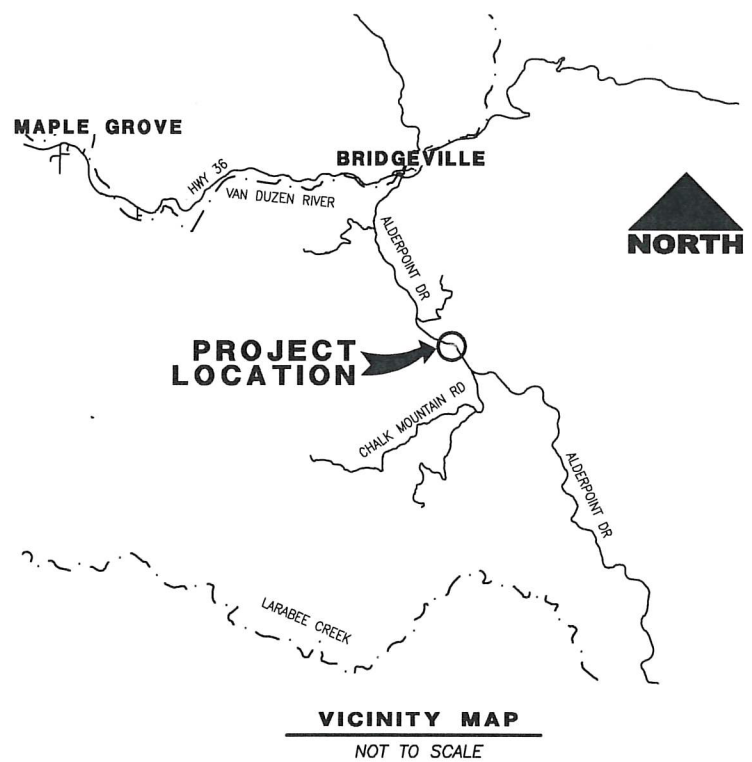
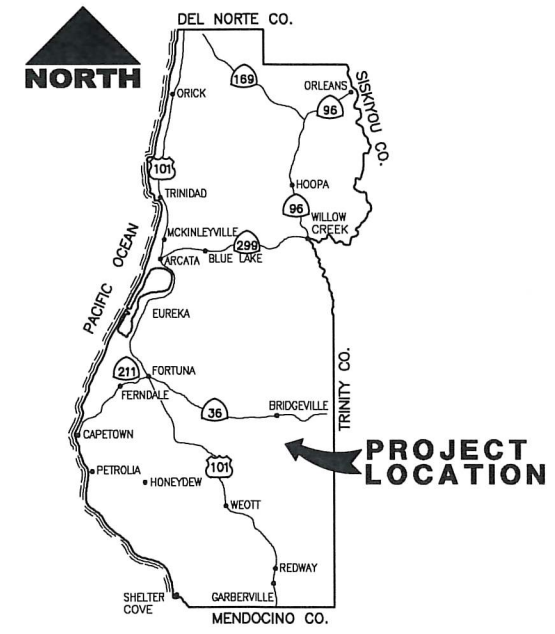


BAR IS ONE INCH ON ORIGINAL DRAWING	ROAD NAME: ALDERPOINT ROAD	MARK THOMAS	COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS	SHEET 1 OF 19
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	ROAD NO: F6B165	DESIGNED BY: EM	ALDERPOINT RD STORM DAMAGE (PM 44.79)	
	PROJECT NO.: ER32LO(125)	DRAWN BY: EM	TITLE SHEET	
	CONTRACT NO.: 217231	REVIEWED BY: TL		
	DRAWING FILE NAME:	APPROVED BY: EM		
	PLOT DATE: DECEMBER 2020			
	REVISION DATE:			



COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS PROJECT PLANS FOR CONSTRUCTION OF STORM DAMAGE REPAIR TO ALDERPOINT ROAD [F6B165] P.M. 44.79 PROJECT NO. ER 32LO (125) CONTRACT NO. 217231

TO BE SUPPLEMENTED BY STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION
STANDARD PLANS, STANDARD SPECIFICATIONS, AND LATEST REVISED 2018 STANDARD SPECIFICATIONS



INDEX OF SHEETS

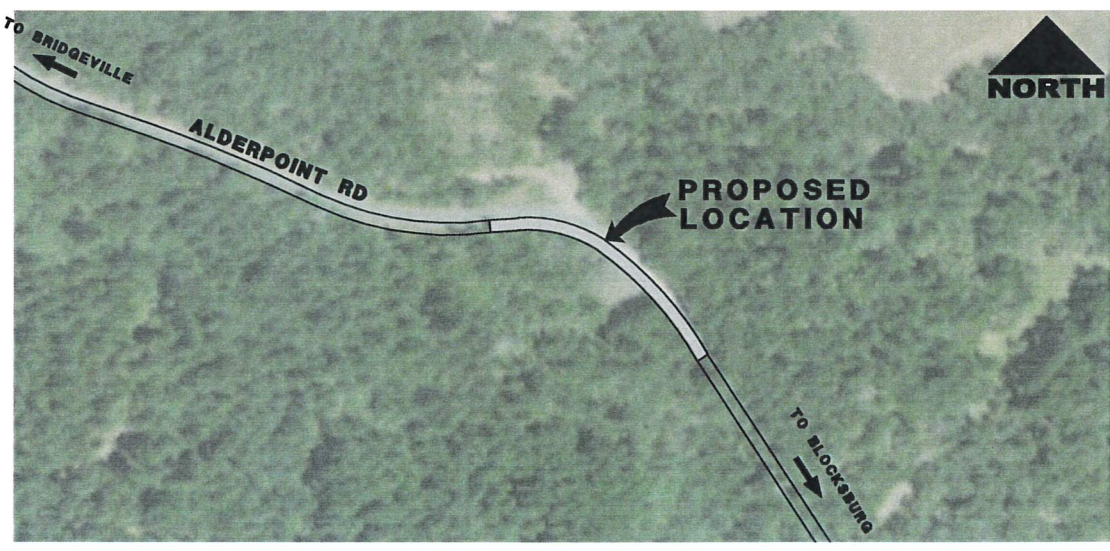
- 1 TITLE SHEET
- 2 PROJECT CONTROL
- 3 TYPICAL CROSS SECTIONS
- 4 LAYOUT
- 5 PROFILE AND SUPERELEVATION
- 6 DRAINAGE PLAN
- 7 DRAINAGE DETAILS
- 8-9 STAGE CONSTRUCTION
- 10 EROSION CONTROL
- 11 SIGNING AND STRIPING
- 12-19 RETAINING WALL PLANS

NOTES

1. THE CONTRACTOR SHALL HAVE A CLASS "A" LICENSE FOR THIS PROJECT.
2. STANDARD PLAN LIST APPLICABLE TO THIS CONTRACT IS INCLUDED IN THE SPECIAL PROVISIONS.
3. LATITUDE: 40.442121
LONGITUDE: -123.787326

GEOTECHNICAL REPORT

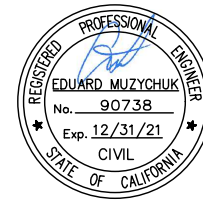
JUNE 2019
CRAWFORD & ASSOCIATES, INC.



APPROVED BY:
Tony Seghetti
TONY SEGHETTI, RCE 63714
COUNTY OF HUMBOLDT
PUBLIC WORKS DEPUTY DIRECTOR
12/21/20
DATE

J. Hickey
JASON HICKEY, SE 5783
12/17/20
DATE

ORIGINAL LOW BID PRICE	CONSTRUCTED BY	RESIDENT ENGINEER
	PROJECT COMPLETED	CONSTRUCTION COST \$



ROAD NAME: ALDERPOINT ROAD	MILE POST: 44.79
ROAD NO: F6B165	EA NO.: 0117000187L-N
PROJECT NO.: ER32LO(125)	BRIDGE NO: N/A
CONTRACT NO.: 217231	DRAWING FILE NAME:
PLOT DATE: DECEMBER 2020	REVISION DATE:

MARK THOMAS
DESIGNED BY: EM
DRAWN BY: EM
REVIEWED BY: TL
APPROVED BY: EM

COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS
ALDERPOINT RD STORM DAMAGE (PM 44.79)
PROJECT CONTROL

SHEET **2**
OF
19

NOTES:

1. CONTRACTOR MUST COMPLY WITH BUSINESS AND PROFESSIONS CODE SECTION 8771 (b) REGARDING REFERENCING, PRESERVING AND RECONSTRUCTING MONUMENTS, WHETHER OR NOT MONUMENTS ARE SHOWN IN THESE PLANS.
2. IF MONUMENT IS DAMAGED BY CONTRACTOR'S OPERATIONS, CONTRACTOR SHALL REPLACE MONUMENT AT CONTRACTOR'S EXPENSE.

ABBREVIATIONS:

NGS NATIONAL GEODETIC SURVEY
PID PERMANENT IDENTIFIER

LEGEND:

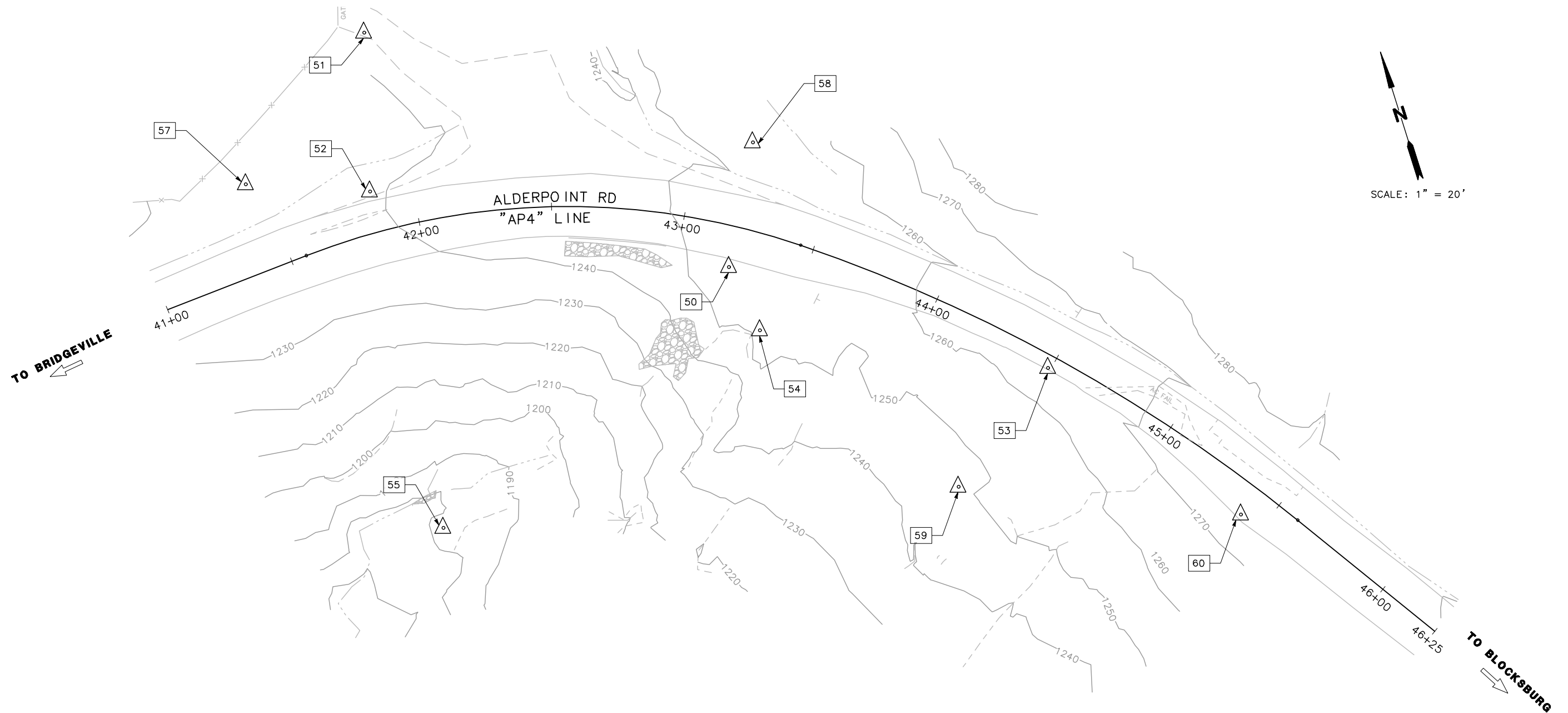
△ CONTROL POINT

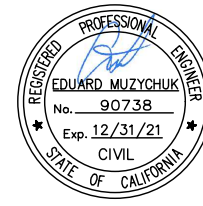
DATUM:

1. COORDINATES FOR THIS SURVEY ARE CALIFORNIA COORDINATE SYSTEM OF 1983 (CCS83) ZONE 1, NAD 83 (2011), EPOCH 2010.0 BASED ON A STATIC GPS CONTROL SURVEY USING THE NGS OPUS POST PROCESSING SOFTWARE. THE CONTROL POINT IDENTIFIED AS POINT 51 WAS HELD FOR HORIZONTAL POSITIONS SHOWN HEREON. THE MAPPING ANGLE IS 1 DEGREE 10 MINUTES 9"; ROTATE BEARINGS HEREON COUNTERCLOCKWISE BY THIS ANGLE TO OBTAIN "TRUE" OR GEODETIC BEARINGS. GRID DISTANCES SHOWN SHOULD BE DIVIDED BY THE COMBINED SCALE FACTOR OF 0.99985760 TO OBTAIN GROUND DISTANCES. MAPPING ANGLE AND GRID SCALE FACTOR ARE TAKEN AT CONTROL POINT NUMBER 51, A 12 INCH SPIKE. ELEVATIONS ARE NAVD 88 DATUM BASED ON OPUS SOLUTION UTILIZING THE GEOID 12B MODEL; AN ELEVATION OF 1240.84 FEET WAS MEASURED AT THE AFOREMENTIONED CONTROL POINT 51.
2. THE RIGHT OF WAY SHOWN IS BASED ON THE DEED RECORDED IN BOOK 523 OF OFFICIAL RECORDS, PAGE 82, FROM BARNWELL ET.AL. TO THE COUNTY OF HUMBOLDT. THIS RIGHT OF WAY VARIES IN WIDTH- SEE DOCUMENT FOR PARTICULARS. THE RIGHT OF WAY WAS PLACED UTILIZING PRIOR COUNTY PROJECT NO. ER-4400(55), CONTRACT NO. 206419 DATED 3/12/2013 BY LOCATING TWO COMMON CONTROL POINTS FROM THIS SURVEY AND THAT SHOWN ON SAID PLANS AS DIRECTED BY COUNTY OF HUMBOLDT.

