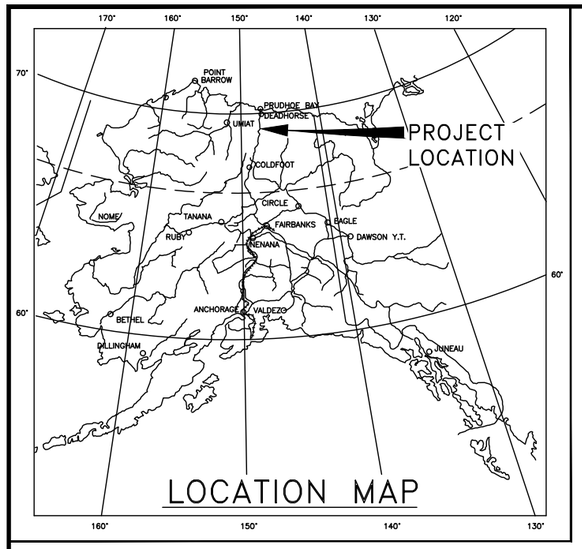
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	A1	65
CDS ROUTE: 150000	MILEPOINT: 289 TO 305			



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
&
PUBLIC FACILITIES

PROPOSED HIGHWAY PROJECT

Z609130000/0656005

DALTON HIGHWAY MP 289–305 REHABILITATION

GRADING, DRAINAGE, SURFACING, SIGNING

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
A1–A3	TITLE SHEET, LEGEND, SHEET LAYOUT
B1–B2	TYPICAL SECTIONS, CULVERT SECTIONS
C1	ESTIMATE OF QUANTITIES
D1–D3	CULVERT AND SUPERELEVATION SUMMARIES
E1–E3	DETAILS
F1–F30	PLAN & PROFILE
G1	APPROACH DETAILS
H1–H6	SIGN SUMMARY AND DETAILS
N1–N4	PIPELINE CROSSING BARRIERS
Q1–Q16	EROSION AND SEDIMENT CONTROL PLANS

THE FOLLOWING STANDARD PLANS APPLY TO THIS PROJECT:
I–81.00, S–00.12, S–01.02, S–05.02, S–20.10, S–30.05, C–04.12, G–00.05, G–10.20, G–20.12, S–31.02, S–32.02.

DESIGN DESIGNATIONS

ADT (2017)	225
ADT (2050)	370
DHV (%)	16.5%
PERCENT TRUCKS (T)	74%
DIRECTIONAL SPLIT (D)	40%(SB)/60%(NB)
DESIGN SPEED (V)	50 MPH

PROJECT SUMMARY

WIDTH OF TRAVELED WAY	32 FEET
LENGTH OF PROJECT	16.5 MILES

David K. Fischer, P.E., PROJECT MANAGER

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
&
PUBLIC FACILITIES

APPROVED BY:

_____ DATE _____

Sarah E. Schacher, P.E.
Preconstruction Engineer, Northern Region

ACCEPTED FOR CONSTRUCTION:

_____ DATE _____

Ryan F. Anderson, P.E.
Regional Director, Northern Region

Preliminary Plans

\\pdc.local\dfsanc\Projects\2017\17331FB-DaltonMP289-305\C\C0000cnst17331FB-A1 A1 COVER Fri, Oct/16/20 09:40am

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	A2	A3

LIST OF ABBREVIATIONS/SYMBOLS

ADT	AVERAGE DAILY TRAFFIC
AH	AHEAD
APL	ALYESKA PIPELINE
ATM	ALASKA TRAFFIC MANUAL
&	AND
BMP	BEST MANAGEMENT PRACTICE
B.O.P.	BEGINNING OF PROJECT
CB	CATCH BASIN
CF	CUBIC FOOT
CGP	CONSTRUCTION GENERAL PERMIT
COMM	COMMUNICATIONS
CSP	CORRUGATED STEEL PIPE
ø	DIAMETER
D	DEGREE OF CURVATURE, DIRECTIONAL SPLIT, DIAMETER
Δ	DELTA ANGLE
DHV	DESIGN HOURLY VOLUME
DOT&PF	DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
E	EAST
E.G.	FOR EXAMPLE
ELEV	ELEVATION
E.O.P.	END OF PROJECT
EOTW	EDGE OF TRAVELED WAY
ESAL	EQUIVALENT SINGLE AXLE LOAD
ESCP	EROSION AND SEDIMENT CONTROL PLAN
ETC.	ETCETERA
FL	FLOWLINE
FO	FIBER OPTICS
FT OR '	FOOT
HMCP	HAZARDOUS MATERIAL CONTROL PLAN
IE	INVERT ELEVATION
IN OR "	INCH
L	LENGTH OF CURVE
LBS	POUNDS
LHF	LEFT HAND FORWARD
LT	LEFT
LVC	LENGTH OF VERTICAL CURVE
N	NORTH
N/A	NOT APPLICABLE
NO.	NUMBER
NPS	NOMINAL PIPE SIZE
NTS	NOT TO SCALE
OG	ORIGINAL GROUND
%	PERCENT
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
P.O.C.	POINT ON CURVE
P.O.S.	POINT ON TANGENT
PST	PERFORATED STEEL TUBE
PT	POINT OF TANGENCY
PUE	PUBLIC UTILITY EASEMENT
R	RADIUS OF CURVE
RHF	RIGHT HAND FORWARD
RT	RIGHT
ROW	RIGHT-OF-WAY
S	SOUTH
SPP	STRUCTURAL PLATE PIPE
SPEC	SPECIFICATION
STD	STANDARD
SWPPP	STORM WATER POLLUTION PREVENTION PLAN
SY	SQUARE YARD
T	TANGENT DISTANCE, HEAVY VEHICLE PERCENTAGE
TCP	TEMPORARY CONSTRUCTION PERMIT
TS	TUBE STEEL
TYP.	TYPICAL
USACE	UNITED STATES ARMY CORP OF ENGINEERS
V	DESIGN SPEED
VPC	VERTICAL POINT OF CURVATURE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY
W	WEST
W/	WITH

	RECOVERED	SET
BLM MONUMENT		
GLO MONUMENT		
USC&GS MONUMENT		
PRIMARY MONUMENT		
CENTERLINE MONUMENT IN CASING		
PRIMARY R.O.W. MONUMENT		
BEARING OBJECT		
MISCELLANEOUS MONUMENT		
LINE OF SIGHT MONUMENT		
CONCRETE R.O.W. MONUMENT		
BENCHMARK		BM
REBAR AND CAP		
REBAR		
IRON PIPE		
PK NAIL		
SPIKE		
HUB AND TACK		
CONSTRUCTION CENTERLINE	5+00	
MISCELLANEOUS CENTERLINE	10+00	
STATION EQUATION	"L"48+97.23 POT BK= "O"48+97.23 PC AHD	
PROJECT RIGHT-OF-WAY LINE	R/W	
EXISTING RIGHT-OF-WAY LINE		
EXISTING PROPERTY LINE		
CONTROLLED ACCESS LINE	C/A	
UTILITY EASEMENT LINE	PUE	
TEMPORARY EASEMENT LINE (TCP OR TCE)	TCP	
ACCESS OR SECTION LINE EASEMENT	ACCESS EASEMENT	
PROPOSED CUT SLOPE LIMIT		
PROPOSED FILL SLOPE LIMIT		
SECTION LINE		
1/4 SECTION LINE		
1/16 SECTION LINE		
TOWNSHIP & RANGE LINE	T. 2 N. / T. 1 N. — T. 1 E. / T. 2 E.	

	EXISTING	PROPOSED
ROADWAY/PAVEMENT EDGE		
FENCE		
GUARDRAIL		
CULVERT PIPE		
CULVERT LABEL		P 993+56 48" x 84'
SIGN		
MAILBOX	MB	MB
WATER BOUNDARY		
ORDINARY HIGH WATER LINE		
FLOW CENTERLINE		
FLOW DIRECTION		
WETLANDS		
EXISTING BUILDINGS	H	H = HOUSE G = GARAGE M = MERCHANT/STORE B = BARN S = SHED P = PRIVY SS = SERVICE STATION W = WAREHOUSE
POST OR BOLLARD		
WELL OR MONITORING WELL	W	
SEPTIC PIPE	S, VW	
FUEL TANK FILL PIPE/VENT	P	
TEST HOLE	TH	
CONIFER TREE		
THERMOSIPHON		
DELINEATOR/GUIDE MARKER		
FUEL LINE	O	O
GAS LINE	G	G
FIBER OPTIC LINE	FO	
DIRECT BURIAL TELEPHONE CABLE		
PIPELINE MARKER OR VALVE		
HANDHOLD		
SPLICE VAULT		

LEGEND

Preliminary Plans

\\pdc.local\dfsanc\Projects\2017\17331FB-DaltonMP289-305\C\C0000cnst17331FB-LEGEND Fri, Oct/16/20 09:40am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

NO.	DATE	REVISION

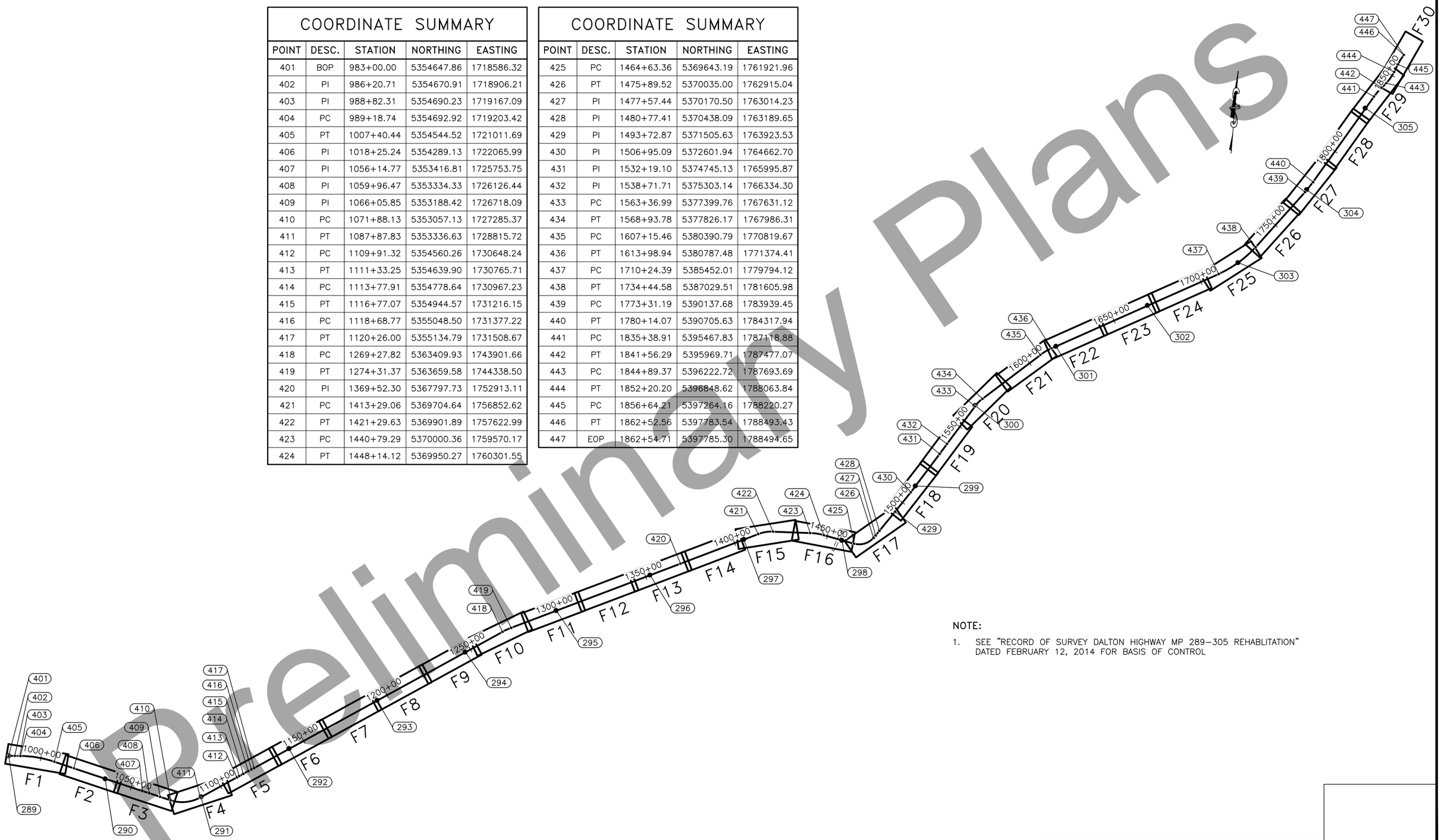
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	A3	A3

COORDINATE SUMMARY

POINT	DESC.	STATION	NORTHING	EASTING
401	BOP	983+00.00	5354647.86	1718586.32
402	PI	986+20.71	5354670.91	1718906.21
403	PI	988+82.31	5354690.23	1719167.09
404	PC	989+18.74	5354692.92	1719203.42
405	PT	1007+40.44	5354544.52	1721011.69
406	PI	1018+25.24	5354289.13	1722065.99
407	PI	1056+14.77	5353416.81	1725753.75
408	PI	1059+96.47	5353334.33	1726126.44
409	PI	1066+05.85	5353188.42	1726718.09
410	PC	1071+88.13	5353057.13	1727285.37
411	PT	1087+87.83	5353336.63	1728815.72
412	PC	1109+91.32	5354560.26	1730648.24
413	PT	1111+33.25	5354639.90	1730765.71
414	PC	1113+77.91	5354778.64	1730967.23
415	PT	1116+77.07	5354944.57	1731216.15
416	PC	1118+68.77	5355048.50	1731377.22
417	PT	1120+26.00	5355134.79	1731508.67
418	PC	1269+27.82	5363409.93	1743901.66
419	PT	1274+31.37	5363659.58	1744338.50
420	PI	1369+52.30	5367797.73	1752913.11
421	PC	1413+29.06	5369704.64	1756852.62
422	PT	1421+29.63	5369901.89	1757622.99
423	PC	1440+79.29	5370000.36	1759570.17
424	PT	1448+14.12	5369950.27	1760301.55

COORDINATE SUMMARY

POINT	DESC.	STATION	NORTHING	EASTING
425	PC	1464+63.36	5369643.19	1761921.96
426	PT	1475+89.52	5370035.00	1762915.04
427	PI	1477+57.44	5370170.50	1763014.23
428	PI	1480+77.41	5370438.09	1763189.65
429	PI	1493+72.87	5371505.63	1763923.53
430	PI	1506+95.09	5372601.94	1764662.70
431	PI	1532+19.10	5374745.13	1765995.87
432	PI	1538+71.71	5375303.14	1766334.30
433	PC	1563+36.99	5377399.76	1767631.12
434	PT	1568+93.78	5377826.17	1767986.31
435	PC	1607+15.46	5380390.79	1770819.67
436	PT	1613+98.94	5380787.48	1771374.41
437	PC	1710+24.39	5385452.01	1779794.12
438	PT	1734+44.58	5387029.51	1781605.98
439	PC	1773+31.19	5390137.68	1783939.45
440	PT	1780+14.07	5390705.63	1784317.94
441	PC	1835+38.91	5395467.83	1787118.88
442	PT	1841+56.29	5395969.71	1787477.07
443	PC	1844+89.37	5396222.72	1787693.69
444	PT	1852+20.20	5396848.62	1788063.84
445	PC	1856+64.21	5397264.16	1788220.27
446	PT	1862+52.56	5397783.54	1788493.43
447	EOP	1862+54.71	5397785.30	1788494.65



Preliminary Plans

NOTE:

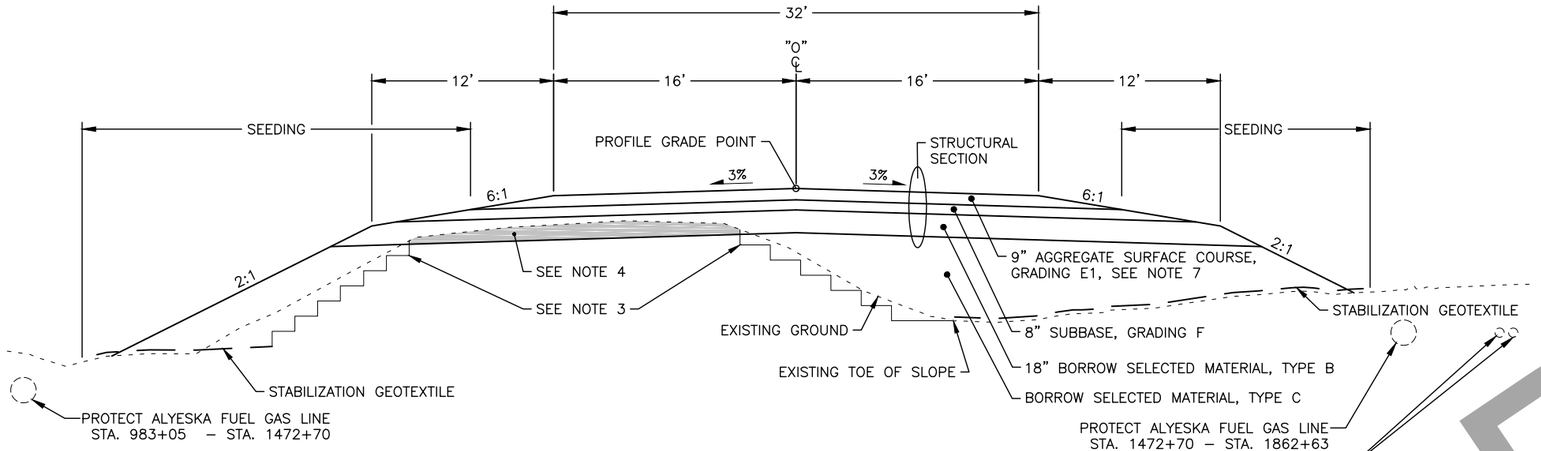
1. SEE "RECORD OF SURVEY DALTON HIGHWAY MP 289–305 REHABLITATION" DATED FEBRUARY 12, 2014 FOR BASIS OF CONTROL

SHEET LAYOUT

P:\2017\17331FB-DaltonMP289-305\C\c0001cnst17331fb-A3 SHEET LAYOUT Fri, Oct/16/20 02:01pm
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

NO.	DATE	REVISION

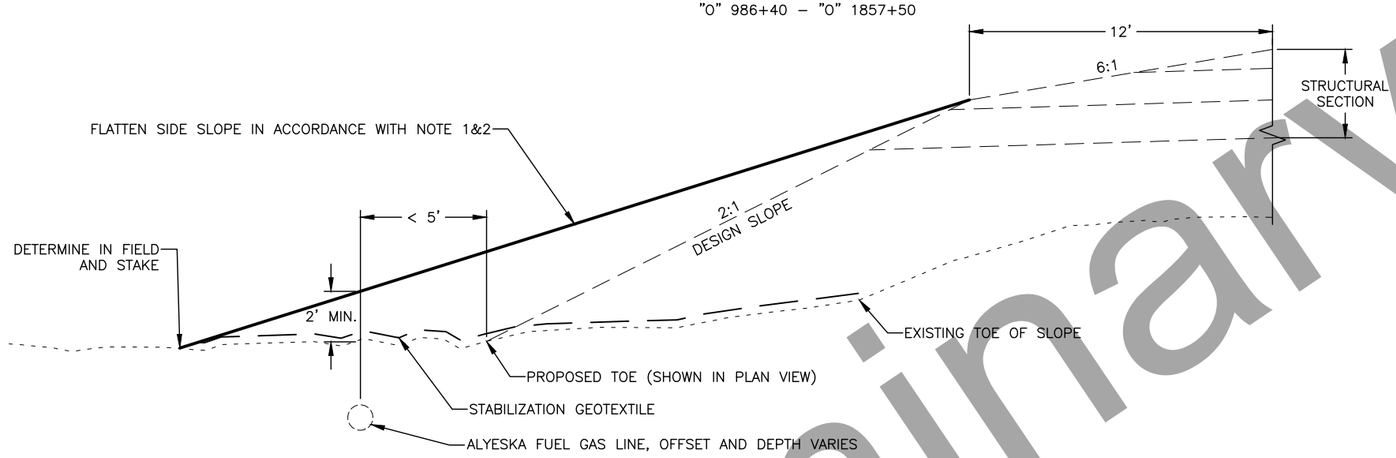
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	B1	B2



GENERAL TYPICAL SECTION

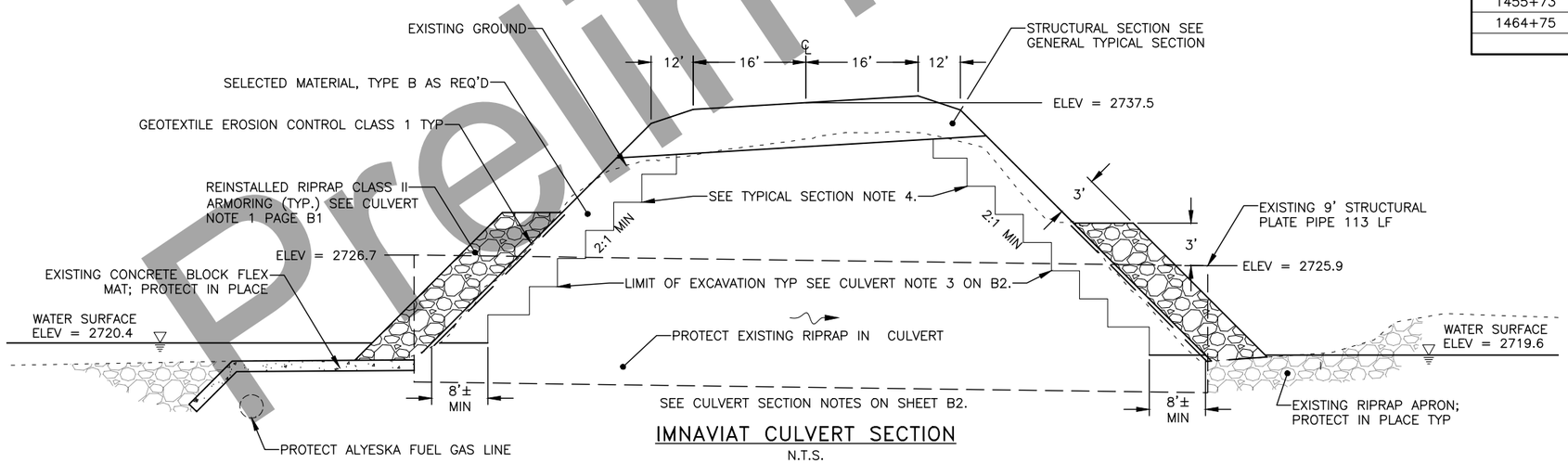
N.T.S.

"O" 986+40 – "O" 1857+50



ALYESKA FUEL GASLINE SLOPE WARP DETAIL

N.T.S.



IMNAVIAT CULVERT SECTION

N.T.S.

"O" 1078+36 – "O" 1078+08

TYPICAL SECTION NOTES:

1. THE DESIGN FORESLOPE IS 2:1, WHERE THE PROPOSED TOE WOULD FALL WITHIN 5 FEET OF THE GAS LINE (SEE SLOPE WARP SUMMARY TABLE), FLATTEN THE SIDESLOPE SUCH THAT THERE IS AN ADDITIONAL 2 FEET OF FILL MATERIAL OVER THE LOCATION OF THE GAS LINE.
2. TRANSITION EMBANKMENT SLOPES AT FLATTENING AREAS AS DIRECTED BY THE ENGINEER
3. COMPACTION OVER THE GAS LINE SHALL BE DONE WITH SMALL VIBRATORY PLATES OR VIBRATORY ROLLERS NOT EXCEEDING 10 TONS.
4. BENCH THE EXISTING ROADWAY EMBANKMENT PER SECTION 203–3.03.
5. CUT EXISTING ROAD WHERE NECESSARY TO ALLOW FOR 18 INCHES OF SELECTED MATERIAL, TYPE B. SPREAD EXISTING EMBANKMENT AS REQUIRED TO PROVIDE SPACE FOR STRUCTURAL SECTION.
6. DO NOT STRIP EXISTING VEGETATION. PLACE FILL OVER INTACT VEGETATION IN WIDENED AREAS AND AREAS OF REALIGNMENT.
7. ANY MATERIAL HAUL THAT IS REQUIRED AS A RESULT OF BENCHING AND/OR SPREADING OPERATIONS IS SUBSIDIARY TO ITEM 203.0019.0000 UNCLASSIFIED EXCAVATION.
8. INCREASE AGGREGATE SURFACE COURSE, GRADING E–1 TO 10 INCHES AT MOMENT SLAB. STATION 1006+30.5 TO 1006+95.5.
9. THE ALIGNMENT AND PROFILE ARE SUBJECT TO MINOR REVISIONS AT THE LARGE DIAMETER CULVERT CROSSINGS AT THE ENGINEERS DIRECTION TO MATCH THE FACE OF THE EXISTING CULVERTS.
10. RE–GRADE SECTION FROM BEGIN PROJECT "O" 983+00 TO BEGIN BRIDGE "O" 985+35.69 AND END BRIDGE "O" 986+20.71 TO START TYPICAL FULL SECTION "O" 986+40.

UTILITY NOTES:

1. THE CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES FROM DAMAGE.
2. PRIOR TO GROUND DISTURBING ACTIVITIES THE CONTRACTOR SHALL CONTACT AND COORDINATE WORK ACTIVITIES WITH ALYESKA PIPELINE SERVICE COMPANY.

SLOPE WARPING TABLE

START STATION	END STATION	LENGTH (FT)	RT/LT	START STATION	END STATION	LENGTH (FT)	RT/LT
1082+86	1083+17	31	LT	1494+89	1496+31	142	RT
1109+48	1111+78	230	LT	1527+14	1530+08	294	RT
1136+32	1139+87	355	LT	1604+28	1606+15	187	RT
1145+68	1148+72	304	LT	1737+61	1738+73	112	RT
1216+13	1220+55	442	LT	1801+51	1802+97	146	RT
1412+32	1416+34	402	LT	1833+76	1835+45	169	RT
1445+68	1446+17	49	LT	1851+45	1852+82	137	RT
1450+72	1451+31	59	LT		Total RT	1187	
1453+31	1453+94	63	LT				
1455+73	1457+73	200	LT				
1464+75	1465+44	69	LT				
	Total LT	2204					

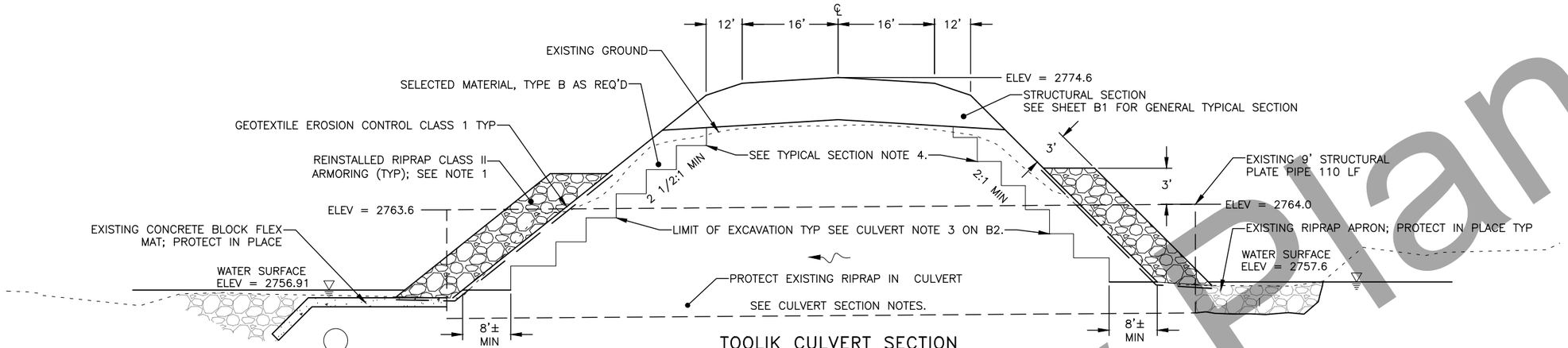
TYPICAL SECTION

Preliminary Plans

P:\2017\17331FB–DaltonMP289–305\C\c3001cnst17331fb–B1 TYPICAL SECTION Fri, Oct/16/20 09:40am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC. CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452–1414

NO.	DATE	REVISION

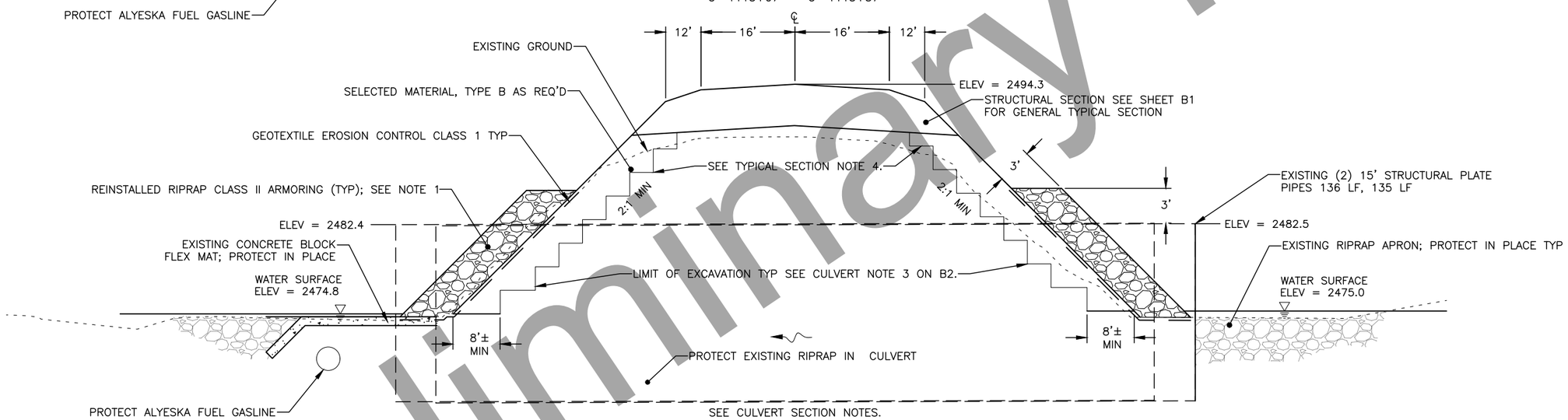
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	B2	B2



TOOLIK CULVERT SECTION

N.T.S.

"O" 1115+07 – "O" 1115+57



OKSRUKUYIK CULVERT SECTION

N.T.S.

"O" 1451+78 – "O" 1453+07

CULVERT SECTION NOTES:

1. EXISTING RIPRAP ARMORING ABOVE THE EXISTING RIPRAP APRON SHALL BE REMOVED AND STOCKPILED PRIOR TO EMBANKMENT CONSTRUCTION AND INSTALLATION OF GEOTEXTILE. ADDITIONAL RIPRAP MATERIAL SHALL BE USED IF THE EXISTING MATERIAL IS NOT SUFFICIENT TO MEET THE DIMENSIONS SHOWN.
2. GEOTEXTILE EROSION CONTROL SHALL BE PLACED ALONG THE EMBANKMENT SLOPE AND EXCAVATED SURFACE PRIOR TO THE REINSTALLATION OF RIPRAP ARMORING.
3. EXCAVATION OF EXISTING EMBANKMENT MATERIAL SHALL BE LIMITED TO MATERIAL ABOVE THE EXISTING RIPRAP APRON ELEVATION.
4. PROPOSED EMBANKMENT TOE NOT TO EXTEND PAST THE EXISTING FACE OF CULVERT.
5. WATER SURFACE ELEVATIONS FROM AUGUST 2013 AERIAL MAPPING.

CULVERT SECTIONS

Preliminary Plans

P:\2017\17331FB-DaltonMP289-305\C\c3001cnst17331fb-B2 CULVERT SECTIONS Fri, Oct/16/20 09:40am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC. CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	C1	C1

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM DESCRIPTION	PAY UNIT	QUANTITY
202.0017.0000	REMOVAL OF CULVERT PIPE	EACH	68
203.0006.0000	BORROW	TON	1,138,000
203.0019.0000	UNCLASSIFIED EXCAVATION	LUMP SUM	ALL REQ'D
301.0003.00E1	AGGREGATE SURFACE COURSE, GRADING E-1	TON	180,100
304.0001.000F	SUBBASE, GRADING F	TON	205,300
501.xxxx.0000	MOMENT SLAB	EACH	2
507.0001.0002	STEEL BRIDGE RAILING, 2-TUBE	LINEAR FEET	76
603.0001.0024	CSP 24 INCH	LINEAR FEET	3,983
603.0001.0036	CSP 36 INCH	LINEAR FEET	4,278
603.0001.0048	CSP 48 INCH	LINEAR FEET	337
606.0001.0000	W-BEAM GUARDRAIL	LINEAR FEET	200
606.0006.0000	REMOVING AND DISPOSING OF GUARDRAIL	LINEAR FEET	593
606.0013.0000	PARALLEL GUARDRAIL TERMINAL	EACH	4
606.0016.0000	TRANSITION RAIL	EACH	4
611.2005.0000	SALVAGE AND REUSE EXISTING RIPRAP	LUMP SUM	ALL REQ'D
613.0002.0000	CULVERT MARKER POST	EACH	134
615.0001.0000	STANDARD SIGN	SQUARE FEET	471
615.0002.0000	REMOVE AND RELOCATE EXISTING SIGN	EACH	29
615.0004.0000	DELINEATOR, RIGID	EACH	880
616.0002.0050	THAW PIPE 1/2 INCH DIAMETER	EACH	67
618.0001.0000	SEEDING	ACRE	80
624.0001.0000	CALCIUM CHLORIDE	TON	242
630.0002.0000	GEOTEXTILE, STABILIZATION	SQUARE YARD	185,000
631.0002.0001	GOETEXTILE, EROSION CONTROL, CLASS 1	SQUARE YARD	936
639.20000.0000	APPROACH	EACH	22
640.0001.0000	MOBLIZATION AND DEMOBILIZATION	LUMP SUM	ALL REQ'D
640.2004.0000	CONTRACTOR CAMP	LUMP SUM	ALL REQ'D
641.0001.0000	EROSION, SEDIMENT AND POLLUTION CONTROL ADMINISTRATION	LUMP SUM	ALL REQ'D
641.0003.0000	TEMPORARY EROSION, SEDIMENT AND POLLUTION CONTROL	LUMP SUM	ALL REQ'D
641.0005.0000	TEMPORARY EROSION, SEDIMENT AND POLLUTION CONTROL BY DIRECTIVE	CONTINGENT SUM	ALL REQ'D
641.0006.0000	WITHOLDINGS	CONTINGENT SUM	ALL REQ'D
641.0007.0000	SWPPP MANAGER	LUMP SUM	ALL REQ'D
642.0001.0000	CONSTRUCTION SURVEYING	LUMP SUM	ALL REQ'D
643.0002.0000	TRAFFIC MAINTENANCE	LUMP SUM	ALL REQ'D
643.0025.0000	TRAFFIC CONTROL	CONTINGENT SUM	ALL REQ'D
644.0001.0000	FIELD OFFICE	LUMP SUM	ALL REQ'D
644.0002.0000	FIELD LABORATORY	LUMP SUM	ALL REQ'D
644.0004.0000	MEAL	EACH	9,600
644.0005.0000	LODGING	EACH	3,200
644.0006.0000	VEHICLES	LUMP SUM	ALL REQ'D
644.0015.0000	NUCLEAR TESTING EQUIPMENT STORAGE SHED	EACH	1
645.0001.0000	TRAINING PROGRAM, 5 TRANEES/APPRENTICES	HOUR	3,100
646.0001.0000	CPM SCHEDULING	LUMP SUM	ALL REQ'D

ESTIMATING FACTORS

ITEM NUMBER	ITEM	FACTOR
203.0006.0000	BORROW	2 TONS/CUBIC YARD
30.0003.00E1	AGGREGATE SURFACE COURSE, GRADING E-1	1.96 TONS/CUBIC YARD
304.0001.000F	SUBBASE, GRADING F	2 TONS/CUBIC YARD
624.0001.0000	CALCIUM CHLORIDE	1.5 POUNDS/SQUARE YARD

ESTIMATED LUMP SUM QUANTITIES

ITEM NUMBER	ITEM	FACTOR
203.0019.0000	UNCLASSIFIED EXCAVATION	102,000 CUBIC YARDS
611.2005.0000	SALVAGE AND REUSE EXISTING RIPRAP	936 CUBIC YARDS

Preliminary Plans

ESTIMATE OF QUANTITIES

P:\2017\17331FB-DaltonMP289-305\C\C0002cnst17331FB-C1 ESTIMATE OF QUANTITIES Fri, Oct/16/20 03:38pm
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	D1	D3

CULVERT SUMMARY

PIPE NO.	STATION	CULVERT REMOVAL	LT/C/RT	DIAMETER			INVERT		613.0002.0000 CULVERT MARKER POST	616.0002.0050 1/2" CULVERT THAW PIPE	SKEW ANGLE	AS-BUILT CENTERLINE LOCATION **			REMARKS
				24"	36"	48"	LEFT	RIGHT				STATION	LATITUDE	LONGITUDE	
1	989+56	YES	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
2	989+63	YES	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
3	990+02	NO	C			114	2414.53	2417.40	YES	YES	30 RT AH				
4	993+56	YES	C			90	2418.48	2419.61	YES	YES	MATCH EXISTING				
5	993+81	YES	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
6	1003+79	YES	C		152		2467.74	2455.84	YES	YES	MATCH EXISTING				
7	1020+64	YES	C	90			2540.94	2544.74	YES	YES	MATCH EXISTING				
8	1023+57	YES	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
9	1033+46	YES	C		116		2594.49	2591.20	YES	YES	MATCH EXISTING				
10	1035+76	YES	C		124		2609.95	2602.80	YES	YES	MATCH EXISTING				
11	1065+23	YES	RT	72			N/A	N/A	N/A	N/A	MATCH EXISTING				
12	1070+06	YES	C		110		2774.51	2784.56	YES	YES	MATCH EXISTING				
13	1078+71	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				IMNAVAIT CREEK – 9' ROUND MULTIPLATE
14	1081+39	YES	C		112		2728.70	2729.04	YES	YES	MATCH EXISTING				
15	1097+36	YES	C		76		2788.55	2790.60	YES	YES	MATCH EXISTING				
16	1115+30	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				TOOLIK RIVER – 9' ROUND MULTIPLATE
17	1116+54	YES	C		110		2758.83	2761.38	YES	YES	MATCH EXISTING				
18	1137+29	YES	C			133	2784.89	2786.31	YES	YES	MATCH EXISTING				
19	1152+80	YES	C	86			2786.61	2790.58	YES	YES	MATCH EXISTING				
20	1157+42	NO	C	80			2781.66	2783.45	YES	YES	NO SKEW				
21	1161+28	YES	C		100		2778.16	2779.83	YES	YES	MATCH EXISTING				
22	1164+23	YES	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
23	1170+18	YES	C		104		2761.70	2763.60	YES	YES	MATCH EXISTING				
24	1174+22	YES	C	82			2759.24	2760.39	YES	YES	MATCH EXISTING				
25	1177+96	YES	C		128		2754.52	2756.89	YES	YES	MATCH EXISTING				
26	1181+34	YES	C		100		2751.91	2753.85	YES	YES	MATCH EXISTING				
27	1202+90	NO	C	80			2732.68	2733.22	YES	YES	NO SKEW				
28	1219+97	NO	C		112		2698.60	2697.09	YES	YES	18 LT AH				
29	1220+12	YES	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
30	1229+92	YES	C		120		2693.21	2691.18	YES	YES	MATCH EXISTING				
31	1242+44	YES	C		80		2678.76	2678.23	YES	YES	MATCH EXISTING				
32	1245+77	NO	C		84		2680.43	2678.8	YES	YES	23 LT AH				
33	1291+03	YES	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
34	1291+49	NO	C		92		2696.66	2697.74	YES	YES	27 LT AH				
35	1298+41	YES	C	96			2687.19	2688.74	YES	YES	MATCH EXISTING				
36	1301+98	YES	C		106		2682.62	2681.51	YES	YES	MATCH EXISTING				
37	1308+73	YES	C		108		2670.14	2668.55	YES	YES	MATCH EXISTING				
38	1316+09	YES	C		98		2650.57	2652.66	YES	YES	MATCH EXISTING				
39	1319+92	YES	C		108		2642.29	2644.74	YES	YES	MATCH EXISTING				
40	1327+87	YES	C		100		2632.40	2631.86	YES	YES	MATCH EXISTING				
41	1331+61	YES	C		88		2629.25	2629.38	YES	YES	MATCH EXISTING				
42	1349+70	YES	C		108		2618.61	2617.84	YES	YES	MATCH EXISTING				
43	1355+49	YES	C		100		2608.29	2606.44	YES	YES	34 RT AH				
SHEET TOTAL		35		586	2536	337			66	33					

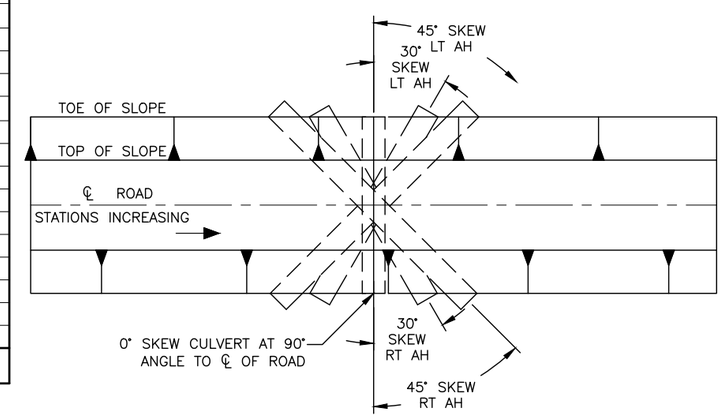
CULVERT NOTES:

1. INSTALL THAW PIPES AT LOCATIONS SHOWN IN THE SUMMARY ACCORDING TO DETAILS ON SHEET E2.
2. NEW CULVERT MARKER POSTS MUST BE INSTALLED ON CULVERTS AS SHOWN IN THE SUMMARY. ACCORDING TO DETAILS ON SHEET E1.
3. REMOVAL OF EXISTING CULVERTS SHALL BE SUBSIDIARY TO 603 PAY ITEMS.
4. USE .064 GAGE STEEL FOR ALL 24", 36" AND 48" CULVERTS.

DRAINAGE NOTES:

1. CULVERT LENGTHS, SKEW, AND LOCATIONS ARE SUBJECT TO MINOR REVISIONS BY THE ENGINEER. ALL CULVERTS SHALL BE FIELD STAKED BASED UPON FINAL ROADWAY ELEVATION AND WIDTH.
2. CULVERT LENGTHS ARE APPROXIMATE. CONTRACTOR MUST FIELD VERIFY LENGTHS AND ADJUST AS NECESSARY AND AS DIRECTED BY THE ENGINEER.
3. HAND CLEAR ALL BRUSH AROUND INLETS/OUTLETS AS DIRECTED BY THE ENGINEER. THIS WORK IS SUBSIDIARY TO 603 PAY ITEMS.

** THE CONTRACTOR SHALL ENTER AS-BUILT LOCATIONS FOR ALL CULVERTS IN THE CULVERT SUMMARY TABLE. COORDINATES SHALL BE LOCATED AT THE INTERSECTION OF THE CULVERT AND ROAD CENTERLINE. USE NAD83 DATUM FORMATTED TO DEGREES, MINUTES, SECONDS TO A PRECISION OF 2 DECIMAL PLACES (DDD' MM' SS.SS"). THIS WORK IS SUBSIDIARY TO 603 SERIES PAY ITEMS.



