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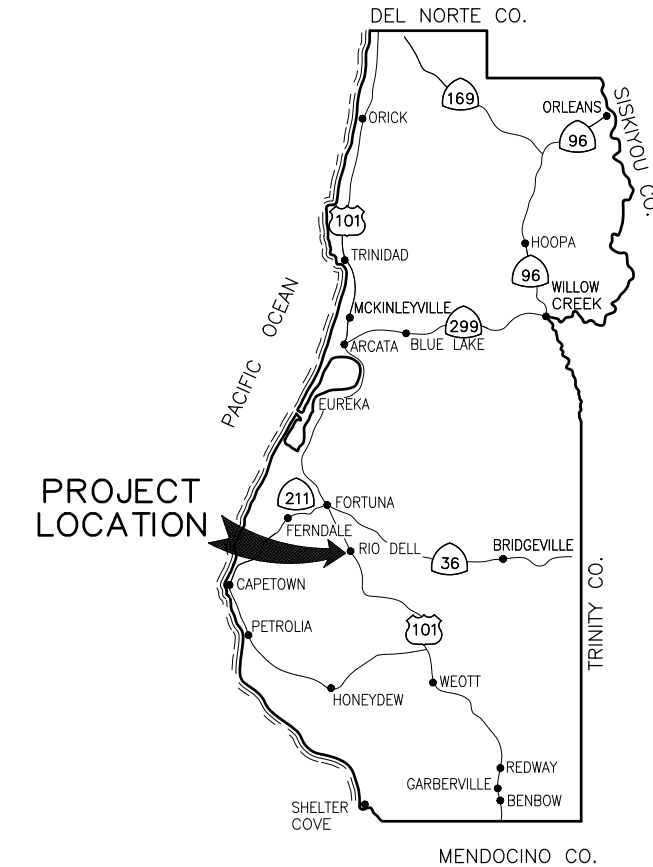
ROAD NAME: MONUMENT ROAD	DESIGN SECTION ENGINEERING
ROAD NO: 3F020	MILE POST: 0.00
PROJECT NO.: 4308-CA-DR PW#1276	DESIGNED BY: C.PROVO
CONTRACT NO.: 217356	DRAWN BY: C.PROVO
DRAWING FILE NAME: 11200624_01_G001-COVER.dwg	REVIEWED BY: J.WOLF
PLOT DATE: 07/01/2020	Sheet: 1
	APPROVED BY: J.WOLF

COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS	SHEET 1 OF 23
STORM DAMAGE REPAIR MONUMENT ROAD PM 0.00	
TITLE SHEET	

COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS

PROJECT PLANS FOR CONSTRUCTION OF STORM DAMAGE REPAIRS MONUMENT ROAD (3F020) AT P.M. 0.00 PROJECT NO. 4308-CA-DR PW#1276 CONTRACT NO. 217356

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



LOCATION MAP
NOT TO SCALE



SHEET LIST TABLE

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8	DRAINAGE AND UTILITIES
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10	EROSION CONTROL
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23	BARRIER SLAB DETAILS

JOSH A. WOLF
RCE 70358
CIVIL ENGINEER
GHD INC.

DATE



APPROVED

TONY R. SEGHELLI
RCE 63714
DEPUTY DIRECTOR OF ENGINEERING
COUNTY OF HUMBOLDT

DATE

NOTES

1. THE CONTRACTOR SHALL HAVE A CLASS "A" LICENSE FOR THIS PROJECT.
2. STANDARD PLAN LIST APPLICABLE TO THIS CONTRACT INCLUDED IN THE SPECIAL PROVISIONS.
3. GEOTECHNICAL REPORT: CRAWFORD AND ASSOCIATES, 2020.

ABBREVIATIONS

(TO SUPPLEMENT CALTRANS STANDARD PLANS A3A, A3B & A3C)

- APN ASSESSORS PARCEL NUMBER
- CL CENTERLINE
- CT CALTRANS
- (E) EXISTING
- EL ELEVATION
- K K-VALUE
- L LEFT
- PVI POINT OF VERTICAL CURVATURE
- R RIGHT
- S SLOPE
- TEL TELEPHONE



VICINITY MAP
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ROAD NAME: MONUMENT ROAD	DESIGN SECTION: ENGINEERING
ROAD NO: 3F020	MILE POST: 0.00
PROJECT NO.: 4308-CA-DR PW#1276	DESIGNED BY: C.PROVO
CONTRACT NO.: 217356	DRAWN BY: C.PROVO
DRAWING FILE NAME: 11200624_02_G002-TRAFFIC CONTROL PLAN.dwg	REVIEWED BY: J.WOLF
PLOT DATE: 07/01/2020	Sheet: 2
	APPROVED BY: J.WOLF

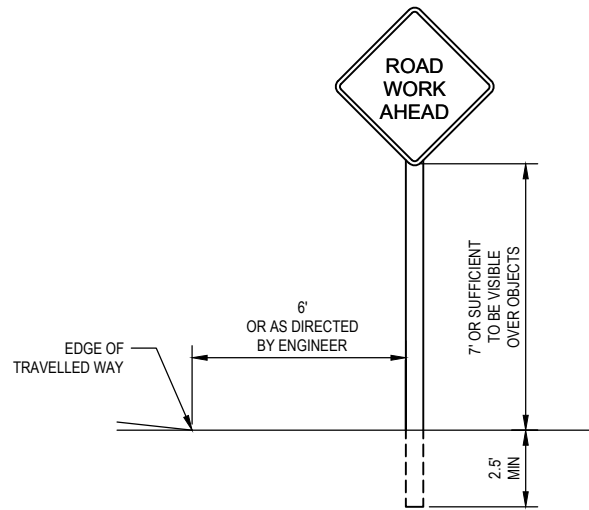
COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS	SHEET 2 OF 23
STORM DAMAGE REPAIR MONUMENT ROAD PM 0.00	
TRAFFIC CONTROL PLAN AND QUANTITIES	

QUANTITIES

STILL BEING DEVELOPED

CONSTRUCTION SIGN NOTES:

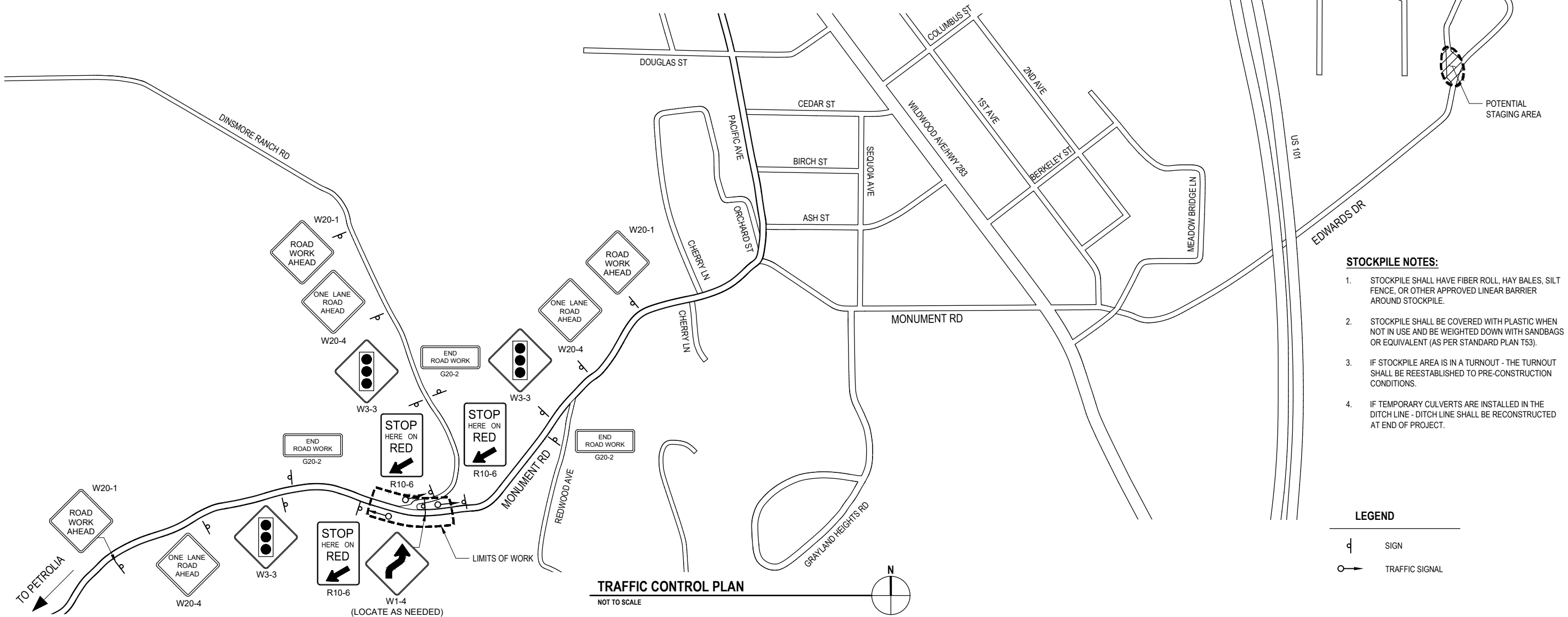
1. EXACT SIGN LOCATIONS AND POSITIONS TO BE APPROVED BY THE ENGINEER.
2. ALL WARNING SIGNS SHALL HAVE A BLACK LEGEND AND BORDER ON ORANGE BACKGROUND.
3. ALTERNATIVE POST CONFIGURATION TO BE APPROVED BY ENGINEER.
4. REFER TO FIGURE 6H-12 FOR LANE CLOSURE ON A TWO-LANE ROAD USING TRAFFIC CONTROL SIGNALS (TA-12).
5. ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CAMUTCD) AND CALTRANS 2018 STANDARD PLANS.
6. MAINTAIN ALL SIGNS THROUGHOUT DURATION OF CONSTRUCTION.
7. MAINTAIN ONE TRAVEL LANE AT ALL TIMES.
8. PROVIDE FLAGGERS AS REQUIRED TO ACCOMMODATE CONSTRUCTION.



TYPICAL STATIONARY CONSTRUCTION AREA SIGNS

STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

SIGN CODE	PANEL SIZE	SIGN MESSAGE	NUMBER & POST SIZE	NO. OF SIGNS
W1-4	36"x36"	HORIZONTAL ALIGNMENT	(1) 4"x4"	1
R10-6	24"x36"	STOP HERE ON RED	(1) 4"x4"	3
W3-3	36"x36"	SIGNAL WARNING	(1) 4"x4"	3
W20-4	36"x36"	ONE LANE ROAD AHEAD	(1) 4"x4"	3
W20-1	36"x36"	ROAD WORK AHEAD	(1) 4"x4"	3
G20-2	36"x18"	END ROAD WORK	(1) 4"x4"	3



STOCKPILE NOTES:

1. STOCKPILE SHALL HAVE FIBER ROLL, HAY BALES, SILT FENCE, OR OTHER APPROVED LINEAR BARRIER AROUND STOCKPILE.
2. STOCKPILE SHALL BE COVERED WITH PLASTIC WHEN NOT IN USE AND BE WEIGHTED DOWN WITH SANDBAGS OR EQUIVALENT (AS PER STANDARD PLAN T53).
3. IF STOCKPILE AREA IS IN A TURNOUT - THE TURNOUT SHALL BE REESTABLISHED TO PRE-CONSTRUCTION CONDITIONS.
4. IF TEMPORARY CULVERTS ARE INSTALLED IN THE DITCH LINE - DITCH LINE SHALL BE RECONSTRUCTED AT END OF PROJECT.

LEGEND

- SIGN
- TRAFFIC SIGNAL

TRAFFIC CONTROL PLAN

NOT TO SCALE



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ROAD NO: JF020	MILE POST: 0.00
PROJECT NO.: 4308-CA-DR PW#1276	DESIGNED BY: C.PROVO
CONTRACT NO.: 217356	DRAWN BY: C.PROVO
DRAWING FILE NAME: 11200624_03_G003-SURVEY CONTROL.dwg	REVIEWED BY: J.WOLF
PLOT DATE: 07/01/2020	Sheet: 3
	APPROVED BY: J.WOLF

COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS
STORM DAMAGE REPAIR MONUMENT ROAD PM 0.00
SURVEY CONTROL PLAN

Segment	Type	Length	Radius	Direction	Start Station	End Station
C1	CURVE	89.26	663.00		"MRCL" 1+00.00	"MRCL" 1+89.26
C2	CURVE	220.73	3211.00		"MRCL" 1+89.26	"MRCL" 4+09.99
C3	CURVE	79.26	223.00		"MRCL" 4+09.99	"MRCL" 4+89.25
L1	LINE	178.28	-	N86° 55' 34.59"E	"MRCL" 4+89.25	"MRCL" 6+67.52

Segment	Type	Length	Radius	Direction	Start Station	End Station
C4	CURVE	110.56	3227.58		"RWLOL" 3+00.00	"RWLOL" 4+10.56
C5	CURVE	85.15	239.58		"RWLOL" 4+10.56	"RWLOL" 4+95.71
L2	LINE	58.79	-	N86° 55' 48.81"E	"RWLOL" 4+95.71	"RWLOL" 5+54.50

SURVEY CONTROL NOTES

1. THE PURPOSE OF THIS SURVEY IS TO DETERMINE TOPOGRAPHY FOR A STORM DAMAGE REPAIR SITE AT PM 0.00 ON MONUMENT ROAD IN THE RIO DELL AREA. THE SITE HAS A ROADWAY FAILURE AND EVIDENCE OF PREVIOUS FAILURES AND PREVIOUS WOODEN RETAINING WALL/PILE CONSTRUCTION. THIS SURVEY REFLECTS CONDITIONS ON THE SITE AT TIME OF SURVEY; FIELD WORK PERFORMED ON 10/4/18, 11/19/18, AND 12/3/18.
2. UNDERGROUND UTILITIES RESEARCH WAS NOT PERFORMED. NO EVIDENCE OF UNDERGROUND UTILITIES WAS ENCOUNTERED IN THIS AREA OTHER THAN THE STORM DRAIN CROSSINGS SHOWN HEREON.
3. COORDINATES FOR THIS SURVEY ARE CALIFORNIA COORDINATE SYSTEM OF 1983 (CCS83) ZONE 1, NAD 83, EPOCH 2010.00, US SURVEY FEET, BASED ON A RTK GPS CONTROL SURVEY PERFORMED ON 10/4/2018. THE MAPPING ANGLE IS 1 DEGREE 22 MINUTES 42 SECONDS- ROTATE BEARINGS COUNTERCLOCKWISE BY THIS ANGLE TO OBTAIN "TRUE" OR GEODETIC BEARINGS. GRID DISTANCES SHOWN SHOULD BE DIVIDED BY THE COMBINED SCALE FACTOR OF 0.99990976 TO OBTAIN GROUND DISTANCES. MAPPING ANGLE AND GRID SCALE FACTOR TAKEN AT NGS CONTROL POINT "101 HUM 53.32", PID "DH6338", WHICH IS THE BASIS OF THE HORIZONTAL CONTROL FOR THIS SITE, A HPGN CONTROL POINT LOCATED AT THE NORTHERLY RIO DELL OFFRAMP ON SOUTHBOUND US HIGHWAY 101.
4. VERTICAL DATUM IS NAVD88 ELEVATIONS, IN FEET, BASED ON A TIE TO NGS CONTROL POINT "Q 1086", PID "LV0395", WHICH IS A BRASS DISC LOCATED AT THE NORTH END OF THE EAGLE PRAIRIE BRIDGE IN THE CITY OF RIO DELL, HELD AT THE PUBLISHED ELEVATION OF 137.60 FEET.
5. BOUNDARY LINES SHOWN HEREON ARE BASED ON BOOK 38 OF SURVEYS, PAGE 12 PER TIES TO RECORD MONUMENTS SHOWN THEREON. THE WITNESS CORNER TO THE QUARTER CORNER BETWEEN SECTIONS 6 & 7, TOWNSHIP 1 NORTH, RANGE 1 EAST FALLS WITHIN THE PROJECT AREA AS SHOWN HEREON. NO RIGHT OF WAY IS SHOWN FOR MONUMENT ROAD WEST OF THE QUARTER SECTION LINE SHOWN HEREON AS THE COUNTY OWNS THIS PROPERTY. THE PORTION OF MONUMENT ROAD EAST OF THE QUARTER SECTION LINE FALLS WITHIN THE CITY OF RIO DELL. PROPERTY TO THE NORTH OF THIS PORTION OF MONUMENT ROAD ENDS AT THE NORTH LINE OF MONUMENT ROAD PER BOOK 153 OF DEEDS, PAGE 22; PROPERTY TO THE SOUTH OF THIS PORTION OF MONUMENT ROAD ENDS AT THE CENTERLINE OF MONUMENT ROAD PER BOOK 23 OF OFFICIAL RECORDS, PAGE 299. MEANING MONUMENT ROAD IS CONTAINED WITHIN A 25 FOOT FEE STRIP AND 25 FOOT EASEMENT. THE POSITION FOR THE 25 FEE STRIP AND 25 FOOT RIGHT OF WAY SHOWN HEREON DOES NOT MATCH THE POSITION SHOWN ON BOOK 53 OF SURVEYS, PAGES 98-101; THIS SURVEY HOLDS A COMMON POINT FOR THE NORTH LINE OF MONUMENT ROAD.
6. THE PILES/CUT OFF POLES SHOWN HEREON APPEAR TO BE REMNANTS OF A PREVIOUS WOODEN RETAINING WALL; ONLY A COUPLE HORIZONTAL MEMBERS REMAIN AND WERE VISIBLE. DEPTH OF THESE POLES AND ANY WALL UNDER THE GROUND SURFACE IS UNKNOWN.
7. THIS SITE, ESPECIALLY THE PORTION FALLING WITHIN THE CITY OF RIO DELL, APPEARS TO BE THE SITE ON AN INFORMAL LANDFILL. LARGE AMOUNTS OF TRASH WERE FOUND ONSITE, AND ADDITIONAL TRASH WAS DUMPED DURING THE COURSE OF THE SURVEY.
8. THE BRASS CAP LOCATED IN THE ROADWAY ON THE PROJECT SITE, POINT #101, IS A WITNESS CORNER TO THE QUARTER CORNER BETWEEN SECTIONS 6 & 7, TOWNSHIP 1 NORTH, RANGE 1 EAST. A PRE- AND POST-CONSTRUCTION CORNER RECORD SHOULD BE PREPARED BEFORE ANY DISTURBANCE TO THIS MONUMENT.
9. TREES 12" AND LARGER LOCATED WITHIN THE PROJECT SITE ARE SHOWN HEREON. SMALLER TREES AND LARGE QUANTITIES OF POISON OAK EXIST ONSITE.

UNDERGROUND UTILITY NOTE

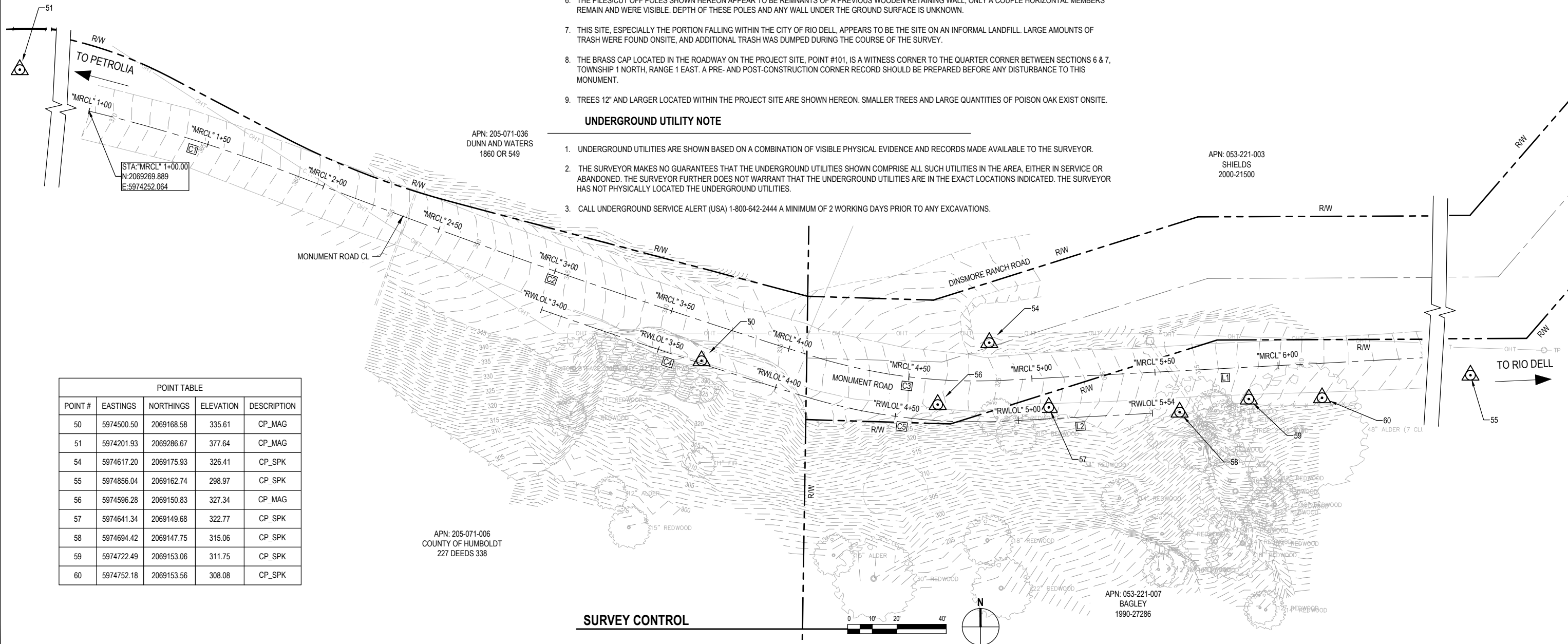
1. UNDERGROUND UTILITIES ARE SHOWN BASED ON A COMBINATION OF VISIBLE PHYSICAL EVIDENCE AND RECORDS MADE AVAILABLE TO THE SURVEYOR.
2. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES ARE IN THE EXACT LOCATIONS INDICATED. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.
3. CALL UNDERGROUND SERVICE ALERT (USA) 1-800-642-2444 A MINIMUM OF 2 WORKING DAYS PRIOR TO ANY EXCAVATIONS.