CONSTRUCTION SURVEY CONTROL DATA

POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION	STATION/OFFSET
50	2049493.20	6064134.50	1252.34	SPIKE	"AP4" 43+20.77 15.43' Rt
51	2049618.20	6064030.62	1240.84	SPIKE	"AP4" 41+95.56 73.67' Lt
52	2049560.82	6064014.79	1239.51	SPIKE	"AP4" 41+85.13 15.39' Lt
53	2049421.10	6064237.12	1266.15	SPIKE	"AP4" 44+48.87 4.72' Rt
54	2049467.14	6064138.39	1251.35	SPIKE	"AP4" 43+40.17 35.07' Rt
55	2049432.40	6064002.97	1181.68	SPIKE	"AP4" 41+74.53 113.31' Rt
57	2049577.46	6063971.20	1237.92	DPW	"AP4" 41+44.31 33.12' Lt
58	2049535.01	6064157.15	1257.28	SPIKE	"AP4" 43+18.64 32.07' Lt
59	2049388.82	6064191.74	1249.26	SPIKE	"AP4" 44+39.88 59.76' Rt
60	2049346.93	6064289.47	1273.79	MAGNETIC NAIL	"AP4" 45+40.70 11.48' Rt

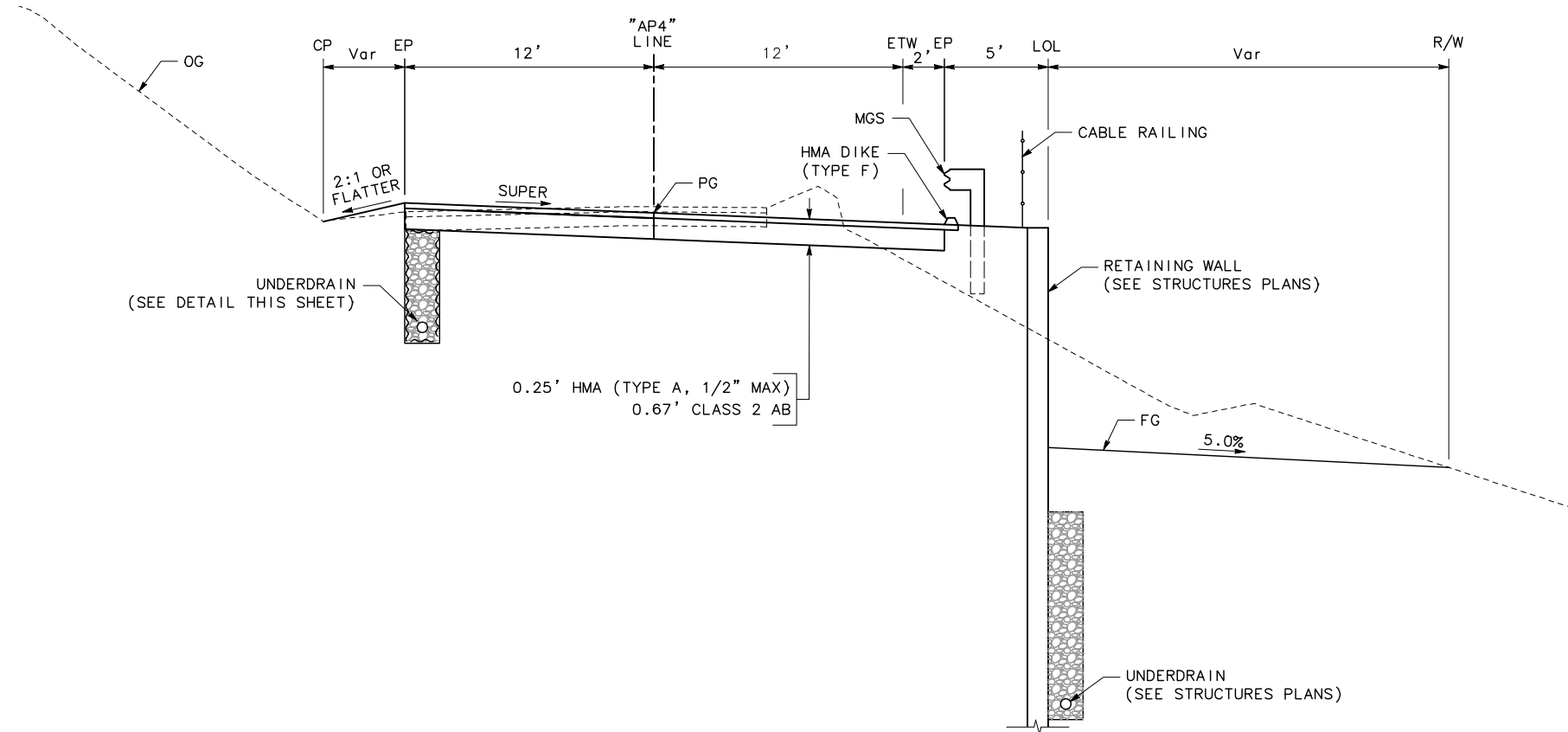




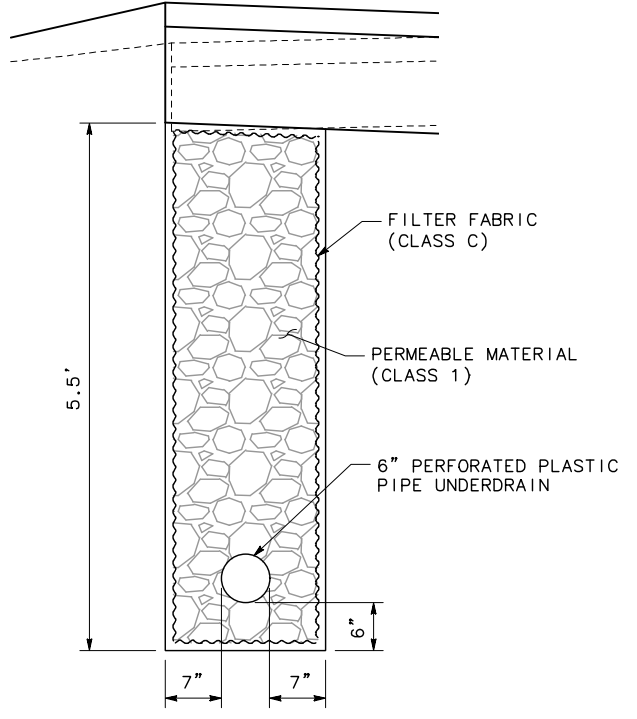
BAR IS ONE INCH ON ORIGINAL DRAWING	ROAD NAME: ALDERPOINT ROAD	MILE POST: 44.79
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	ROAD NO: F6B165	EA NO.: 0117000187L-N
	PROJECT NO.: ER32LO(125)	BRIDGE NO: N/A
	CONTRACT NO.: 217231	DRAWING FILE NAME:
	PLOT DATE: DECEMBER 2020	REVISION DATE:

MARK THOMAS
DESIGNED BY: EM
DRAWN BY: EM
REVIEWED BY: TL
APPROVED BY: EM

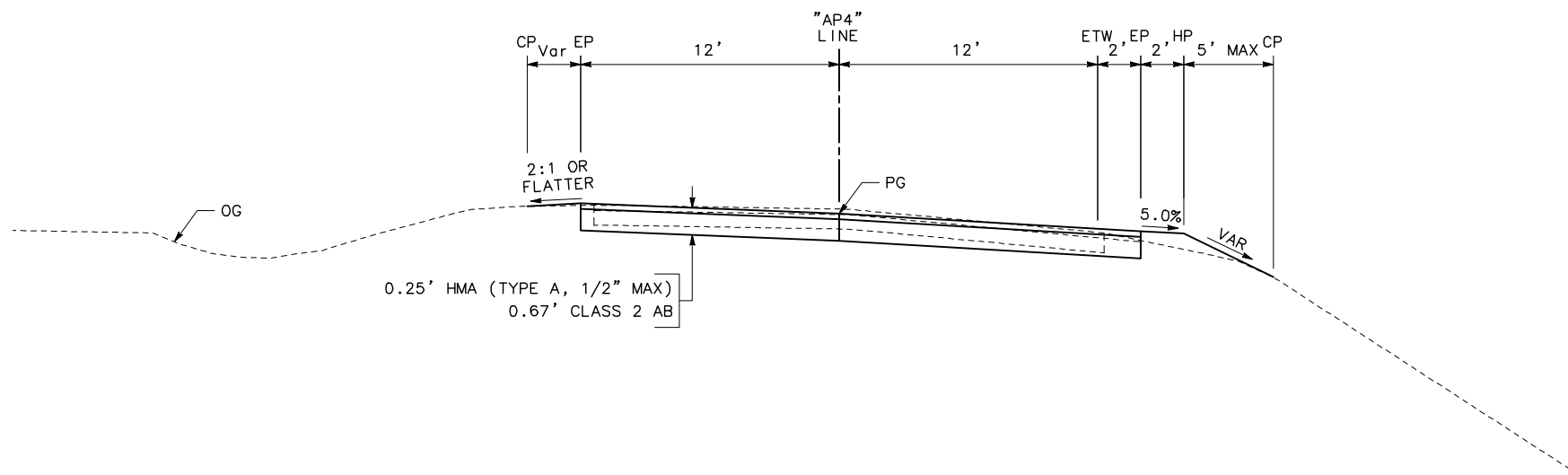
- NOTES:**
- DIMENSIONS OF THE STRUCTURAL SECTIONS ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATION.
 - SUPERELEVATIONS ARE SHOWN ON THE SUPERELEVATION DIAGRAM.
 - FOR CABLE RAILING DETAILS NOT SHOWN, SEE CALTRANS STANDARD PLANS, B11-47.
 - FOR UNDERDRAIN DETAILS NOT SHOWN, SEE CALTRANS STANDARD PLANS, D102.
 - FOR PLASTIC CULVERT EXCAVATION AND BACKFILL NOT SHOWN, SEE CALTRANS STANDARD PLANS, A62F.
 - FOR HMA DIKE DETAILS NOT SHOWN, SEE CALTRANS STANDARD PLANS, A87B AND A77N4.
 - FOR NARROW ROADWAY INSTALLATION OF MGS, SEE CALTRANS STANDARD PLAN, A77N3.



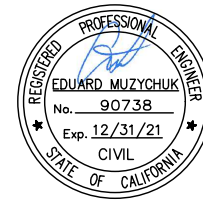
ALDERPOINT ROAD
"AP4" 43+06.11 TO 45+47.14



UNDERDRAIN DETAIL
NO SCALE



ALDERPOINT ROAD
"AP4" 41+50.00 TO 43+06.11
"AP4" 45+47.14 TO 46+00.00



ROAD NAME: ALDERPOINT ROAD	MILE POST: 44.79
ROAD NO: F6B165	EA NO.: 0117000187L-N
PROJECT NO.: ER32LO(125)	BRIDGE NO: N/A
CONTRACT NO.: 217231	DRAWING FILE NAME:
PLOT DATE: DECEMBER 2020	REVISION DATE:

MARK THOMAS
DESIGNED BY: EM
DRAWN BY: EM
REVIEWED BY: TL
APPROVED BY: EM

COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS
ALDERPOINT RD STORM DAMAGE (PM 44.79)
LAYOUT

SHEET **4**
OF
19

NOTES:

1. PROVIDE CONCRETE VEGETATION CONTROL UNDER MIDWEST GUARDRAIL SYSTEM, (MGS) AND ALTERNATIVE IN-LINE TERMINAL SYSTEM (AITS) PER CALTRANS STANDARD PLANS A77N5, A77N5A & A77N6.
2. FOR STEEL PIPE INLET DETAILS NOT SHOWN, SEE CALTRANS STANDARD PLANS, D75A.

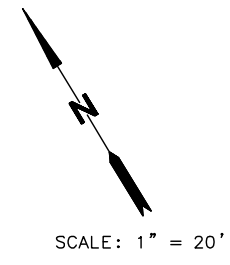
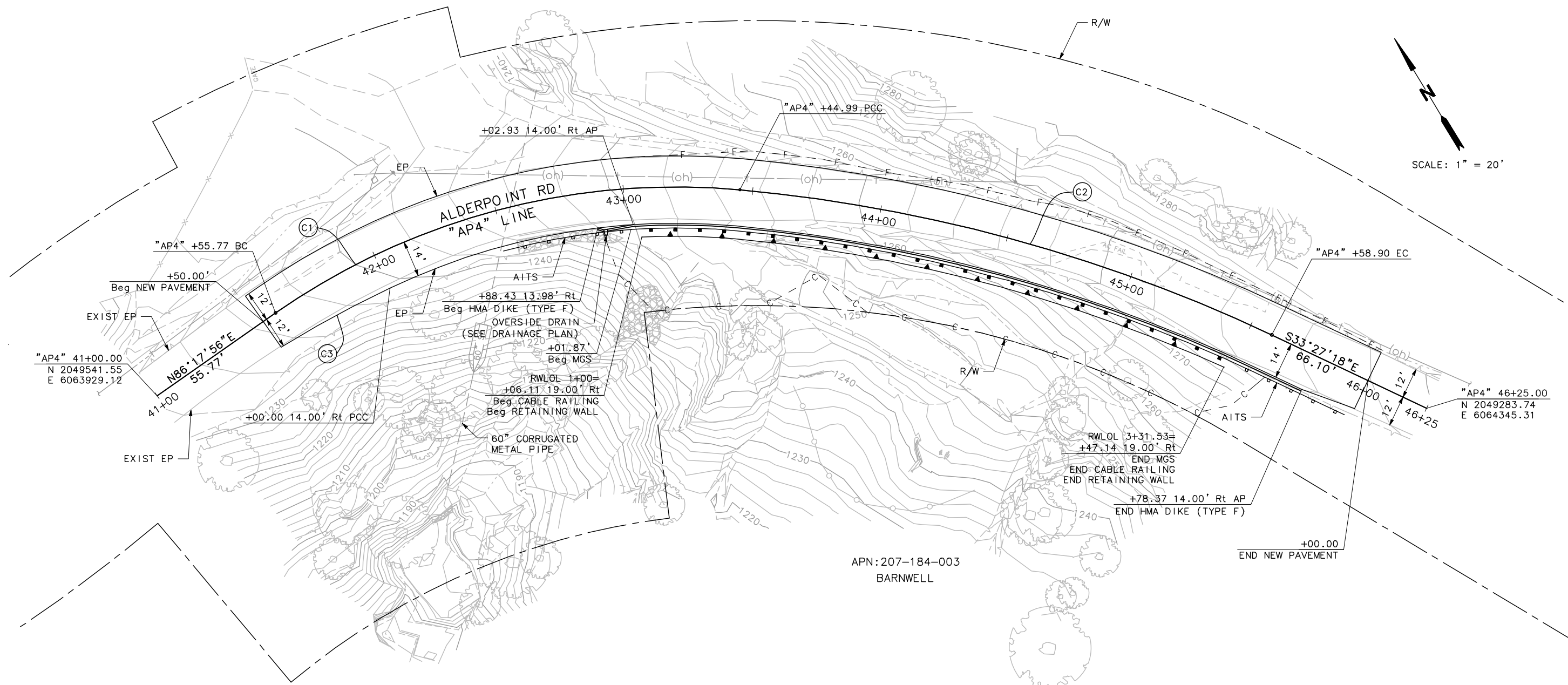
LEGEND:

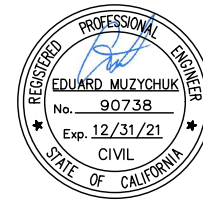
- - -C- CUT LINE
- - -F- FILL LINE
- ▲ RETAINING WALL
- MGS (MIDWEST GUARDRAIL SYSTEM)
- ALTERNATIVE IN-LINE TERMINAL SYSTEM (AITS)

CURVE #	RADIUS	DELTA	TANGENT	LENGTH
C1	270.00'	40°09'17"	98.69'	189.22'
C2	610.00'	20°05'29"	108.06'	213.90'
C3	476.00'	5°45'34"	23.94'	47.85'

APN: 207-184-007
BARNWELL

APN: 207-184-003
BARNWELL





ROAD NAME: ALDERPOINT ROAD	MILE POST: 44.79
ROAD NO: F6B165	EA NO.: 0117000187L-N
PROJECT NO.: ER32L0(125)	BRIDGE NO: N/A
CONTRACT NO.: 217231	DRAWING FILE NAME:
PLOT DATE: DECEMBER 2020	REVISION DATE:

MARK THOMAS
DESIGNED BY: EM
DRAWN BY: EM
REVIEWED BY: TL
APPROVED BY: EM

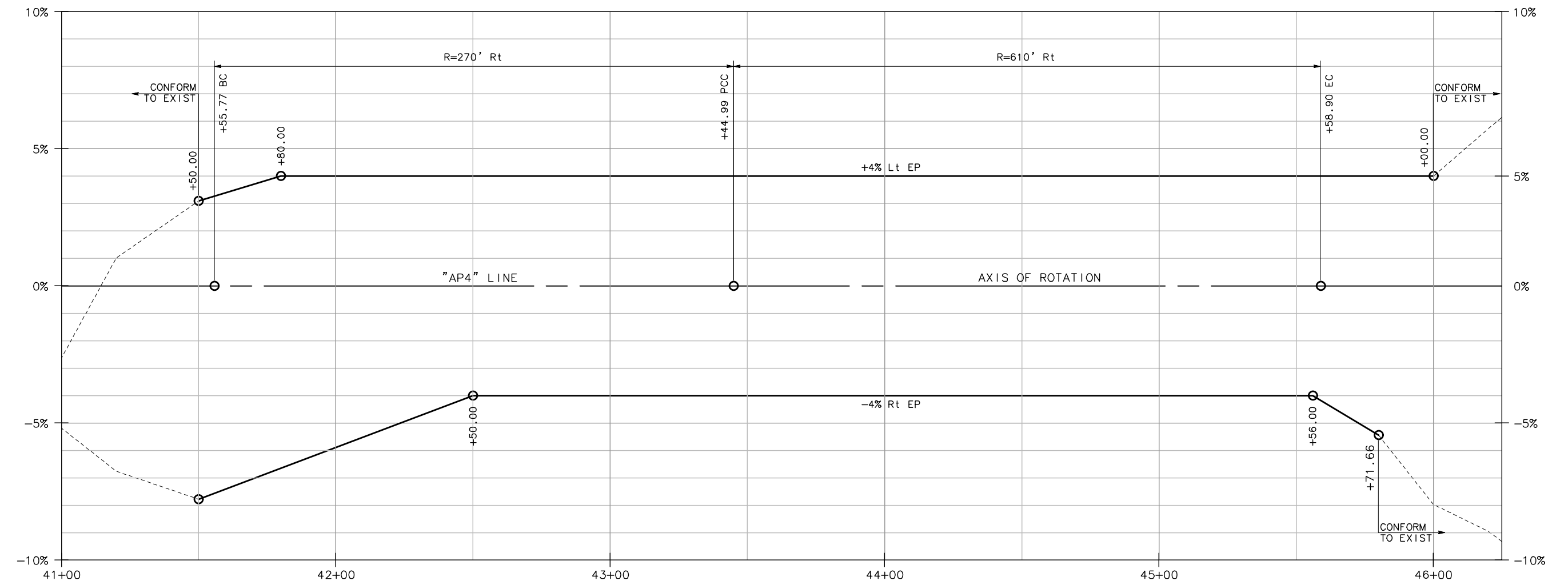
COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS
ALDERPOINT RD STORM DAMAGE (PM 44.79)
PROFILE AND SUPERELEVATION