CULVERT SKEW

CULVERT SUMMARY

Preliminary Plans

P:\2017\17331FB-DaltonMP289-305\C\c4003cnst17331fb-D1 CULVERT SUMMARY Fri, Oct/16/20 04:03pm
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	D2	D3

CULVERT SUMMARY

PIPE NO.	STATION	CULVERT REMOVAL	LT/C/RT	DIAMETER			INVERT		613.0002.0000 CULVERT MARKER POST	616.0002.0050 1/2" CULVERT THAW PIPE	SKEW ANGLE	AS-BUILT CENTERLINE LOCATION **			REMARKS
				24"	36"	48"	LEFT	RIGHT				STATION	LATITUDE	LONGITUDE	
44	1376+91	YES	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
45	1377+21	NO	C		91		2568.78	2568.39	YES	YES	33 RT AH				
46	1380+28	NO	C	88			2567.70	2567.43	YES	YES	3 LT AH				
47	1380+49	YES	C	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
48	1384+61	YES	C	94			2569.67	2569.20	YES	YES	MATCH EXISTING				
49	1407+74	YES	RT	60			N/A	N/A	N/A	N/A	MATCH EXISTING				
50	1437+70	YES	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
51	1438+12	NO	C	80			2527.02	2524.17	YES	YES	3 RT AH				
52	1438+83	YES	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
53	1440+44	NO	C	76			2520.9	2519.02	YES	YES	20 RT AH				
54	1452+37	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				OKSRUKUYIK CREEK – TWO 15' MULTIPLATE
55	1458+82	YES	C	88			2503.63	2512.43	YES	YES	MATCH EXISTING				
56	1464+68	YES	C		122		2521.59	2532.31	YES	YES	35 RT AH				
57	1482+47	YES	C	90			2539.8	2535.06	YES	YES	25 RT AH				
58	1503+19	YES	C	90			2453.65	2444.76	YES	YES	MATCH EXISTING				
59	1507+76	NO	C	90			2432.36	2424.20	YES	YES	19 RT AH				
60	1508+35	YES	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
61	1515+23	YES	C	84			2405.79	2401.05	YES	YES	MATCH EXISTING				
62	1530+09	YES	C		119		2340.36	2329.07	YES	YES	MATCH EXISTING				
63	1540+47	YES	C	98			2291.35	2280.96	YES	YES	MATCH EXISTING				
64	1548+26	YES	C	86			2265.08	2258.43	YES	YES	MATCH EXISTING				
65	1555+82	YES	C	79			2246.64	2239.32	YES	YES	23 RT AH				
66	1565+41	YES	C	78			2232.17	2231.77	YES	YES	25 RT AH				
67	1579+69	YES	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
68	1579+75	NO	C	91			2190.4	2184.94	YES	YES	9 RT AH				
69	1585+13	NO	C	98			2184.07	2181.27	YES	YES	11 RT AH				
70	1596+09	YES	C		106		2148.18	2143.01	YES	YES	MATCH EXISTING				
71	1617+15	YES	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
72	1621+01	YES	C	84			2098.40	2094.29	YES	YES	MATCH EXISTING				
73	1622+93	YES	C	76			2092.48	2088.53	YES	YES	MATCH EXISTING				
74	1632+20	NO	C	74			2072.99	2072.62	YES	YES	15 RT AH				
75	1646+84	YES	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
76	1646+93	NO	C	84			2039.34	2039.02	YES	YES	12 LT AH				
77	1689+76	NO	C		97		1954.68	1953.97	YES	YES	40 RT AH				
78	1691+47	YES	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
79	1695+28	YES	C	98			1945.85	1942.64	YES	YES	30 RT AH				
80	1706+49	NO	C	89			1930.42	1923.20	YES	YES	32 RT AH				
81	1712+29	YES	C		108		1919.38	1908.71	YES	YES	MATCH EXISTING				
82	1730+98	NO	C		99		1921.37	1916.46	YES	YES	15 RT AH				
83	1741+41	YES	C	88			1873.08	1870.47	YES	YES	MATCH EXISTING				
84	1767+50	YES	C	74			1882.32	1879.45	YES	YES	MATCH EXISTING				
85	1798+14	YES	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
86	1804+22	NO	C	88			1774.37	1773.10	YES	YES	3 LT AH				
87	1835+92	YES	C	94			1693.62	1695.85	YES	YES	MATCH EXISTING				
88	1844+09	YES	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
89	1849+35	YES	C	90			1659.60	1657.02	YES	YES	MATCH EXISTING				
90	1850+93	YES	C	88			1657.50	1656.41	YES	YES	MATCH EXISTING				
				1000	1000										TO BE PLACED AT ENGINEERS DISCRETION
SHEET TOTALS		75		3397	1742	0			68	34					
SUMMARY TOTAL				3983	4278	337			134	67					

Preliminary Plans

CULVERT SUMMARY

P:\2017\17331FB-DaltonMP289-305\C\c4003cnst17331fb-D2 CULVERT SUMMARY Fri, Oct/16/20 04:03pm
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	D3	D3

SUPERELEVATIONS SUMMARY

CURVE P.I.	RADIUS (FEET)	BEGIN TRANSITION	TRANSITION LENGTH (FEET)	CURVE P.C.	BEGIN FULL SUPERELEVATION	SUPERELEVATION RATE (%)	END FULL SUPERELEVATION	CURVE P.T.	TRANSITION LENGTH (FEET)	END TRANSITION
998+37.03	5,847	987+88.38	160.71	989+18.74	989+43.73	3	1007+15.45	1007+40.44	160.71	1008+70.80
1080+35.55	1,960	1070+08.97	228.82	1071+88.13	1072+37.79	5.6	1087+38.16	1087+87.83	228.82	1089+66.98
1271+80.00	3,620	1267+76.24	187.25	1269+27.82	1269+63.50	4	1273+95.71	1274+31.37	187.25	1275+82.96
1417+34.78	2,000	1411+53.06	224.00	1413+29.06	1413+77.06	5.4	1420+81.63	1421+29.63	224.00	1423+05.63
1444+48.45	3,090	1439+21.51	196.77	1440+79.29	1441+18.29	4.4	1447+75.21	1448+14.12	196.77	1449+71.90
1470+94.61	1,000	1462+76.69	240.00	1464+63.36	1465+16.69	6	1475+36.19	1475+89.52	240.00	1477+76.19
1566+17.23	1,980	1561+57.83	228.82	1563+36.99	1563+86.65	5.6	1568+44.12	1568+93.78	228.82	1570+72.94
1610+58.71	2,975	1605+57.68	196.77	1607+15.46	1607+54.45	4.4	1613+59.95	1613+98.94	196.77	1615+56.72
1722+52.67	5,750	1708+94.03	160.71	1710+24.39	1710+49.39	2.8	1734+19.58	1734+44.58	160.71	1735+74.93
1776+72.99	6,080	1772+05.57	159.23	1773+31.19	1773+54.19	2.6	1779+91.07	1780+14.07	159.23	1781+39.69
1838+48.40	3,500	1883+87.32	187.25	1835+38.91	1835+74.57	4	1841+20.63	1841+56.29	187.25	1843+07.88
1848+58.52	2,100	1843+13.36	224.00	1844+89.37	1845+37.36	5.4	1851+72.21	1852+20.20	224.00	1853+96.21
1859+59.91	2,370	1857+08.54	212.80	1856+64.21	1857+08.54	5	1862+08.23	1862+52.56	212.80	1864+21.03

SUPERELEVATION NOTES:

1. THE SUPERELEVATION ROTATION POINT IS CENTERLINE AT PROFILE GRADE.
2. SEE STANDARD DRAWING I-81.00 FOR SUPERELEVATION TRANSITION DETAILS. THE TRANSITION LENGTHS GIVEN IN THE SUMMARY DO NOT INCLUDE THE 1/2 VERTICAL CURVE LENGTHS SHOWN ON EACH END OF THE TRANSITION.
3. SUPERELEVATION SHALL BE BUILT INTO THE SUBGRADE AND CARRIED THROUGH THE FULL WIDTH.

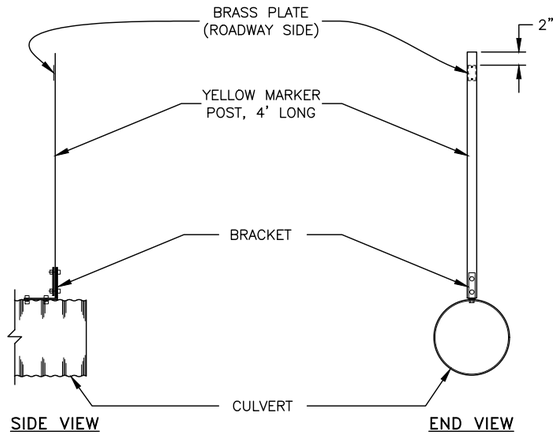
Preliminary Plans

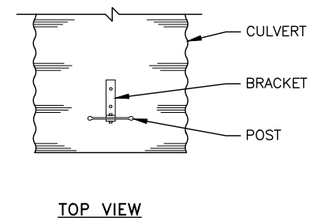
SUPERELEVATION SUMMARY

P:\2017\17331FB-DaltonMP289-305\C\c4003cnst17331fb-D3 SUPERELEVATION SUMMARY Fri, Oct/16/20 09:40am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

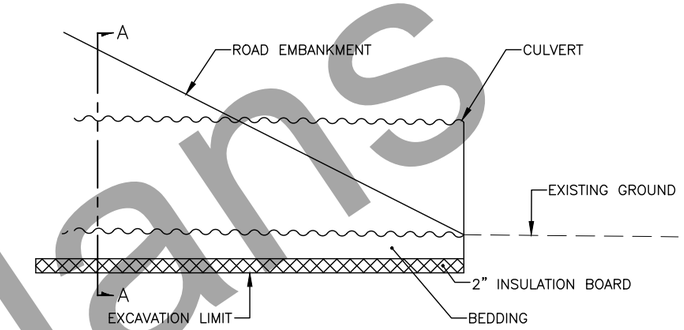
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	E1	E3

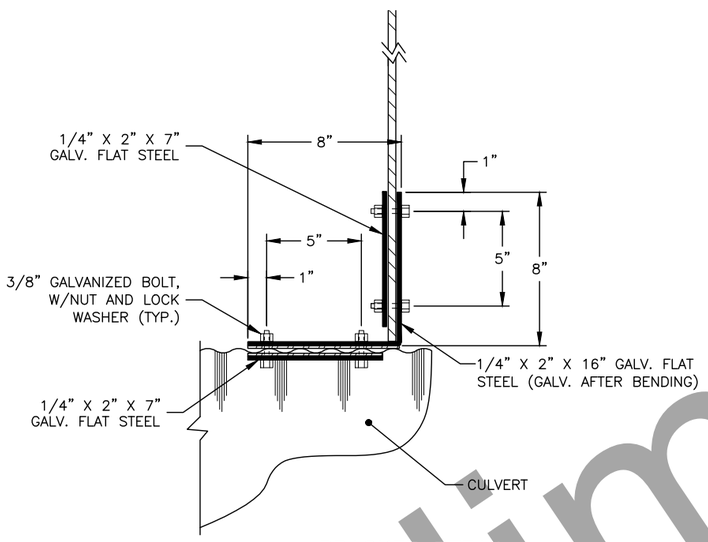




CULVERT MARKER POST DETAIL
N.T.S.



DETAIL: CULVERT INSTALLATION
N.T.S.



BRACKET DETAIL
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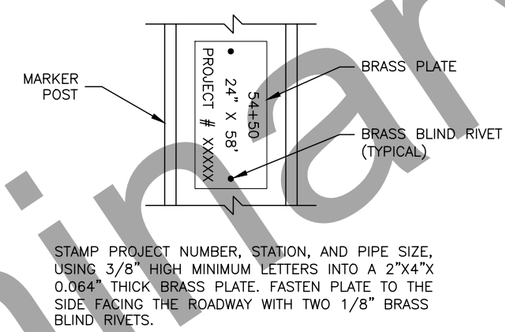
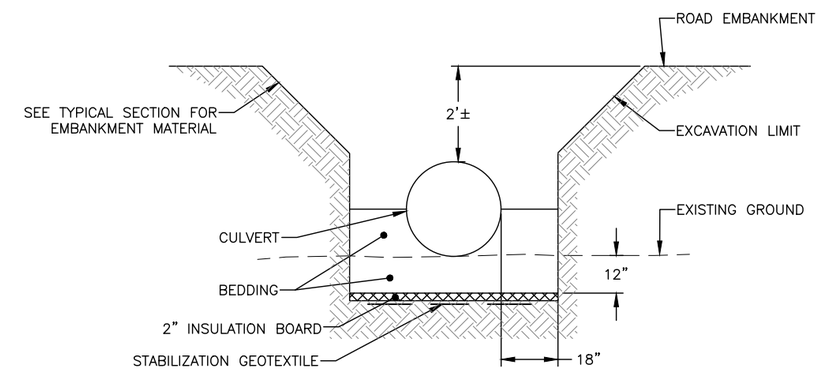


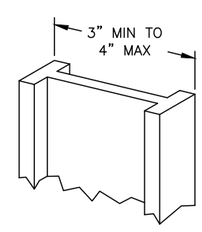
BRASS PLATE DETAIL
N.T.S.



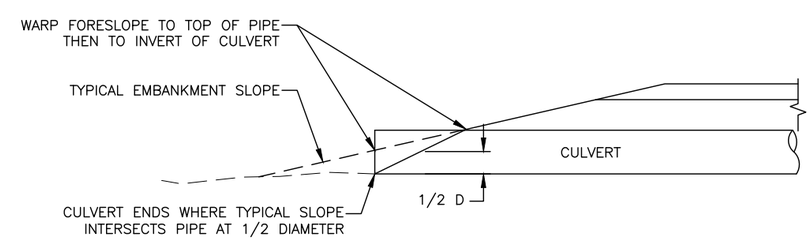
SECTION A–A CULVERT INSTALLATION
N.T.S.

CULVERT MARKER POSTS NOTES:

1. MARKER POSTS ARE TO BE INSTALLED ON CROSS CULVERTS ONLY.
2. IF CULVERTS ARE CLOSELY SPACED, MARK ONLY THE FIRST AND LAST CULVERT IN SERIES AS APPROVED BY THE ENGINEER, UNLESS OTHERWISE INDICATED IN CULVERT SUMMARY
3. DRILL ALL BOLT HOLES. COAT HOLES WITH ZINC RICH PAINT. FLAME CUTTING SHALL NOT BE PERMITTED.
4. GASKET MATERIAL SHALL BE PLACED BETWEEN DISSIMILAR METALS. GASKET MATERIAL SHALL BE APPROVED PRIOR TO INSTALLATION.
5. STATION STAMPS ON BRASS PLATES TO BE PER INSTALLED LOCATION AND NOT NECESSARILY THE LOCATION INDICATED ON THE PLANS.



MARKER POST DETAIL
N.T.S.



CULVERT SLOPE WARPING DETAILS
2:1 OR FLATTER FORESLOPES
N.T.S.

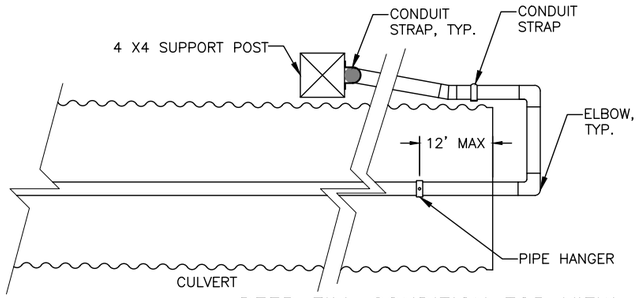
CULVERT DETAILS
(1 OF 2)

Preliminary Plans

P:\2017\17331FB-DaltonMP289-305\C\C4001cnst17331FB-E1 CULVERT DETAILS (1 OF 2) Fri, Oct/16/20 09:41am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

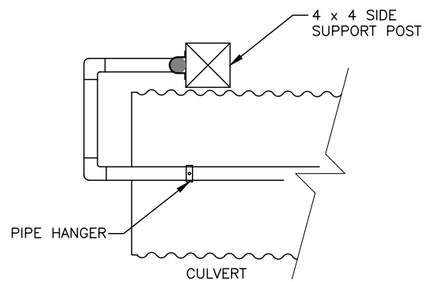
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	E2	E3



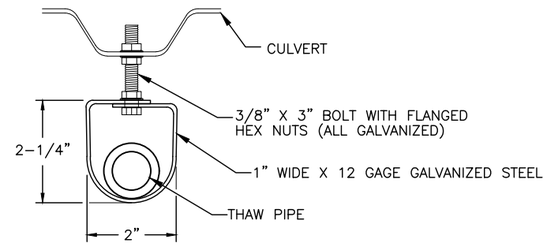
DEEP FILL CONDITION TOP VIEW

N.T.S.

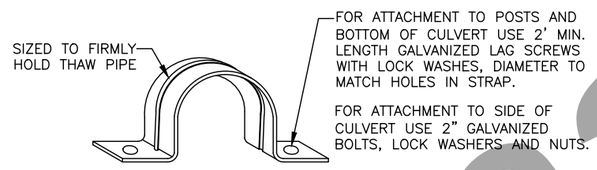


LOW FILL CONDITION TOP VIEW

N.T.S.



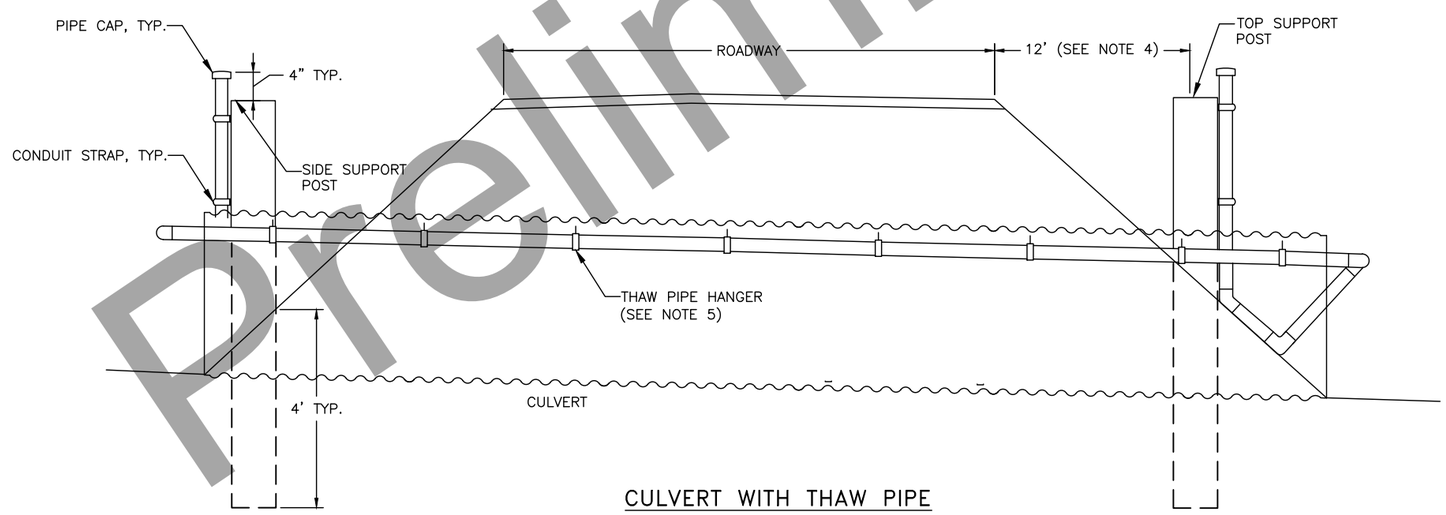
THAW PIPE HANGER DETAIL



GALVANIZED RIGID CONDUIT STRAP DETAIL

LOW FILL CONDITION:
SIDE SUPPORT POST–ALIGN TOP WITH EDGE OF SHOULDER OR TO A MAXIMUM HEIGHT OF 5', WHICH EVER IS LESS.

DEEP FILL CONDITION:
TOP SUPPORT POST–ALIGN TOP WITH EDGE OF SHOULDER OR TO A MAXIMUM HEIGHT OF 5', WHICH EVER IS LESS.



CULVERT WITH THAW PIPE

N.T.S.

THAW PIPE NOTES:

1. REFER TO THE CULVERT SUMMARY ON SHEETS D1 TO D2 FOR THAW PIPE LOCATIONS AND QUANTITIES.
2. THESE THAW PIPES ARE INTENDED FOR USE IN STEAM THAWING.
3. USE ½" I.D. ASTM A53 GALVANIZED PIPE AND FITTINGS TO MATCH.
4. WHEN THE HEIGHT OF FILL EXCEEDS 5' LOCATE THE SUPPORT POST ON THE SIDE SLOPE 12' FROM THE SHOULDER.
5. FASTEN THE THAW PIPE TO THE TOP OF THE CULVERT WITH THAW PIPE HANGERS ON 4' CENTERS MAX. THE MAXIMUM DISTANCE FROM END OF CULVERT TO FIRST PIPE HANGER IS 12 INCHES.
6. USE PRESSURE TREATED SUPPORT POSTS OF HEM–FIR, NO. 2 OR BETTER. USE AMMONIACAL COPPER ZINC ARSENATE (ACZA) OR CHROMATED COPPER ARSENATE (CCA) PRESERVATIVES ON SUPPORT POSTS. PRESSURE TREAT IN ACCORDANCE WITH AASHTO M133.
7. FASTEN THAW PIPE TO SUPPORT POSTS WITH GALVANIZED RIGID CONDUIT STRAPS AND 3" LONG GALVANIZED LAG SCREWS AT MAX. 12" CENTERS, IF MORE THAN ONE IS REQUIRED.
8. FILL THAW PIPE WITH A MINUS 50° FAHRENHEIT MIX OF RV ANTIFREEZE AND WATER, THEN CAP.

CULVERT DETAILS (2 OF 2)

Preliminary Plans

P:\2017\17331FB-DaltonNP289-305\C\C4001cnst17331FB-E2 CULVERT DETAILS Fri, Oct/16/20 09:41am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	E3	E3

606 GUARDRAIL SUMMARY

BEGIN STATION	END STATION	RT/LT	606.0013.0000 PARALLEL GUARDRAIL TERMINAL (EACH)	606.0001.0000 W-BEAM GUARDRAIL (LINEAR FOOT)	606.0016.0000 TRANSITION RAIL (EACH)	507.0001.0000 STEEL BRIDGE RAILING (LINEAR FOOT)	606.0006.0000 REMOVING AND DISPOSING OF GUARDRAIL (LINEAR FOOT)
1005+85.9	1006+35.9	LT	1				303
1006+35.9	1006+35.9	LT		--			
1006+35.9	1006+57.5	LT			1		
1006+57.5	1006+95.5	LT				38	
1006+95.5	1007+17.0	LT			1		
1007+17.0	1008+17.0	LT		100			
1008+17.0	1008+67.0	LT	1				
1004+58.9	1005+08.9	RT	1				290
1005+08.9	1006+08.9	RT		100			
1006+08.9	1006+30.5	RT			1		
1006+30.5	1006+68.5	RT				38	
1006+68.5	1006+90.0	RT			1		
1006+90.0	1006+90.0	RT		--			
1006+90.0	1007+40.0	RT	1				
		PAY ITEM TOTALS	4	200	4	76	593

NOTES:

1. FOR PARALLEL GUARDRAIL TERMINALS, CONSTRUCT THE GUARDRAIL TERMINAL WIDENING IN ACCORDANCE WITH THE "STANDARD DETAIL" ON STANDARD DRAWING G-20.12 THE END OFFSET (X) SHALL BE 2 FEET.

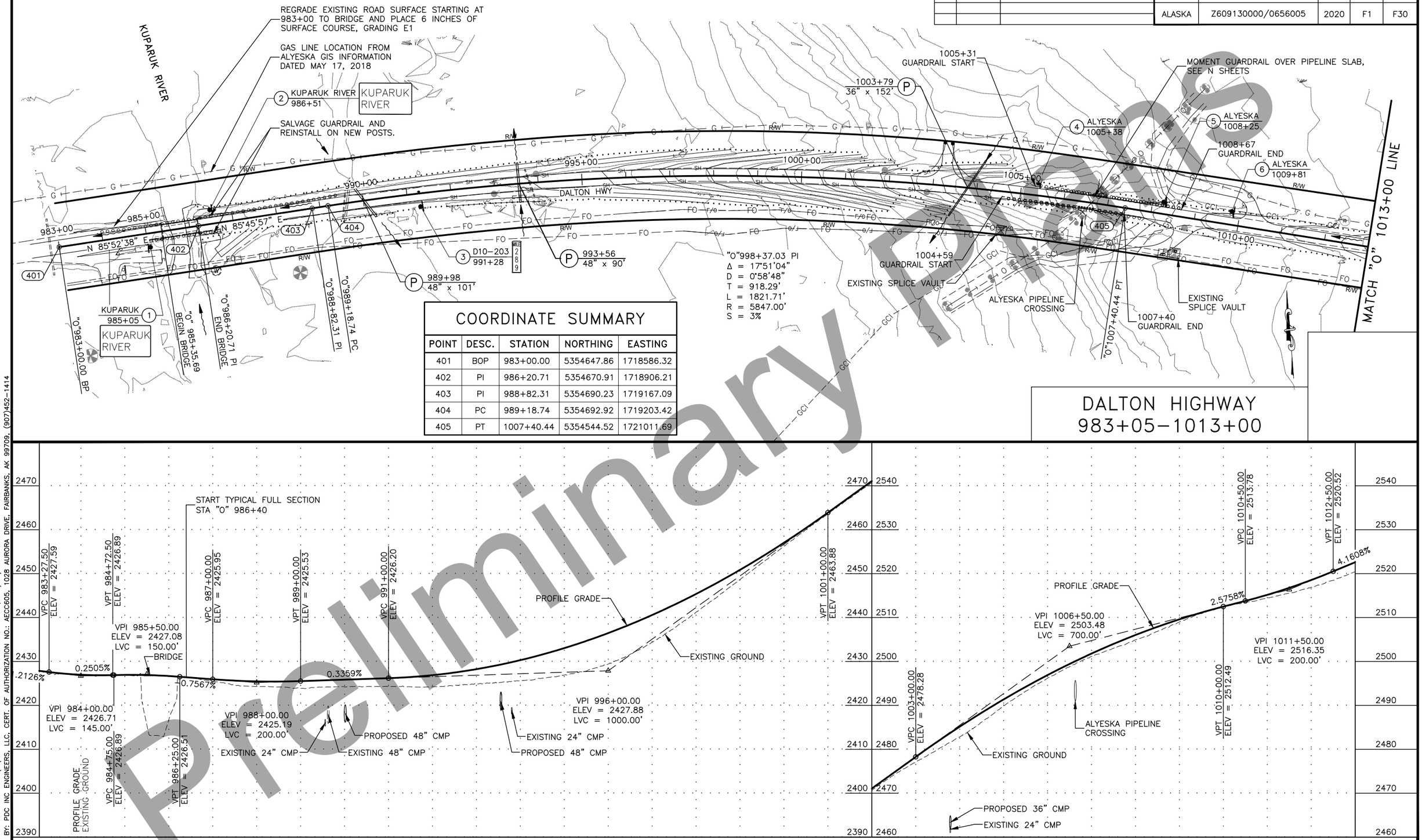
Preliminary Plans

GUARDRAIL SUMMARY AND DETAILS

P:\2017\17331FB-DaltonMP289-305\C\C4001cnst17331FB-E3 GUARDRAIL SUMMARY AND DETAILS Fri, Oct/16/20 09:41am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	F1	F30



COORDINATE SUMMARY

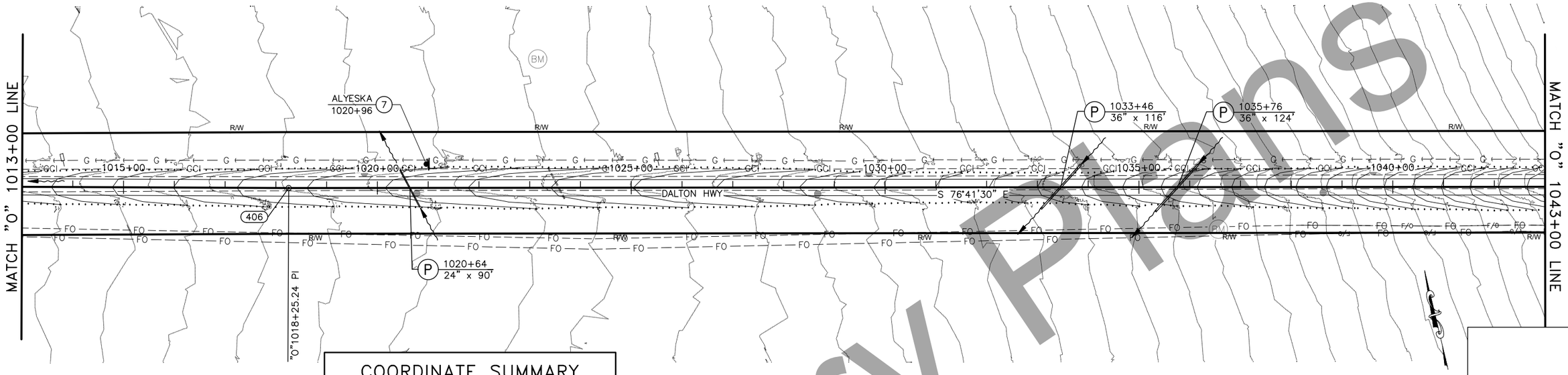
POINT	DESC.	STATION	NORTHING	EASTING
401	BOP	983+00.00	5354647.86	1718586.32
402	PI	986+20.71	5354670.91	1718906.21
403	PI	988+82.31	5354690.23	1719167.09
404	PC	989+18.74	5354692.92	1719203.42
405	PT	1007+40.44	5354544.52	1721011.69

Preliminary Plans

P:\2017\17331FB-DaltonMP289-305\C\C1001cnst17331FB-F1 983+05-1013+00 Fri, Oct/16/20 09:42am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

NO.	DATE	REVISION

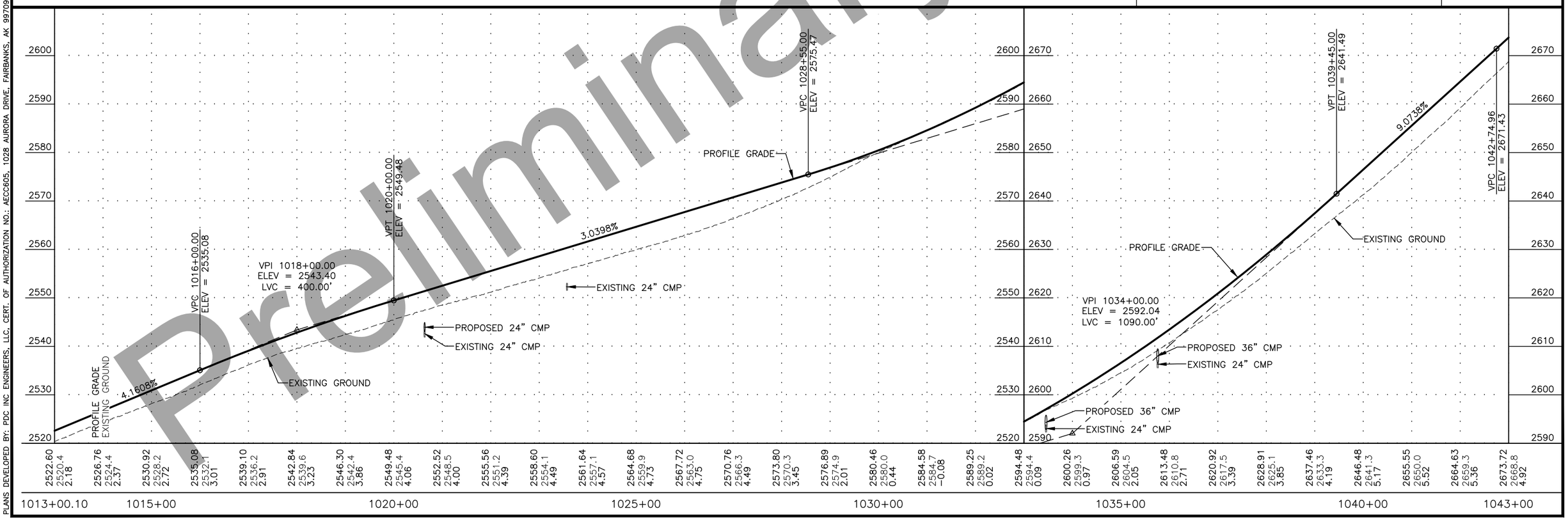
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	F2	F30



COORDINATE SUMMARY

POINT	DESC.	STATION	NORTHING	EASTING
406	PI	1018+25.23	5354289.13	1722065.98

DALTON HIGHWAY
1013+00–1043+00

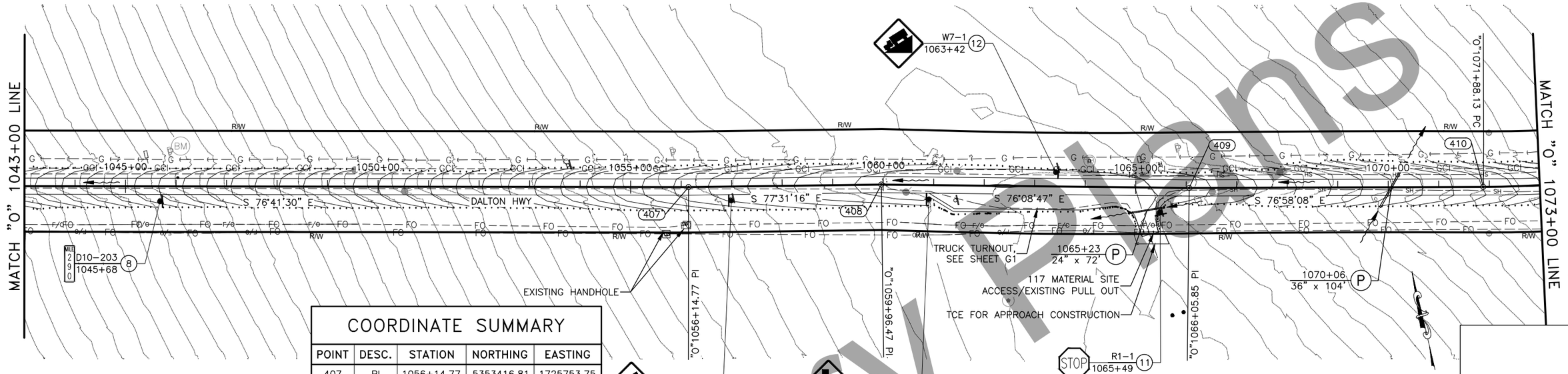


Preliminary Plans

P:\2017\17331FB-DaltonMP289-305\C\C1001cnst17331FB-F2 1013+00-1043+00 Fri, Oct/16/20 09:44am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

NO.	DATE	REVISION

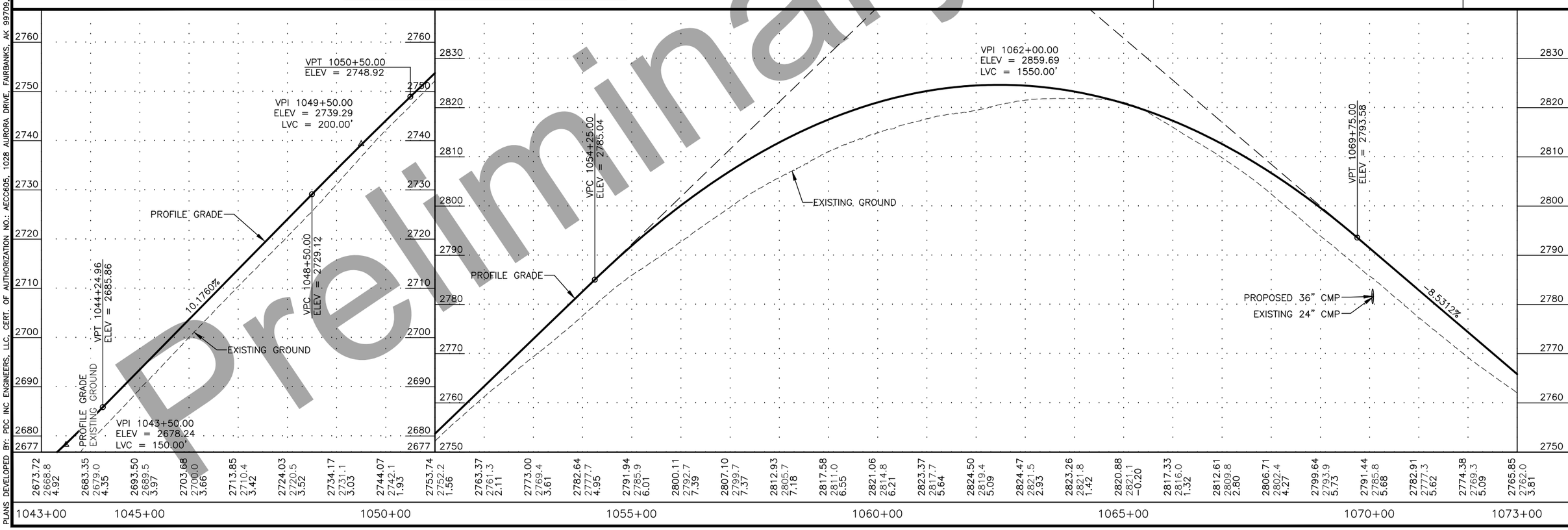
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	F3	F30



COORDINATE SUMMARY

POINT	DESC.	STATION	NORTHING	EASTING
407	PI	1056+14.77	5353416.81	1725753.75
408	PI	1059+96.47	5353334.33	1726126.44
409	PI	1066+05.85	5353188.42	1726718.09
410	PC	1071+88.13	5353057.13	1727285.37

DALTON HIGHWAY
1043+00–1073+00

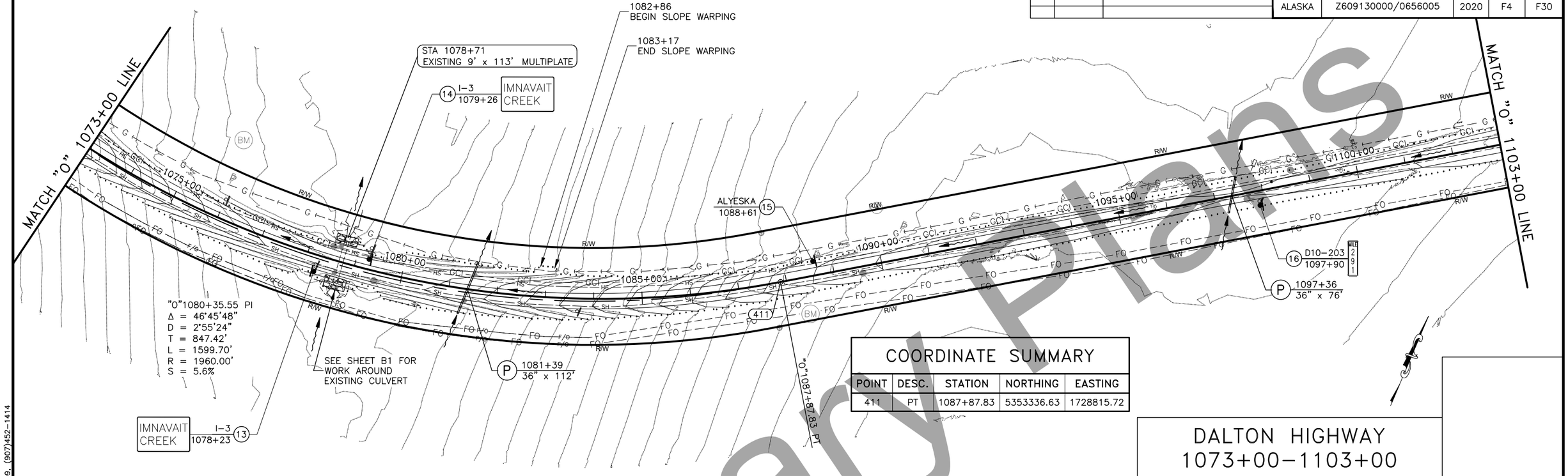


Preliminary Plans

P:\2017\17331FB-DaltonMP289-305\C\C1001cnst17331FB-F3 1043+00-1073+00 Fri, Oct/16/20 09:45am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

NO.	DATE	REVISION

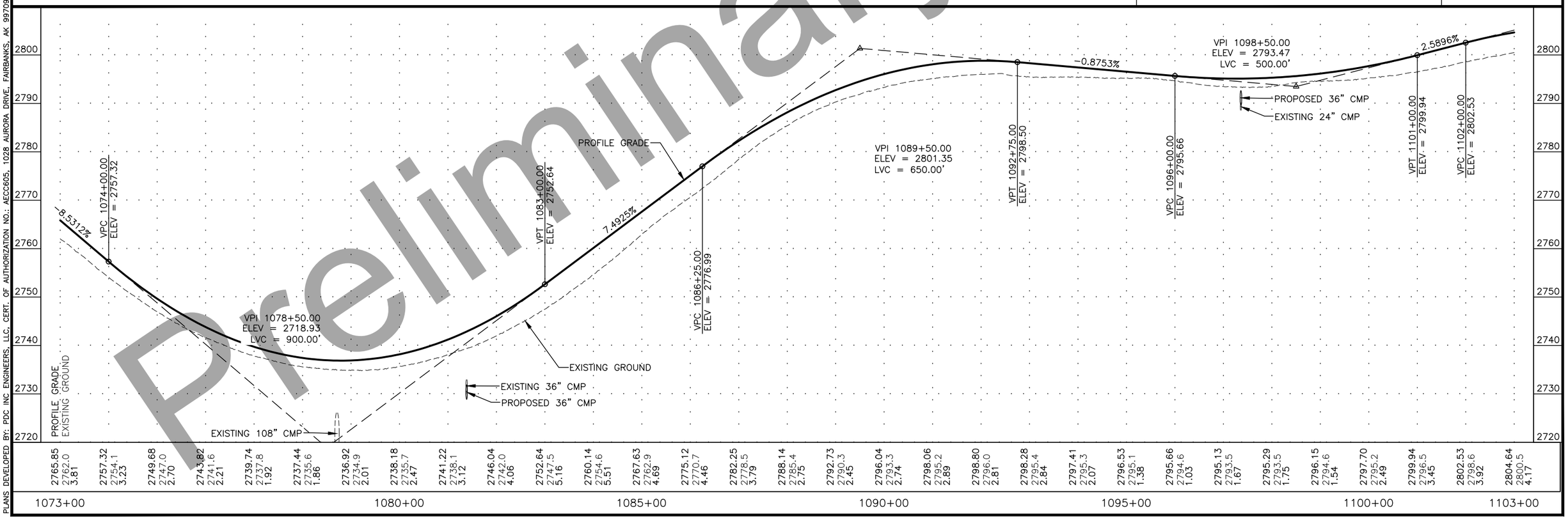
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	F4	F30



COORDINATE SUMMARY

POINT	DESC.	STATION	NORTHING	EASTING
411	PT	1087+87.83	5353336.63	1728815.72

DALTON HIGHWAY
1073+00–1103+00

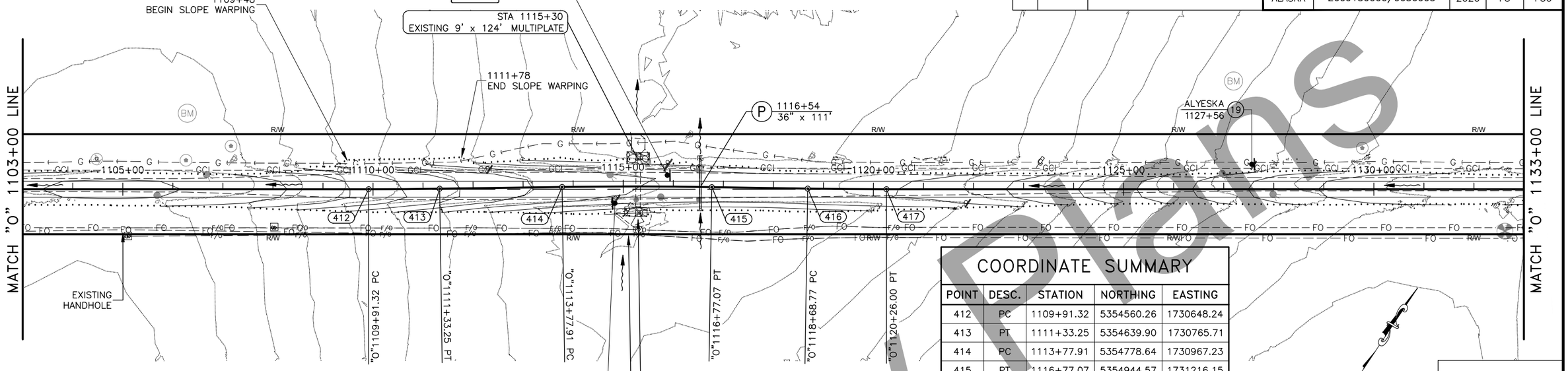


Preliminary Plans

P:\2017\17331FB-DaltonMP289-305\C\C1001cnst17331FB-F4 1073+00-1103+00 Fri, Oct/16/20 09:46am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

NO.	DATE	REVISION

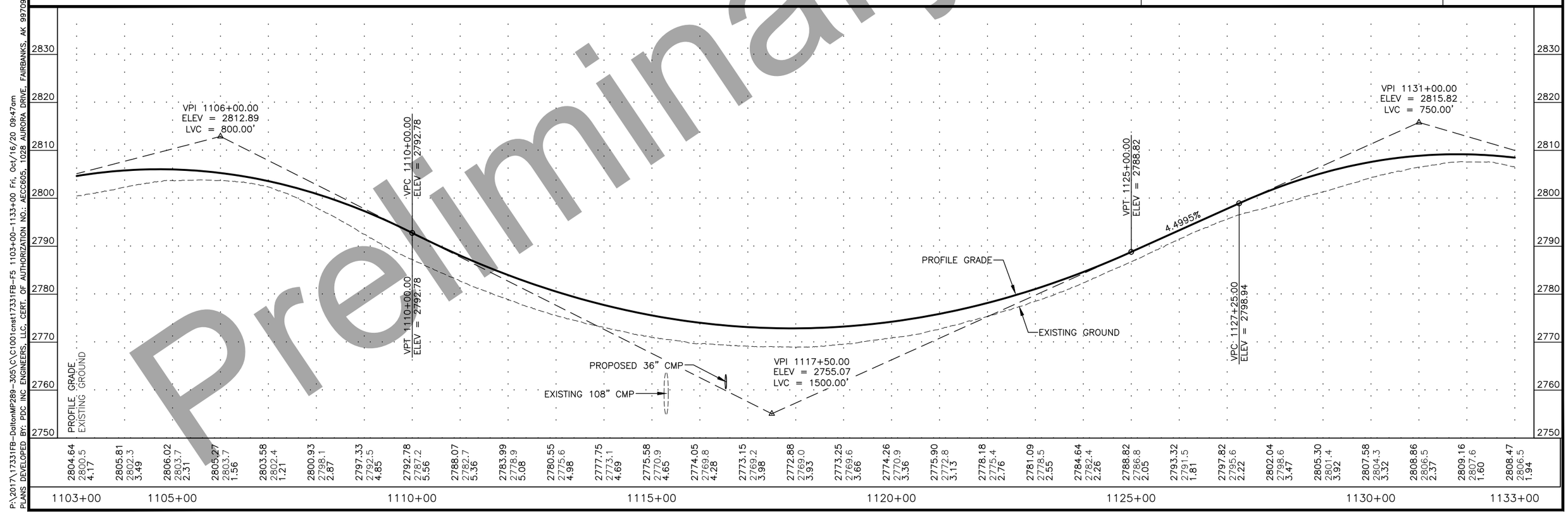
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	F5	F30



COORDINATE SUMMARY

POINT	DESC.	STATION	NORTHING	EASTING
412	PC	1109+91.32	5354560.26	1730648.24
413	PT	1111+33.25	5354639.90	1730765.71
414	PC	1113+77.91	5354778.64	1730967.23
415	PT	1116+77.07	5354944.57	1731216.15
416	PC	1118+68.77	5355048.50	1731377.22
417	PT	1120+26.01	5355134.79	1731508.67

DALTON HIGHWAY
1103+00–1133+00

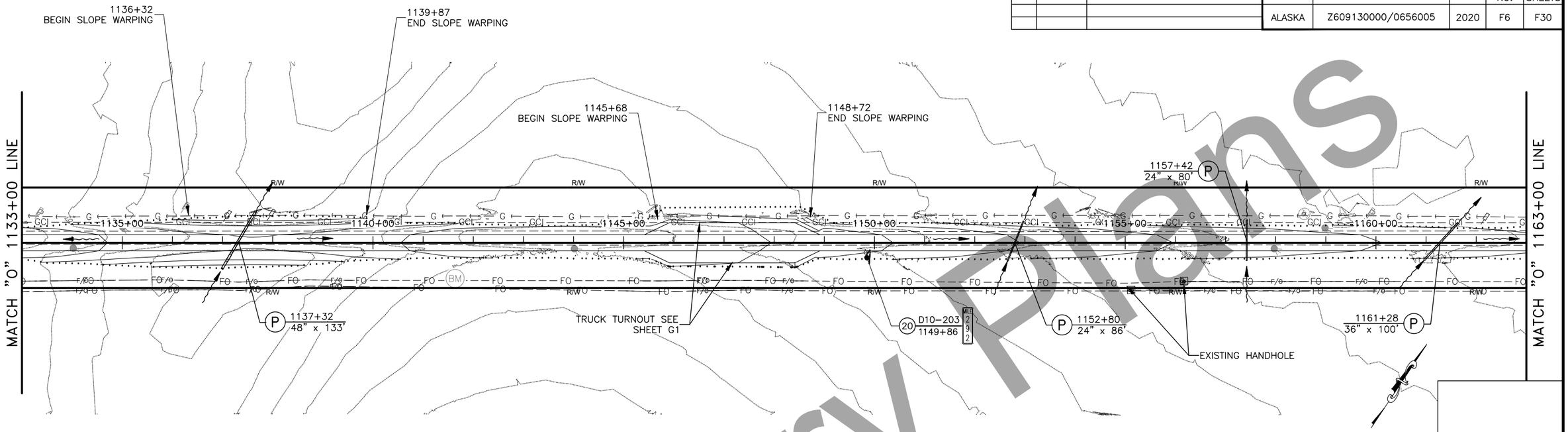


Preliminary Plans

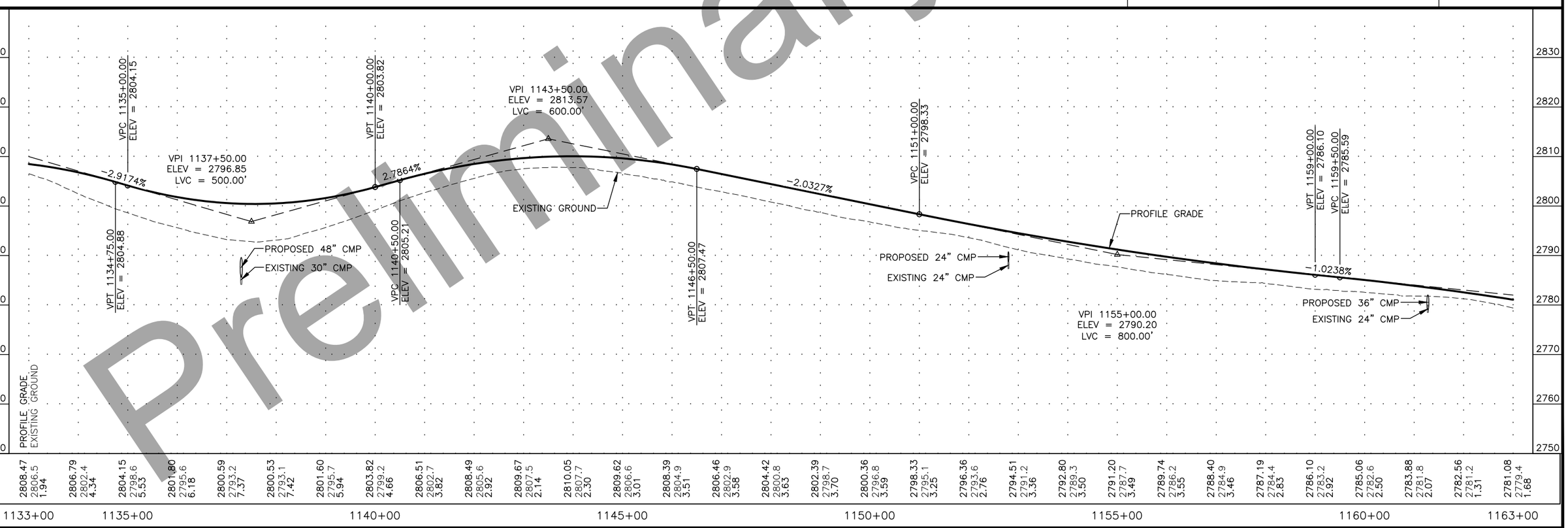
P:\2017\17331FB-DaltonMP289-305\C\C1001cnst17331FB-F5 1103+00-1133+00 Fri, Oct/16/20 09:47am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	F6	F30



DALTON HIGHWAY
1133+00–1163+00

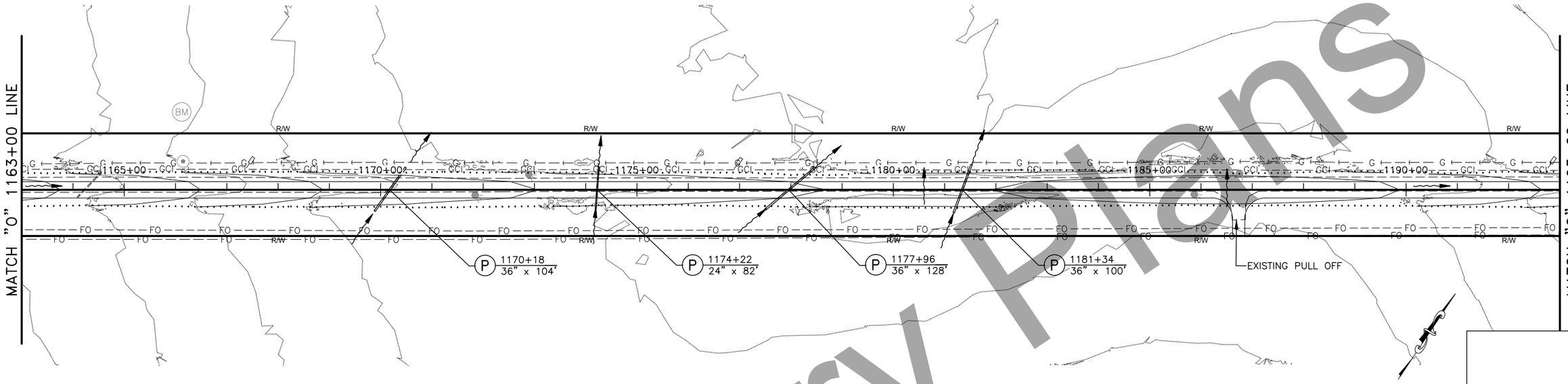


Preliminary Plans

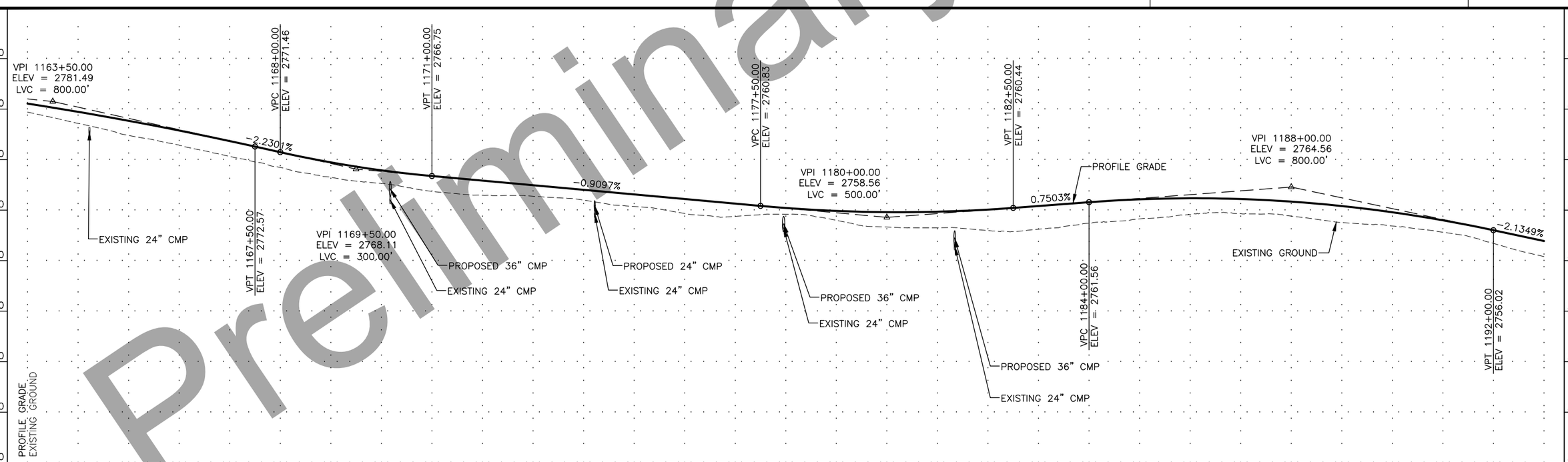
P:\2017\17331FB-DaltonMP289-305\C\C1001cnst17331FB-F6 1133+00-1163+00 Fri, Oct/16/20 09:48am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	F7	F30



DALTON HIGHWAY
1163+00–1193+00

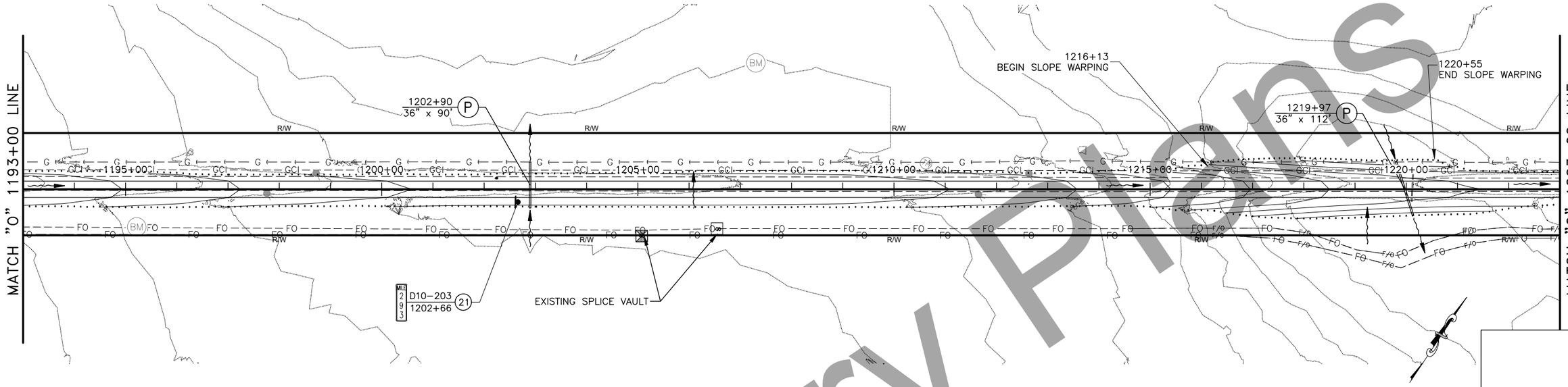


Preliminary Plans

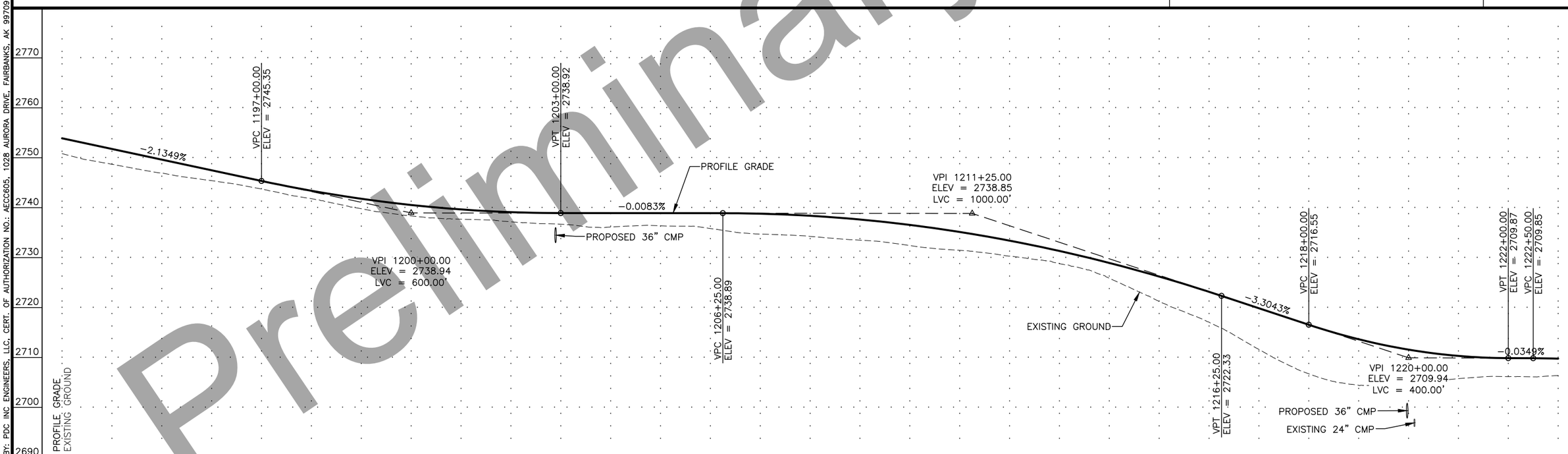
P:\2017\17331FB-DaltonMP289-305\C\C1001cnst17331FB-F7 1163+00-1193+00 Fri, Oct/16/20 09:50am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	F8	F30



DALTON HIGHWAY
1193+00–1223+00

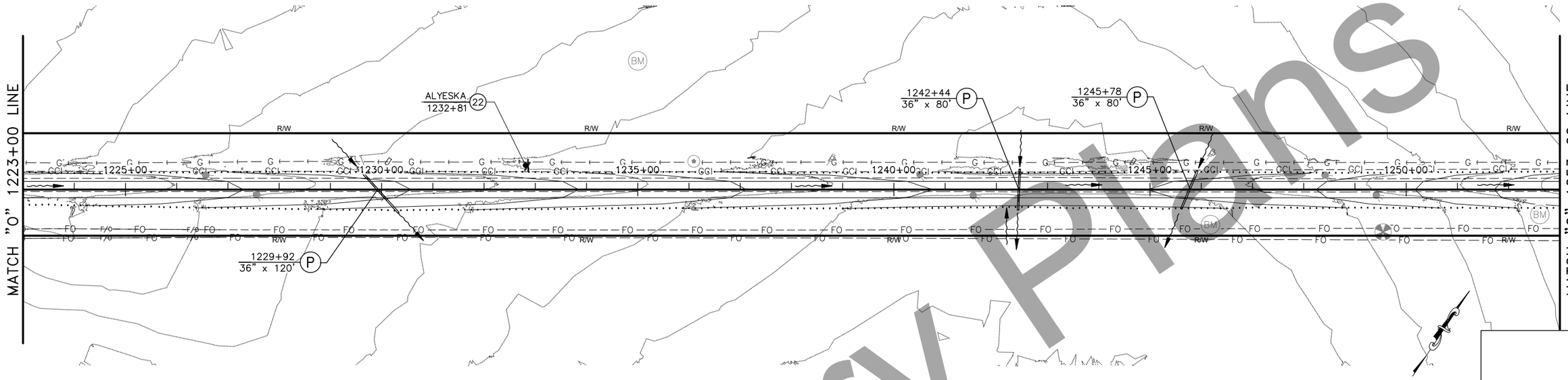


Preliminary Plans

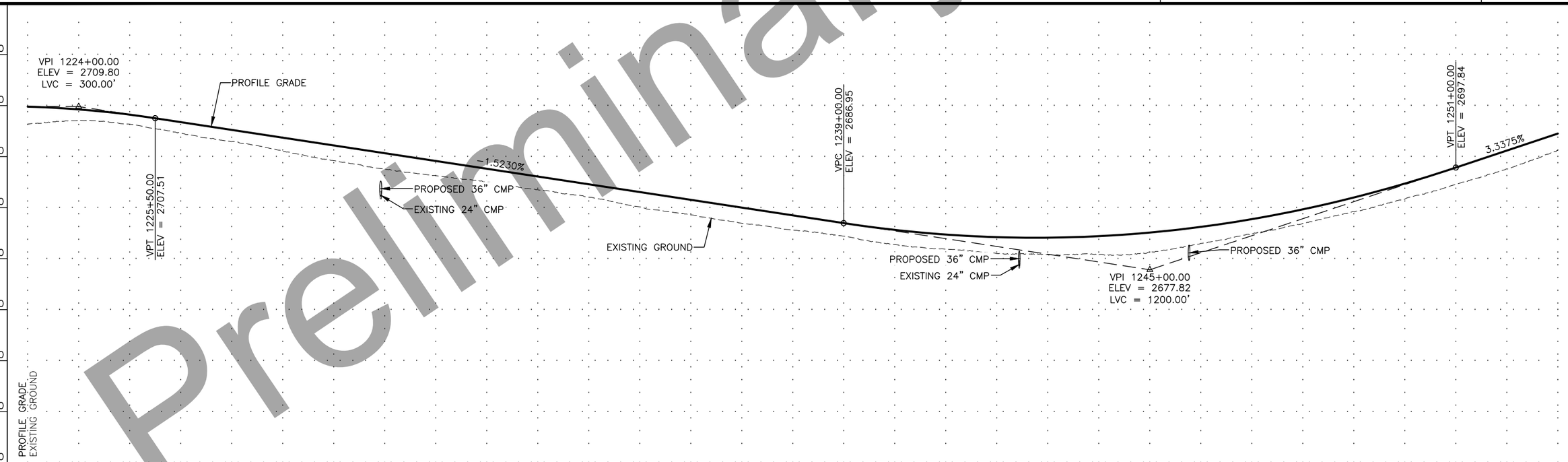
P:\2017\17331FB-DaltonMP289-305\C\C1001cnst17331FB-F8 1193+00-1223+00 Fri, Oct/16/20 09:51am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	F9	F30



DALTON HIGHWAY
1223+00–1253+00

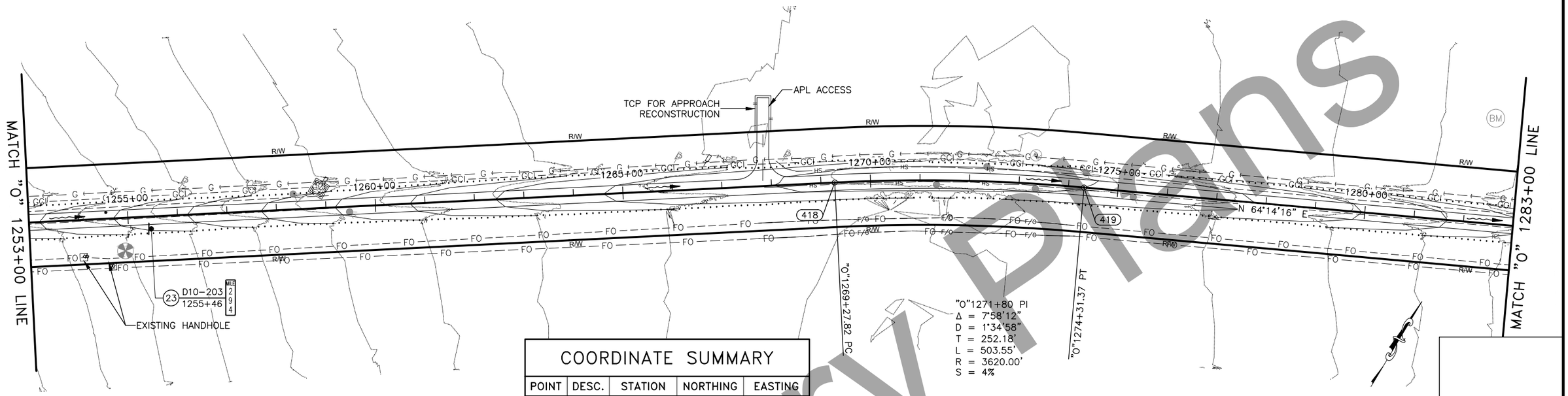


Preliminary Plans

P:\2017\17331FB-DaltonMP289-305\C\C1001cnst17331FB-F9 1223+00-1253+00 Fri, Oct/16/20 09:52am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

NO.	DATE	REVISION

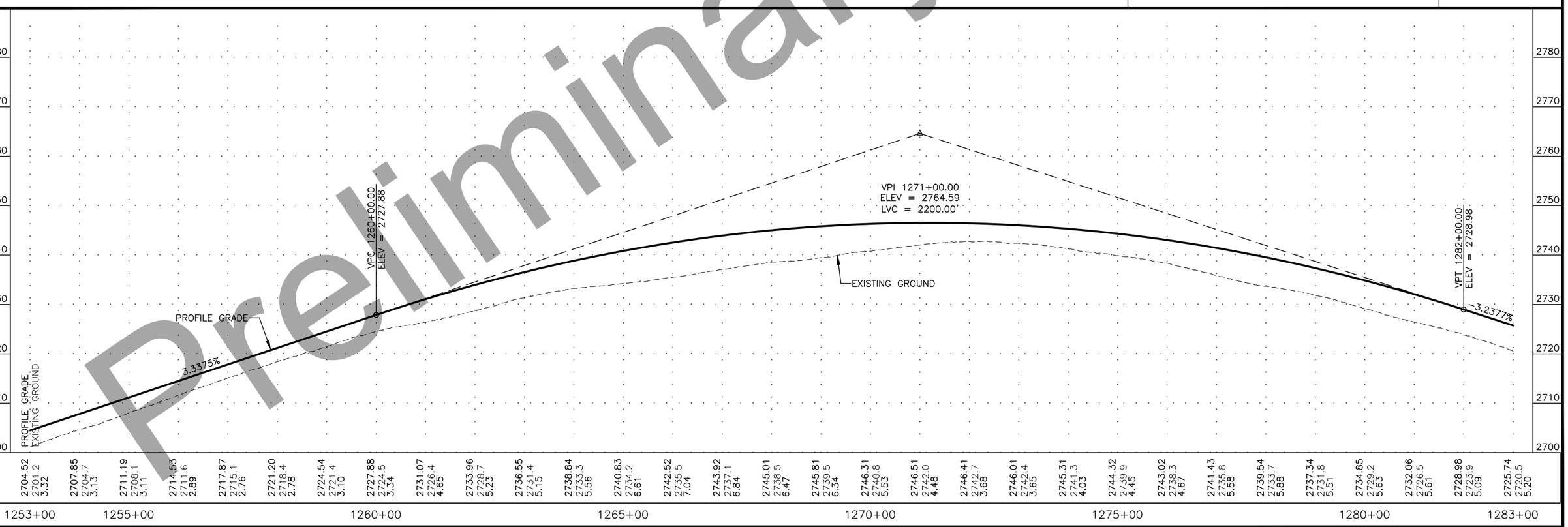
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	F10	F30



COORDINATE SUMMARY

POINT	DESC.	STATION	NORTHING	EASTING
418	PC	1269+27.82	5363409.93	1743901.66
419	PT	1274+31.37	5363659.58	1744338.50

DALTON HIGHWAY
1253+00–1283+00

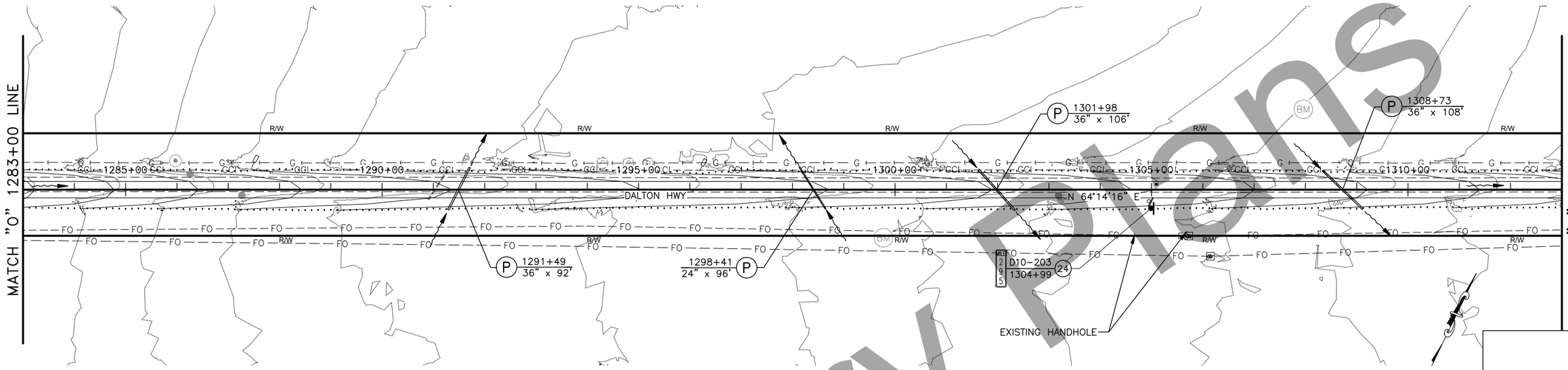


Preliminary Plans

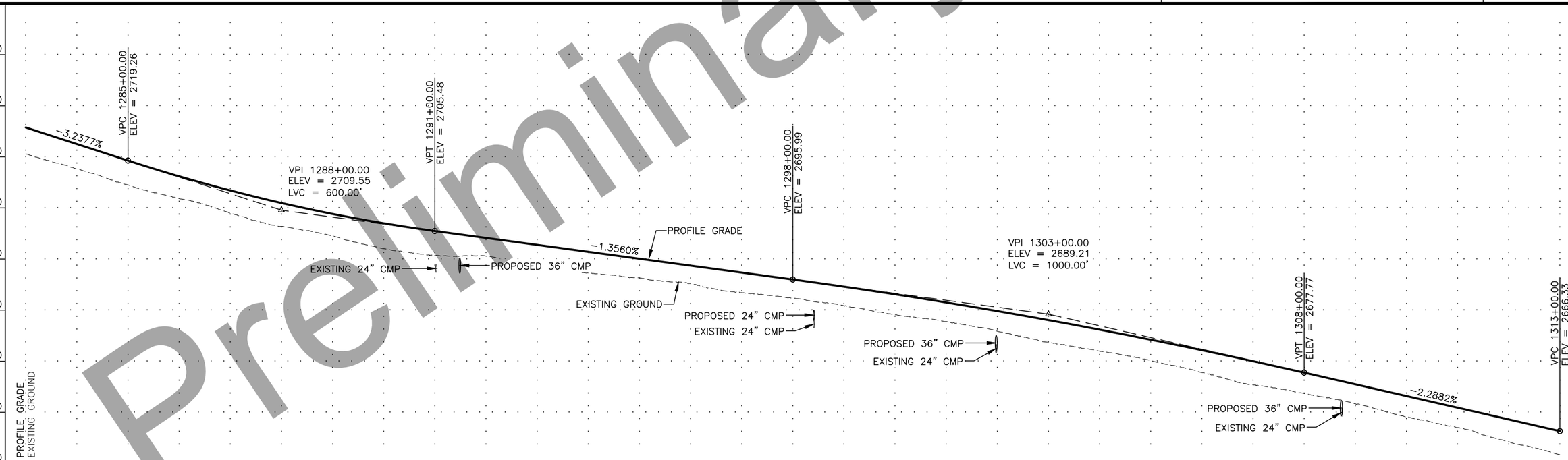
P:\2017\17331FB-DaltonMP289-305\C\C1001cnst17331FB-F10 1253+00-1283+00 Fri, Oct/16/20 09:53am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	F11	F30



DALTON HIGHWAY
1283+00–1313+00

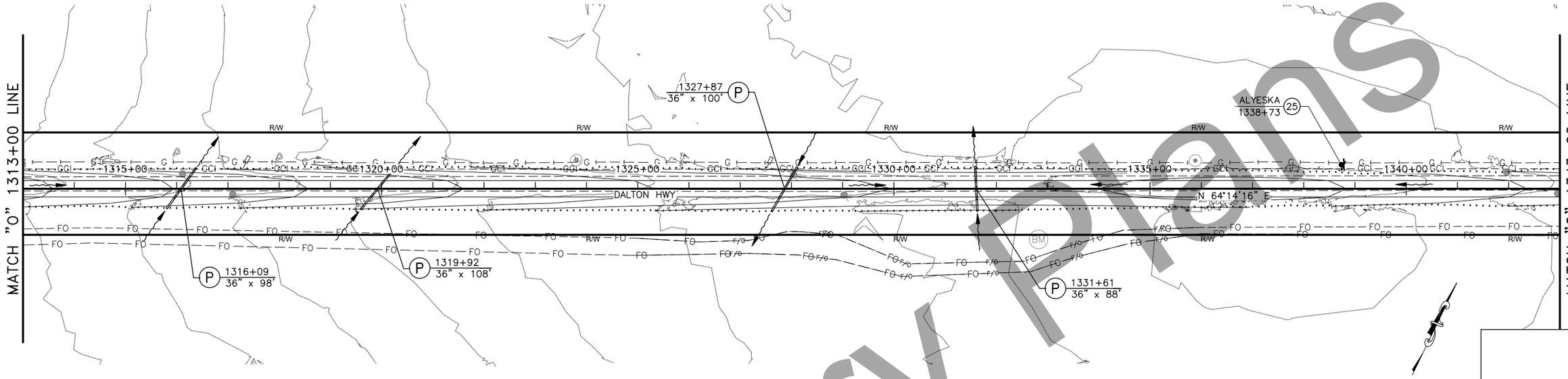


Preliminary Plans

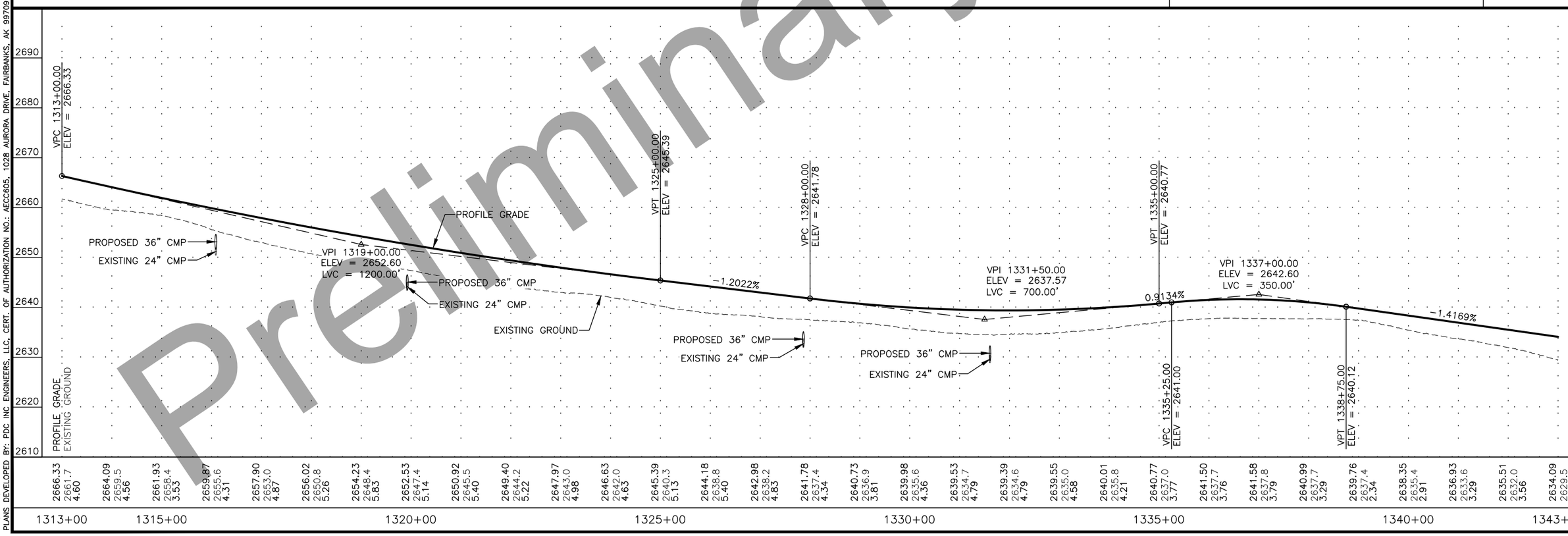
P:\2017\17331FB-DaltonMP289-305\C\C1001cnst17331FB-F11 1283+00-1313+00 Fri, Oct/16/20 09:55am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	F12	F30



DALTON HIGHWAY
1313+00–1343+00

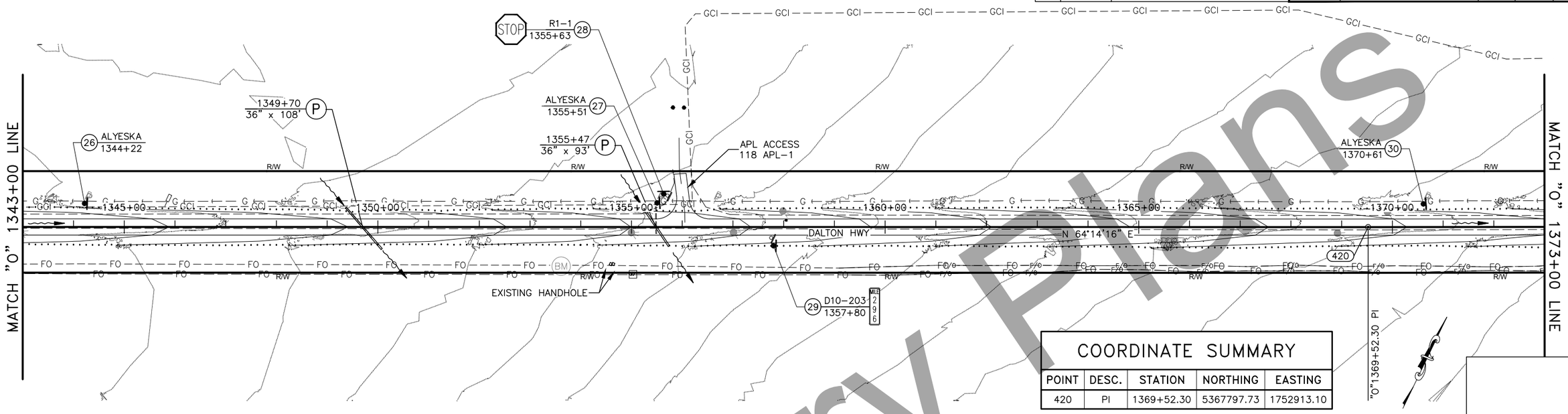


Preliminary plans

P:\2017\17331FB-DaltonMP289-305\C\C1001cnst17331FB-F12 1313+00-1343+00 Fri, Oct/16/20 09:56am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

NO.	DATE	REVISION

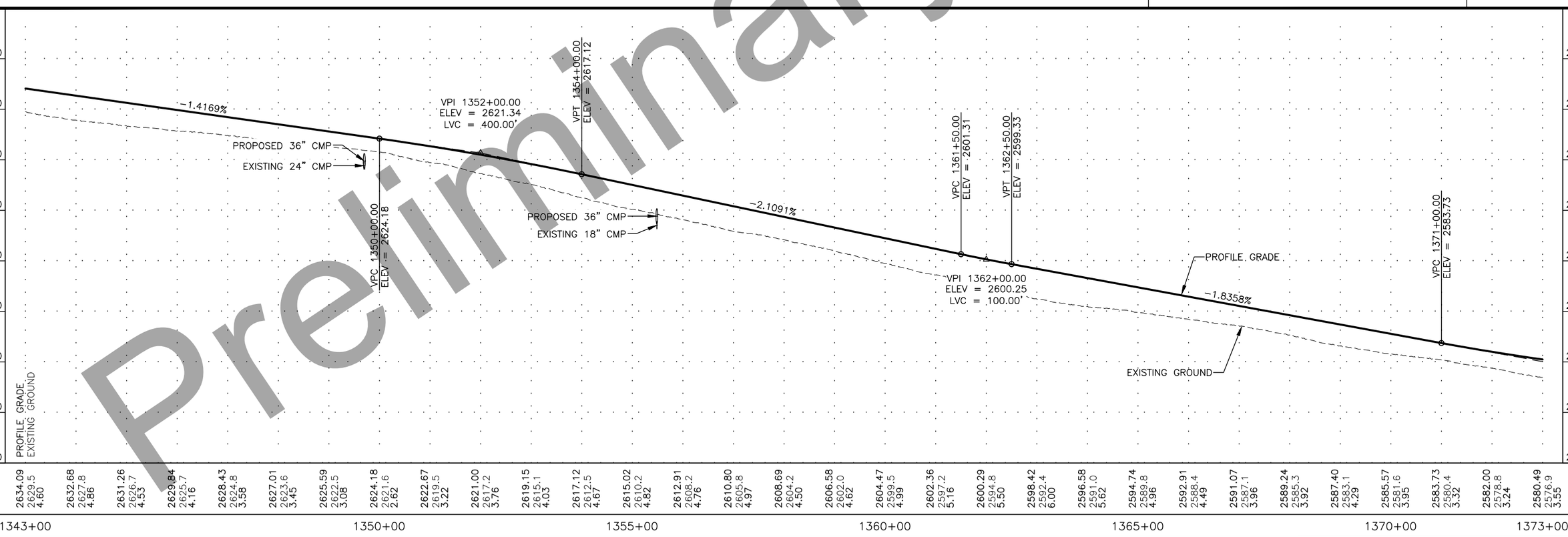
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	F13	F30



COORDINATE SUMMARY

POINT	DESC.	STATION	NORTHING	EASTING
420	PI	1369+52.30	5367797.73	1752913.10

DALTON HIGHWAY
1343+00–1373+00

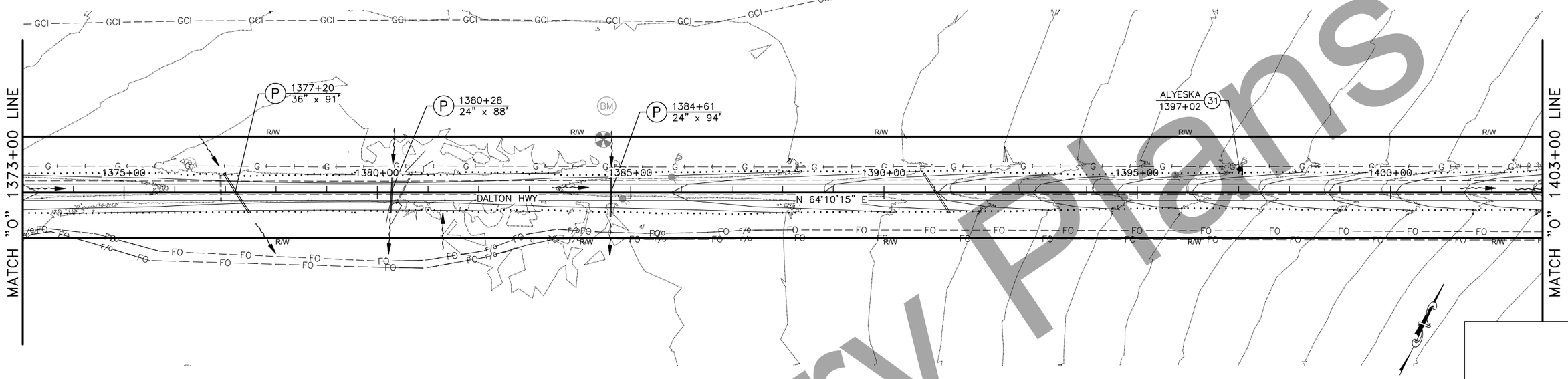


Preliminary Plans

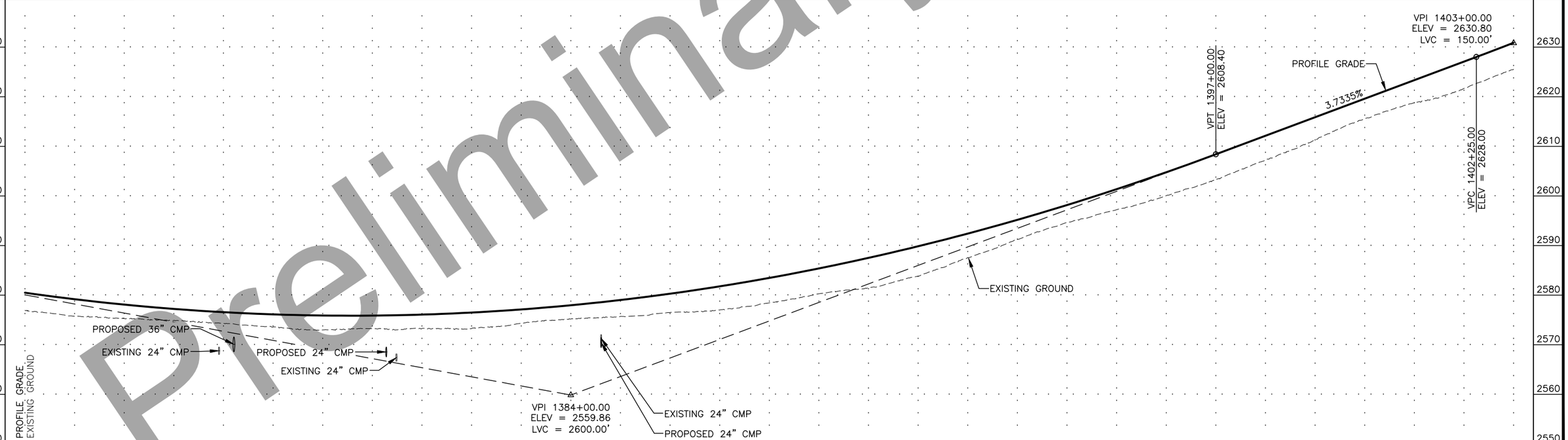
P:\2017\17331FB-DaltonMP289-305\C\C1001cnst17331FB-F13 1343+00-1373+00 Fri, Oct/16/20 09:57am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	F14	F30