GENERAL 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 CONTRACTORS OPERATIONS, CONTRACTOR SHALL REPLACE MONUMENT AT CONTRACTORS EXPENSE.

LEGEND

- TEMPORARY CONTROL POINT
- MATTOLE ROAD R/W
- DRAINAGE R/W
- TCE
- ALIGNMENT LINE



APN: 205-071-036
DUNN AND WATERS
1860 OR 549

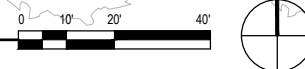
APN: 053-221-003
SHIELDS
2000-21500

APN: 205-071-006
COUNTY OF HUMBOLDT
227 DEEDS 338

APN: 053-221-007
BAGLEY
1990-27286

POINT #	EASTINGS	NORTHINGS	ELEVATION	DESCRIPTION
50	5974500.50	2069168.58	335.61	CP_MAG
51	5974201.93	2069286.67	377.64	CP_MAG
54	5974617.20	2069175.93	326.41	CP_SPK
55	5974856.04	2069162.74	298.97	CP_SPK
56	5974596.28	2069150.83	327.34	CP_MAG
57	5974641.34	2069149.68	322.77	CP_SPK
58	5974694.42	2069147.75	315.06	CP_SPK
59	5974722.49	2069153.06	311.75	CP_SPK
60	5974752.18	2069153.56	308.08	CP_SPK

SURVEY CONTROL



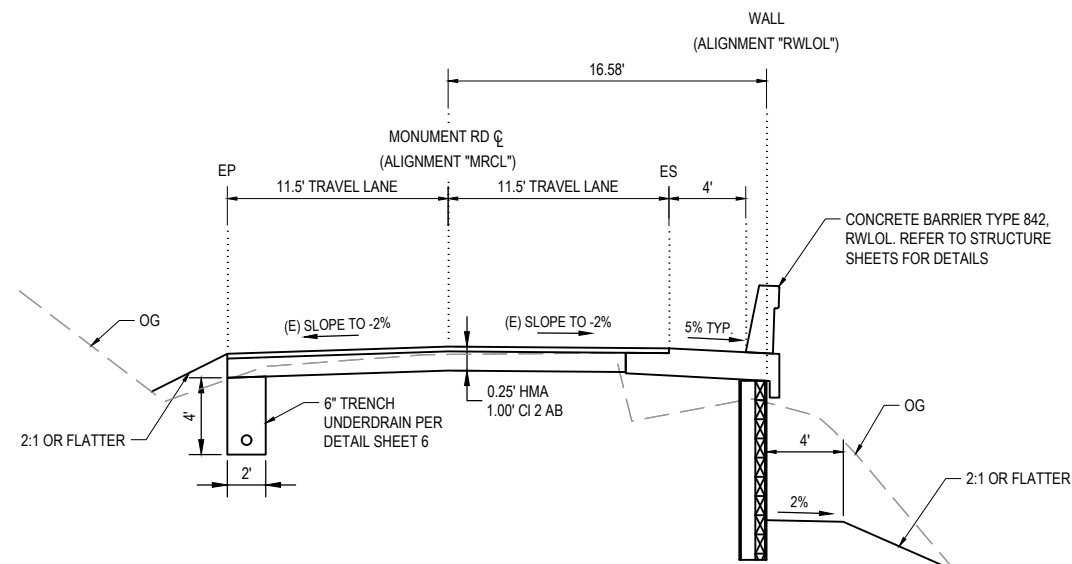


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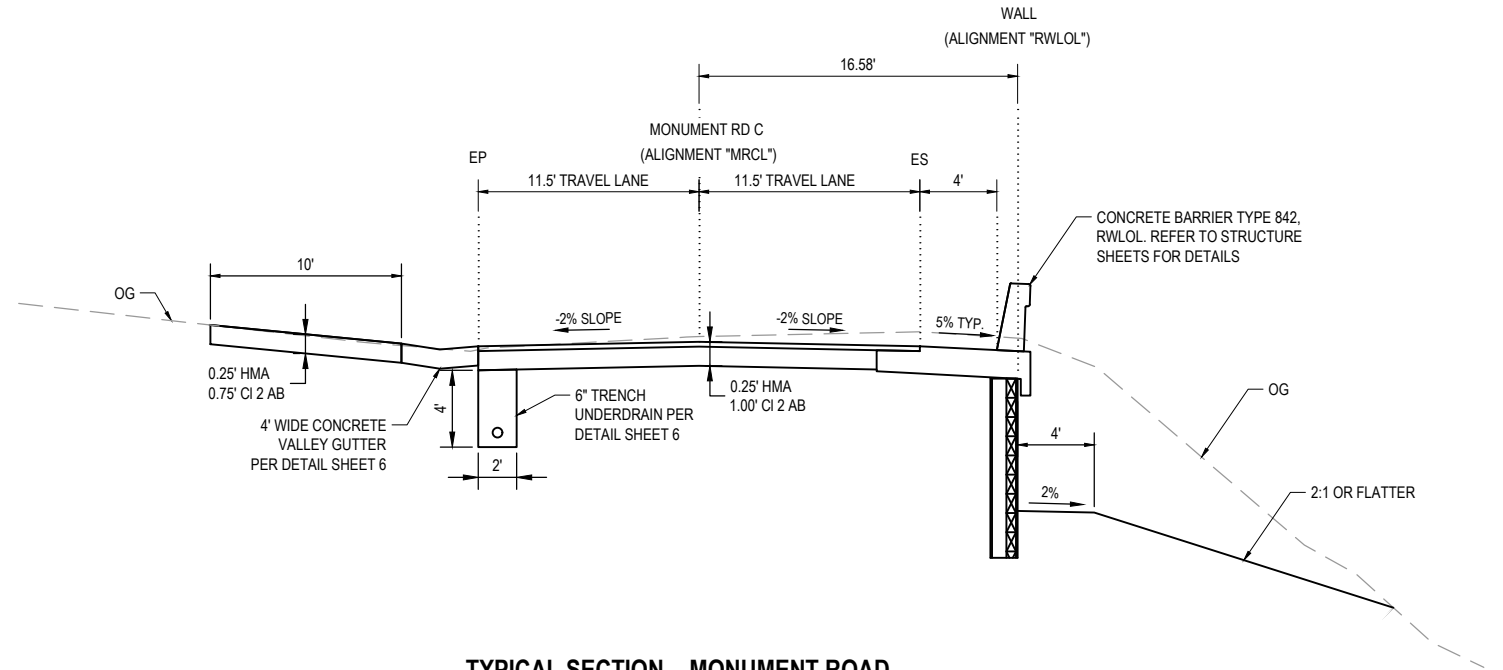


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ROAD NO: 3F020 MILE POST: 0.00	DESIGNED BY: C.PROVO
PROJECT NO.: 4308-CA-DR PW#1276	DRAWN BY: C.PROVO
CONTRACT NO.: 217356	REVIEWED BY: J.WOLF
DRAWING FILE NAME: 11200624_04_G004-TYPICAL SECTIONS.dwg	APPROVED BY: J.WOLF
PLOT DATE: 07/01/2020 Sheet: 4	

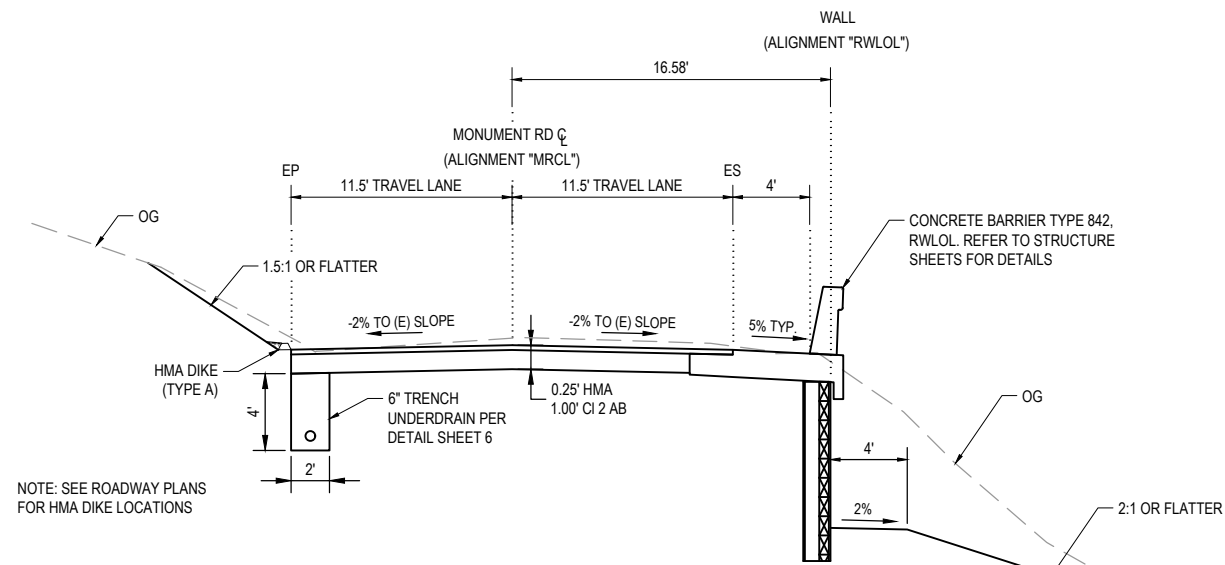
COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS
STORM DAMAGE REPAIR MONUMENT ROAD PM 0.00
TYPICAL ROADWAY SECTIONS



TYPICAL SECTION - MONUMENT ROAD
NOT TO SCALE STA "MRCL" 3+07 - "MRCL" 3+86



TYPICAL SECTION - MONUMENT ROAD
NOT TO SCALE STA "MRCL" 3+86 - "MRCL" 4+74

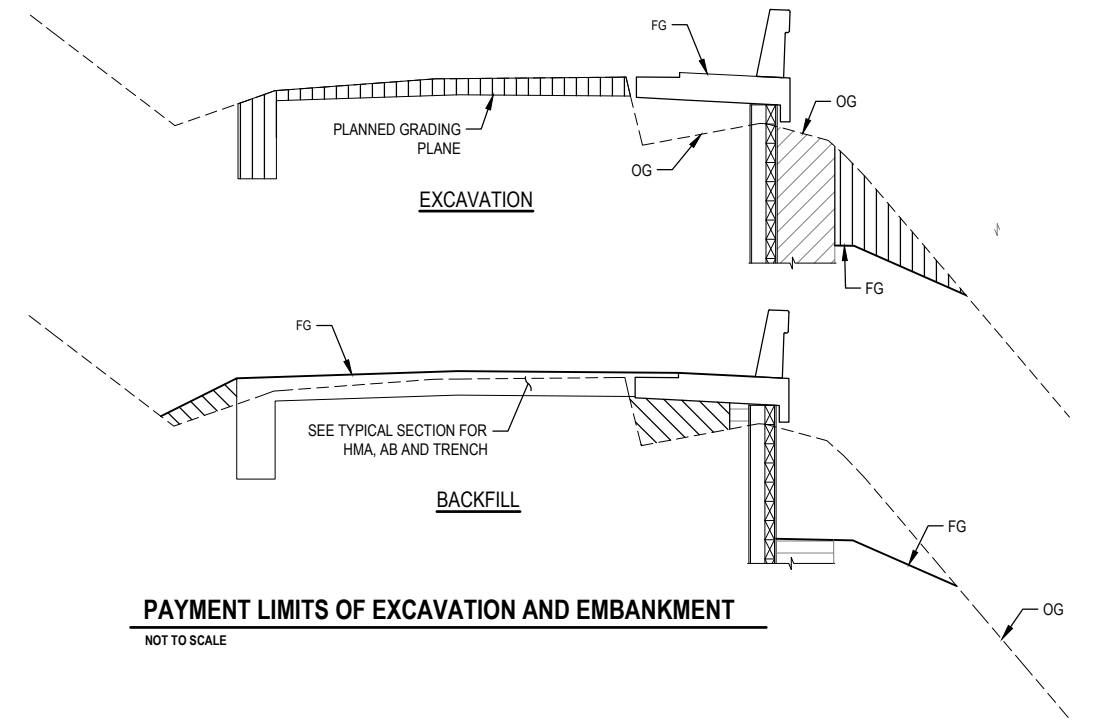


NOTE: SEE ROADWAY PLANS FOR HMA DIKE LOCATIONS

TYPICAL SECTION - MONUMENT ROAD
NOT TO SCALE STA "MRCL" 4+74 - "MRCL" 5+49

LEGEND

ROADWAY EXCAVATION	
STRUCTURE EXCAVATION	
EMBANKMENT	
STRUCTURE BACKFILL	



PAYMENT LIMITS OF EXCAVATION AND EMBANKMENT
NOT TO SCALE



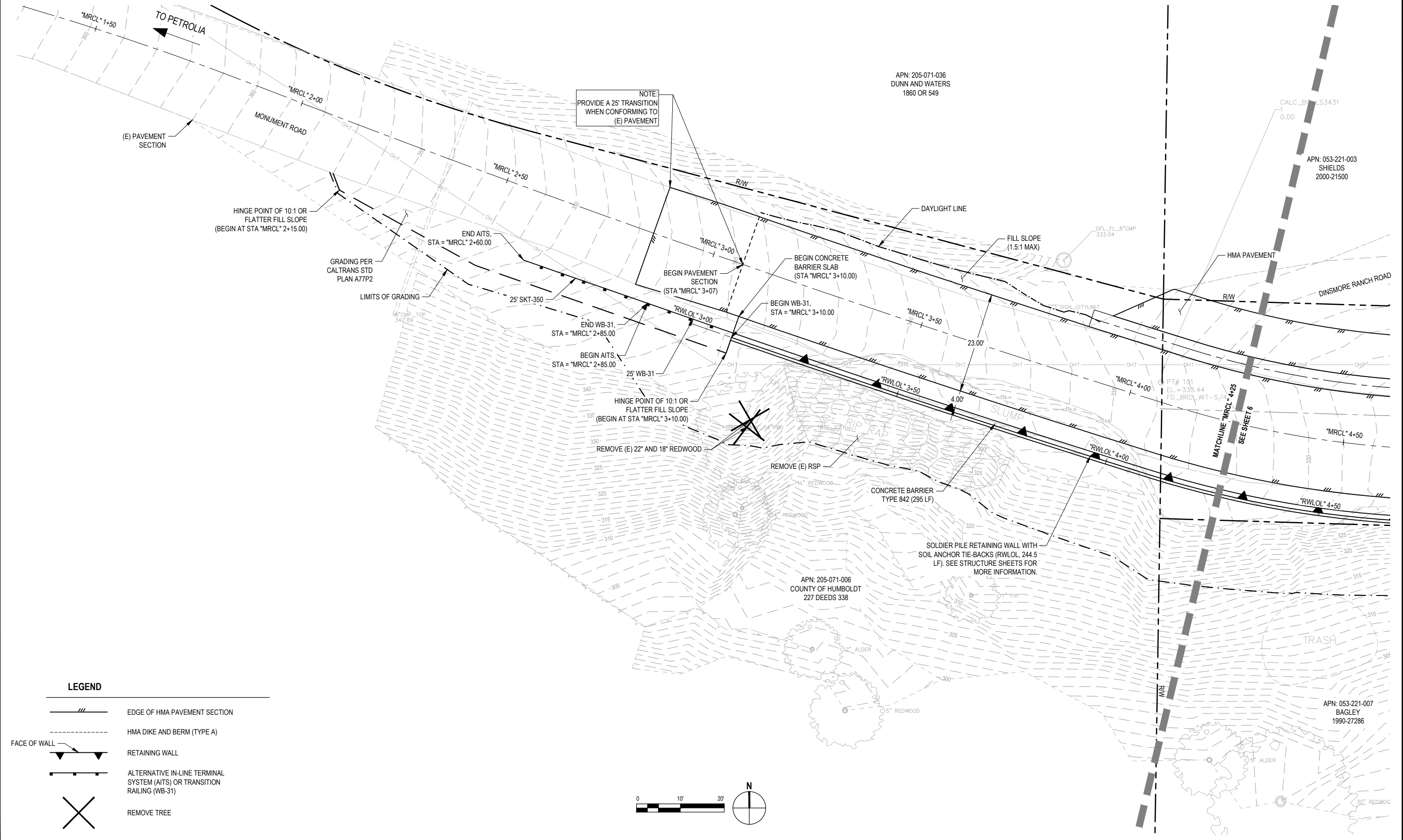
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CONTRACT NO.: 217356	DRAWN BY: C.PROVO
DRAWING FILE NAME: 11200624_LAYOUT - 1 OF 2.dwg	REVIEWED BY: J.WOLF
PLOT DATE: 07/01/2020	Sheet: 5
	APPROVED BY: J.WOLF

COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS	SHEET 5 OF 23
STORM DAMAGE REPAIR MONUMENT ROAD PM 0.00	
LAYOUT - 1 OF 2	



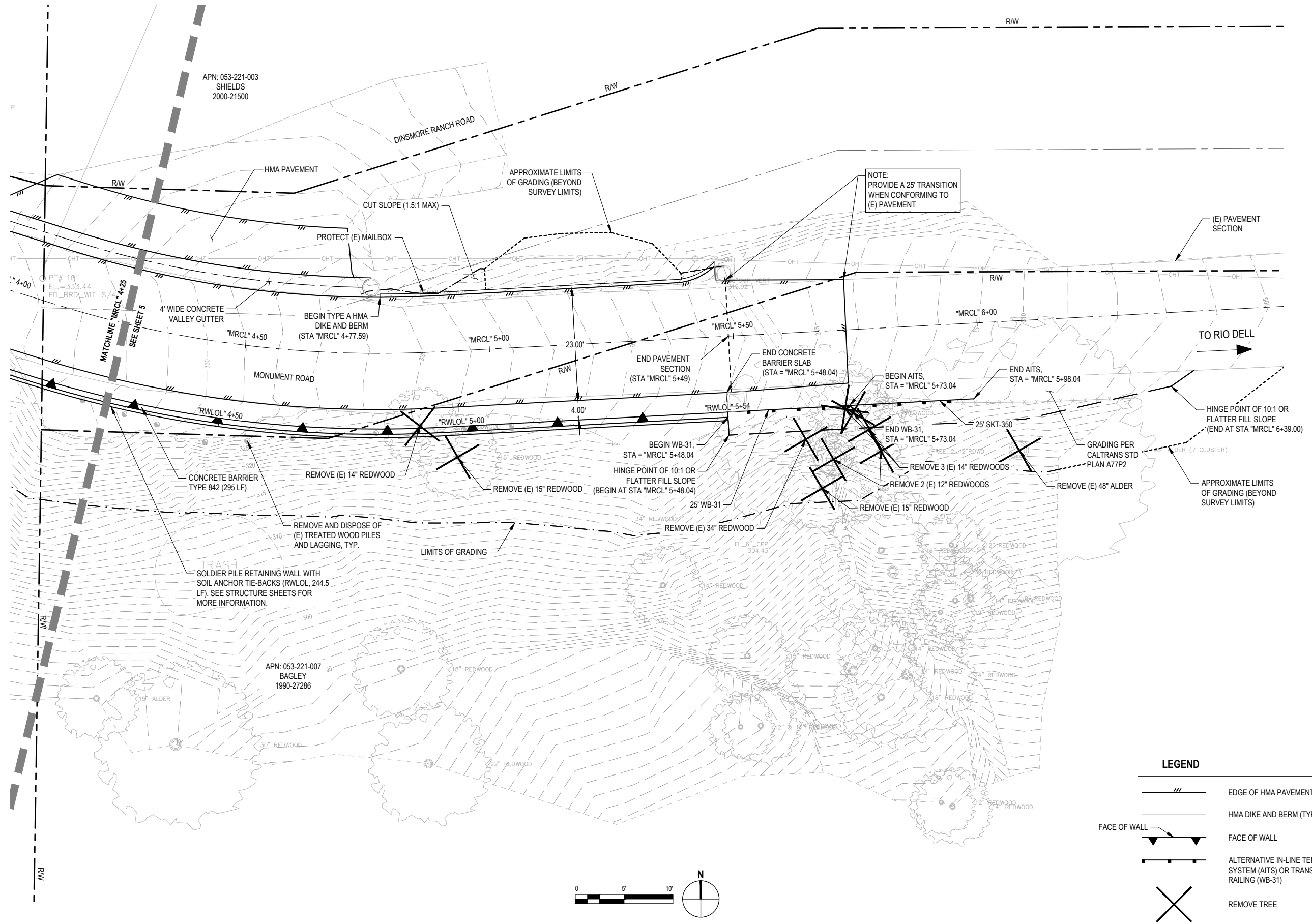


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CONTRACT NO.: 217356	DRAWN BY: C.PROVO
DRAWING FILE NAME: 11200624_LAYOUT - 2 OF 2.dwg	REVIEWED BY: J.WOLF
PLOT DATE: 07/01/2020	Sheet: 6
	APPROVED BY: J.WOLF

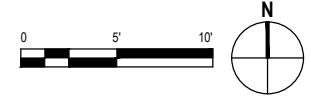
COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS	SHEET 6 OF 23
STORM DAMAGE REPAIR MONUMENT ROAD PM 0.00	
LAYOUT - 2 OF 2	