SHEET **5**
OF
19

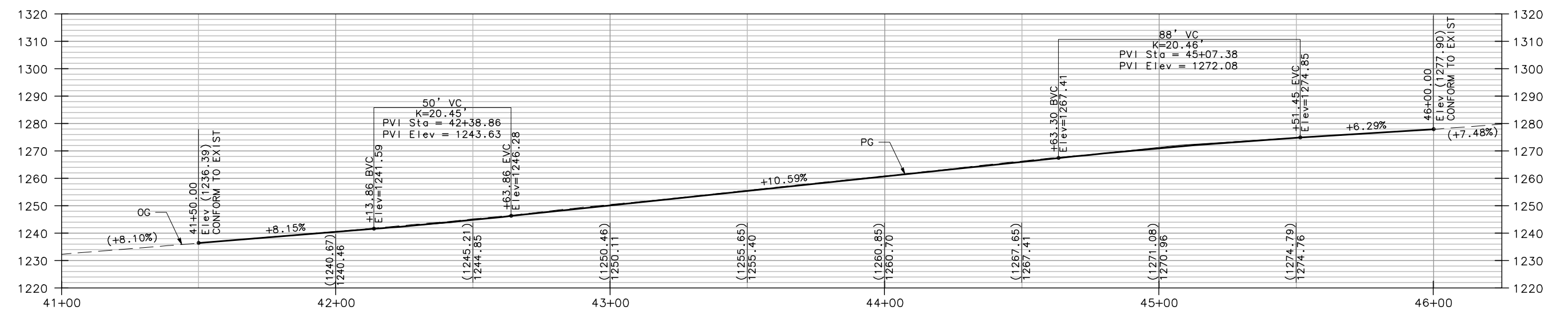
LEGEND:

(XXXX.XX) EXIST ELEVATION

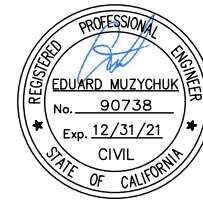
100% SUBMITTAL



SUPERELEVATION DIAGRAM
SCALE: HORIZ 1" = 20'



PROFILE
SCALE: 1" = 20'



ROAD NAME: ALDERPOINT ROAD	MILE POST: 44.79
ROAD NO: F6B165	EA NO.: 0117000187L-N
PROJECT NO.: ER32LO(125)	BRIDGE NO: N/A
CONTRACT NO.: 217231	DRAWING FILE NAME:
PLOT DATE: DECEMBER 2020	REVISION DATE:

MARK THOMAS
DESIGNED BY: EM
DRAWN BY: EM
REVIEWED BY: TL
APPROVED BY: EM

COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS
ALDERPOINT RD STORM DAMAGE (PM 44.79)
DRAINAGE PLAN

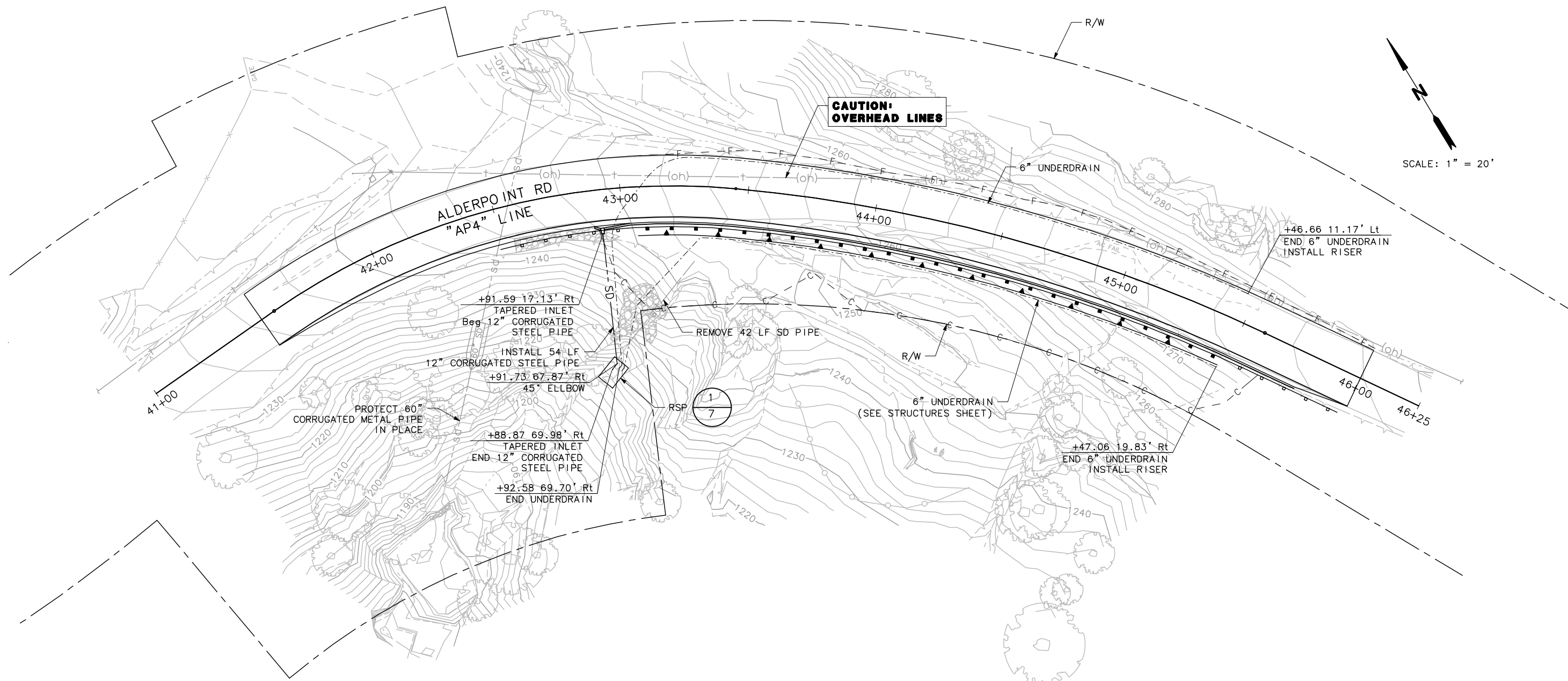
SHEET **6**
OF
19

NOTES:

1. ALL CALLOUTS ON THIS SHEET REFERENCE THE "AP4" LINE UNLESS OTHERWISE NOTED.
2. FOR UNDERDRAIN AND RISER DETAILS NOT SHOWN, SEE CALTRANS STANDARD PLAN D102.

LEGEND:

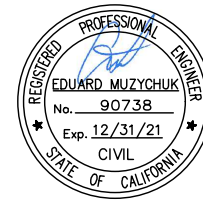
- +—(oh)— EXIST AT&T OVERHEAD TELEPHONE LINE
- +— EXIST AT&T UNDERGROUND TELEPHONE LINE
- sd— EXIST STORM DRAIN
- SD— STORM DRAIN
- - - - - UNDERDRAIN



THIS PLAN ACCURATE FOR DRAINAGE AND UTILITY WORK ONLY

NOTES:

1. FOR ANCHOR ASSEMBLY DETAILS NOT SHOWN, SEE CALTRANS STANDARD PLAN D87A, D87C.

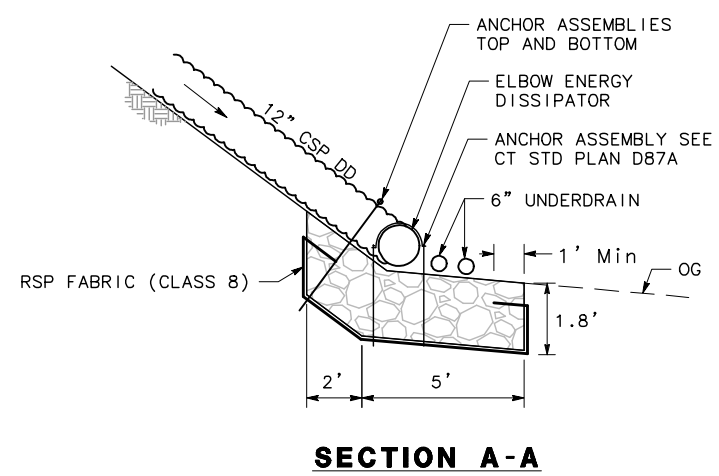
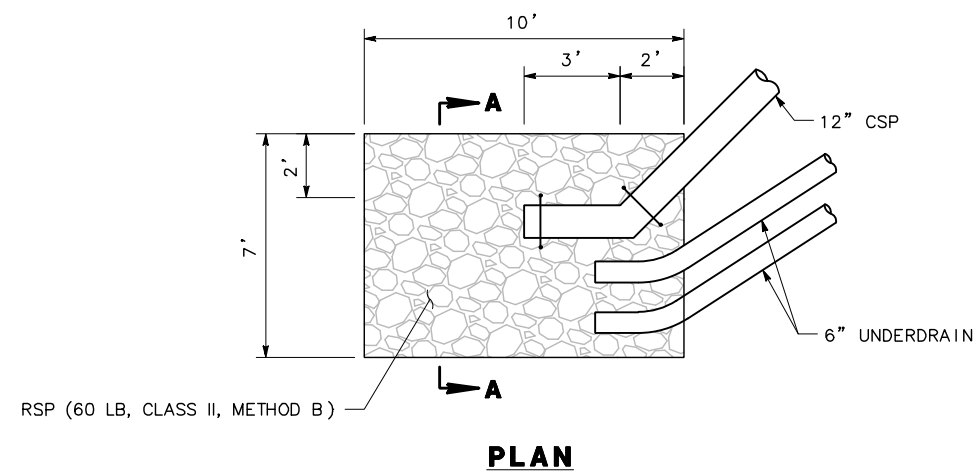


ROAD NAME: ALDERPOINT ROAD	MILE POST: 44.79
ROAD NO: F6B165	EA NO.: 0117000187L-N
PROJECT NO.: ER32LO(125)	BRIDGE NO: N/A
CONTRACT NO.: 217231	DRAWING FILE NAME:
PLOT DATE: DECEMBER 2020	REVISION DATE:

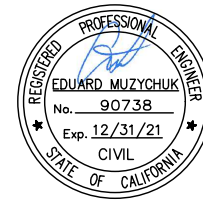
MARK THOMAS
DESIGNED BY: EM
DRAWN BY: EM
REVIEWED BY: TL
APPROVED BY: EM

COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS
ALDERPOINT RD STORM DAMAGE (PM 44.79)
DRAINAGE DETAILS

SHEET
7
OF
19



ELBOW ENERGY DISSIPATOR & ROCK SLOPE PROTECTION (RSP) (1)



ROAD NAME: ALDERPOINT ROAD	MILE POST: 44.79
ROAD NO: F6B165	EA NO.: 0117000187L-N
PROJECT NO.: ER32LO(125)	BRIDGE NO: N/A
CONTRACT NO.: 217231	DRAWING FILE NAME:
PLOT DATE: DECEMBER 2020	REVISION DATE:

MARK THOMAS
DESIGNED BY: EM
DRAWN BY: EM
REVIEWED BY: TL
APPROVED BY: EM

NOTES:

1. SEE DRAINAGE AND UTILITY PLAN FOR ANY PERMANENT STORM DRAIN/UTILITIES NOT SHOWN ON THESE PLANS.
2. MAINTAIN AT LEAST 12' WIDE LANE FOR TWO-WAY, ONE-LANE TRAFFIC ALONG THE CONSTRUCTION ZONE.
3. ENGINEER SHALL APPROVE THE LOCATION OF THE TEMPORARY TRAFFIC SIGNAL.

CONSTRUCTION THIS STAGE:

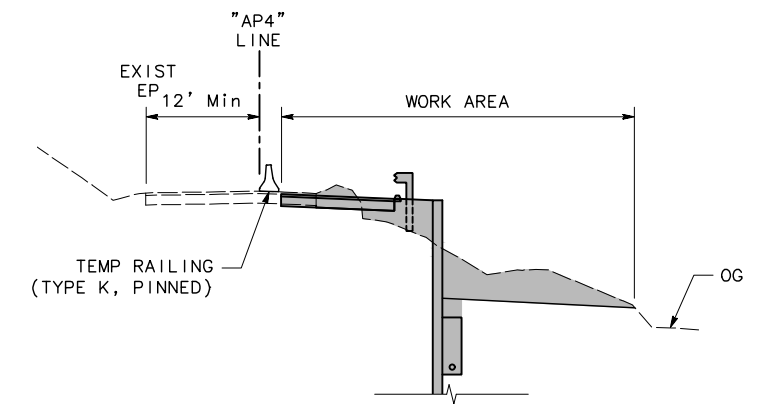
1. PAINT TEMP 12" WIDE WHITE LIMIT LINE, EACH DIRECTION. PLACE ADVANCED WARNING CONSTRUCTION AREA SIGNS AS SHOWN.
2. CONSTRUCT SOLDIER PILE WALL AND WALL DRAIN.
3. CONSTRUCT OVERSIDE DRAIN, UNDERDRAIN AND RSP PAD.
4. CONSTRUCT ROADWAY AND MGS.

LEGEND

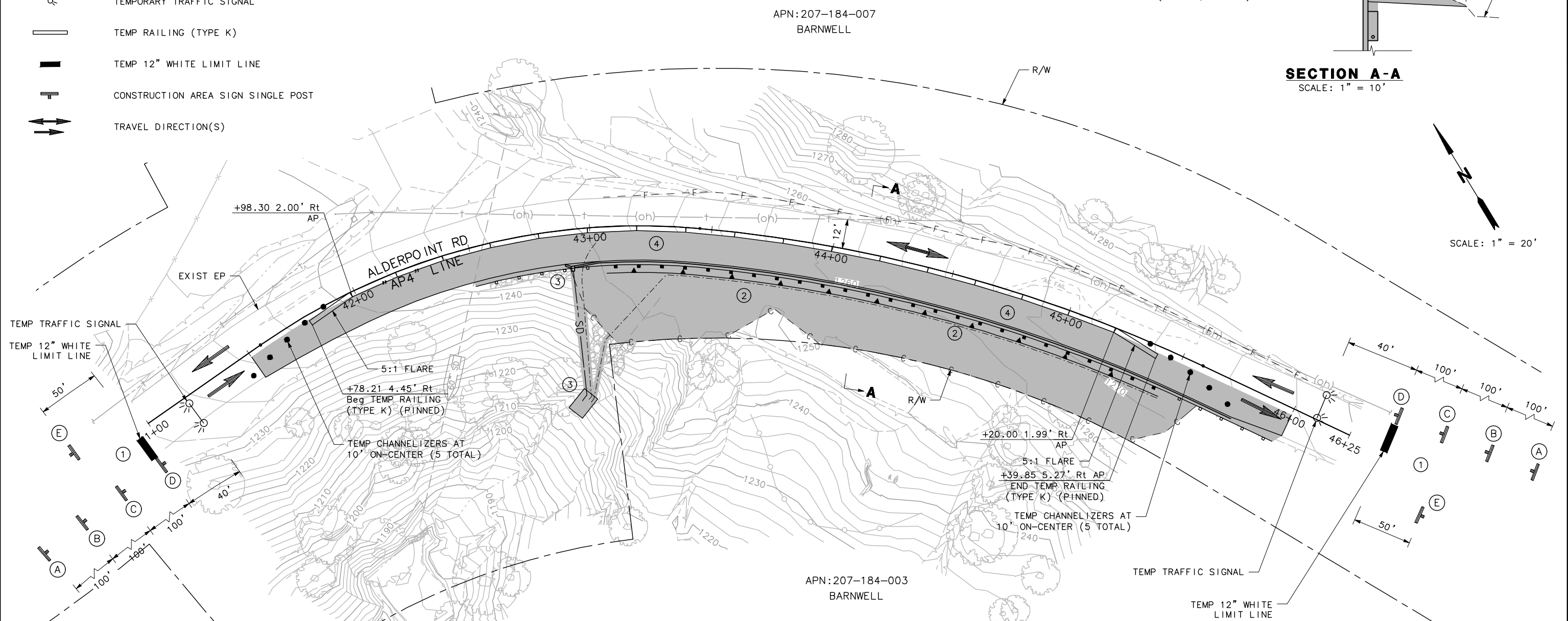
- STAGE 1 WORK AREA
- TEMPORARY CHANNELIZERS
- TEMPORARY TRAFFIC SIGNAL
- TEMP RAILING (TYPE K)
- TEMP 12" WHITE LIMIT LINE
- CONSTRUCTION AREA SIGN SINGLE POST
- TRAVEL DIRECTION(S)

TRAFFIC THIS STAGE:

MAINTAIN EXISTING TRAFFIC CONDITIONS ON ALDERPOINT ROAD. CONTINUE TWO-WAY/ONE-LANE TRAFFIC AS SIGNAL CONTROLLED WITH CHANNELIZERS AND K-RAIL PLACED PER PLAN.