DALTON HIGHWAY
1373+00–1403+00

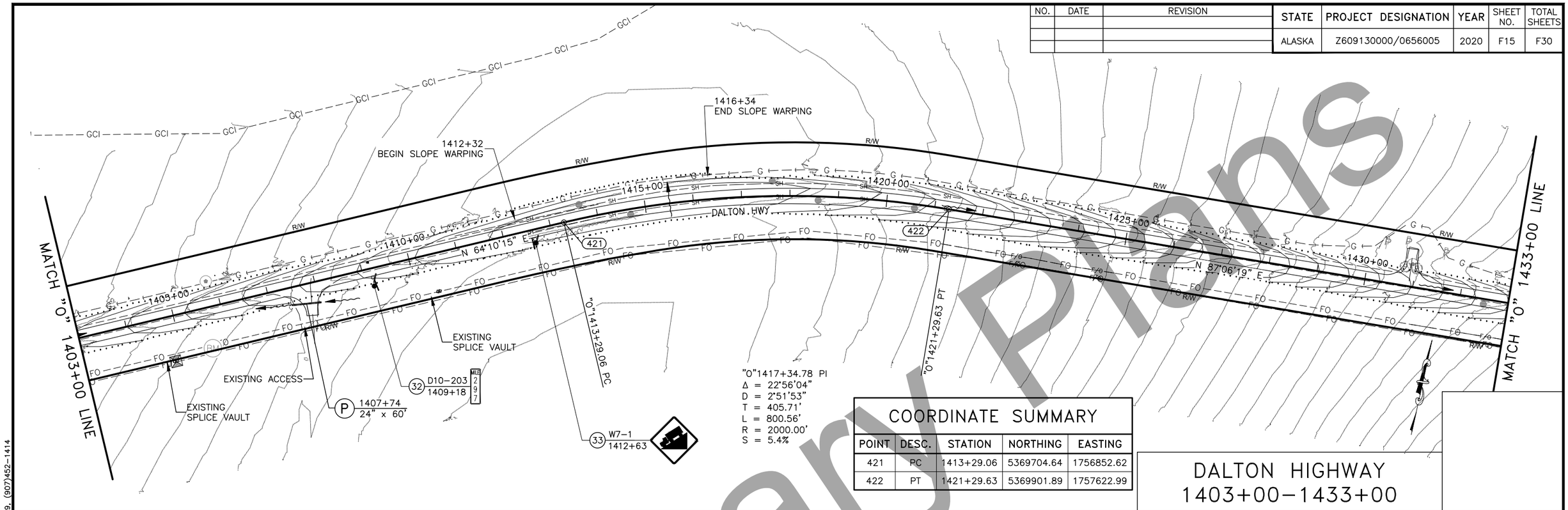


Preliminary Plans

P:\2017\17331FB-DaltonMP289-305\C\C1001cnst17331FB-F14 1373+00-1403+00 Fri, Oct/16/20 09:58am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

NO.	DATE	REVISION

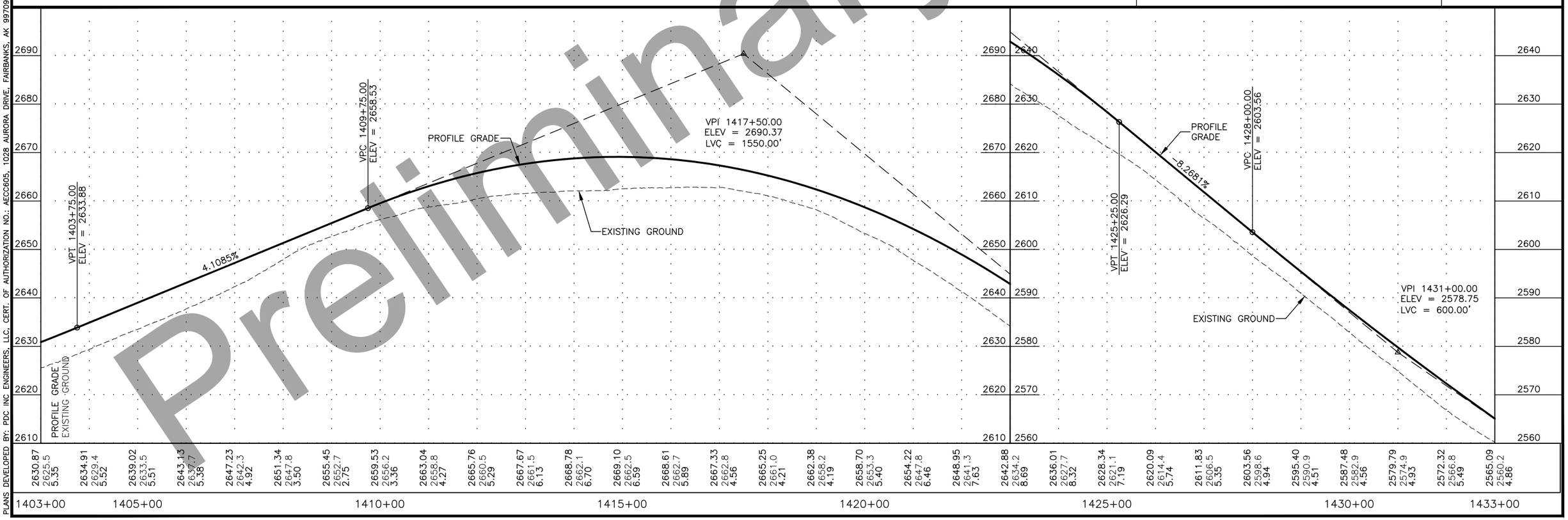
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	F15	F30



COORDINATE SUMMARY

POINT	DESC.	STATION	NORTHING	EASTING
421	PC	1413+29.06	5369704.64	1756852.62
422	PT	1421+29.63	5369901.89	1757622.99

DALTON HIGHWAY
1403+00–1433+00



Preliminary Plans

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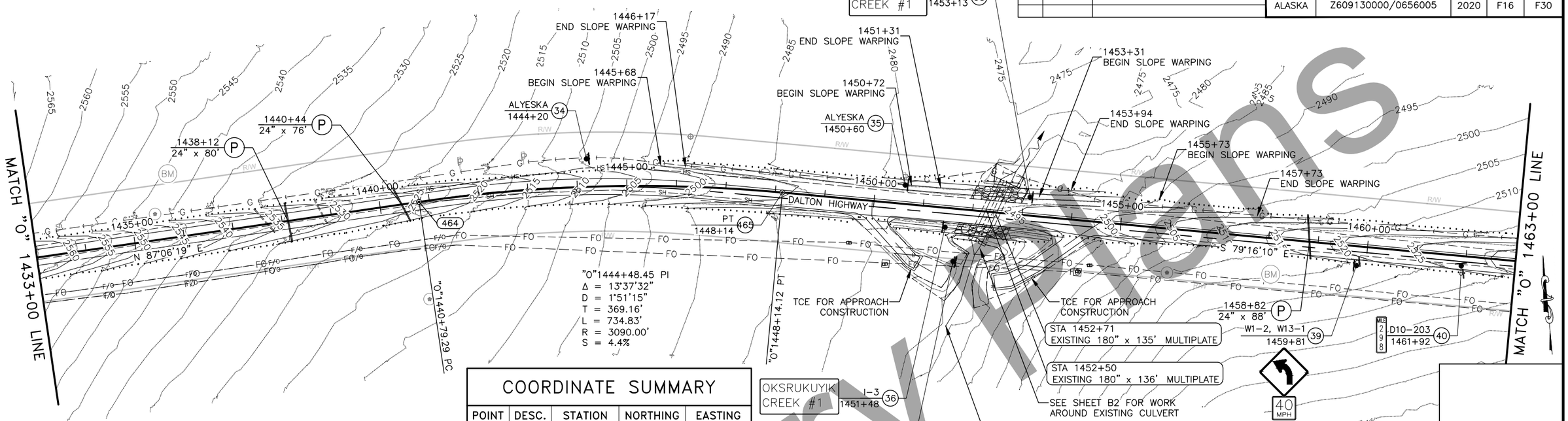
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

NO.	DATE	REVISION

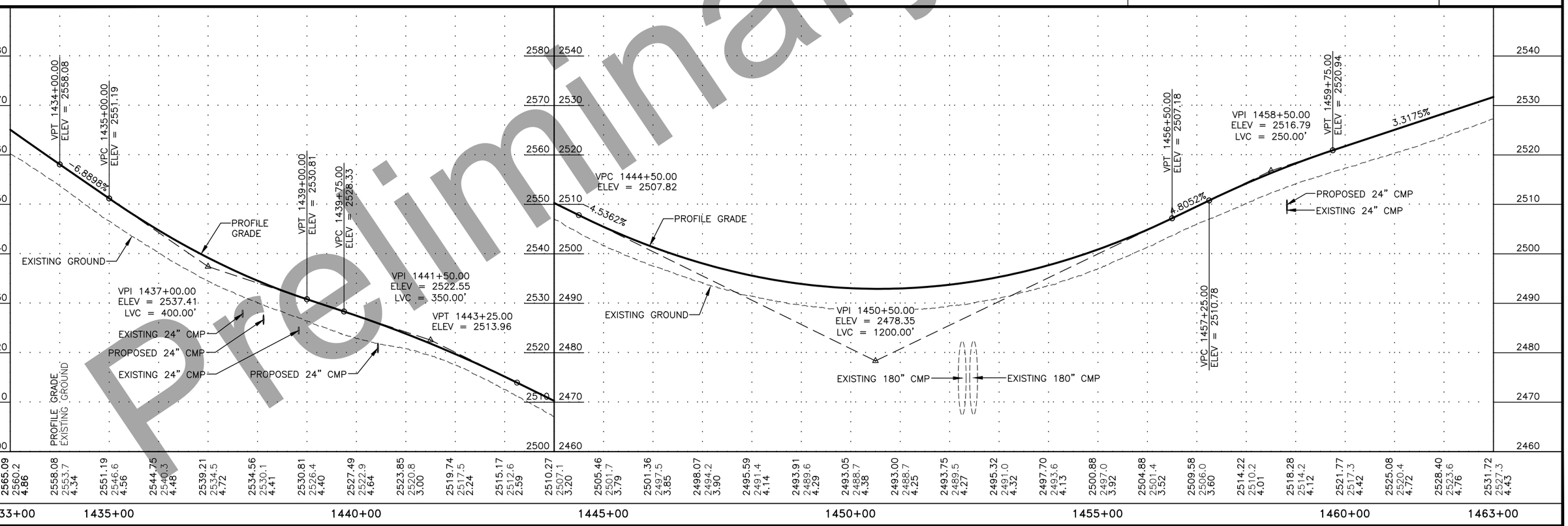
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	F16	F30



DALTON HIGHWAY
1433+00–1463+00

COORDINATE SUMMARY

POINT	DESC.	STATION	NORTHING	EASTING
464	PC	1440+79.29	5370000.36	1759570.17
465	PT	1448+14.12	5369950.27	1760301.55



Preliminary Plans

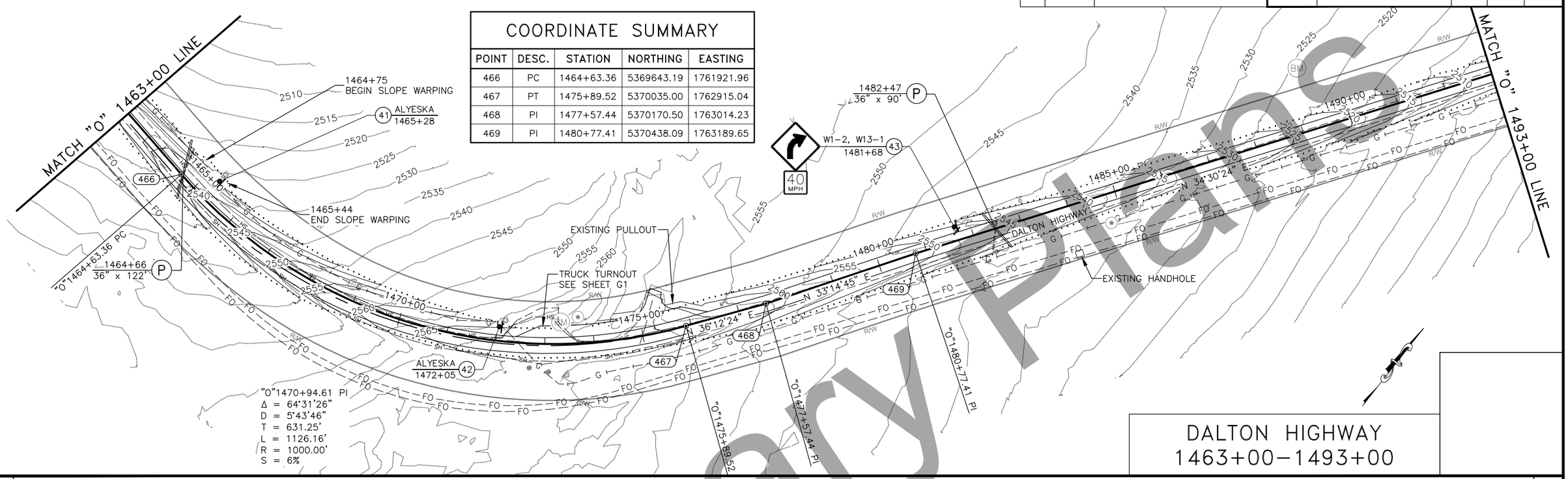
P:\2017\17331FB-DaltonMP289-305\C\c1002cnst17331fb-F16 1433+00-1463+00 Fri, Oct/16/20 10:05am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

NO.	DATE	REVISION

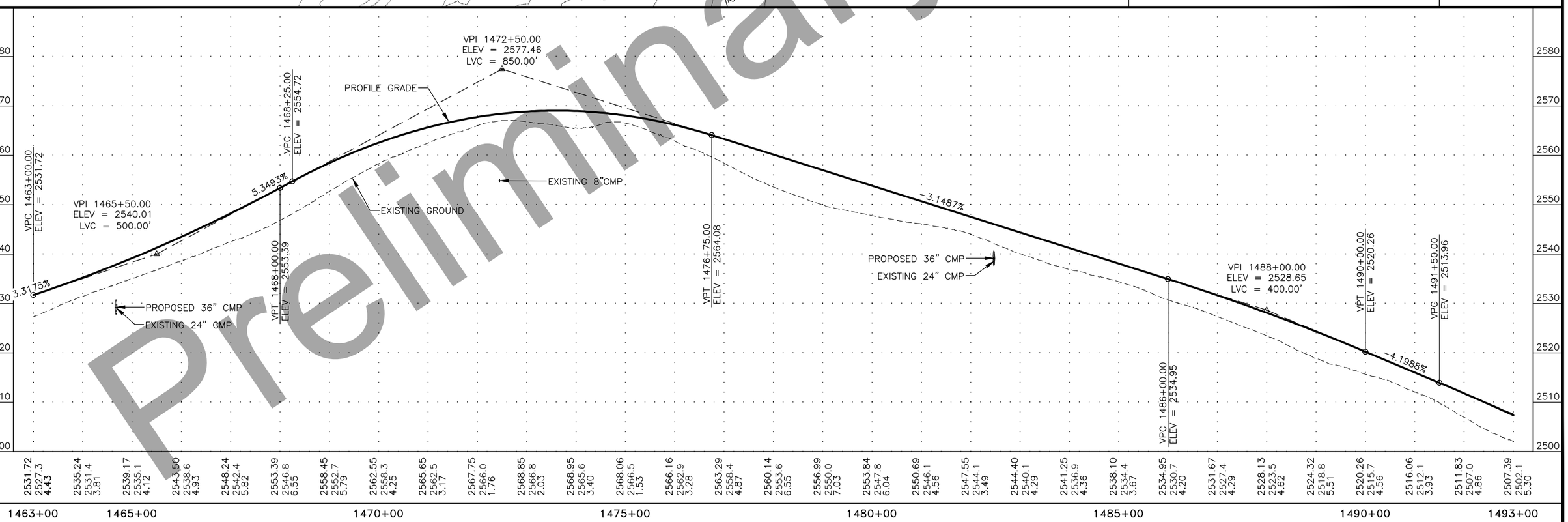
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	F17	F30

COORDINATE SUMMARY

POINT	DESC.	STATION	NORTHING	EASTING
466	PC	1464+63.36	5369643.19	1761921.96
467	PT	1475+89.52	5370035.00	1762915.04
468	PI	1477+57.44	5370170.50	1763014.23
469	PI	1480+77.41	5370438.09	1763189.65



DALTON HIGHWAY
1463+00–1493+00

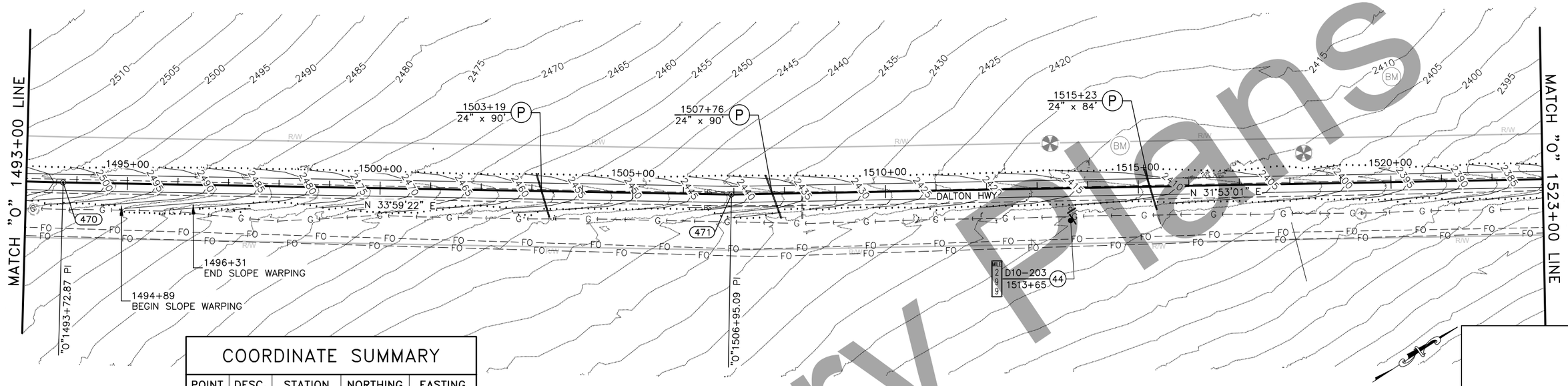


Preliminary Plans

P:\2017\17331FB-DaltonMP289-305\C\c1002cnst17331fb-F17 1463+00-1493+00 Fri, Oct/16/20 02:57pm
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

NO.	DATE	REVISION

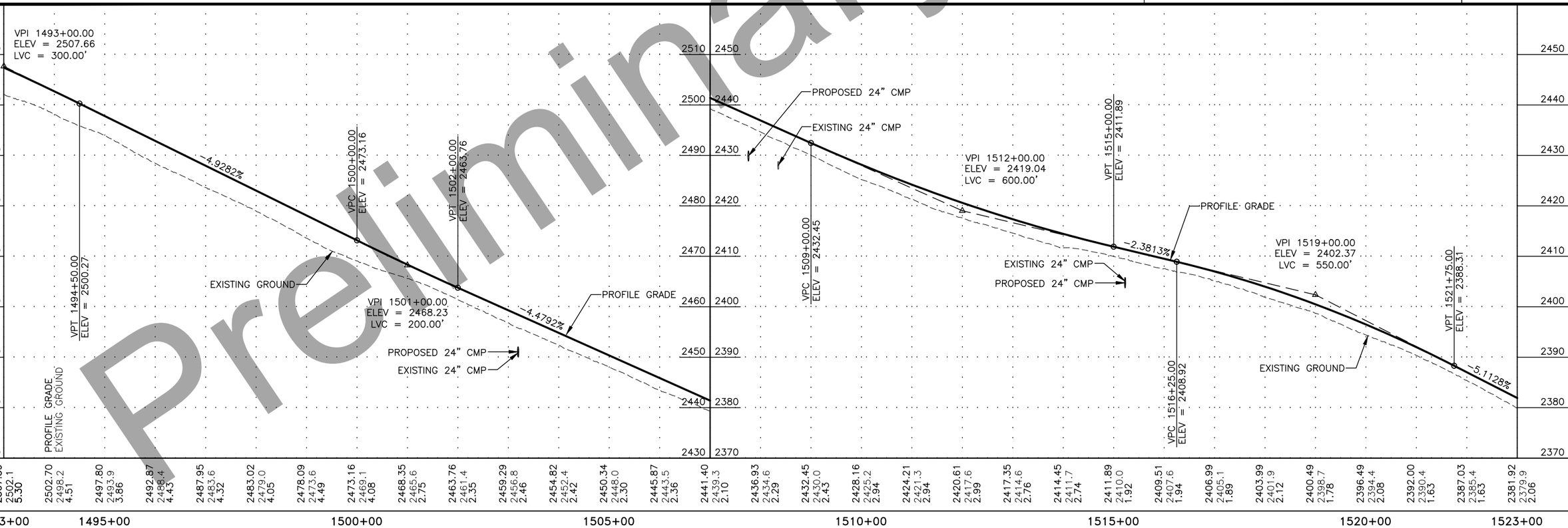
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	F18	F30



COORDINATE SUMMARY

POINT	DESC.	STATION	NORTHING	EASTING
470	PI	1493+72.87	5371505.63	1763923.53
471	PI	1506+95.09	5372601.94	1764662.70

DALTON HIGHWAY
1493+00–1523+00

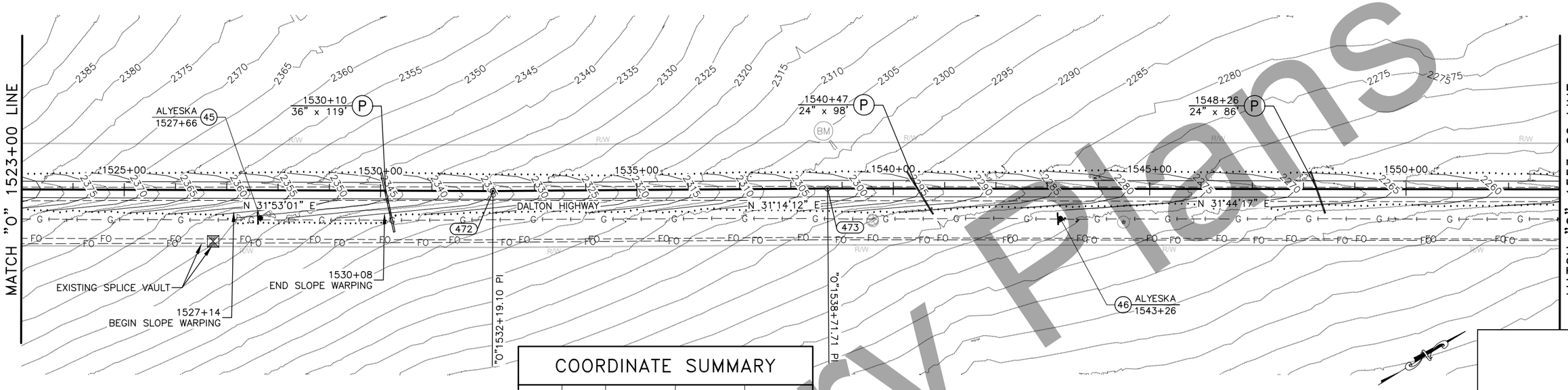


Preliminary Plans

P:\2017\17331FB-DaltonMP289-305\C\c1002cnst17331fb-F18 1493+00-1523+00 Fri, Oct/16/20 10:15am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

NO.	DATE	REVISION

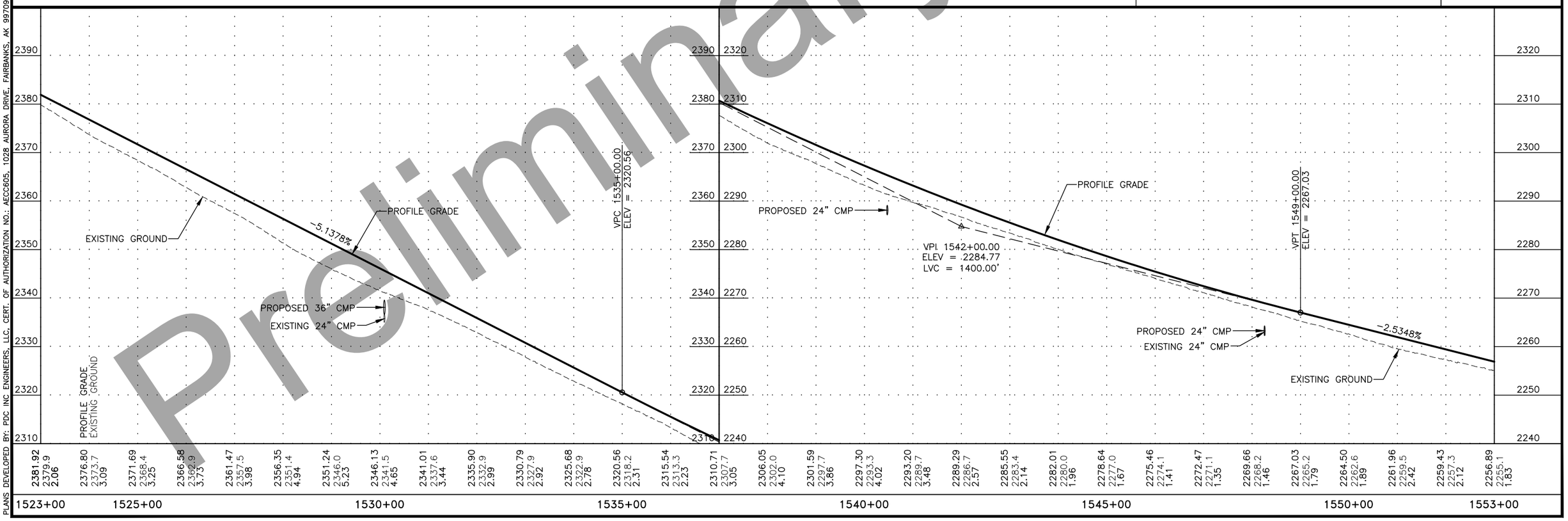
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	F19	F30



COORDINATE SUMMARY

POINT	DESC.	STATION	NORTHING	EASTING
472	PI	1532+19.10	5374745.13	1765995.87
473	PI	1538+71.71	5375303.14	1766334.30

DALTON HIGHWAY
1523+00–1553+00

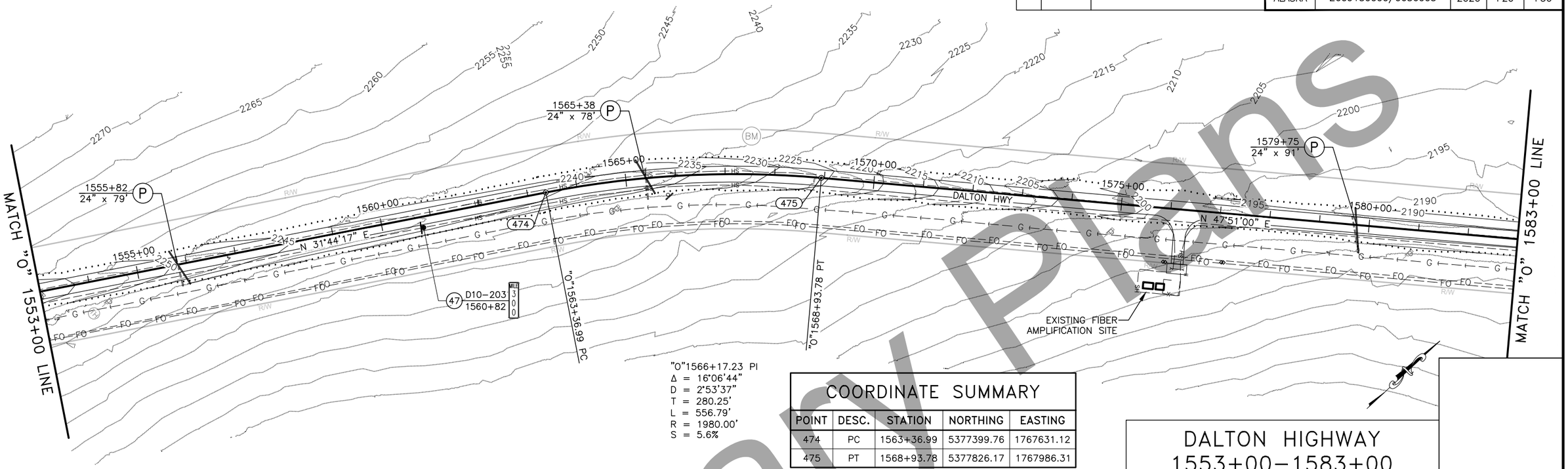


Preliminary Plans

P:\2017\17331FB-DaltonMP289-305\C\c1002cnst17331fb-F19 1523+00-1553+00 Fri, Oct/16/20 10:19am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	F20	F30

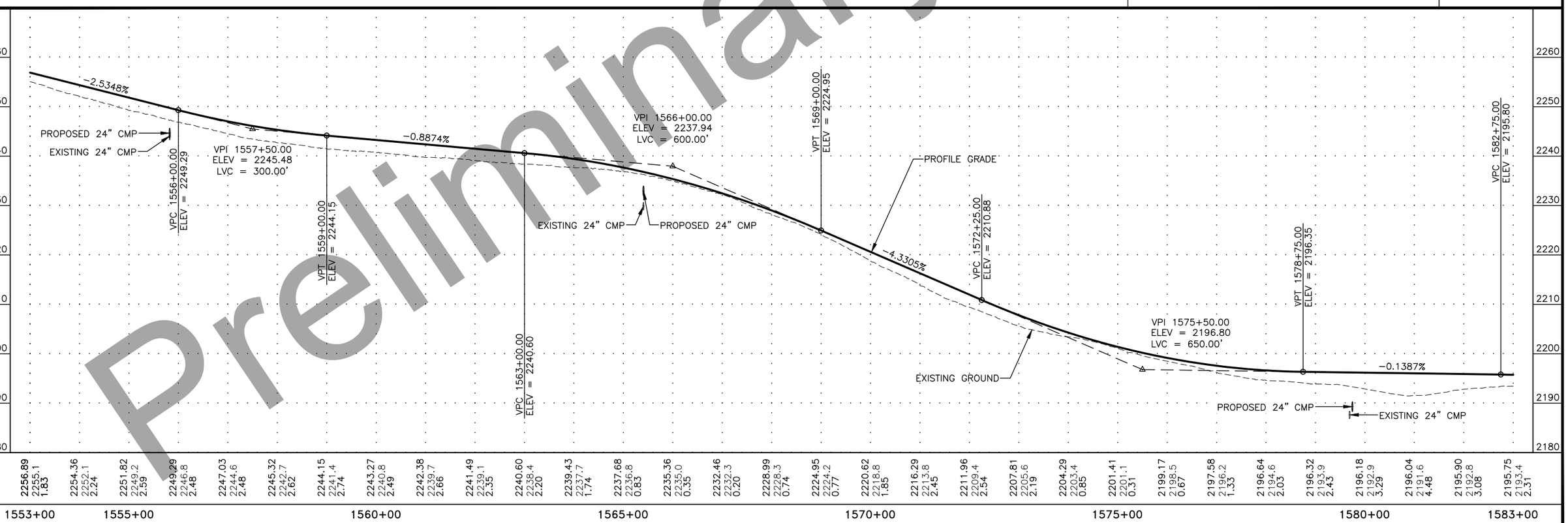


"O"1566+17.23 PI
Δ = 16°06'44"
D = 2°53'37"
T = 280.25'
L = 556.79'
R = 1980.00'
S = 5.6%

COORDINATE SUMMARY

POINT	DESC.	STATION	NORTHING	EASTING
474	PC	1563+36.99	5377399.76	1767631.12
475	PT	1568+93.78	5377826.17	1767986.31

DALTON HIGHWAY
1553+00–1583+00



Preliminary Plans

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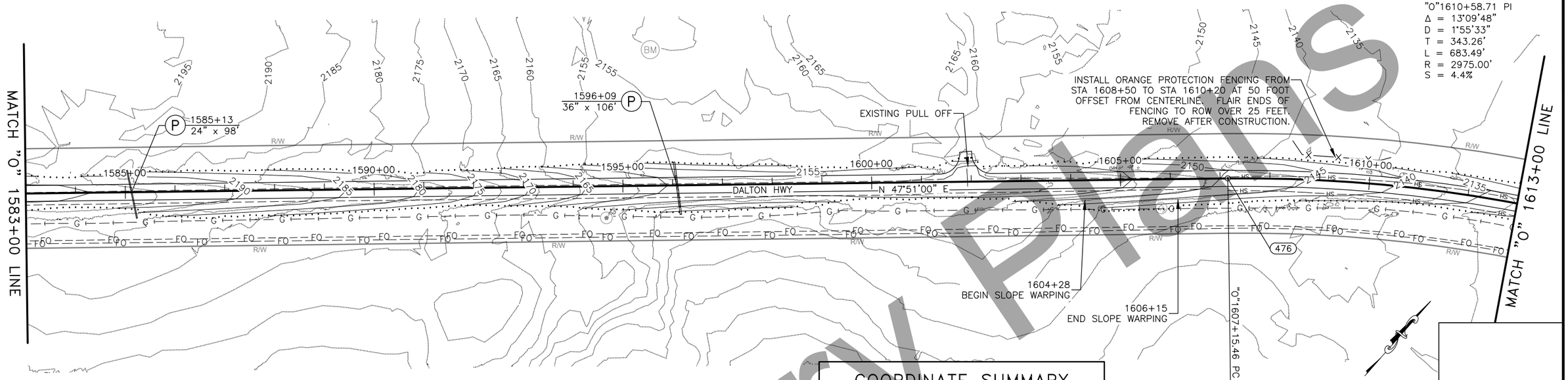
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

NO.	DATE	REVISION

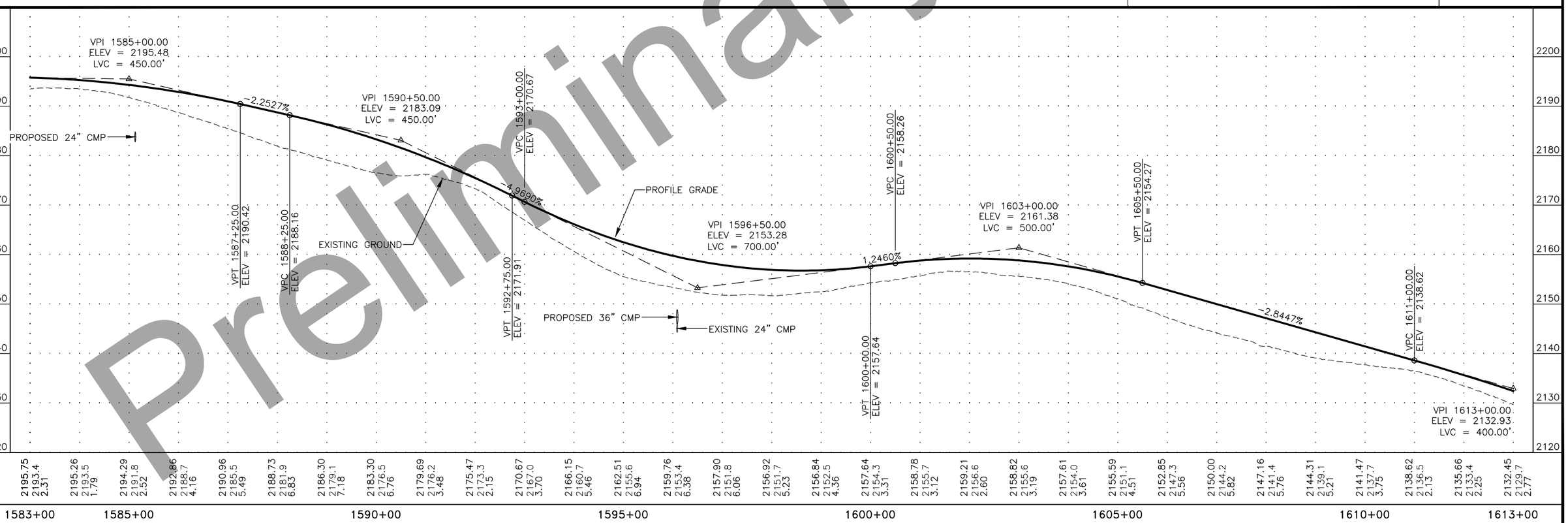
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	F21	F30



COORDINATE SUMMARY

POINT	DESC.	STATION	NORTHING	EASTING
476	PC	1607+15.46	5380390.79	1770819.67

DALTON HIGHWAY
1583+00–1613+00



Preliminary Plans

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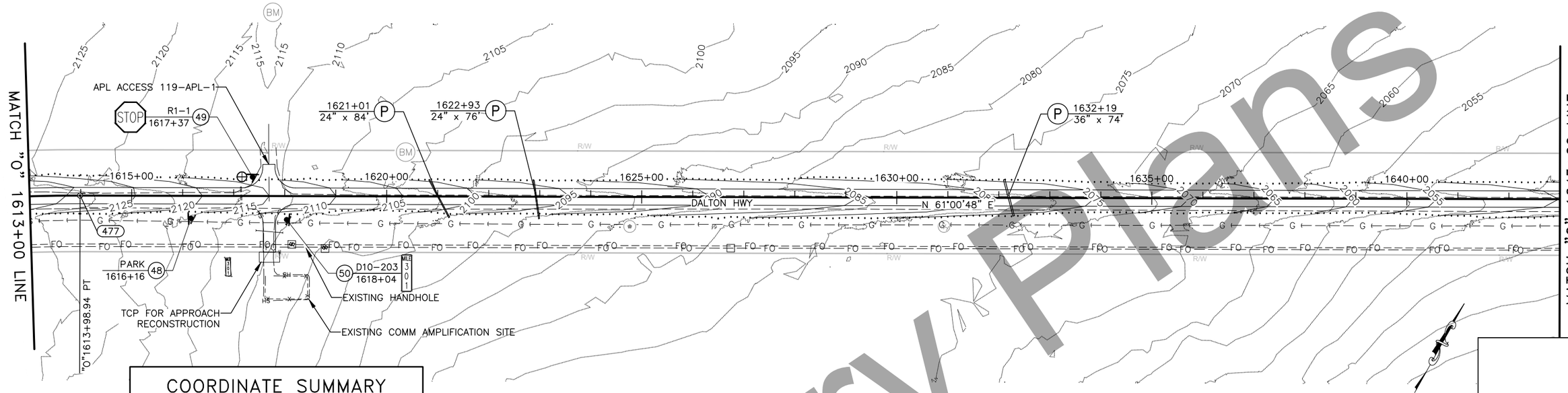
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

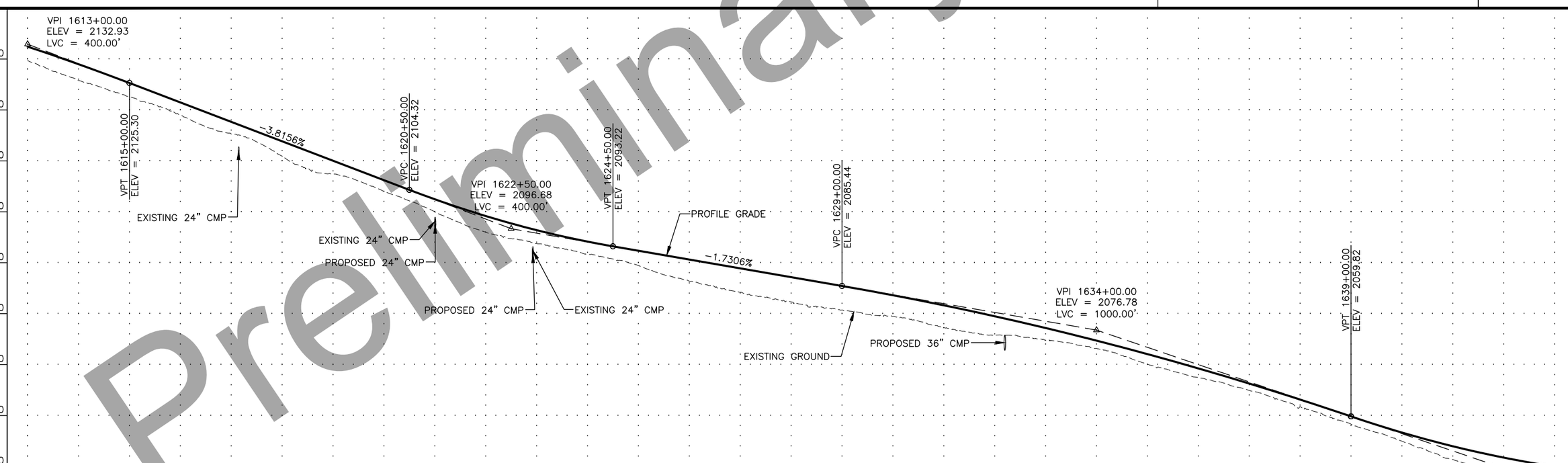
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	F22	F30



COORDINATE SUMMARY				
POINT	DESC.	STATION	NORTHING	EASTING
477	PT	1613+98.94	5380787.48	1771374.42

DALTON HIGHWAY
1613+00–1643+00

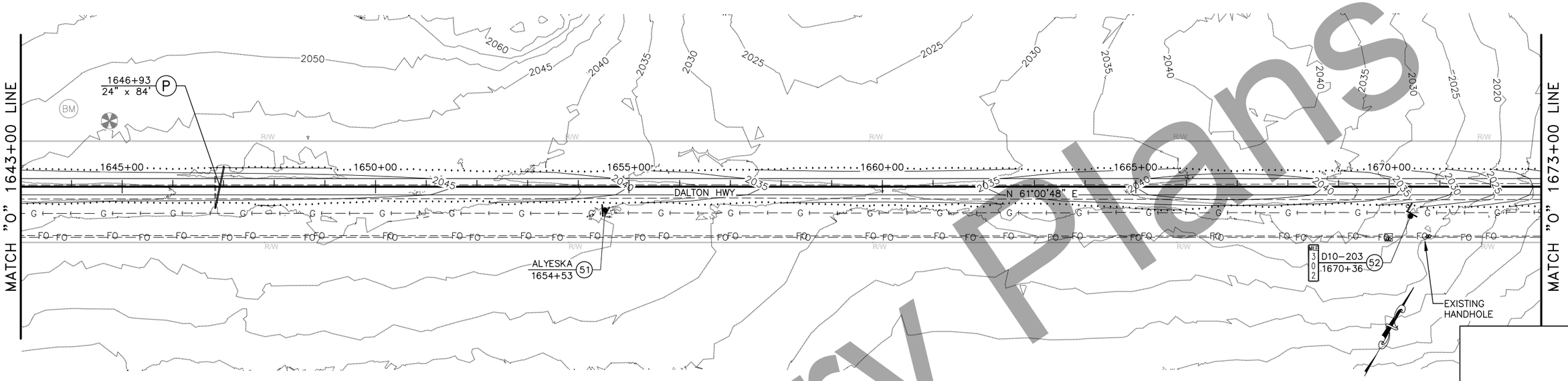


Preliminary Plans

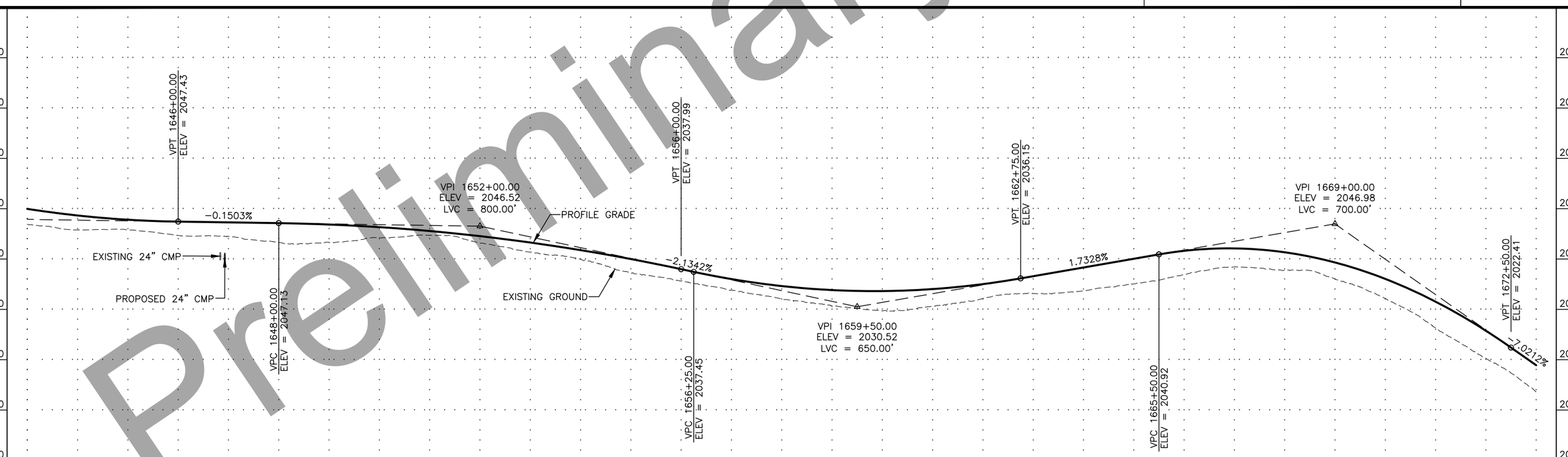
P:\2017\17331FB-DaltonMP289-305\C\c1002cnst17331fb-F22 1613+00-1643+00 Fri, Oct/16/20 10:33am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	F23	F30



DALTON HIGHWAY
1643+00–1673+00



Preliminary Plans

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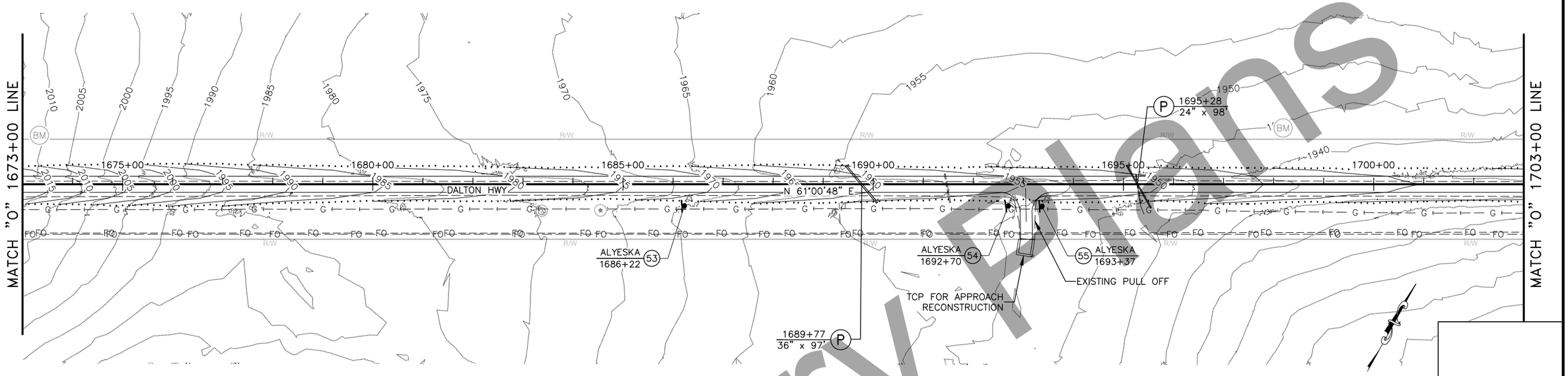
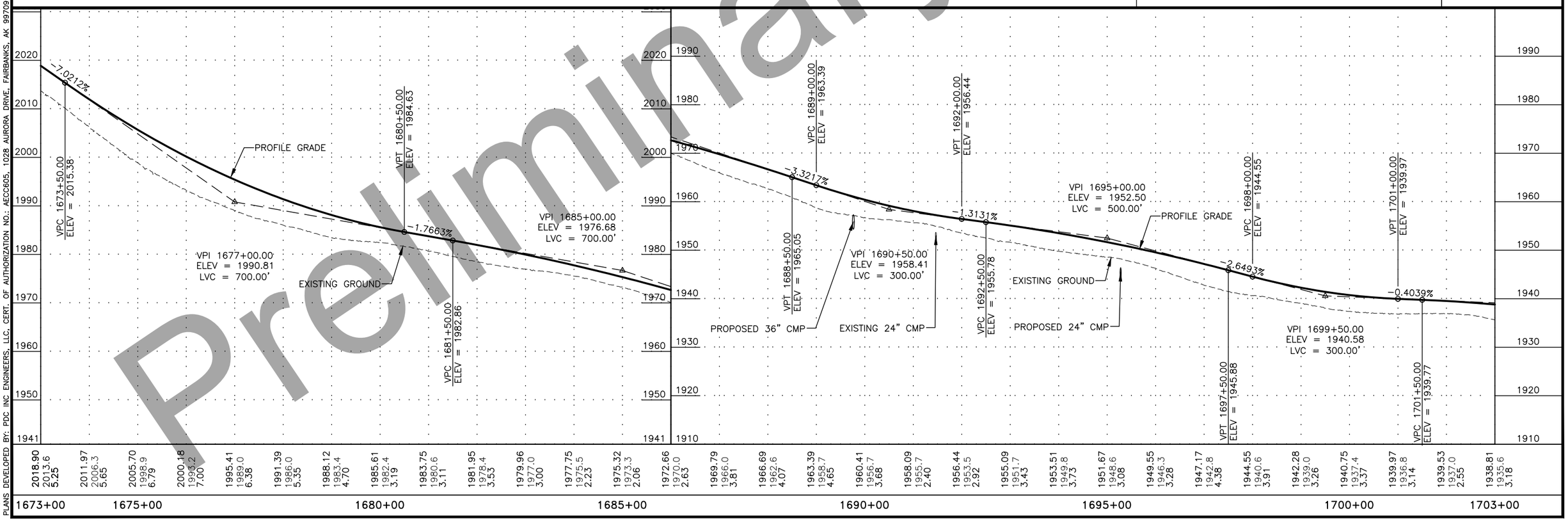
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	F24	F30



DALTON HIGHWAY
1673+00–1703+00



Preliminary Plans

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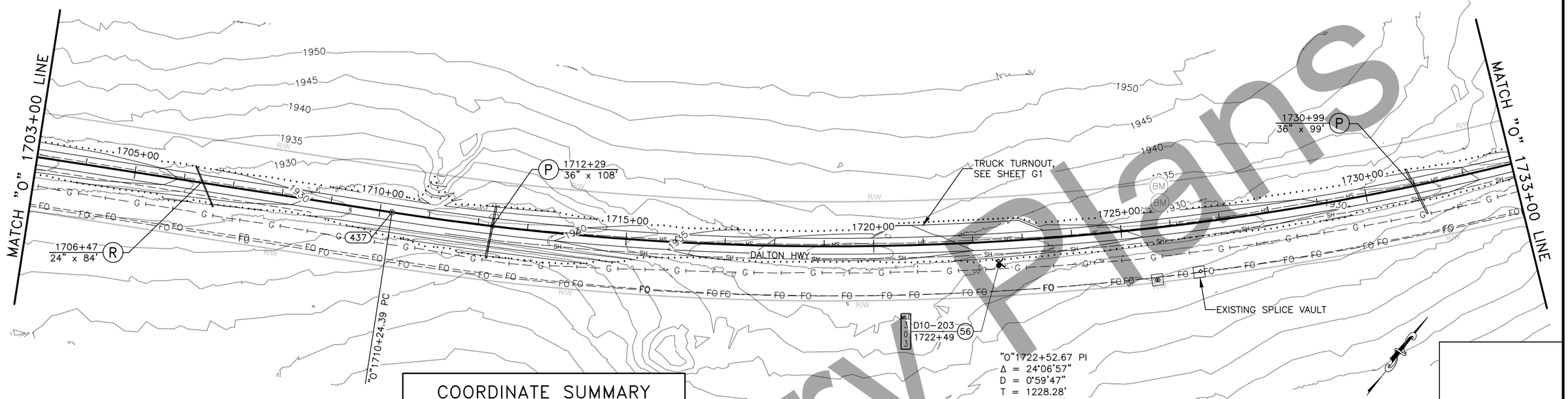
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

NO.	DATE	REVISION

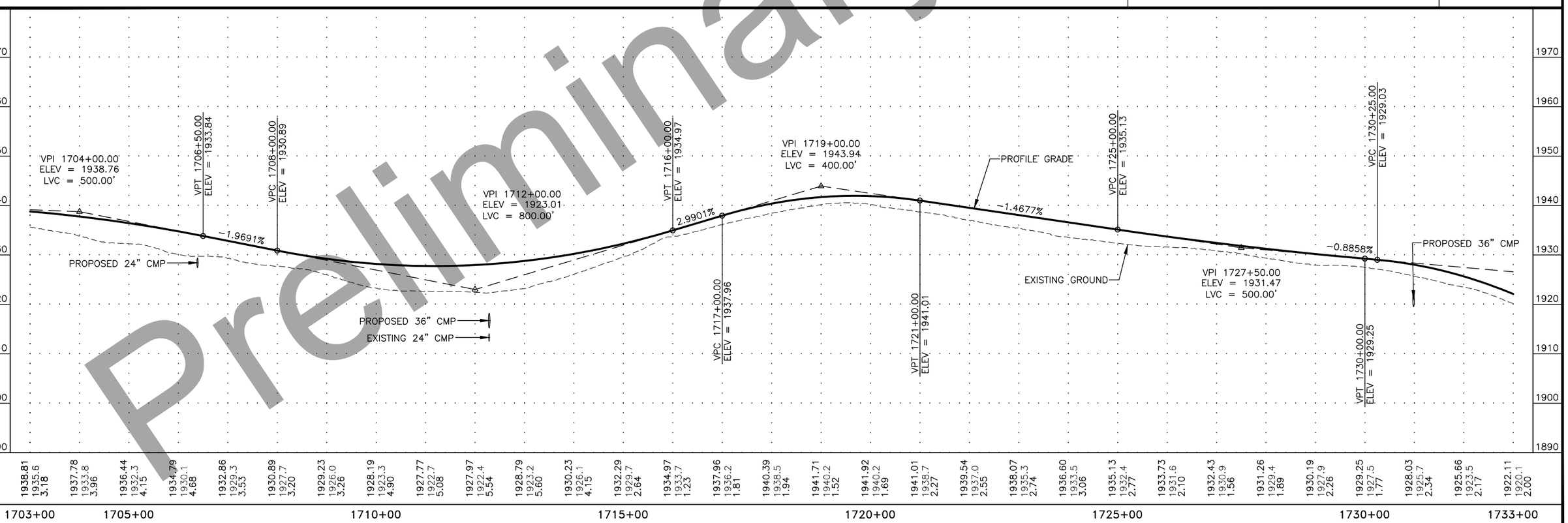
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	F25	F30



COORDINATE SUMMARY

POINT	DESC.	STATION	NORTHING	EASTING
437	PC	1710+24.39	5385452.01	1779794.12

DALTON HIGHWAY
1703+00–1733+00



Preliminary Plans

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PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

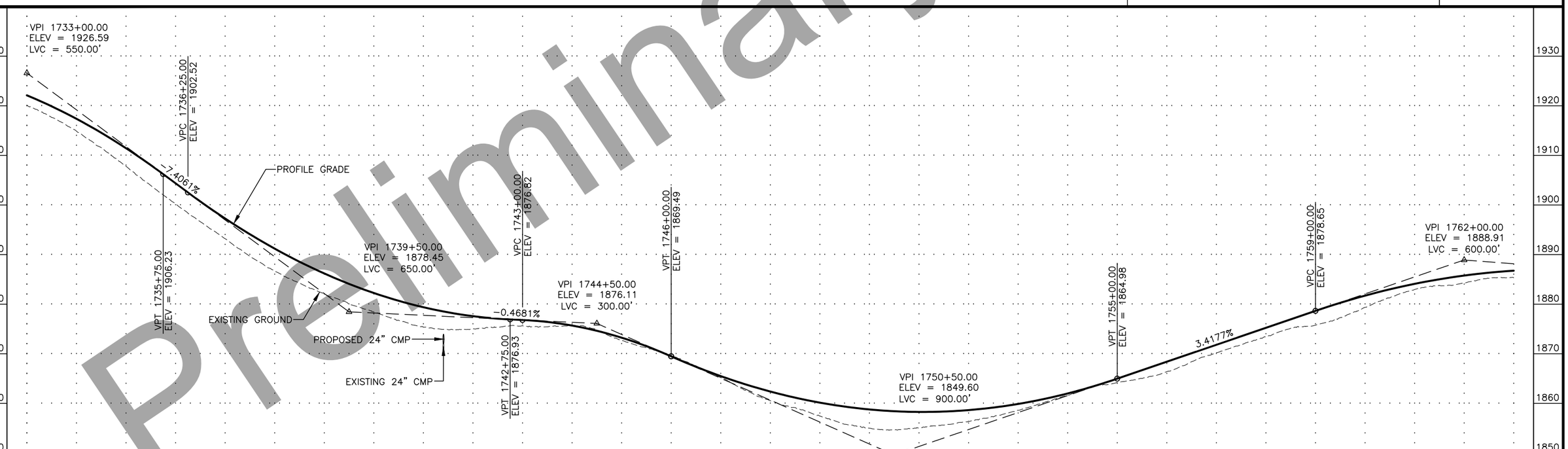
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	F26	F30

COORDINATE SUMMARY

POINT	DESC.	STATION	NORTHING	EASTING
438	PT	1734+44.58	5387029.51	1781605.98

DALTON HIGHWAY
1733+00–1763+00



Preliminary Plans

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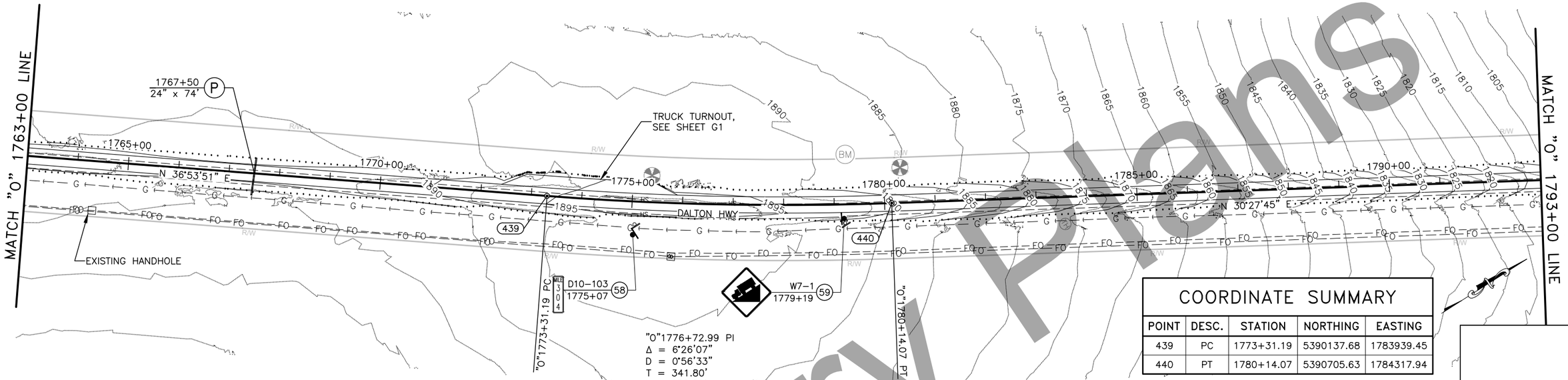
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

NO.	DATE	REVISION

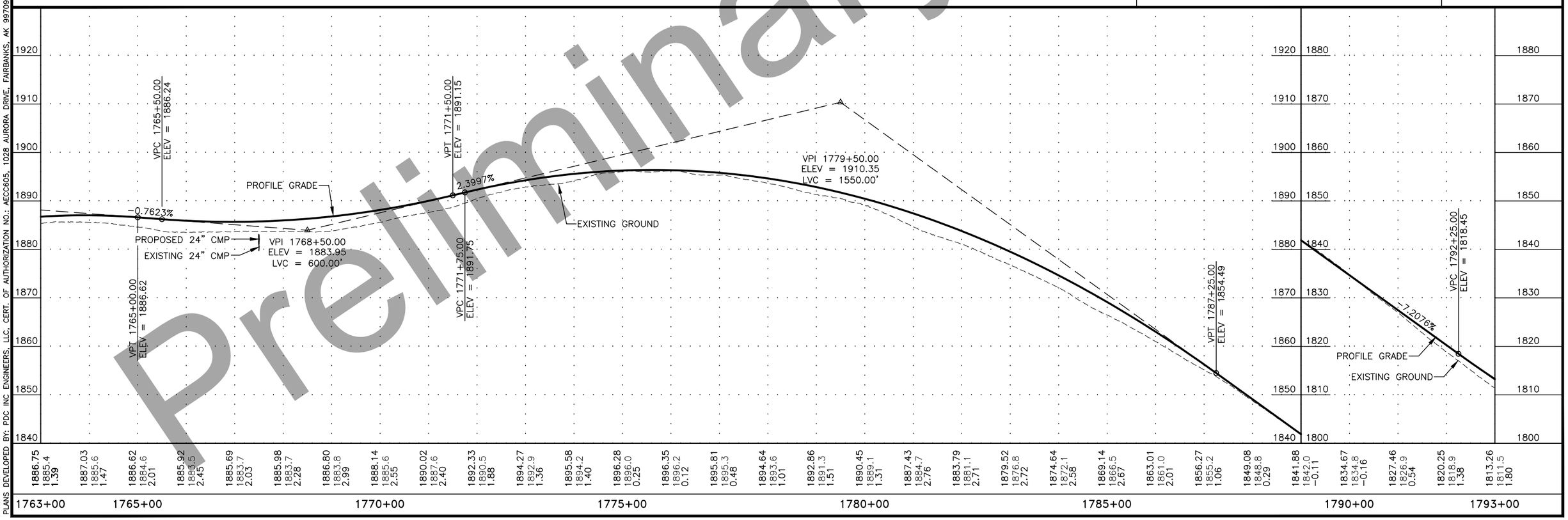
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	F27	F30



COORDINATE SUMMARY

POINT	DESC.	STATION	NORTHING	EASTING
439	PC	1773+31.19	5390137.68	1783939.45
440	PT	1780+14.07	5390705.63	1784317.94

DALTON HIGHWAY
1763+00–1793+00

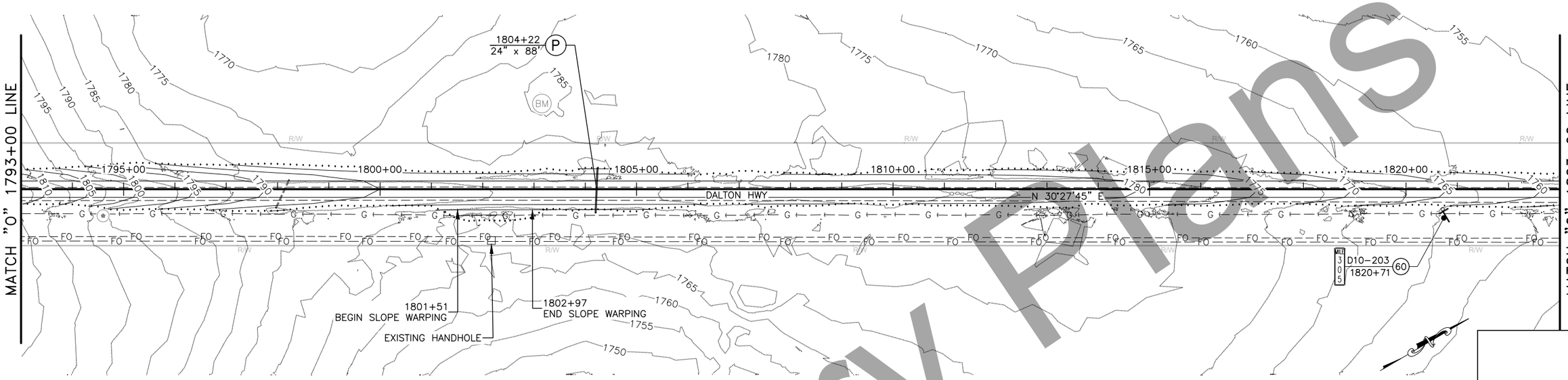


Preliminary Plans

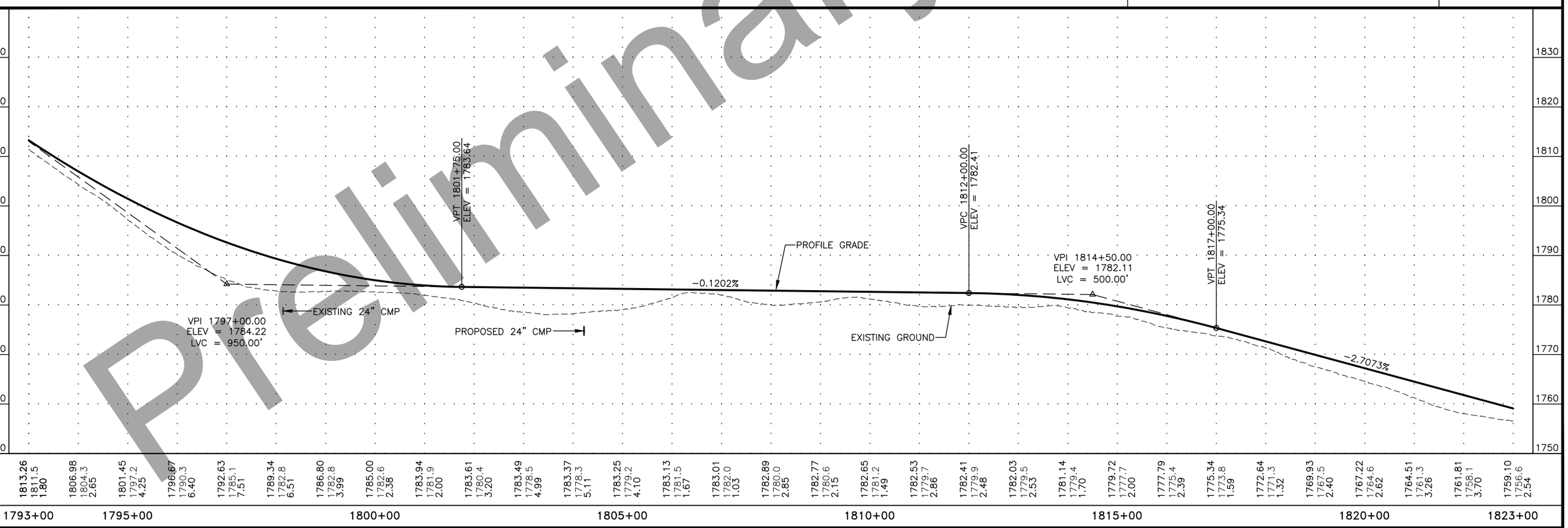
P:\2017\17331FB-DaltonMP289-305\C\c1002cnst17331fb-F27 1763+00-1793+00 Fri, Oct/16/20 10:57am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	F28	F30



DALTON HIGHWAY
1793+00–1823+00

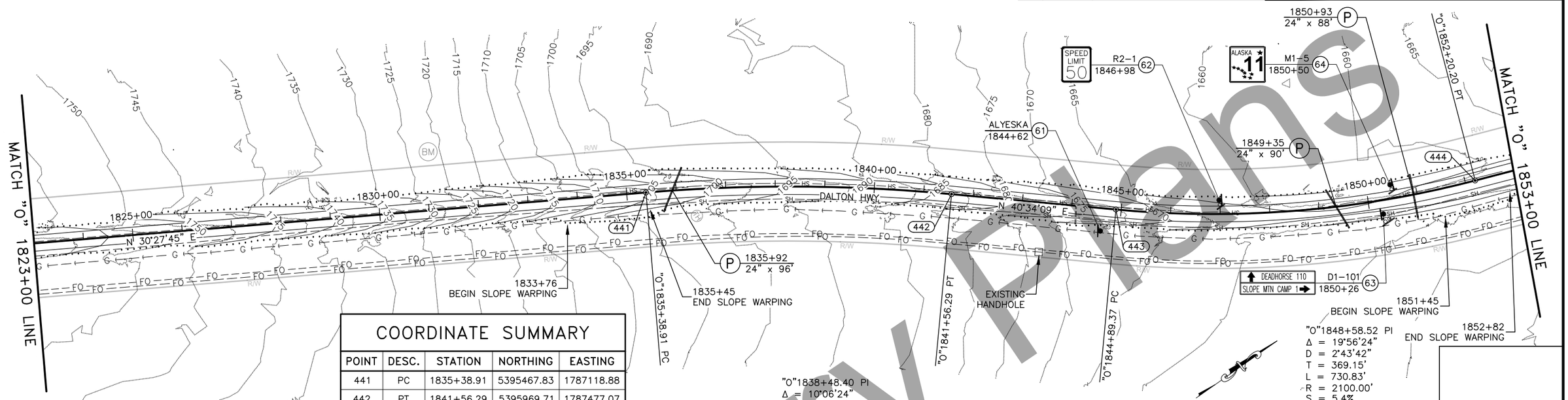


Preliminary Plans

P:\2017\17331FB-DaltonMP289-305\C\c1002cnst17331fb-F28 1793+00-1823+00 Fri, Oct/16/20 11:01am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

NO.	DATE	REVISION

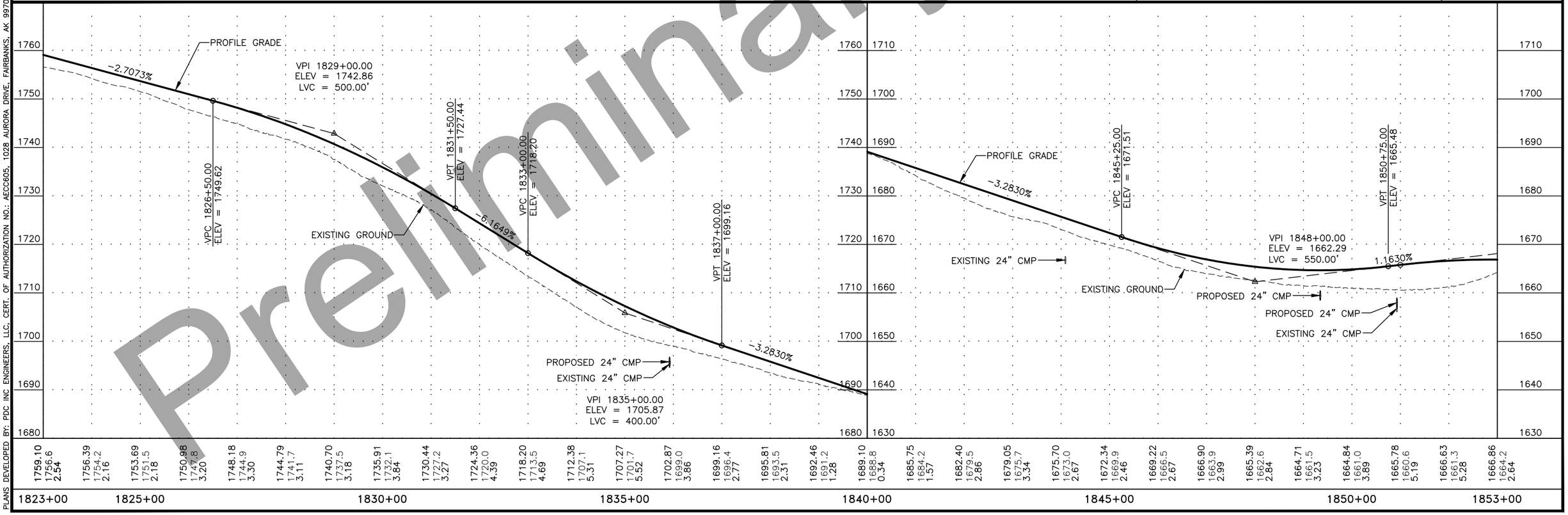
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	F29	F30



COORDINATE SUMMARY

POINT	DESC.	STATION	NORTHING	EASTING
441	PC	1835+38.91	5395467.83	1787118.88
442	PT	1841+56.29	5395969.71	1787477.07
443	PC	1844+89.37	5396222.72	1787693.69
444	PT	1852+20.20	5396848.62	1788063.84

DALTON HIGHWAY
1823+00–1852+00

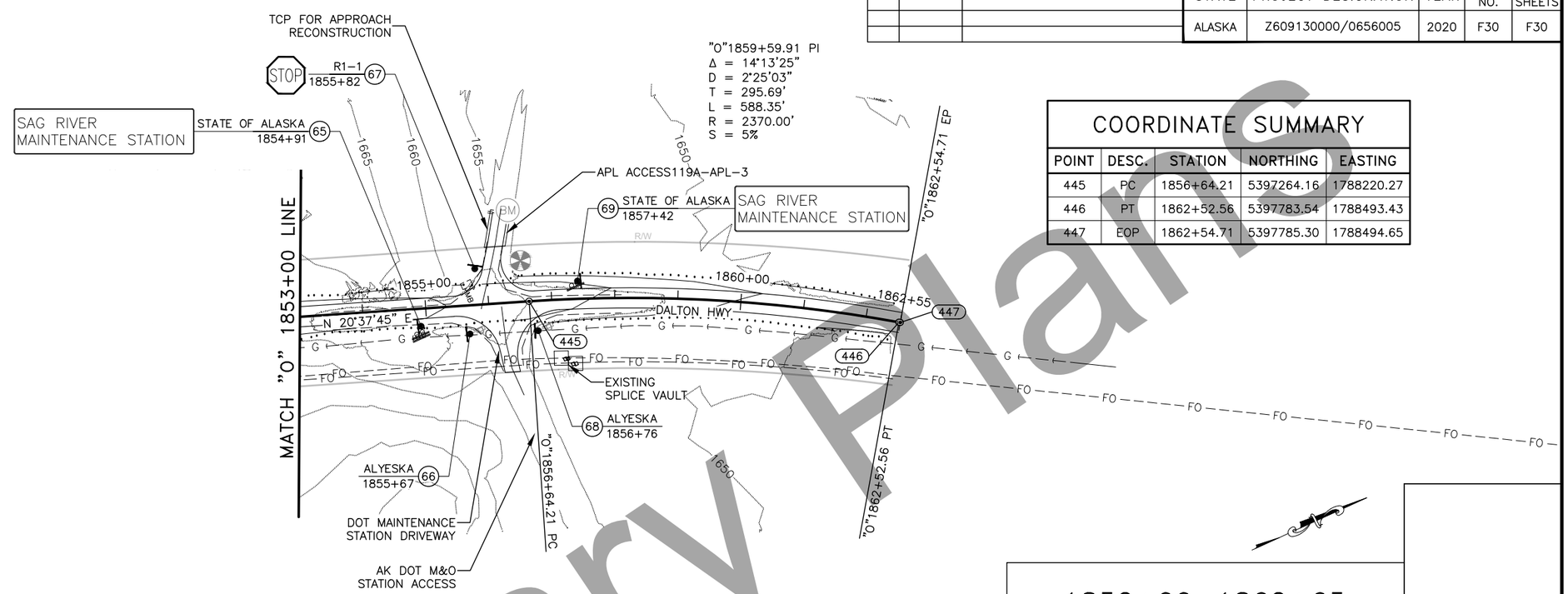


Preliminary Plans

P:\2017\17331FB-DaltonMP289-305\C\c1002cnst17331fb-F29 1823+00-1852+00 Fri, Oct/16/20 11:06am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

NO.	DATE	REVISION

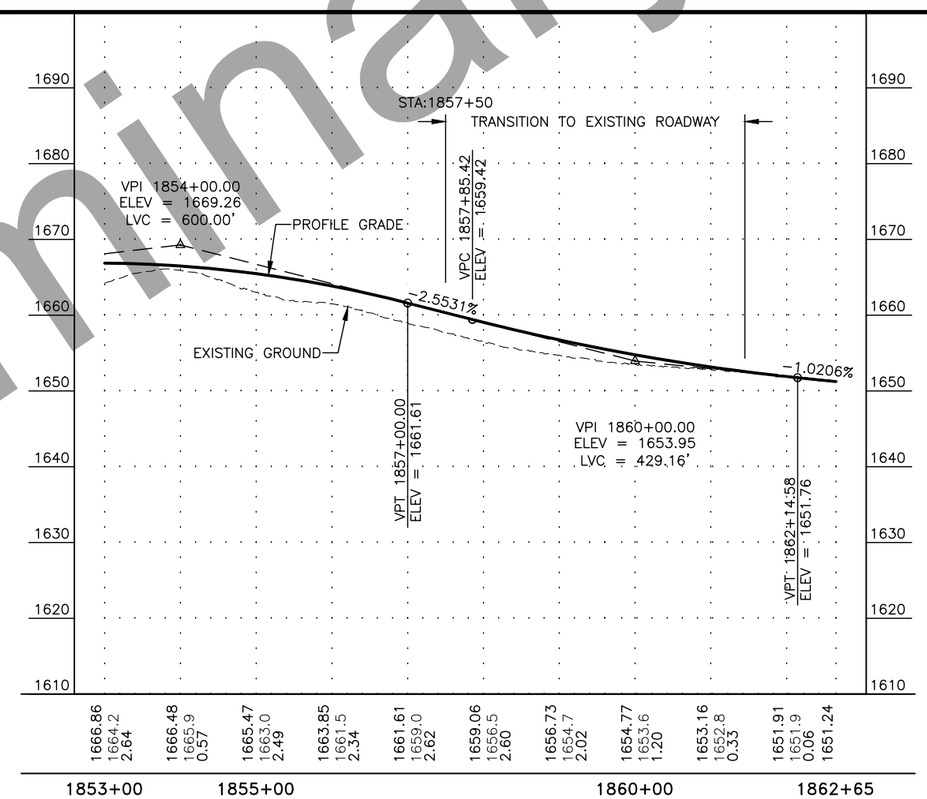
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	F30	F30



COORDINATE SUMMARY

POINT	DESC.	STATION	NORTHING	EASTING
445	PC	1856+64.21	5397264.16	1788220.27
446	PT	1862+52.56	5397783.54	1788493.43
447	EOP	1862+54.71	5397785.30	1788494.65

1852+00–1862+65



Preliminary Plans

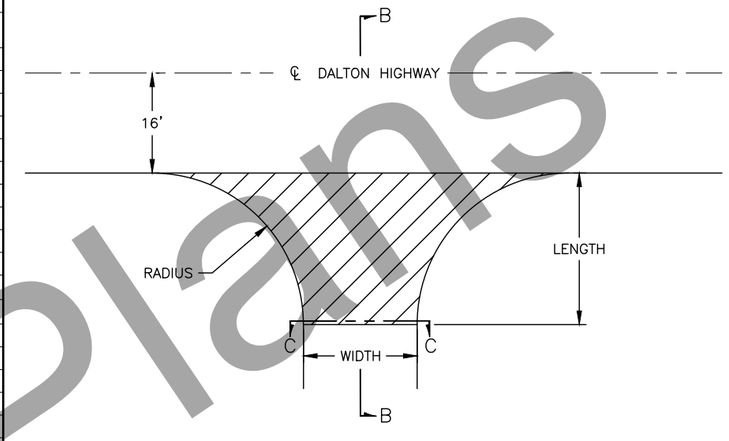
P:\2017\17331FB-DaltonMP289-305\C\c1002cnst17331fb-F30 1852+00-1862+65 Fri, Oct/16/20 11:13am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	G1	G1

APPROACH SUMMARY

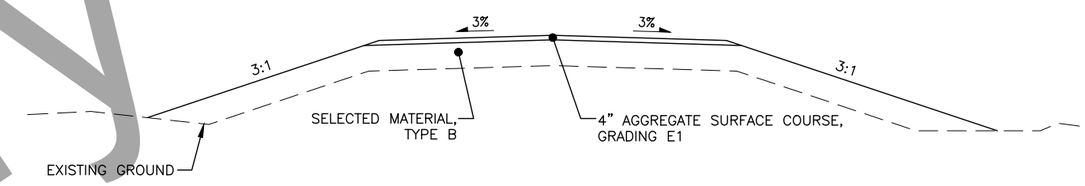
SHEET	"O" PI STATION	OFFSET	WIDTH (FT)	LANDING LENGTH (FT)	TOTAL LENGTH (FT)	DESIGN RADIUS	SKEW ANGLE	REMARKS
F1	984+15.42	RT	24	30	85	40 RT, 10 LT	9	APL ACCESS
F2	984+15.43	RT	24	30	87	10	4, SEE REMARK	APL ACCESS, APPROACH STATION AND SKEW ANGLE MEASURED FROM THE EDGE OF 984+15.42 APPROACH
F1	987+73.42	RT	24	40	102	20 RT, 50 LT	60	EXISTING PULL OFF 116-APL-6
F1	1003+27.94	LT	24	40	81	40	0	PRIVATE BUILDING
F1	1009+13.45	RT	24	40	140	20 RT, 50 LT	43	APL ACCESS
F1	1010+53.44	LT	24	40	254	50 RT, 20 LT	30	APL ACCESS
F3	1064+98.72	RT	34	40	79	50	17	117 MATERIAL SITE 117-AMS-1
F7	1186+73.40	RT	24	40	75	40	0	EXISTING PULL OFF
F10	1267+82.35	LT	24	30	163	40	3	BLOCKED APL ACCESS
F13	1356+05.45	LT	24	40	90	40	6	APL ACCESS 118-APL-1
F15	1407+91.58	RT	24	40	50	40	9	APL ACCESS
F15	1430+90.88	LT	24	40	62	40	1	EXISTING PULL OFF
F16	1449+65.16	RT	26	30	154	10	47	DOT OKS #1 CREEK ACCESS
F16	1454+59.36	RT	26	40	224	10 LT, 50 RT	52	DOT OKS #1 CREEK ACCESS
F17	1474+98.77	LT	24	30	85	25 RT, 50 LT	29	ABANDONED APL ACCESS
F20	1576+20.58	RT	24	40	94	40	1	FIBER OPTIC BOOSTER
F21	1601+92.53	LT	24	40	44	40	3	EXISTING PULL OFF
F22	1617+69.62	LT	24	40	40	40	0	APL ACCESS 119-APL-1
F22	1617+69.62	RT	24	30	94	40	0	FIBER OPTIC BOOSTER, EXISTING GATE
F24	1693+04.23	LT	24	30	124	40	0	EXISTING PULL OFF
F30	1855+90.38	LT	24	30	130	50	17	APL ACCESS 119A-APL-3
F30	1856+19.75	RT	24	40	95	70	3	DOT CAMP ACCESS



DETAIL: APPROACH
N.T.S.

APPROACH NOTES:

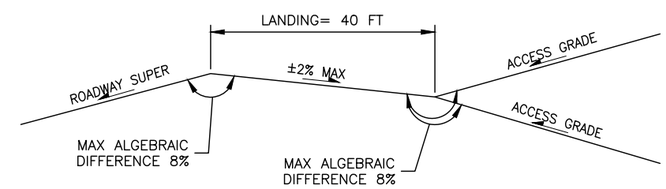
1. APPROACH LANDING LENGHTS MAY BE ADJUSTED AS APPROVED BY THE ENGINEER.
2. CONSTRUCT, GRADE AND SURFACE APPROACH LANDINGS WITH THE SAME TYPE AND DEPTH OF MATERIAL AS SPECIFIED IN THE ROADWAY TYPICAL SECTION.
3. WIDTHS AND RADII SHOWN ARE MINIMUMS. CONSTRUCT TO EXISTING WIDTHS AND RADII IF LARGER.
4. REMOVING AND REPLACING EXISTING GATES IS SUBSIDIARY TO PAY ITEM 693.2000.0000.

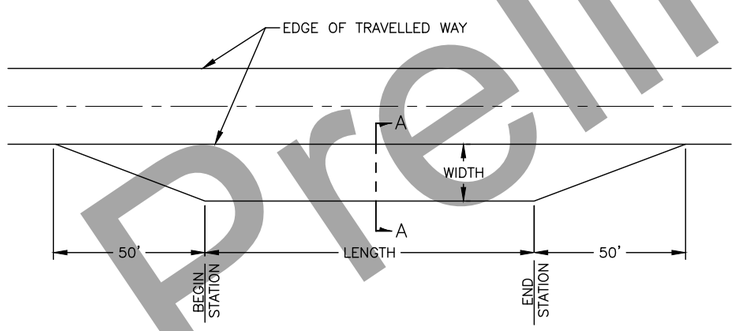


SECTION C-C

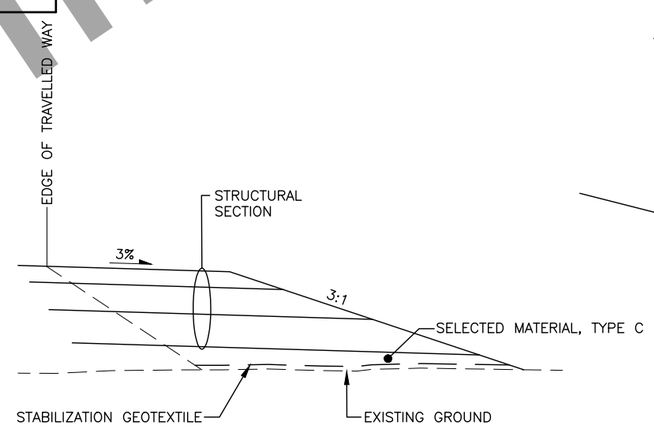
TRUCK TURNOUT TABLE

BEGIN STATION	END STATION	LOCATION		LENGTH (FT)	WIDTH (FT)	TRANSITION (FT)	REMARKS
		LEFT	RIGHT				
1061+41	1063+91		X	250	30	50	
1145+95	1148+45	X	X	250	24	50	
1473+00	1476+00	X		300	24	50	
1720+55	1723+05	X		250	24	50	
1773+00	1775+50	X		250	24	50	

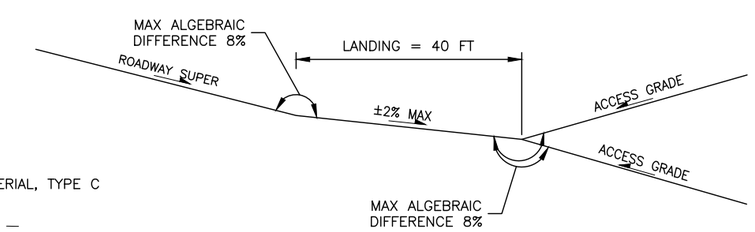




DETAIL: TRUCK TURNOUT
N.T.S.



SECTION A-A
N.T.S.



SECTION B-B

APPROACH DETAILS

Preliminary Plans

P:\2017\17331FB-DaltonMP289-305\C\c4003cnst17331fb-G1 APPROACH DETAILS Fri, Oct/16/20 11:13am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	H1	H6

DALTON HIGHWAY SIGNING SUMMARY

LOC. NO.	STATION	LOCATION LT.	LOCATION RT.	ASDS CODE	LEGEND	SIZE H X V (INCHES)	BRACING/FRAMING BRACED	BRACING/FRAMING FRAMED	AREA (SQ.FT.)	MTG. HGT. (FT.)	DIR.	POST TYPE	POST SIZE (INCHES)	POST NO.	REMARKS
1	985+05		X	I-3	KUPARUK RIVER	54X36		X	13.5		w	PST	2.5"x2.5"	2	
2	986+51	X		I-3	KUPARUK RIVER	54X36		X	13.5		E	PST	2.5"x2.5"	2	
3	991+28		X	D10-203	289	14x36	X		3.5		W	PST	2.5"x2.5"	1	
8	1045+68		X	D10-203	290	14x36	X		3.5		W	PST	2.5"x2.5"	1	
9	1056+99		X	W7-1	DOWNGRADE (Symbol)	36x36	X		9		W	PST	2.5"x2.5"	1	
10	1060+91		X	W2-2	SIDE ROAD (Symbol)	36x36	X		9		W	PST	2.5"x2.5"	1	
11	1063+42	X		W7-1	DOWNGRADE (Symbol)	36x36	X		9		E	PST	2.5"x2.5"	1	
13	1078+23		X	I-3	IMNAVIAT CREEK	54X36		X	13.5		W	PST	2.5"x2.5"	2	
14	1079+26	X		I-3	IMNAVIAT CREEK	54X36		X	13.5		E	PST	2.5"x2.5"	2	
16	1097+90		X	D10-203	291	14x36	X		3.5		W	PST	2.5"x2.5"	1	
17	1114+83		X	I-3	TOOLIK RIVER	42X36	X		10.5		W	PST	2.5"x2.5"	2	
18	1115+88	X		I-3	TOOLIK RIVER	42X36	X		10.5		E	PST	2.5"x2.5"	2	
20	1149+86		X	D10-203	292	14x36	X		3.5		W	PST	2.5"x2.5"	1	
21	1202+66		X	D10-203	293	14x36	X		3.5		W	PST	2.5"x2.5"	1	
23	1255+46		X	D10-203	294	14x36	X		3.5		W	PST	2.5"x2.5"	1	
24	1304+99		X	D10-203	295	14x36	X		3.5		W	PST	2.5"x2.5"	1	
28	1355+63	X		R1-1	STOP	24X24	X		4		N	PST	2.5"x2.5"	1	SALVAGE AND REUSE ON NEW SIGN POST
29	1357+80		X	D10-203	296	14x36	X		3.5		W	PST	2.5"x2.5"	1	
32	1409+18		X	D10-203	297	14x36	X		3.5		W	PST	2.5"x2.5"	1	
33	1412+63		X	W7-1	DOWNGRADE (Symbol)	36x36	X		9		W	PST	2.5"x2.5"	1	
36	1451+48		X	I-3	OKSRUKUYIK CREEK	66X36		X	16.5		W	PST	2.5"x2.5"	2	
38	1453+13	X		I-3	OKSRUKUYIK CREEK	66X36		X	16.5		E	PST	2.5"x2.5"	2	
39	1459+81		X	W1-2	CURVE WARNING (Symbol)	36X36	X		9		W	PST	2.5"x2.5"	1	
				W13-1	X MPH	24X24	X		4		W	PST	2.5"x2.5"	1	
40	1461+92		X	D10-203	298	14x36	X		3.5		W	PST	2.5"x2.5"	1	
43	1481+68	X		W1-2	CURVE WARNING (Symbol)	36X36	X		9		N	PST	2.5"x2.5"	1	
				W13-1	X MPH	24X24	X		4		N	PST	2.5"x2.5"		
44	1513+65		X	D10-203	299	14x36	X		3.5		W	PST	2.5"x2.5"	1	
47	1565+82		X	D10-203	300	14x36	X		3.5		W	PST	2.5"x2.5"	1	
48	1616+16		X	SPECIAL 1	HUNTING REGULATIONS APPLY	42X30	X		6.25		S	PST	2.5"x2.5"	1	
				SPECIAL 2	ENTERING PUBLIC LANDS	18X24	X		3		N				
49	1617+37	X		R1-1	STOP	24X24	X		4		N	PST	2.5"x2.5"	1	SALVAGE AND REUSE ON NEW SIGN POST
50	1618+49		X	D10-203	301	14x36	X		3.5		W	PST	2.5"x2.5"	1	
52	1670+36		X	D10-203	302	14x36	X		3.5		W	PST	2.5"x2.5"	1	
							SUBTOTAL		236.25						

SIGNING NOTES:

1. REMOVE AND SALVAGE ALL EXISTING SIGNS AND SIGN FOUNDATIONS WITHIN THE PROJECT LIMITS, EXCEPT THOSE DESIGNATED FOR REINSTALLATION, SALVAGE, OR OTHERWISE NOTED.
2. SIGNS LISTED AS PRIVATELY OWNED IN THE SUMMARY TABLE ARE OWNED AND MAINTAINED BY ALYESKA PIPELINE SERVICE COMPANY, SIGNS NOTED FOR REMOVAL AND REUSE ARE TO BE REINSTALLED USING EXISTING SIGN(S) AND POST(S) WITH NEW SOIL EMBEDMENT SLEEVE(S). REINSTALL LOCATION TO BE DIRECTED BY THE ENGINEER. THIS WORK IS SUBSIDIARY TO 615 SERIES ITEMS.
3. MOUNTING HEIGHTS ARE PER STANDARD DRAWING S-05.02 UNLESS OTHERWISE NOTED.
4. DETERMINE POST LENGTHS IN THE FIELD. DO NOT EXTEND POSTS ABOVE TOP OF SIGN.
5. INSTALL PST SIGN POSTS WITH SOIL EMBEDDED FOUNDATIONS PER STANDARD DRAWING S-30.04. ATTACH THE SIGN POST TO THE SLEEVE USING GALVANIZED ⅜" BOLT, NUT, SPLIT LOCK WASHERS AND TWO FLAT WASHERS.
6. INSTALL "TUBE POST SIGN BRACING" AS SHOWN ON STANDARD DRAWING S-01.00 ON ALL SIGNS MOUNTED ON A SINGLE PST POST AND HAVING A HORIZONTAL DIMENSION OF 30 INCHES OR GREATER, EXCEPT D3-100 SERIES SIGNS. INSTEAD OF THE ⅝" GALVANIZED BOLTS AND NYLON LOCKING NUTS SHOWN ON STANDARD DRAWING S-01.00, USE GALVANIZED ⅜" BOLT, SPLIT LOCK WASHERS AND NUTS. STAINLESS STEEL FASTENER HARDWARE MAY BE USED INSTEAD OF GALVANIZED. ¼" X 1 ½" ALUMINUM ALLOY 6061-T6 BAR MAY ALSO BE USED TO FABRICATE SIGN BRACES.
7. ATTACH ALL SIGNS TO THEIR SUPPORTS WITH ⅜" BOLTS, EXCEPT ATTACH UNFRAMED SIGNS TO PST POSTS WITH ALUMINUM DRIVE RIVETS. WIND WASHERS ARE NOT REQUIRED WITH DRIVE RIVETS. INCLUDE SPLIT LOCK WASHERS WHEN BOLTS ARE USED.
8. ALL FASTENER HARDWARE SHALL MEET THE REQUIREMENTS OF THE "FASTENER SPECIFICATION TABLE" ON SHEET H6.
9. STOP (R1-1) SIGN LOCATIONS, ESPECIALLY THOSE AT LARGE RADIUS INTERSECTIONS, MAY NEED ADJUSTMENT IN THE FIELD. THE ENGINEER WILL APPROVE FINAL LOCATIONS.
10. MAINTAIN EXISTING SIGNS UNTIL NEW SIGNS ARE INSTALLED. DO NOT LEAVE DUPLICATE OR CONFLICTING SIGNING UP AT ANY TIME.
11. ALL LETTERING THAT INCLUDES UPPER AND LOWER CASE LETTERS SHALL BE SERIES E-MODIFIED AS NOTED IN APPENDIX C OF THE ASDS, EXCEPT FOR D3-100 AND D3-1 SIGNS WHICH ARE SERIES 2000 LETTERS.
12. LOCATE AND PROTECT ALL NEW AND EXISTING UNDERGROUND UTILITIES, INCLUDING BUT NOT LIMITED TO: PIPELINES, INTERCONNECT CABLES, SIGNAL SYSTEMS, LIGHTING SYSTEMS, STORM AND SANITARY SEWERS, WATER SYSTEMS, AND TELEPHONE AND ELECTRICAL CABLES, PRIOR TO INSTALLING SIGN POSTS. NOT ALL EXISTING UTILITIES MAY BE SHOWN ON THE PLANS.
13. DELIVER ALL SALVAGED SIGNS TO THE SAG RIVER MAINTENANCE CAMP.
14. CLEARING MAY BE REQUIRED TO ENSURE ADEQUATE VISIBILITY OF SIGNS, THIS WORK IS SUBSIDIARY TO PAY ITEM 615.0001.0000.
15. THE 4" MOUNTING AREA ON MILEPOST SIGNS (D10-100 SERIES) SHALL BE BARE ALUMINUM. THIS ELIMINATES THE OPTION OF INSTALLING GREEN REFLECTIVE SHEETING IN THIS AREA AS NOTED IN THE ASDS.

POST TYPE LEGEND:

PST = PERFORATED STEEL TUBE
TS = TUBE STEEL (SQUARE STRUCTURAL STEEL TUBING)
W_X_ = WIDE FLANGE

SIGN SUMMARY

Preliminary Plans

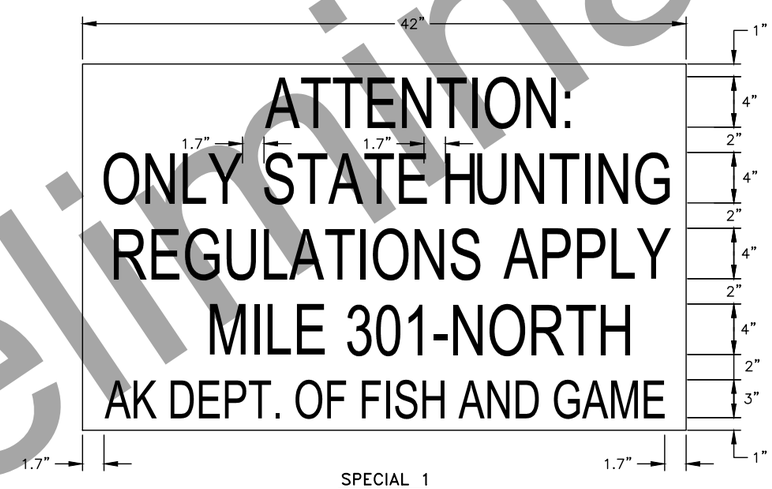
P:\2017\17331FB-DaltonMP289-305\C\c4002cnst17331fb-H1 SIGN SUMMARY Fri, Oct/16/20 11:13am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	H2	H6

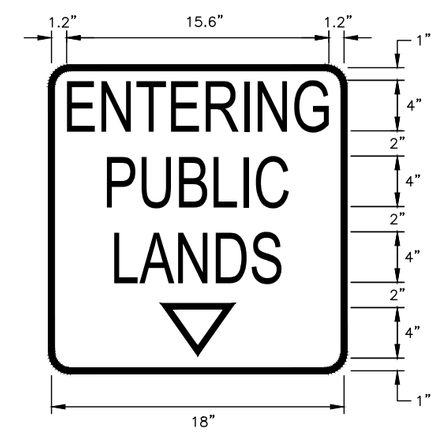
DALTON HIGHWAY SIGNING SUMMARY

LOC. NO.	STATION	LOCATION		ASDS CODE	LEGEND	SIZE H X V (INCHES)	BRACING/ FRAMING		AREA (SQ.FT.)	MTG. HGT. (FT.)	DIR.	POST			REMARKS
		LT.	RT.				BRACED	FRAMED				TYPE	SIZE (INCHES)	NO.	
56	1722+49		X	D10-203	303	14x36	X		3.5		W	PST	2.5"x2.5"	1	
58	1775+07		X	D10-203	304	14x36	X		3.5		W	PST	2.5"x2.5"	1	
59	1779+20		X	W7-1	DOWNGRADE (Symbol)	36x36	X		9		W	PST	2.5"x2.5"	1	
60	1820+71		X	D10-203	305	14x36	X		3.5		W	PST	2.5"x2.5"	1	
62	1846+98	X		R2-1	SPEED LIMIT 50	36x48	X		12		E	PST	2.5"x2.5"	1	
63	1850+26		X	D1-201	DEADHORSE 110 SLOPE MT. CAMP 1	258X90		X	161.25		W	PST	2.5"x2.5"	2	
64	1850+50	X		M1-5	SOUTH HIGHWAY 11	36x36	X		9		E	PST	2.5"x2.5"	1	
65	1854+91		X		STATE OF ALASKA SAG RIVER MAINTENANCE STATION	66X36		X	16.5		W	PST	2.5"x2.5"	2	
69	1857+42	X			STATE OF ALASKA SAG RIVER MAINTENANCE STATION	66X36		X	16.5		E	PST	2.5"x2.5"	2	
							TOTAL AREA		471						



SPECIAL 1

NOTES:
LEGEND WHITE
BACKGROUND BROWN



SPECIAL 2

NOTES:
R=1.5"
T=0.5"
BORDER AND LEGEND: WHITE
BACKGROUND: BROWN

SIGN SUMMARY

Preliminary Plans

P:\2017\17331FB-DaltonMP289-305\C\c4002cnst17331fb-H2 SIGN SUMMARY Fri, Oct/16/20 11:13am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	H3	H6

PRIVATELY OWNED SIGNING SUMMARY

LOC. NO.	STATION	LOCATION LT.	LOCATION RT.	ASDS CODE	LEGEND	POST DIR.	POST TYPE	POST SIZE (INCHES)	POST NO.	REMARKS
4	1005+38	X		ALYESKA		S	PST	2.5"x2.5"	1	SALVAGE ALYESKA SIGN, INSTALL ON NEW POST
5	1008+25	X		ALYESKA		E	PST	2.5"x2.5"	1	SALVAGE ALYESKA SIGN, INSTALL ON NEW POST
6	1009+96	X		ALYESKA		E	PST	2.5"x2.5"	1	SALVAGE ALYESKA SIGN, INSTALL ON NEW POST
7	1020+96	X		ALYESKA		E/W	PST	2.5"x2.5"	1	SALVAGE ALYESKA SIGN, INSTALL ON NEW POST
12	1065+49		X	ALYESKA		S	PST	2.5"x2.5"	1	SALVAGE AND REUSE ON NEW SIGN POST
15	1088+61	X		ALYESKA		S	PST	2.5"x2.5"	1	SALVAGE ALYESKA SIGN, INSTALL ON NEW POST
19	1127+56	X		ALYESKA		E/W	PST	2.5"x2.5"	1	SALVAGE ALYESKA SIGN, INSTALL ON NEW POST
22	1232+81	X		ALYESKA		E/W	PST	2.5"x2.5"	1	SALVAGE ALYESKA SIGN, INSTALL ON NEW POST
25	1338+73	X		ALYESKA		E/W	PST	2.5"x2.5"	1	SALVAGE ALYESKA SIGN, INSTALL ON NEW POST
26	1344+22	X		ALYESKA		S	PST	2.5"x2.5"	1	SALVAGE ALYESKA SIGN, INSTALL ON NEW POST
27	1355+51	X		ALYESKA		S	PST	2.5"x2.5"	1	SALVAGE ALYESKA SIGN, INSTALL ON NEW POST
30	1370+61	X		ALYESKA		S	PST	2.5"x2.5"	1	SALVAGE ALYESKA SIGN, INSTALL ON NEW POST
31	1397+02	X		ALYESKA		S	PST	2.5"x2.5"	1	SALVAGE ALYESKA SIGN, INSTALL ON NEW POST
34	1444+20	X		ALYESKA		N/S	PST	2.5"x2.5"	1	SALVAGE ALYESKA SIGN, INSTALL ON NEW POST
35	1450+60	X		ALYESKA		S	PST	2.5"x2.5"	1	SALVAGE ALYESKA SIGN, INSTALL ON NEW POST
37	1451+70		X	ALYESKA		W/E	PST	2.5"x2.5"	1	SALVAGE ALYESKA SIGN, INSTALL ON NEW POST
41	1465+28	X		ALYESKA		S	PST	2.5"x2.5"	1	SALVAGE ALYESKA SIGN, INSTALL ON NEW POST
42	1472+05	X		ALYESKA		S	PST	2.5"x2.5"	1	SALVAGE ALYESKA SIGN, INSTALL ON NEW POST
45	1527+66		X	ALYESKA		W	PST	2.5"x2.5"	1	SALVAGE ALYESKA SIGN, INSTALL ON NEW POST
46	1543+26		X	ALYESKA		N/S	PST	2.5"x2.5"	1	SALVAGE ALYESKA SIGN, INSTALL ON NEW POST
51	1654+53		X	ALYESKA		N/S	PST	2.5"x2.5"	1	SALVAGE ALYESKA SIGN, INSTALL ON NEW POST
53	1686+22		X	ALYESKA		W	PST	2.5"x2.5"	1	SALVAGE ALYESKA SIGN, INSTALL ON NEW POST
54	1692+70		X	ALYESKA		W	PST	2.5"x2.5"	1	SALVAGE ALYESKA SIGN, INSTALL ON NEW POST
55	1693+37		X	ALYESKA		W	PST	2.5"x2.5"	1	SALVAGE ALYESKA SIGN, INSTALL ON NEW POST
57	1739+15		X	ALYESKA		W	PST	2.5"x2.5"	1	SALVAGE ALYESKA SIGN, INSTALL ON NEW POST
61	1844+62		X	ALYESKA		W	PST	2.5"x2.5"	1	SALVAGE ALYESKA SIGN, INSTALL ON NEW POST
66	1855+67		X	ALYESKA		W	PST	2.5"x2.5"	1	SALVAGE ALYESKA SIGN, INSTALL ON NEW POST
67	1855+82	X		ALYESKA		N	PST	2.5"x2.5"	1	SALVAGE AND REUSE ON NEW SIGN POST
68	1856+76		X	ALYESKA		W	PST	2.5"x2.5"	1	SALVAGE ALYESKA SIGN, INSTALL ON NEW POST

Preliminary Plans

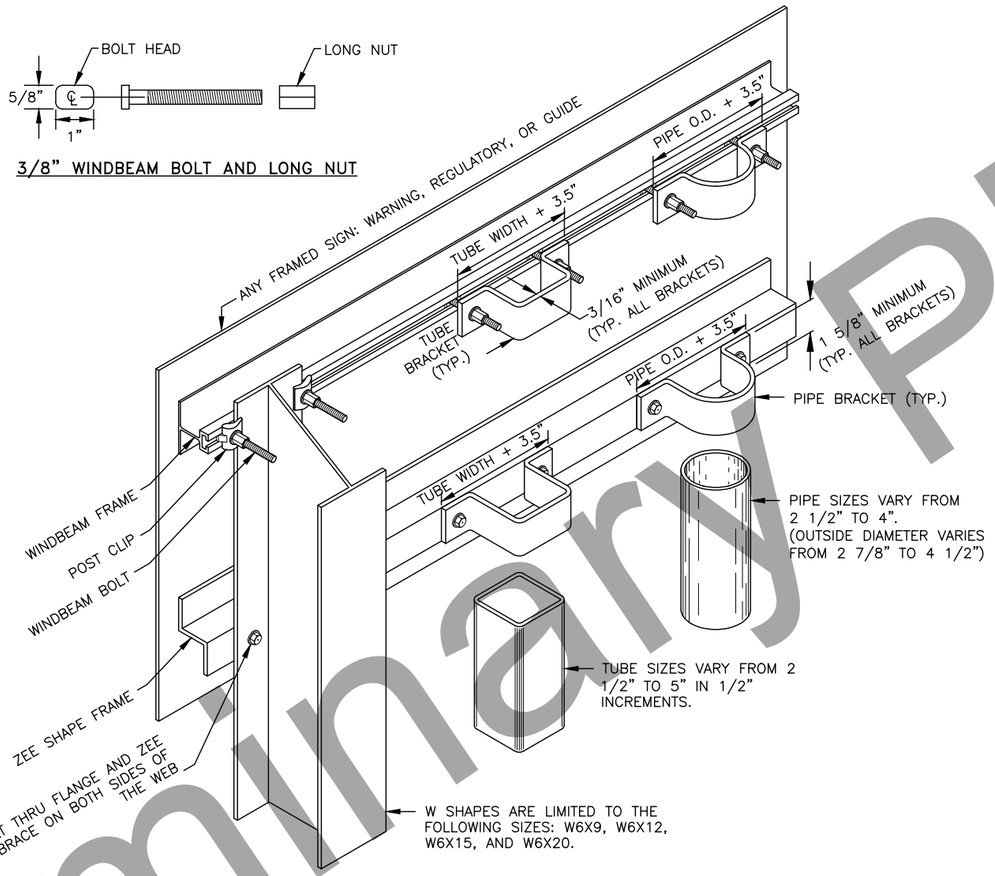
SUMMARY TABLES

P:\2017\17331FB-DaltonMP289-305\C\c4002cnst17331fb-H3 SUMMARY TABLES Fri, Oct/16/20 11:13am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

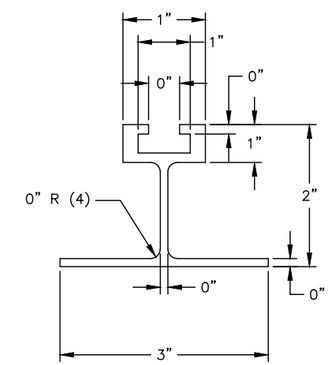
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	H4	H6

3/8" WINDBEAM BOLT AND LONG NUT



FRAMED SIGN ATTACHMENT BRACKETS



NOTES

1. ALUMINUM ALLOY 6061–T6 SHALL BE USED FOR EXTRUDED WINDBEAM AND RIVETS.
2. ATTACH SIGN TO WINDBEAM WITH 3/16" RIVETS AT 4" STAGGERED SPACING.

EXTRUDED ALUMINUM WINDBEAM

FRAMED SIGN NOTES:

1. ATTACH FRAMED SIGNS TO POSTS WHEREVER THE FRAMES CROSS THE POSTS. AT EACH CROSSING, ATTACH THE SIGN USING TWO POST CLIPS ON W–SHAPE POSTS, A U–SHAPED BRACKET ON PIPES OR A BRACKET WITH SQUARE CORNERS ON TUBES.
2. THE TUBE BRACKETS USED ON EVEN INCH SIZE TUBES MAY ALSO BE USED ON TUBES 1/2" SMALLER IN SIZE.
3. THE BRACKET DETAILS SHOWN INDICATE GENERAL DESIGNS ONLY. DESIGNS MAY VARY BY MANUFACTURER.

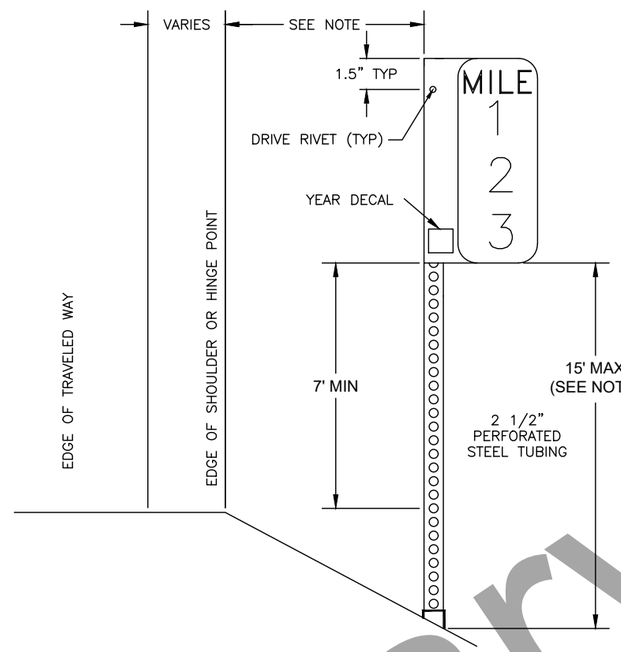
Preliminary Plans

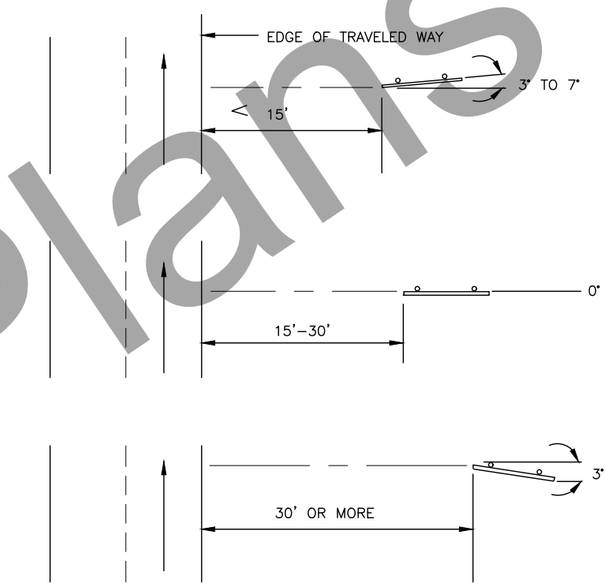
SIGN DETAILS

P:\2017\17331FB–DaltonMP289–305\C\c4002cnst17331fb–H4 SIGN DETAILS Fri, Oct/16/20 11:13am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC. CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452–1414

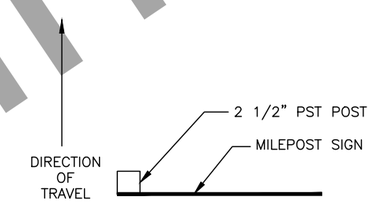
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	H5	H6





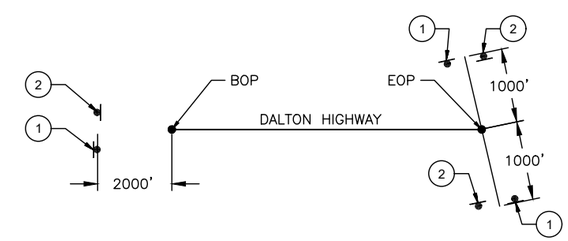
SIGN INSTALLATION ANGLES



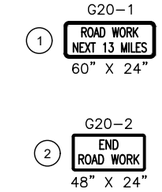
MILEPOST MOUNTING DETAILS

NOTES:

1. INSTALL MILEPOST SIGNS (D10 SERIES) WITH A 20 FOOT OFFSET. ADJUST THE OFFSET AS NECESSARY SO THE BOTTOM OF THE SIGN IS NO MORE THAN 15 FEET ABOVE THE GROUND. THE SIGN OFFSET SHALL NOT BE LESS THAN THE OFFSETS SHOWN ON STANDARD DRAWING S-05.02 OR GREATER THAN 30 FEET.



PERMANENT CONSTRUCTION SIGNS



SIGN LEGEND

NOTE:
INSTALL ALL PERMANENT CONSTRUCTION SIGNS ON WOOD POSTS.

SIGN DETAILS

Preliminary Plans

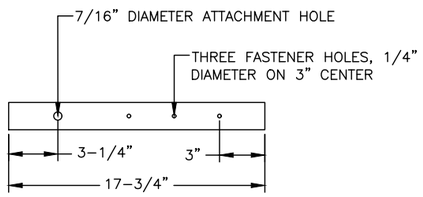
P:\2017\17331FB-DaltonMP289-305\C\c4002cnst17331fb-H5 SIGN DETAILS Fri, Oct/16/20 11:13am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

NO.	DATE	REVISION

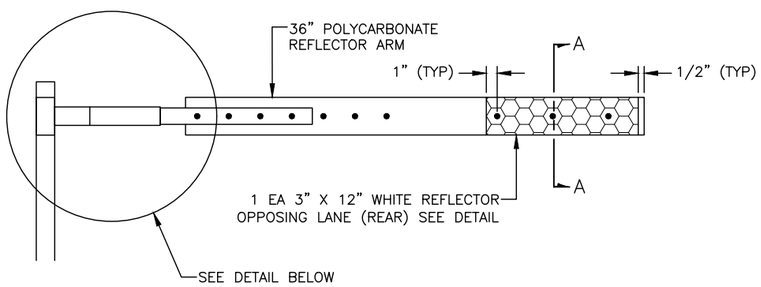
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	H6	H6

FASTENER SPECIFICATION TABLE

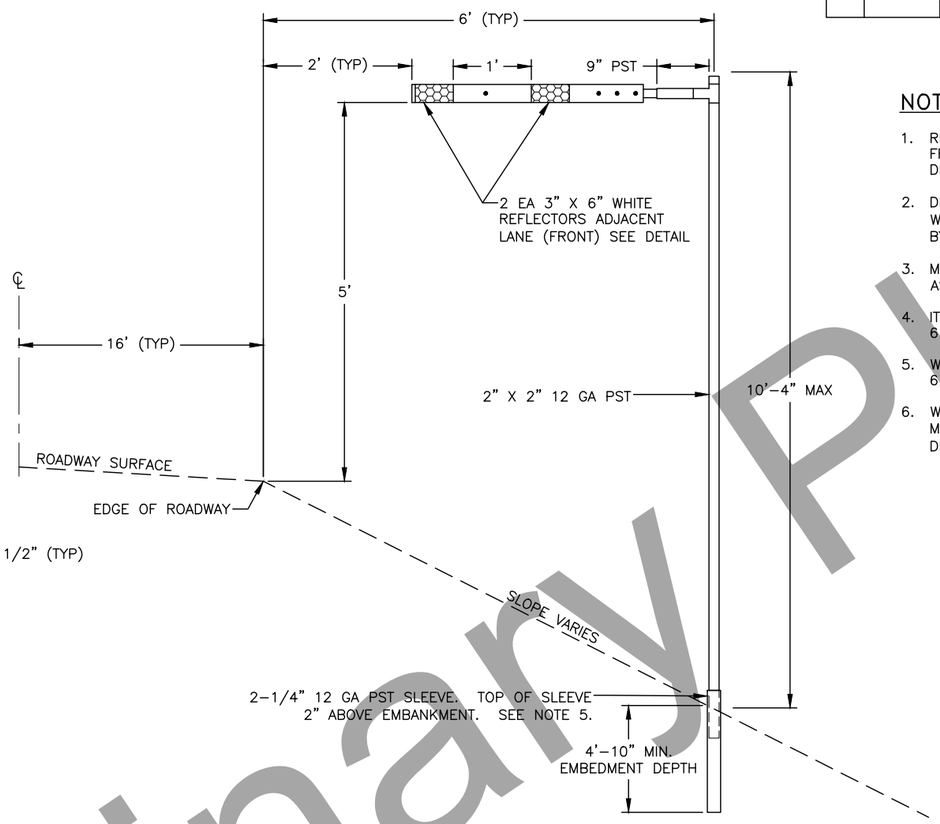
FASTENERS	STEEL	STAINLESS STEEL
BOLTS	ASTM A 307	ASTM F 593
NUTS	ASTM A 563	ASTM F 594
WASHERS	ASTM F 844	ASTM A 480



COUPLER DETAIL
N.T.S.



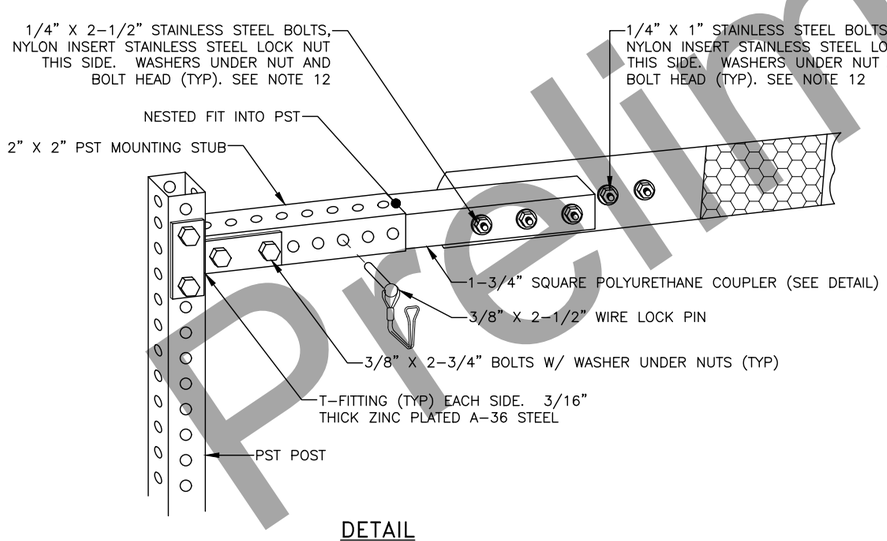
DELINEATOR DETAILS–OPPOSING LANE
N.T.S.



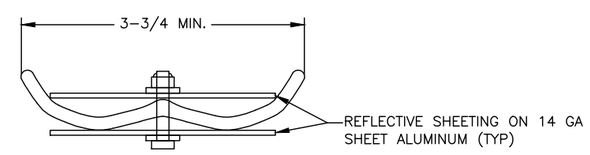
DELINEATOR DETAILS–ADJACENT LANE
N.T.S.

NOTES:

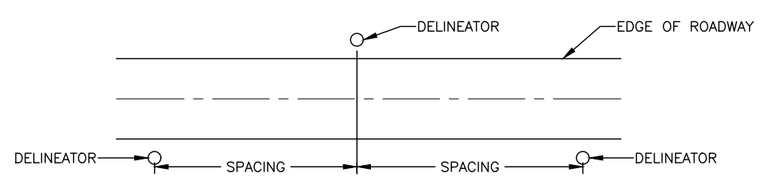
1. REMOVE AND SALVAGE EXISTING DELINEATORS ALONG THE PROJECT. DAMAGE RESULTING FROM THE REMOVAL IS THE RESPONSIBILITY OF THE CONTRACTOR. DELIVER SALVAGED DELINEATORS TO THE SAG RIVER M&O CAMP.
2. DELINEATOR SPACING SHALL BE 100' ON TANGENT SECTIONS AND 50 FEET ON CURVES WITH LENGTH OF 500' OR GREATER. MAKE ADJUSTMENTS TO THE SPACING AS DIRECTED BY THE ENGINEER.
3. MAINTAIN AT LEAST 7' HORIZONTAL DISTANCE TO ANY OTHER VERTICAL SUPPORTS SUCH AS SIGNS, MILE MARKERS, ETC.
4. IT IS EXPECTED THAT PRE-DRILLING WILL BE REQUIRED. THIS IS SUBSIDIARY TO ITEM 615.0004.0000 DELINEATOR.
5. WHERE POSTS ARE PLACED IN PRE-DRILLED HOLES, BACKFILL IS SUBSIDIARY TO ITEM 615.0004.0000 DELINEATOR AND WILL NOT BE MEASURED FOR PAYMENT.
6. WHERE WASHERS ARE IN CONTACT WITH THE POLYCARBONATE ARM, USE RUBBER BACKED METAL OR PLAIN METAL WASHERS WITH INSIDE DIAMETER OF 1/4", MINIMUM OUTSIDE DIAMETER OF 1" AND MINIMUM THICKNESS OF 1/16".



DETAIL
N.T.S.



REFLECTOR DETAIL
SECTION A–A



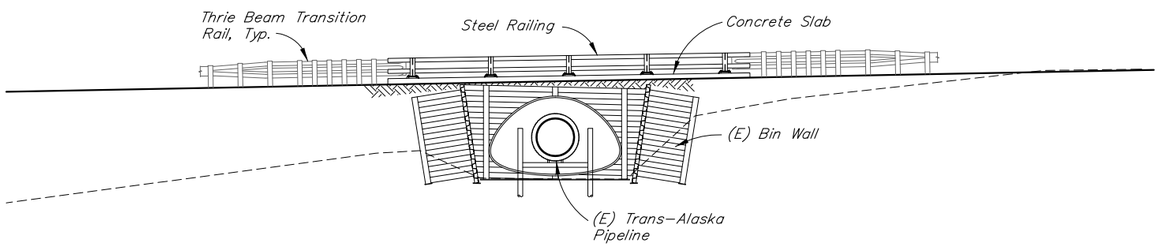
LAYOUT DETAIL
N.T.S.

DELINEATOR DETAILS

Preliminary Plans

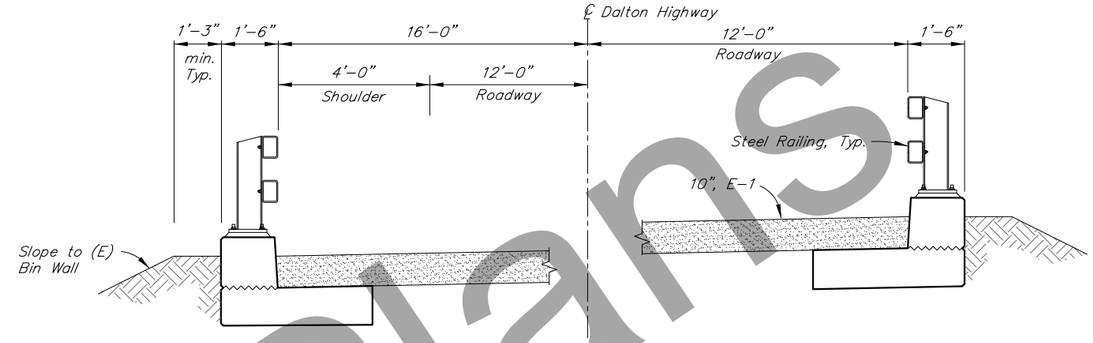
P:\2017\17331FB-DaltonMP289-305\C\C4001cnst17331FB-H6 DELINEATOR DETAILS Fri, Oct/16/20 11:13am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC. CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000	2020	N1	N4



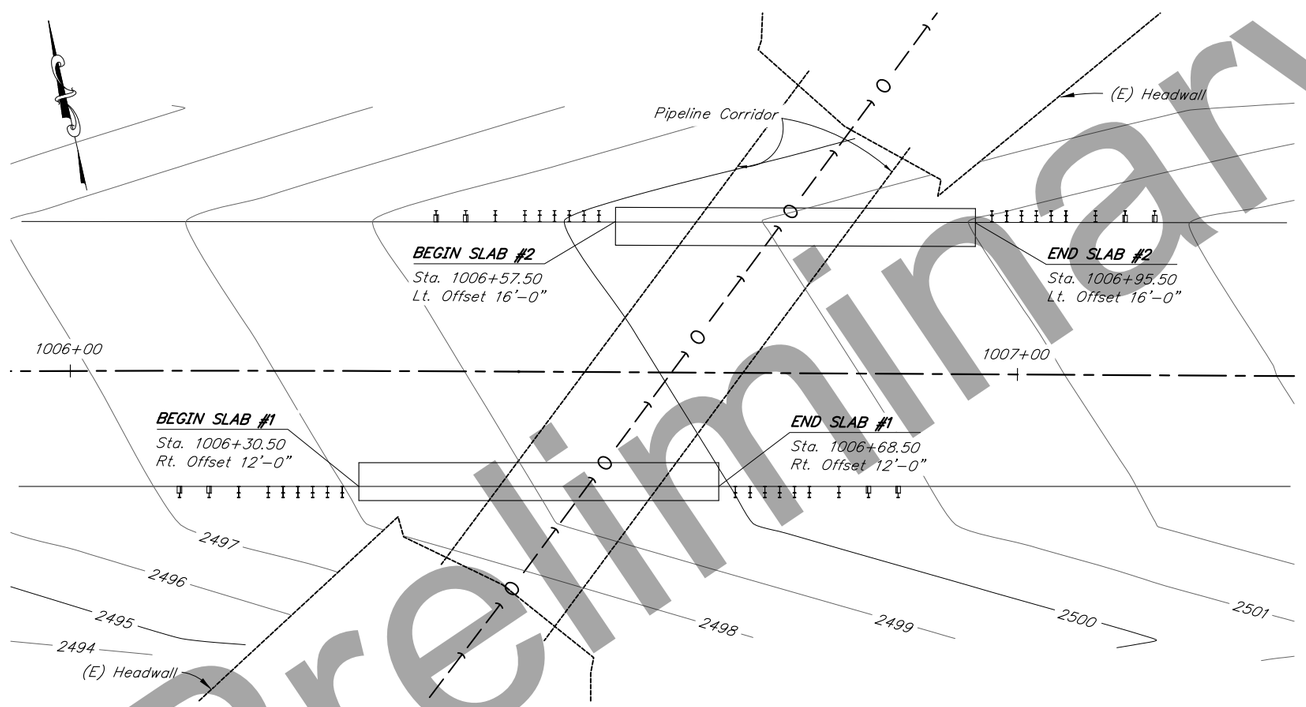
ELEVATION

12 0 5 10
In. Feet



TYPICAL SECTION

12 6 0 1 2 3 4
In. Feet



SITE PLAN

12 0 5 10
In. Feet

GENERAL NOTES

DESIGN:..... AASHTO LRFD Bridge Design Specifications, 2017 Edition, with latest interim specifications.

NCHRP Report 663, 2010

DESIGN LOAD:.....AASHTO Mash TL-4

REINFORCEMENT:..... ASTM A706, Grade 60, Fy = 60,000 psi
Space reinforcement evenly unless otherwise noted.