NOTE:
PROVIDE A 25' TRANSITION
WHEN CONFORMING TO
(E) PAVEMENT

LEGEND

	EDGE OF HMA PAVEMENT SECTION
	HMA DIKE AND BERM (TYPE A)
	FACE OF WALL
	ALTERNATIVE IN-LINE TERMINAL SYSTEM (AITS) OR TRANSITION RAILING (WB-31)
	REMOVE TREE





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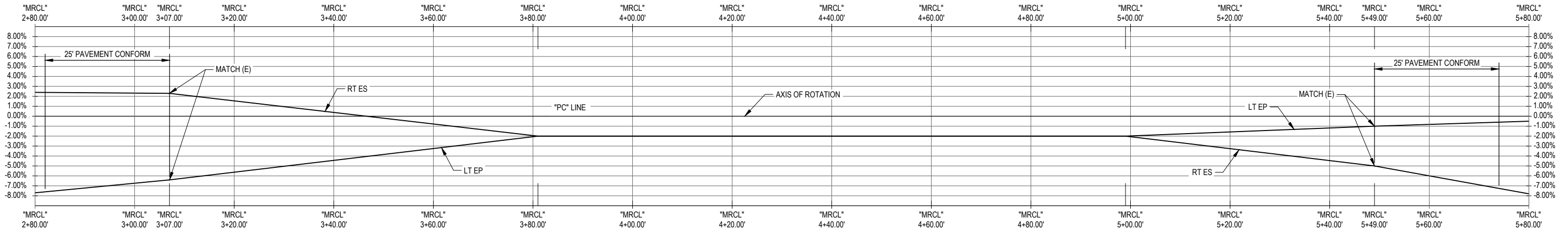
ROAD NAME: MONUMENT ROAD	DESIGN SECTION: ENGINEERING
ROAD NO: 3F020	MILE POST: 0.00
PROJECT NO.: 4308-CA-DR PW#1276	DESIGNED BY: C.PROVO
CONTRACT NO.: 217356	DRAWN BY: C.PROVO
DRAWING FILE NAME: 11200624_07_C102-PROFILE AND SUPER.dwg	REVIEWED BY: J.WOLF
PLOT DATE: 07/01/2020	Sheet: 7
	APPROVED BY: J.WOLF

COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS	SHEET 7 OF 23
STORM DAMAGE REPAIR MONUMENT ROAD PM 0.00	
PROFILE AND SUPERELEVATION	

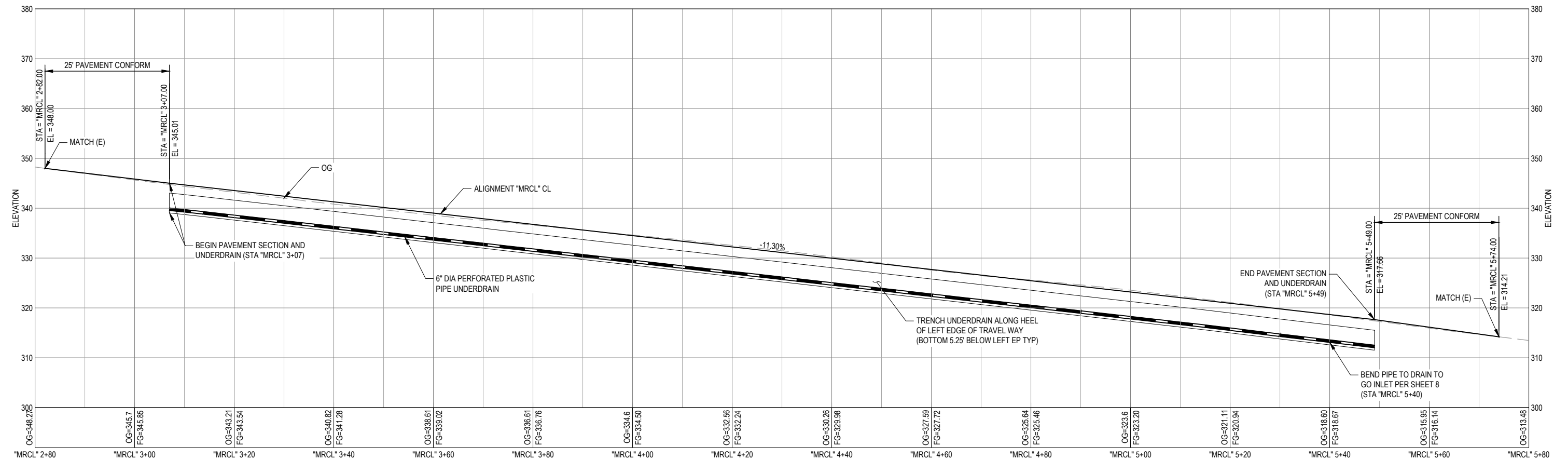
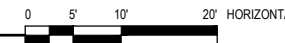
ROADWAY GEOMETRY					
STATION	LEFT TRAVEL LANE CROSS SLOPE	LEFT EOP ELEVATION	CROWN ELEVATION	RIGHT EOP ELEVATION	RIGHT TRAVEL LANE CROSS SLOPE
"MRCL" 3+07	-6.40%	344.27	345.01	345.27	2.30%
"MRCL" 3+81	-2.00%	336.42	344.22	336.42	-2.00%
"MRCL" 4+99	-2.00%	323.08	338.01	323.08	-2.00%
"MRCL" 5+49	-1.00%	317.55	317.66	317.09	-5.00%

Note: Negative cross slopes indicate downwards sloping away from centerline

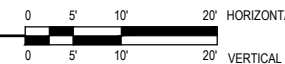
ROADWAY ELEVATIONS



MONUMENT ROAD PM 0.00 SUPERELEVATION



MONUMENT ROAD PM 0.00 PROFILE VIEW



65% DESIGN SUBMITTAL - 7/1/2020

NOTE: THIS PLAN IS ACCURATE FOR DRAINAGE AND UTILITIES ONLY



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CONTRACT NO: 217356	DRAWN BY: C.PROVO
DRAWING FILE NAME: 11200624_DRAINAGE AND UTILITIES.dwg	REVIEWED BY: J.WOLF
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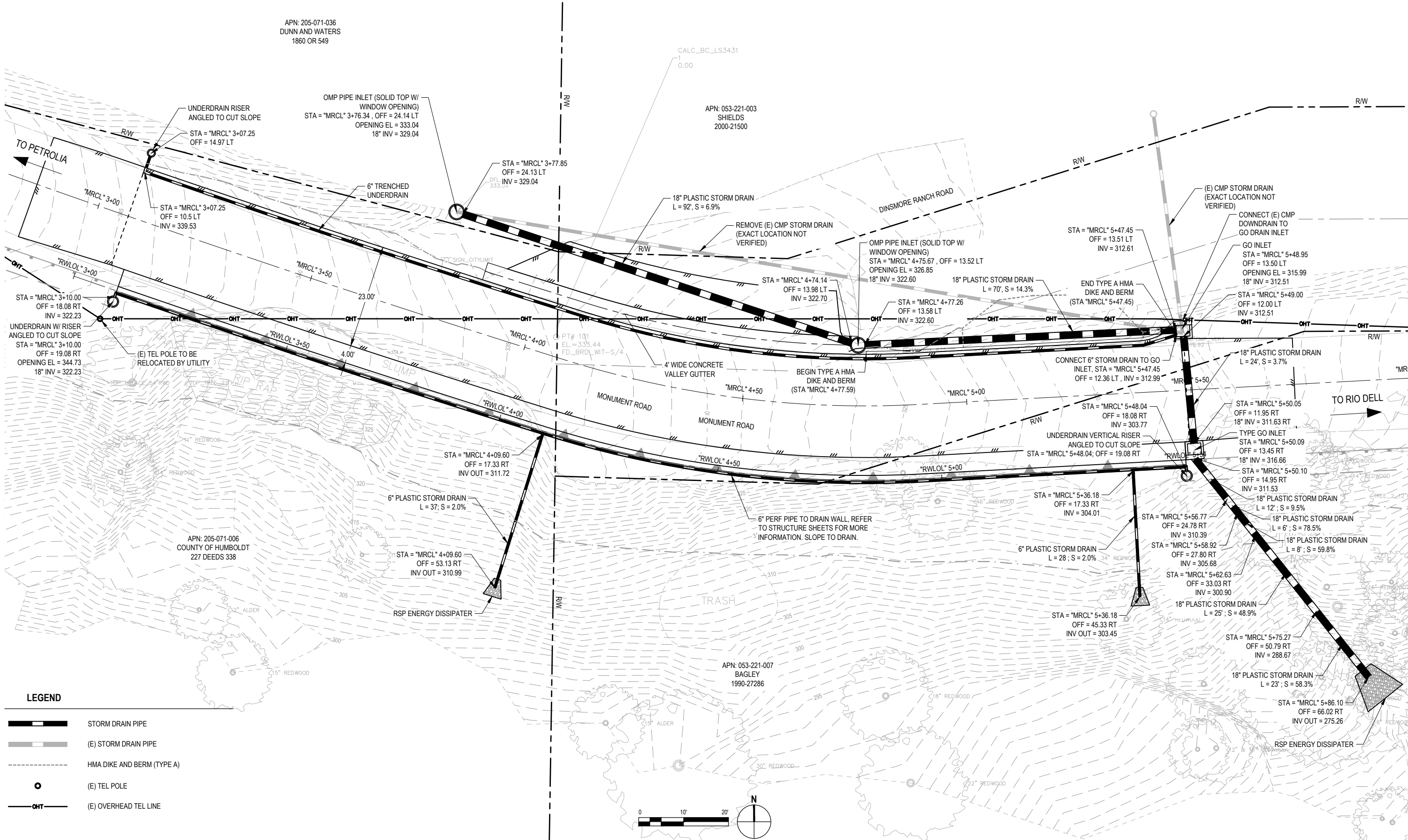
COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS	SHEET 8 OF 23
STORM DAMAGE REPAIR MONUMENT ROAD PM 0.00	
DRAINAGE AND UTILITIES	

APN: 205-071-036
DUNN AND WATERS
1860 OR 549

APN: 053-221-003
SHIELDS
2000-21500

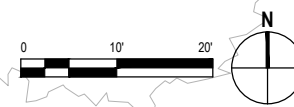
APN: 205-071-006
COUNTY OF HUMBOLDT
227 DEEDS 338

APN: 053-221-007
BAGLEY
1990-27286



LEGEND

- STORM DRAIN PIPE
- (E) STORM DRAIN PIPE
- HMA DIKE AND BERM (TYPE A)
- (E) TEL POLE
- (E) OVERHEAD TEL LINE





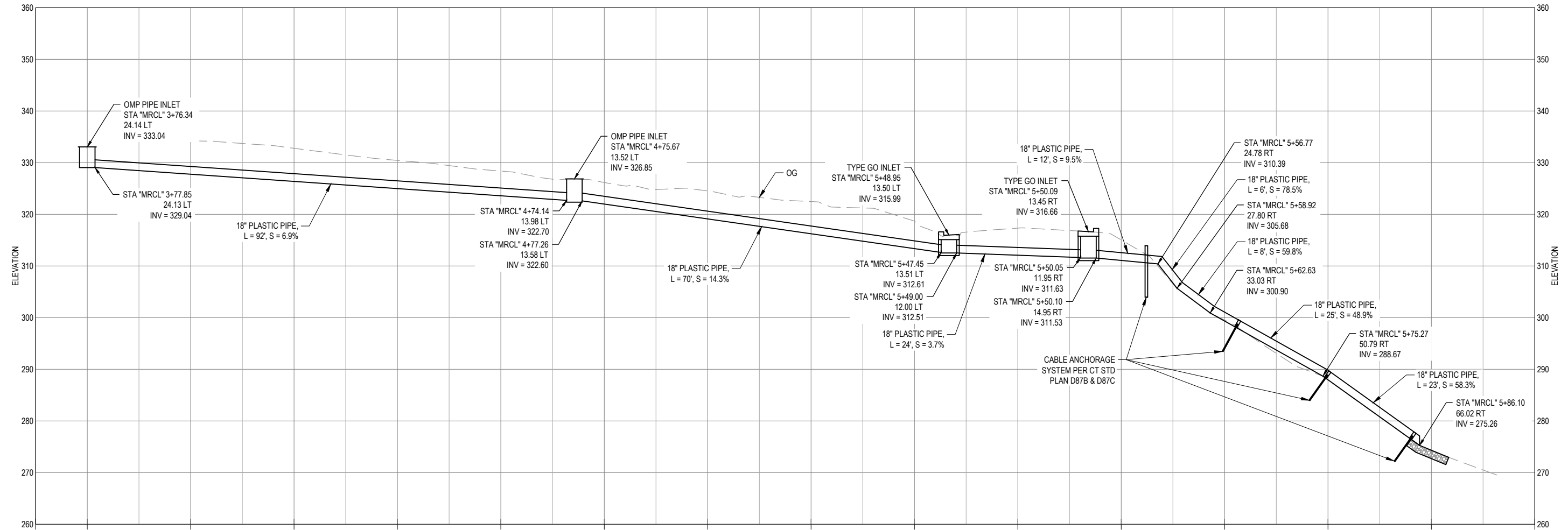
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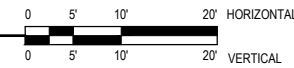
BAR IS ONE INCH ON ORIGINAL DRAWING
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ROAD NAME: MONUMENT ROAD	DESIGN SECTION: ENGINEERING
ROAD NO: JF020	MILE POST: 0.00
PROJECT NO.: 4308-CA-DR PW#1276	DESIGNED BY: C.PROVO
CONTRACT NO.: 217356	DRAWN BY: C.PROVO
DRAWING FILE NAME: 11200624_DRAINAGE PROFILE.dwg	REVIEWED BY: J.WOLF
PLOT DATE: 07/01/2020	Sheet: 9
	APPROVED BY: J.WOLF

COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS	SHEET 9 OF 23
STORM DAMAGE REPAIR MONUMENT ROAD PM 0.00	
DRAINAGE PROFILE	



18" STORM DRAIN SYSTEM PROFILE



NOTE: THIS PLAN IS ACCURATE FOR EROSION CONTROL ONLY

65% DESIGN SUBMITTAL - 7/1/2020

APN: 053-221-003
SHIELDS
2000-21500



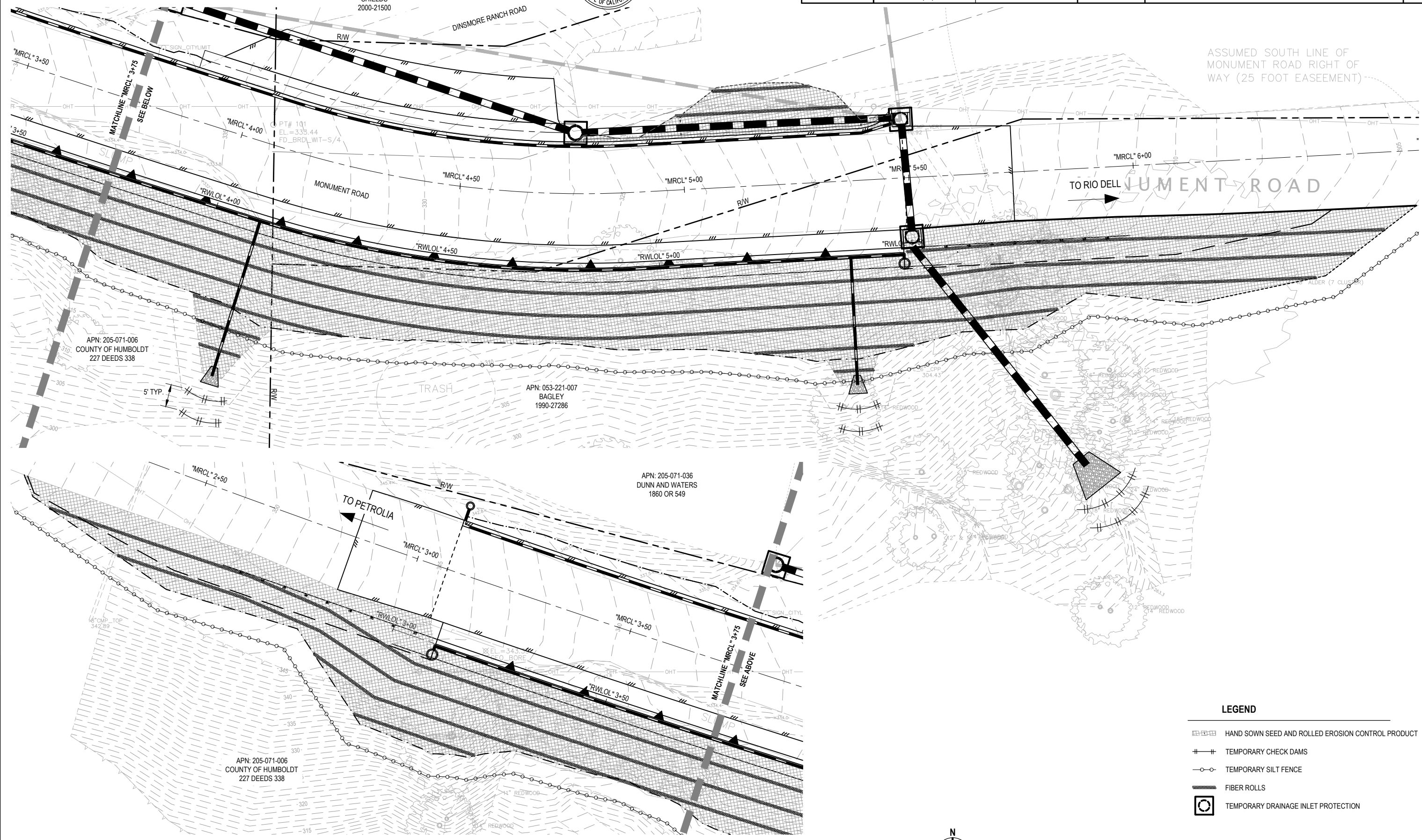
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ROAD NAME: MONUMENT ROAD	DESIGN SECTION: ENGINEERING
ROAD NO: 3F020	MILE POST: 0.00
PROJECT NO: 4308-CA-DR PW#1276	DESIGNED BY: C.PROVO
CONTRACT NO: 217356	DRAWN BY: C.PROVO
DRAWING FILE NAME: 11200624_09_C104-EROSION CONTROL.dwg	REVIEWED BY: J.WOLF
PLOT DATE: 07/01/2020	Sheet: 10
	APPROVED BY: J.WOLF

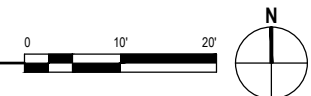
COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS	SHEET 10 OF 23
STORM DAMAGE REPAIR MONUMENT ROAD PM 0.00	
EROSION CONTROL	



ASSUMED SOUTH LINE OF MONUMENT ROAD RIGHT OF WAY (25 FOOT EASEMENT)

- LEGEND**
- HAND SOWN SEED AND ROLLED EROSION CONTROL PRODUCT
 - TEMPORARY CHECK DAMS
 - TEMPORARY SILT FENCE
 - FIBER ROLLS
 - TEMPORARY DRAINAGE INLET PROTECTION

MONUMENT ROAD PM 0.00 PLAN VIEW



NOTE: THIS PLAN IS ACCURATE FOR SIGNING AND STRIPING ONLY



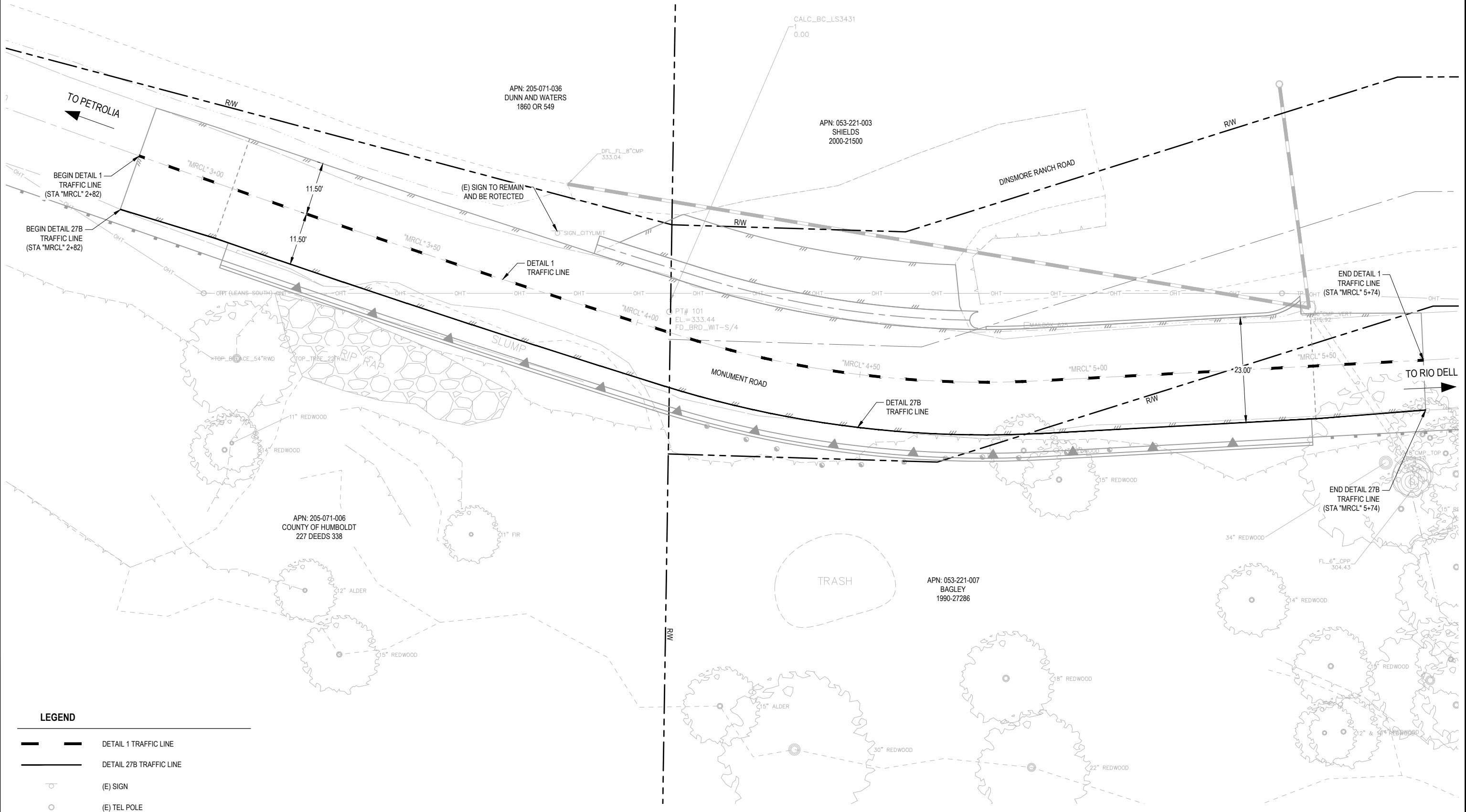
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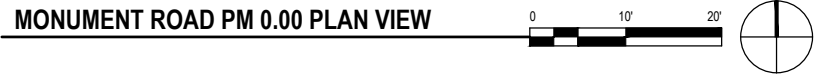
ROAD NAME: MONUMENT ROAD	DESIGN SECTION: ENGINEERING
ROAD NO: JF020	MILE POST: 0.00
PROJECT NO.: 4308-CA-DR PW#1276	DESIGNED BY: C.PROVO
CONTRACT NO.: 217356	DRAWN BY: C.PROVO
DRAWING FILE NAME: 11200624_SIGNAGE AND STRIPING.dwg	REVIEWED BY: J.WOLF
PLOT DATE: 07/01/2020	Sheet: 11
	APPROVED BY: J.WOLF

COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS	SHEET 11 OF 23
STORM DAMAGE REPAIR MONUMENT ROAD PM 0.00	
SIGNING AND STRIPING	



LEGEND

	DETAIL 1 TRAFFIC LINE
	DETAIL 27B TRAFFIC LINE
	(E) SIGN
	(E) TEL POLE





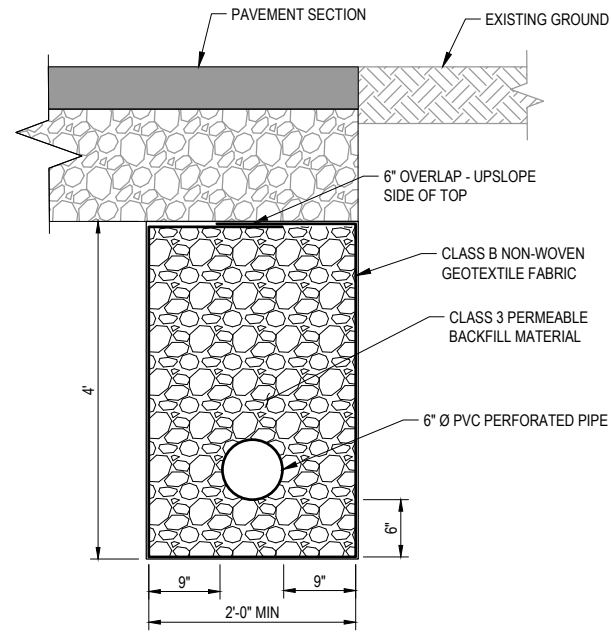
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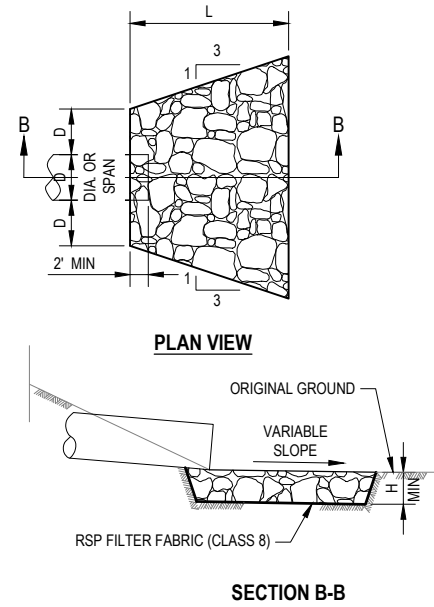
ROAD NAME: MONUMENT ROAD	DESIGN SECTION ENGINEERING
ROAD NO: JF020 MILE POST: 0.00	DESIGNED BY: C.PROVO
PROJECT NO.: 4308-CA-DR PW#1276	DRAWN BY: C.PROVO
CONTRACT NO.: 217356	REVIEWED BY: J.WOLF
DRAWING FILE NAME: 11200624_08_C103-CONSTRUCTION DETAILS.dwg	APPROVED BY: J.WOLF
PLOT DATE: 07/01/2020 Sheet: 12	

COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS	SHEET 12 OF 23
STORM DAMAGE REPAIR MONUMENT ROAD PM 0.00	
CONSTRUCTION DETAILS	



TYPICAL TRENCH UNDERDRAIN

NOT TO SCALE



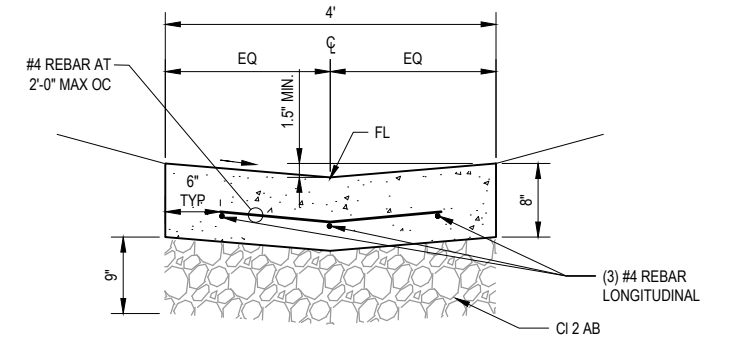
RSP ENERGY DISSIPATOR

NOT TO SCALE

CULVERT SIZE D (inches)	RSP CLASS	LENGTH OF APRON L (feet)	DEPTH OF APRON H (feet)	ESTIMATED RSP QUANTITY (CY)
6	2	4	1.5	1
18	2	8	1.5	3.5

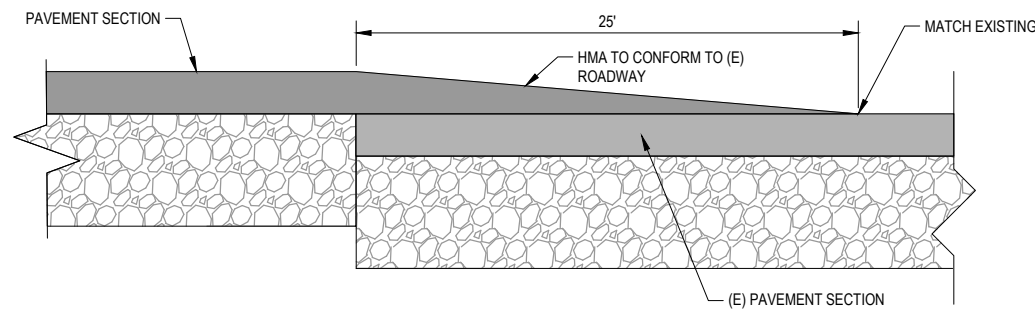
NOTE:

- EXCAVATION FOR PLACEMENT OF RSP WILL NOT BE MEASURED FOR PAYMENT.



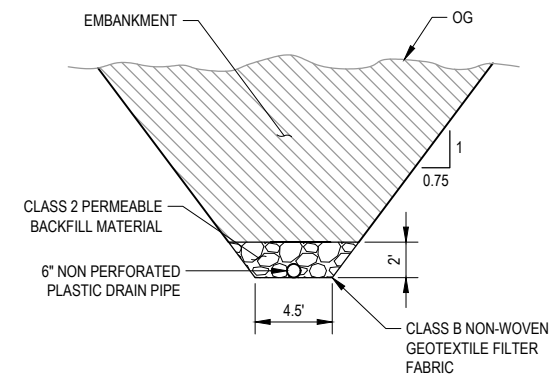
TYPICAL CONCRETE VALLEY GUTTER DETAIL

NOT TO SCALE



PAVEMENT CONFORM DETAIL

NOT TO SCALE



SUBDRAIN OUTLET DETAIL

NOT TO SCALE

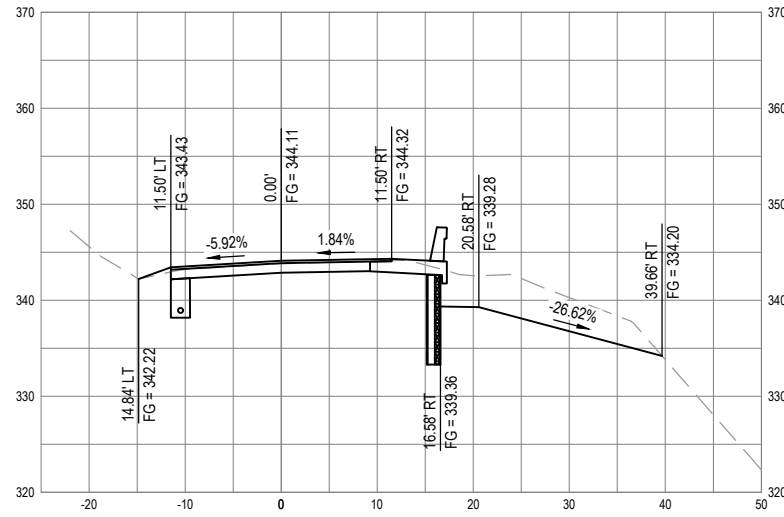


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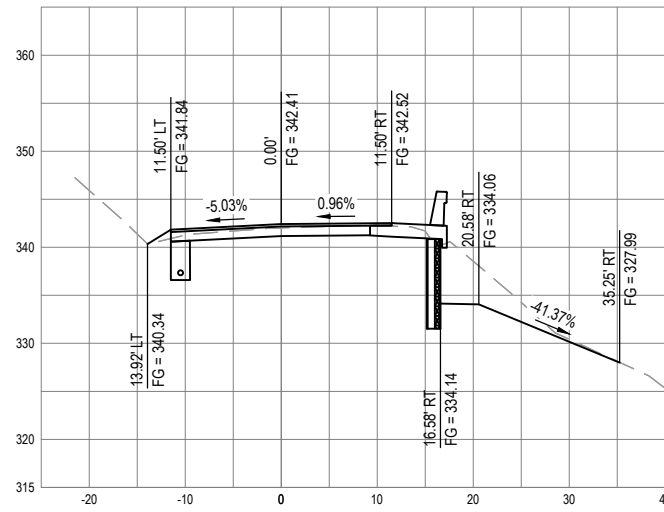


ROAD NAME: MONUMENT ROAD	DESIGN SECTION ENGINEERING
ROAD NO: 3F020	MILE POST: 0.00
PROJECT NO.: 4308-CA-DR PW#1276	DESIGNED BY: C.PROVO
CONTRACT NO.: 217356	DRAWN BY: C.PROVO
DRAWING FILE NAME: 11200624_10_C105-DESIGN SECTIONS.dwg	REVIEWED BY: J.WOLF
PLOT DATE: 07/01/2020	Sheet: 13
	APPROVED BY: J.WOLF

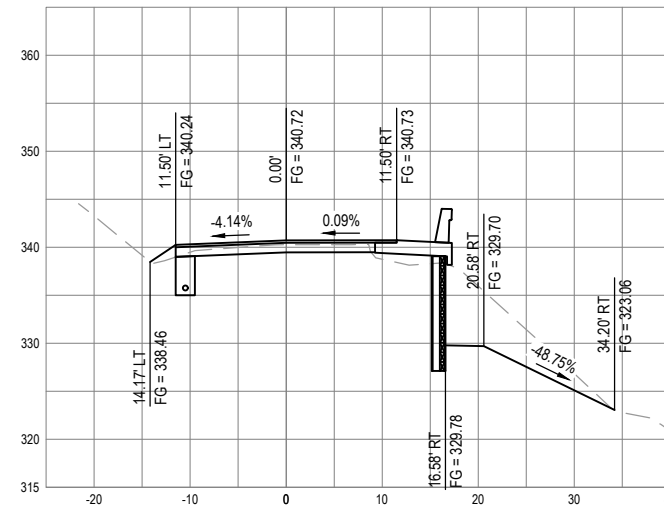
COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS	SHEET 13 OF 23
STORM DAMAGE REPAIR MONUMENT ROAD PM 0.00	
ROADWAY CROSS SECTIONS - 1 OF 2	



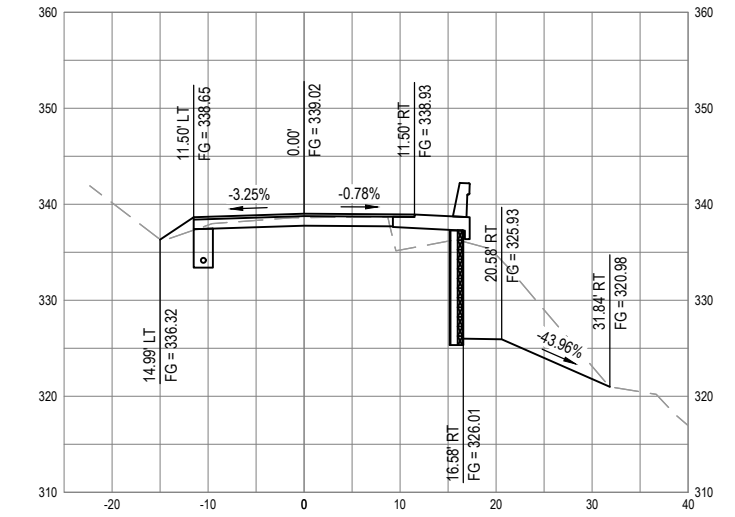
SECTION - STA "MRCL" 3+15



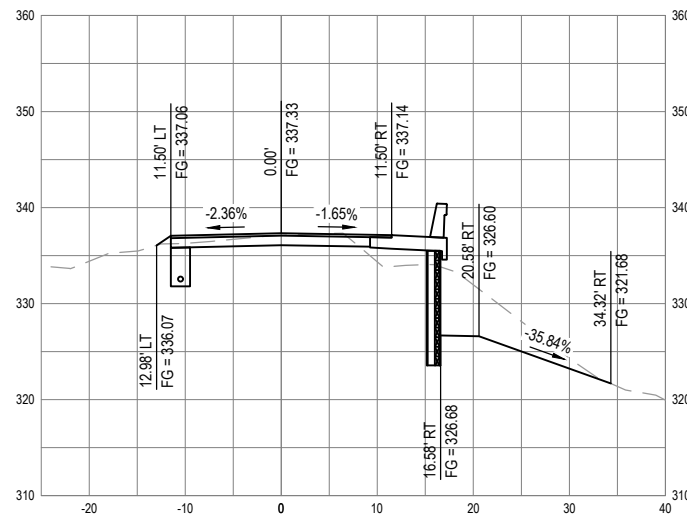
SECTION - STA "MRCL" 3+30



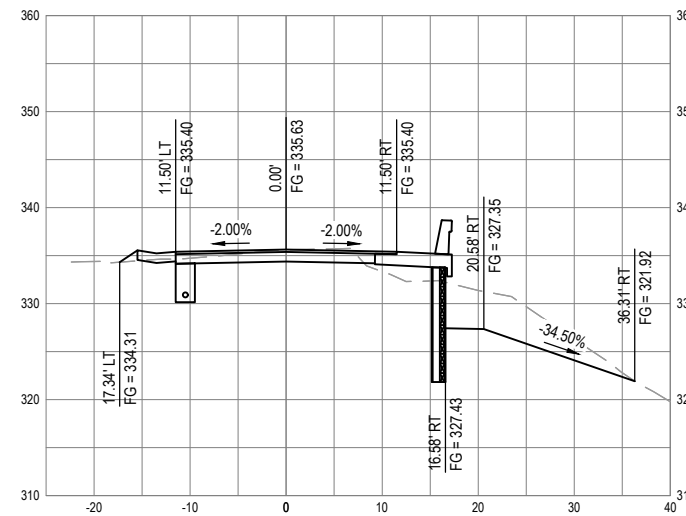
SECTION - STA "MRCL" 3+45



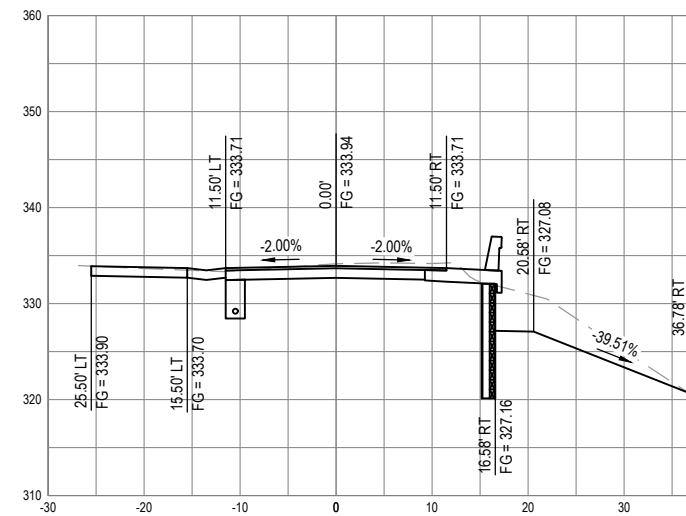
SECTION - STA "MRCL" 3+60



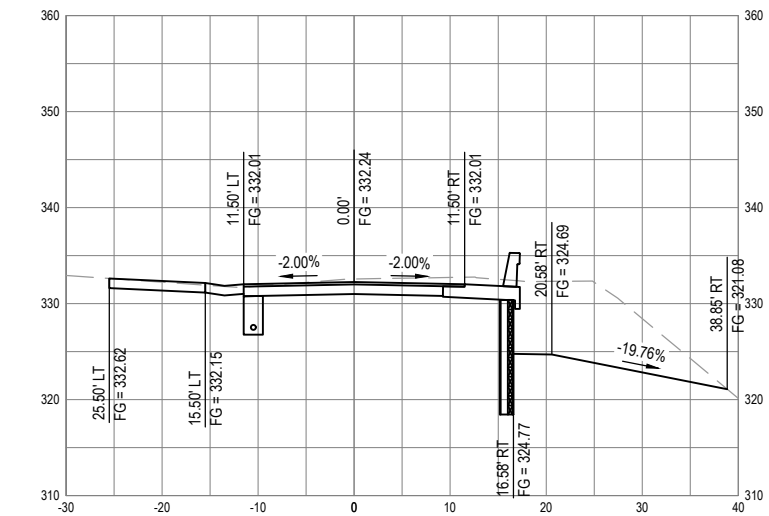
SECTION - STA "MRCL" 3+75



SECTION - STA "MRCL" 3+90



SECTION - STA "MRCL" 4+05



SECTION - STA "MRCL" 4+20



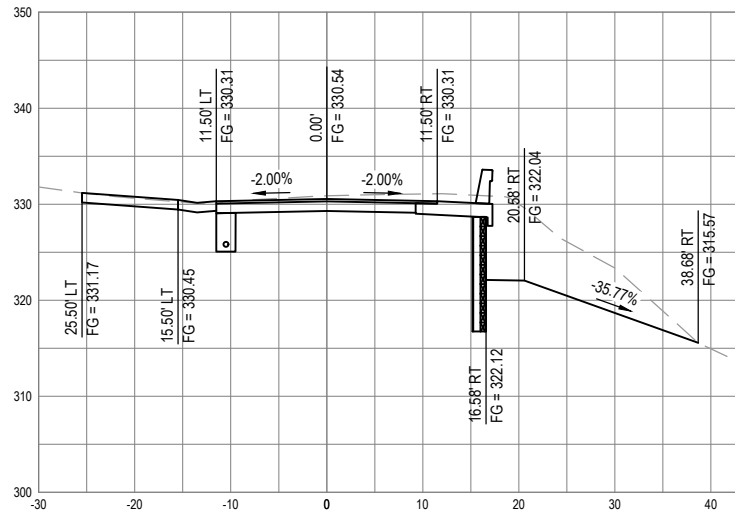
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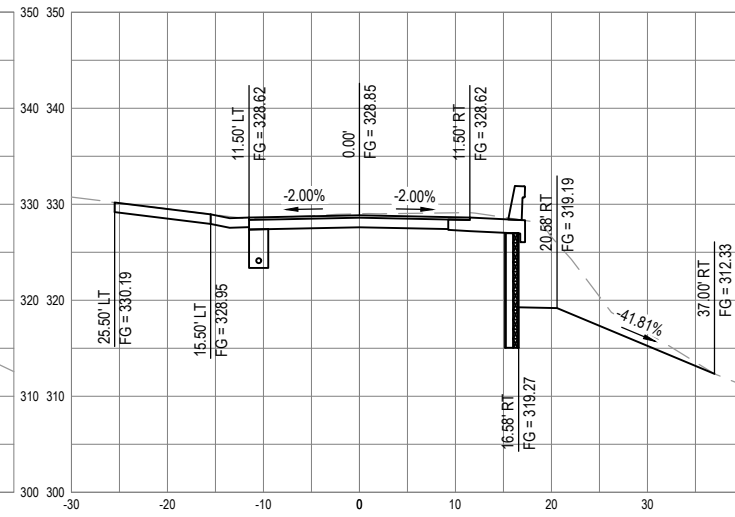
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ROAD NAME: MONUMENT ROAD	DESIGN SECTION ENGINEERING
ROAD NO: 3F020	MILE POST: 0.00
PROJECT NO.: 4308-CA-DR PW#1276	DESIGNED BY: C.PROVO
CONTRACT NO.: 217356	DRAWN BY: C.PROVO
DRAWING FILE NAME: 11200624_10_C105-DESIGN SECTIONS 2.dwg	REVIEWED BY: J.WOLF
PLOT DATE: 07/01/2020	Sheet: 14
	APPROVED BY: J.WOLF

