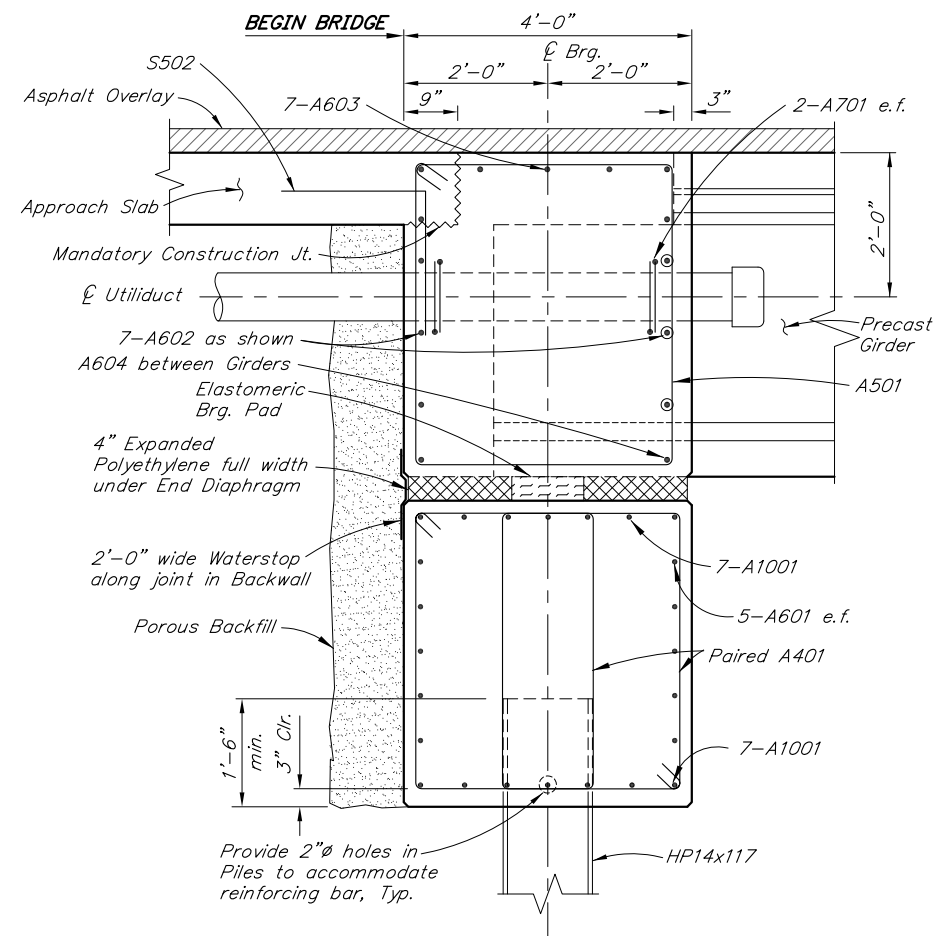
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION
3132 Channel Drive
Juneau, Alaska 99801
907-465-2975

MONTANA CREEK BRIDGE
PARKS HIGHWAY
ABUTMENT 3

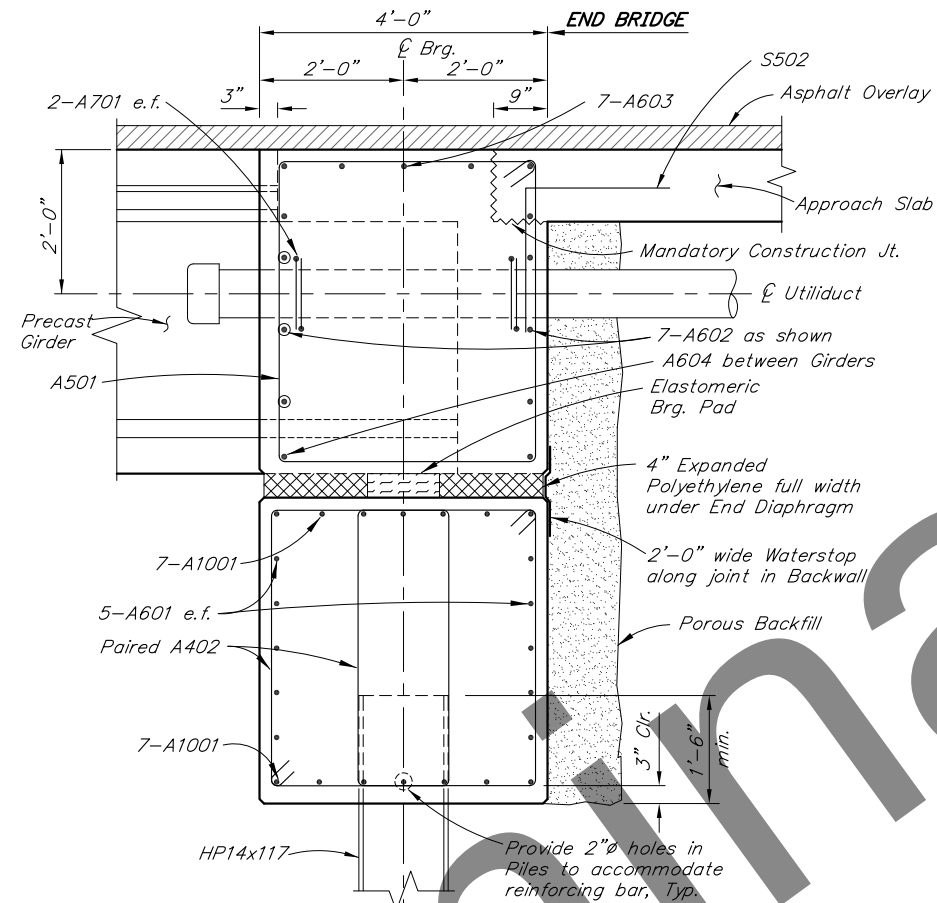


BRIDGE NO. 215
DWG. NO. 6

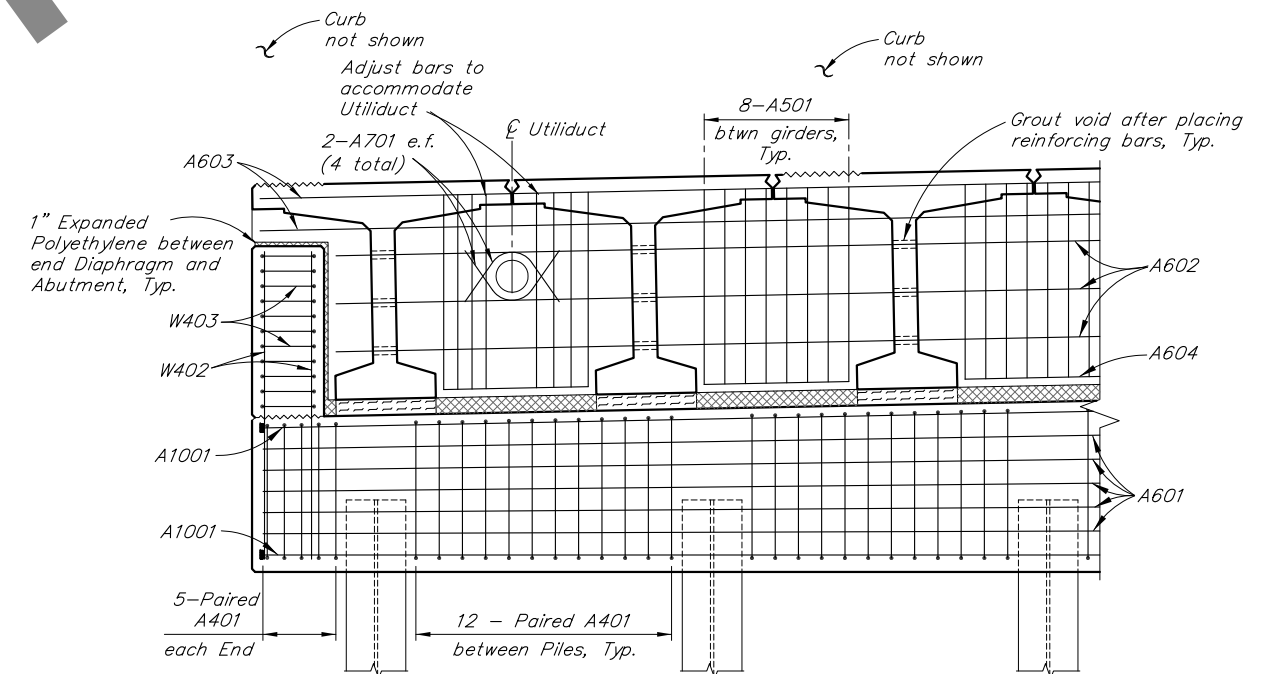
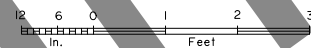
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A41034/Z589760000	2021	N33	N69



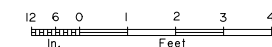
SECTION A-A



SECTION B-B



DETAIL C



DESIGNED BY:	<i>Elmer Marx</i>	CHECKED:	<i>Ben Fetterhoff</i>
DRAWN BY:	<i>Sam Sollie</i>	CHECKED:	<i>Elmer Marx</i>
QUANTITIES BY:	<i>Elmer Marx</i>	CHECKED:	<i>Ben Fetterhoff</i>

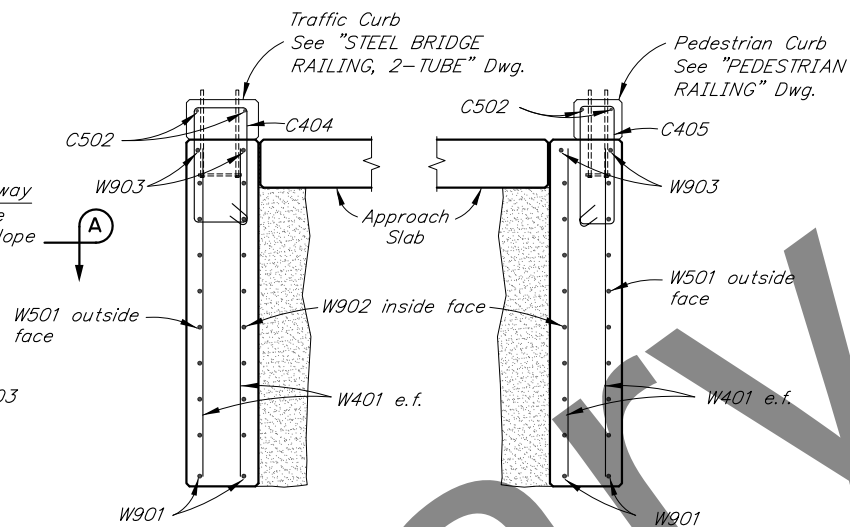
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION
3132 Channel Drive
Juneau, Alaska 99801
907-465-2975

MONTANA CREEK BRIDGE
PARKS HIGHWAY
ABUTMENT DETAILS



BRIDGE NO. 215
DWG. NO. 7

R:\cad\215\215-1-ABUT DET Mon, Oct/12/20 8:14am



REINFORCING STEEL - ONE ABUTMENT

MARK	NOTE	SIZE	NO.	LENGTH	TYPE	BENDING DIAGRAM
W401		4	84	VARIES	---	
W402		4	16	7'-2"	---	
W403		4	22	10'-5"	STIRRUP	
W501		5	22	VARIES	---	
W901		9	4	24'-6"	BENT	
W902		9	22	VARIES	---	
W903		9	4	21'-6"	BENT	
C404	E	4	16	7'-9"	STIRRUP	
C405	E	4	16	6'-11"	STIRRUP	
C502	E	5	4	19'-6"	---	

W401

4'-6" Min.
23'-8" Max.

W501, W902

W403

3'-8" Min.
8'-6" Max.

W901

C405

1'-2"

19'-6"

W903



7'-0"

Begin Fill Slope

Railing Expansion Joint

Fill vertical and horizontal surfaces with Silicone Joint Sealant, e.f., Typ.

Finished Groundline

This technical drawing illustrates the cross-section of a bridge railing system. On the left, a railing section is shown with a dimension of 7'-0" and a label "Begin Fill Slope" pointing to the start of the slope. The railing consists of multiple horizontal rails supported by vertical posts. A "Railing Expansion Joint" is indicated between the railing section and the vertical wall. The vertical wall is shown with a "Finished Groundline" and a "Fill vertical and horizontal surfaces with Silicone Joint Sealant, e.f., Typ." label. The groundline is shown as a dashed line sloping down to the right, meeting the vertical wall. The wall itself is shown with a cross-hatched pattern on the left side, indicating a concrete or masonry structure.



MONTANA CREEK BRIDGE
PARKS HIGHWAY
WINGWALLS



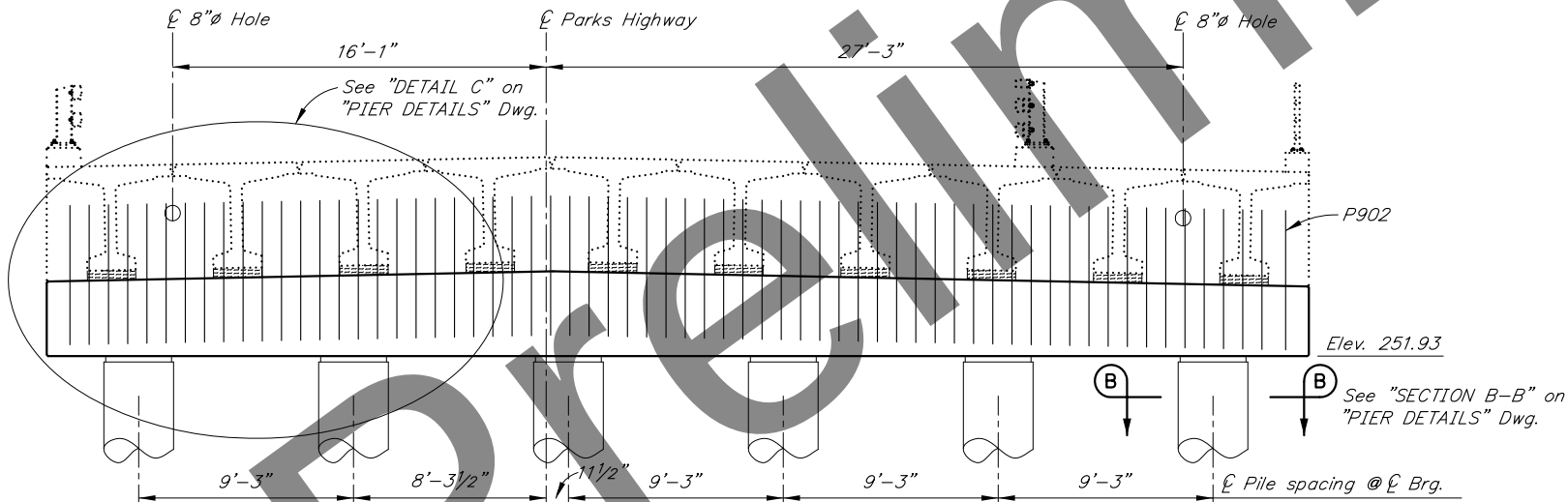
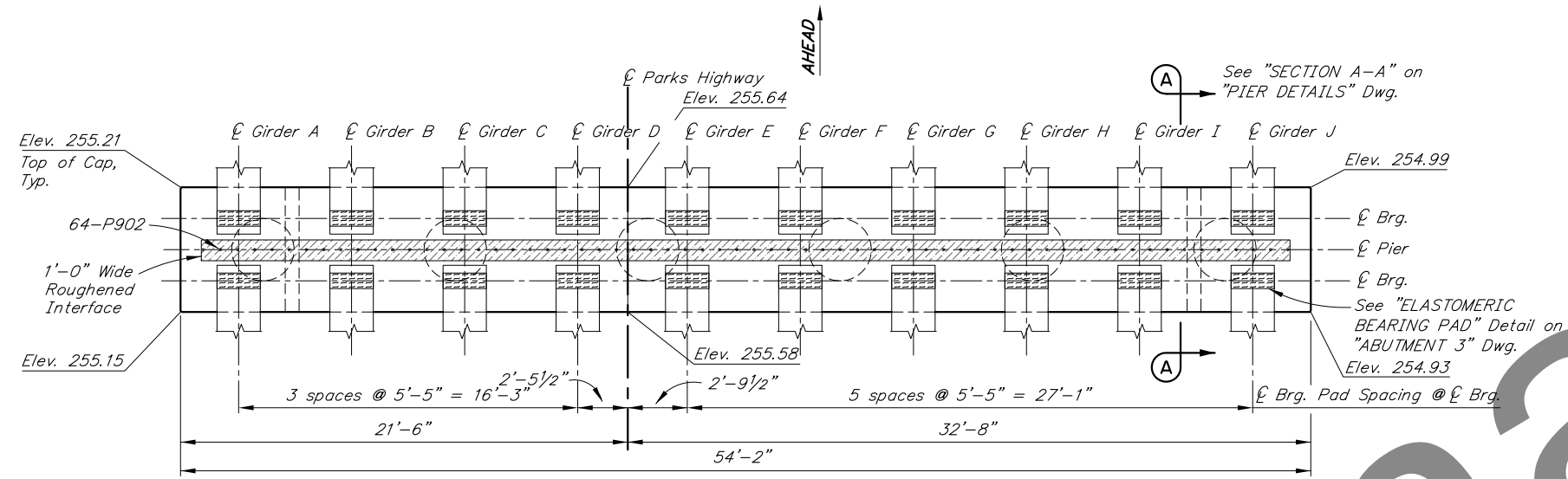
BRIDGE NO. 215
DWG. NO. 8

R:\cad\215\215-1-PIER Mon, Oct/12/20 8:14am

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A41034/Z589760000	2021	N35	N69

REINFORCING STEEL - PIER 2

MARK	NOTE	SIZE	NO.	LENGTH	TYPE	BENDING DIAGRAM
P401		4	60	6'-8"	BENT	
P501	S	5	6	686'-6"	SPIRAL	
P502		5	48	8'-10"	HOOP	
P503	E	5	160	16'-1"	STIRRUP	
P601		6	267	VARIES	STIRRUP	
P602	E	6	20	53'-10"	---	
P701	E	7	8	3'-0"	BENT	
P901		9	96	60'-0"	---	
P902		9	64	6'-0"	---	
P1001	H,M	10	24	53'-10"	HEADED	
P1002	M	10	10	53'-10"	---	



E - Epoxy-Coated
H - Headed reinforcing steel
M - Field adjust to match crown
S - Length does not include splices

DESIGNED BY:	Elmer Marx	CHECKED:	Ben Fetterhoff
DRAWN BY:	Sam Solie	CHECKED:	Elmer Marx
QUANTITIES BY:	Elmer Marx	CHECKED:	Ben Fetterhoff

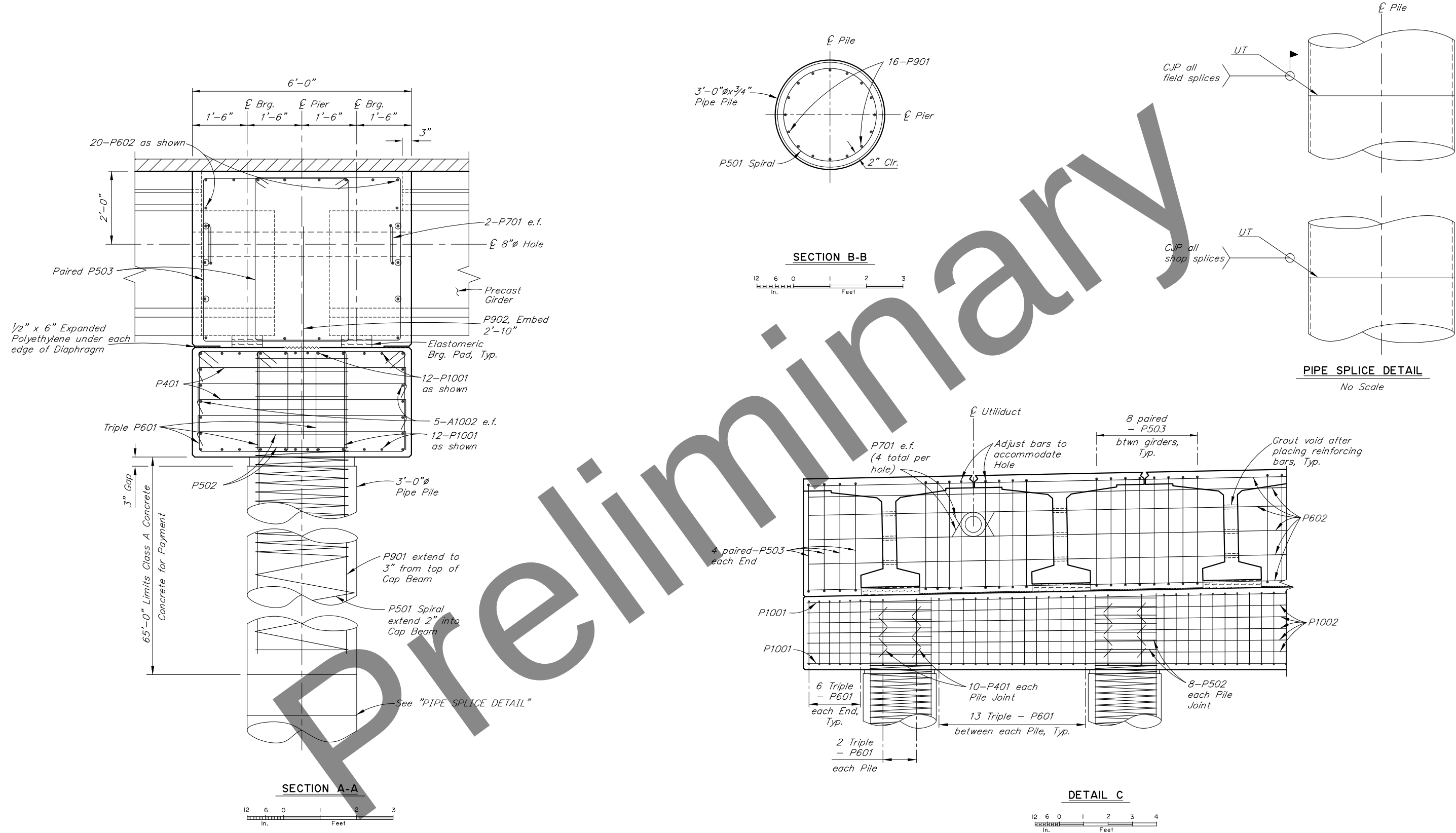
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
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BRIDGE SECTION
3132 Channel Drive
Juneau, Alaska 99801
907-465-2975

MONTANA CREEK BRIDGE
PARKS HIGHWAY
PIER 2



BRIDGE NO. 215
DWG. NO. 9

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A41034/Z589760000	2021	N36	N69



DESIGNED BY:	Elmer Marx	CHECKED:	Ben Fetterhoff
DRAWN BY:	Sam Solie	CHECKED:	Elmer Marx
QUANTITIES BY:	Elmer Marx	CHECKED:	Ben Fetterhoff

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION
3132 Channel Drive
Juneau, Alaska 99801
907-465-2975

MONTANA CREEK BRIDGE
PARKS HIGHWAY
PIER DETAILS



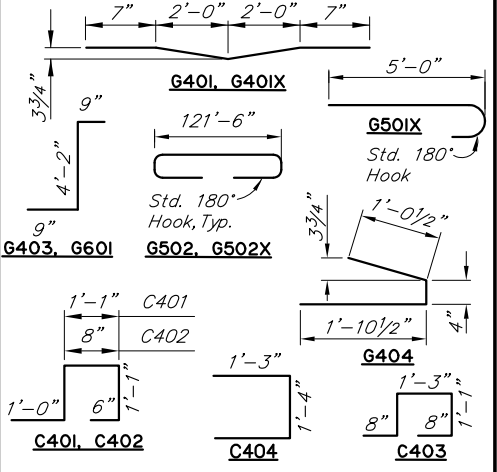
BRIDGE NO. 215
DWG. NO. 10

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A41034/Z589760000	2021	N38	N69

REINFORCING STEEL SCHEDULE
- ONE GIRDER

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
G401	E	4	175	5'-1"	BENT
G401X	E,X	4	200	5'-1"	BENT
G402	E,S	4	8	116'-2"	----
G402X	E,S,X	4	8	116'-2"	----
G403	E	4	356	5'-8"	BENT
G404	E	4	76	3'-3"	BENT
G501	E	5	175	4'-11"	----
G501X	E,X	5	200	5'-7"	BENT
G502	E,S	5	8	122'-8"	BENT
G502X	E,S,X	5	8	122'-8"	BENT
G601	E	6	16	5'-8"	BENT
C401	E,L,X	4	87	4'-9"	BENT
C402	E,L,X	4	87	4'-4"	BENT
C403	E,L,X	4	87	4'-11"	BENT
C404	E,X	4	28	3'-10"	BENT
C405	E,S,X	4	3	285'-8"	----
C501	E,S,X	5	2	245'-8"	----

BENDING DIAGRAM



E - Epoxy-Coated
L - Ship 8 bars loose
S - Length does not include splices. Minimum lap splice length for splices shall be:
2'-0" for #4 bars, 2'-6" for #5 bars.
X - Exterior Girders only

GIRDER NOTES

Use Class P concrete with the following strengths:
At Stress Transfer f'_{ci} = 6,500 psi
At 28 days f'_c = 7,500 psi

Use 1/2" round low relaxation strands with an ultimate strength of 270 ksi and a cross section area of 0.153 in².

Design is based on the following steel stresses:
Pretensioning - Jacking Stress 189 ksi
After initial losses - 169 ksi
After all losses - 139 ksi

Deflect forms to compensate for camber and roadway grade.

Galvanize all steel embedded in girders except for shear connectors.

1" clear on all reinforcing except as noted.

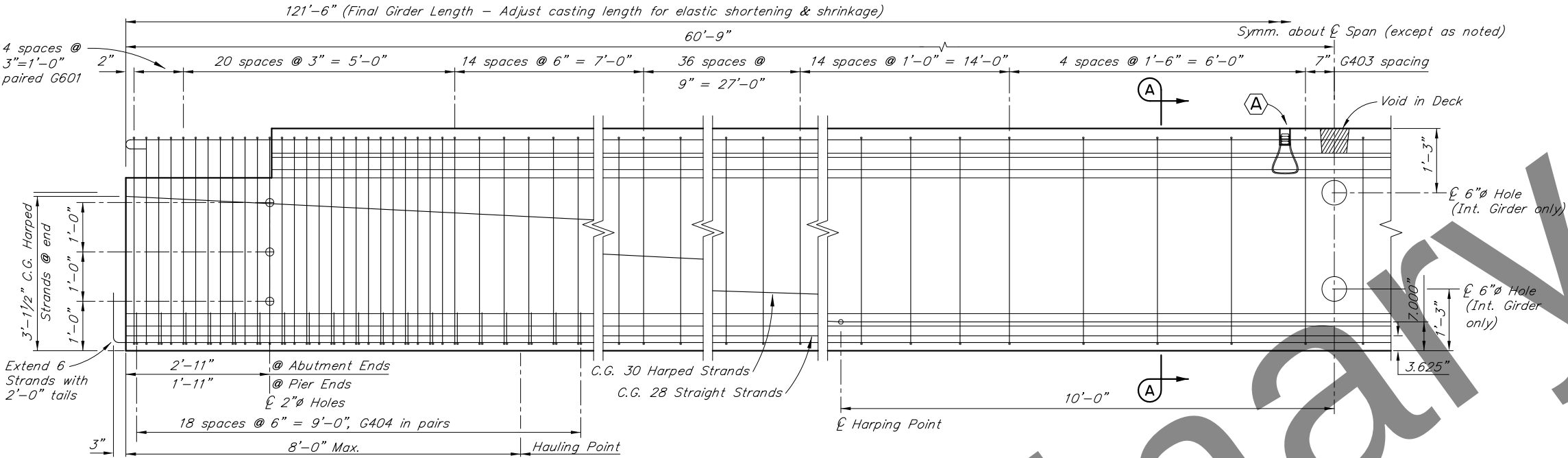
Finish top flange surface with light broom finish. Roughen the surface under the barrier.

Omit Shear Key, Shear Connector, and Deck Voids on outside of exterior girders.

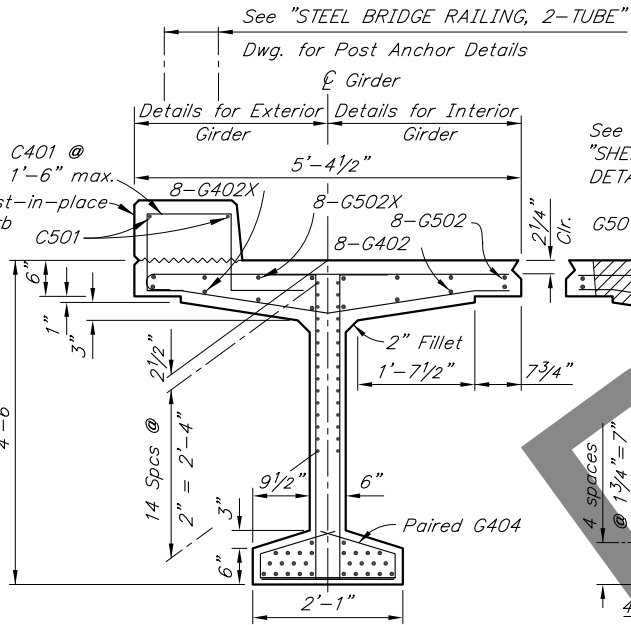
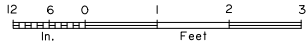
Cast Girder ends plumb with respect to roadway grade. Install web holes and web anchor inserts parallel to $\bar{E}$ bearing.

A 1"x1'-0" Coil Anchor Insert for vertical adjustment of girders. Recess 2". Prevent concrete from filling hole.

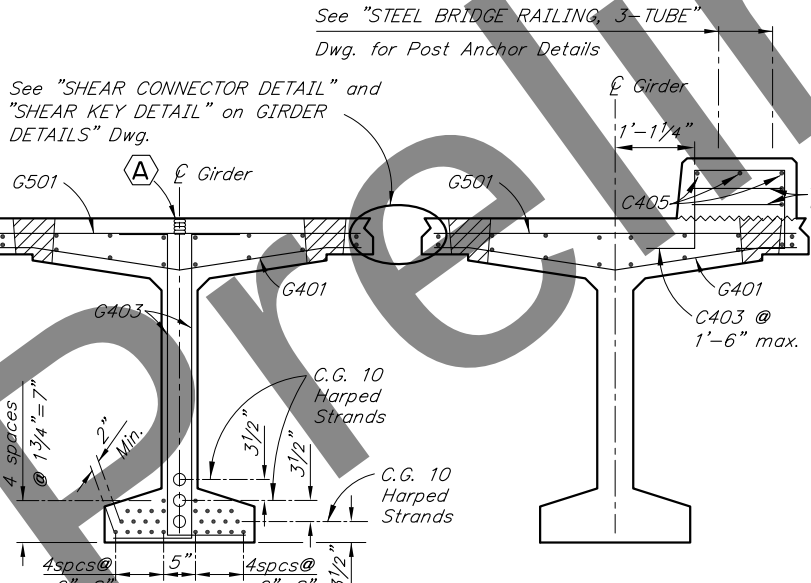
See "FRAMING PLAN AND TYPICAL SECTION" Dwg. for shear connector spacing.



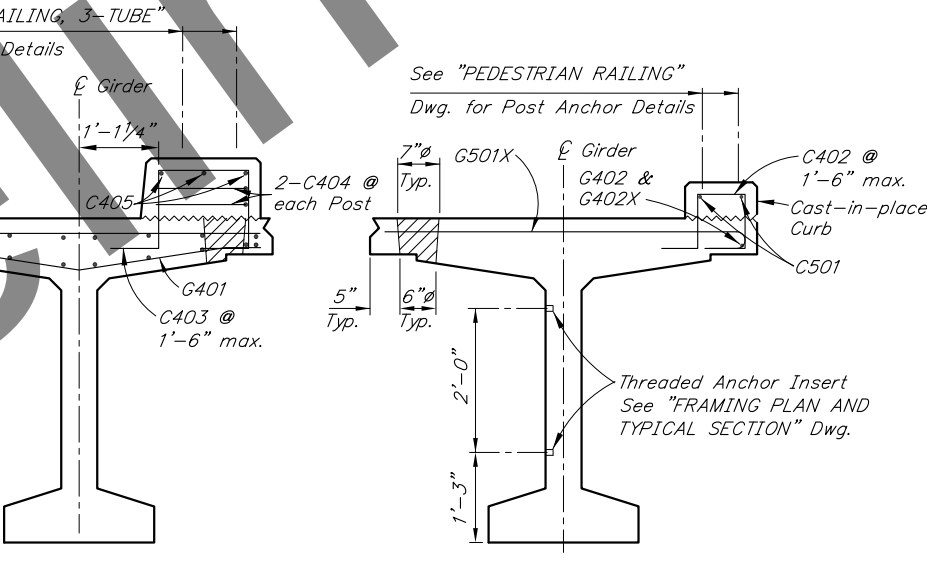
ELEVATION



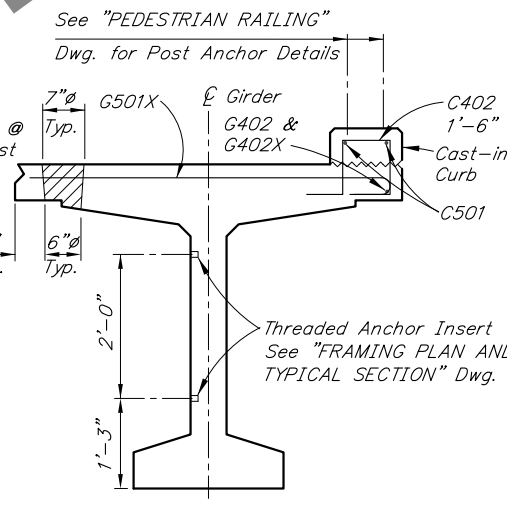
END VIEW



SECTION A-A



GIRDER H



EXTERIOR GIRDER NEAR MID SPAN

(Unrelated Reinforcement not shown)

DESIGNED BY:	Elmer Marx	CHECKED:	Ben Fetterhoff
DRAWN BY:	Sam Solie	CHECKED:	Elmer Marx
QUANTITIES BY:	Elmer Marx	CHECKED:	Ben Fetterhoff

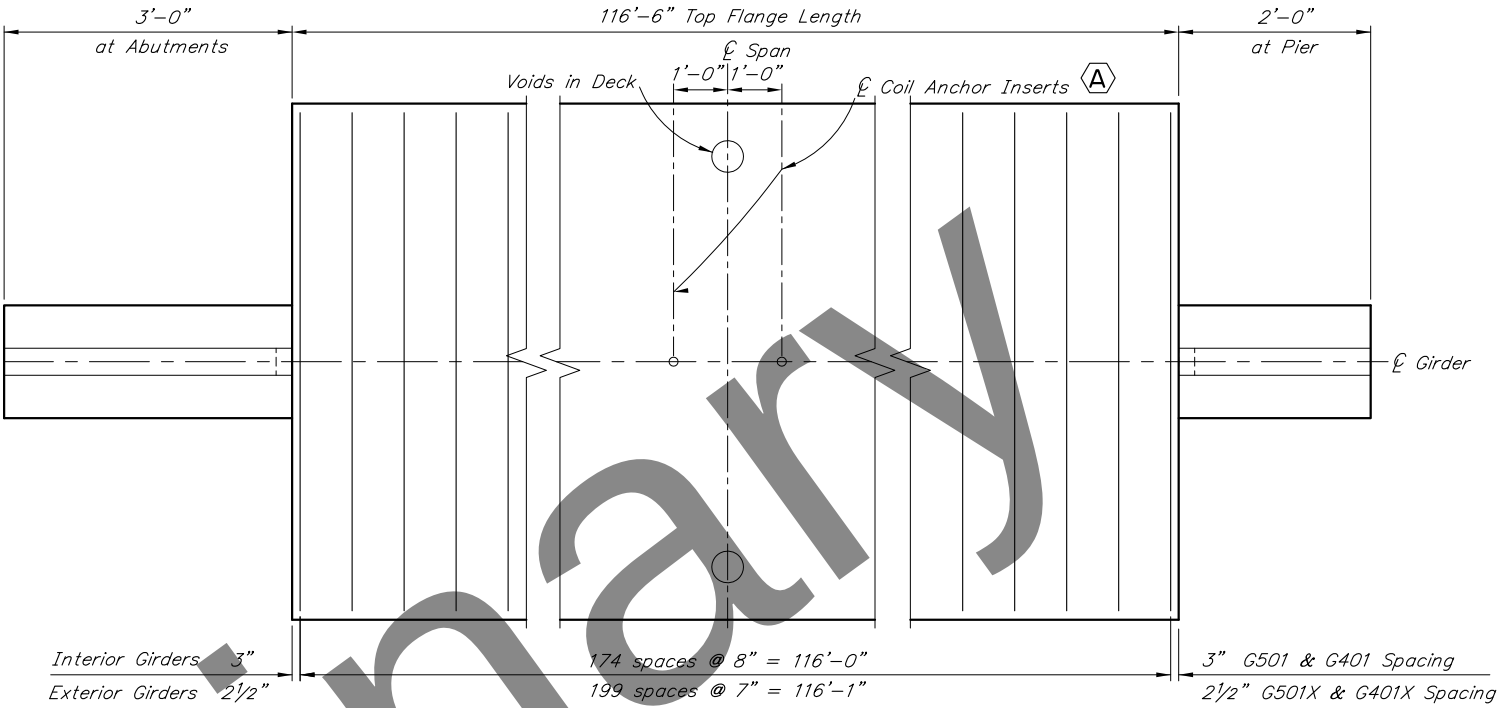
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION
3132 Channel Drive
Juneau, Alaska 99801
907-465-2975

MONTANA CREEK BRIDGE
PARKS HIGHWAY
GIRDERS



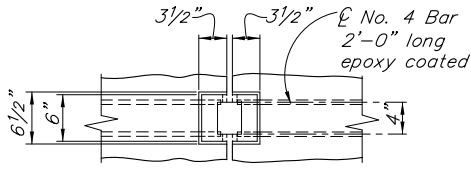
BRIDGE NO. 215
DWG. NO. 12

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A41034/Z589760000	2021	N39	N69

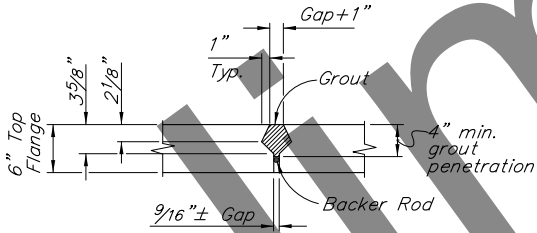


PLAN

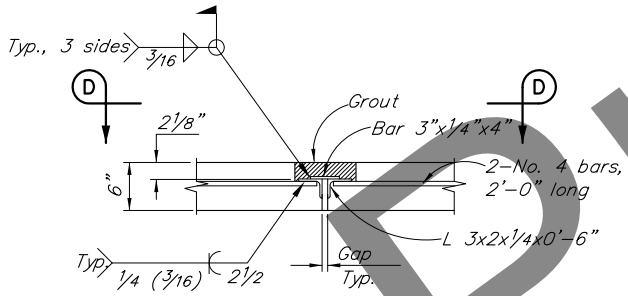
No Scale



VIEW D-D



SHEAR KEY DETAIL



SHEAR CONNECTOR DETAIL



DESIGNED BY:	Elmer Marx	CHECKED:	Ben Fetterhoff
DRAWN BY:	Sam Sollie	CHECKED:	Elmer Marx
QUANTITIES BY:	Elmer Marx	CHECKED:	Ben Fetterhoff

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION
3132 Channel Drive
Juneau, Alaska 99801
907-465-2975

MONTANA CREEK BRIDGE
PARKS HIGHWAY
GIRDER DETAILS



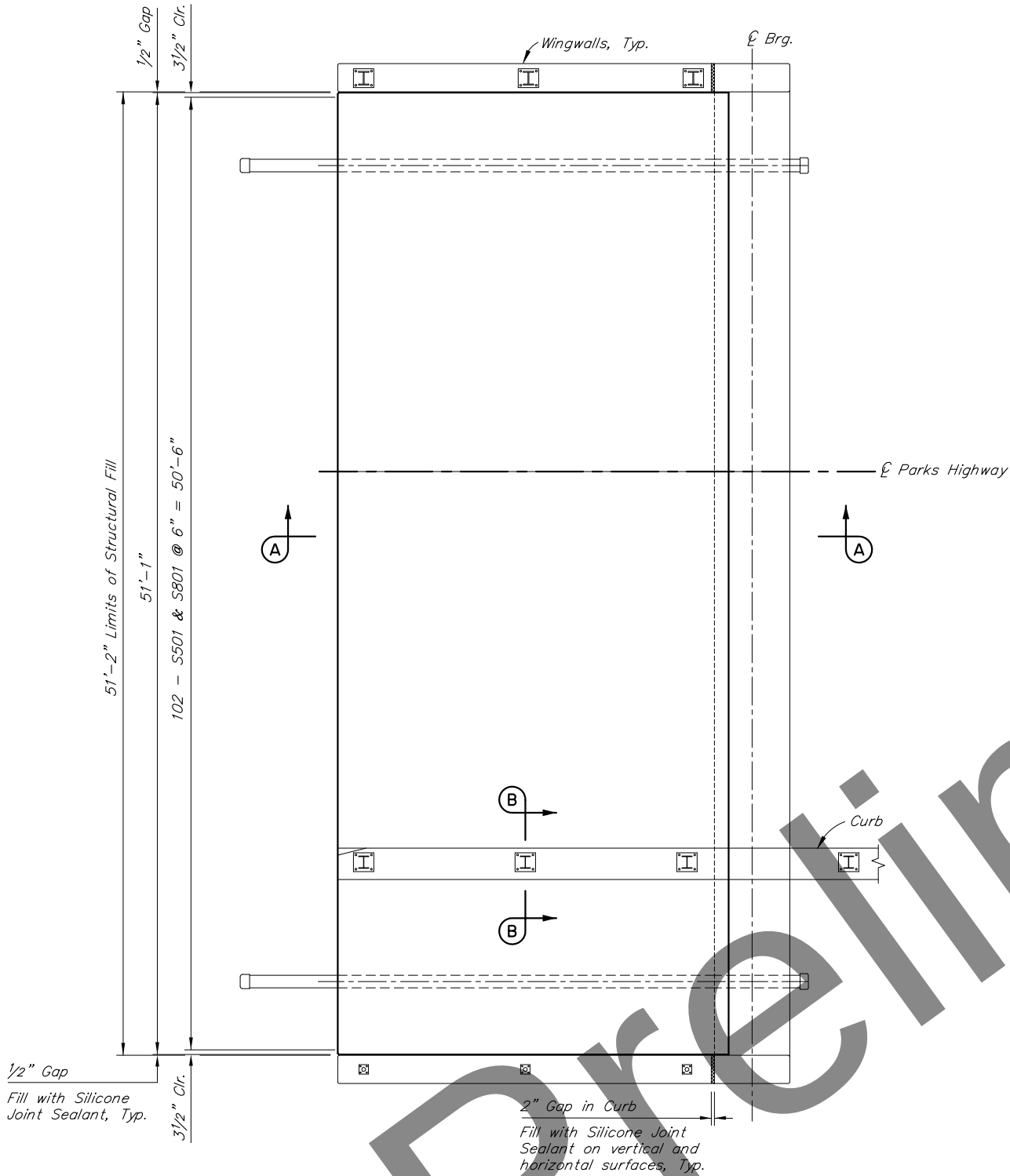
BRIDGE NO. 215
DWG. NO. 13

R:\cad\215\215-1-GIRDER DETAILS Mon, Oct/12/20 8:15am

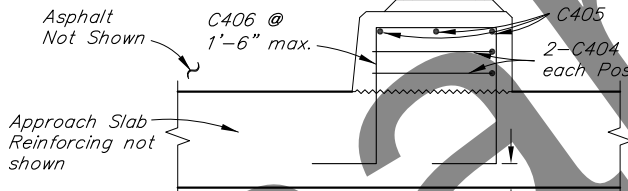
R:\cad\215\215-1-APPROACH Mon, Oct/12/20 8:15am

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A41034/Z589760000	2021	N40	N69

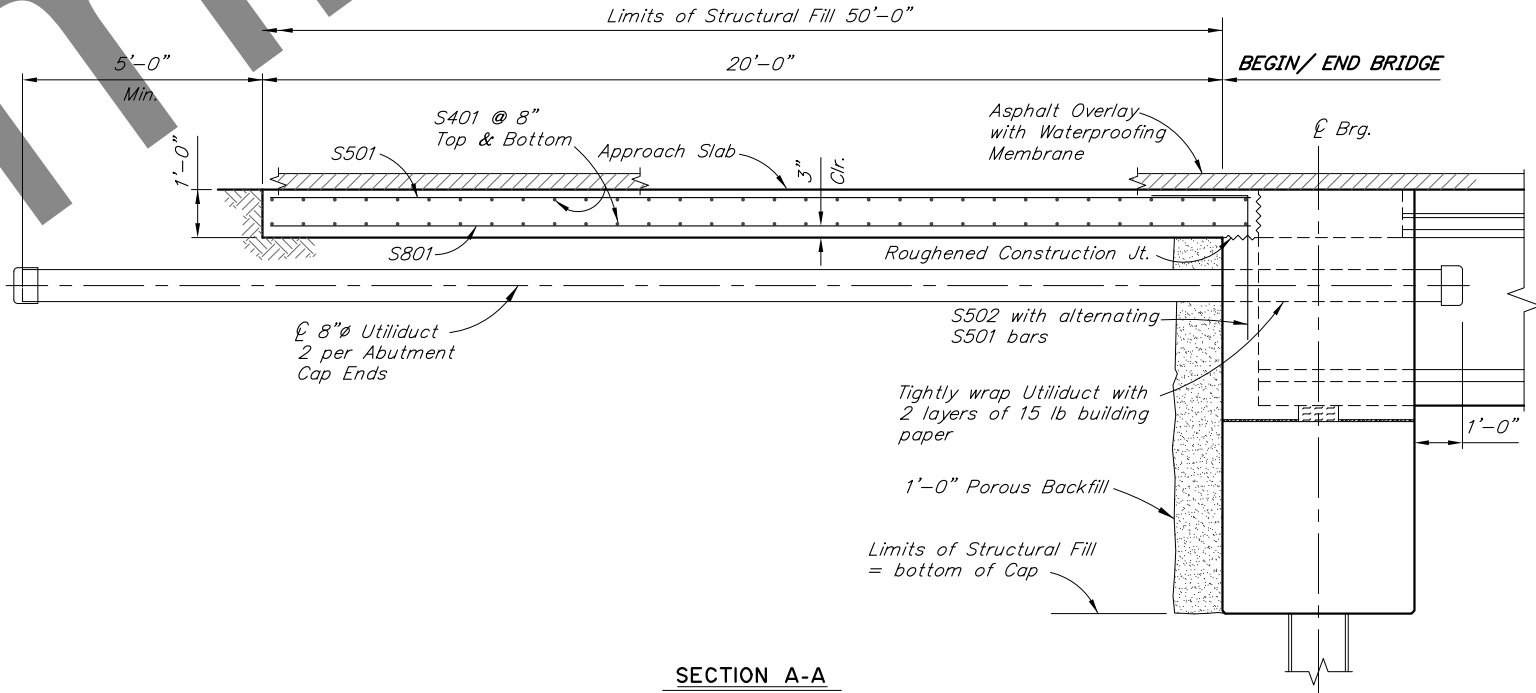
REINFORCING STEEL - ONE APPROACH SLAB					
MARK	NOTE	SIZE	NO.	LENGTH	TYPE
S401	E,M,S	4	64	50'-9"	---
S501	E	5	102	20'-5"	---
S502	E	5	51	5'-0"	BENT
S801	E	8	102	20'-5"	---
C404	E	4	6	3'-10"	BENT
C406	E	4	16	5'-5"	BENT
BENDING DIAGRAM					
E - Epoxy-Coated M - Field adjust to match cross slope S - Length does not include splices					



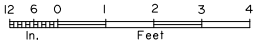
PLAN
(Abutment 1 shown Abutment 3 similar)



SECTION B-B



SECTION A-A



DESIGNED BY:	Elmer Marx	CHECKED:	Ben Fetterhoff
DRAWN BY:	Sam Sollie	CHECKED:	Elmer Marx
QUANTITIES BY:	Elmer Marx	CHECKED:	Ben Fetterhoff

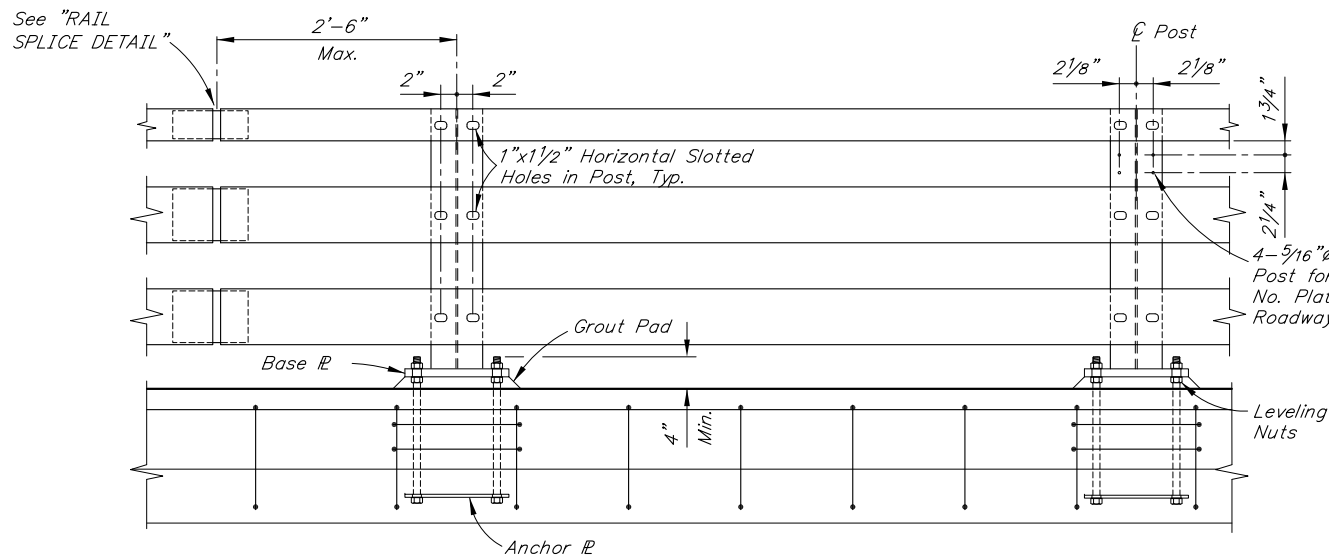
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
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BRIDGE SECTION
3132 Channel Drive
Juneau, Alaska 99801
907-465-2975

MONTANA CREEK BRIDGE
PARKS HIGHWAY
APPROACH SLABS



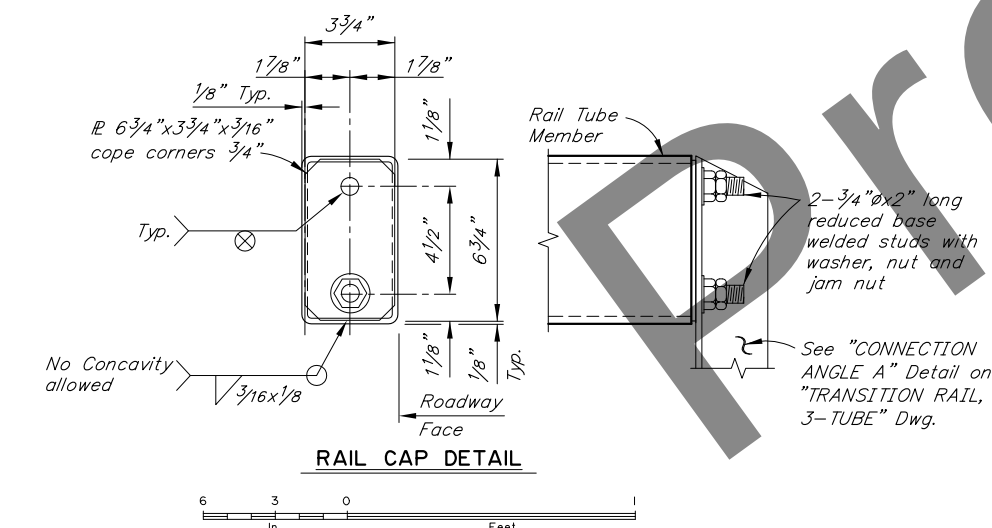
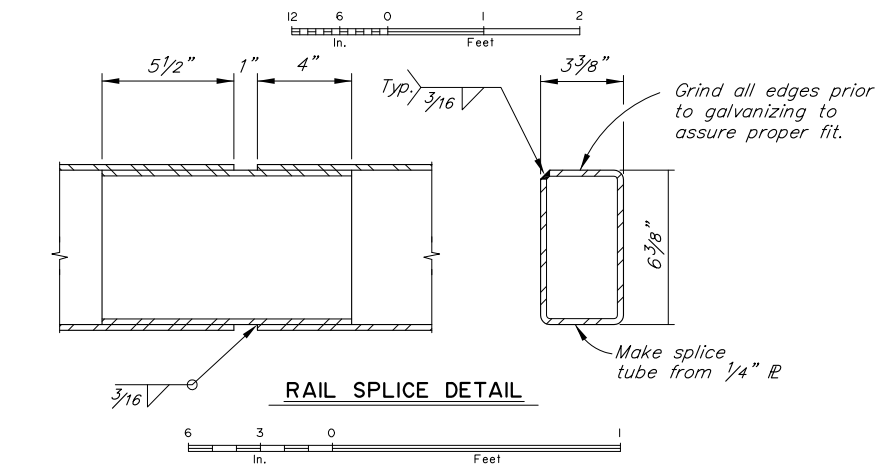
BRIDGE NO. 215
DWG. NO. 14

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A41034/Z589760000	2021	N42	N69



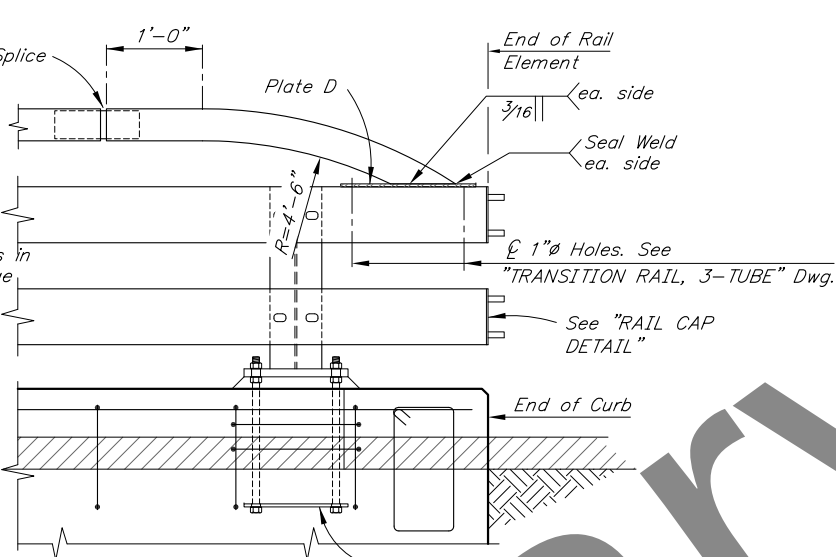
EXPANSION JOINT

TYPICAL POST ELEVATION

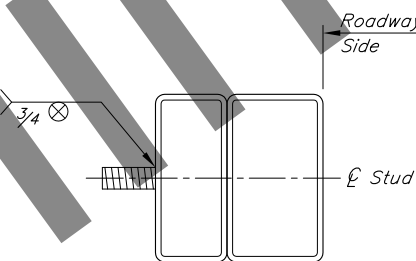
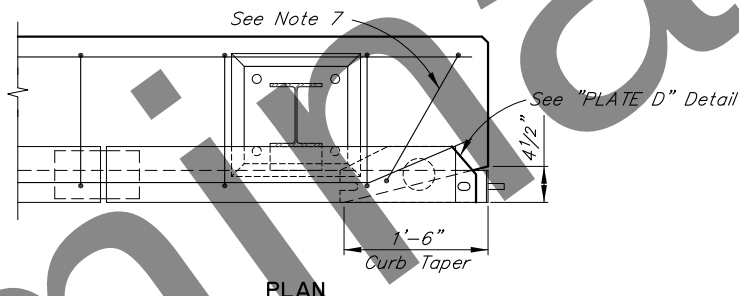


RAIL CAP DETAIL

DESIGNED BY:	Elmer Marx	CHECKED:	Ben Fetterhoff
DRAWN BY:	Sam Solie	CHECKED:	Elmer Marx
QUANTITIES BY:	Elmer Marx	CHECKED:	Ben Fetterhoff



END POST - ELEVATION



RAILING STUD DETAIL

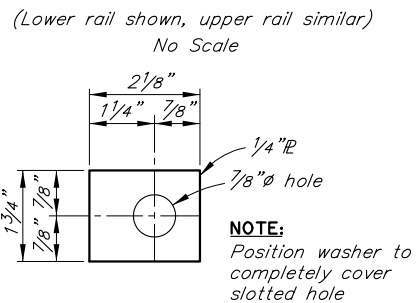
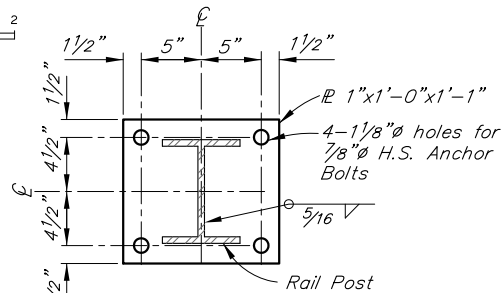
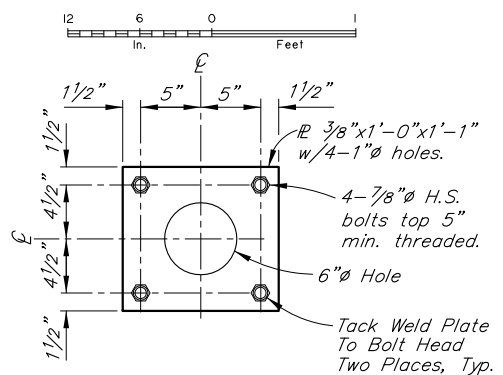


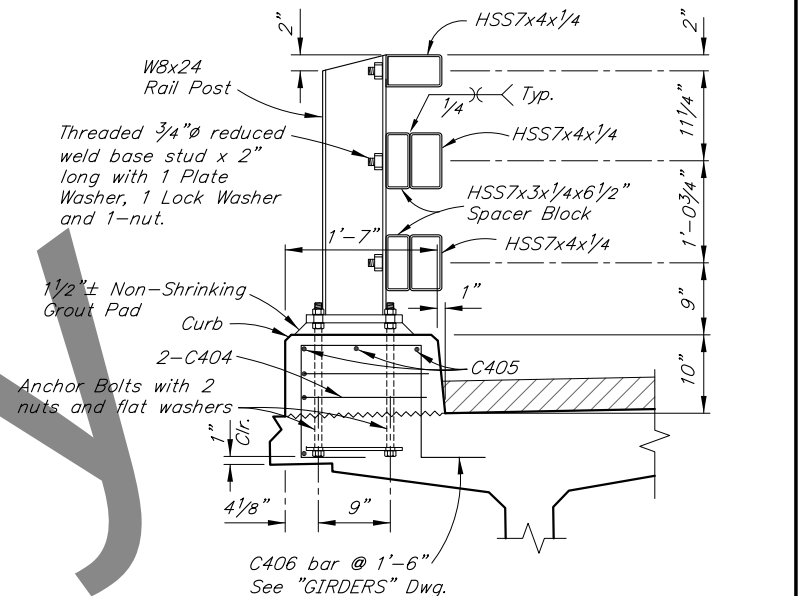
PLATE WASHER



BASE PLATE DETAIL



ANCHOR PLATE DETAIL



TYPICAL SECTION

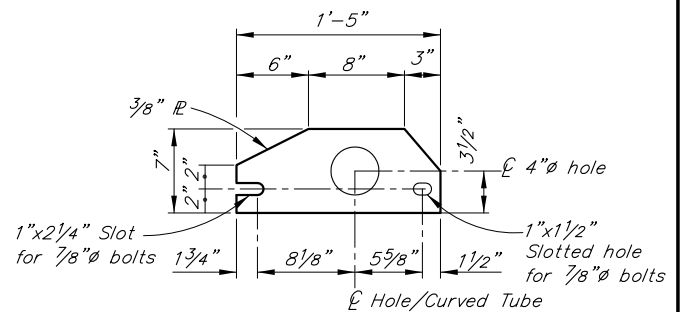


PLATE D

NOTES:

1. Locate bridge number plates on right hand side of approaching traffic near each end as shown on "GENERAL LAYOUT" Dwg. (2 total).
2. Furnish bridge number plates. Use "Century" type style lettering. Use studs and nuts that conform to UNS C65100 or C65500. Braze 1/4" ϕ threaded rod to back of plate with nut - 4 required. Use tamper proof nuts.
3. Provide railing expansion joints at 50'-0" maximum intervals. Railing shall be continuous over 2 posts minimum. Railing expansion joints are required in rail panels that span bridge expansion joints.
4. Use grout with a minimum 24-hour f'c of 3000 psi in single placement.
5. See "FRAMING PLAN AND TYPICAL SECTION" Dwg. for rail post spacing.
6. Install bridge rail posts plumb.
7. Adjust reinforcing to accommodate curb taper.

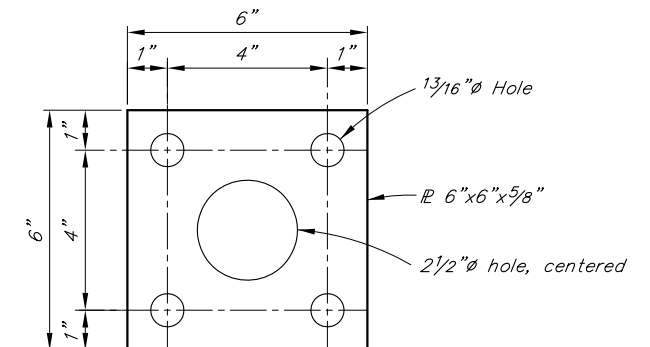
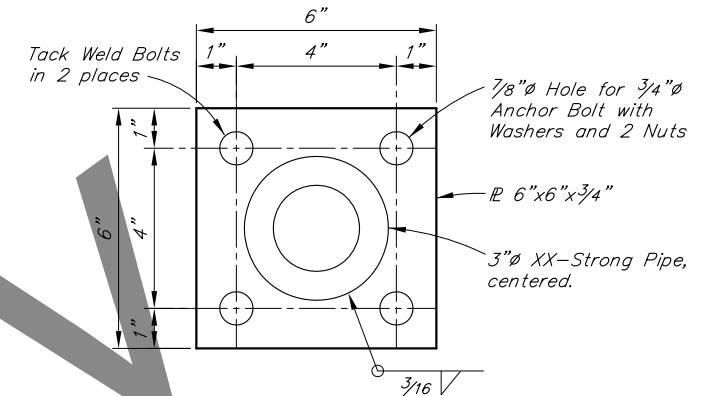
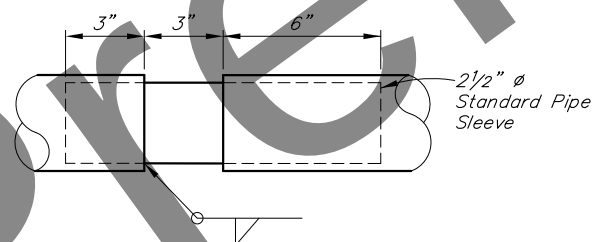
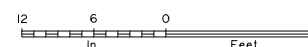
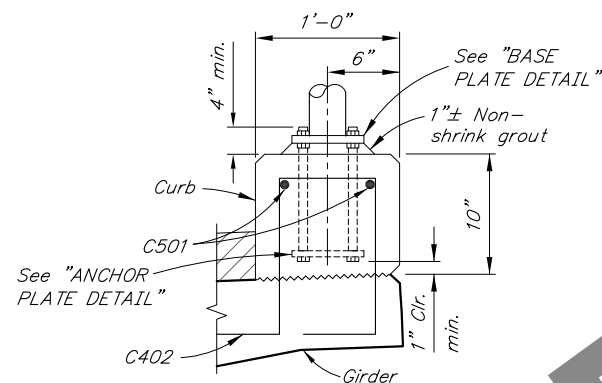
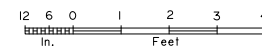
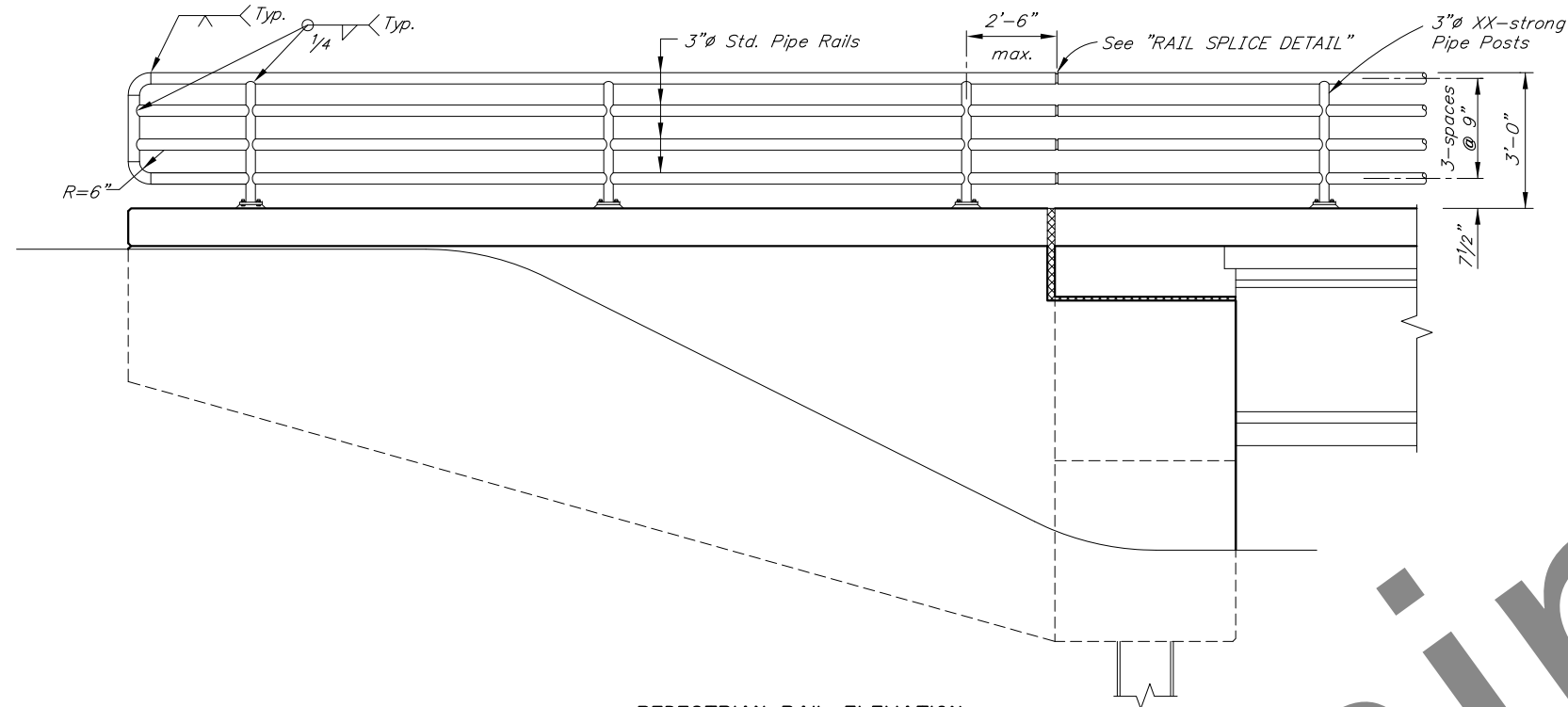
STATE OF ALASKA
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MONTANA CREEK BRIDGE
PARKS HIGHWAY
STEEL BRIDGE RAILING, 3-TUBE



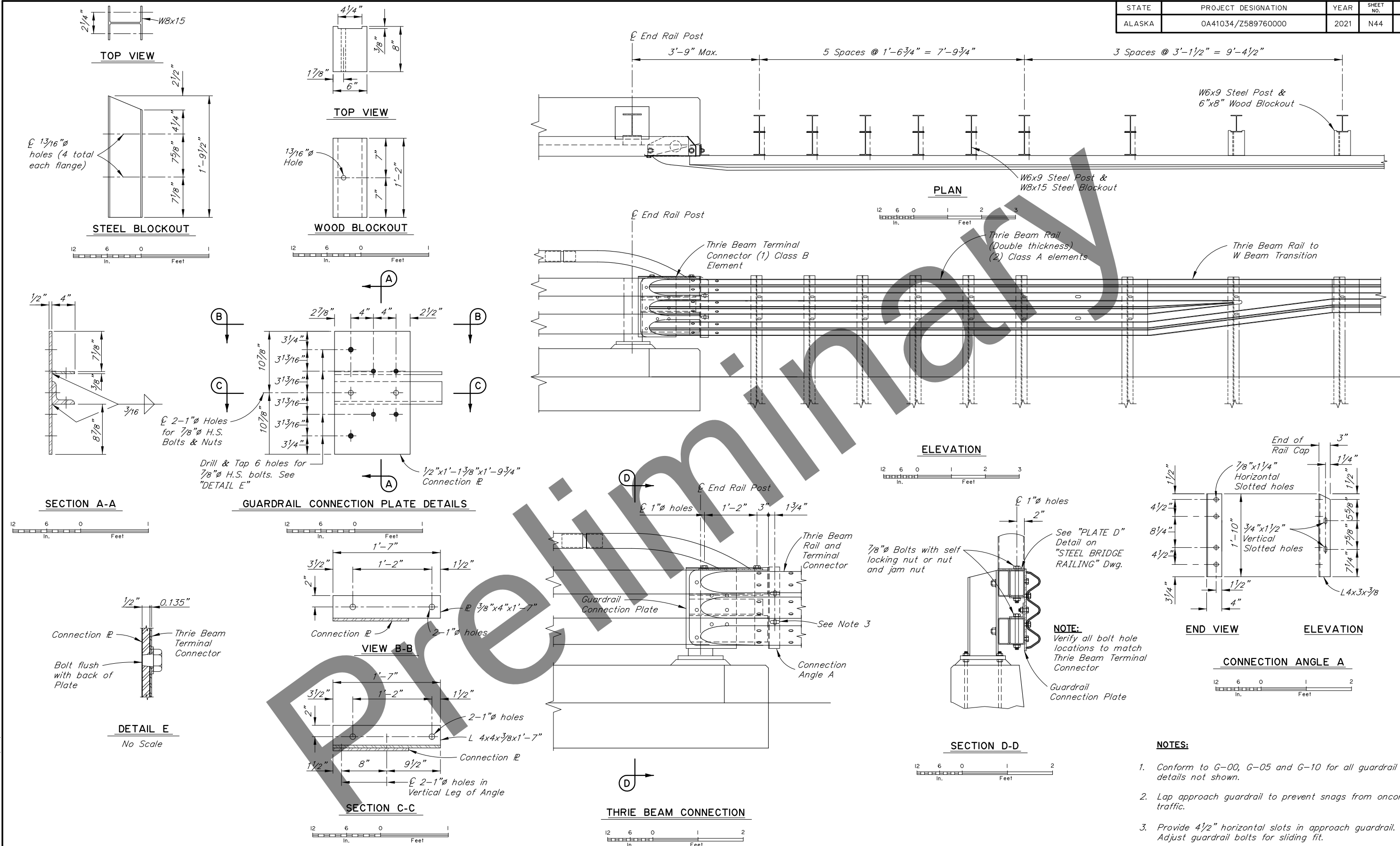
BRIDGE NO. 215
DWG. NO. 16

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STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A41034/Z589760000	2021	N44	N69



DESIGNED BY:	Elmer Marx	CHECKED:	Ben Fetterhoff
DRAWN BY:	Sam Solie	CHECKED:	Elmer Marx
QUANTITIES BY:	Elmer Marx	CHECKED:	Ben Fetterhoff

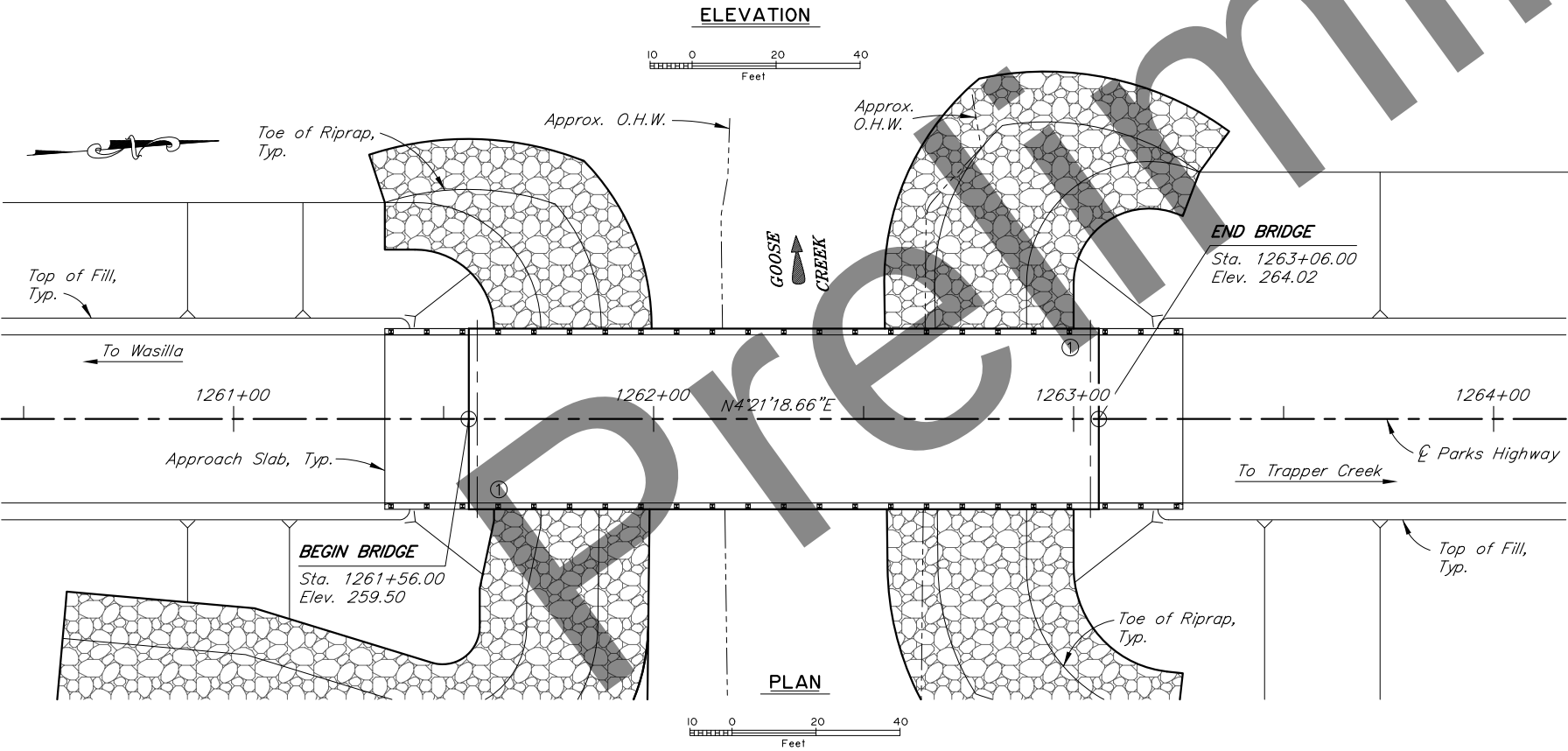
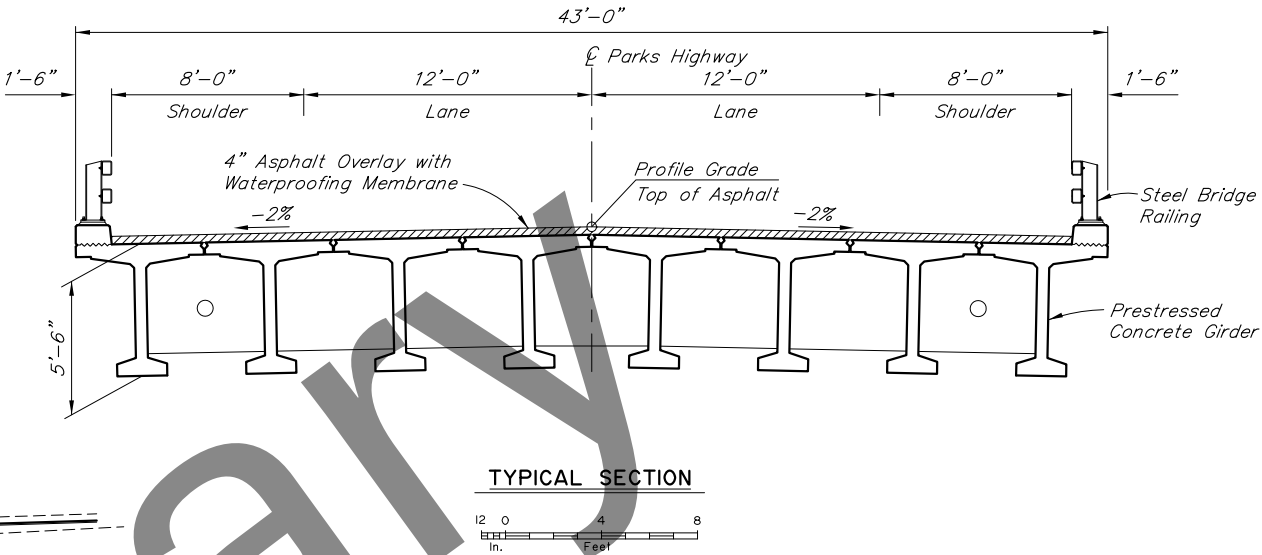
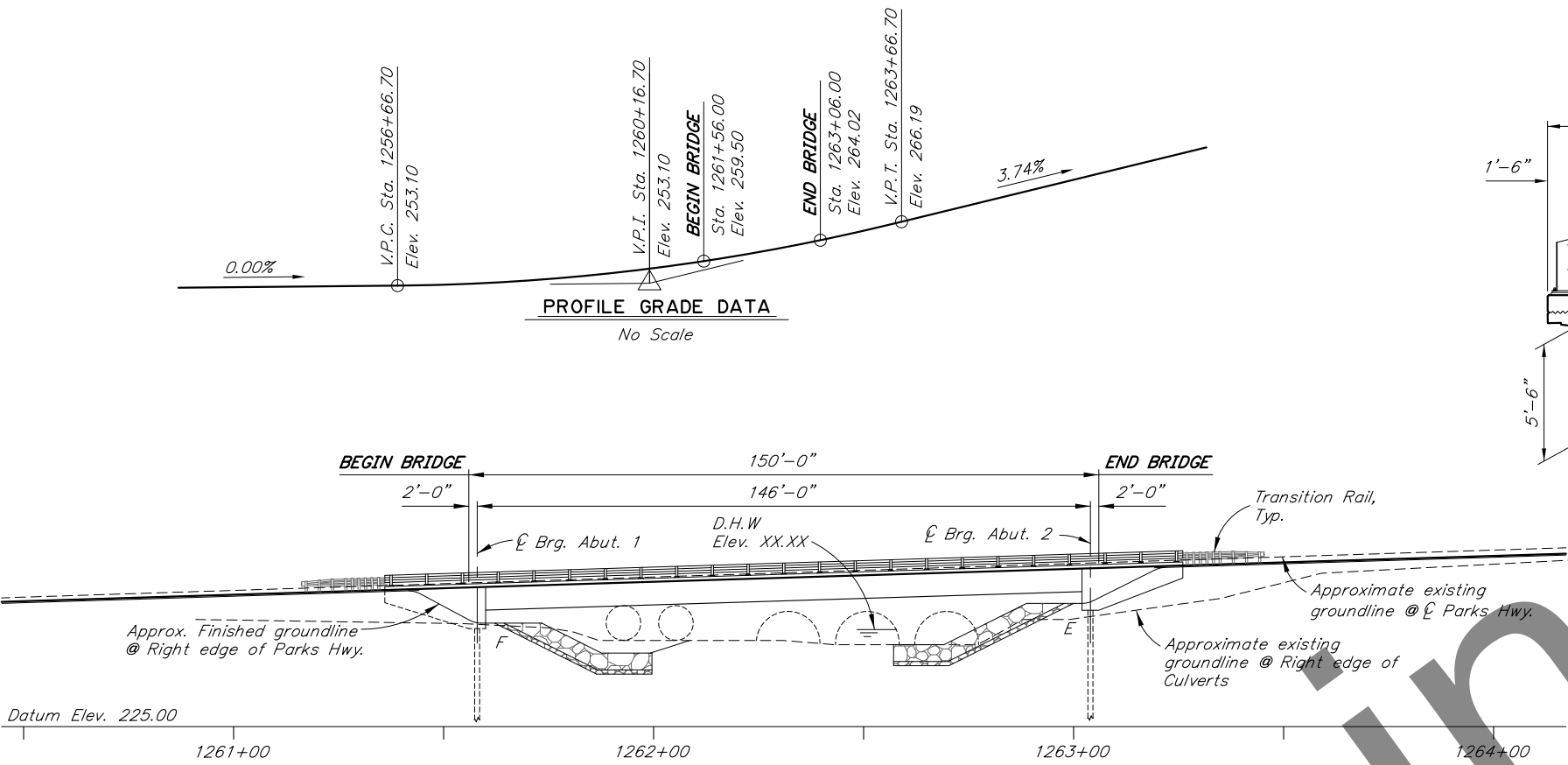
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION
3132 Channel Drive
Juneau, Alaska 99801
907-465-2975

MONTANA CREEK BRIDGE
PARKS HIGHWAY
TRANSITION RAIL, 3-TUBE


BRIDGE NO. 215
DWG. NO. 18

R:\cad\215\215-1-TRANSITION 3TUBE Mon, Oct/12/20 8:15am

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	OA41036/CFHWY00217	2021	N52	N69



DRAWING INDEX	
TITLE	DWG. NO.
GENERAL LAYOUT	1
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ABUTMENT DETAILS	7
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FRAMING PLAN AND TYPICAL SECTION	9
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APPROACH SLAB	12
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LOG OF TEST BORINGS	14-18

NOTES

① Approximate location of Bridge Number Plate.

DESIGNED BY:	Elmer Marx	CHECKED:	Douglas Gelineau	LAYOUT BY:	Elmer Marx	CHECKED BY:	Douglas Gelineau
DRAWN BY:	Sam Solie	CHECKED:	Elmer Marx	SPECIFICATIONS BY:	Elmer Marx	P S & E COMPARED:	Douglas Gelineau
QUANTITIES BY:	Elmer Marx	CHECKED:	Douglas Gelineau	APPROVAL RECOMMENDED BY:	Rich Pratt		

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION
3132 Channel Drive
Juneau, Alaska 99801
907-465-2975

GOOSE CREEK BRIDGE
PARKS HIGHWAY
GENERAL LAYOUT



BRIDGE NO. 2343
DWG. NO. 1

R:\cad\2343\2343-GENERAL LAYOUT Mon, Oct/12/20 8:40am

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A41036/CFHWY00217	2021	N53	N69

GENERAL NOTES

DESIGN:..... AASHTO LRFD Bridge Design Specifications, 2020 Edition, with latest interim specifications.

Seismic design per AASHTO Guide Specifications for LRFD Seismic Bridge Design, 2011 with latest interim revisions.

LIVE LOAD:..... HL-93

DEAD LOAD:..... Includes 50 psf for all wearing surfaces.

SEISMIC PARAMETERS:..... PGA = 0.52
S_s = 1.09
S₁ = 0.38
Site Class = C
Liquefaction Potential = Low
AASHTO 7% probability of exceedance in 75 years.

REINFORCEMENT:..... ASTM A706, Grade 60, F_y = 60,000 psi
ASTM A970 Headed bars, Class HA.
Space reinforcement evenly unless otherwise noted.

PRESTRESSED CONCRETE:..... See "GIRDERS" Dwg.

CONCRETE:..... Class A Concrete unless otherwise noted, f'c = 4000 psi

STRUCTURAL STEEL:..... ASTM A709, Grade 36T3, F_y = 36,000 psi
Galvanize structural steel in accordance with AASHTO M111 unless shown otherwise.

STRUCTURAL STEEL PILING:..... ASTM A709, GR50T3, F_y = 50,000 psi.
Pile Tip reinforcing is required.

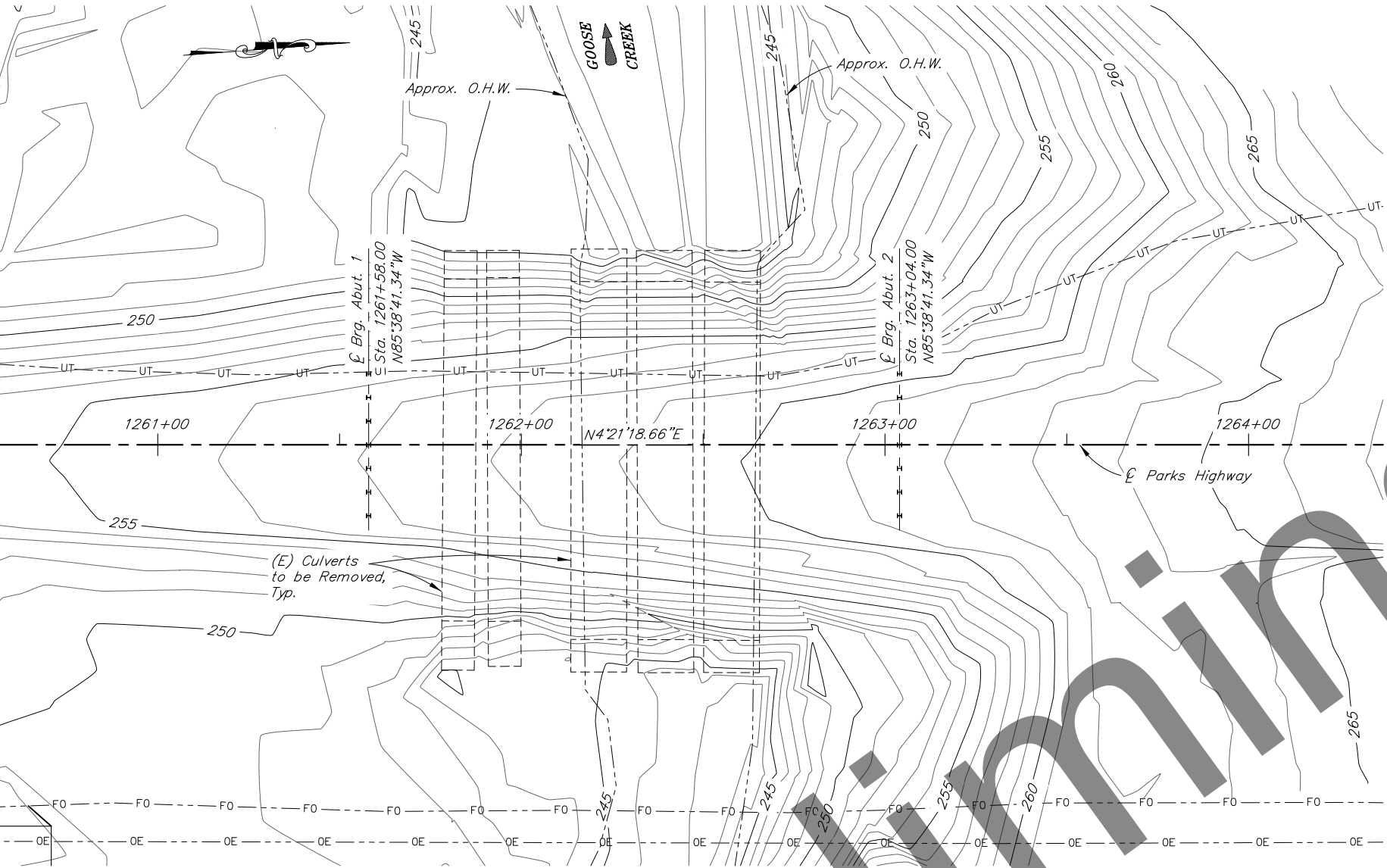
PILE DATA TABLE

LOCATION	PILE TYPE	DRIVING CRITERIA		DESIGN DATA			
		MINIMUM PENETRATION (ft)	ESTIMATED PILE TIP ELEVATION (ft)	DRIVING RESISTANCE (K)	STRENGTH I FACTORED LOAD (K)	NOMINAL RESISTANCE (K)	RESISTANCE FACTOR, φ
Abutment 1	HP14x117	40	160	555	360	555	0.65
Abutment 2	HP14x117	40	160	555	360	555	0.65

Difficult driving conditions are expected. Pilot bore hole required for each pile.

ABBREVIATIONS:

CL	= centerline	e.w.	= each way	MSE	= mechanically stabilized earth
Pl.	= plate	Ext.	= exterior	n.f.	= near face
&	= and	FO	= fiber optic cable	No.	= number
@	= at	F	= fixed	o.c.	= on center
Ø	= diameter	f.f.	= front/air face	O.H.W.	= ordinary high water
±	= approximate	f'c	= specified concrete compressive strength	OE	= overhead electrical line
Abut.	= abutment	f'ci	= specified concrete compressive strength at release	pcf	= pounds per cubic foot
Approx.	= approximate			psf	= pounds per square foot
b.f.	= back/dirt face			psi	= pounds per square inch
bot.	= bottom			R	= radius
Br.	= bridge	Ft.	= feet	R.O.W.	= right of way
btwn.	= between	Fy	= yield stress	R.T.	= right
Brg.	= bearings	Glav.	= galvanize	Rd.	= road
C.G.	= center of gravity	H.S.	= high strength	spcs.	= space, spaces
C.I.P.	= cast in place	Hwy.	= highway	Sta.	= station
CJP	= complete joint penetration	ID	= internal diameter	SF	= square feet
Clr.	= clear, clearance	Int.	= interior	SY	= square yard
CMP	= corrugated metal pipe	Jt.	= joint	Std.	= standard
CY	= cubic yard	K	= kips	Symm.	= symmetric
Dia.	= diameter	ksf	= 1000 pounds per square foot	Typ.	= typical
Dwg.	= drawing	ksi	= 1000 pounds per square inch	UT	= ultrasonic testing
E	= expansion	LBS or lb	= pounds	UT	= underground telephone cable
(E)	= existing	LF	= linear foot	V.P.C.	= point of vertical curve
EA	= each	LS	= lump sum	V.P.I.	= point of vertical intersection
Elev.	= elevation	LT.	= left	V.P.T.	= point of vertical tangent
e.f.	= each face	max.	= maximum	w/	= with
		min.	= minimum		



SITE PLAN



ESTIMATE OF QUANTITIES

ITEM NO.	ITEM	PAY UNIT	ESTIMATING UNIT	SUBST.	SUPERST.	TOTAL QUANTITY
202.0018.0000	Removal of Culvert Pipe, Bridge No. 4040	LS	LS	All Req'd	All Req'd	All Req'd
205.0006.0000	Structural Fill	CY	CY	1,510	---	1,510
501.0001.0000	Class A Concrete	LS	CY	98.3	130.5	228.8
501.0007.0000	Precast Concrete Member, 147'-6\" Decked Bulb-Tee	EA	EA	---	8	8
503.0001.0000	Reinforcing Steel	LS	LBS	16,720	---	16,720
503.0002.0000	Epoxy-Coated Reinforcing Steel	LS	LBS	---	20,420	20,420
505.0005.1417	Furnish Structural Steel Piles, HP14x117	LF	LF	1,281.2	---	1,281.2
505.0006.1417	Drive Structural Steel Piles, HP14x117	EA	EA	14	---	14
507.0001.0002	Steel Bridge Railing, 2-Tube	LF	LF	---	380.0	380.0
508.0001.0000	Waterproofing Membrane, Spray-Applied	LS	SF	---	7,600	7,600
520.0001.0000	Temporary Crossings Goose Creek	LS	LS	All Req'd	All Req'd	All Req'd
606.0016.0000	Transition Rail	EA	EA	---	4	4
611.0001.0001	Riprap, Class I	CY	CY	500	---	500
611.0001.0003	Riprap, Class III	CY	CY	2,500	---	2,500
631.0002.0001	Geotextile, Erosion Control, Class I	SY	SY	1,500	---	1,500

Item numbers are for reference only. Quantities shown are not necessarily the pay quantities nor the total quantity of the particular item.

TBD

DESIGNED BY:	Elmer Marx	CHECKED:	Douglas Gellineau
DRAWN BY:	Sam Sollie	CHECKED:	Elmer Marx
QUANTITIES BY:	Elmer Marx	CHECKED:	Douglas Gellineau

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION
3132 Channel Drive
Juneau, Alaska 99801
907-465-2975

GOOSE CREEK BRIDGE
PARKS HIGHWAY
SITE PLAN



BRIDGE NO. 2343
DWG. NO. 2

RIPRAP TABLE							
POINT	STATION	OFFSET	ELEVATION	POINT	STATION	OFFSET	ELEVATION
1	1260+59.3	52.2' Right	253.00'	26	1261+31.9	107.6' Right	245.15'
2	1261+02.5	56.0' Right	253.00'	27	1261+90.8	125.6' Right	245.15'
3	1261+43.9	68.7' Right	253.00'	28	1261+98.1	101.7' Right	244.97'
4	1261+69.7	49.5' Right	253.00'	29	1263+29.9	58.8' Left	255.00'
5	1261+69.7	41.5' Right	253.00'	30	1263+28.3	59.4' Left	255.00'
6	1261+73.1	25.4' Right	251.30'	31	1262+88.8	32.1' Left	255.00'
7	1261+73.1	21.5' Left	251.30'	32	1262+88.8	35.3' Right	255.00'
8	1261+43.1	51.5' Left	251.30'	33	1263+20.9	71.2' Right	255.00'
9	1261+36.0	51.5' Left	251.30'	34	1263+24.7	71.6' Right	255.00'
10	1261+46.3	53.9' Left	250.00'	35	1263+08.5	71.9' Right	253.00'
11	1261+58.8	54.6' Left	248.00'	36	1262+98.9	70.9' Right	251.00'
12	1261+68.2	53.4' Left	246.00'	37	1262+91.1	69.6' Right	249.00'
13	1261+76.5	51.2' Left	243.96'	38	1262+84.2	67.8' Right	247.00'
14	1261+84.5	37.9' Left	244.04'	39	1262+76.7	65.4' Right	244.62'
15	1261+87.5	21.5' Left	244.12'	40	1262+70.8	53.4' Right	244.55'
16	1261+87.0	25.4' Right	244.39'	41	1262+67.7	35.3' Right	244.44'
17	1261+86.8	41.5' Right	244.48'	42	1262+66.9	31.4' Left	244.07'
18	1261+86.7	49.5' Right	244.52'	43	1262+69.8	49.5' Left	243.87'
19	1261+77.8	72.6' Right	244.82'	44	1262+76.1	61.9' Left	243.73'
20	1261+58.9	84.2' Right	245.05'	45	1262+83.0	69.9' Left	243.65'
21	1261+39.3	83.7' Right	245.15'	46	1262+91.5	70.7' Left	246.00'
22	1260+99.8	71.6' Right	245.15'	47	1262+98.8	70.4' Left	248.00'
23	1260+57.9	67.9' Right	245.15'	48	1263+06.4	69.3' Left	250.00'
24	1260+55.7	92.8' Right	245.15'	49	1263+14.5	66.9' Left	252.00'
25	1260+95.0	96.2' Right	245.15'	50	1263+23.8	62.7' Left	254.00'

RADIUS TABLE	
CURVE	RADIUS
R1	30'-0"
R2	20'-0"
R3	29'-2"
R4	36'-2"

HYDRAULIC & HYDROLOGIC SUMMARY, BRIDGE NO. 2343

Flood Frequency (Yr.)	100	500	Regulatory
Exceedance Probability (%)	1	2	-
Discharge (cfs)	5,780*	9,360*^	1,537*
Water Surface Elevation (ft)	250.3	250.7	247.0
Anticipated Add'l Backwater (ft)	0	0	0
Contraction Scour (ft)	0.3	1.1	n.c
Abutment Scour (ft)	n.c.	n.c.	n.c.
Pier Scour (ft)	n.a.	n.a	n.a
Long-Term Degradation (ft)	0 (Approx.)		

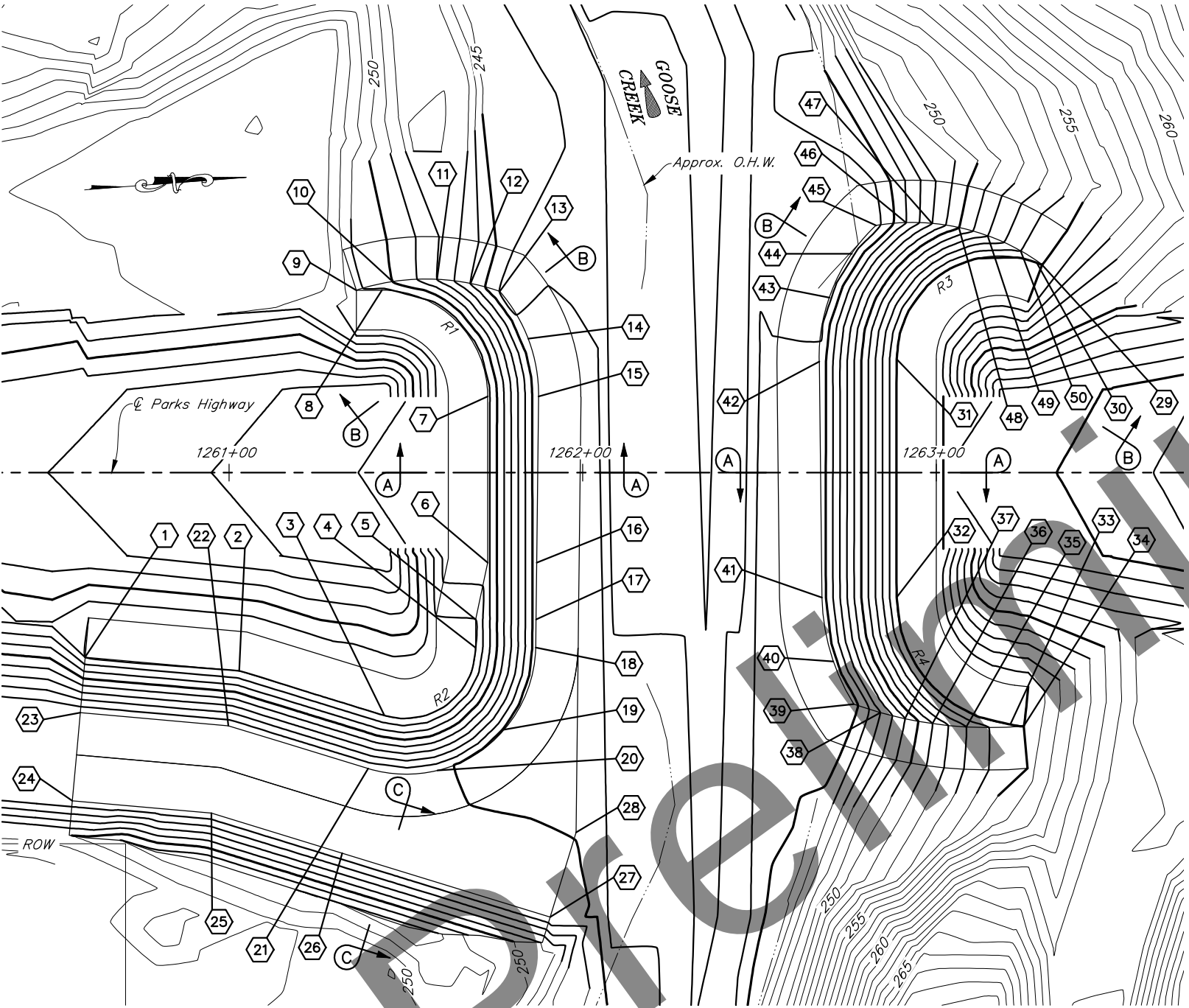
Drainage Area: Goose Creek and Sheep Creek diverge approximately 5.5 miles upstream of this crossing. The drainage area upstream of the split is 125.0 square miles and the drainage area downstream of the split is 35.0 square miles.

Datum: NGVD29

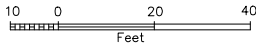
Hydraulic Capacity at Point of Roadway Overtopping: 6,250* cfs

* Includes flow through culverts located within floodplain to the south.

^ Includes roadway overtopping flow.



RIPRAP LAYOUT



DESIGNED BY:	Designed	CHECKED:	Engineer
DRAWN BY:	Drafter	CHECKED:	Engineer
QUANTITIES BY:	Engineer	CHECKED:	Engineer

PRELIMINARY PLAN

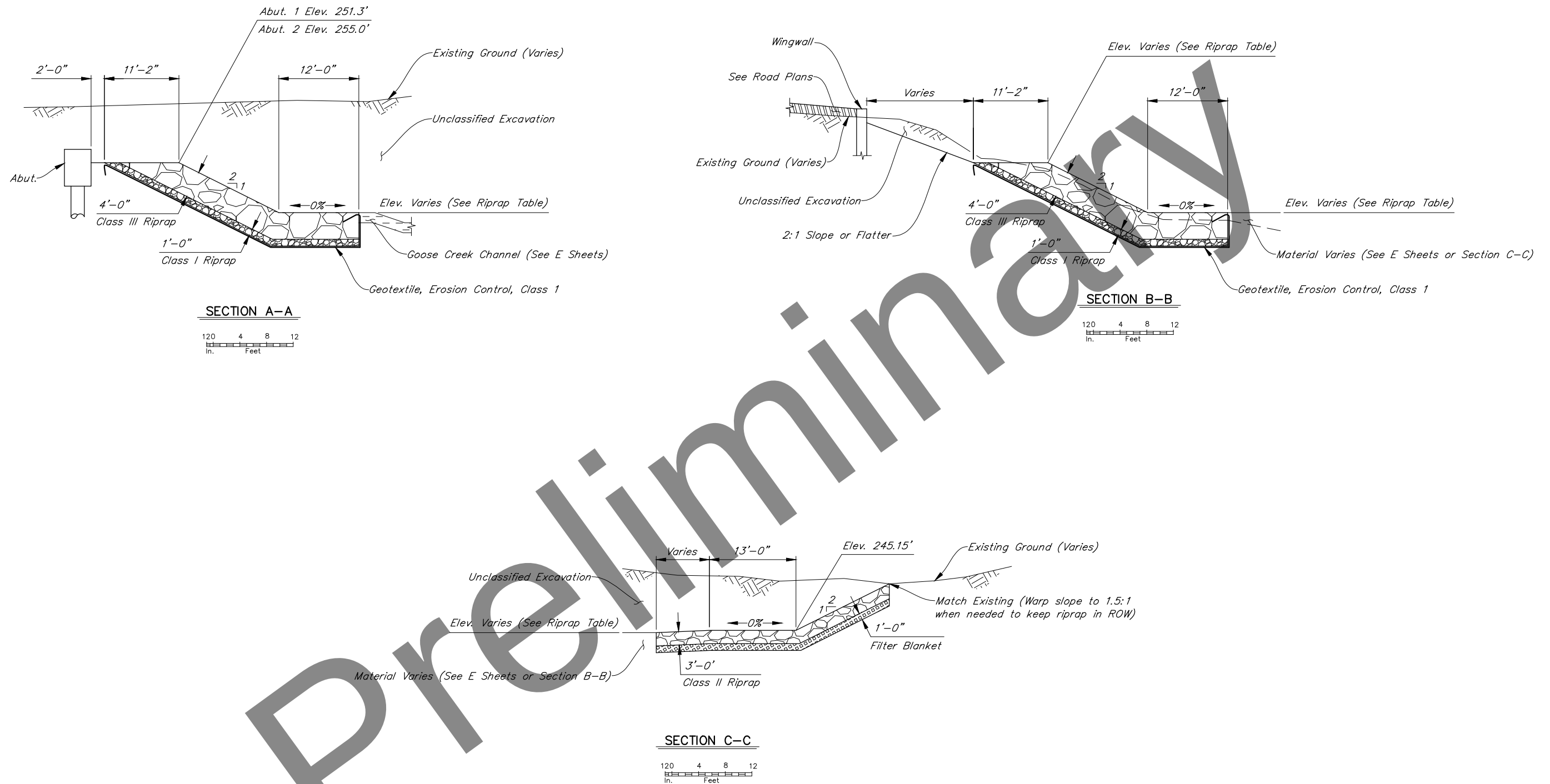
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION
3132 Channel Drive
Juneau, Alaska 99801
907-465-2975

GOOSE CREEK BRIDGE
PARKS HIGHWAY
RIPRAP LAYOUT



BRIDGE NO. 2343
DWG. NO. 3

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A41036/CFHWY00217	2021	N55	N69



DESIGNED BY:	Designed	CHECKED:	Engineer
DRAWN BY:	Drafter	CHECKED:	Engineer
QUANTITIES BY:	Engineer	CHECKED:	Engineer

PRELIMINARY PLAN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION
3132 Channel Drive
Juneau, Alaska 99801
907-465-2975

GOOSE CREEK BRIDGE
PARKS HIGHWAY
RIPRAP DETAILS



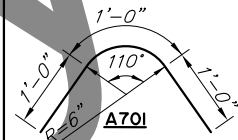
BRIDGE NO. 2343
DWG. NO. 3

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STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A41036/CFHWY00217	2021	N56	N69

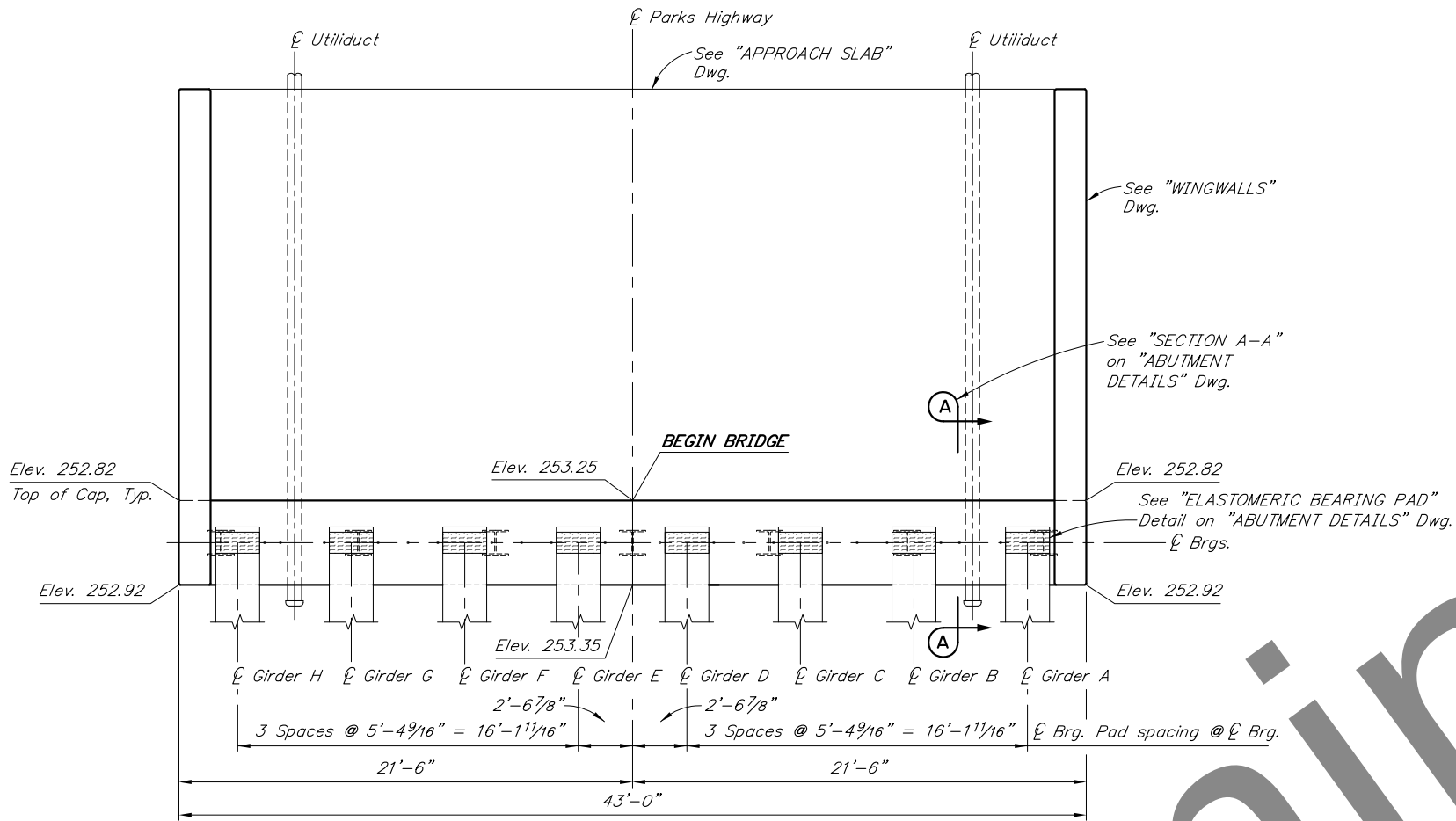
REINFORCING STEEL - ABUTMENT I

MARK	NOTE	SIZE	NO.	LENGTH	TYPE	BENDING DIAGRAM
A401		4	120	VARIES	STIRRUP	
A501	E	5	42	18'-9"	STIRRUP	
A601	E	6	10	39'-7"	---	
A602	E,M,S	6	7	42'-8"	---	
A701	E	7	8	3'-0"	BENT	
A801		8	10	42'-8"	---	
A802	E	8	21	8'-0"	---	
A1001	H,M,S	10	14	42'-8"	HEADED	

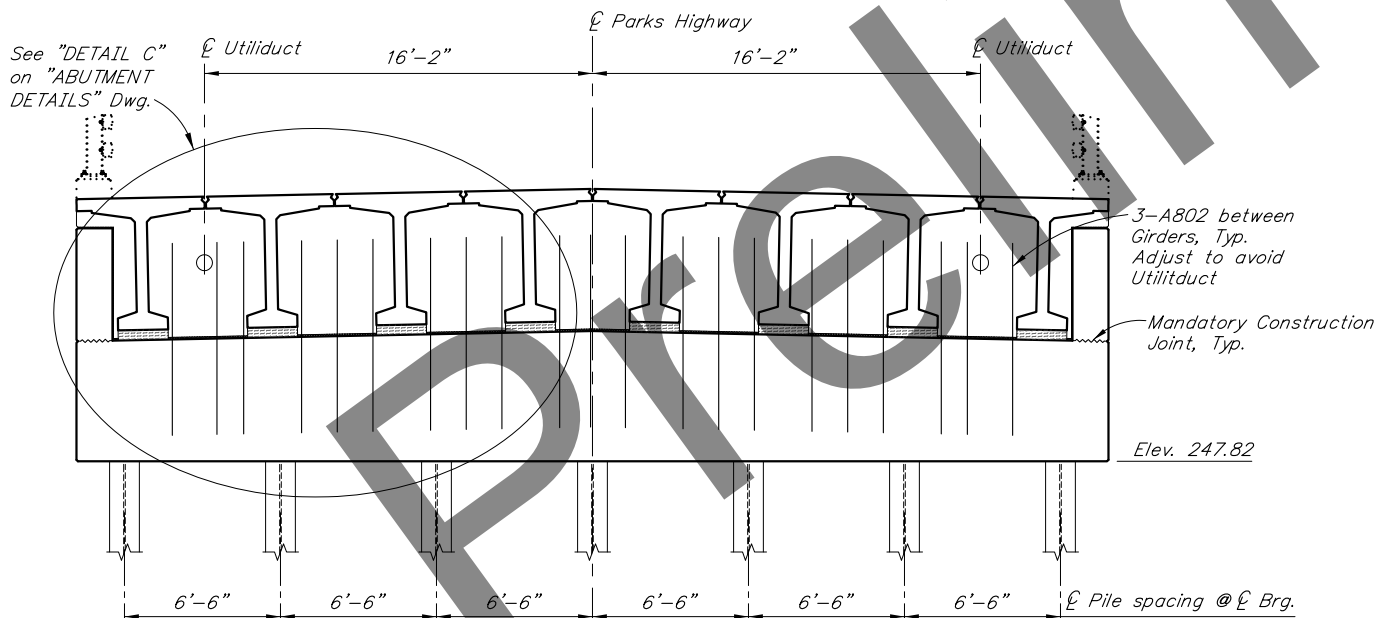


42'-8"
A1001

E - Epoxy-Coated
H - Headed reinforcing steel
M - Field adjust to match cross slope
S - Splice permitted. Splice length not included



PLAN



ELEVATION

(Looking back on Station)



DESIGNED BY:	Elmer Marx	CHECKED:	Douglas Gellneau
DRAWN BY:	Sam Solie	CHECKED:	Elmer Marx
QUANTITIES BY:	Elmer Marx	CHECKED:	Douglas Gellneau

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION
3132 Channel Drive
Juneau, Alaska 99801
907-465-2975

GOOSE CREEK BRIDGE
PARKS HIGHWAY
ABUTMENT 1

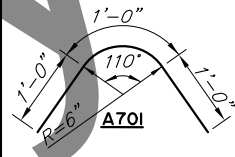


BRIDGE NO. 2343
DWG. NO. 5

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A41036/CFHWY00217	2021	N57	N69

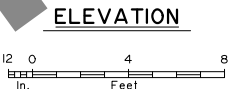
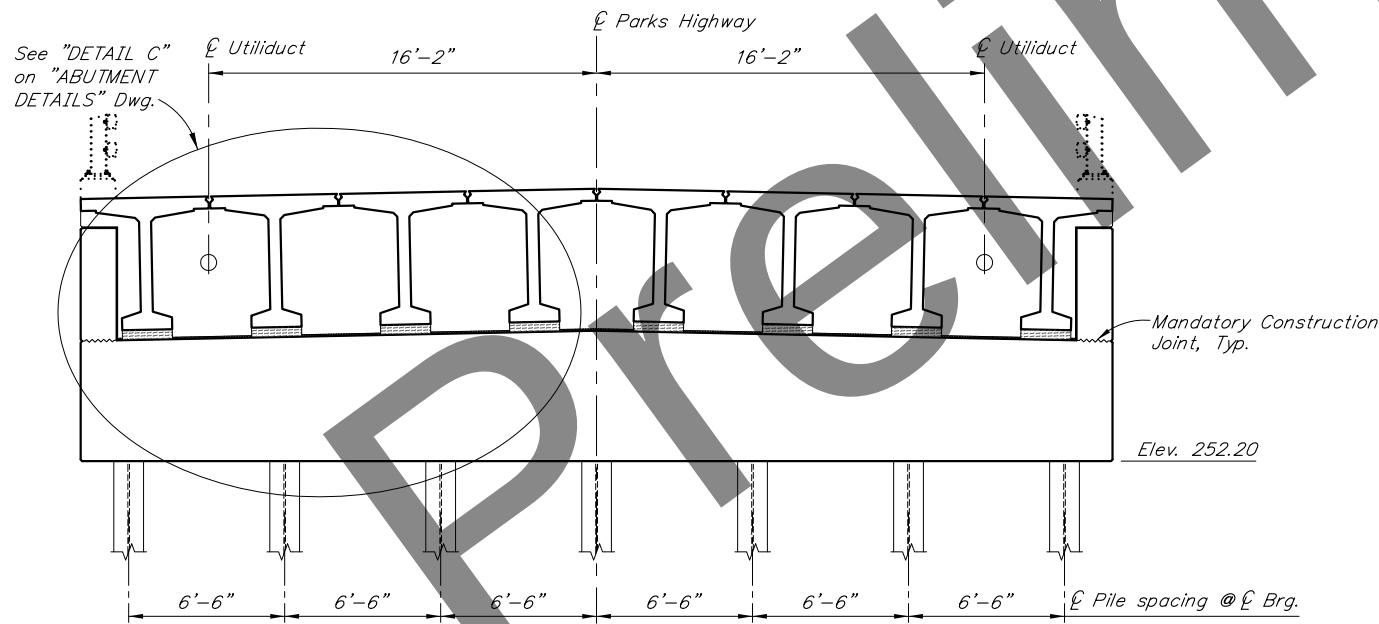
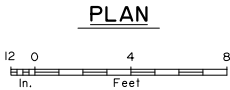
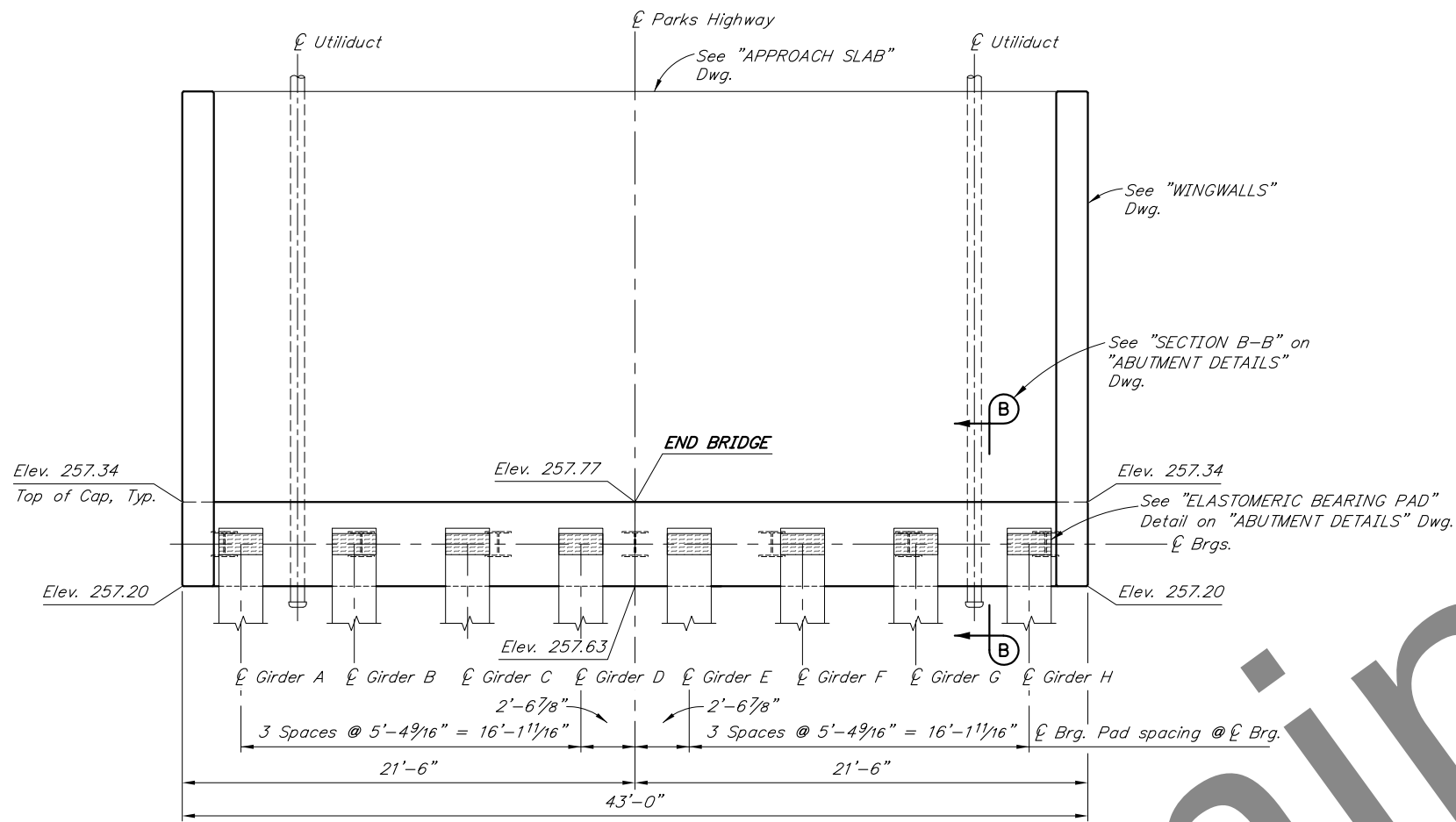
REINFORCING STEEL - ABUTMENT 2

MARK	NOTE	SIZE	NO.	LENGTH	TYPE	BENDING DIAGRAM
A401		4	120	VARIES	STIRRUP	
A501	E	5	42	18'-9"	STIRRUP	
A601	E	6	10	39'-7"	---	
A602	E,M,S	6	7	42'-8"	---	
A701	E	7	8	3'-0"	BENT	
A801		8	10	42'-8"	---	
A1001	H,M,S	10	14	42'-8"	HEADED	



42'-8"
A1001

E - Epoxy-Coated
H - Headed reinforcing steel
M - Field adjust to match cross slope
S - Splice permitted. Splice length not included



DESIGNED BY:	Elmer Marx	CHECKED:	Douglas Gellineau
DRAWN BY:	Sam Solie	CHECKED:	Elmer Marx
QUANTITIES BY:	Elmer Marx	CHECKED:	Douglas Gellineau

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION
3132 Channel Drive
Juneau, Alaska 99801
907-465-2975

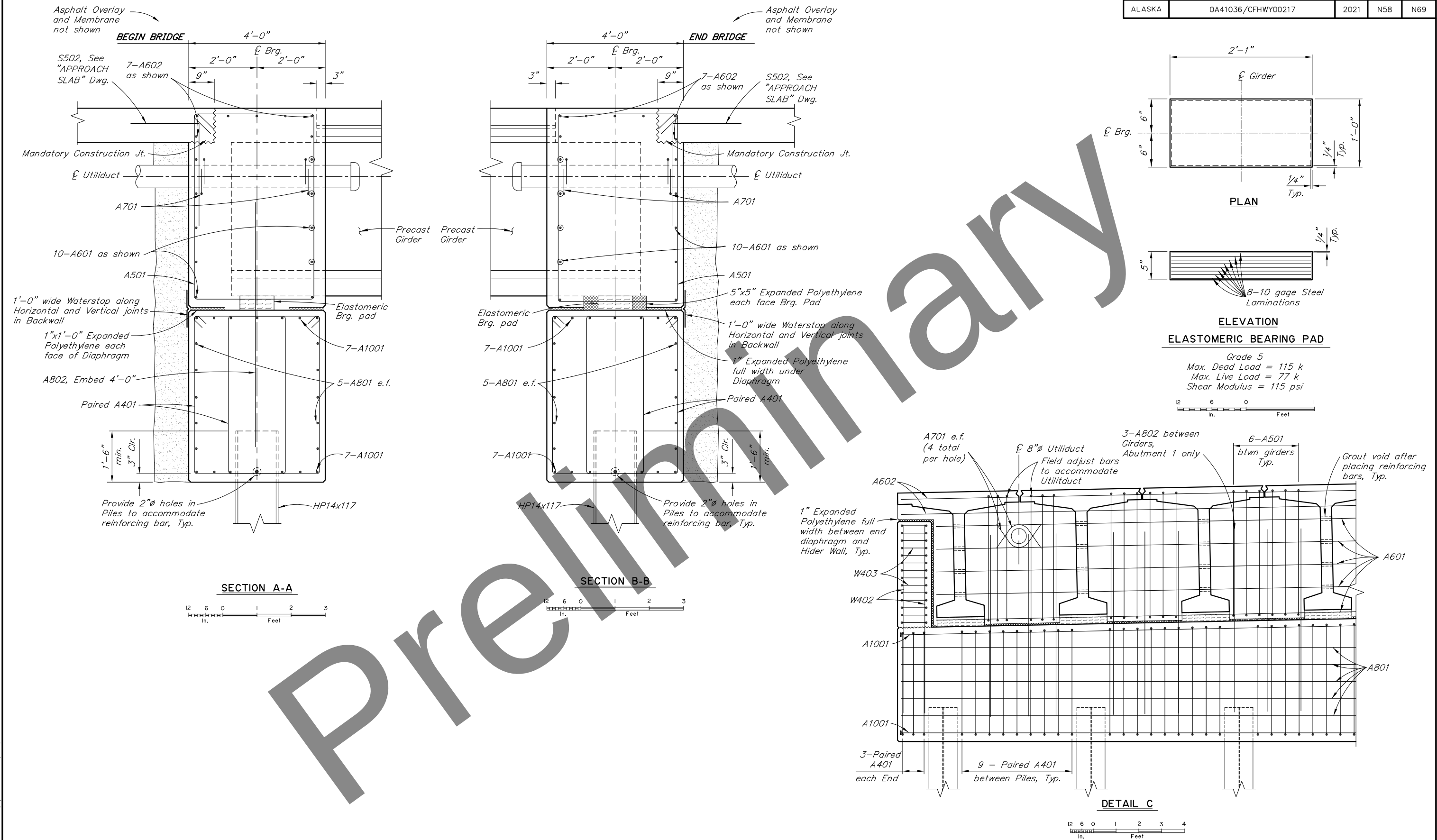
GOOSE CREEK BRIDGE
PARKS HIGHWAY
ABUTMENT 2



BRIDGE NO. 2343
DWG. NO. 6

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STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A41036/CFHWY00217	2021	N58	N69

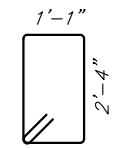
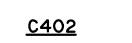


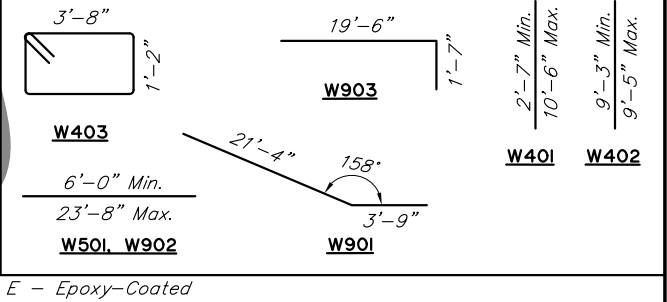
DESIGNED BY: Elmer Marx	CHECKED: Douglas Gellineau	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION 3132 Channel Drive Juneau, Alaska 99801 907-465-2975	GOOSE CREEK BRIDGE PARKS HIGHWAY ABUTMENT DETAILS	 BRIDGE NO. 2343 DWG. NO. 7
DRAWN BY: Sam Sollie	CHECKED: Elmer Marx			
QUANTITIES BY: Elmer Marx	CHECKED: Douglas Gellineau			

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STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	OA41036/CFHWY00217	2021	N59	N69

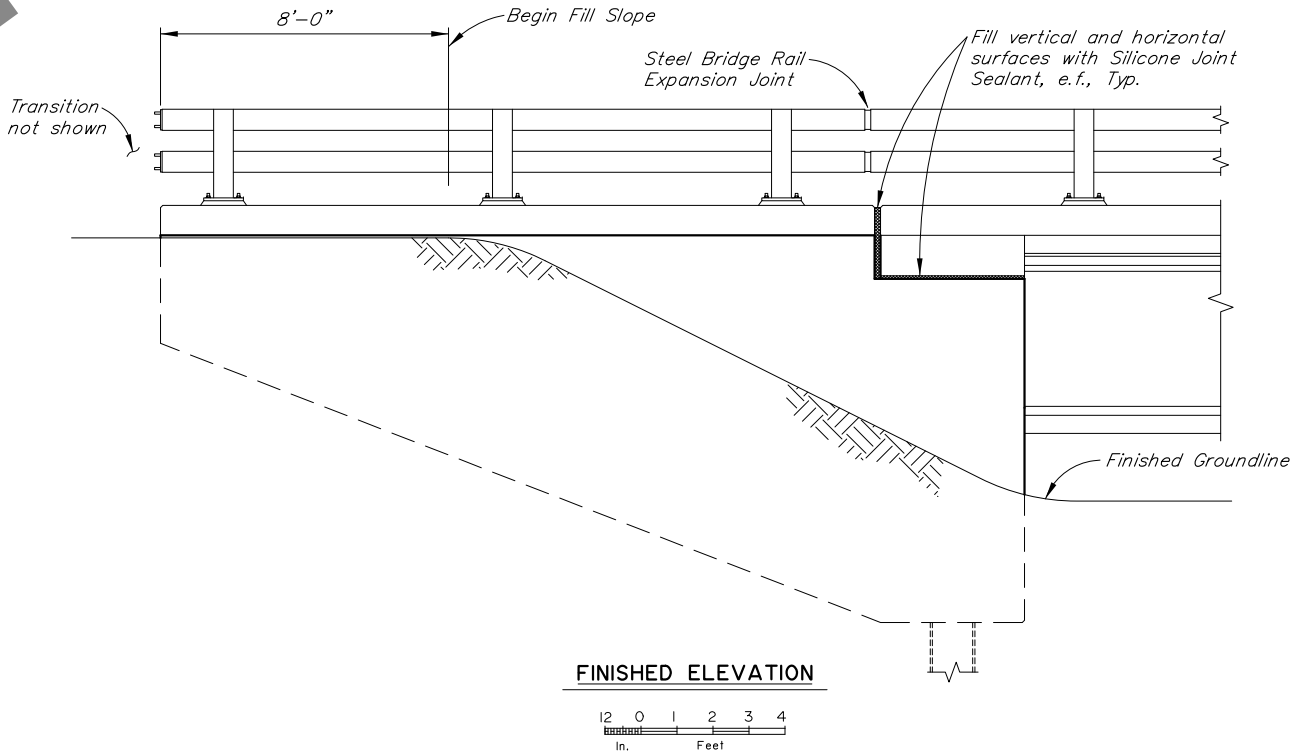
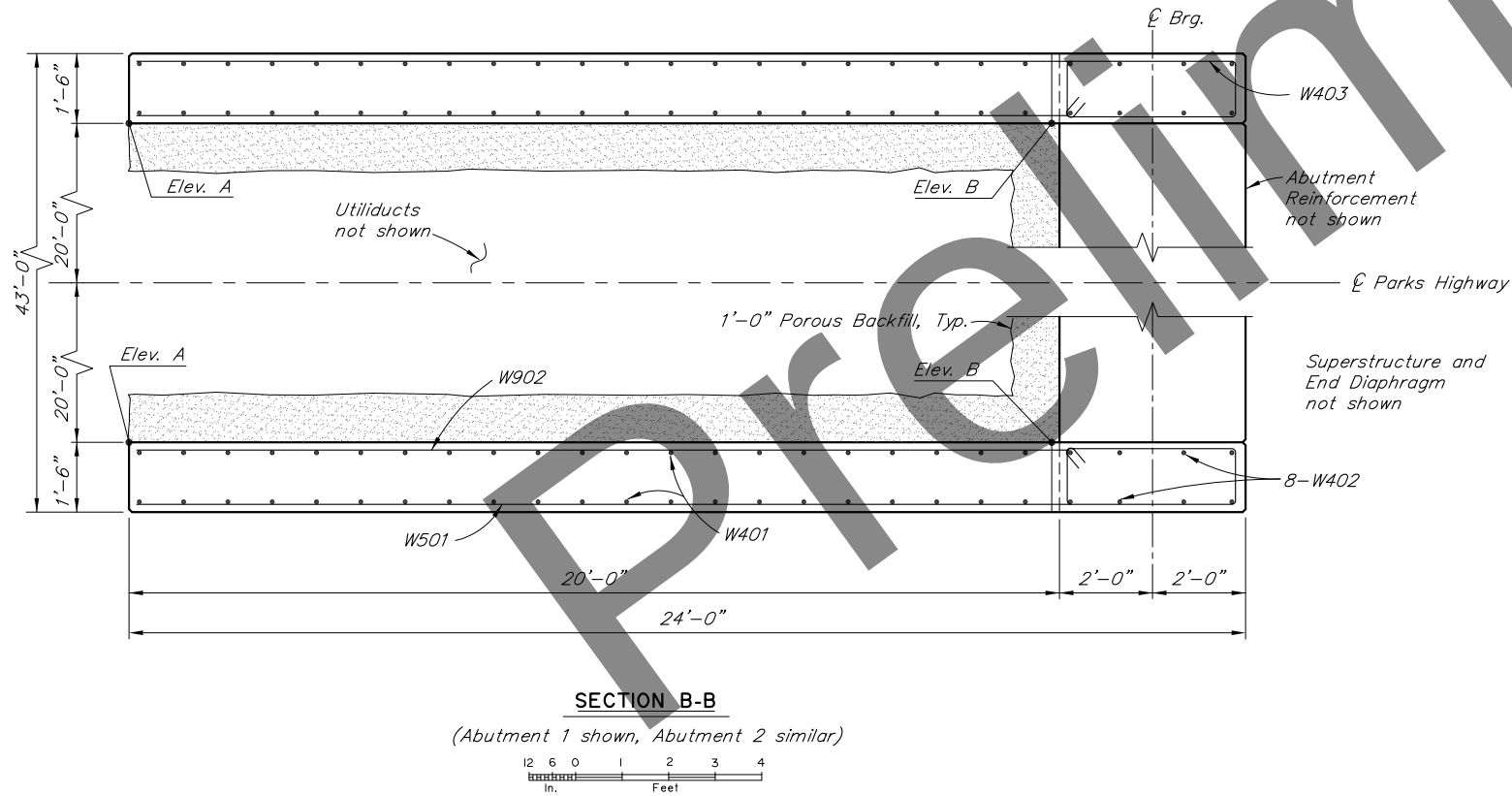
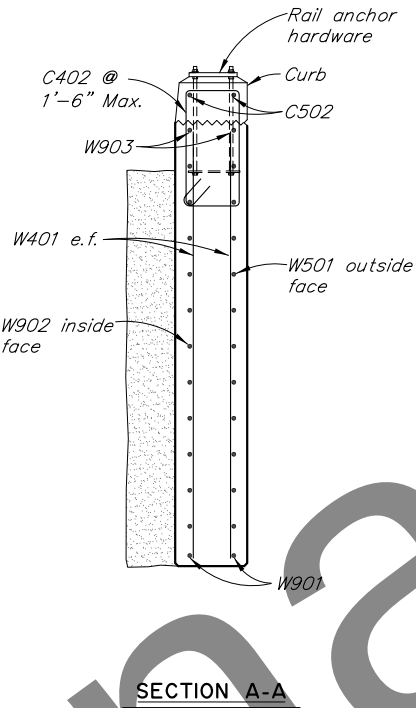
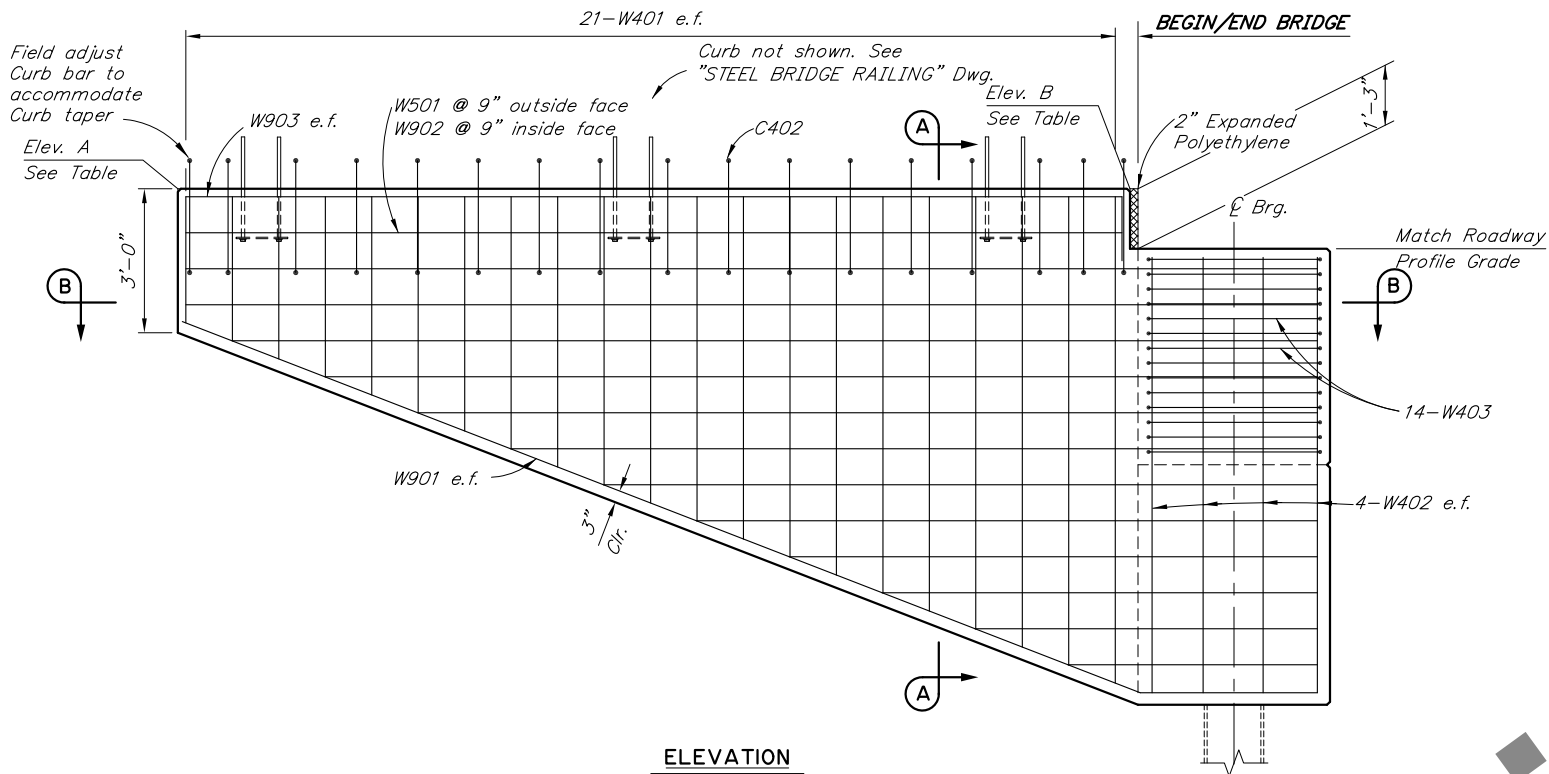
REINFORCING STEEL - ONE ABUTMENT

MARK	NOTE	SIZE	NO.	LENGTH	TYPE	BENDING DIAGRAM
W401		4	84	VARIES	---	
W402		4	16	VARIES	---	
W403		4	28	10'-5"	STIRRUP	
W501		5	26	VARIES	---	
W901		9	4	25'-1"	BENT	
W902		9	26	VARIES	---	
W903		9	4	21'-1"	BENT	
C402	E	4	34	7'-7"	STIRRUP	
C502	E	5	4	19'-6"	---	



TOP OF WINGWALL ELEVATION TABLE (FT)

LOCATION	A	B
ABUTMENT 1	258.25	258.76
ABUTMENT 2	263.98	263.29



DESIGNED BY:	Elmer Marx	CHECKED:	Douglas Gellineau
DRAWN BY:	Sam Solie	CHECKED:	Elmer Marx
QUANTITIES BY:	Elmer Marx	CHECKED:	Douglas Gellineau

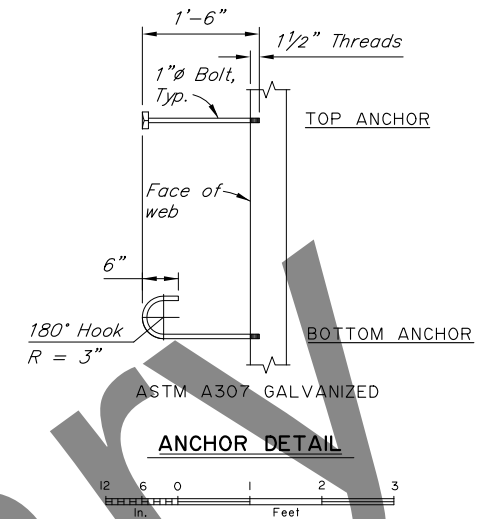
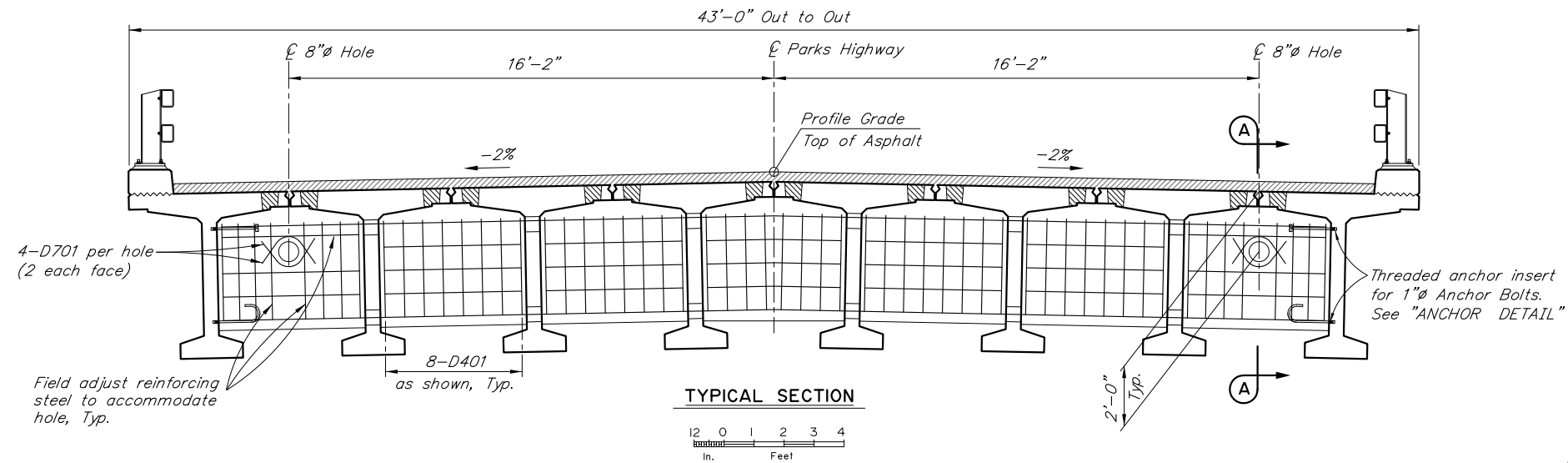
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION
3132 Channel Drive
Juneau, Alaska 99801
907-465-2975

GOOSE CREEK BRIDGE
PARKS HIGHWAY
WINGWALLS

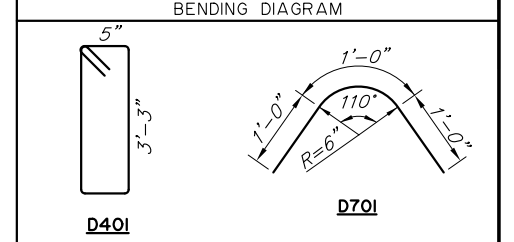


BRIDGE NO. 2343
DWG. NO. 8

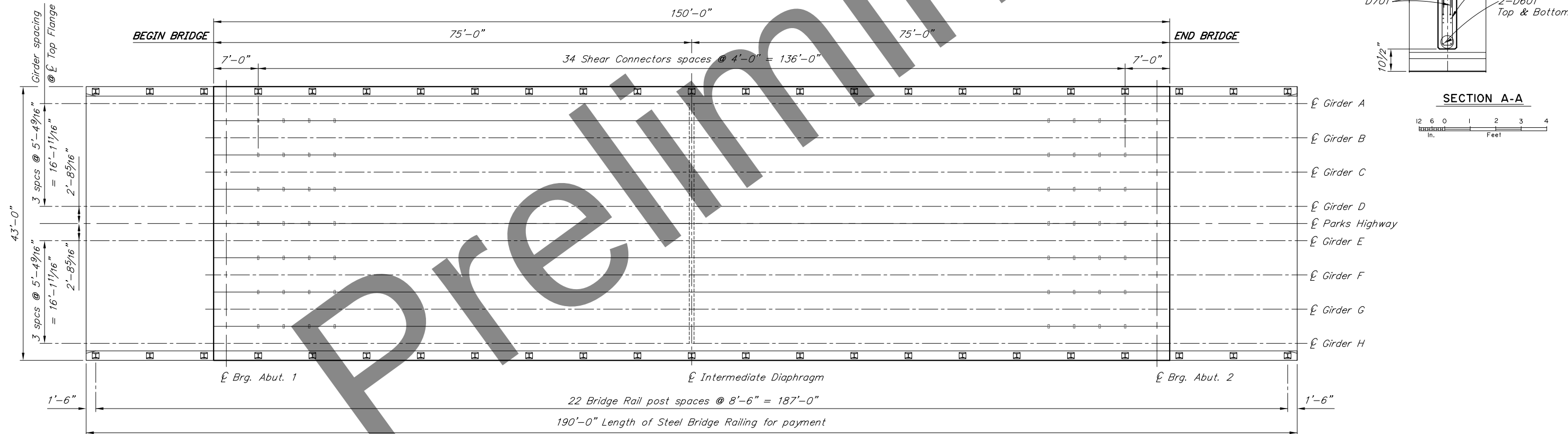
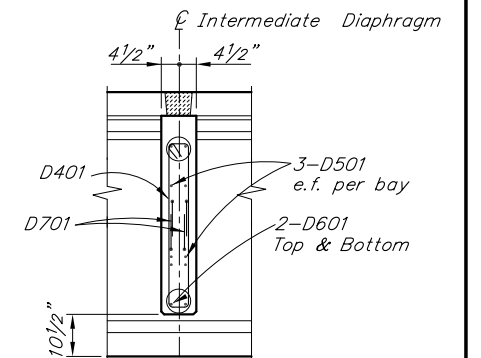
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A41036/CFHWY00217	2021	N60	N69



REINFORCING STEEL					
MARK	NOTE	SIZE	NO.	LENGTH	TYPE
D401	E	4	56	8'-1"	STIRRUP
D501	E	5	42	4'-6"	---
D601	E,M	6	4	36'-9"	---
D701	E	7	8	3'-0"	BENT



E – Epoxy-Coated
M – Field adjust to match cross slope



FRAMING PLAN



DESIGNED BY:	<i>Elmer Marx</i>	CHECKED:	<i>Douglas Gelineau</i>
DRAWN BY:	<i>Sam Sollie</i>	CHECKED:	<i>Elmer Marx</i>
QUANTITIES BY:	<i>Elmer Marx</i>	CHECKED:	<i>Douglas Gelineau</i>

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION
3132 Channel Drive
Juneau, Alaska 99801
907-465-2975

GOOSE CREEK BRIDGE
PARKS HIGHWAY
FRAMING PLAN AND TYPICAL SECTION



BRIDGE NO. 2343

DWG. NO. 9

R:\cad\2343\2343-1-TYPICAL SECTION Mon, Oct/12/20 8:46am

R:\cad\2343\2343-1-GIRDERS Mon, Oct/12/20 8:46am

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A41036/CFHWY00217	2021	N61	N69

REINFORCING STEEL - ONE GIRDER

MARK	NOTE	SIZE	NO.	LENGTH	TYPE	BENDING DIAGRAM
G401	E	4	214	5'-1"	BENT	
G401X	E,X	4	245	5'-1"	BENT	
G402	E,S	4	8	142'-4"	---	
G402X	E,S,X	4	8	142'-4"	---	
G403	E	4	384	6'-8"	BENT	
G404	E	4	76	3'-3"	BENT	
G501	E	5	214	4'-11"	---	
G501X	E,X	5	245	5'-7"	BENT	
G502	E,S	5	8	148'-8"	BENT	
G502X	E,S,X	5	8	148'-8"	BENT	
G601	E	6	20	6'-8"	BENT	
C401	E,L,X	4	101	4'-9"	BENT	
C501	E,S,X	5	2	149'-8"	---	
G401	E	4	214	5'-1"	BENT	
G401X	E,X	4	245	5'-1"	BENT	

E - Epoxy-Coated reinforcing steel
L - Ship 6 loose per exterior girder
S - Splices permitted. Length does not include splices. Minimum lap splice length for splices shall be 2'-0" for #4 bars and 2'-6" for #5 bars
X - Exterior girders only

GIRDER NOTES:

Class P Concrete: at Stress Transfer..... $f'ci = 6,500$ psi
at 28 Days..... $f'c = 8,000$ psi

$1/2"$ ϕ low-relaxation prestressing strands with an ultimate strength of 270 ksi and a cross sectional area of 0.153 in².

Steel stresses: Pretensioning - Jacking Stress 189 ksi
After initial losses 171 ksi
After all losses 141 ksi

One inch clear cover on reinforcing steel unless otherwise noted.

See "FRAMING PLAN AND TYPICAL SECTION" Dwg. for Shear Connector spacing.

Deflect forms to compensate for camber.

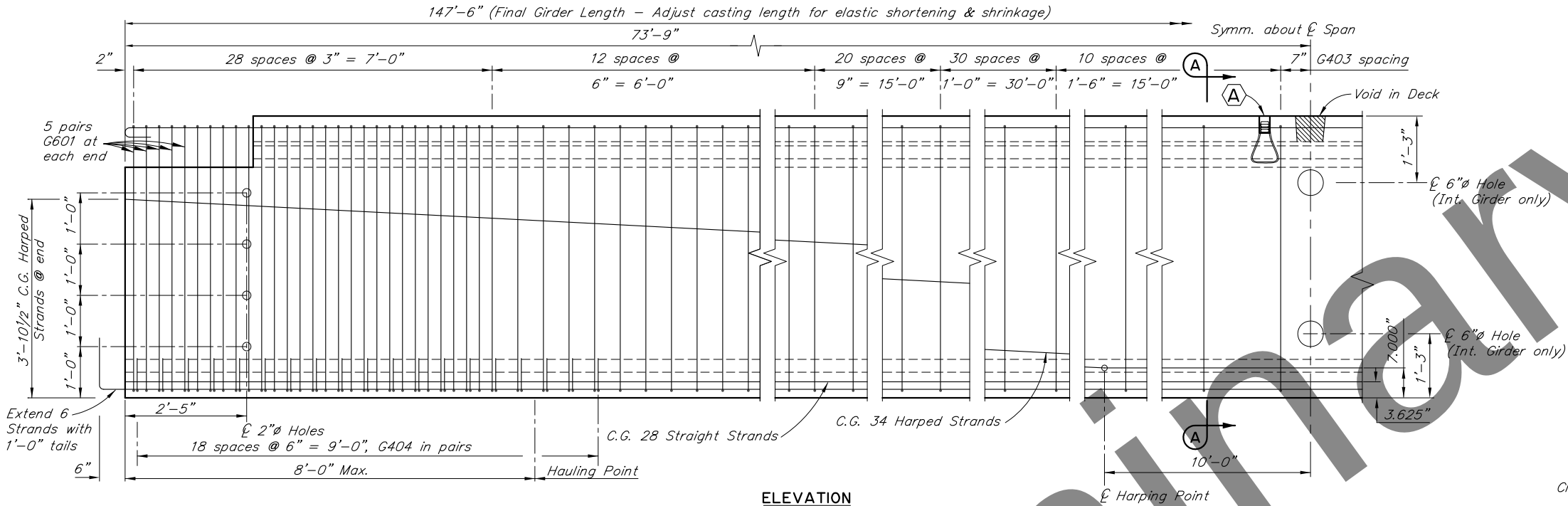
Galvanize structural steel embedded in girders except for shear connectors.

1"x1'-0" Coil Anchor Insert for vertical adjustment of girders. Recess 2".
Prevent concrete from filling hole.

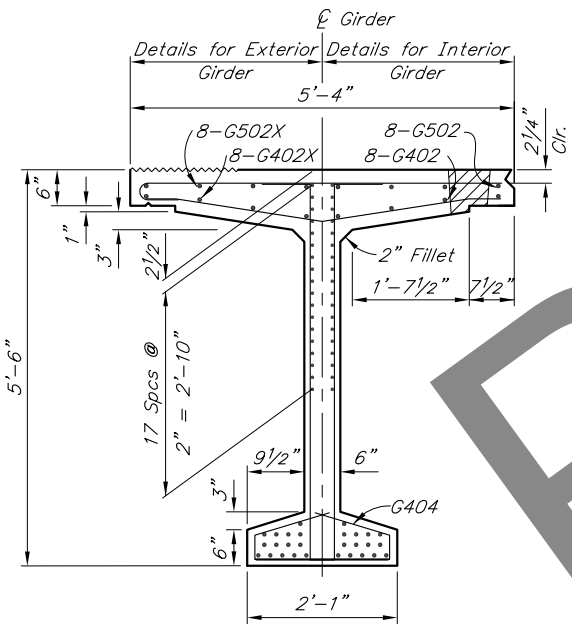
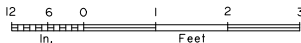
Omit Shear Key, Shear Key Connector and Deck Void in exterior face of exterior girders.

Cast ends of girders plumb with respect to roadway grade. Install web holes and web anchor inserts parallel to $\bar{C}$ bearing.

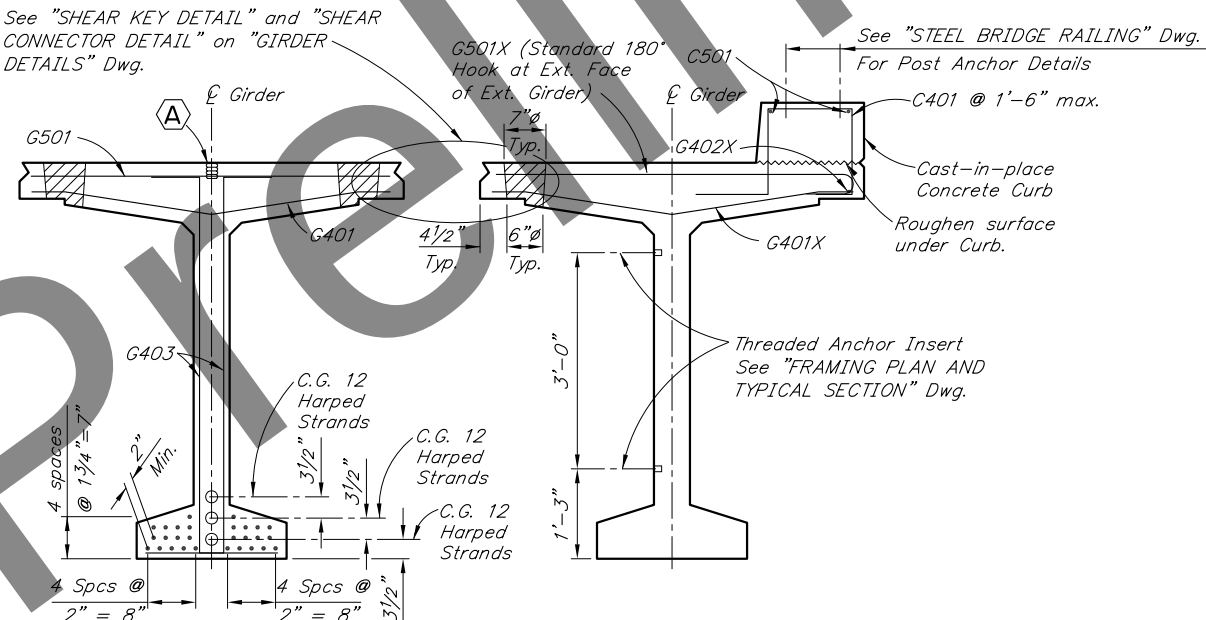
Finish top flange with light broom finish. Roughen the surface under the Curb.



ELEVATION



END VIEW



SECTION A-A

EXTERIOR GIRDER NEAR MID SPAN

(Unrelated Reinforcement not shown)

DESIGNED BY:	Elmer Marx	CHECKED:	Douglas Gellineau
DRAWN BY:	Sam Solie	CHECKED:	Elmer Marx
QUANTITIES BY:	Elmer Marx	CHECKED:	Douglas Gellineau

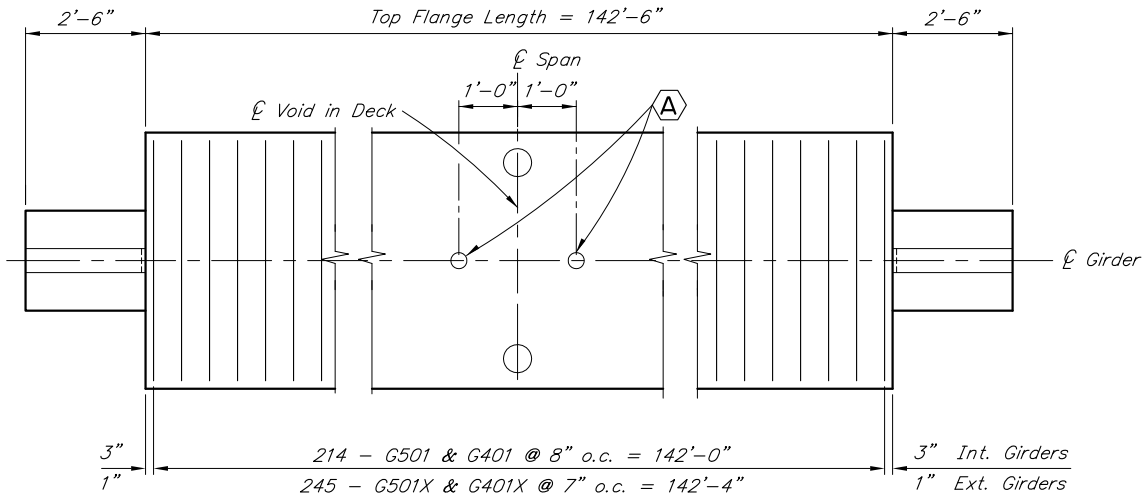
STATE OF ALASKA
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GOOSE CREEK BRIDGE
PARKS HIGHWAY
GIRDERS

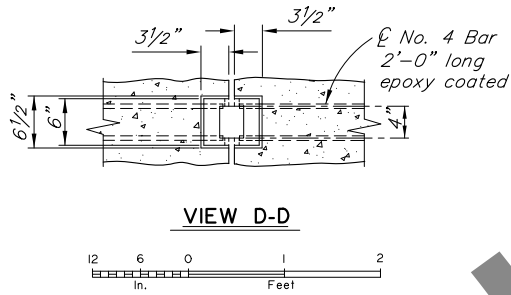


BRIDGE NO. 2343
DWG. NO. 10

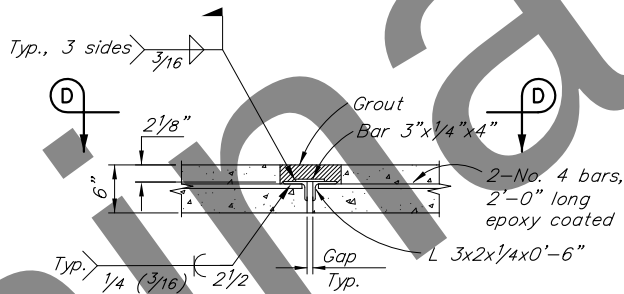
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A41036/CFHWY00217	2021	N62	N69



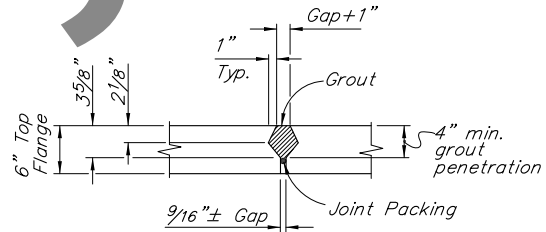
PLAN
No Scale



VIEW D-D



SHEAR CONNECTOR DETAIL



SHEAR KEY DETAIL

DESIGNED BY: Elmer Marx	CHECKED: Douglas Gellineau
DRAWN BY: Sam Sollie	CHECKED: Elmer Marx
QUANTITIES BY: Elmer Marx	CHECKED: Douglas Gellineau

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GOOSE CREEK BRIDGE
PARKS HIGHWAY
GIRDER DETAILS

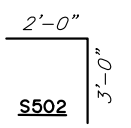


BRIDGE NO. 2343
DWG. NO. II

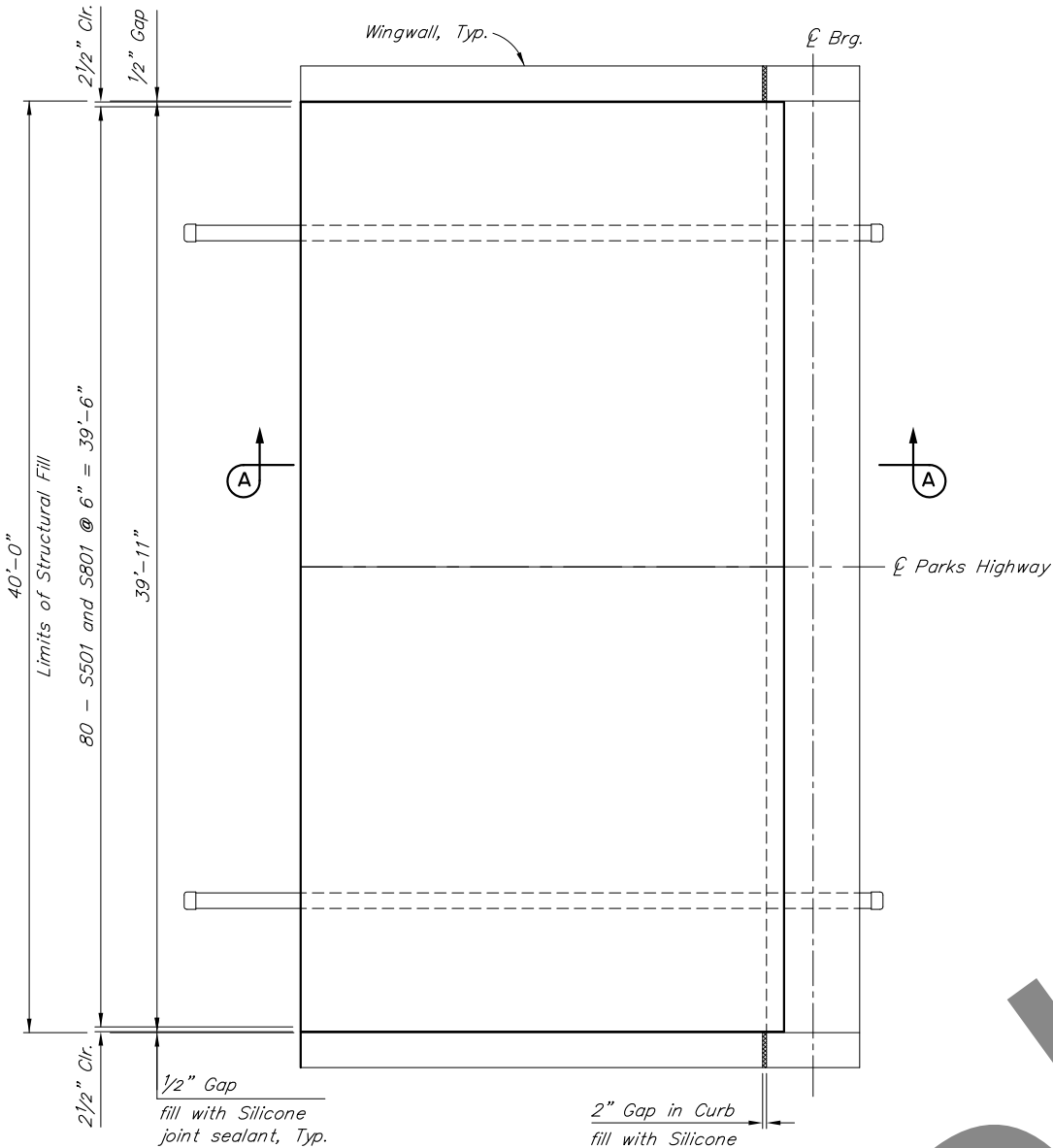
R:\cad\2343\2343-1-GIRDERS (2) Mon, Oct/12/20 8:46am

R:\cad\2343\2343-1-APPROACH SLAB Mon, Oct/12/20 8:47am

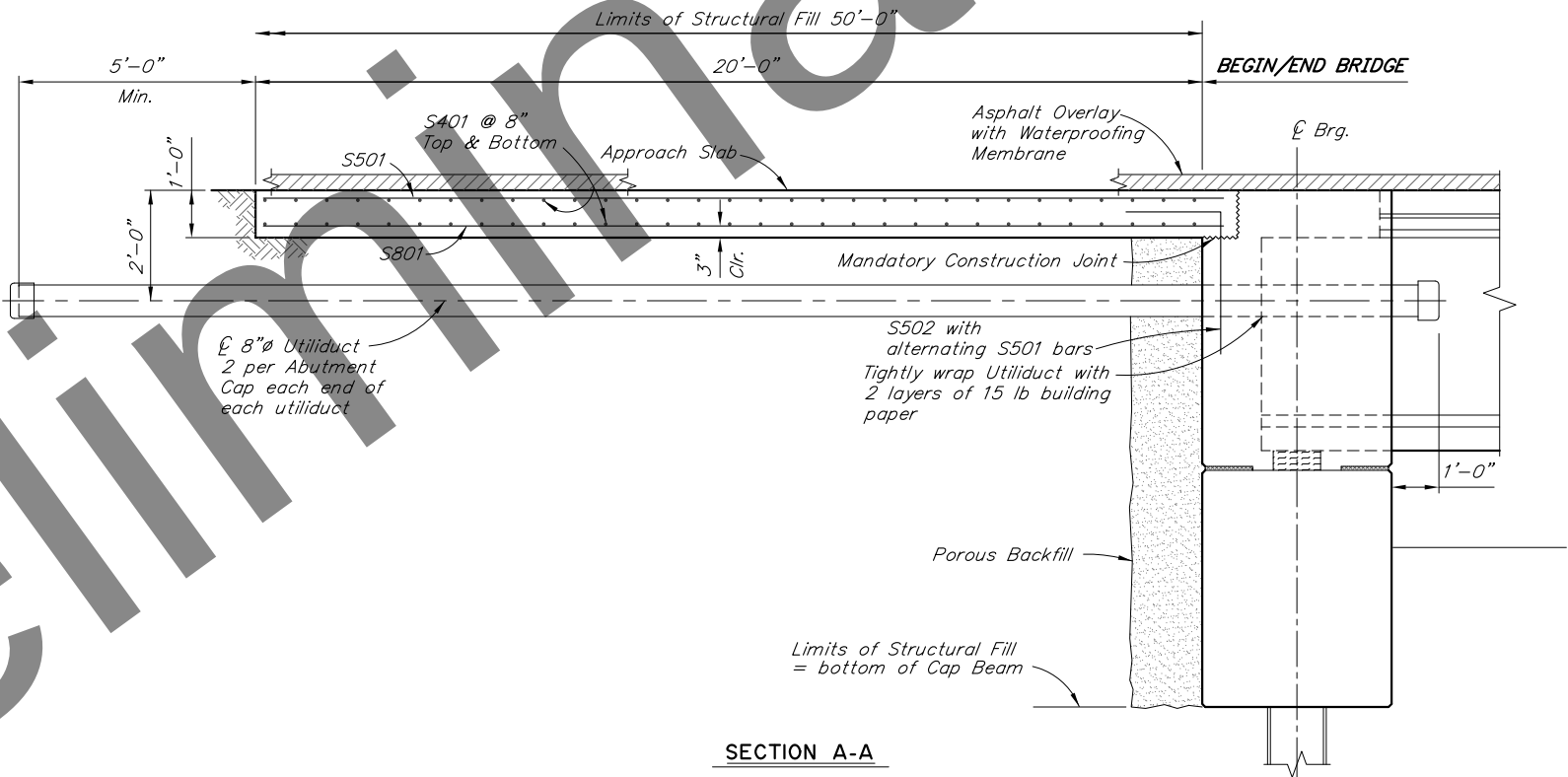
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A41036/CFHWY00217	2021	N63	N69

REINFORCING STEEL - ONE APPROACH SLAB						
MARK	NOTE	SIZE	NO.	LENGTH	TYPE	BENDING DIAGRAM
S401	E,M	4	62	39'-7"	---	
S501	E	5	80	20'-5"	---	
S502	E	5	40	5'-0"	BENT	
S801	E	8	80	20'-5"	---	

E - Epoxy-Coated
M - Field adjust top mat of bars to match roadway profile



PLAN
(Abutment 1 shown Abutment 2 similar)



SECTION A-A



DESIGNED BY:	Elmer Marx	CHECKED:	Douglas Gellineau
DRAWN BY:	Sam Sollie	CHECKED:	Elmer Marx
QUANTITIES BY:	Elmer Marx	CHECKED:	Douglas Gellineau

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GOOSE CREEK BRIDGE
PARKS HIGHWAY
APPROACH SLAB



BRIDGE NO. 2343
DWG. NO. 12