CONCRETE:.....Class A Concrete unless otherwise noted, f'c = 4,000 psi

DRAWING INDEX

TITLE	DWG. NO.
GENERAL LAYOUT	1
CONCRETE SLAB	2
STEEL RAILING	3
THRIE BEAM TRANSITION RAIL	4

ABBREVIATIONS:

℄	= centerline	H.S.	= high strength
ℙ	= plate	ksf	= 1000 pounds per square foot
&	= and	LB	= pound
@	= at	LF	= linear foot
Dia., ø	= diameter	LS	= lump sum
Approx., ±	= approximate	Lt.	= left
bot.	= bottom	max.	= maximum
Br.	= bridge	min.	= minimum
btwn.	= between	No.	= number
C.I.P.	= cast in place	o.c.	= on center
Clr.	= clear, clearance	—→—→—0—	= oil pipeline
CMP	= corrugated metal pipe	Rt.	= right
CY	= cubic yard	spc.	= space, spaces
Dwg.	= drawing	Sta.	= station
(E)	= existing	Std.	= standard
EA	= each	SF	= square feet
Elev.	= elevation	Symm.	= symmetric
Hwy.	= highway	Typ.	= typical

PRELIMINARY PLAN

Preliminary Plans

DESIGNED BY: Elmer Marx	CHECKED: Sara Manning	LAYOUT BY: Elmer Marx	CHECKED BY: Sara Manning
DRAWN BY: Sam Sollie	CHECKED: Elmer Marx	SPECIFICATIONS BY: Elmer Marx	P S & E COMPARED: Sara Manning
QUANTITIES BY: Elmer Marx	CHECKED: Sara Manning	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

PIPELINE CROSSING BARRIERS

DALTON HIGHWAY

GENERAL LAYOUT - MPXXX.X

DWG. NO. 1

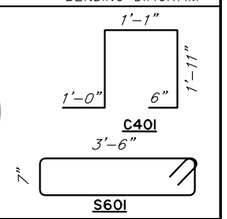
R:\cad\MISC\Dalton Slab pdfs\Dalton Slab MP289-305 site-GENERAL Wed, Mar/18/20 08:24am

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000	2020	N2	N4

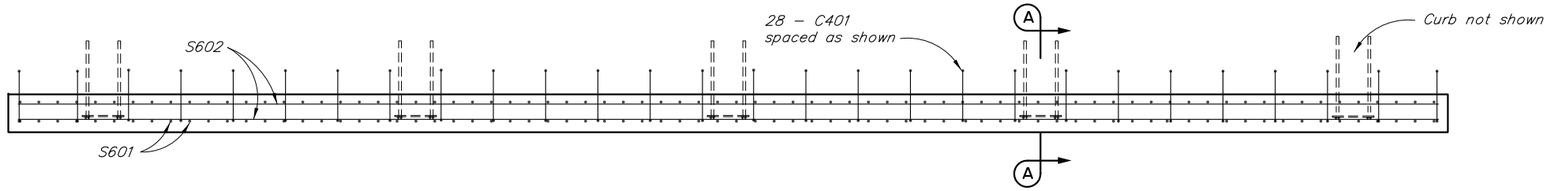
REINFORCING STEEL - ONE SLAB

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
C401	E	4	28	6'-5"	BENT
C501	E	5	2	37'-6"	---
S601	E	6	76	9'-6"	BENT
S602	E	6	12	37'-6"	---

BENDING DIAGRAM

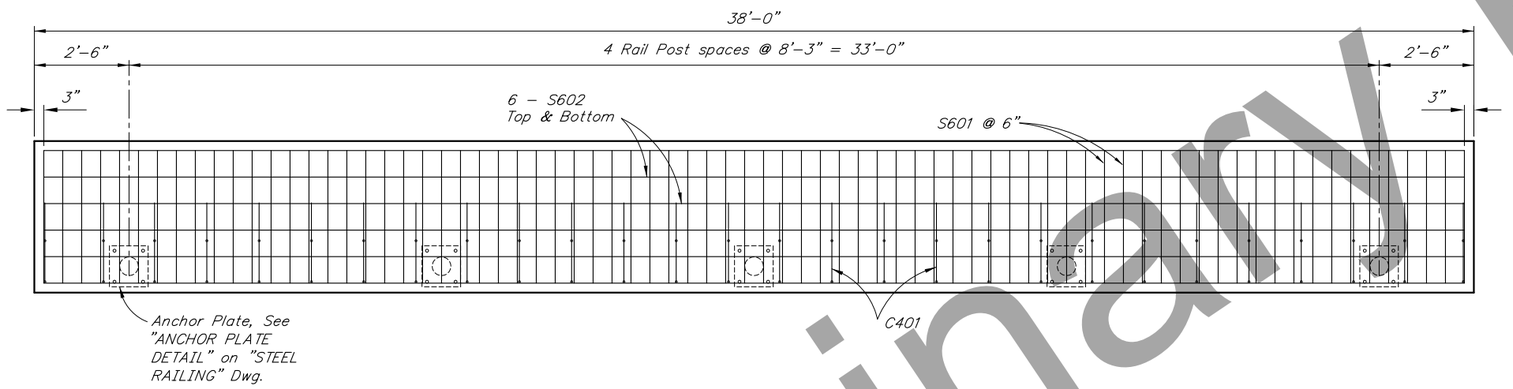


E - Epoxy-Coated



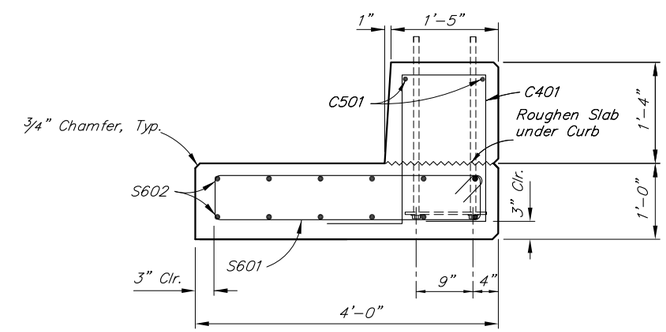
ELEVATION

12 6 0 1 2 3 4
In. Feet



PLAN

12 6 0 1 2 3 4
In. Feet



SECTION A-A

12 6 0 1 2
In. Feet

Preliminary Plans

DESIGNED BY: Elmer Marx	CHECKED: Sara Manning	**PRELIMINARY PLAN**	STATE OF ALASKA **DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES** BRIDGE SECTION 3132 Channel Drive Juneau, Alaska 99801 907-465-2975
DRAWN BY: Sam Sollie	CHECKED: Elmer Marx		
QUANTITIES BY: Elmer Marx	CHECKED: Sara Manning		

PIPELINE CROSSING BARRIERS

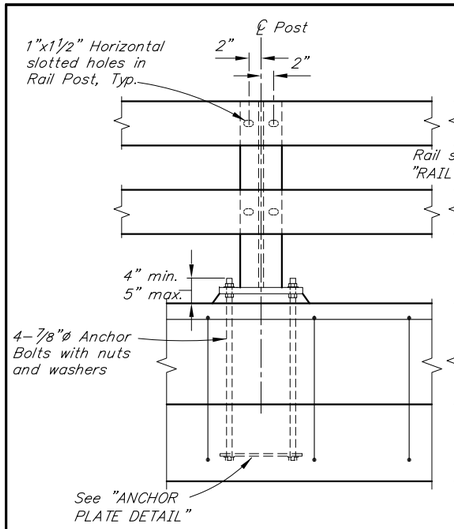
DALTON HIGHWAY

CONCRETE SLAB

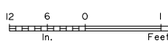
DWG. NO. 2

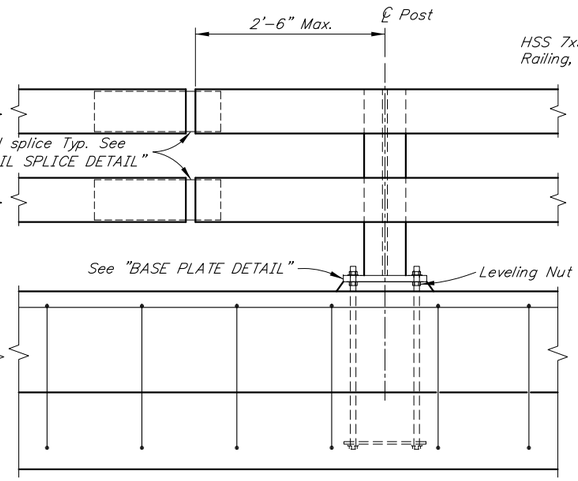
R:\cad\MISC\Dalton Slab pdfs\Dalton Slab MP289-305 site-SLAB Wed, Mar/18/20 08:24am

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000	2020	N3	N4

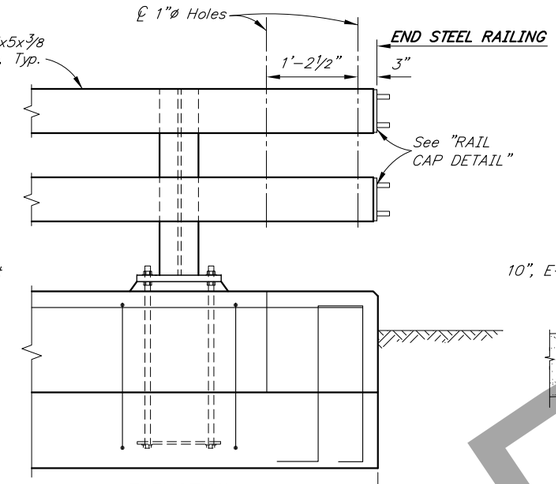


TYPICAL POST ELEVATION

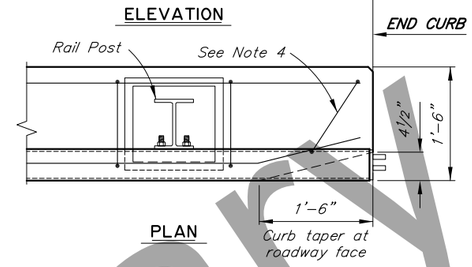




EXPANSION JOINT

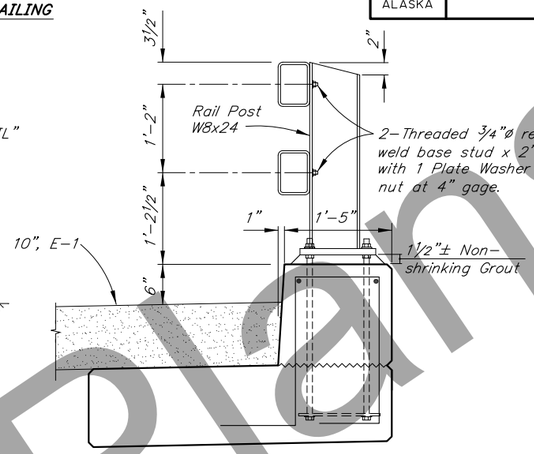


ELEVATION



PLAN

END POST DETAIL



TYPICAL SECTION

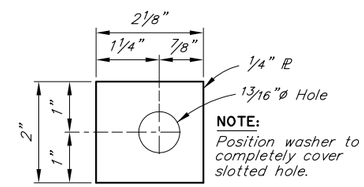
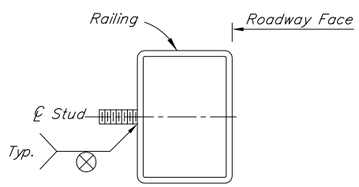
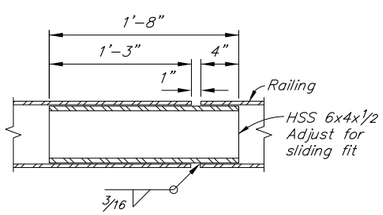


PLATE WASHER

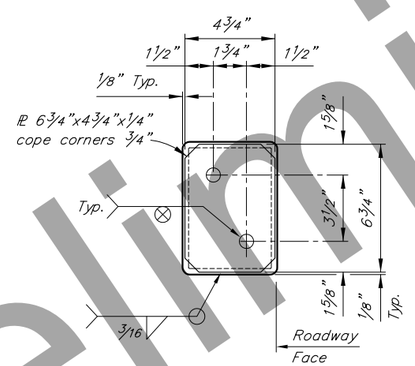
No Scale

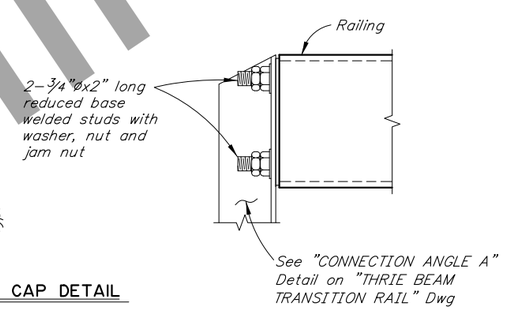


RAILING STUD DETAIL

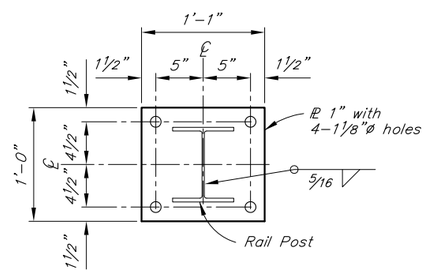


RAIL SPLICE DETAIL

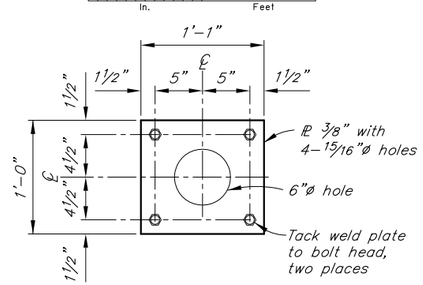




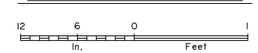
RAIL CAP DETAIL



BASE PLATE DETAIL



ANCHOR PLATE DETAIL



NOTES

1. Use grout with a minimum 24 hour f'c of 3000 psi in single placement.
2. See "CONCRETE SLAB" Dwg. for rail post spacing.
3. Install rail posts plumb.
4. Adjust reinforcing to accommodate curb taper.

Preliminary Plans

DESIGNED BY: Elmer Marx	CHECKED: Sara Manning	PRELIMINARY PLAN	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION 3132 Channel Drive Juneau, Alaska 99801 907–465–2975
DRAWN BY: Sam Sollie	CHECKED: Elmer Marx		
QUANTITIES BY: Elmer Marx	CHECKED: Sara Manning		

PIPELINE CROSSING BARRIERS

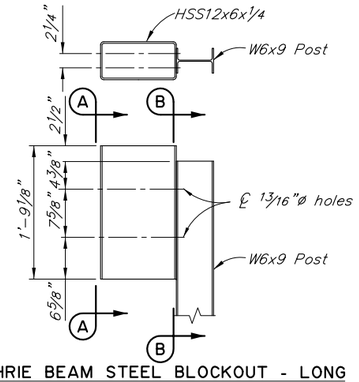
DALTON HIGHWAY

STEEL RAILING

DWG. NO. 3

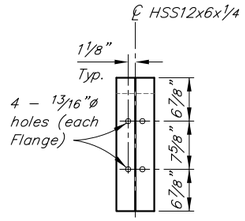
R:\cad\MISC\Dalton Slab pdfs\Dalton Slab MP289-305 site-RAIL Wed, Mar/18/20 08:24am

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000	2020	N4	N4

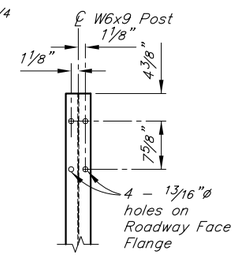


THRIE BEAM STEEL BLOCKOUT - LONG

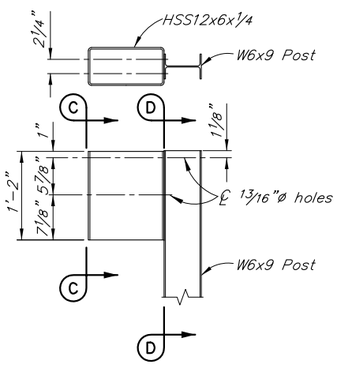
See Note 4 for additional details



VIEW A-A

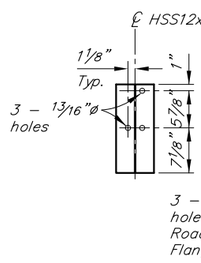


SECTION B-B

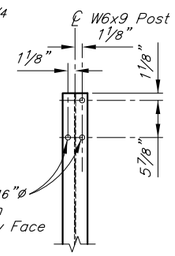


THRIE BEAM STEEL BLOCKOUT - SHORT

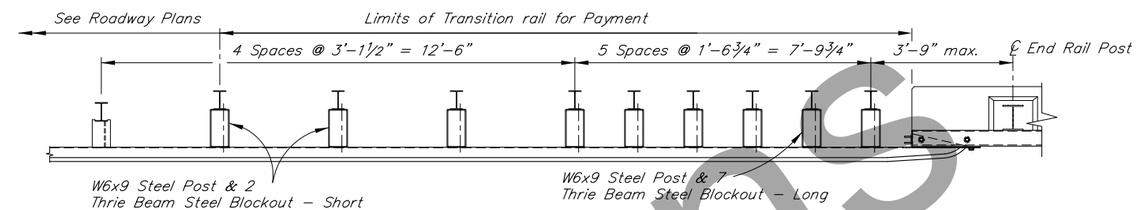
See Note 4 for additional details



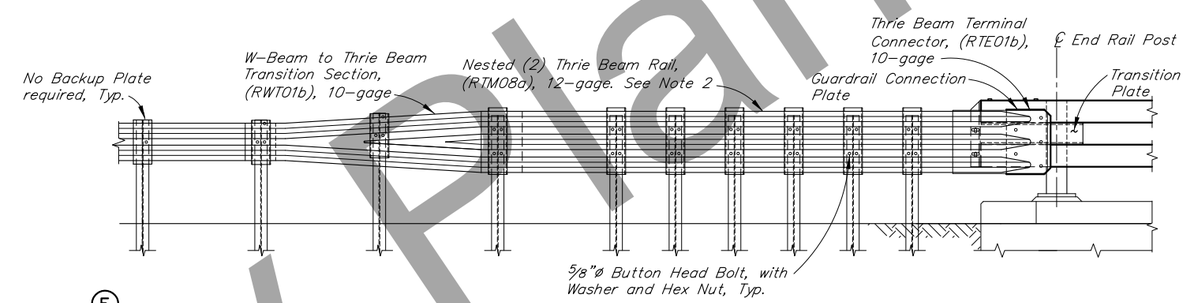
VIEW C-C



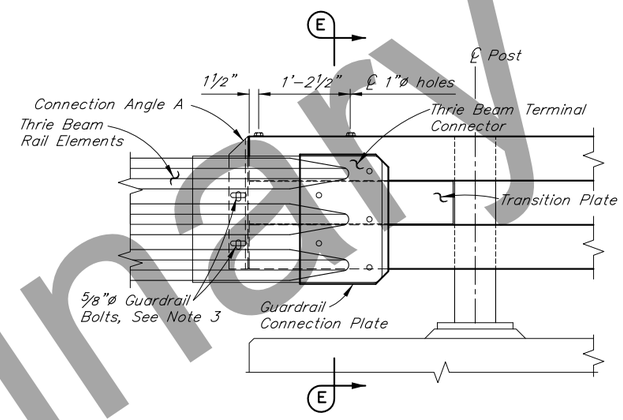
SECTION D-D



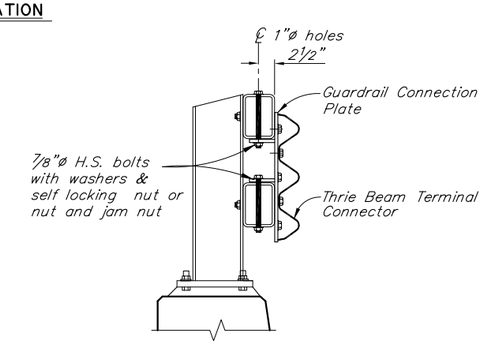
PLAN



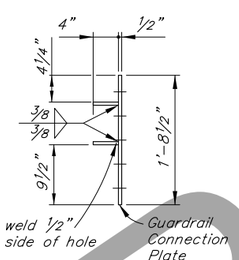
ELEVATION



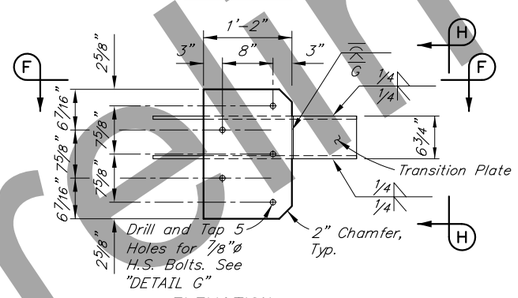
TRANSITION CONNECTION - ELEVATION



SECTION E-E

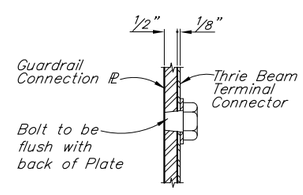


SECTION H-H

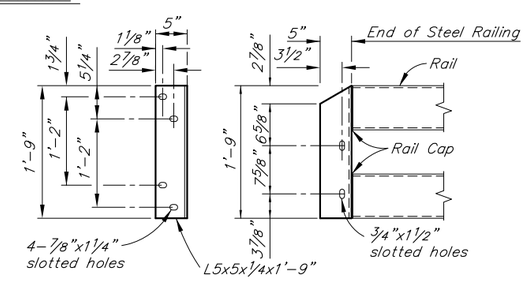


ELEVATION

GUARDRAIL CONNECTION PLATE DETAILS



DETAIL G



END VIEW ELEVATION

CONNECTION ANGLE A

No Scale

NOTES:

1. All guardrail and guardrail connection hardware to conform to AASHTO M 180. Use H.S. Bolts conforming to ASTM A325. All other steel conforms to ASTM A709 Grade 50.
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.
4. Conform to G-00, G-05S and G-10 of the Standard Plans for all guardrail details not shown.

Preliminary Plans

DESIGNED BY: Elmer Marx	CHECKED: Sara Manning	PRELIMINARY PLAN	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION 3132 Channel Drive Juneau, Alaska 99801 907-465-2975
DRAWN BY: Sam Sollie	CHECKED: Elmer Marx		
QUANTITIES BY: Elmer Marx	CHECKED: Sara Manning		

PIPELINE CROSSING BARRIERS

DALTON HIGHWAY

THRIE BEAM TRANSITION RAIL

DWG. NO. 4

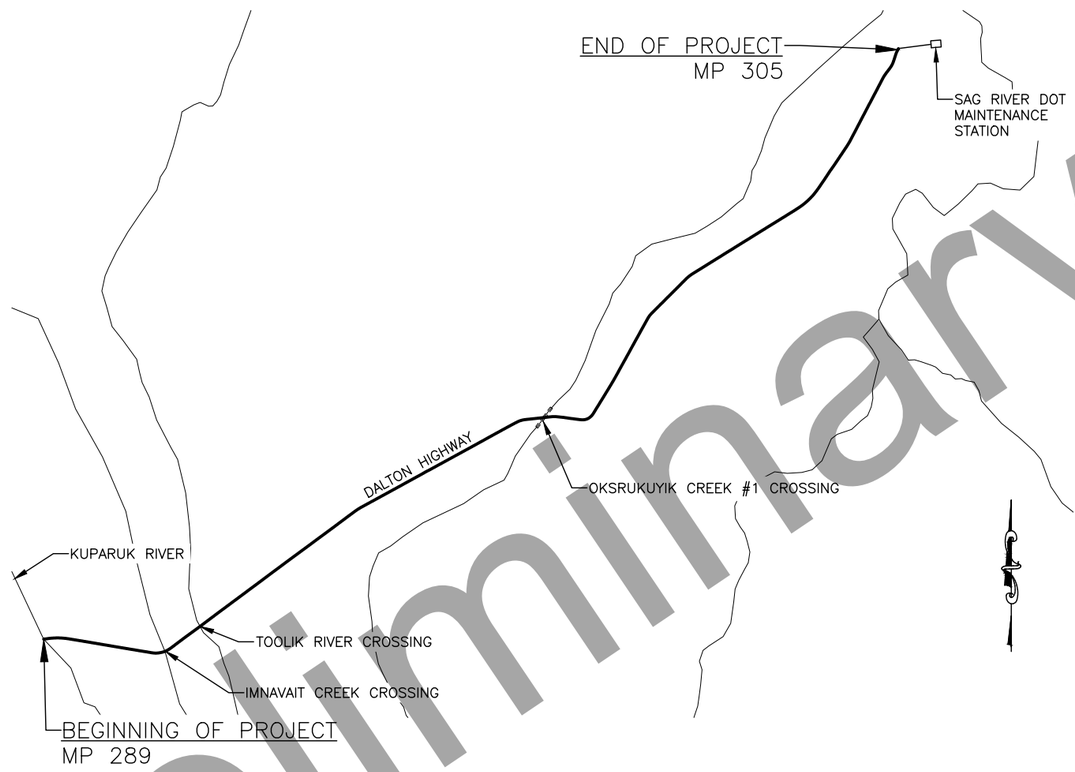
R:\cad\MISC\Dalton Slab pdfs\Dalton Slab MP289-305 site-TRANSITION Wed, Mar/18/20 08:24am

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	Q1	Q16

GENERAL NOTES:

1. READ AND COMPLY WITH THE CONSTRUCTION GENERAL PERMIT (CGP) AND SECTION 641 OF THE PROJECT SPECIFICATIONS.
2. EROSION AND SEDIMENT CONTROL FEATURES BASED ON THE DOT&PF MANUAL ALASKA STORM WATER POLLUTION PREVENTION PLAN GUIDE (MARCH 2017 OR LATEST VERSION) AND LATEST BMPs.
3. INITIATE EROSION AND SEDIMENT CONTROLS PRIOR TO ANY EARTH DISTURBING ACTIVITIES.
4. MAINTAIN ALL DEVICES WEEKLY INCLUDING, BUT NOT LIMITED TO REMOVAL AND DISPOSAL OF ACCUMULATED SOILS, CLEANING DEVICES AND REPLACEMENT OF DAMAGED DEVICES. ALL COSTS ASSOCIATED WITH THE MAINTENANCE, REMOVAL, AND REINSTALLATION ACTIVITIES ARE SUBSIDIARY TO PAY ITEM 641(3).
5. STOCKPILE AND STAGING LOCATIONS MUST BE RECLAIMED TO THEIR ORIGINAL CONDITION. STOCKPILES AND/OR STAGING AREAS ARE NOT ALLOWED IN WETLANDS.
6. ENSURE LOADS ARE STABLE OR COVERED SO THAT NO MATERIAL ESCAPES DURING HAULING ACTIVITIES.
7. CONTRACTOR WILL WATER EXPOSED SOILS TO MITIGATE FUGITIVE DUST AS NECESSARY.
8. PERIMETER CONTROLS ARE EXPECTED FOR THE ENTIRE LENGTH OF THE PROJECT. PREFERRED PERIMETER CONTROL IS VEGETATIVE BUFFER EXCEPT WITHIN 25 FEET OF WETLAND AREAS. WETLAND AREAS ARE MARKED.
9. PERIMETER CONTROLS THROUGH OR WITHIN 25 FEET OF WETLANDS SHOULD INCLUDE FIBER ROLLS OR SILT FENCE.



PROJECT LOCATION

ESCP LEGEND:

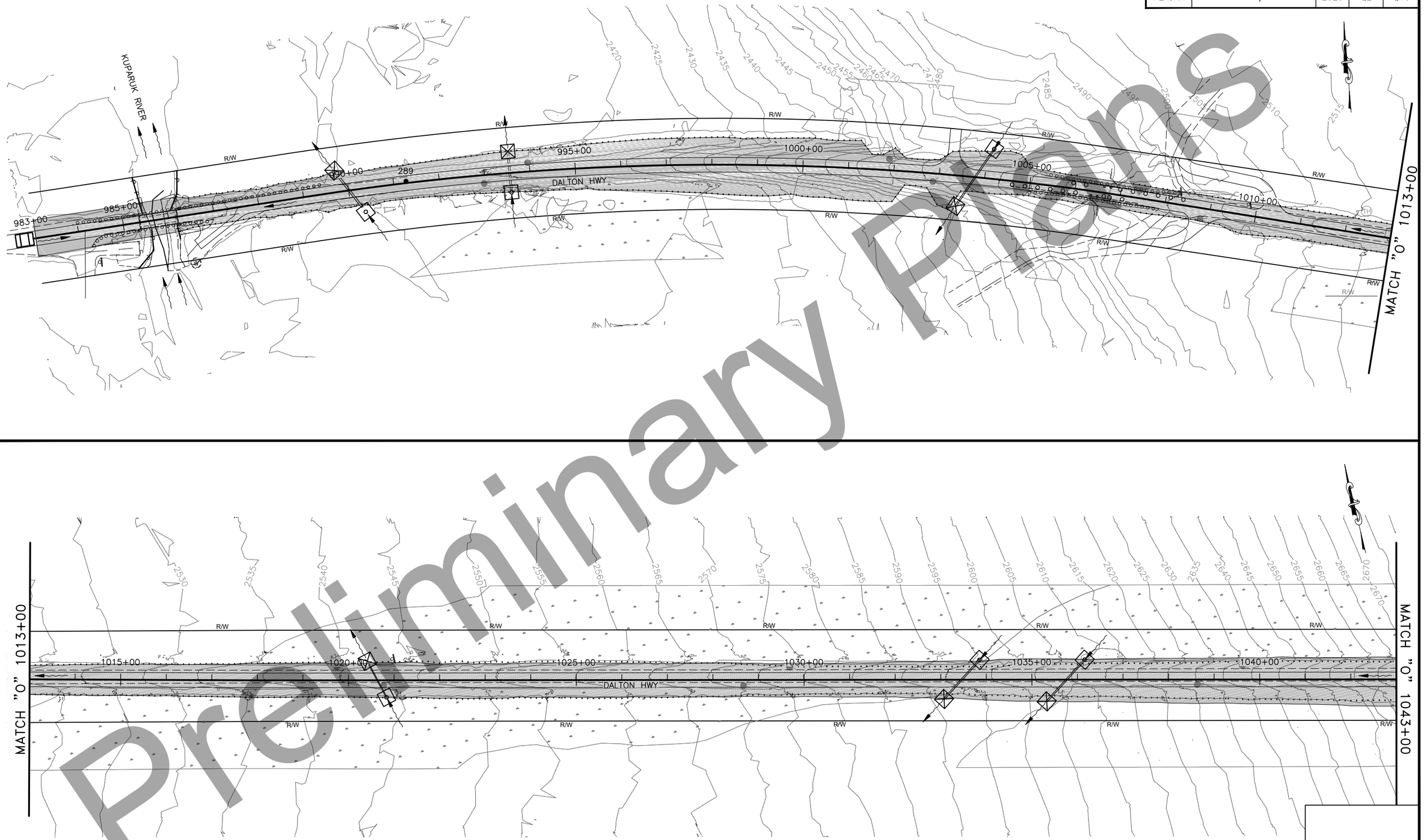
- R/W — RIGHT OF WAY
- SURFACE WATER FLOW DIRECTION
- TEMPORARY PERIMETER CONTROL – FIBER FILLED TUBE BERMS (SEE BMP 10.00, DOT&PF SWPPP GUIDE) OR FUNCTIONAL EQUIVALENT TO MANUFACTURER'S SPECIFICATIONS
- OUTLET PROTECTION (SEE RIPRAP OUTLETS AT STORM DRAIN OUTLETS DETAIL SHEET G12.)
- CULVERT INLET PROTECTION (SEE BMP 08.00 DOT&PF SWPPP GUIDE)
- VEHICLE TRACKING ENTRANCE/EXIT
- WETLANDS
- DITCH LINE
- FILL LINE

LEGEND AND GENERAL NOTES

Preliminary Plans

P:\2017\17331FB-DaltonMP289-305\C\c6000cnst17331fb-Q1 LEGEND AND GENERAL NOTES Fri, Oct/16/20 11:13am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	Q2	Q16

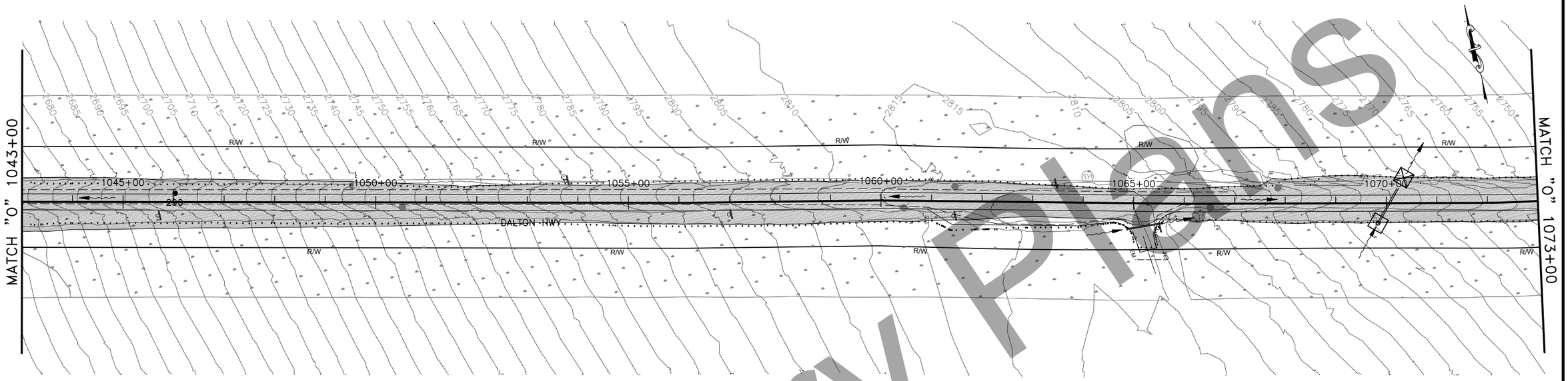


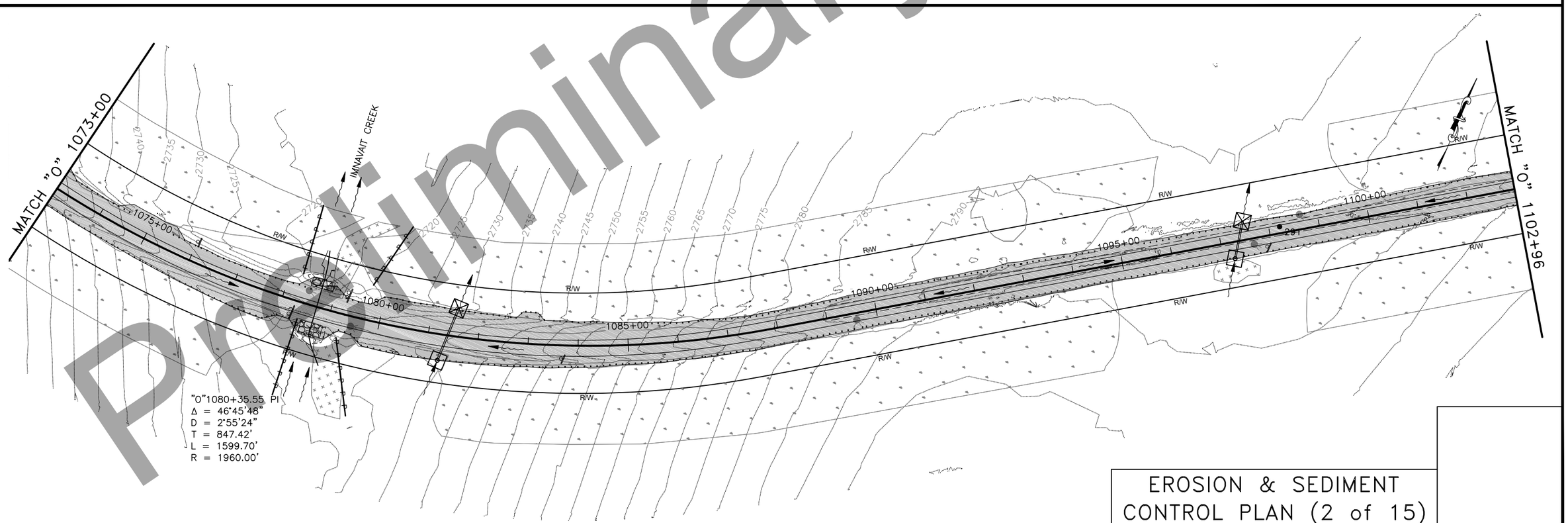
Preliminary Plans

EROSION & SEDIMENT CONTROL PLAN (1 of 15)

P:\2017\17331FB-DaltonMP289-305\C\C6001cnst17331FB-Q2 EROSION & SEDIMENT CONTROL PLAN (1 of 15) Fri, Oct/16/20 11:14am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	Q3	Q16



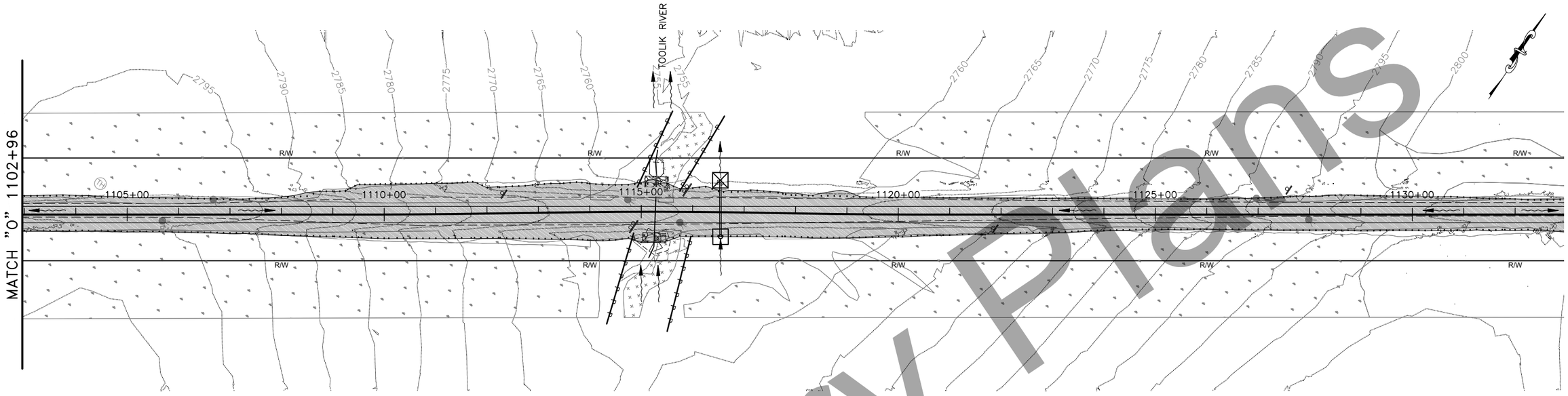


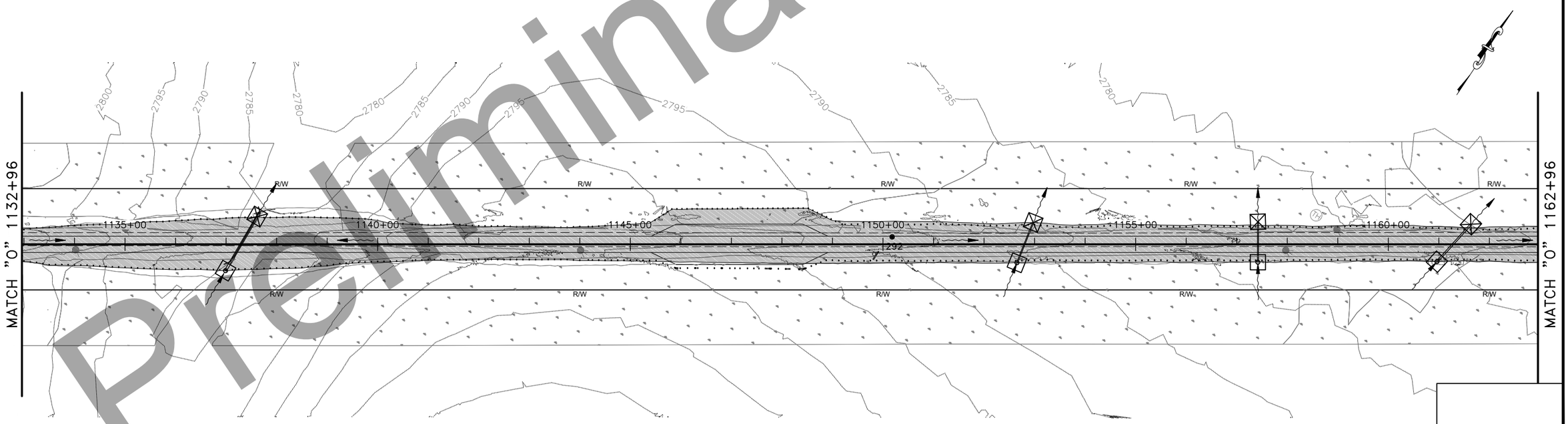
Preliminary Plans

EROSION & SEDIMENT CONTROL PLAN (2 of 15)

P:\2017\17331FB-DaltonMP289-305\C\C6001cnst17331FB-Q3 EROSION & SEDIMENT CONTROL PLAN (2 of 15) Fri, Oct/16/20 11:14am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	Q4	Q16



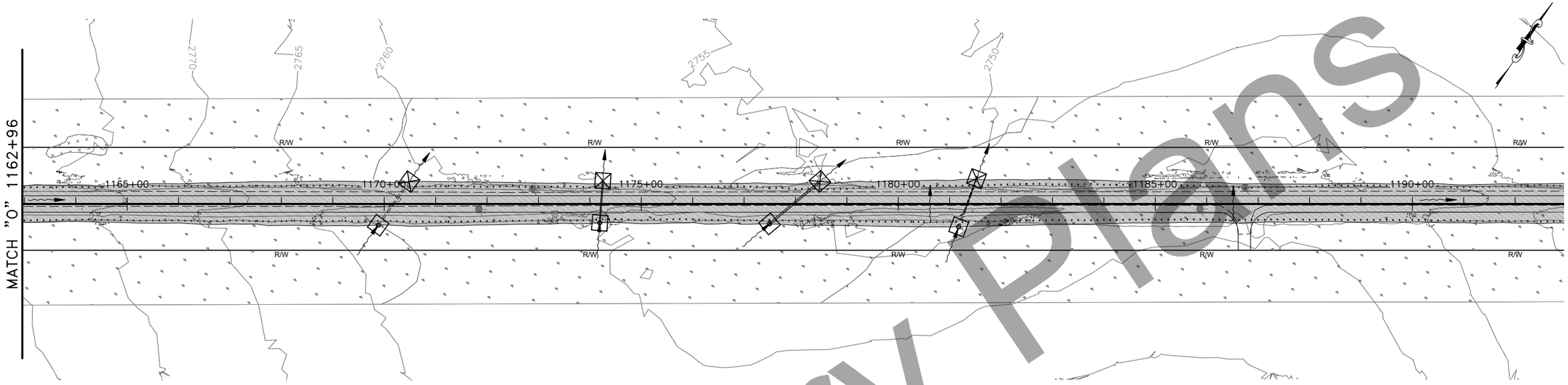


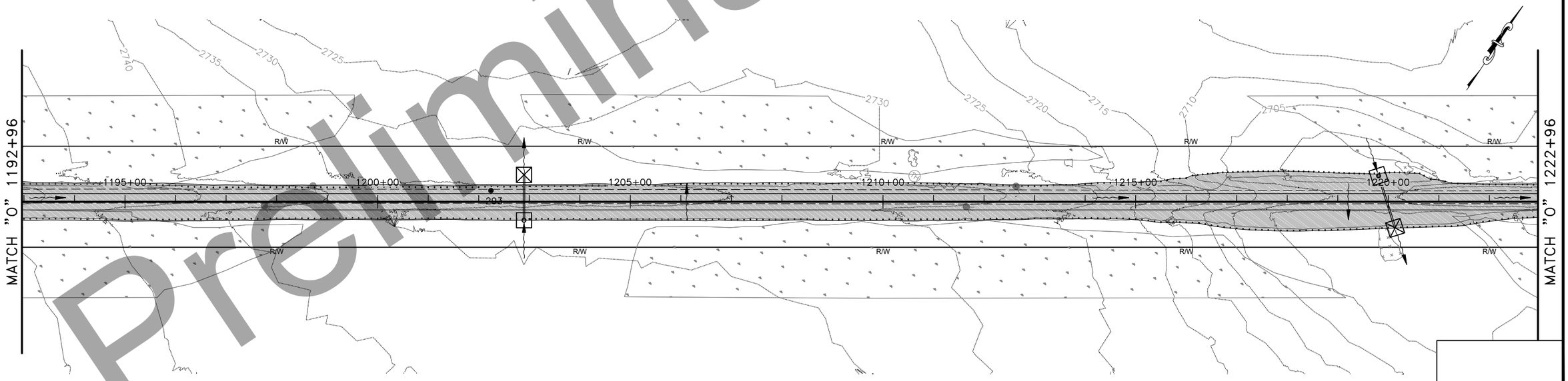
EROSION & SEDIMENT CONTROL PLAN (3 of 15)

Preliminary Plans

P:\2017\17331FB-DaltonMP289-305\C\C6001cnst17331FB-Q4 EROSION & SEDIMENT CONTROL PLAN (3 of 15) Fri, Oct/16/20 11:14am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC. CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	Q5	Q16





EROSION & SEDIMENT CONTROL PLAN (4 of 15)

Preliminary Plans

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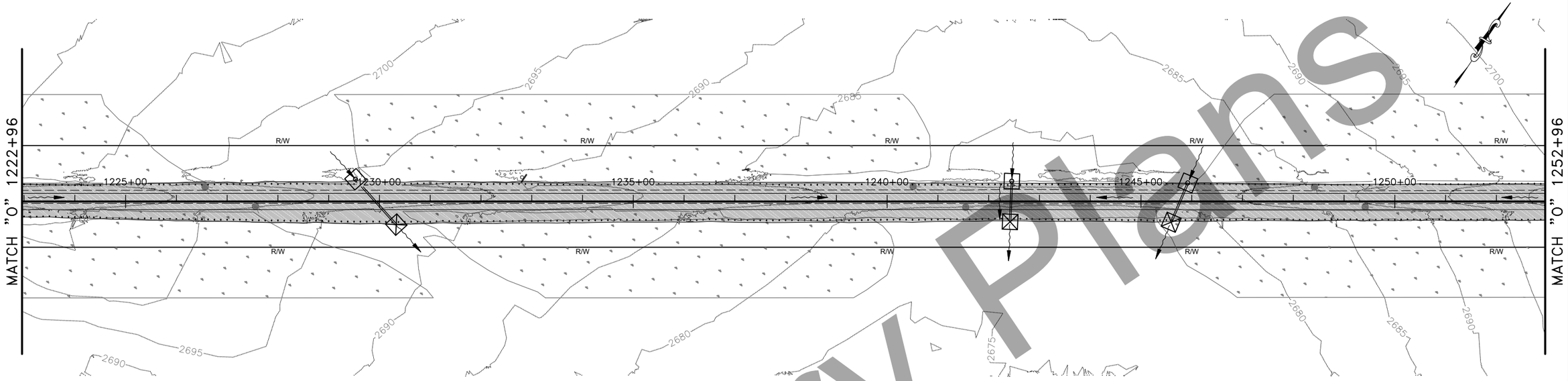
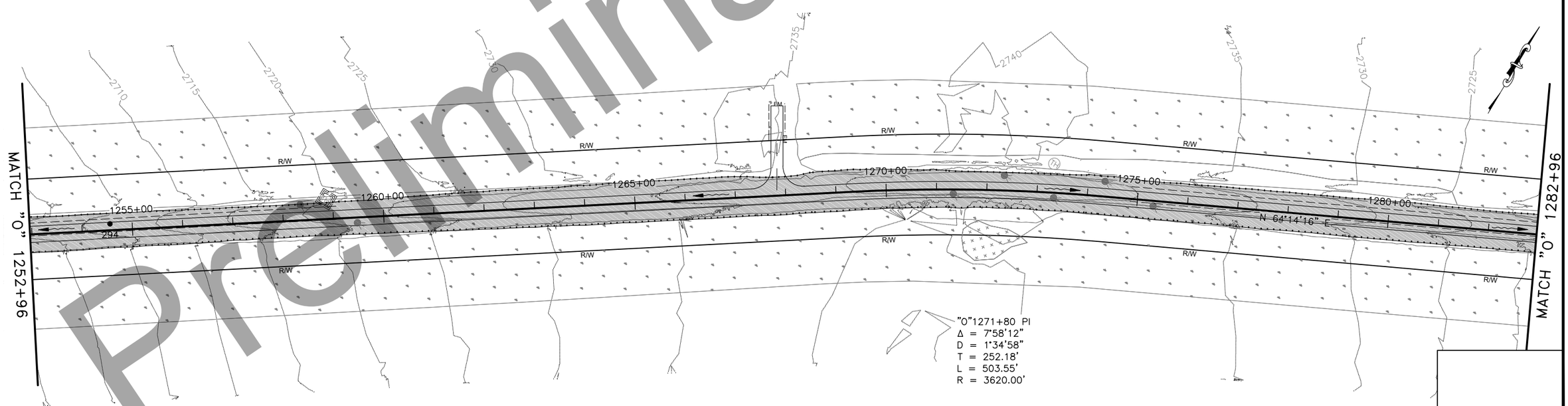
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC. CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	Q6	Q16



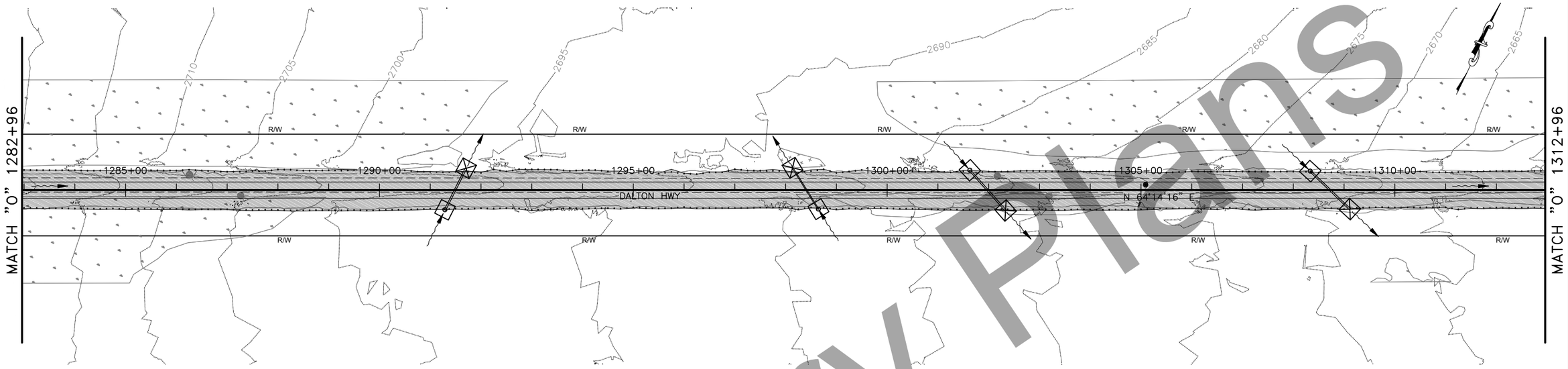


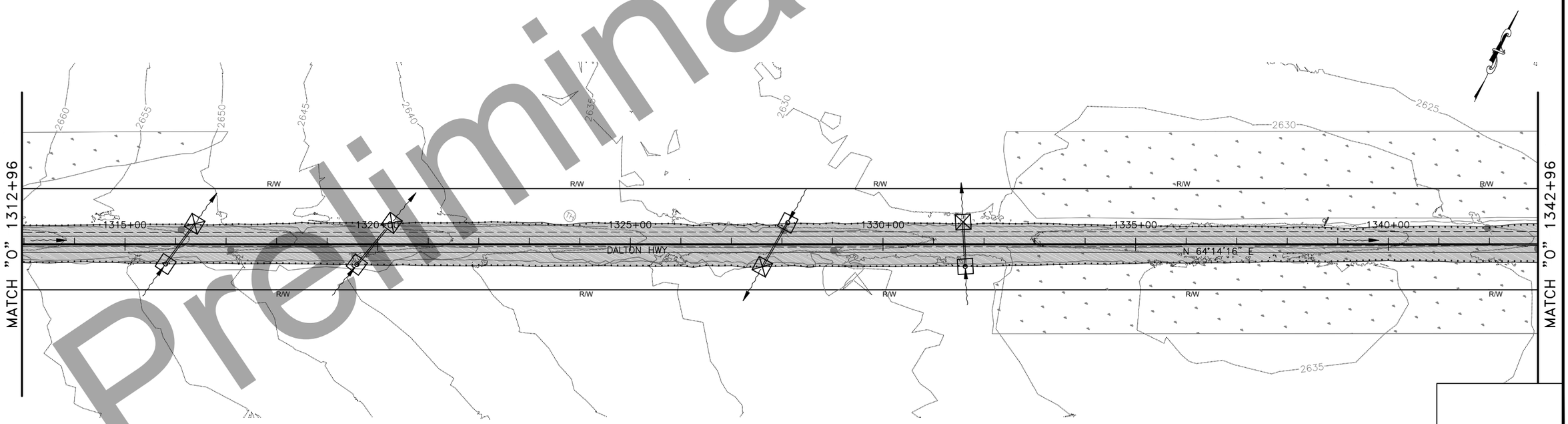
EROSION & SEDIMENT CONTROL PLAN (5 OF 15)

Preliminary Plans

P:\2017\17331FB-DaltonMP289-305\C\C6001cnst17331FB-Q6 EROSION & SEDIMENT CONTROL PLAN (5 OF 15) Fri, Oct/16/20 11:14am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC. CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	Q7	Q16



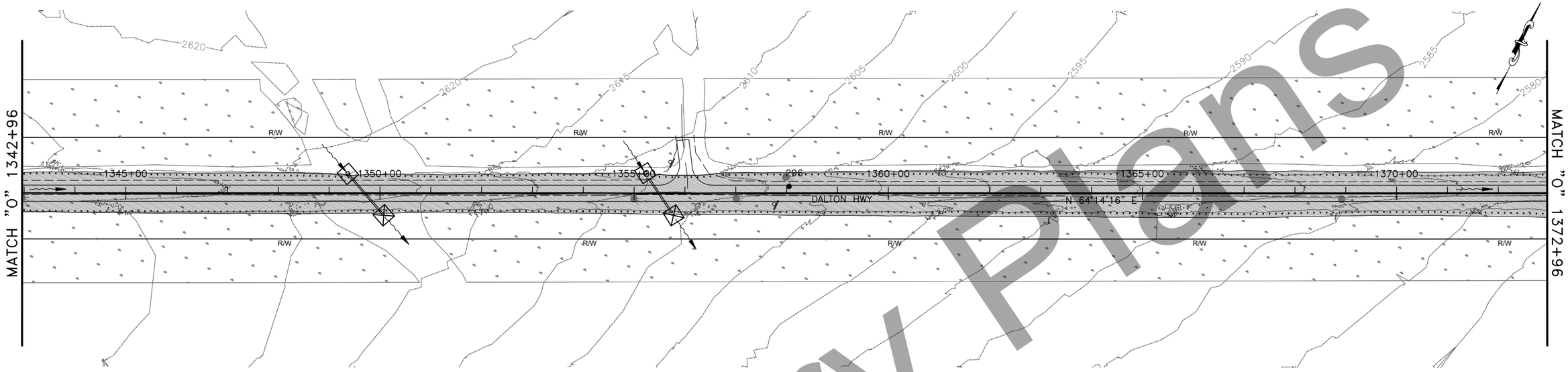


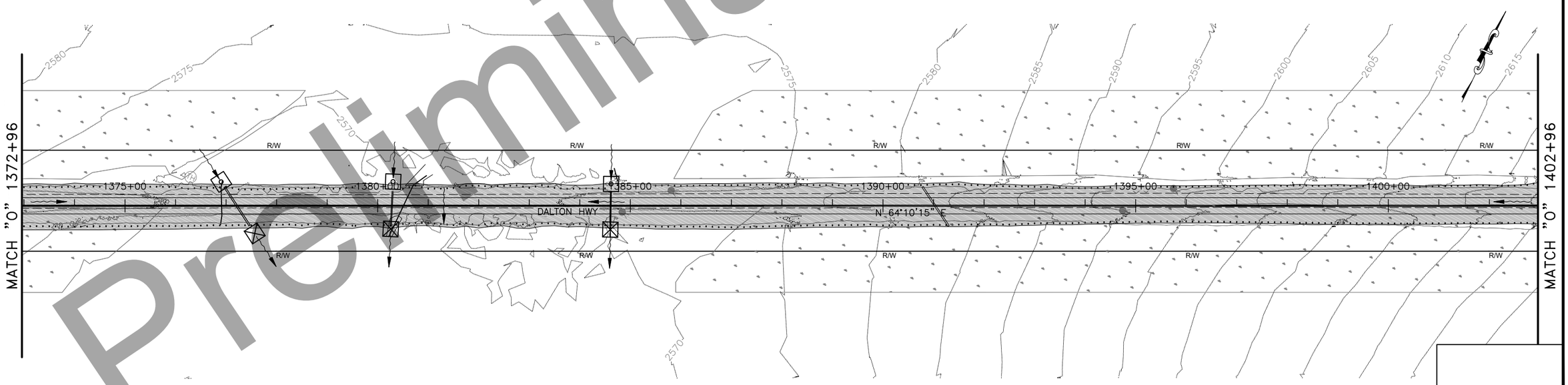
EROSION & SEDIMENT CONTROL PLAN (6 OF 15)

Preliminary Plans

P:\2017\17331FB-DaltonMP289-305\C\C6001cnst17331FB-Q7 EROSION & SEDIMENT CONTROL PLAN (6 OF 15) Fri, Oct/16/20 11:14am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC. CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	Q8	Q16





EROSION & SEDIMENT CONTROL PLAN (7 OF 15)

Preliminary Plans

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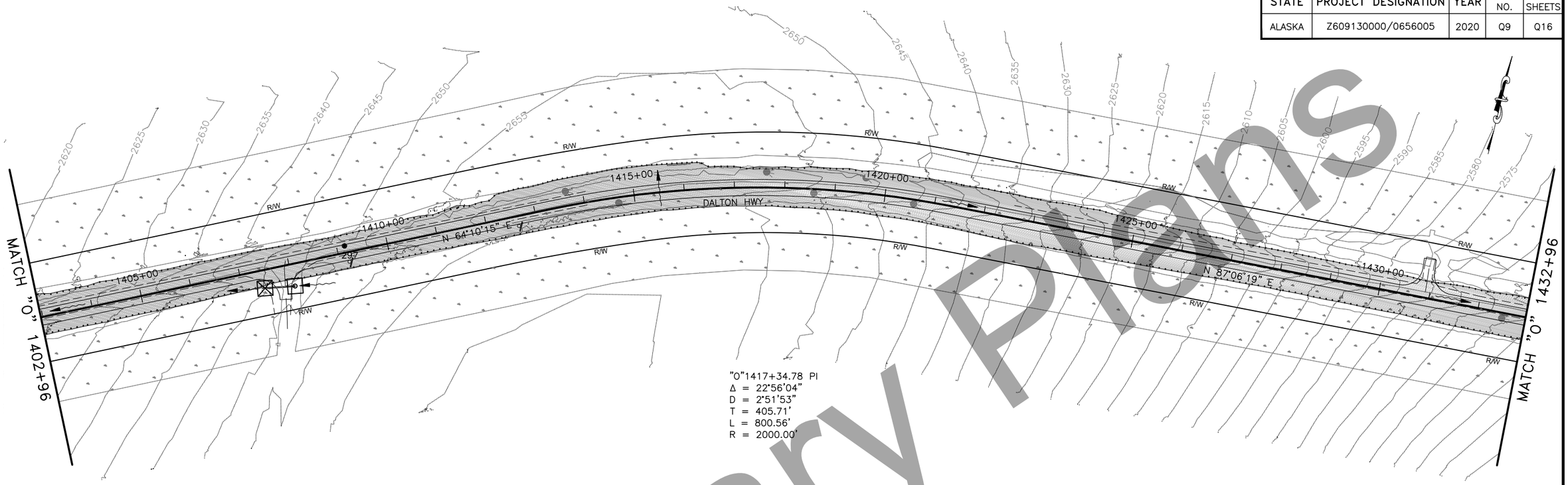
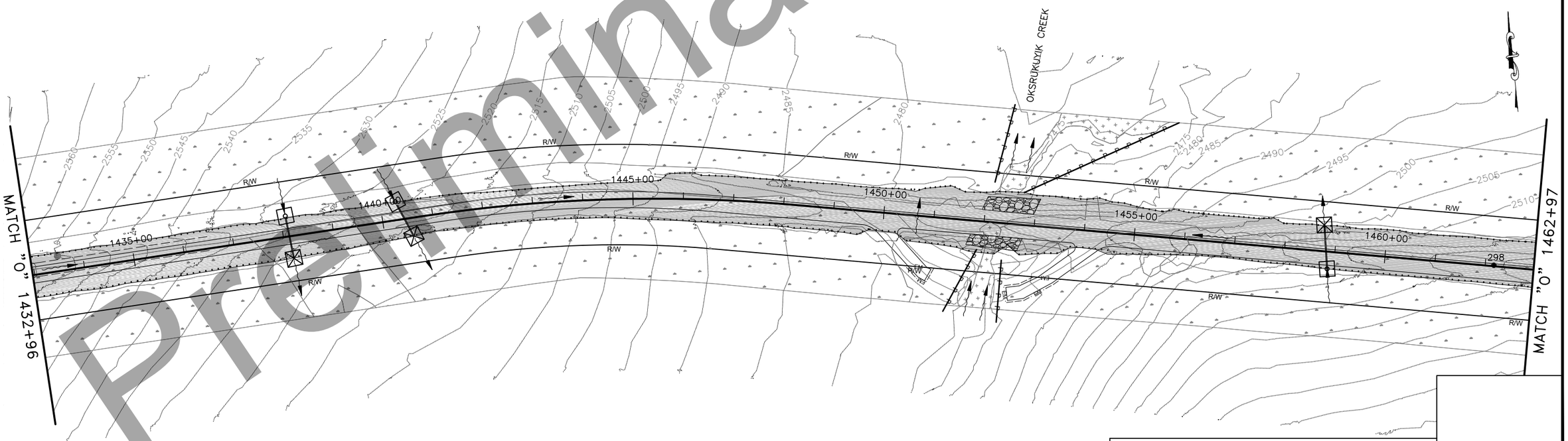
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC. CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	Q9	Q16



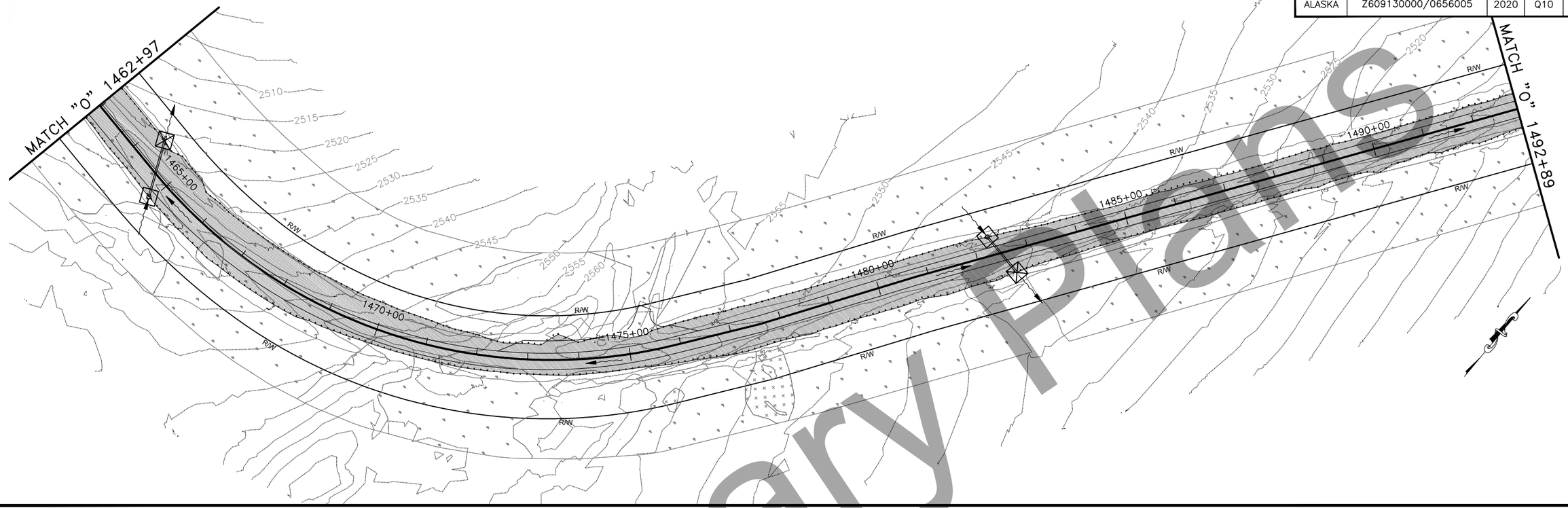


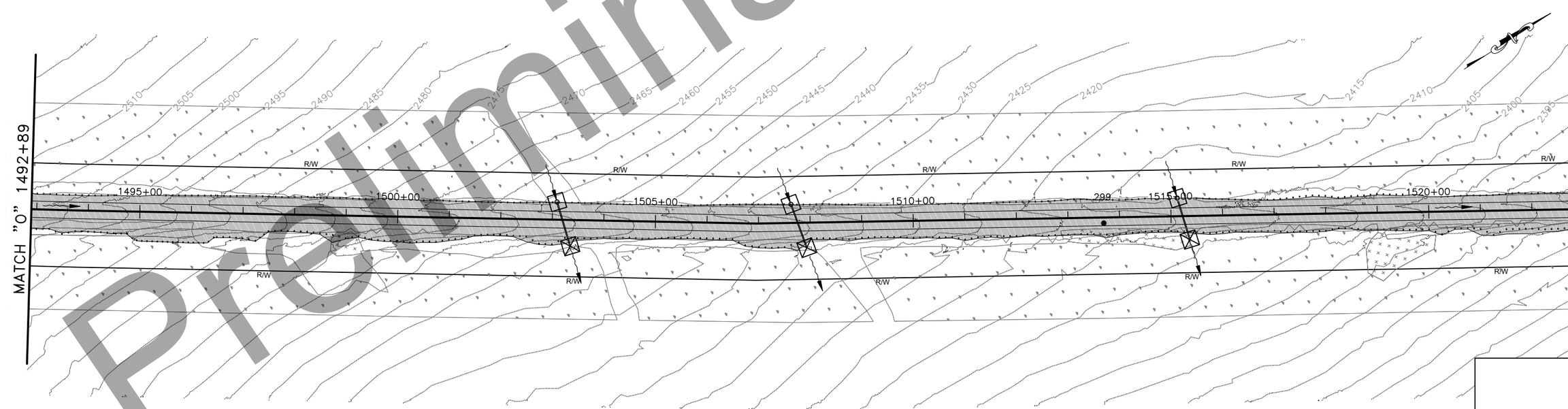
EROSION & SEDIMENT CONTROL PLAN (8 OF 15)

Preliminary Plans

P:\2017\17331FB-DaltonMP289-305\C\C6001cnst17331FB-Q9 EROSION & SEDIMENT CONTROL PLAN (8 OF 15) Fri, Oct/16/20 11:15am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	Q10	Q16



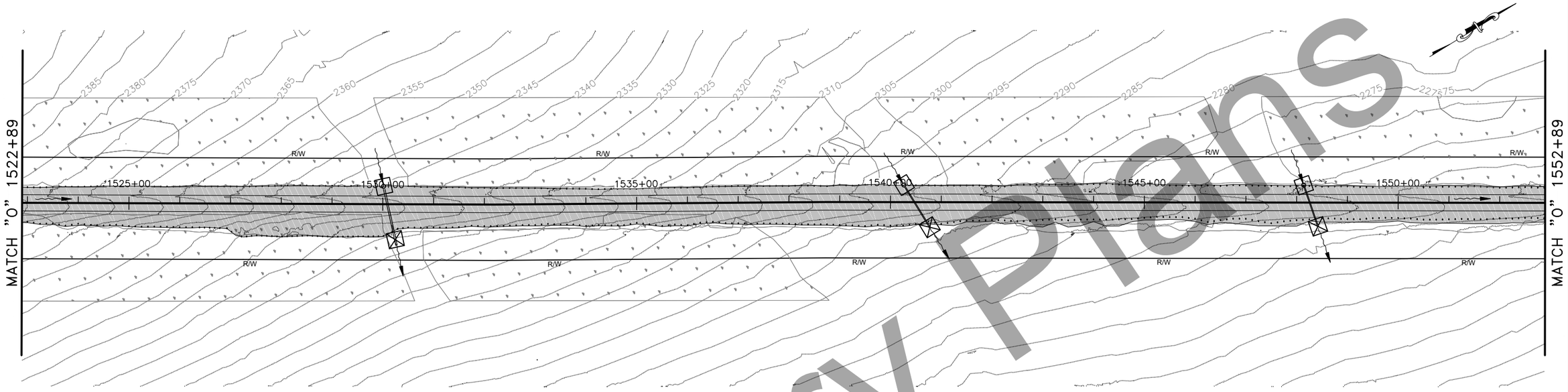


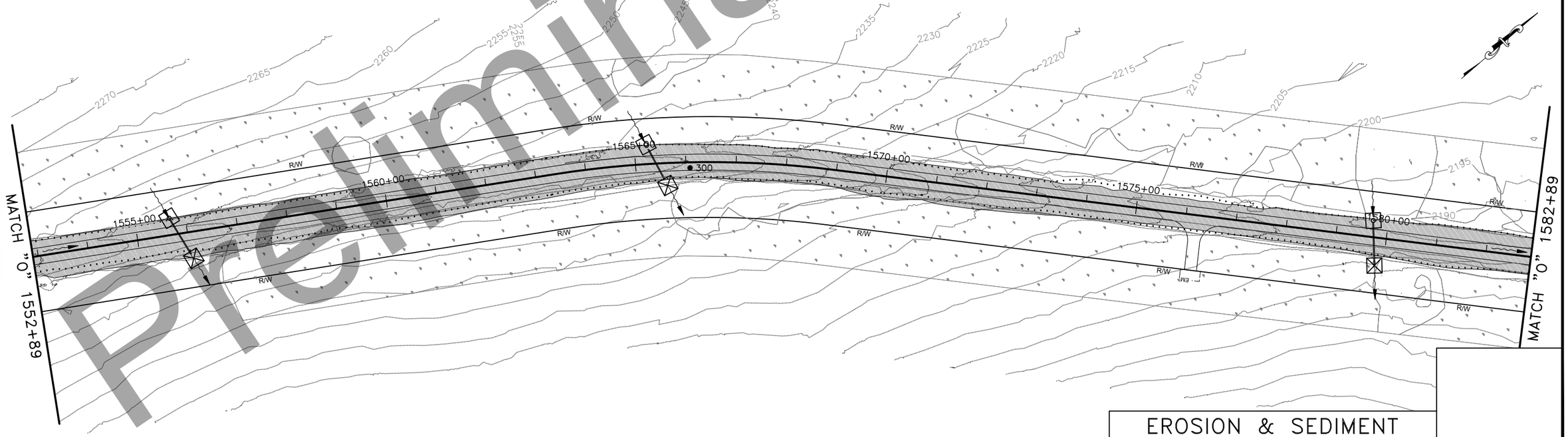
Preliminary Plans

EROSION & SEDIMENT CONTROL PLAN (9 OF 15)

P:\2017\17331FB-DaltonMP289-305\C\C6001cnst17331FB-Q10 EROSION & SEDIMENT CONTROL PLAN (9 OF 15) Fri, Oct/16/20 11:15am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	Q11	Q16



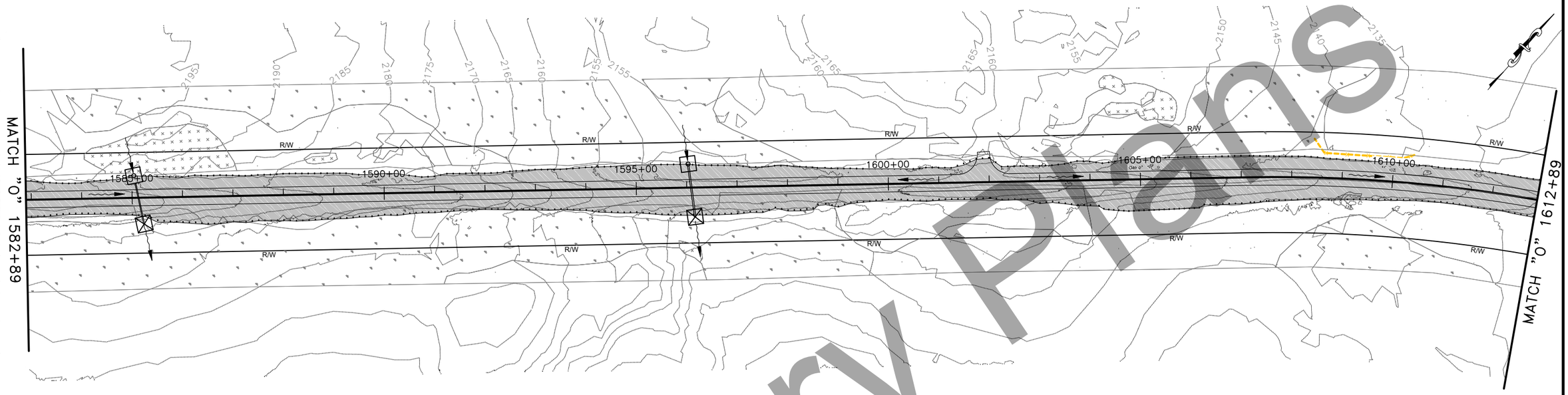


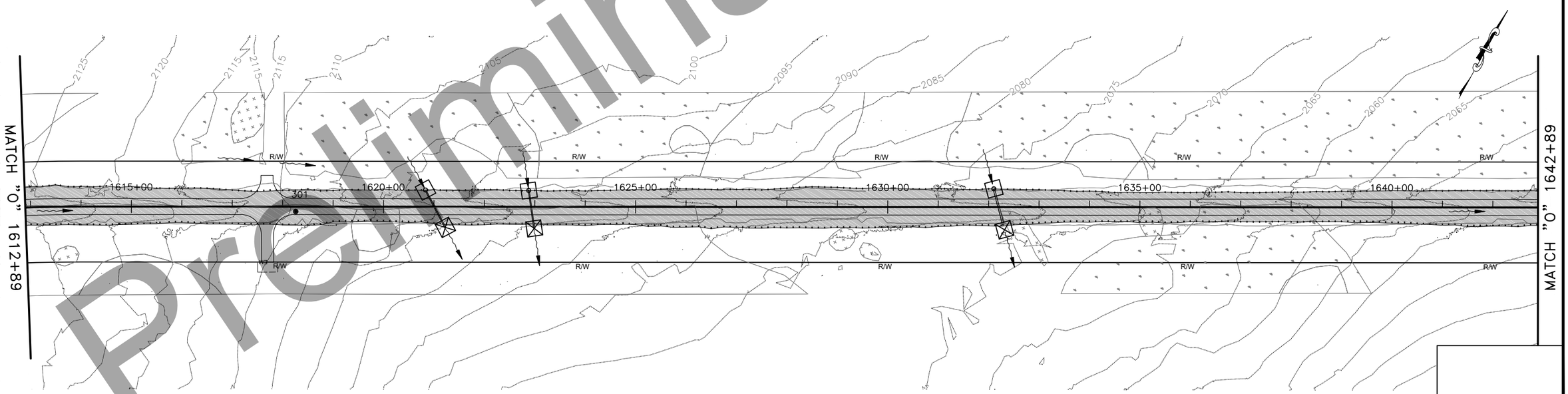
EROSION & SEDIMENT CONTROL PLAN (10 OF 15)

Preliminary Plans

P:\2017\17331FB-DaltonMP289-305\C\C6001cnst17331FB-Q11 EROSION & SEDIMENT CONTROL PLAN (10 OF 15) Fri, Oct/16/20 11:15am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	Q12	Q16



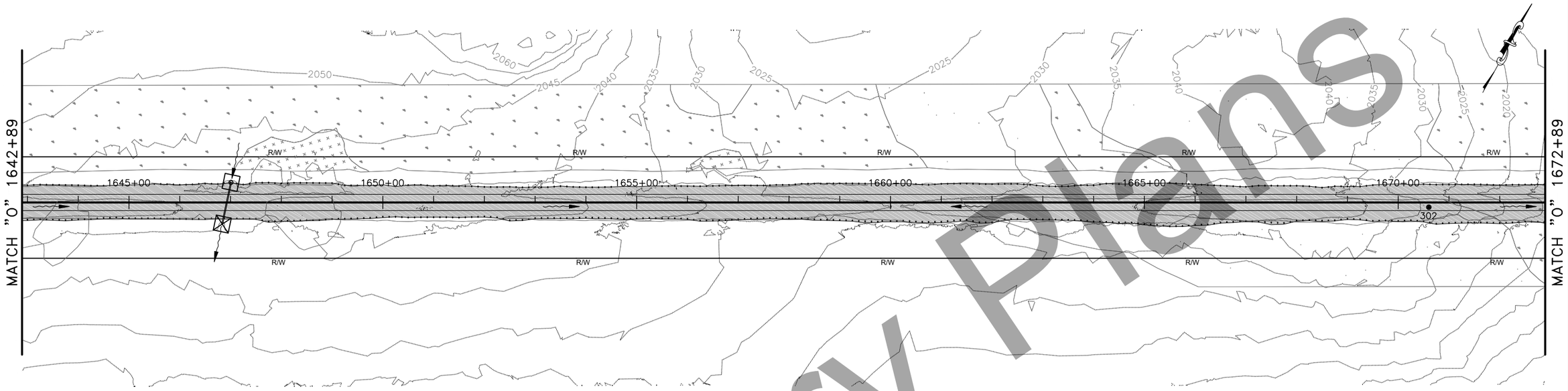


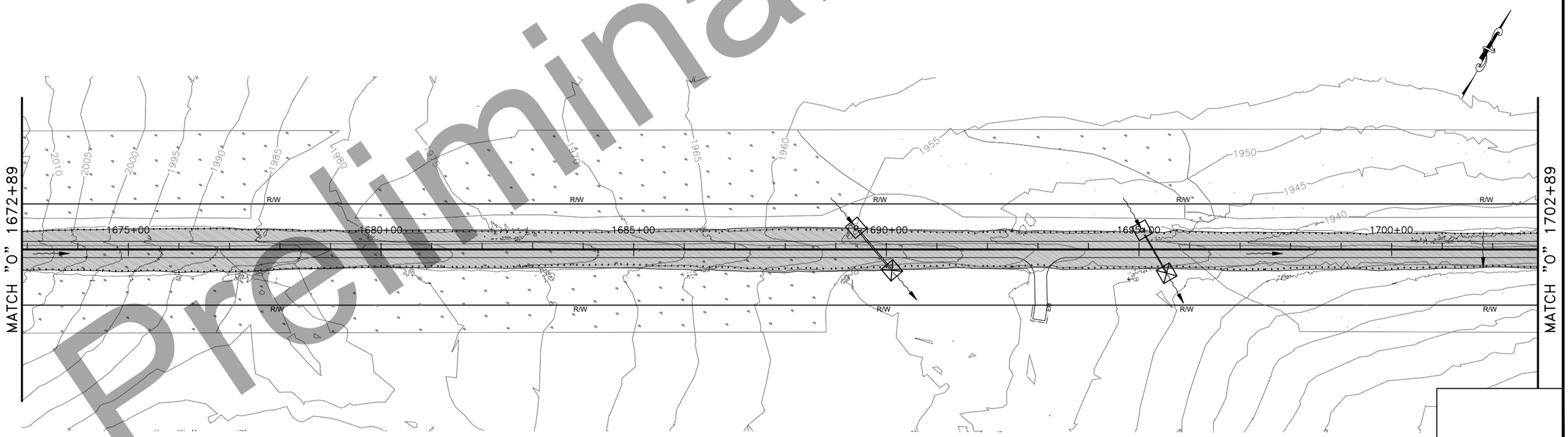
EROSION & SEDIMENT CONTROL PLAN (11 OF 15)

Preliminary Plans

P:\2017\17331FB-DaltonMP289-305\C\C6001cnst17331FB-Q12 EROSION & SEDIMENT CONTROL PLAN (11 OF 15) Fri, Oct/16/20 11:15am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	Q13	Q16



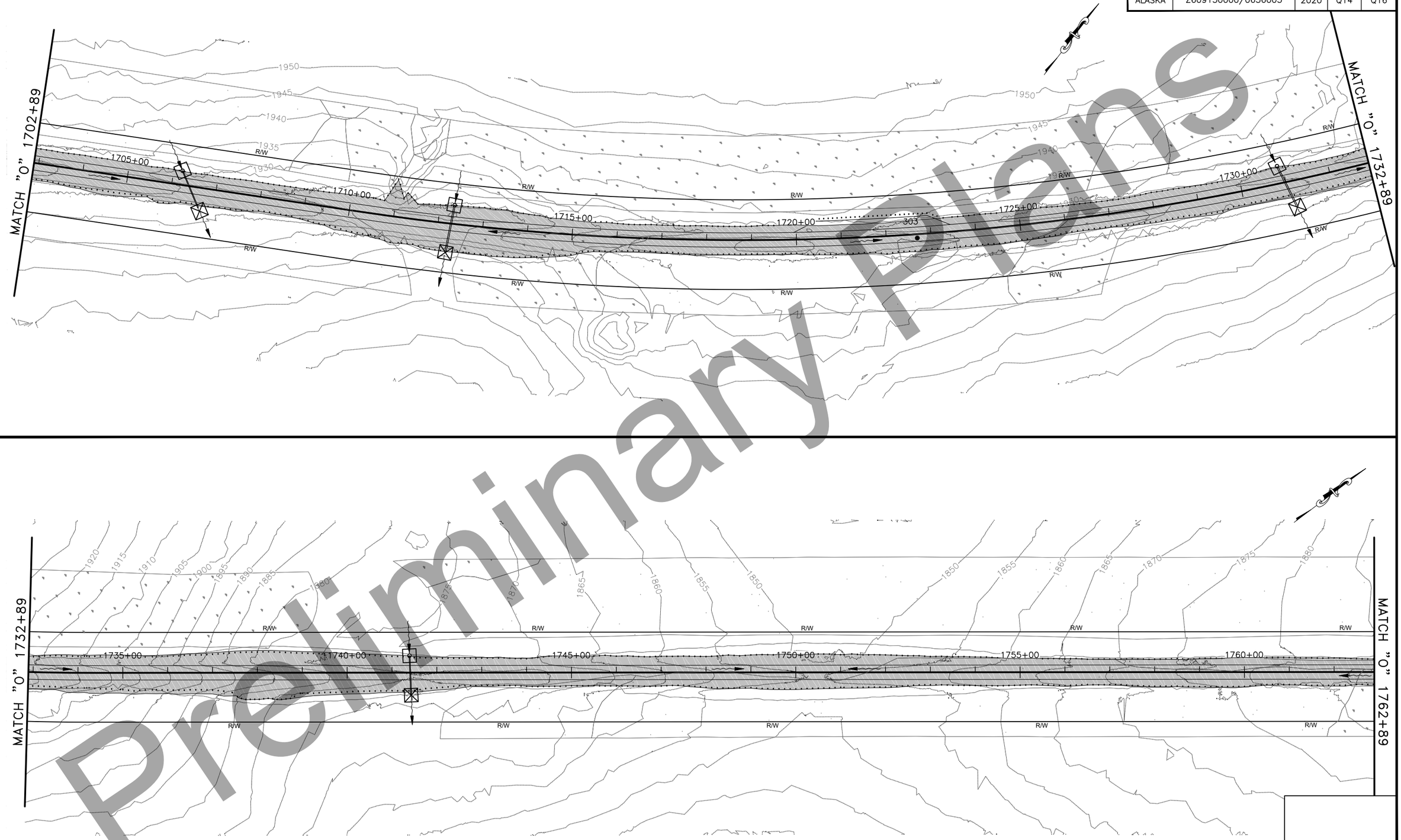


EROSION & SEDIMENT CONTROL PLAN (12 OF 15)

Preliminary Plans

P:\2017\17331FB-DaltonMP289-305\C\C6001cnst17331FB-Q13 EROSION & SEDIMENT CONTROL PLAN (12 OF 15) Fri, Oct/16/20 11:15am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	Q14	Q16

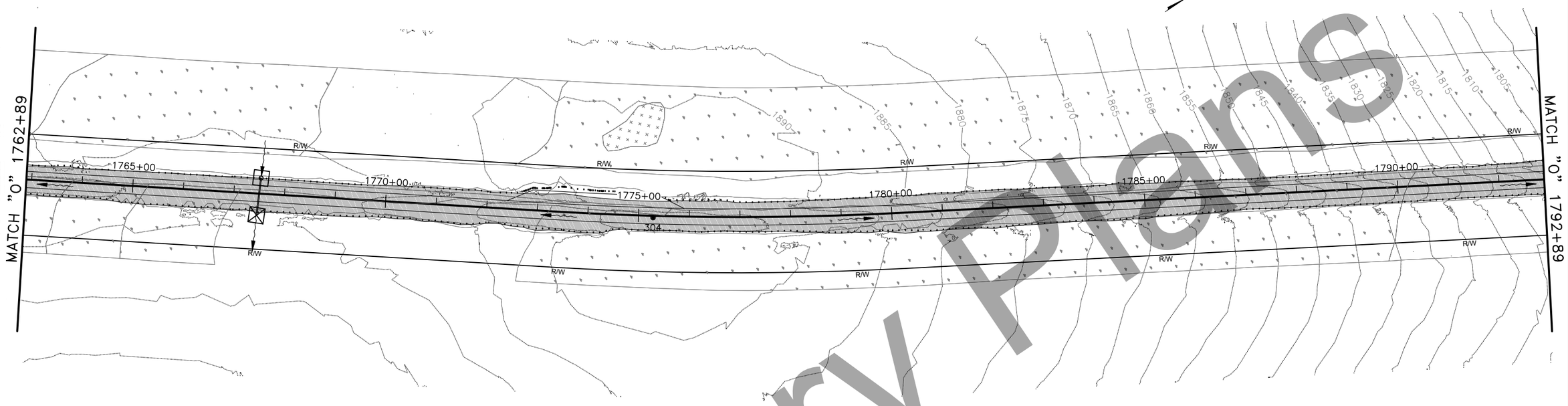


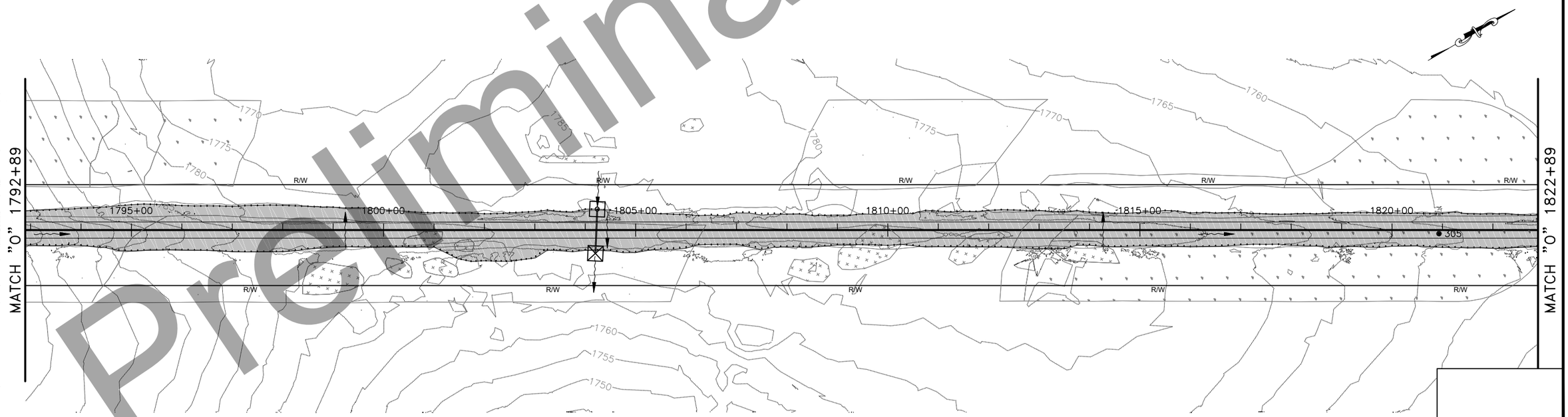
Preliminary Plans

EROSION & SEDIMENT CONTROL PLAN (13 OF 15)

P:\2017\17331FB-DaltonMP289-305\C\C6001cnst17331FB-Q14 EROSION & SEDIMENT CONTROL PLAN (13 OF 15) Fri, Oct/16/20 11:15am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	Q15	Q16



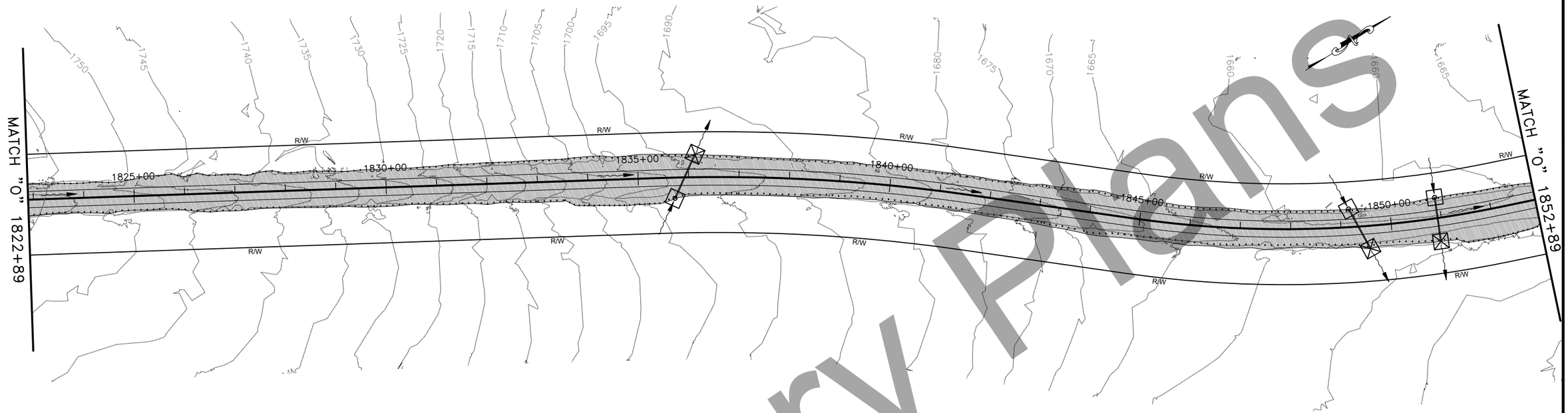


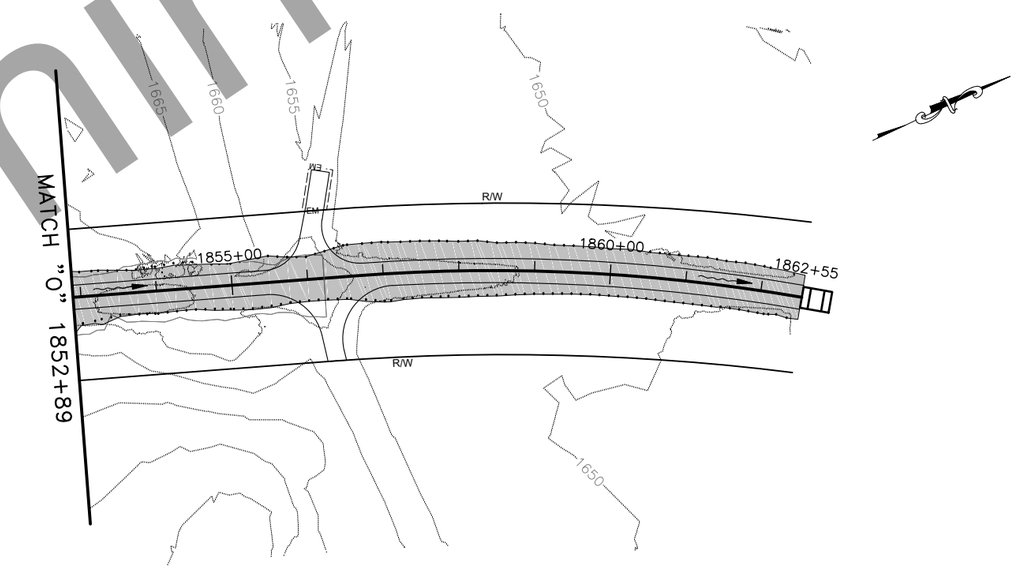
EROSION & SEDIMENT CONTROL PLAN (14 of 15)

Preliminary Plans

P:\2017\17331FB-DaltonMP289-305\C\C6001cnst17331FB-Q15 EROSION & SEDIMENT CONTROL PLAN (14 of 15) Fri, Oct/16/20 11:15am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z609130000/0656005	2020	Q16	Q16





EROSION & SEDIMENT CONTROL PLAN (15 of 15)

Preliminary Plans

P:\2017\17331FB-DaltonMP289-305\C\C6001cnst17331FB-Q16 EROSION & SEDIMENT CONTROL PLAN (15 of 15) Fri, Oct/16/20 11:15am
PLANS DEVELOPED BY: PDC INC ENGINEERS, LLC, CERT. OF AUTHORIZATION NO.: AECC605, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414