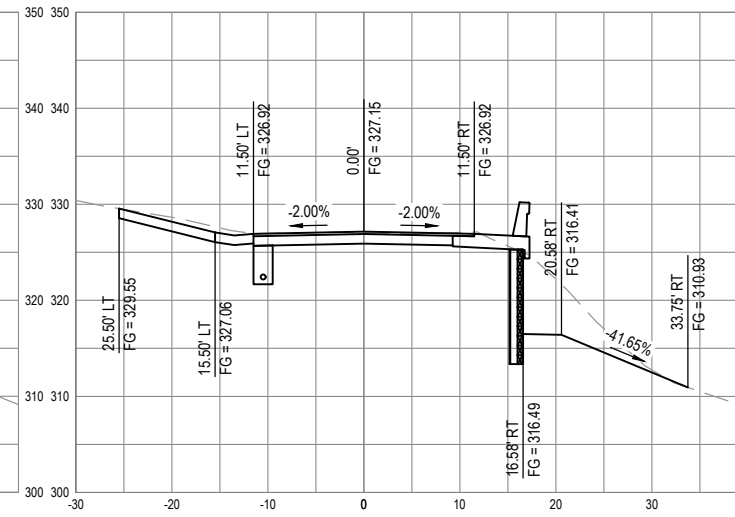
COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS
STORM DAMAGE REPAIR MONUMENT ROAD PM 0.00
ROADWAY CROSS SECTIONS - 2 OF 2



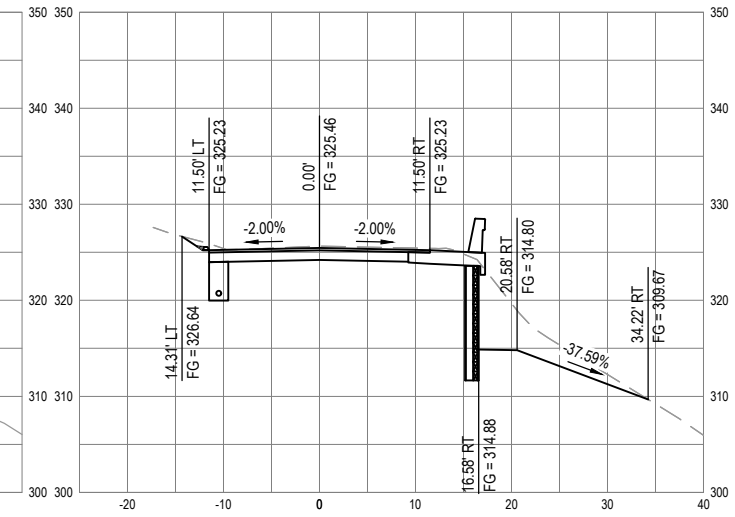
SECTION - STA "MRCL" 4+35



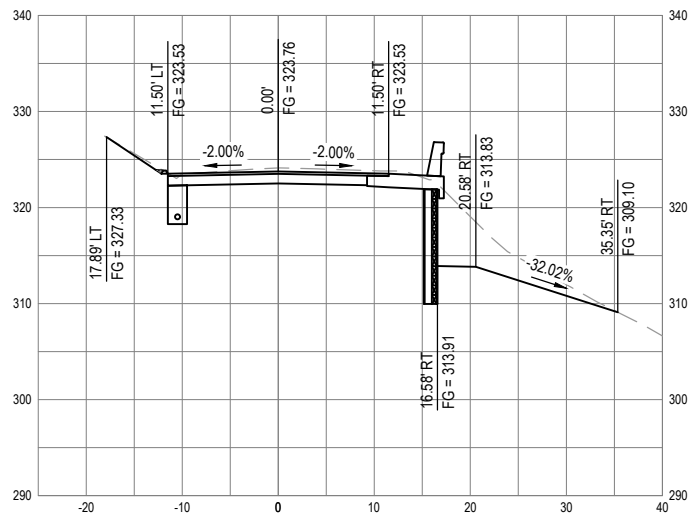
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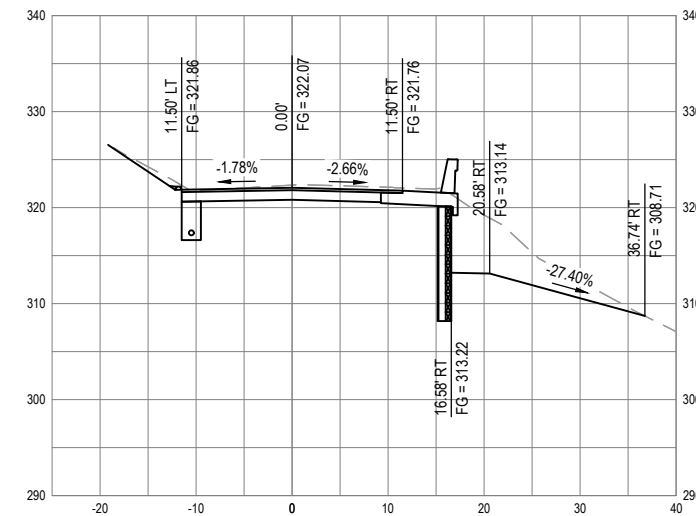
SECTION - STA "MRCL" 4+65



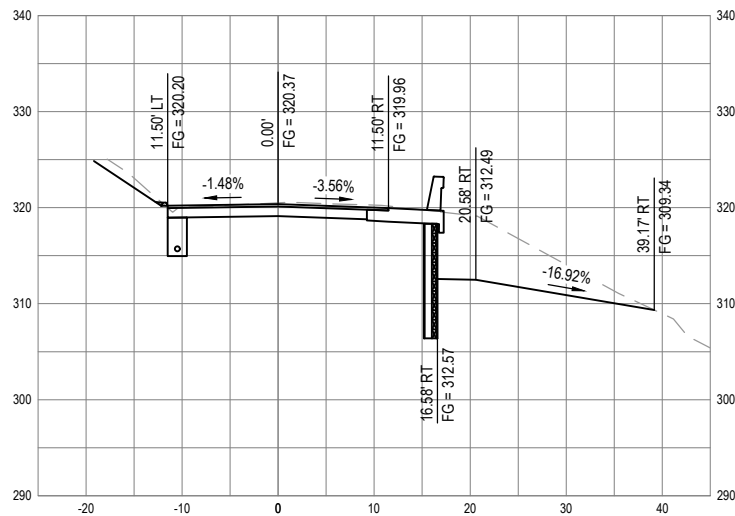
SECTION - STA "MRCL" 4+80



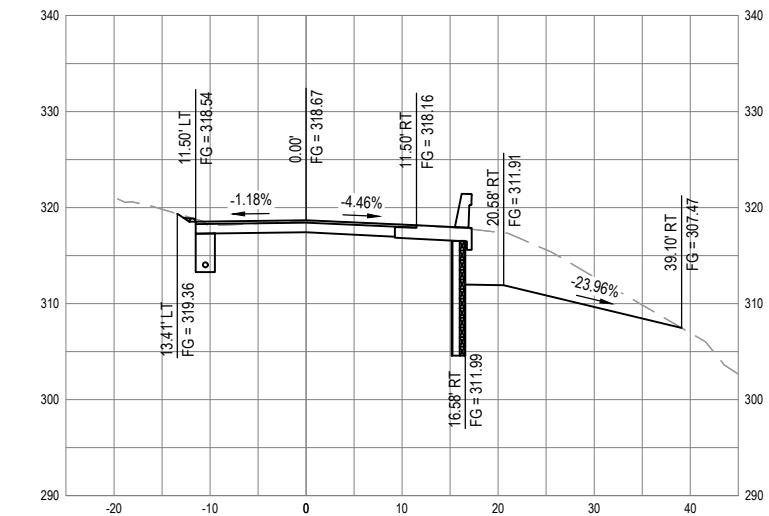
SECTION - STA "MRCL" 4+95



SECTION - STA "MRCL" 5+10



SECTION - STA "MRCL" 5+25



SECTION - STA "MRCL" 5+40



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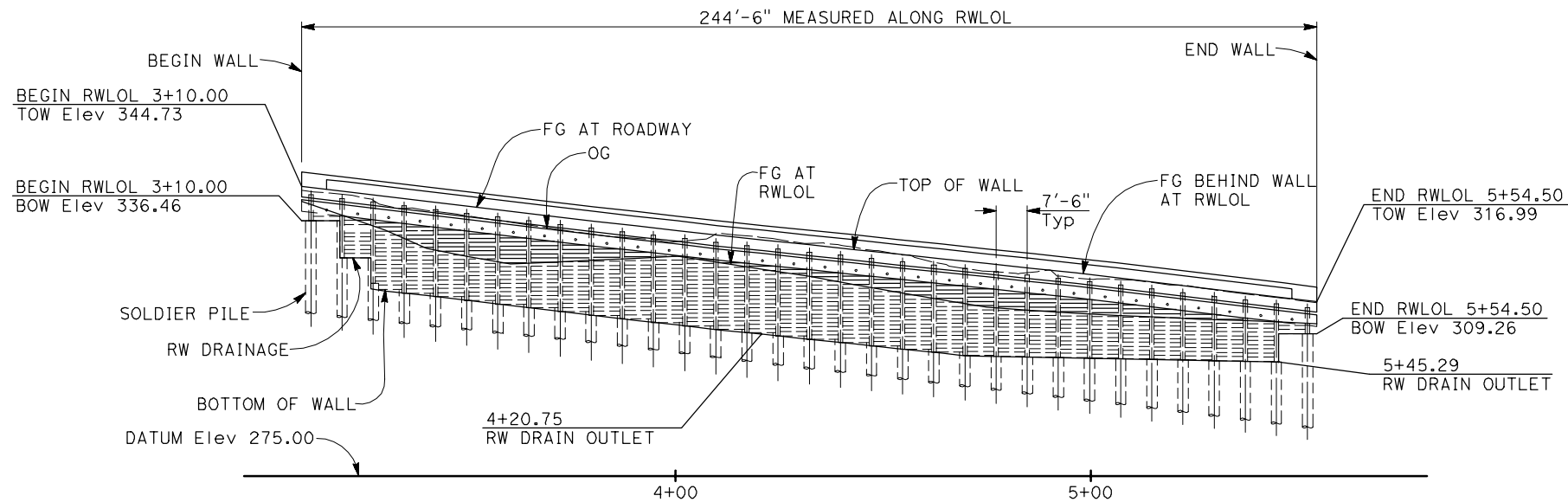
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ROAD NAME: MONUMENT ROAD	DESIGN SECTION ENGINEERING
ROAD NO: 3F020	MILE POST: 0.00
PROJECT NO.: 4308-CA-DR PW#1276	DESIGNED BY: AWR
CONTRACT NO.: 217356	DRAWN BY: AR
DRAWING FILE NAME: 20190482S1.dwg	REVIEWED BY:
PLOT DATE: 06/30/2020	SHEET: S1
	APPROVED BY:

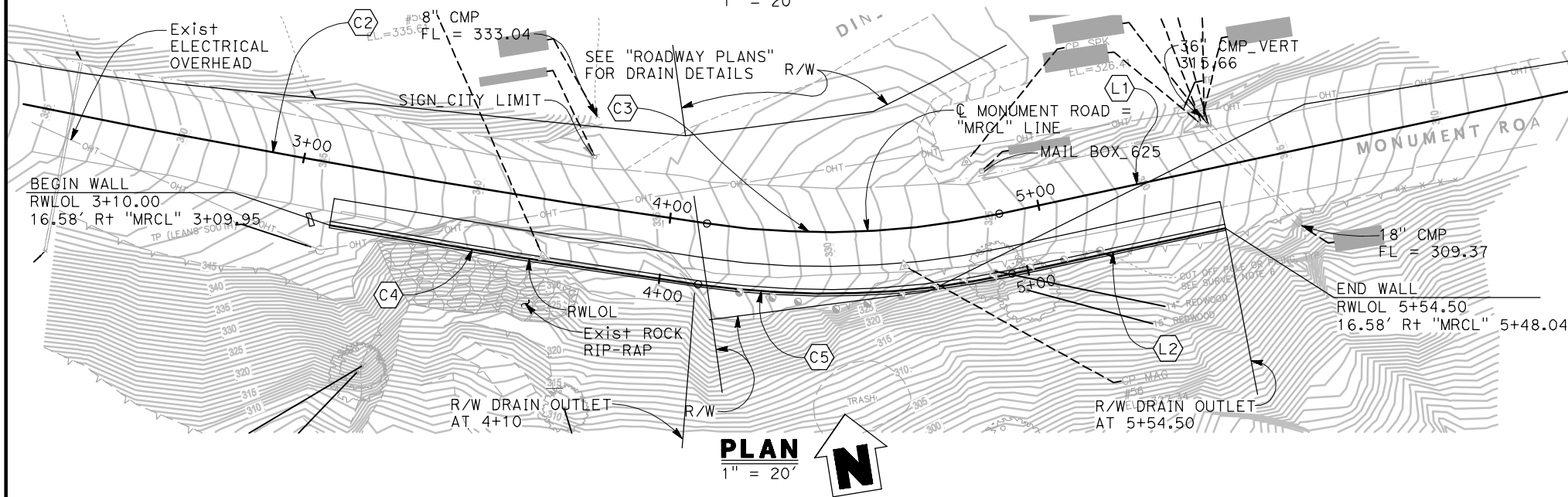
COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS	SHEET 15 OF 23
STORM DAMAGE REPAIR MONUMENT ROAD PM 0.0	
RETAINING WALL GENERAL PLAN	

LINE TABLE		
LINE #	LENGTH	DIRECTION
(L2)	58.79'	N 86°55'35" E

CURVE TABLE						
CURVE #	BC TANGENT BEARING	RADIUS	DELTA	TANGENT	LENGTH	EC TANGENT BEARING
(C4)	S 70°52'24" E	3227.58'	01°50'12"	51.73'	103.46'	S 72°42'36" E
(C5)	S 72°42'36" E	239.58'	20°21'50"	43.03'	85.15'	N 86°55'35" E



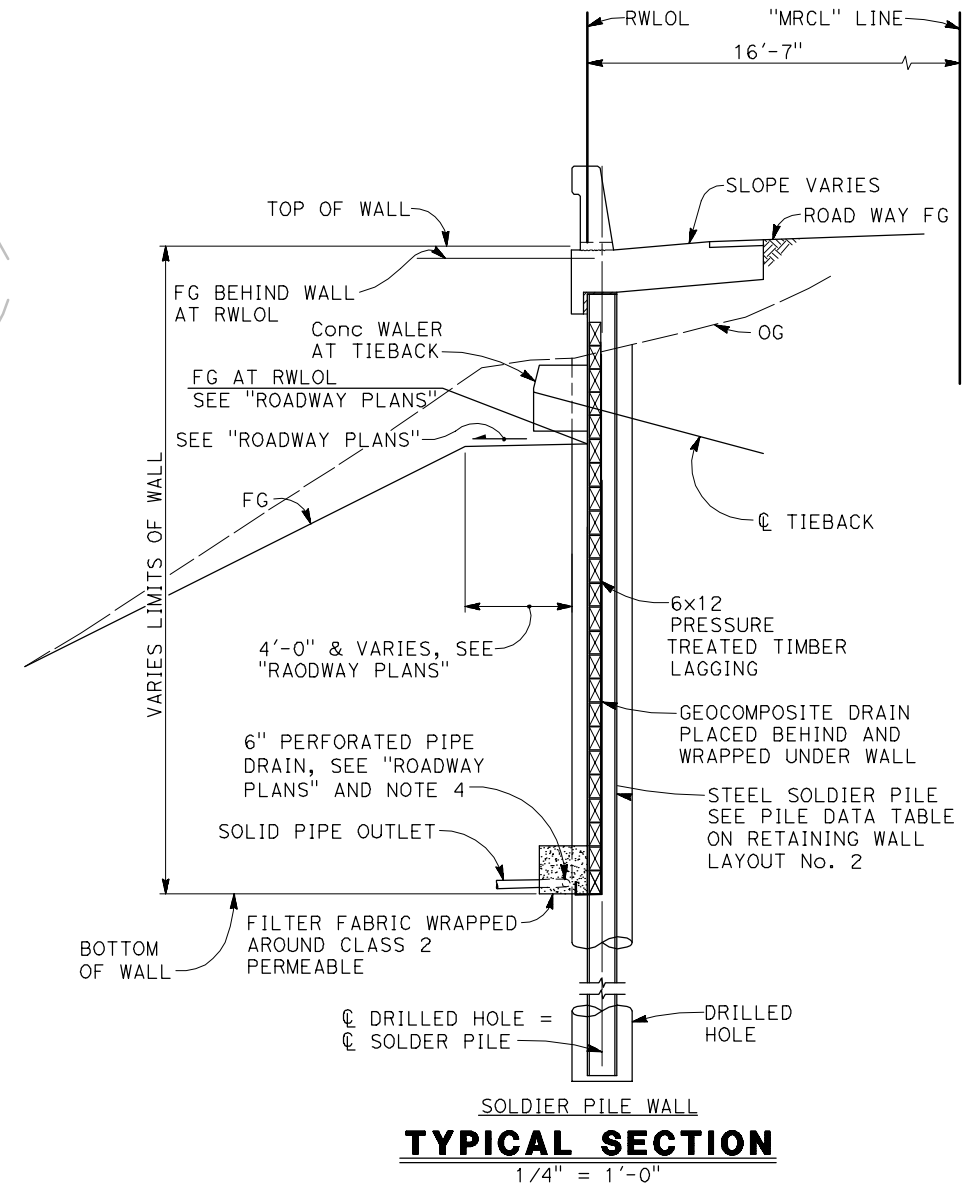
DEVELOPED ELEVATION
 1" = 20'



PLAN
 1" = 20'

NOTES:

1. Top of wall elevations shown are based on "ROADWAY PLANS". Verify elevations with "ROADWAY PLANS" prior to construction.
2. See "ROADWAY PLANS" for right-of-way, utility, drainage, roadway and layout information not noted.
3. "MRCL" Line layout information shown is for informational purposes only, see "ROADWAY PLANS" for "MR" Line.
4. 6" perforated drain pipe to be 3" Cir of RWLOL. Slope drain at Min 2%.



TYPICAL SECTION
 1/4" = 1'-0"



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ROAD NAME: MONUMENT ROAD	DESIGN SECTION: ENGINEERING	COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS	SHEET 16 OF 23
ROAD NO: F3C010 MILE POST: 5.00	PROJECT NO.: ER-32L0(118)	MONUMENT ROAD PM 0.0	
CONTRACT NO.: 217224	DESIGNED BY: AWR	STRUCTURAL GENERAL NOTES & ABBREVIATIONS	
DRAWING FILE NAME: 20190482S2.dwg	DRAWN BY: AR		
PLOT DATE: 06/30/2020 SHEET: S2	REVIEWED BY:		
	APPROVED BY:		

GENERAL NOTES
LOAD AND RESISTANCE FACTOR DESIGN

DESIGN: AASHTO LRFD Bridge Design Specifications 8th Edition with Caltrans Amendments, preface dated September 2017

Geotechnical Report by Crawford & Associates, Inc., dated April 2020

REINFORCED CONCRETE & Reinf: ASTM Designation: A706
 fy = 60,000 psi
 f'c = 3,600 psi

STRUCTURAL STEEL: Steel Piles ASTM Designation: A572/A, A572M Grade 50 Min or A992/A992M GRADE 50
 Steel Plates ASTM Designation: ASTM A572/A572M Grade 50
 Welded Studs ASTM Designation: A108, AASHTO/AWS D1.5
 Welding AWS D1.1

SOIL PARAMETERS: UNIT WEIGHT (γ) = 124 pcf
 At Rest Earth Pressure = 61 pcf
 Passive Earth Pressure
 Passive Arching Capability = 3.0
 Seismic Earth Pressure = 12H pcf
 Max Passive Pressure = 10,000 psf

LIVE LOAD Live Load Surcharge = 250 psf
 TIMBER LAGGING: PRESSURE TREATED DOUGLAS FIR No. 1, TIMBER TO BE FULL SAWN

PRESTRESSING STEEL:

Bars - ASTM Designation: A722 Type II (150 ksi)

Strand Tendons-ASTM Designation: A416
 (270 Ksi Low Relaxation steel)

FDL = Factored Design Load on Ground Anchor (kips)
 FTL = Factored Test Load per anchor (Kips) = 1.0 FDL
 LL = Lock-off Load (Kips) = 0.55 FDL
 fpu = Minimum tensile strength of prestressing steel
 As = Minimum cross sectional area of prestressing steel in ground anchor (square inch)

$As(\text{Min}) = \frac{1.0 \text{ FTL}}{0.75 \text{ fpu}}$ (Strands)

$As(\text{Min}) = \frac{1.0 \text{ FTL}}{0.80 \text{ fpu}}$ (Bars)

For FDL, see "GROUND ANCHOR DATA TABLE" on "RETAINING WALL LAYOUT No. 2" sheet

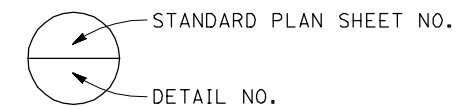
INDEX TO SOLDIER PILE WALL PLANS

SHEET NO.	TITLE
9	S1 RETAINING WALL GENERAL PLAN
10	S2 STRUCTURAL GENERAL NOTES & ABBREVIATIONS
11	S3 RETAINING WALL LAYOUT No. 1
12	S4 RETAINING WALL LAYOUT No. 2
13	S5 SOLDIER PILE WALL DETAILS No. 1
14	S6 SOLDIER PILE WALL DETAILS No. 2
15	S7 GROUND ANCHOR DETAILS