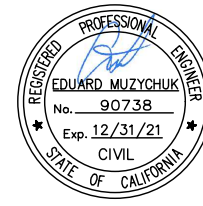


SECTION A-A
SCALE: 1" = 10'



SCALE: 1" = 20'

CONSTRUCTION AREA SIGNS		
SIGN LETTER	SIGN CODE	SIGN MESSAGE
A	W20-1	ROAD WORK AHEAD
B	W20-4	ONE LANE ROAD AHEAD
	W13-1P	20 MPH
C	W3-3	SIGNAL AHEAD SYMBOL
D	R8-10	STOP HERE ON RED
E	G20-2	END ROAD WORK



ROAD NAME: ALDERPOINT ROAD	MILE POST: 44.79
ROAD NO: F6B165	EA NO.: 0117000187L-N
PROJECT NO.: ER32LO(125)	BRIDGE NO: N/A
CONTRACT NO.: 217231	DRAWING FILE NAME:
PLOT DATE: DECEMBER 2020	REVISION DATE:

MARK THOMAS
DESIGNED BY: EM
DRAWN BY: EM
REVIEWED BY: TL
APPROVED BY: EM

COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS
ALDERPOINT RD STORM DAMAGE (PM 44.79)
STAGE CONSTRUCTION

SHEET **9**
OF
19

NOTES:

- SEE DRAINAGE AND UTILITY PLAN FOR ANY PERMANENT STORM DRAIN/UTILITIES NOT SHOWN ON THESE PLANS.
- MAINTAIN AT LEAST 11' WIDE LANE FOR TWO-WAY, ONE-LANE TRAFFIC ALONG THE CONSTRUCTION ZONE.

CONSTRUCTION THIS STAGE:

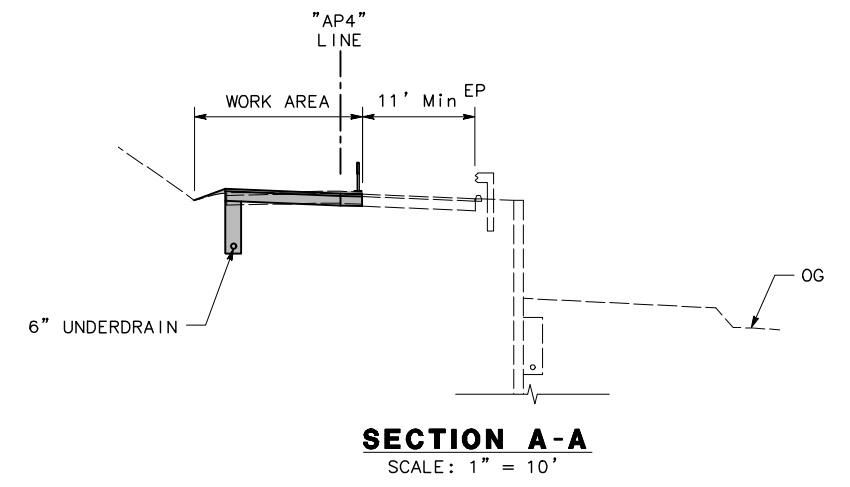
- CONSTRUCT UNDERDRAIN.
- CONSTRUCT ROADWAY

LEGEND

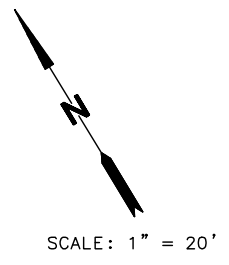
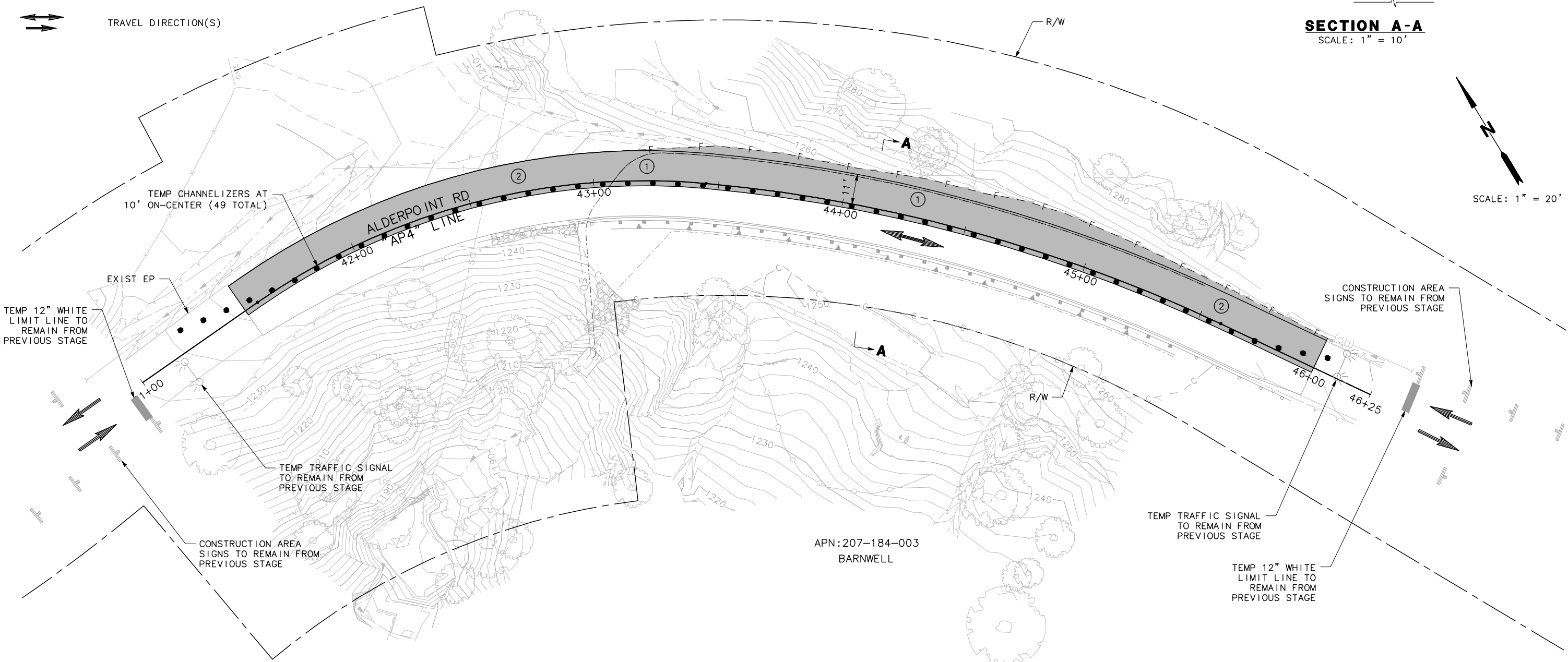
- STAGE 2 WORK AREA
- TEMPORARY CHANNELIZERS
- TEMPORARY TRAFFIC SIGNAL
- TEMP 12" WHITE LIMIT LINE
- CONSTRUCTION AREA SIGN SINGLE POST
- TRAVEL DIRECTION(S)

TRAFFIC THIS STAGE:

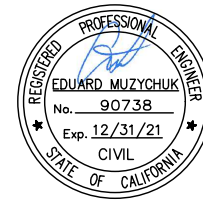
MAINTAIN EXISTING TRAFFIC CONDITIONS ON ALDERPOINT ROAD. CONTINUE TWO-WAY/ONE-LANE TRAFFIC AS SIGNAL CONTROLLED WITH CHANNELIZERS PLACED PER PLAN.



APN: 207-184-007
BARNWELL



APN: 207-184-003
BARNWELL



BAR IS ONE INCH ON ORIGINAL DRAWING	ROAD NAME: ALDERPOINT ROAD	MILE POST: 44.79
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	PROJECT NO.: ER32LO(125)	EA NO.: 0117000187L-N
	CONTRACT NO.: 217231	BRIDGE NO: N/A
	DRAWING FILE NAME:	
	PLOT DATE: DECEMBER 2020	REVISION DATE:

MARK THOMAS
DESIGNED BY: EM
DRAWN BY: EM
REVIEWED BY: TL
APPROVED BY: EM


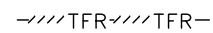
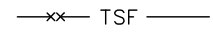
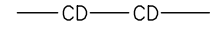


COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS
ALDERPOINT RD STORM DAMAGE (PM 44.79)
EROSION CONTROL

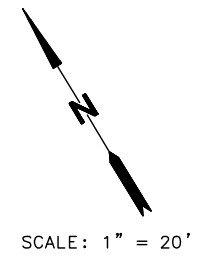
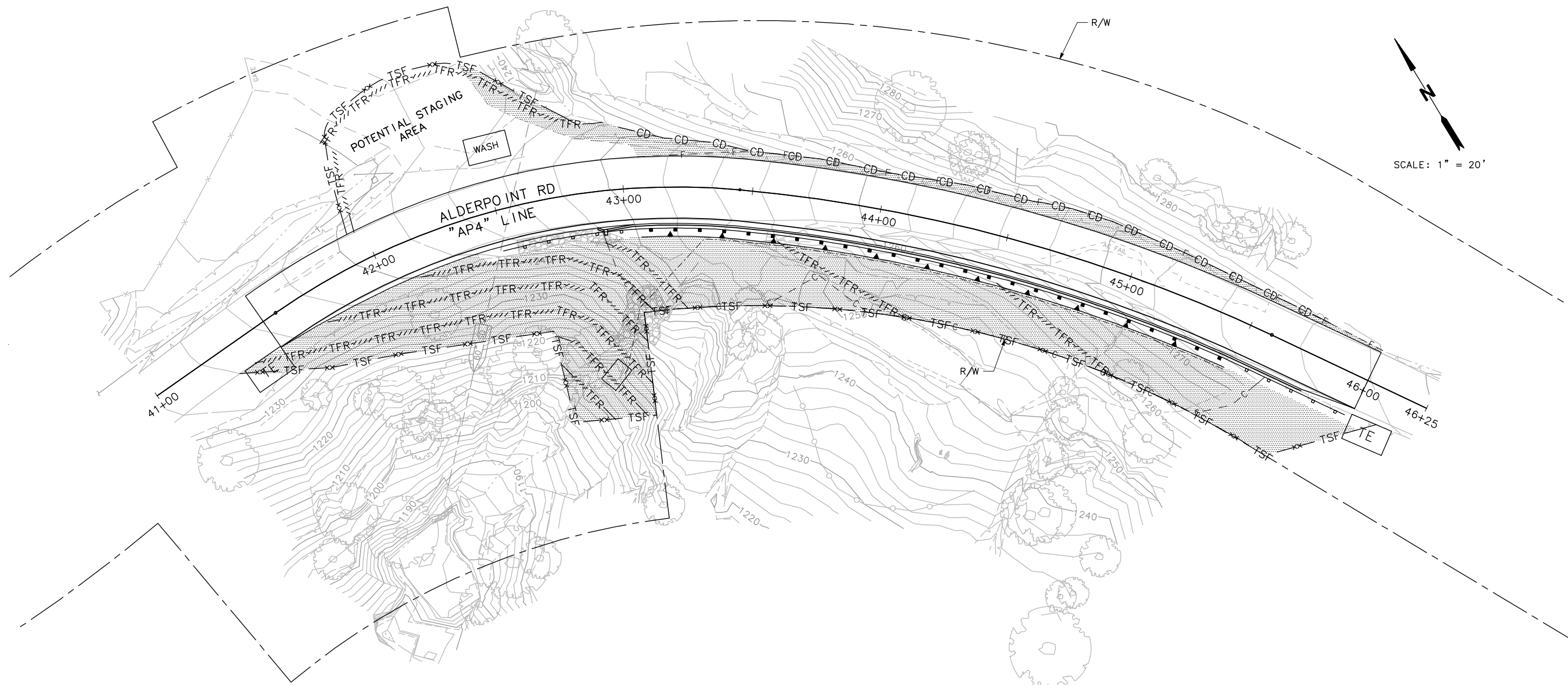
SHEET **10**
OF
19

NOTES:

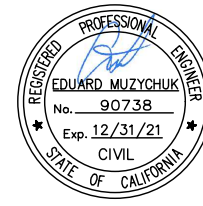
1. CONSTRUCTION ENTRANCE BMP'S MUST BE INSTALLED TO CONTROL VEHICLE TRACKING.

LEGEND:

-  DRY SEED AND STRAW
-  FIBER ROLL
-  TEMP SILT FENCE
-  TEMP CHECK DAM
-  TEMP CONCRETE WASHOUT
-  TEMP CONSTRUCTION ENTRANCE



THIS PLAN ACCURATE FOR EROSION CONTROL ONLY



ROAD NAME: ALDERPOINT ROAD	MILE POST: 44.79
ROAD NO: F6B165	EA NO.: 0117000187L-N
PROJECT NO.: ER32L0(125)	BRIDGE NO: N/A
CONTRACT NO.: 217231	DRAWING FILE NAME:
PLOT DATE: DECEMBER 2020	REVISION DATE:

MARK THOMAS
DESIGNED BY: EM
DRAWN BY: EM
REVIEWED BY: TL
APPROVED BY: EM

COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS
ALDERPOINT RD STORM DAMAGE (PM 44.79)
SIGNING AND STRIPING

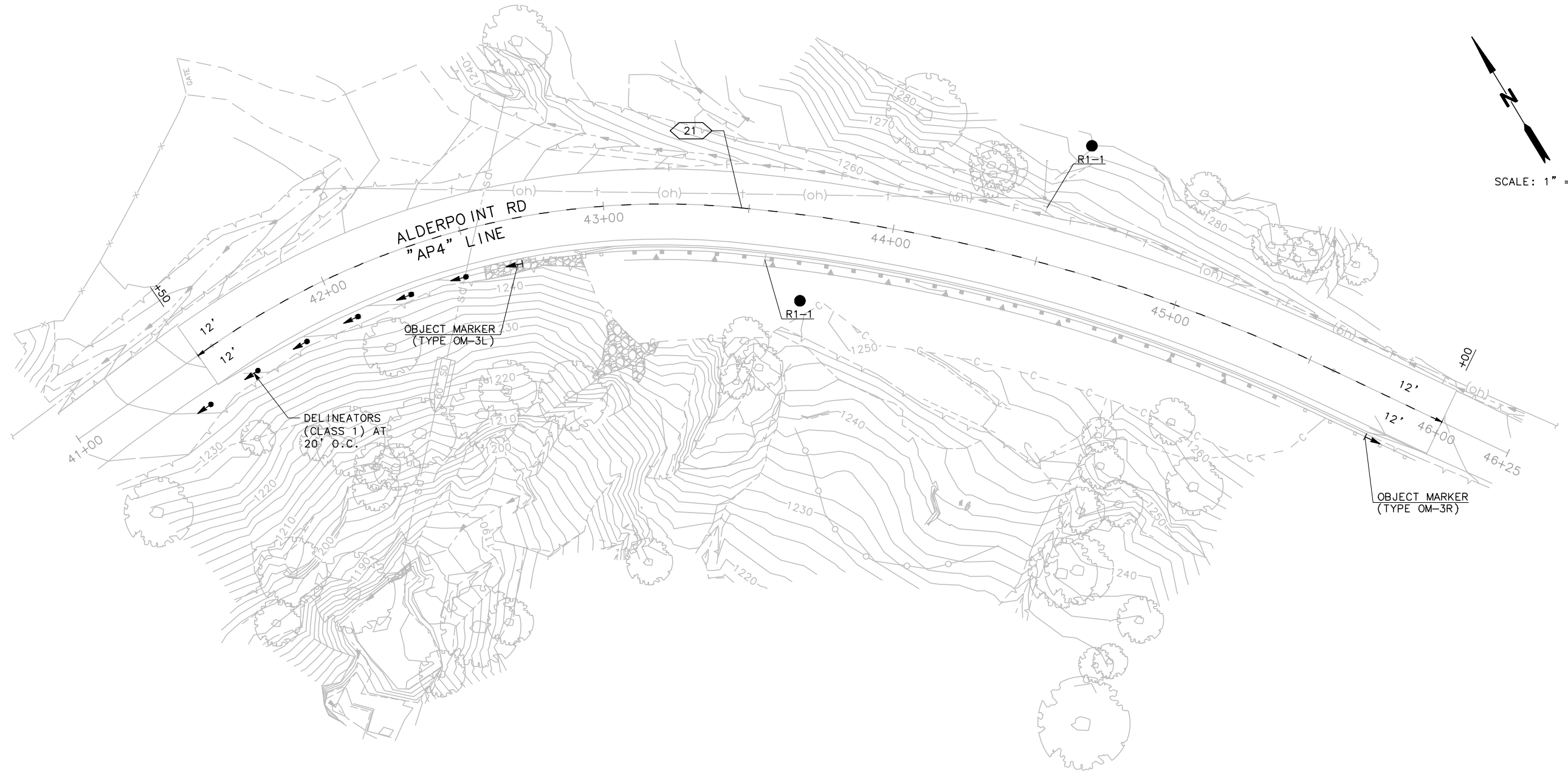
SHEET
11
OF
19

NOTES:

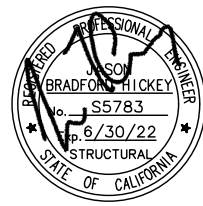
1. CA MUTCD CODES SHOWN AS DESIGNATED BY <CA> WHICH INDICATED A CALIFORNIA SIGN CODE. OTHERWISE, FEDERAL MUTCD CODES ARE SHOWN.

LEGEND:

- REMOVE ROADSIDE SIGN
- ⬡ No. PAVEMENT DELINEATION DETAIL
- ⊥ EXIST ROADSIDE SIGN
- ⬆ OBJECT MARKER
- ⬆ DELINEATOR



THIS PLAN ACCURATE FOR SIGNING AND STRIPING ONLY

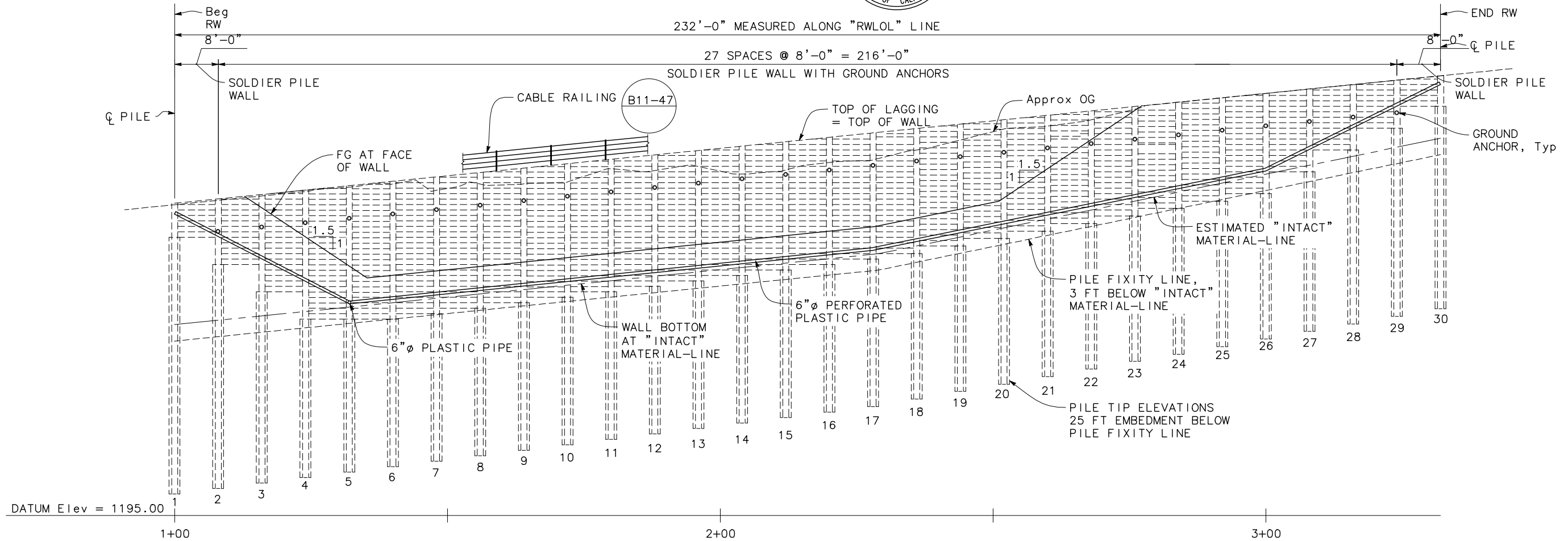


ROAD NAME: ALDERPOINT ROAD	MILE POST: 44.79
ROAD NO: F6B165	EA NO: 0117000187L-N
PROJECT NO: ER32LO(125)	BRIDGE NO: N/A
CONTRACT NO: 217231	DRAWING FILE NAME:
PLOT DATE: DECEMBER 2020	REVISION DATE:

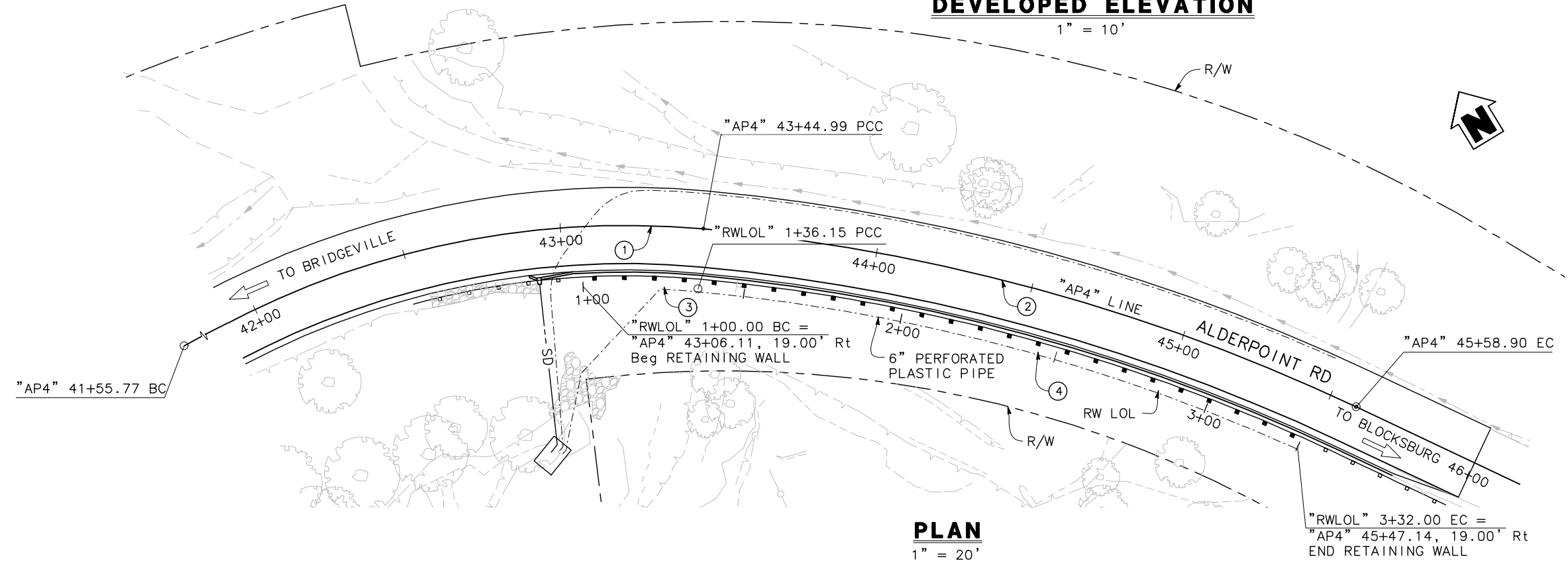
MARK THOMAS
DESIGNED BY: MM
DRAWN BY: GB
REVIEWED BY: JH
APPROVED BY: JH

COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS
ALDERPOINT RD STORM DAMAGE (PM 44.79)
GENERAL PLAN

SHEET 12 OF 19



DEVELOPED ELEVATION
1" = 10'



PLAN
1" = 20'

CURVE TABLE				
CURVE #	RADIUS	DELTA	TANGENT	LENGTH
①	270.00'	40°09'17"	98.69'	189.22'
②	610.00'	20°05'29"	108.06'	213.90'
③	251.00'	08°15'04"	18.10'	36.15'
④	591.00'	18°59'15"	98.83'	195.85'

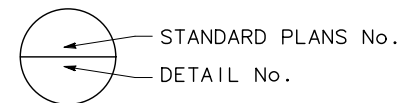
- NOTES:
- For MGS, see "ROADWAY PLANS"
 - For 6"ϕ plastic pipe outfall, see "ROADWAY PLANS"
 - For "TYPICAL SECTION", see "TYPICAL SECTION" sheet.

INDEX TO PLANS

SHEET NO.	TITLE
12	GENERAL PLAN
13	INDEX TO PLANS
14	FOUNDATION PLAN
15	TYPICAL SECTION
16	SOLDIER PILE WALL LAGGING DETAILS
17	SOLDIER PILE WALL DETAILS NO. 1
18	SOLDIER PILE WALL DETAILS NO. 2
19	SUB HORIZONTAL GROUND ANCHOR DETAILS

STANDARD PLANS DATED 2018

A3A	ABBREVIATIONS (SHEET 1 OF 3)
A3B	ABBREVIATIONS (SHEET 2 OF 3)
A3C	ABBREVIATIONS (SHEET 3 OF 3)
A10A	LEGEND - LINES AND SYMBOLS (SHEET 1 OF 5)
A10B	LEGEND - LINES AND SYMBOLS (SHEET 2 OF 5)
A10C	LEGEND - LINES AND SYMBOLS (SHEET 3 OF 5)
A10D	LEGEND - LINES AND SYMBOLS (SHEET 4 OF 5)
A10E	LEGEND - LINES AND SYMBOLS (SHEET 5 OF 5)
A10F	LEGEND - SOIL (SHEET 1 OF 2)
A10G	LEGEND - SOIL (SHEET 2 OF 2)
A10H	LEGEND - ROCK
A62C	LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL - BRIDGE SURCHARGE AND WALL
B11-47	CABLE RAILING



QUANTITIES

STRUCTURE EXCAVATION (SOLDIER PILE WALL)	345	CY
STRUCTURE BACKFILL (SOLDIER PILE WALL)	54	CY
CONCRETE BACKFILL (SOLDIER PILE WALL)	108	CY
LEAN CONCRETE BACKFILL	54	CY
GROUND ANCHOR (SUBHORIZONTAL)	28	EA
STEEL SOLDIER PILE (W 12 X 72)	1,440	LF
24" DRILLED HOLE	1,390	LF
TIMBER LAGGING	25.1	MFBM
CLEAN AND PAINT STEEL SOLDIER PILING	1	LS
6" PERFORATED PLASTIC PIPE UNDERDRAIN	210	LF
6" NON-PERFORATED PLASTIC PIPE UNDERDRAIN	32	LF
CLASS 1 PERMEABLE MATERIAL	115	CY
CABLE RAILING	232	LF

NOTES:
1. For limits of payments for roadway excavation, see "ROADWAY PLANS"

GENERAL NOTES

DESIGN: AASHTO LRFD Bridge Design Specifications, 6th Edition with California Amendments.

LIVE LOAD: 240 psf equivalent to 2 feet soil weight.

SOIL PARAMETERS: (For determination of Design Lateral Earth Pressures)

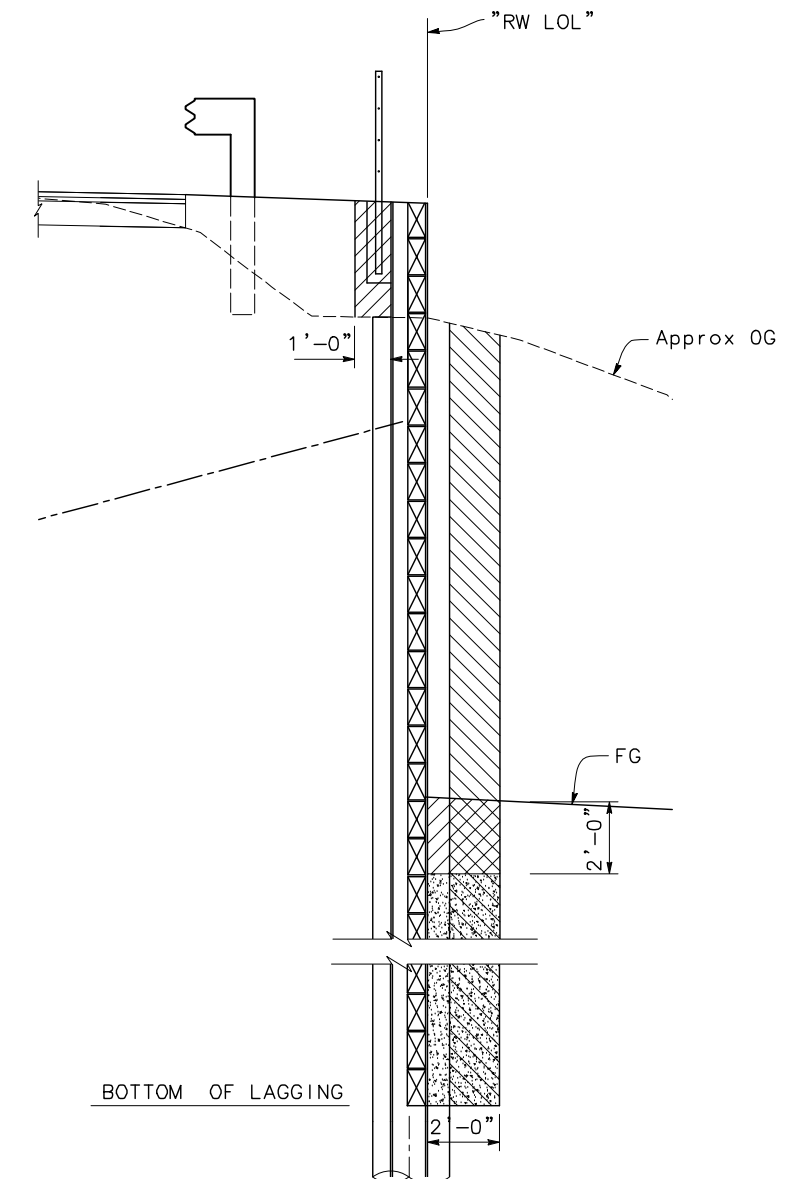
Backfill soil weight = 135 lb/ft^3
Friction Angle = 34°
Active Pressure coefficient, $K_a = 0.283$

SEISMIC PARAMETERS: $k_h = 0.22$
Active (seismic) pressure coefficient, $k_e = 0.067$

STEEL SOLDIER PILES: ASTM A572/A, ASTM 572M Grade 50 Min, or ASTM A992

STRUCTURAL TIMBER: Treated Douglas Fir, Grade No. 1 or better
Timber to be full sawn.

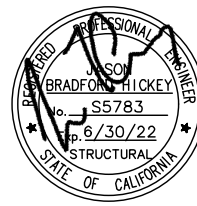
PRESTRESSING STEEL (GROUND ANCHORS):
Bars - ASTM Designation: A722 Type II (150 ksi)
Strand Tendons - ASTM Designation: A416 (270 ksi Low relaxation steel)
 T = Design force on ground anchor (kips)
 f_{pu} = Minimum ultimate tensile strength of ground anchor steel
 $A_s (\text{Min}) = \text{Minimum cross sectional area of steel in ground anchor. (sq. in)}$
 $A_s (\text{Min}) = \frac{1.0T}{0.75 f_{pu}} \text{ (STRANDS)}$
 $A_s (\text{Min}) = \frac{1.0T}{0.80 f_{pu}} \text{ (BARS)}$



STRUCTURE BACKFILL AND EXCAVATION

NO SCALE

- Indicates Structure Excavation, Soldier Pile Wall
- Indicates Structure Backfill, Soldier Pile Wall
- Indicates Permeable Material Class 1



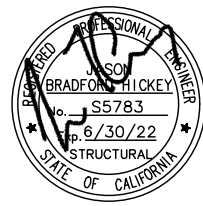
BAR IS ONE INCH ON ORIGINAL DRAWING	ROAD NAME: ALDERPOINT ROAD	MILE POST: 44.79
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	ROAD NO: F6B165	EA NO.: 0117000187L-N
	PROJECT NO.: ER32LO(125)	BRIDGE NO: N/A
	CONTRACT NO.: 217231	DRAWING FILE NAME:
	PLOT DATE: DECEMBER 2020	REVISION DATE:

MARK THOMAS
DESIGNED BY: MM
DRAWN BY: GB
REVIEWED BY: JH
APPROVED BY: JH

COUNTY OF HUMBOLDT
DEPARTMENT OF PUBLIC WORKS
ALDERPOINT RD STORM DAMAGE (PM 44.79)

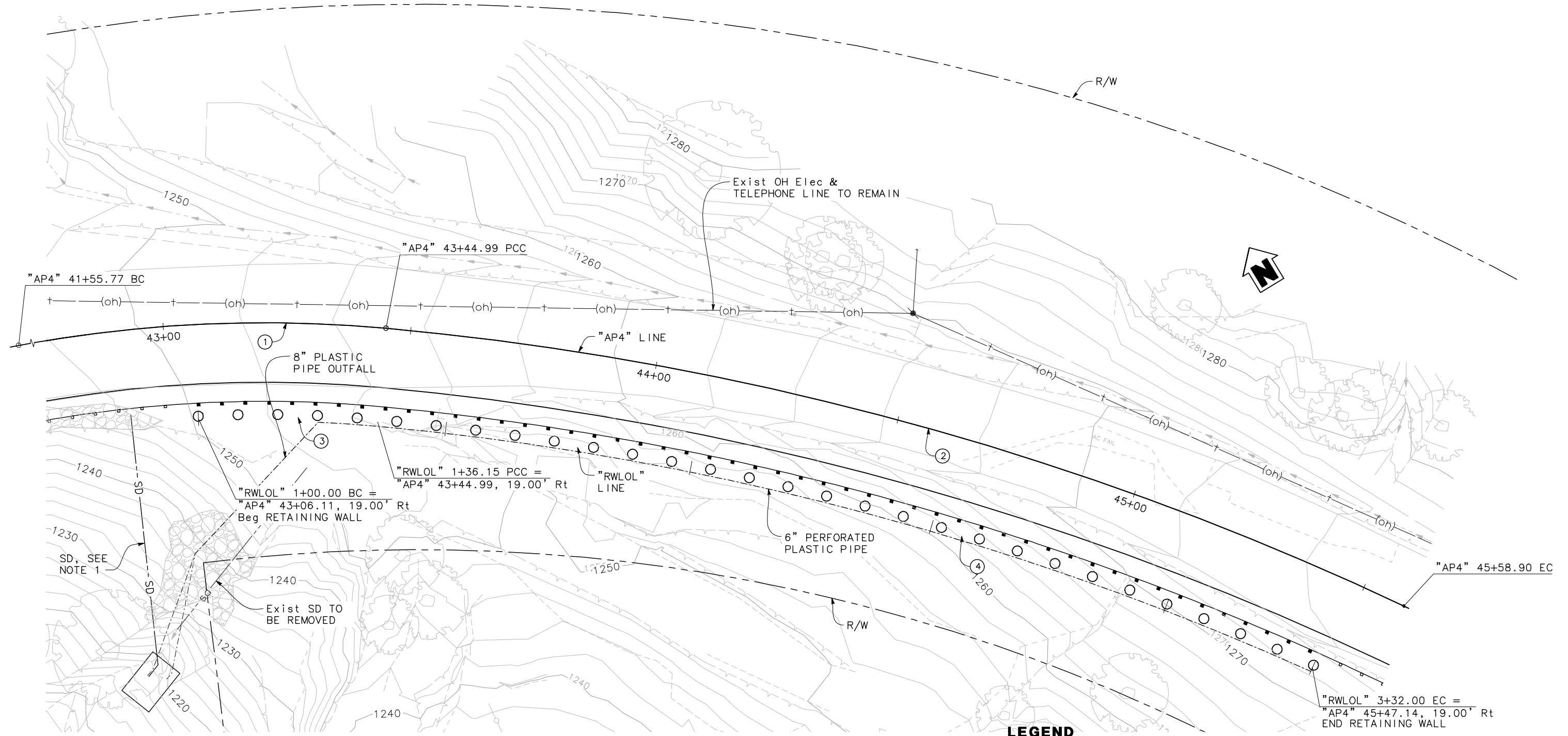
INDEX TO PLAN

SHEET
13
OF
19



ROAD NAME: ALDERPOINT ROAD	MILE POST: 44.79
ROAD NO: F6B165	EA NO: 0117000187L-N
PROJECT NO: ER32LO(125)	BRIDGE NO: N/A
CONTRACT NO: 217231	DRAWING FILE NAME:
PLOT DATE: DECEMBER 2020	REVISION DATE:

MARK THOMAS
DESIGNED BY: MM
DRAWN BY: GB
REVIEWED BY: JH
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PLAN
1" = 10'

LEGEND

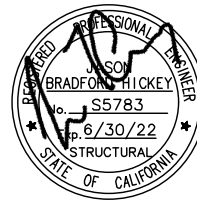
○ - 24 inch diameter drilled hole

BENCHMARK

Coordinates for this survey are California Coordinate System of 1983 (CCS83) Zone 1, NAD 83 (2011), Epoch 2010.0 based on a static GPS Control Survey using the NGS OPUS Post Processing Software. The control point identified as Point 51 was held for horizontal positions shown hereon. The mapping angle is 1 degree 10 minutes 9"; rotate bearings hereon counterclockwise by this angle to obtain "True" or Geodetic Bearings. Grid distances shown should be divided by the Combined Scale factor of 0.99985760 to obtain ground distances. Mapping angle and grid scale factor are taken at control point number 51, a 12 inch spike. Elevations are NAVD 88 datum based on OPUS solution utilizing the GEOID 12B model: an elevation of 1240.84 feet was measured at the aforementioned Control Point 51.

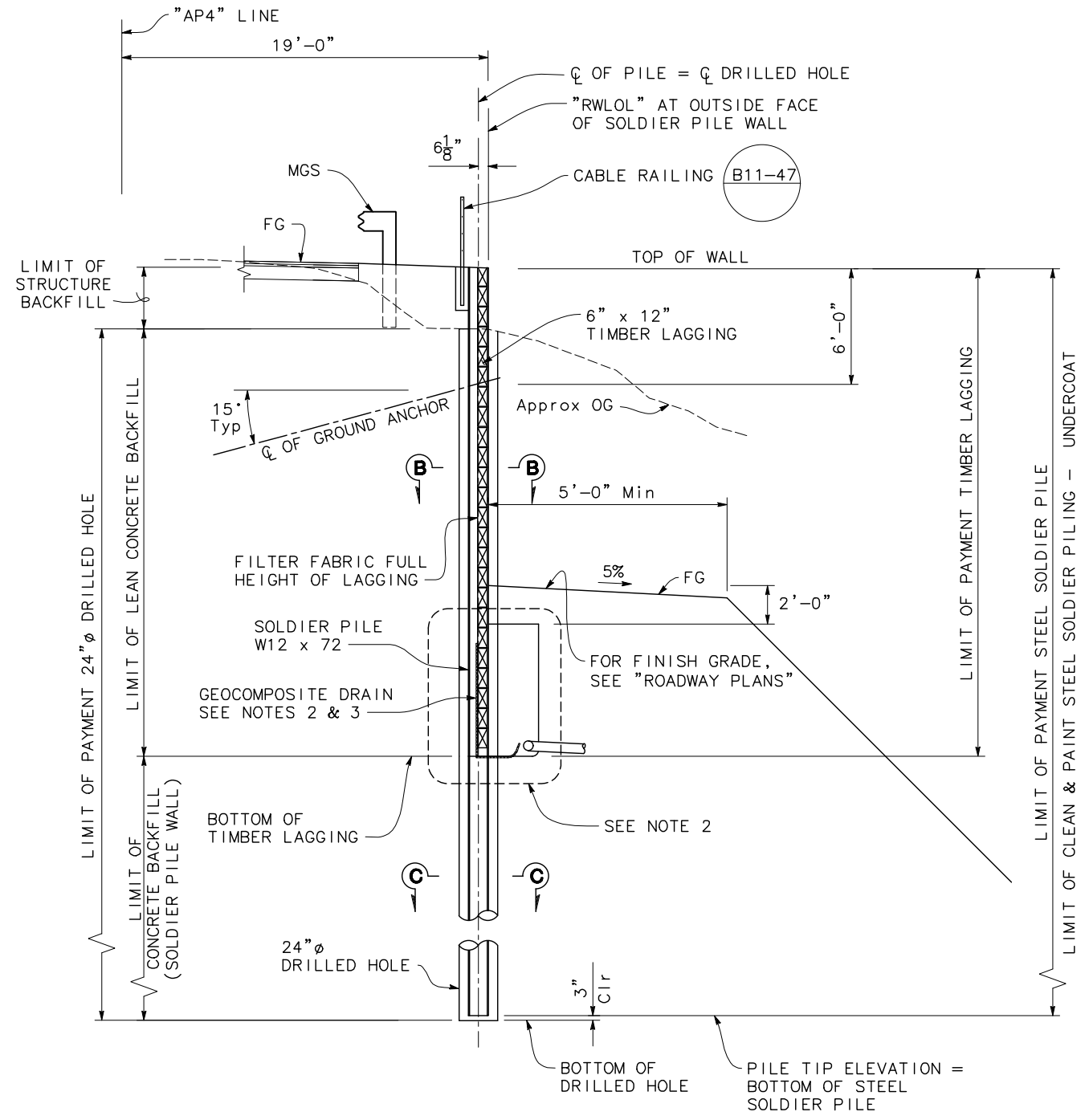
CURVE TABLE				
CURVE #	RADIUS	DELTA	TANGENT	LENGTH
①	270.00'	40°09'17"	98.69'	189.22'
②	610.00'	20°05'29"	108.06'	213.90'
③	251.00'	08°15'04"	18.10'	36.15'
④	591.00'	18°59'15"	98.83'	195.85'

NOTES:
1. For Storm Drain Pipe details, see "ROADWAY PLANS"



ROAD NAME: ALDERPOINT ROAD	MILE POST: 44.79
ROAD NO: F6B165	EA NO.: 0117000187L-N
PROJECT NO.: ER32LO(125)	BRIDGE NO: N/A
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PLOT DATE: DECEMBER 2020	REVISION DATE:

MARK THOMAS
 DESIGNED BY: MM
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 REVIEWED BY: JH
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TYPICAL SECTION - GROUND ANCHOR WALL
 1/4" = 1'-0"

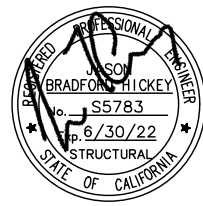
NOTES:

1. For "SECTION B-B" and "SECTION C-C", see "SOLDIER PILE WALL LAGGING DETAILS" sheet.
2. For "WALL DRAIN DETAIL", see "SOLDIER PILE WALL DETAILS No. 2" sheet.
3. Continue geocomposite drain under timber lagging into permeable material

PILE NUMBER	"RWLOL" LINE STATION	TOP OF WALL ELEVATION (ft)	BOTTOM OF LAGGING ELEVATION (ft)	PILE TIP ELEVATION (ft)	GROUND ANCHORS	
					T (kips)	UNBONDED LENGTH (ft)
1	1+00.00	1250.10	1246.0	1199.0	N/A	N/A
2	1+08.00	1250.98	1241.0	1200.0	100	25.0
3	1+16.00	1251.85	1236.0	1201.0	125	30.0
4	1+24.00	1252.73	1231.0	1202.0	150	35.0
5	1+32.00	1253.60	1231.0	1203.0	150	35.0
6	1+40.00	1254.48	1232.0	1204.0	150	35.0
7	1+48.00	1255.35	1233.0	1205.0	150	35.0
8	1+56.00	1256.23	1234.0	1206.0	150	35.0
9	1+64.00	1257.10	1235.0	1207.0	150	35.0
10	1+72.00	1257.97	1236.0	1208.0	150	35.0
11	1+80.00	1258.85	1237.0	1209.0	150	35.0
12	1+88.00	1259.72	1238.0	1210.0	150	35.0
13	1+96.00	1260.60	1239.0	1211.0	150	35.0
14	2+04.00	1261.47	1240.0	1212.0	150	35.0
15	2+12.00	1262.35	1241.0	1213.0	150	35.0
16	2+20.00	1263.22	1242.0	1214.0	150	35.0
17	2+28.00	1264.10	1243.0	1215.0	150	35.0
18	2+36.00	1264.97	1244.4	1216.4	145	34.0
19	2+44.00	1265.85	1245.8	1217.8	140	33.0
20	2+52.00	1266.73	1247.1	1219.1	135	32.0
21	2+60.00	1267.59	1248.5	1220.5	130	31.0
22	2+68.00	1268.41	1249.9	1221.9	125	30.0
23	2+76.00	1269.20	1251.3	1223.3	120	29.0
24	2+84.00	1269.95	1252.6	1224.6	115	28.0
25	2+92.00	1270.67	1254.0	1226.0	110	27.0
26	3+00.00	1271.36	1258.0	1227.4	105	26.0
27	3+08.00	1272.02	1262.0	1228.8	100	25.0
28	3+16.00	1272.64	1266.0	1230.1	95	24.0
29	3+24.00	1273.23	1270.0	1231.5	90	23.0
30	3+32.00	1273.78	N.A	1232.9	N/A	N/A

NOTE:

1. Bottom of lagging indicates adjacent down station lagging elevation

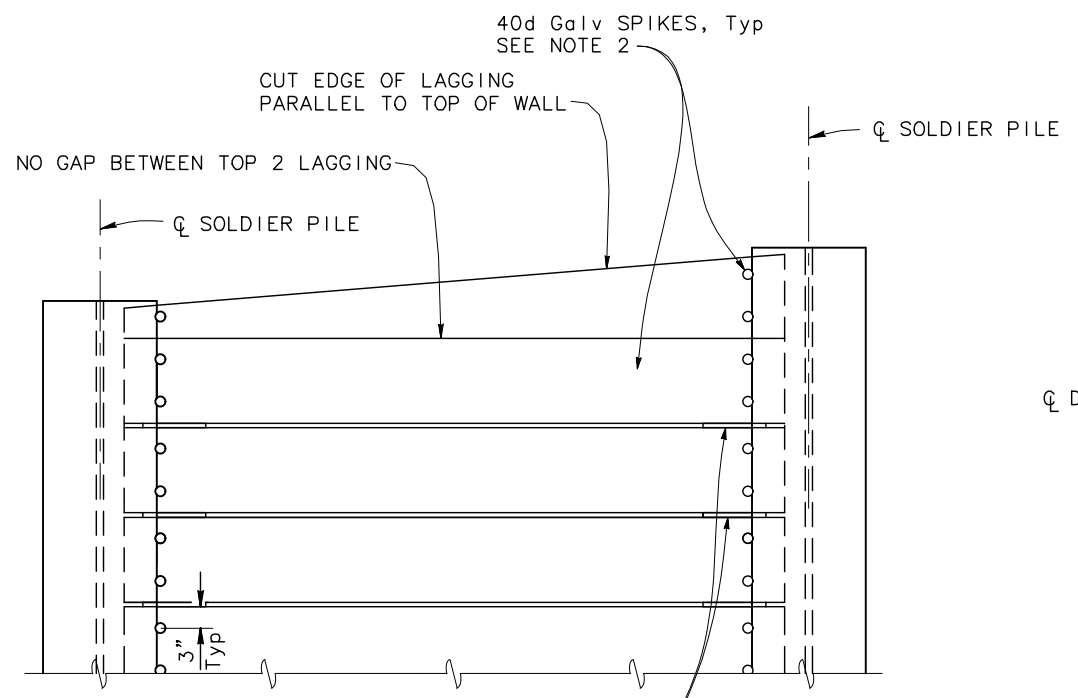


ROAD NAME: ALDERPOINT ROAD	MILE POST: 44.79
ROAD NO: F6B165	EA NO: 0117000187L-N
PROJECT NO.: ER32LO(125)	BRIDGE NO: N/A
CONTRACT NO.: 217231	DRAWING FILE NAME:
PLOT DATE: DECEMBER 2020	REVISION DATE:

MARK THOMAS
DESIGNED BY: MM
DRAWN BY: GB
REVIEWED BY: JH
APPROVED BY: JH

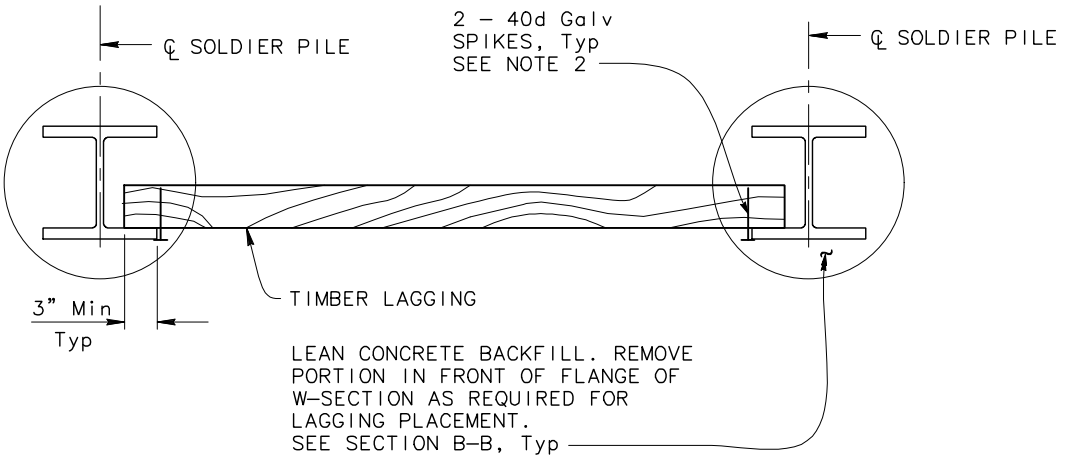
COUNTY OF HUMBOLDT
DEPARTMENT OF PUBLIC WORKS
ALDERPOINT RD STORM DAMAGE (PM 44.79)
SOLDIER PILE WALL LAGGING DETAILS

SHEET **16**
OF
19



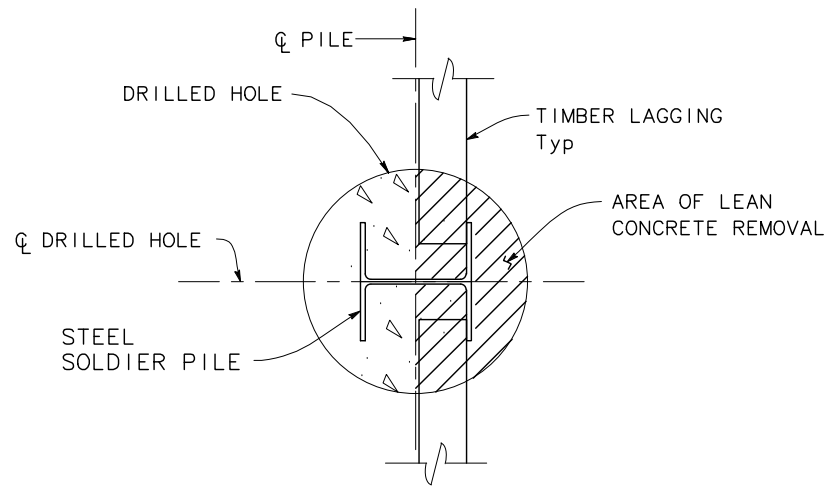
1/2" x 6" x 18" HIGH DENSITY POLYETHYLENE SHIM, Tot 2, BETWEEN LAGGING MEMBERS. SECURE WITH 2-12d Galv NAILS, Typ

PART ELEVATION LAGGING DETAILS
NO SCALE

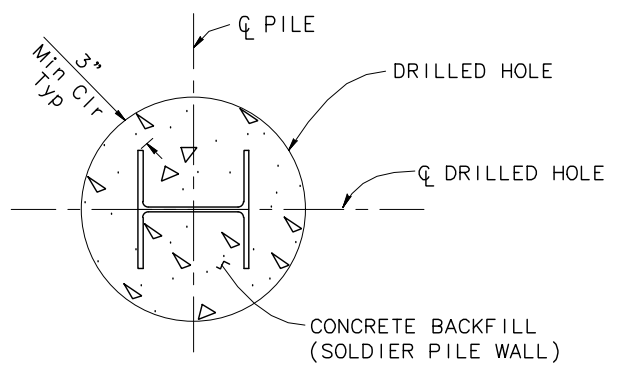


PART PLAN OF TIMBER LAGGING MEMBER
NO SCALE

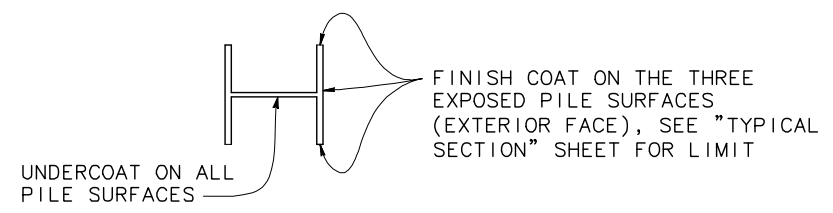
- NOTES:
1. No clipping of timber lagging corners allowed. Lagging corners may be chamfered to facilitate placement. Max 2 corner per lagging
 2. Spikes shall not be bent



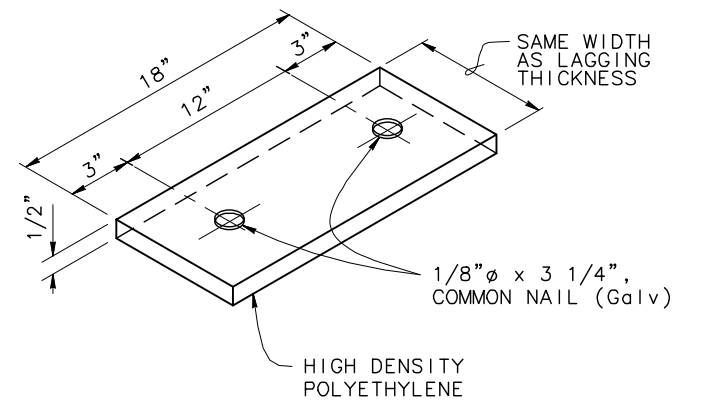
SECTION B-B
NO SCALE



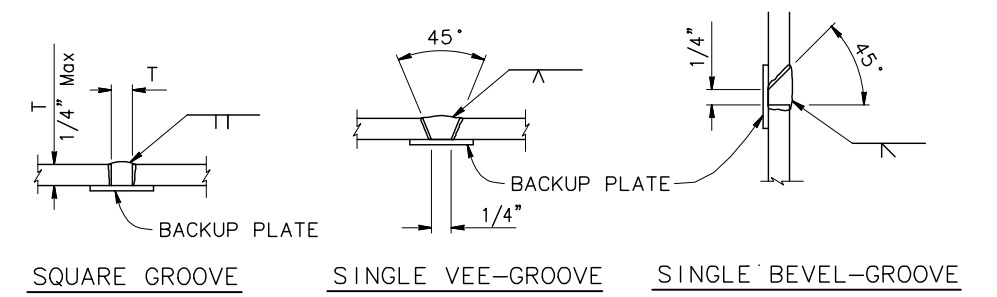
SECTION C-C
NO SCALE



LIMITS OF CLEAN & PAINT STEEL SOLDIER PILES
NO SCALE

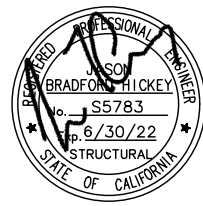


SHIM DETAIL
NO SCALE

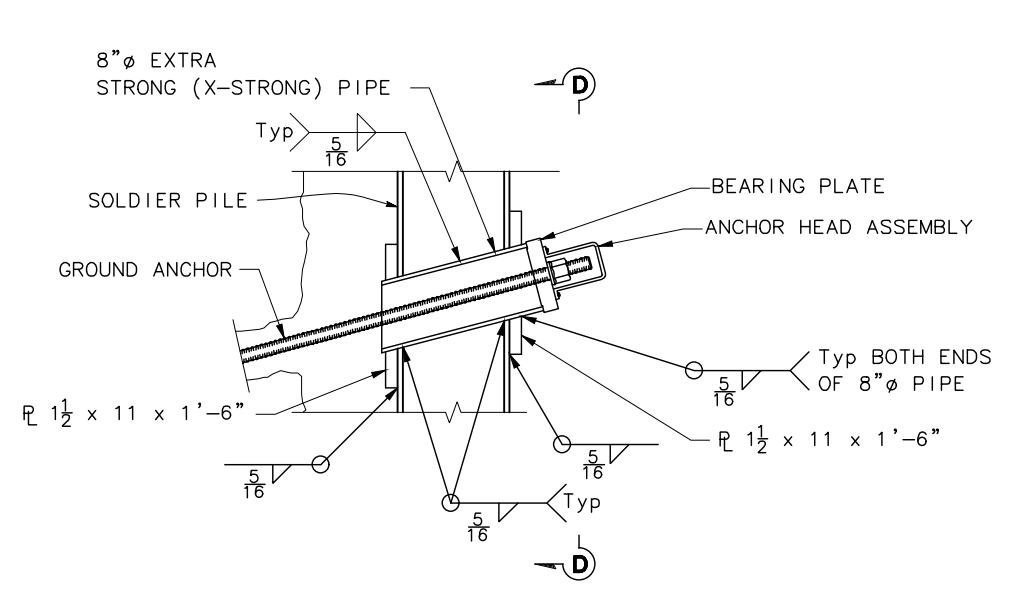


PILE WELDING DETAIL-BUTT JOINTS
NO SCALE

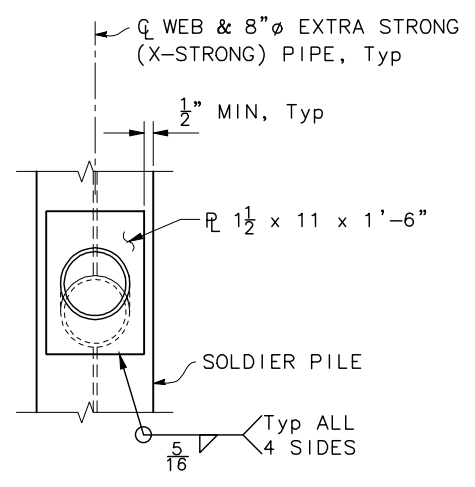
- NOTES:
1. Single vee-groove and square groove permitted for all positions.
 2. Single bevel-groove permitted for horizontal joints only.



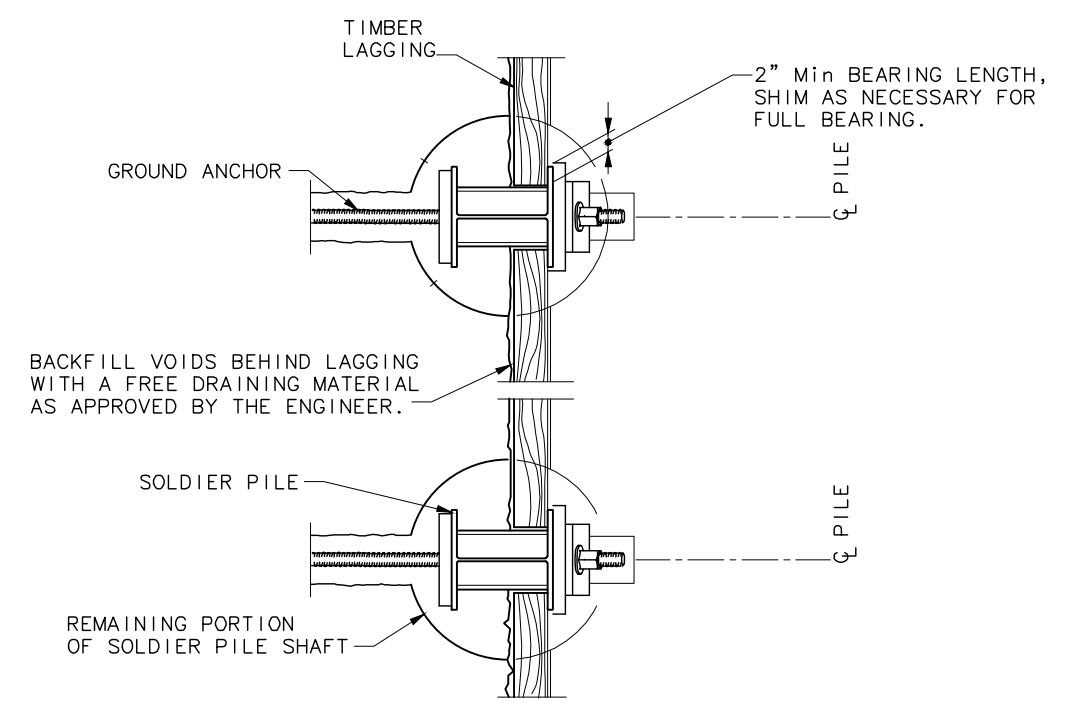
BAR IS ONE INCH ON ORIGINAL DRAWING IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	ROAD NAME: ALDERPOINT ROAD	MILE POST: 44.79	MARK THOMAS COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS	SHEET 17 OF 19
	PROJECT NO.: ER32LO(125)	EA NO.: 0117000187L-N		
	CONTRACT NO.: 217231	BRIDGE NO: N/A	DRAWN BY: GB	ALDERPOINT RD STORM DAMAGE (PM 44.79) SOLDIER PILE WALL DETAILS NO. 1
	DRAWING FILE NAME:		REVIEWED BY: JH	
	PLOT DATE: DECEMBER 2020	REVISION DATE:	APPROVED BY: JH	



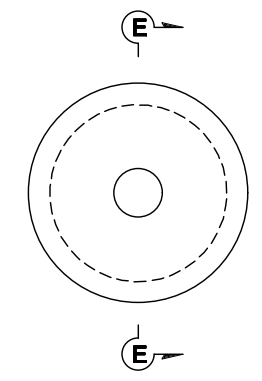
ELEVATION - SOLDIER PILE WITH SHGA THRU WEB
NO SCALE



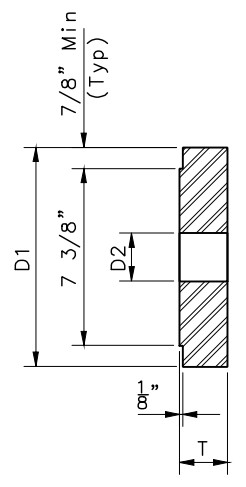
SECTION D-D
NO SCALE



PLAN - SOLDIER PILE WALL
NO SCALE

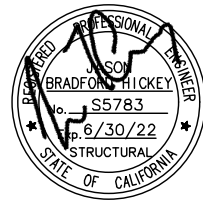


BEARING PLATE
NO SCALE



SECTION E-E
NO SCALE

BEARING PLATE SHALL BE DESIGNED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER FOR APPROVAL IN ACCORDANCE WITH THE STANDARD SPECIFICATION SECTION 50-1.01C.



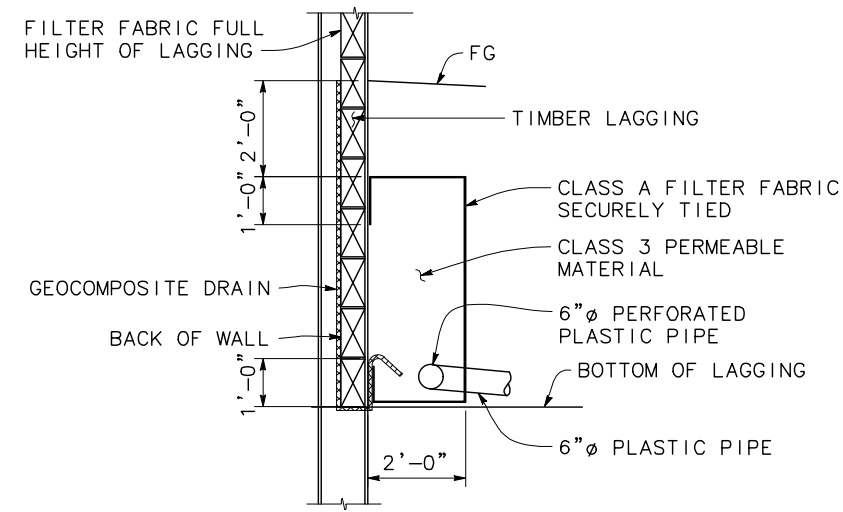
ROAD NAME: ALDERPOINT ROAD	MILE POST: 44.79
ROAD NO: F6B165	EA NO: 0117000187L-N
PROJECT NO: ER32LO(125)	BRIDGE NO: N/A
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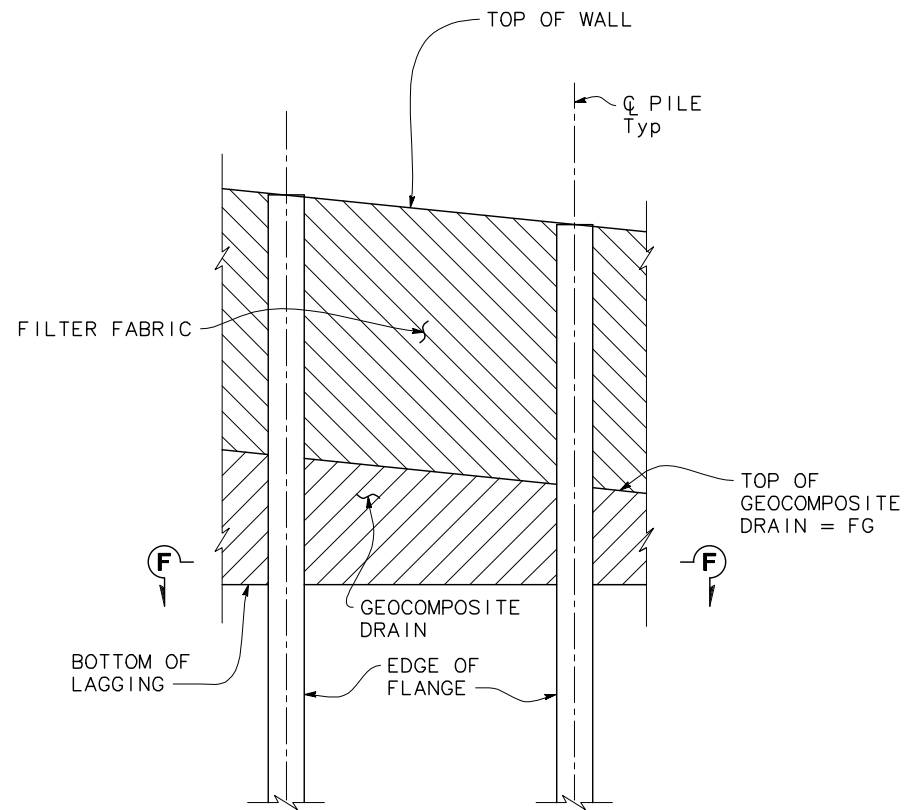
COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS
ALDERPOINT RD STORM DAMAGE (PM 44.79)
SOLDIER PILE WALL DETAILS NO. 2

SHEET
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OF
19

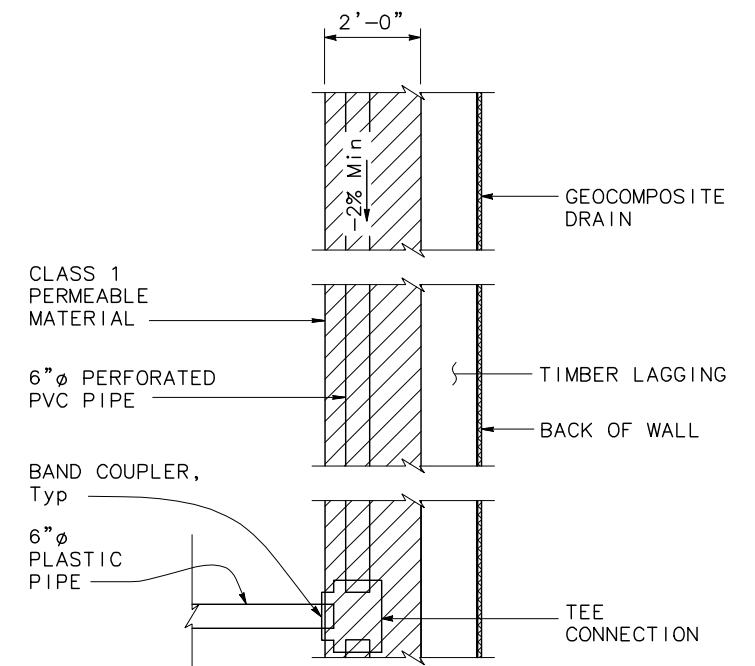
- NOTES:
1. Geocomposite drain strip per Section 88 Geosynthetics of the Standard Specifications



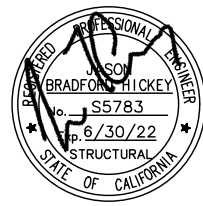
WALL DRAIN DETAIL
NO SCALE



PART ELEVATION DRAIN AT SOLDIER PILE WALL
NO SCALE



SECTION F-F
NO SCALE



ROAD NAME: ALDERPOINT ROAD	MILE POST: 44.79
ROAD NO: F6B165	EA NO: 0117000187L-N
PROJECT NO: ER32LO(125)	BRIDGE NO: N/A
CONTRACT NO: 217231	DRAWING FILE NAME:
PLOT DATE: DECEMBER 2020	REVISION DATE:

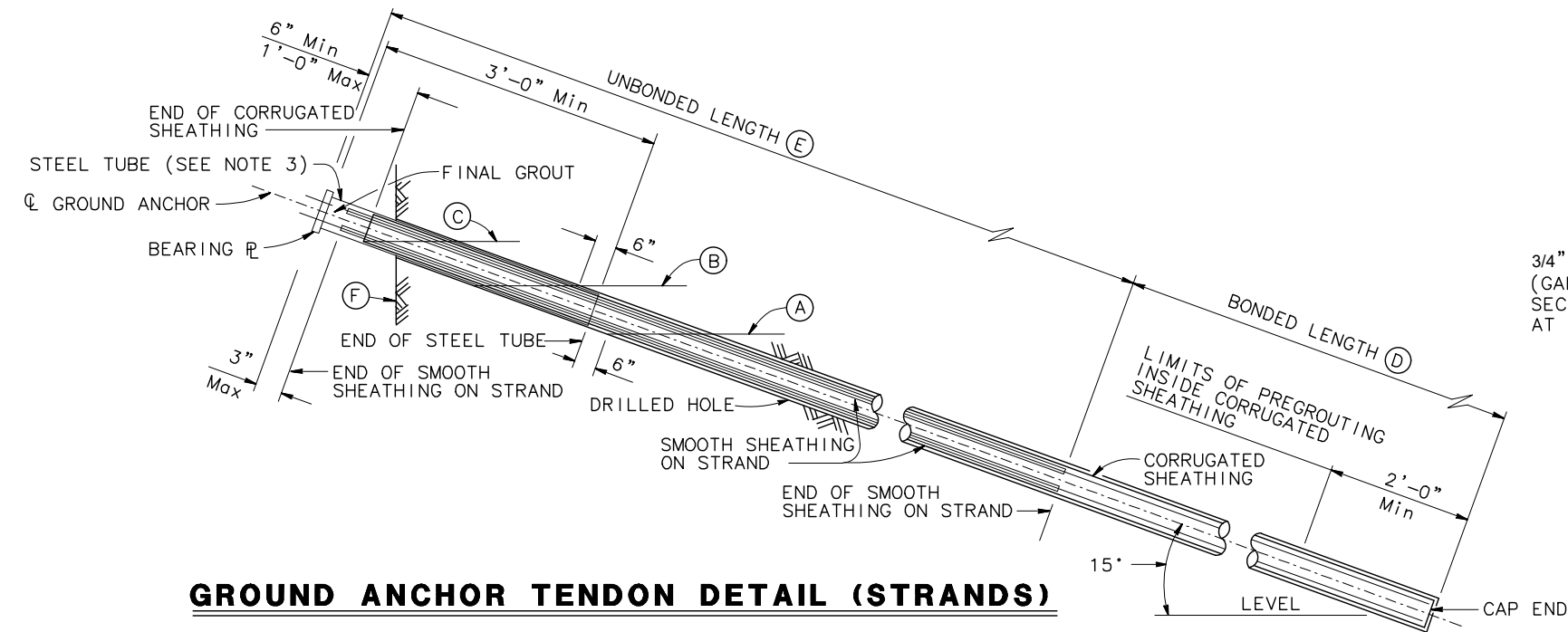
MARK THOMAS
DESIGNED BY: MM
DRAWN BY: GB
REVIEWED BY: JH
APPROVED BY: JH

COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS
ALDERPOINT RD STORM DAMAGE (PM 44.79)
SUB HORIZONTAL GROUND ANCHOR DETAILS

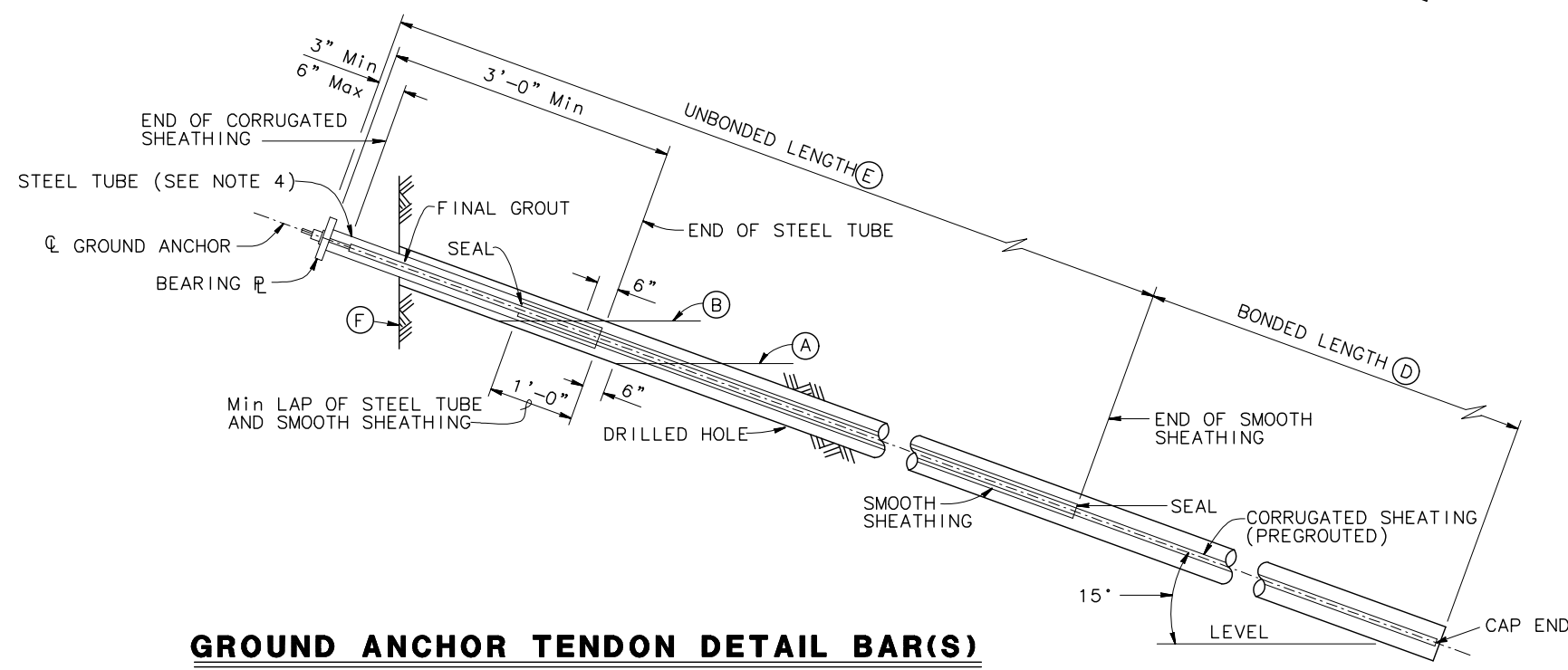
SHEET **19**
OF
19

- NOTES:
- (A) Level of initial grouting for drilled hole 6" in diameter or smaller
 - (B) Level of secondary grouting
 - (C) Level of initial grouting inside corrugated sheathing
 - (D) Bonded length shall be determined by the contractor
 - (E) For unbonded length, see "PILE AND GROUND ANCHOR DATA TABLE" ON "TYPICAL SECTION" SHEET
 - (F) Face of Wall Excavation

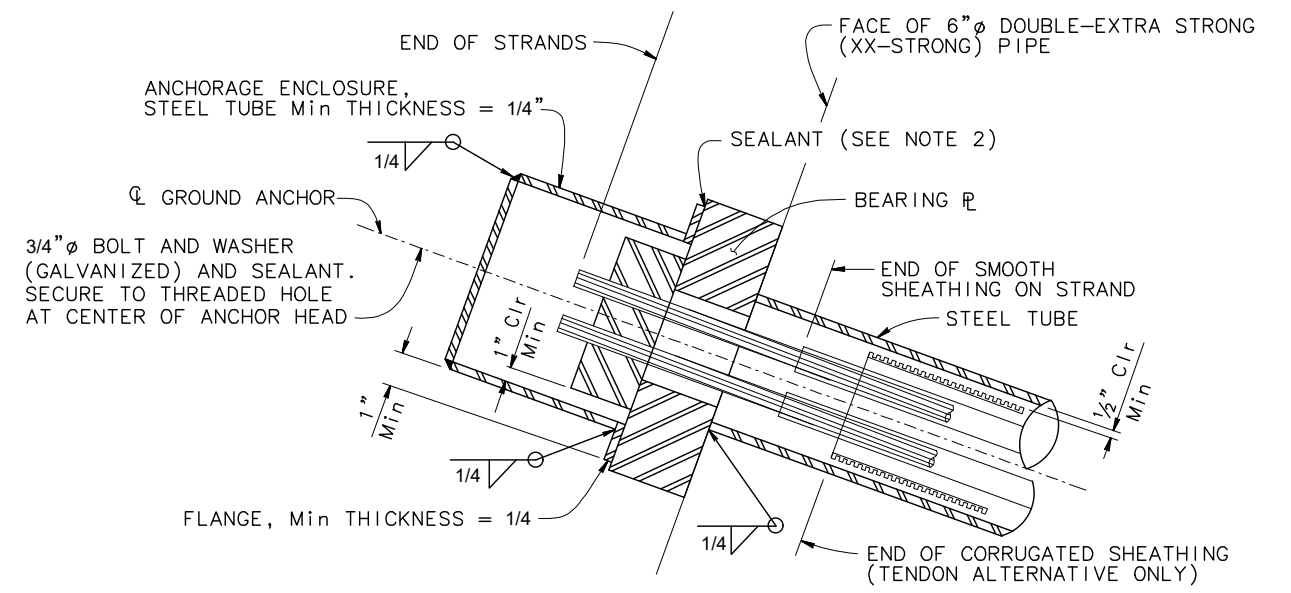
- NOTES:
1. Anchorage enclosure shall have provisions to allow injecting grout at low end and venting at high end. Galvanize after fabrication.
 2. Silicone sealant to cover full width of flange.
 3. Steel tube (Min thickness = 1/4") welded to bearing plate. Galvanize assembly after fabrication
 4. Steel tube welded to bearing plate. Inside diameter of steel tube (Min thickness = 1/4") to be 1" greater than outside diameter of smooth sheathing.
 5. Galvanize assembly after fabrication.



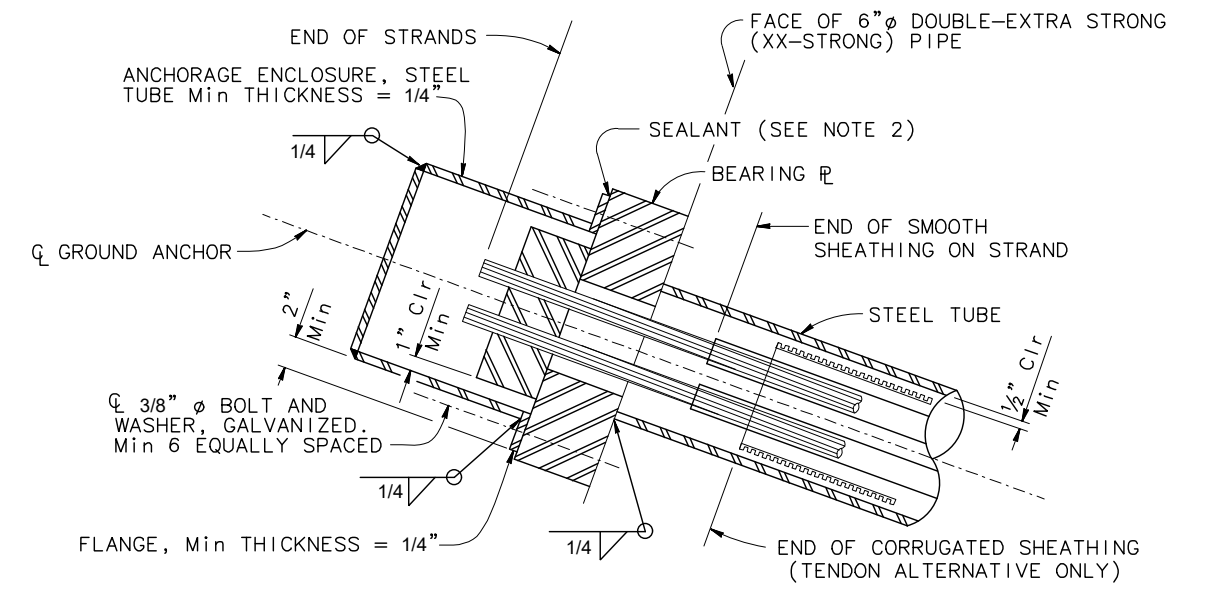
GROUND ANCHOR TENDON DETAIL (STRANDS)



GROUND ANCHOR TENDON DETAIL BAR(S)



ALTERNATIVE X



ALTERNATIVE Y

ANCHORAGE ENCLOSURE DETAILS

NO SCALE