2018 STANDARD PLANS

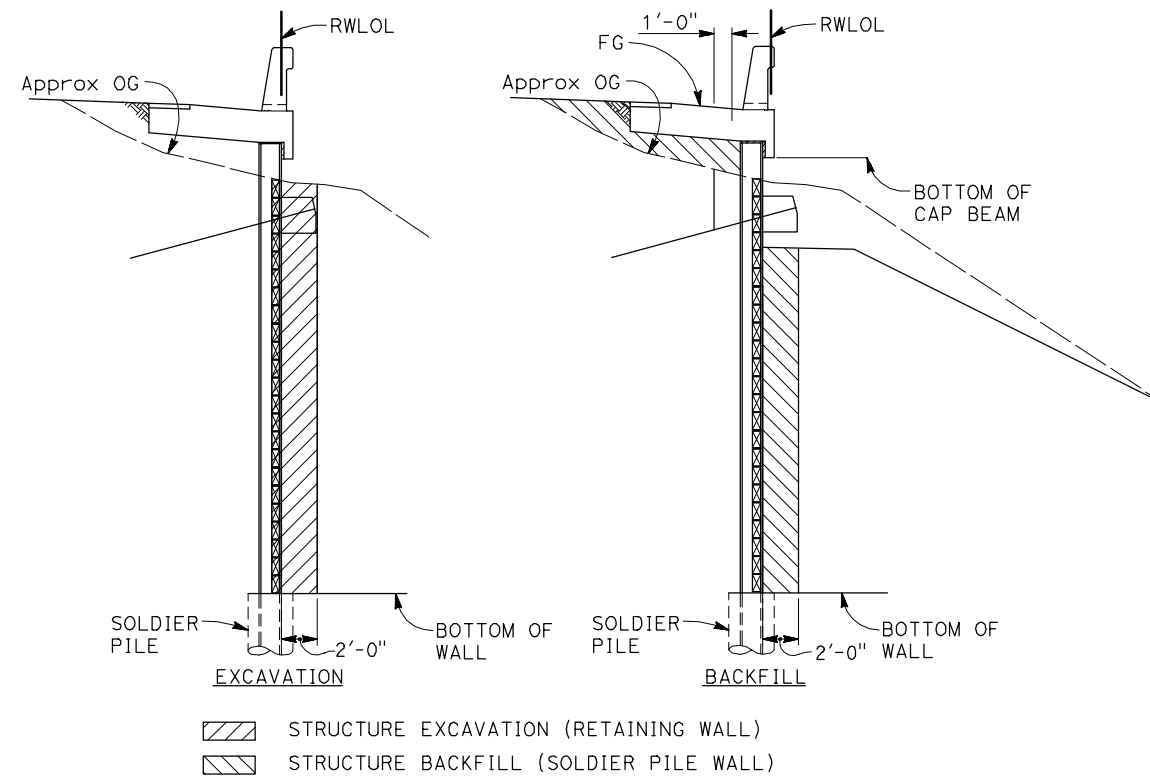
A3A	ABBREVIATIONS (SHEET 1 OF 3)
A3B	ABBREVIATIONS (SHEET 2 OF 3)
A3C	ABBREVIATIONS (SHEET 3 OF 3)
A10A	LEGEND - LINES AND SYMBOLS (SHEET 1 OF 5)
A10B	LEGEND - LINES AND SYMBOLS (SHEET 2 OF 5)
A10C	LEGEND - LINES AND SYMBOLS (SHEET 3 OF 5)
A10D	LEGEND - LINES AND SYMBOLS (SHEET 4 OF 5)
A10E	LEGEND - LINES AND SYMBOLS (SHEET 5 OF 5)
B0-3	BRIDGE DETAILS
B11-47	CABLE RAILING
D102	UNDERDRAINS

LEGEND



ABBREVIATIONS

CL	CENTER LINE
BOW	BOTTOM OF WALL
D/S	DOWN STATION
RWLOL	RETAINING WALL LAYOUT LINE
TOW	TOP OF WALL
U/S	UP STATION



SOLDIER PILE WALL

LIMITS OF PAYMENT FOR STRUCTURE EXCAVATION AND BACKFILL (SOLDIER PILE WALL)

NO SCALE

FINISH COAT ON ALL PILE SURFACES. LIMITS OF FINISH COAT EXTENDS FROM TOP OF PILE TO 5 FEET BELOW BOTTOM OF LAGGING FOR SOLDIER PILE, TYP



UNDERCOAT ON ALL PILE SURFACES, TYP

LIMITS OF CLEAN AND PAINT STEEL SOLDIER PILE

NO SCALE



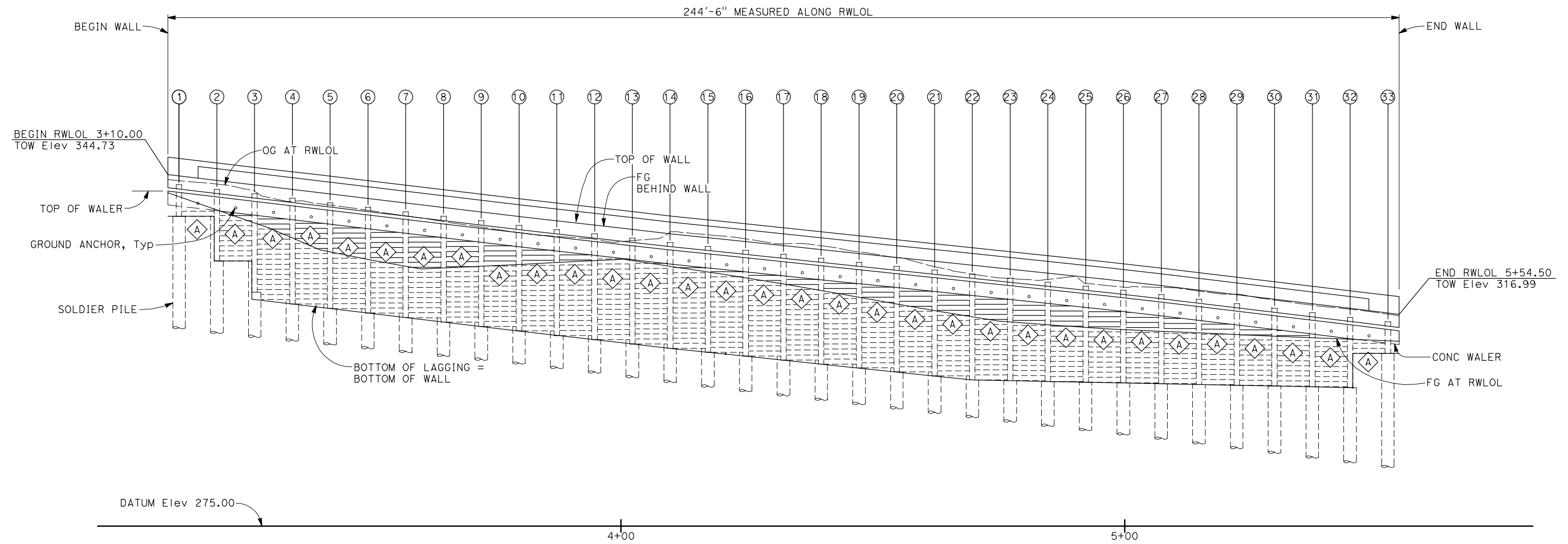
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ROAD NAME: MONUMENT ROAD	DESIGN SECTION: ENGINEERING
ROAD NO: F3C010	MILE POST: 5.00
PROJECT NO.: ER-32L0(118)	DESIGNED BY: AWR
CONTRACT NO.: 217224	DRAWN BY: AR
DRAWING FILE NAME: 20190482S3.dwg	REVIEWED BY:
PLOT DATE: 06/30/2020	APPROVED BY:
SHEET: S3	

COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS	SHEET 17 OF 23
MONUMENT ROAD PM 0.0	
RETAINING WALL LAYOUT No. 1	

- LEGEND:
- ① Indicates Soldier Pile No., see S4 "PILE DATA TABLE"
 - ◇ A Indicates GROUND ANCHOR TYPE, SEE S4 "GROUND ANCHOR DATA TABLE"
- NOTE:
1. Top of wall elevations shown are based on "ROADWAY PLANS", verify elevations with "ROADWAY PLANS" prior to construction.



MIRRORED DEVELOPED ELEVATION - PILE LAYOUT
 1" = 10'



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BAR IS ONE INCH ON ORIGINAL DRAWING	ROAD NAME: MONUMENT ROAD	DESIGN SECTION ENGINEERING
	ROAD NO: F3C010	MILE POST: 5.00
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	PROJECT NO.: ER-32L0(118)	DESIGNED BY: AWR
	CONTRACT NO.: 217224	DRAWN BY: AR
	DRAWING FILE NAME: 2019048254.dwg	REVIEWED BY:
	PLOT DATE: 06/30/2020	SHEET: S4
		APPROVED BY:

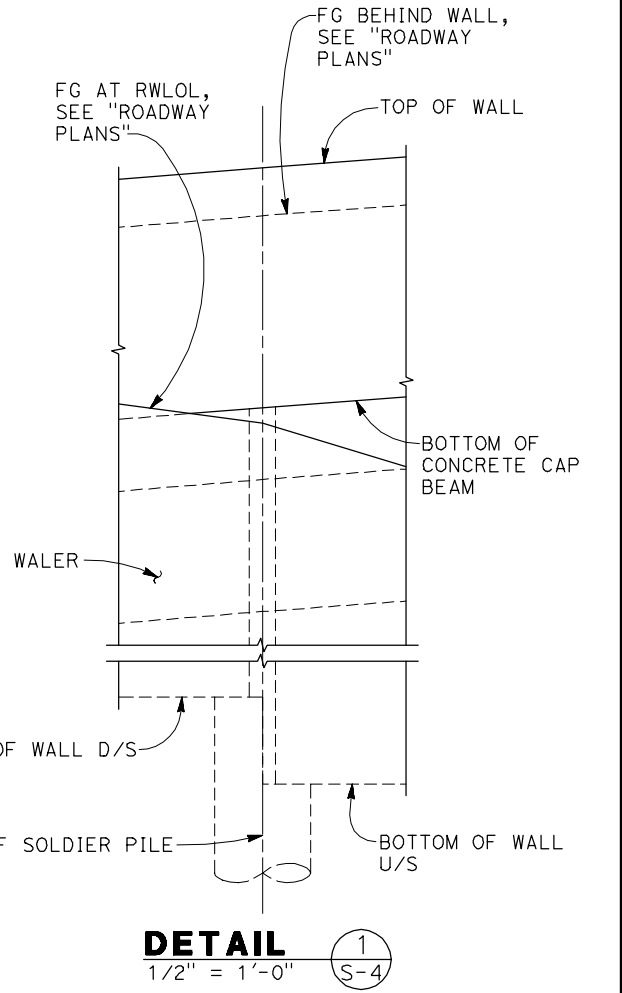
COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS	SHEET 18 OF 23
MONUMENT ROAD PM 0.0	
RETAINING WALL LAYOUT No. 2	

PILE DATA TABLE

PILE #	RWLOL STATION (FT)	PILE SECTION (FT)	TOP OF WALL ELEVATION (FT), SEE NOTE 1	DRILLED HOLE SIZE (IN)	PILE CUTOFF ELEVATION (FT)	BOTTOM OF WALL ELEVATION (FT), SEE ① S-4		PILE LENGTH (FT)	PILE TIP ELEVATION (FT)
						D/S	U/S		
BEGIN WALL	3+10.00	-	344.73	-	-	-	-	-	-
①	3+12.25	W18x106	344.47	30.00	342.39	-	336.21	43.92	298.47
②	3+19.75	W18x106	343.62	30.00	341.54	336.21	329.62	43.92	297.62
③	3+27.25	W18x106	342.77	30.00	340.69	329.62	319.77	43.92	296.77
④	3+34.75	W18x106	341.92	30.00	339.84	319.77	318.92	43.92	295.92
⑤	3+42.25	W18x106	341.07	30.00	338.99	318.92	318.07	43.92	295.07
⑥	3+49.75	W18x106	340.22	30.00	338.14	318.07	317.22	43.92	294.22
⑦	3+57.25	W18x106	339.37	30.00	337.29	317.22	316.37	43.92	293.37
⑧	3+64.75	W18x106	338.52	30.00	336.44	316.37	315.52	43.92	292.52
⑨	3+72.25	W18x106	337.67	30.00	335.59	315.52	314.67	43.92	291.67
⑩	3+79.75	W18x106	336.82	30.00	334.74	314.67	313.82	43.92	290.82
⑪	3+87.25	W18x106	335.97	30.00	333.89	313.82	312.97	43.92	289.97
⑫	3+94.75	W18x106	335.12	30.00	333.04	312.97	312.12	43.92	289.12
⑬	4+02.25	W18x106	334.27	30.00	332.19	312.12	311.27	43.92	288.27
⑭	4+09.75	W18x106	333.41	30.00	331.33	311.27	310.41	43.92	287.41
⑮	4+17.25	W18x106	332.56	30.00	330.48	310.41	309.56	43.92	286.56
⑯	4+24.75	W18x106	331.71	30.00	329.63	309.56	308.71	43.92	285.71
⑰	4+32.25	W18x106	330.86	30.00	328.78	308.71	307.86	43.92	284.86
⑱	4+39.75	W18x106	330.01	30.00	327.93	307.86	307.01	43.92	284.01
⑲	4+47.25	W18x106	329.16	30.00	327.08	307.01	306.16	43.92	283.16
⑳	4+54.75	W18x106	328.31	30.00	326.23	306.16	305.31	43.92	282.31
㉑	4+62.25	W18x106	327.46	30.00	325.38	305.31	304.46	43.92	281.46
㉒	4+69.75	W18x106	326.61	30.00	324.53	304.46	304.46	43.92	280.61
㉓	4+77.25	W18x106	325.76	30.00	323.68	304.46	304.46	43.92	279.76
㉔	4+84.75	W18x106	324.91	30.00	322.83	304.46	304.46	43.92	278.91
㉕	4+92.25	W18x106	324.06	30.00	321.98	304.46	304.46	43.92	278.06
㉖	4+99.75	W18x106	323.20	30.00	321.12	304.46	304.46	43.92	277.20
㉗	5+07.25	W18x106	322.35	30.00	320.27	304.46	304.46	43.92	276.35
㉘	5+14.75	W18x106	321.50	30.00	319.42	304.46	304.46	43.92	275.50
㉙	5+22.25	W18x106	320.65	30.00	318.57	304.46	304.46	43.92	274.65
㉚	5+29.75	W18x106	319.80	30.00	317.72	304.46	304.46	43.92	273.80
㉛	5+37.25	W18x106	318.95	30.00	316.87	304.46	304.46	43.92	272.95
㉜	5+44.75	W18x106	318.10	30.00	316.02	304.46	304.46	43.92	272.10
㉝	5+52.25	W18x106	317.25	30.00	315.17	304.46	-	43.92	-
END WALL	5+54.50	-	316.99	-	-	-	-	43.92	-

- NOTES:
- Top of Wall elevations shown are based on "ROADWAY PLANS", verify elevations with "ROADWAY PLANS" prior to construction. Notify Engineer if top of wall elevations are higher than shown on plans.
 - Per the Geotechnical report by Crawford & Associates, Inc., dated April 2020, the ground anchor unbonded length shall extend at least 5 feet or H/5, whichever is greater (H = wall Height) beyond the "intact" material.

LEGEND:
 ① Indicates Soldier Pile No., see "PILE DATA TABLE"



GROUND ANCHOR TYPE	FACTORED DESIGN LOAD, FDL (kips)	MINIMUM UNBONDED LENGTH (FT) SEE NOTE 2
Ⓐ	214	23'-0"

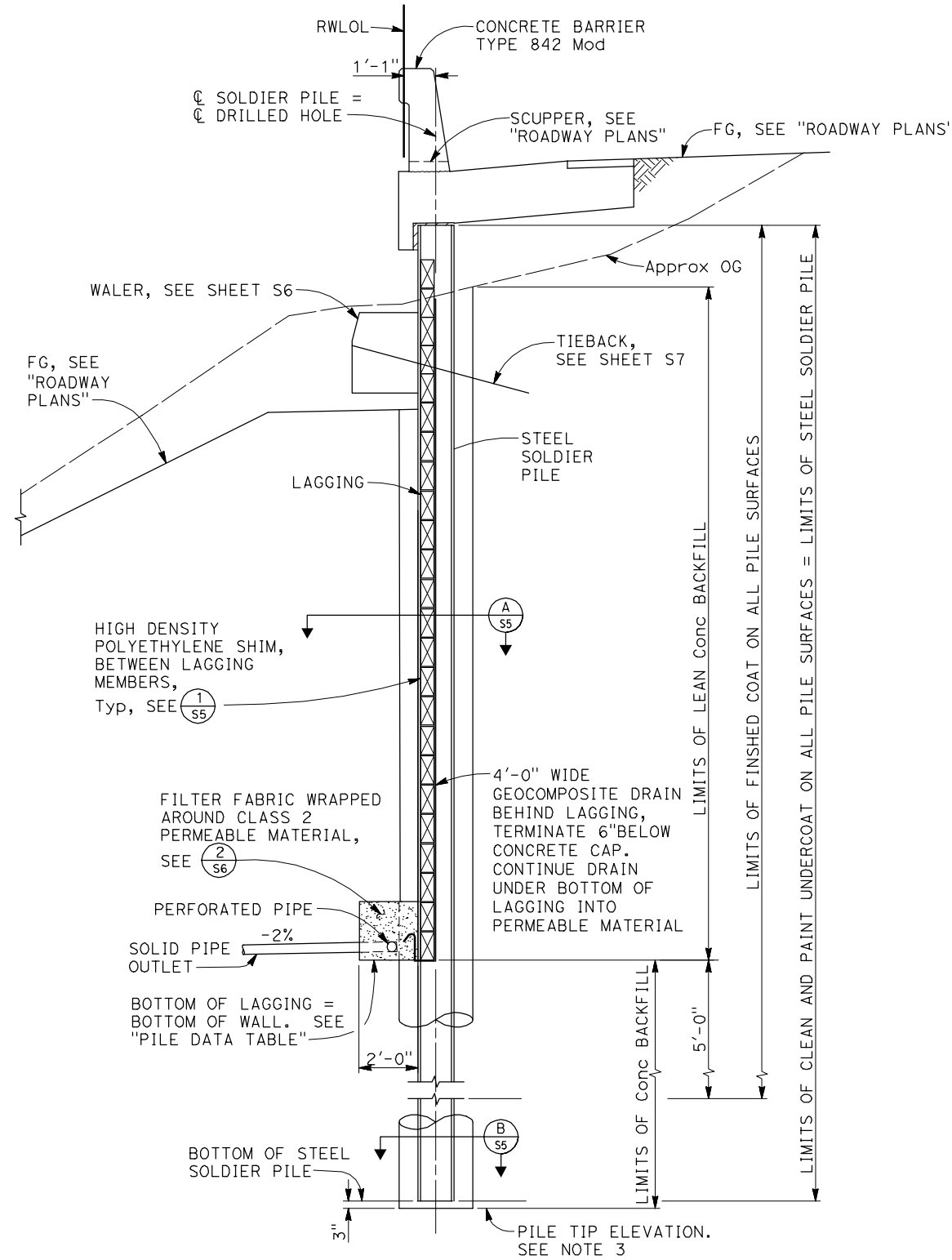
2019048.2 (2019048254)



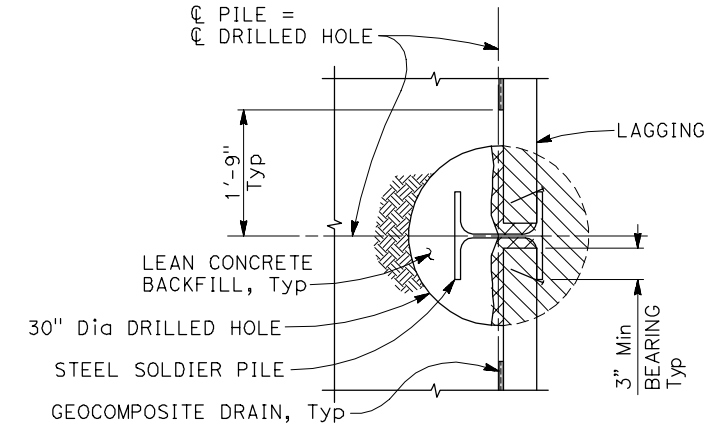
BIGGS CARDOSA ASSOCIATES INC
BCA
 STRUCTURAL ENGINEERS
 1111 Broadway, Ste. 1510
 Oakland, California 94607
 510-625-9900

BAR IS ONE INCH ON ORIGINAL DRAWING IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	ROAD NAME: MONUMENT ROAD	DESIGN SECTION: ENGINEERING	COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS	SHEET 19 OF 23
	ROAD NO: F3C010	MILE POST: 5.00	MONUMENT ROAD PM 0.0	
	PROJECT NO.: ER-32L0(118)	DESIGNED BY: AWR	SOLDER PILE WALL DETAILS No.1	
	CONTRACT NO.: 217224	DRAWN BY: AR		
	DRAWING FILE NAME: 20190482S5.dwg	REVIEWED BY:		
	PLOT DATE: 06/30/2020	SHEET: S5	APPROVED BY:	

- NOTES:
 1. For "Pile Data Table", see "S-4 RETAINING WALL LAYOUT No. 2" sheet
 2. Concrete cap beam must be $f'c = 3.6 \text{ ksi} @ 28 \text{ days}$.

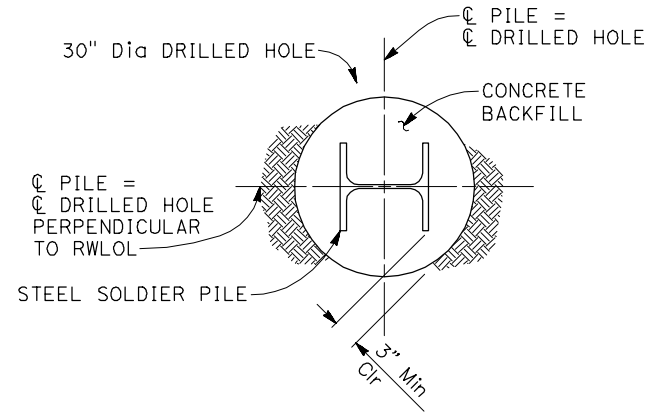


SOLDER PILE WALL
TYPICAL SECTION
 $3/8" = 1'-0"$



SECTION AT LAGGING (A)
 $3/4" = 1'-0"$

- LEAN CONCRETE TO BE CHIPPED AWAY AS REQUIRED FOR LAGGING INSTALLATION
- LIMITS OF FILL WITH STRUCTURAL BACKFILL AFTER LAGGING INSTALLATION



SECTION AT DRILLED HOLE (B)
 $3/4" = 1'-0"$

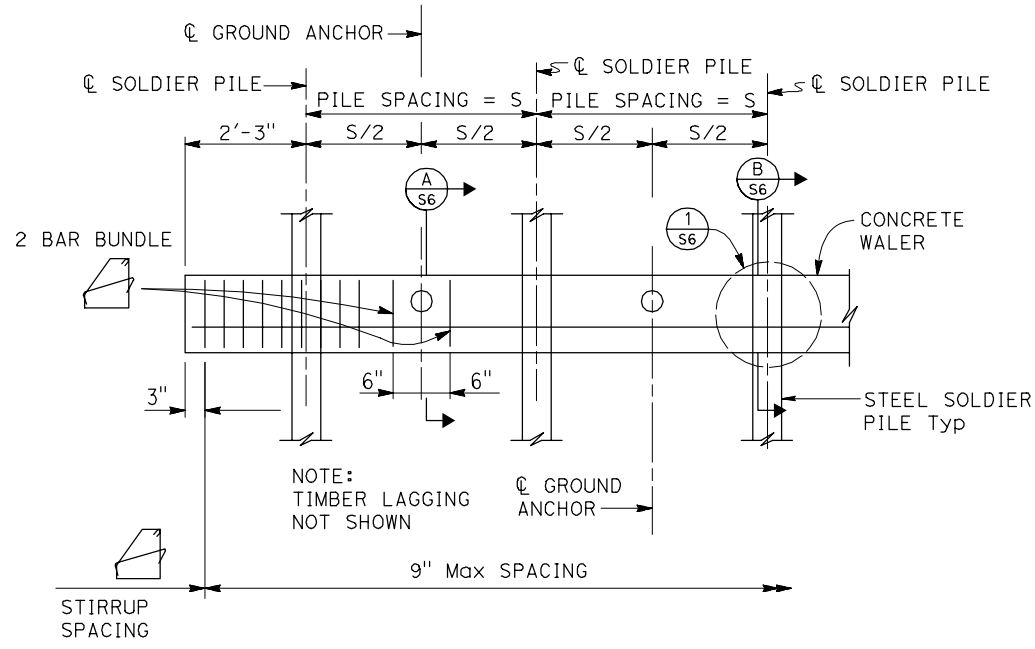


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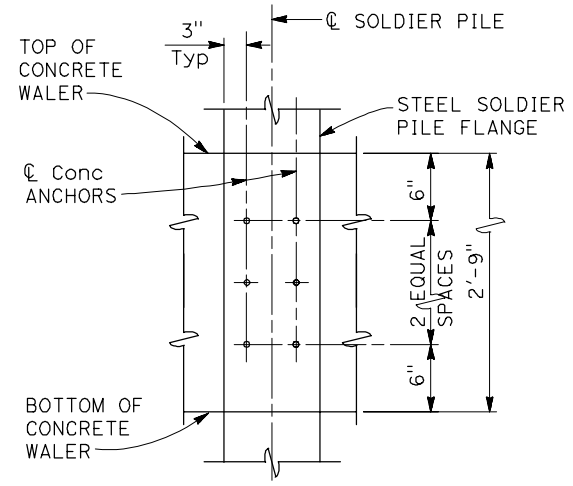
BAR IS ONE INCH ON ORIGINAL DRAWING
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

ROAD NAME: MONUMENT ROAD	DESIGN SECTION: ENGINEERING
ROAD NO: F3C010	MILE POST: 5.00
PROJECT NO.: ER-32L0(118)	DESIGNED BY: AWR
CONTRACT NO.: 217224	DRAWN BY: AR
DRAWING FILE NAME: 20190482S6.dwg	REVIEWED BY:
PLOT DATE: 06/30/2020	SHEET: S6
	APPROVED BY:

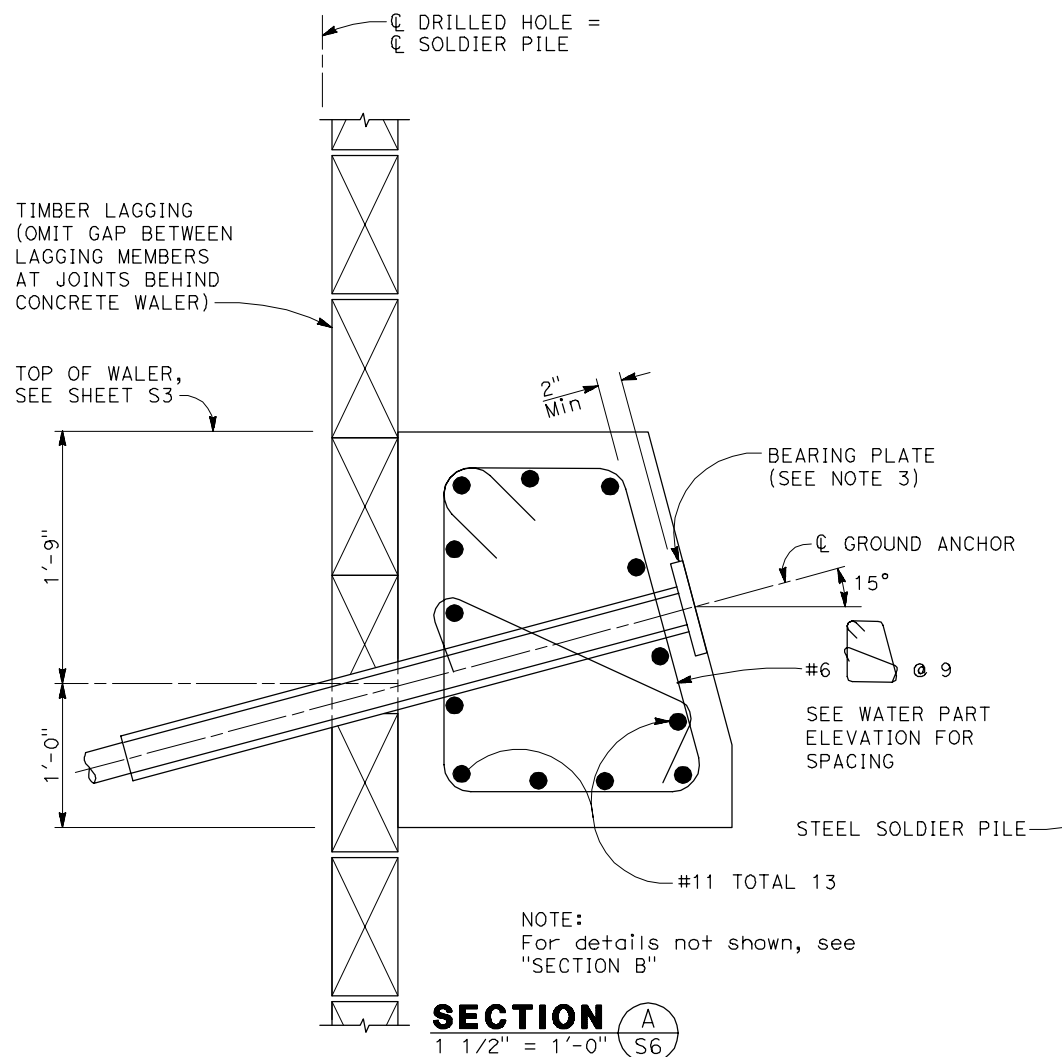
COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS	SHEET 20 OF 23
MONUMENT ROAD PM 0.0	
SOLDIER PILE WALL DETAILS No. 2	



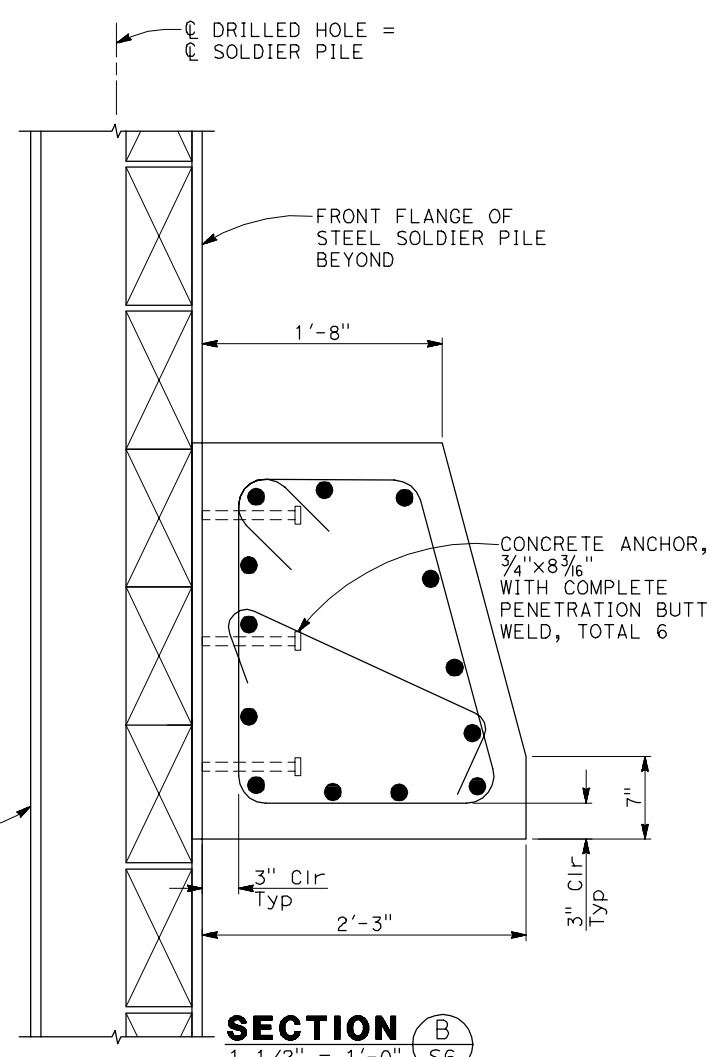
WALER PART ELEVATION
NO SCALE



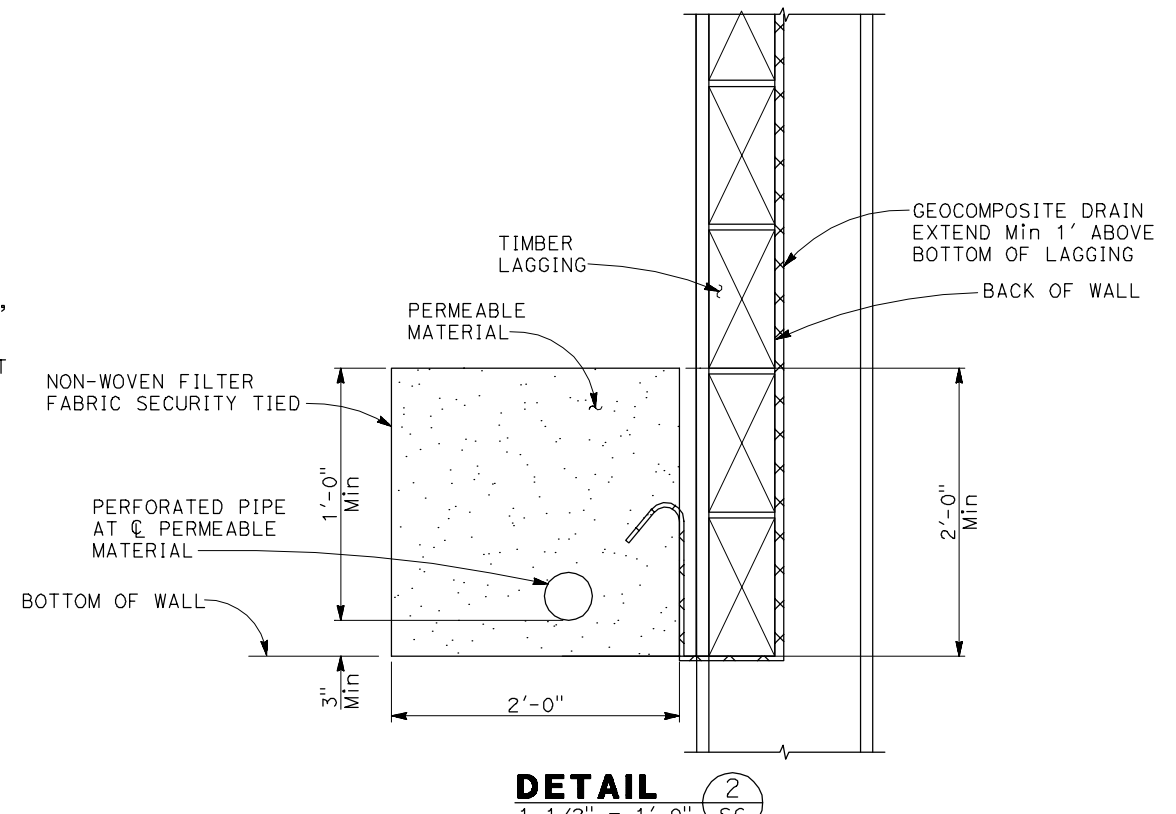
DETAIL 1 S6
NO SCALE



SECTION A S6
1 1/2" = 1'-0"



SECTION B S6
1 1/2" = 1'-0"



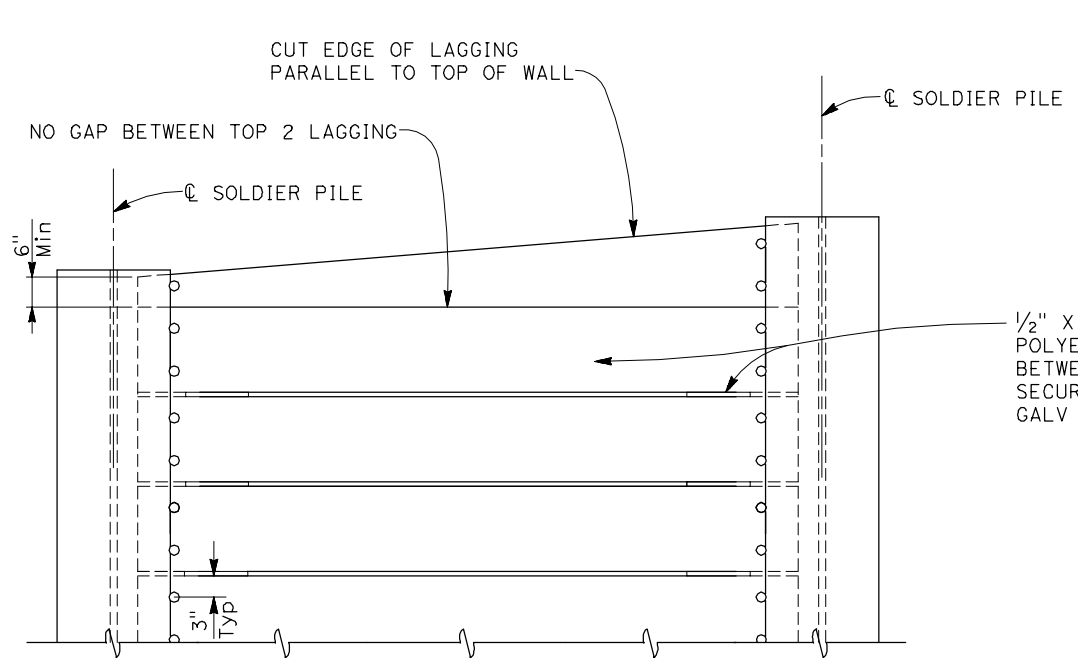
DETAIL 2 S6
1 1/2" = 1'-0"



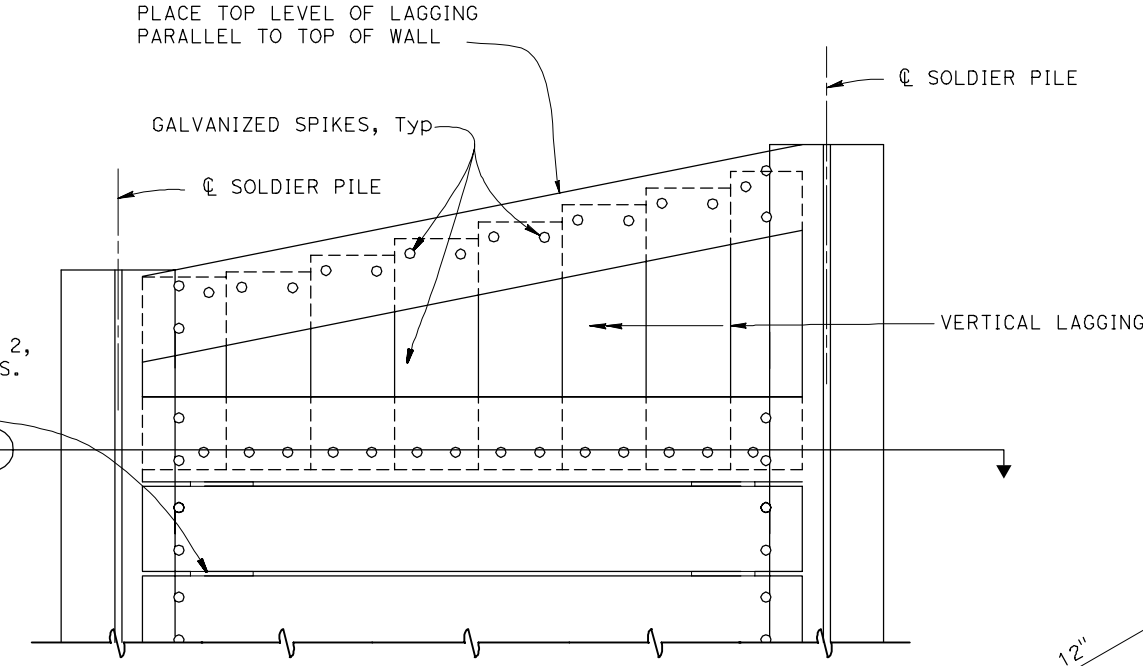
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 Oakland, California 94607
 510-625-9900

ROAD NAME: MONUMENT ROAD	DESIGN SECTION ENGINEERING
ROAD NO: F3C010	MILE POST: 5.00
PROJECT NO.: ER-32LQ(118)	DESIGNED BY: AWR
CONTRACT NO.: 217224	DRAWN BY: SMH
DRAWING FILE NAME: 2019048257.dwg	REVIEWED BY:
PLOT DATE: 06/30/2020	SHEET: S7
	APPROVED BY:

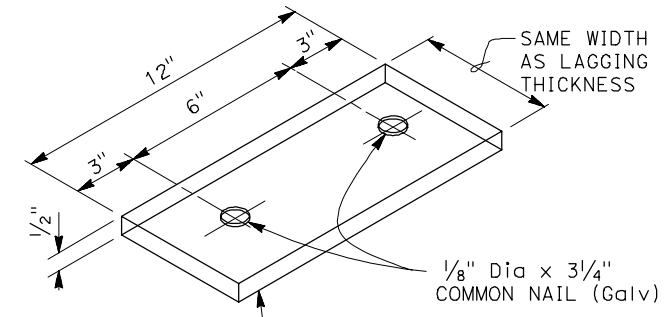
COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS	SHEET 21 OF 23
MONUMENT ROAD PM 0.0	
SOLDIER PILE WALL DETAILS No. 3	



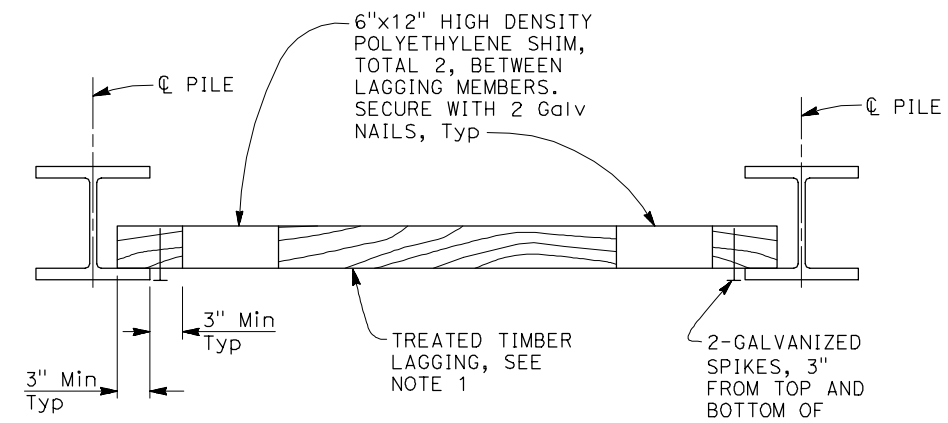
PART ELEVATION
LAGGING DETAILS (ALTERNATIVE 1)
 NO SCALE



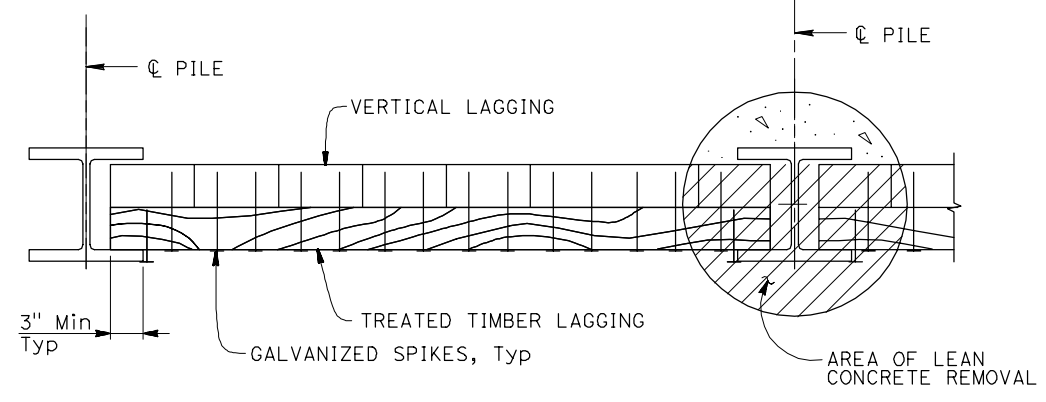
PART ELEVATION
LAGGING DETAILS (ALTERNATIVE 2)
 NO SCALE



SHIM DETAIL
 NO SCALE



PART PLAN
 NO SCALE



SECTION A-A
 NO SCALE

- NOTES:
1. No clipping of timber lagging corners allowed
 2. Use 16d Galv wire spikes for 4 x 12 lagging, and 40d Galv wire spikes for 6 x 12 lagging
 3. Spikes shall not be bent

NOTE:
 THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL



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ROAD NAME: MONUMENT ROAD	DESIGN SECTION: ENGINEERING
ROAD NO: F3C010	MILE POST: 5.00
PROJECT NO.: ER-32L0(118)	DESIGNED BY: AWR
CONTRACT NO.: 217224	DRAWN BY: AR
DRAWING FILE NAME: 2019048258.dwg	REVIEWED BY:
PLOT DATE: 06/30/2020	SHEET: S8
	APPROVED BY:

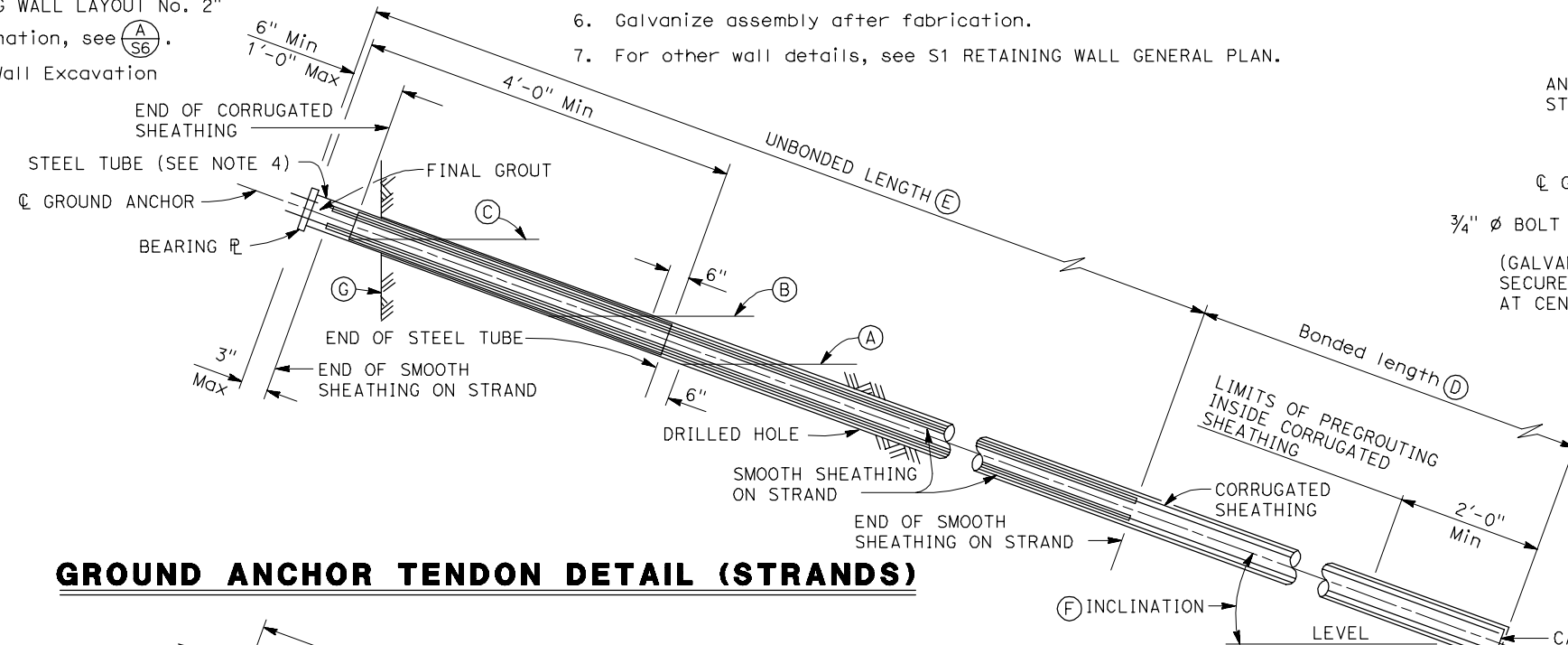
COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS	SHEET 22 OF 23
MONUMENT ROAD PM 0.0	
GROUND ANCHOR DETAILS	

NOTES:

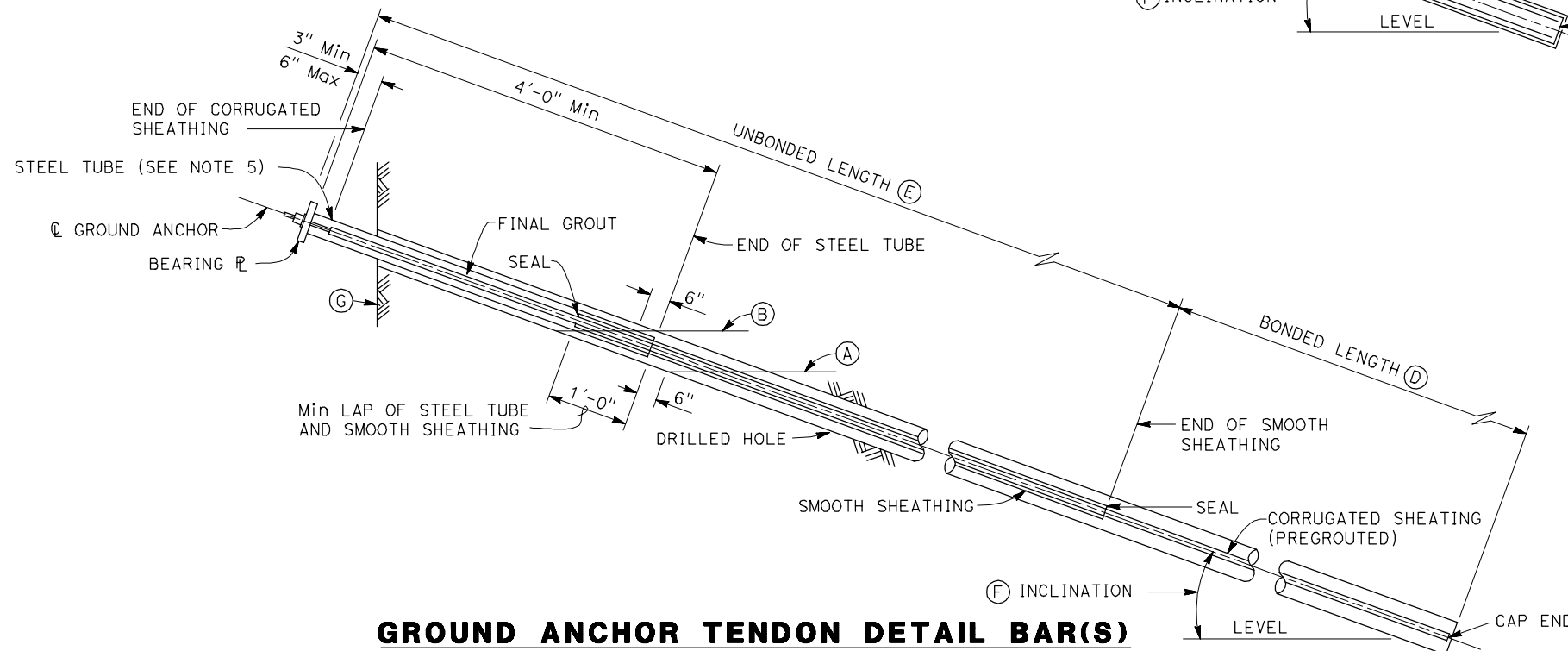
- (A) Level of initial grouting for drilled hole 6" in diameter or smaller
- (B) Level of secondary grouting
- (C) Level of initial grouting inside corrugated sheathing
- (D) Bonded length shall be determined by the contractor
- (E) For unbonded length, see "RETAINING WALL LAYOUT No. 2"
- (F) For inclination, see (A/S6).
- (G) Face of Wall Excavation

NOTES:

- 1. Anchorage enclosure shall only be used when anchor head assembly is not enclosed in concrete.
- 2. Anchorage enclosure shall have provisions to allow injecting grout at low end and venting at high end. Galvanize after fabrication.
- 3. Silicone sealant to cover full width of flange.
- 4. Steel tube (Min thickness = 1/4") welded to bearing plate. Galvanize assembly after fabrication
- 5. 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.
- 6. Galvanize assembly after fabrication.
- 7. For other wall details, see S1 RETAINING WALL GENERAL PLAN.

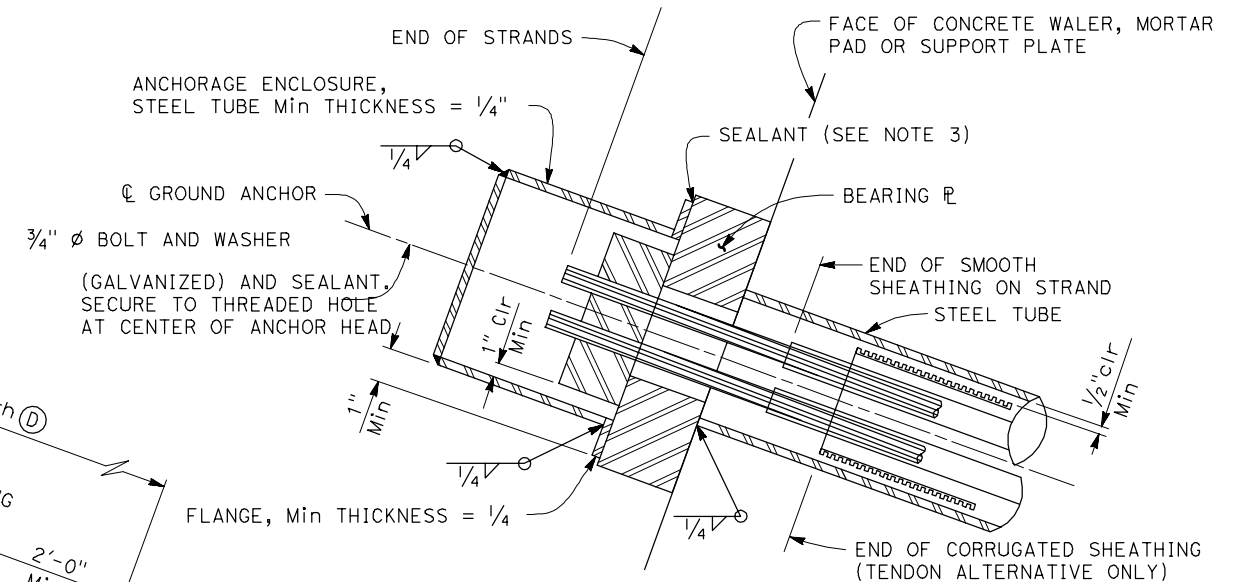


GROUND ANCHOR TENDON DETAIL (STRANDS)

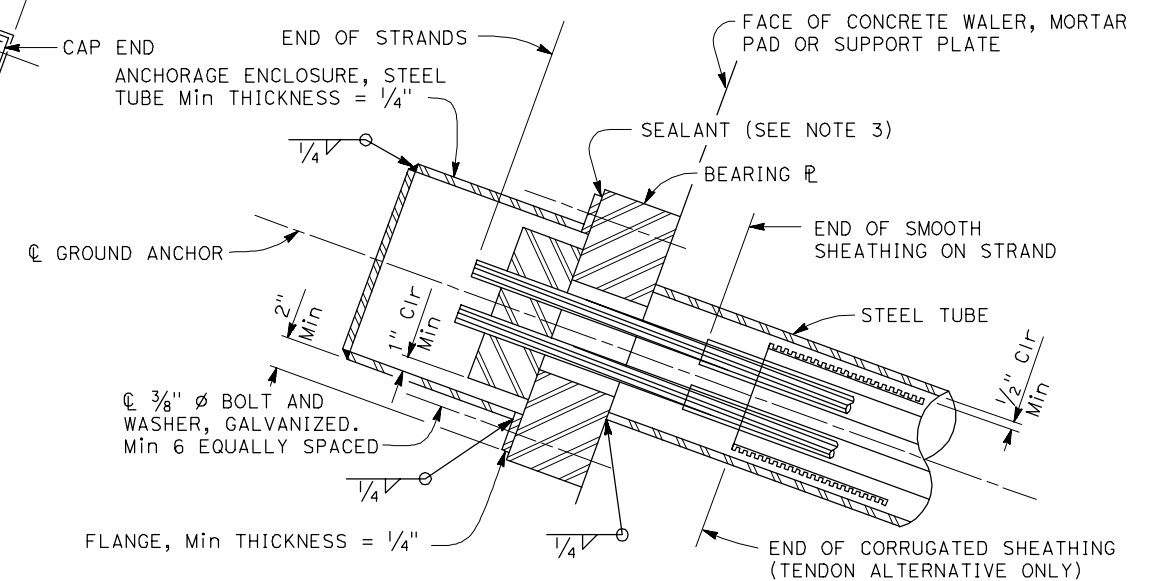


GROUND ANCHOR TENDON DETAIL BAR(S)

NOTE:
 THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL



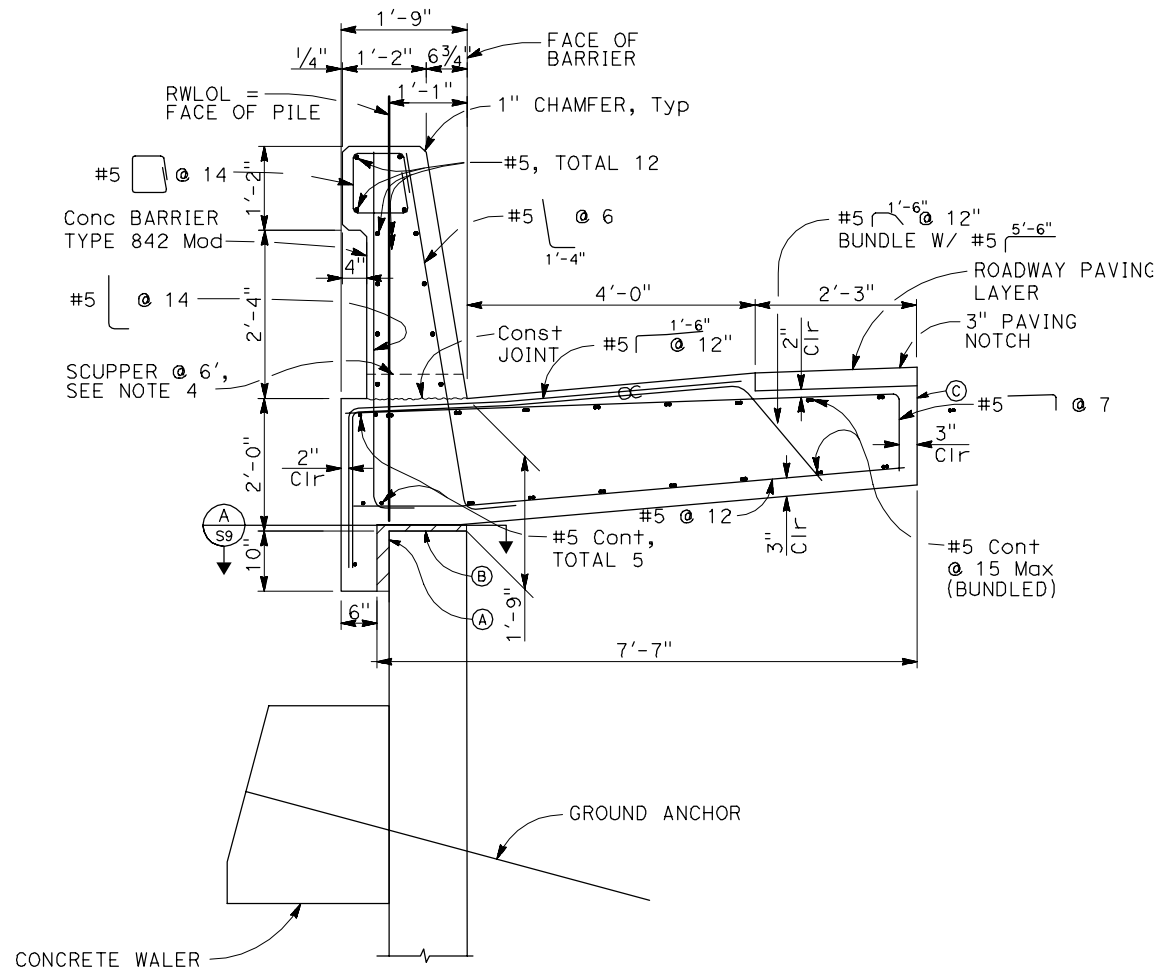
ALTERNATIVE X



ALTERNATIVE Y

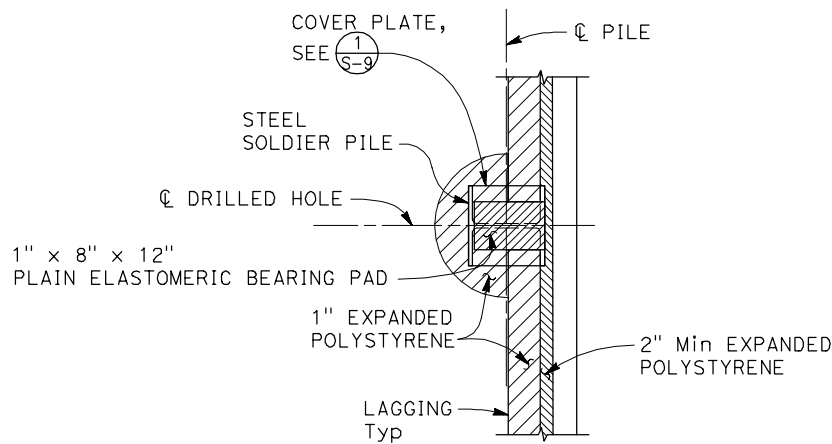
ANCHORAGE ENCLOSURE DETAILS

BAR IS ONE INCH ON ORIGINAL DRAWING IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	ROAD NAME: MONUMENT ROAD	DESIGN SECTION: ENGINEERING	COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS	SHEET 23 OF 23
	ROAD NO: F3C010	MILE POST: 5.00	MONUMENT ROAD PM 0.0	
	PROJECT NO.: ER-32L0(118)	DESIGNED BY: AWR	BARRIER SLAB DETAILS	
	CONTRACT NO.: 217224	DRAWN BY: SMH		
	DRAWING FILE NAME: 20190482S9.dwg	REVIEWED BY:		
	PLOT DATE: 06/30/2020	SHEET: S9	APPROVED BY:	

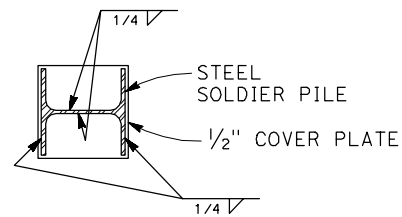


CONCRETE BARRIER SLAB DETAIL

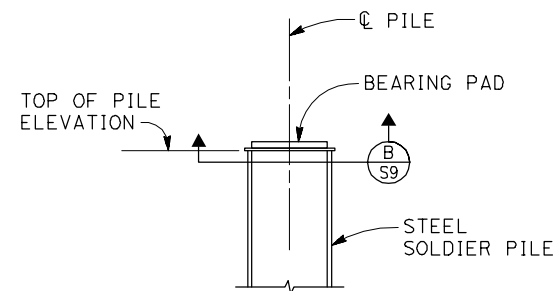
3/4" = 1'-0"



SECTION A
3/4" = 1'-0" S9



SECTION B
NO SCALE S9



DETAIL 1
NO SCALE S9

NOTES:

- (A) 2" Min Expanded polystyrene
- (B) 1" Expanded Polystyrene
See (A) for Soldier Pile Walls
- (C) Contact joint

CONCRETE BARRIER SLAB DESIGN DATA

DESIGN: AASHTO LRFD Bridge Design Specifications, 8th Edition with California Amendments.

F_t : 27 kips on barrier

EQE: $k_h = 0.2$

$k_v = 0.0$

REINFORCED

CONCRETE: $f'_c = 3600$ psi
 $f_y = 60$ ksi
 $n = 8$

NOTES:

1. Clearance to reinforcing steel in concrete barrier to be 1" unless otherwise noted.
2. For additional barrier wall information, see (B11-82) RSP.
3. No expansion joints in concrete barrier or barrier slab within wall limits.
4. Refer to (B7-8) Caltrans Standard Plans for scupper size. Modify barrier reinf around scupper similar to pull box in barrier detail as shown in (B11-82) Caltrans Standard Plans. RSP

NOTE:
THE CONTRACTOR MUST VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL