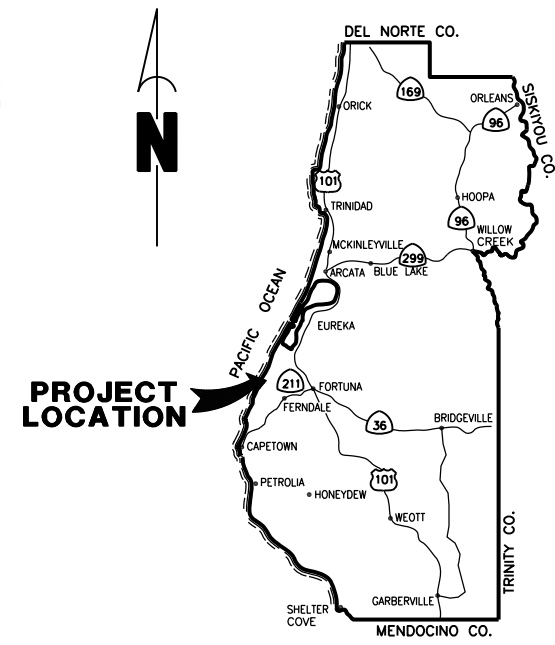


FUNDING SOURCES

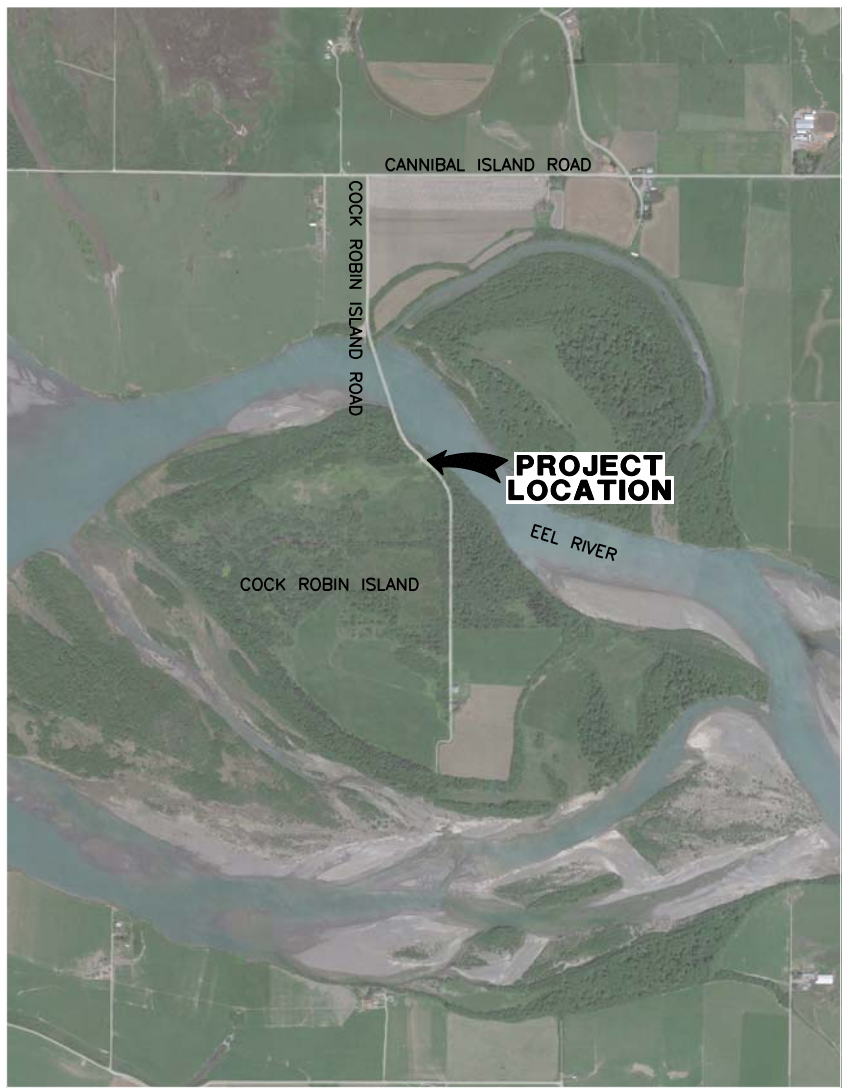


BAR IS ONE INCH ON ORIGINAL DRAWING IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	ROAD NAME: COCK ROBIN ISLAND ROAD	DESIGN SECTION	COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS COCK ROBIN ISLAND ROAD PM 0.50-0.57 SD REPAIR COVER SHEET, SHEET INDEX AND MAPS	SHEET 1 OF 8	
	ROAD NO.: 2H090	MILE POST: 0.50-0.57			ENGINEERING
	FEMA PROJECT NO.: FEMA-4434-DR-CA PW#211				DESIGNED BY: MMS
	CONTRACT NO.: 219308				DRAWN BY: MMS
	DRAWING FILE NAME: 219308 Design	REVIEWED BY: JAB			
	PLOT DATE: 3/7/2023	APPROVED BY: TRS			

COUNTY OF HUMBOLDT
DEPARTMENT OF PUBLIC WORKS
PROJECT PLANS FOR CONSTRUCTION OF
STORM DAMAGE REPAIRS ON
COCK ROBIN ISLAND ROAD (2H090)
at P.M. 0.50-0.57
FEMA-4434-DR-CA PW-211
CONTRACT NO. 219308



LOCATION MAP
SCALE: 1"=10± MILE



VICINITY MAP
N.T.S.



INDEX OF SHEETS


- 1 COVER SHEET, SHEET INDEX, AND MAPS
- 2 CONSTRUCTION AREA SIGNS & QUANTITIES
- 3 RIGHT-OF-WAY AND SURVEY CONTROL
- 4 TYPICAL SECTION AND DETAILS
- 5 PLAN AND PROFILE
- 6-8 SECTION VIEWS

NOTES

THE CONTRACTOR SHALL HAVE A CLASS "A" LICENSE FOR THIS PROJECT.

PROJECT PLANS AND SPECIAL PROVISIONS TO BE SUPPLEMENTED BY THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD PLANS, STANDARD SPECIFICATIONS, AND THE LATEST REVISED 2018 STANDARD SPECIFICATIONS (SEE APPLICABLE STAN PLAN LIST IN SPECIAL PROVISIONS)

RECOMMENDED


 _____ DATE 3/15/2023
 JEFFREY A. BALL
 RCE 70631, EXP. 6/30/2023



APPROVED

_____ DATE _____
 TONY R. SEGHELLI
 RCE 63714, EXP. 9/30/2024



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



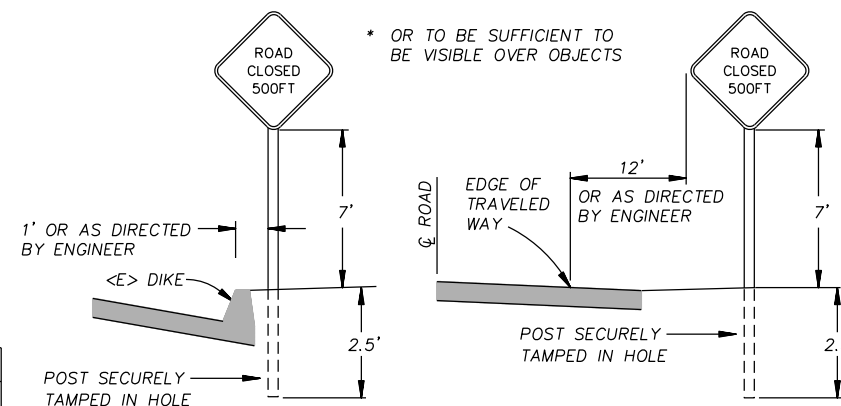
BAR IS ONE INCH ON ORIGINAL DRAWING IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	ROAD NAME: COCK ROBIN ISLAND ROAD	DESIGN SECTION: ENGINEERING	COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS COCK ROBIN ISLAND ROAD PM 0.50-0.57 SD REPAIR CONSTRUCTION AREA SIGNS AND QUANTITIES	SHEET 2 OF 8
	ROAD NO.: 2H090	MILE POST: 0.50-0.57		
	FEMA PROJECT NO.: FEMA-4434-DR-CA PW#211	DRAWN BY: MMS		
	CONTRACT NO.: 219308	REVIEWED BY: JAB		
	DRAWING FILE NAME: 219308 Design	APPROVED BY: TRS		
	PLOT DATE: 3/7/2023			

QUANTITIES

ITEM NO.	ITEM CODE	ITEM DESCRIPTION	UNIT	QUANTITY
1	120095	Construction Area Signs	EA	8
2	120100	Traffic Control System	LS	1
3	129000	Temporary Railing (Type K)	LF	160
4	130100	Job Site Management	LS	1
5	130200	Prepare Water Pollution Control Program	LS	1
6	130600	Sediment Curtain	LF	240
7	130680	Temporary Silt Fence	LF	225
8	146001	Contractor Supplied Biologist	DAY	21
9	170103	Clearing and Grubbing	LS	1
10	190101	F Roadway Excavation	CY	1,193
11	198050	Embankment	CY	77
12	198055	River Gravel	CY	196
13	210212	Dry Seed	SF	1,343
14	210420	Straw	SF	1,343
15	260203	Class 2 Aggregate Base	CY	47
16	390132	Hot Mix Asphalt (Type A)	TON	25
17	723010	Rock Slope Protection (4 Ton, Class XI, Method A)	CY	351
18	723015	Rock Slope Protection (2 Ton, Class IX, Method A)	CY	351
19	723020	Rock Slope Protection (1 Ton, Class VIII, Method A)	CY	318
20	723030	Rock Slope Protection (1/2 Ton, Class VII, Method A)	CY	35
21	729012	Rock Slope Protection Fabric (Class 10)	SY	700
22	999990	Mobilization	LS	1

NOTES

- 1) SIGNS SHALL BE PLACED AS SHOWN ON PLAN OR AS DIRECTED BY THE ENGINEER.
- 2) FINAL PLACEMENT OF SIGNS SHALL BE APPROVED BY RESIDENT ENGINEER.
- 3) ADDITIONAL PORTABLE SIGNS SHALL BE USED AS REQUIRED FOR OTHER ROADSIDE WORK.
- 4) SEE STANDARD PLAN T13 FOR TRAFFIC CONTROL SYSTEM.
- 5) IN ADDITION TO CONSTRUCTION AREA SIGNS AND WHEN DIRECTED BY THE RESIDENT ENGINEER, THE CONTRACTOR SHALL UTILIZE FLAGMEN AS NECESSARY TO DIRECT TRAFFIC.
- 6) DISTANCE TO W20-1 AND G20-2 MAY BE EXTENDED TO ENCOMPASS SITES WITHIN ONE MILE OF EACH OTHER.
- 7) KEEP A MINIMUM OF 1 TRAFFIC LANE AT LEAST 10' WIDE OPEN FOR TRAFFIC, EXCEPT THE FULL WIDTH OF THE TRAVELED WAY MUST BE OPEN WHEN CONSTRUCTION OPERATIONS ARE NOT ACTIVE OR AN APPROVED TRAFFIC CONTROL PLAN IS IN PLACE

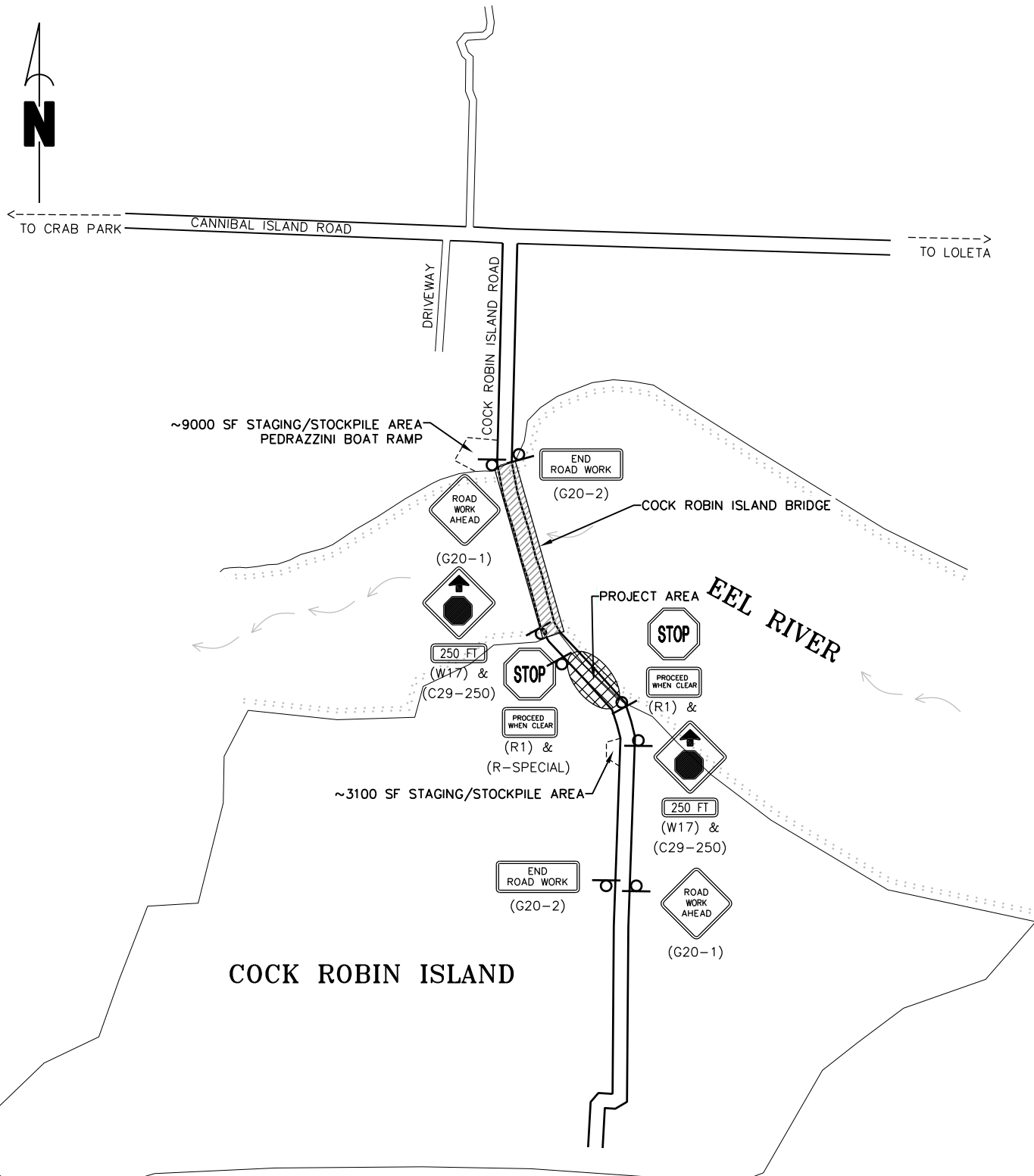


RURAL CONSTRUCTION AREA SIGN

- NOT TO SCALE -

STOCKPILE NOTES

- 1) MANAGE MATERIAL PER SECTION 13-4.03 (C) OF THE 2022 CALTRANS STANDARD SPECIFICATIONS
- 2) IF STOCKPILE AREA IS IN A TURNOUT- THE TURNOUT SHALL BE REESTABLISHED TO PRE-CONSTRUCTION CONDITIONS
- 3) STOCKPILE LOCATIONS HAVE BEEN APPROVED BY PUBLIC WORKS AS DETAILED IN THE ENVIRONMENTAL REPORT.



SIGN PLAN OVERVIEW

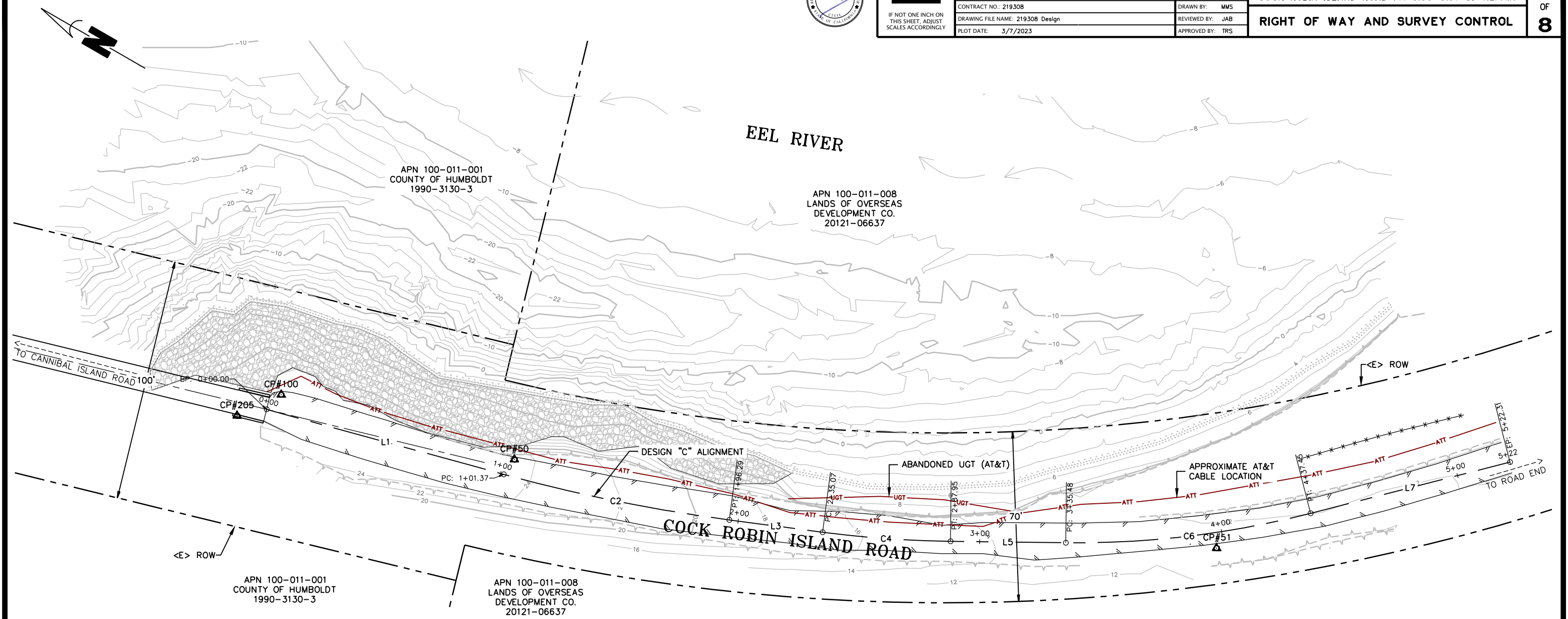
SCALE: 1"=~300'

CONSTRUCTION AREA SIGN SUMMARY

SIGN TYPE	QTY	DESCRIPTION	SIZE	REMARKS	POST SIZE	NUMBER
W20-1	2	ROAD WORK AHEAD	30" x 30"	VISIBLE AT ALL TIMES	4" x 4"	1
W3-1 & C29-250	2	STOP AHEAD	30" x 30" 20" x 7"	VISIBLE AT ALL TIMES	4 x 4	1
R1-1 R-SPECIAL	2	STOP PROCEED WHEN CLEAR	30" x 30" 30" x 15"	VISIBLE AT ALL TIMES LINE OF SIGHT	4 x 4	1
G20-2	2	END ROAD WORK	36" x 18"	VISIBLE AT ALL TIMES	4 x 4	1



BAR IS ONE INCH ON ORIGINAL DRAWING IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	ROAD NAME: COCK ROBIN ISLAND ROAD	DESIGN SECTION: ENGINEERING	COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS COCK ROBIN ISLAND ROAD PM 0.50-0.57 SD REPAIR RIGHT OF WAY AND SURVEY CONTROL	SHEET 3 OF 8
	ROAD NO.: 2H090	MILE POST: 0.50-0.57		
	FEMA PROJECT NO.: FEMA-4434-DR-CA PW#211	DESIGNED BY: MMS		
	CONTRACT NO.: 219308	DRAWN BY: MMS		
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DESIGN CL ALIGNMENT 'C'

No.	Type	Length	Radius	Direction	Start Station	End Station	Delta angle
L1	Line	101.37'		S14° 41' 27"E	0+00.00'	1+01.37'	
C2	Curve	94.93'	696.97'		1+01.37'	1+96.29'	7°48'13"
L3	Line	38.78'		S22° 29' 40"E	1+96.29'	2+35.07'	
C4	Curve	52.88'	444.37'		2+35.07'	2+87.95'	6°49'06"
L5	Line	47.53'		S29° 18' 46"E	2+87.95'	3+35.48'	
C6	Curve	101.97'	387.33'		3+35.48'	4+37.45'	15°05'00"
L7	Line	84.86'		S44° 23' 46"E	4+37.45'	5+22.31'	

CONTROL POINTS

Point Number	Easting	Northing	Point Elevation	Full Description	Longitude	Latitude
50	5928626.5067	2122881.8889	24.45'	CP_MAG	W124° 16' 52.67"	N40° 38' 06.34"
51	5928739.6168	2122612.9417	12.25'	CP_SPK	W124° 16' 51.11"	N40° 38' 03.71"
100	5928601.5650	2122978.5170	25.77'	CP_GPS_200	W124° 16' 53.03"	N40° 38' 07.29"
101	5928361.0760	2123753.4070	25.12'	CP_GPS_201	W124° 16' 56.41"	N40° 38' 14.88"
201	5928361.0729	2123753.4168	25.02'	CP_MAG_101	W124° 16' 56.41"	N40° 38' 14.88"
205	5928584.9676	2122989.9629	26.73'	NOAA_BM_8637_2017	W124° 16' 53.24"	N40° 38' 07.40"
206	5928365.6790	2123740.0190	26.78'	NOAA_BM_8637B_2017	W124° 16' 56.34"	N40° 38' 14.75"
210	5928297.3763	2124144.9962	12.92'	FD_BM_8637C	W124° 16' 57.36"	N40° 38' 18.73"
211	5928311.5824	2124482.4053	13.36'	FD_BM_8637D	W124° 16' 57.29"	N40° 38' 22.07"

SURVEY NOTES:

- The purpose of this survey is to determine topography for storm damage between PM 0.50 to 0.57 of Cock Robin Island Road. This survey reflects conditions at the time of survey; field work was performed in February, March & September 2021.
- Underground utilities research was not performed. An underground telephone line has been exposed by the road failure as shown hereon.
- Coordinates for this survey are California Coordinate System of 1983 (CCS83) Zone 1, NAD83 (2011), Epoch 2010.0 based on a static GPS Control Survey using the NGS OPUS Post-Processing software. The mapping angle is 1°29' 30"; 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 0.99990437 to obtain ground distances. Mapping angle and grid scale factor are taken at Point 100, a Magnail at the northerly end of the project site. Elevations are NAVD88 datum based the OPUS solution. Found NOAA tidal benchmark with designation "941 8637 A" located near the southwest end of the bridge and shown hereon as Point 205 has a published elevation of 26.54 feet, 0.19 feet lower than this survey basis.
- Contours in the Eel River were mainly determined by elevations obtained with a Hydrolite single beam sounder. Elevations were spot checked with conventional measurements where possible. See CAD file for location of sounder points and check points. Please note negative elevations of bed of Eel River; water surface elevation at time of survey was roughly 5.0 feet as shown hereon.
- The lower limit of the rip rap within the Eel River was not determined by this survey.
- No trees greater than 12 inches in diameter were located or found within the project limits.
- Ownerships shown hereon are taken from the Humboldt County GIS; document information is per the Humboldt County Assessors website. Boundary lines shown hereon are based on Book 54 of Surveys, Page 100-101, Humboldt County Records, based on ties to the existing bridge.

UNDERGROUND UTILITY NOTE

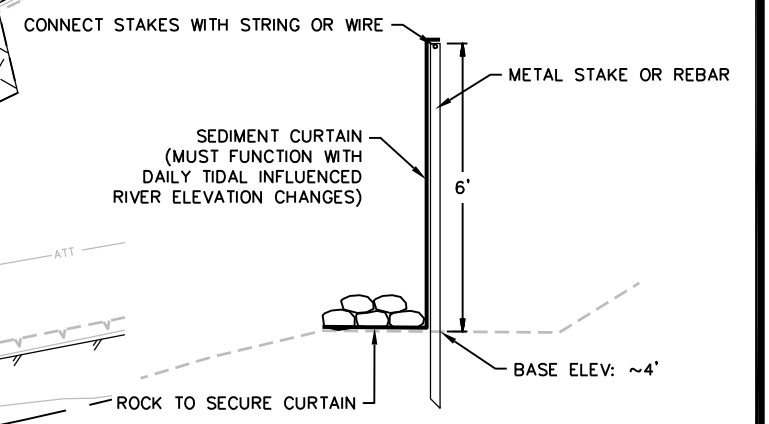
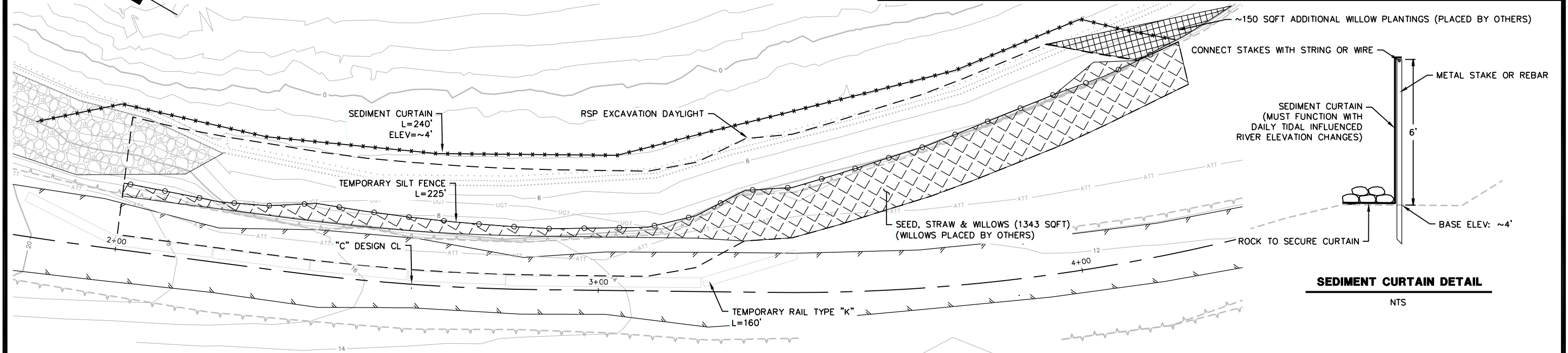
Underground utilities are shown based on a combination of visible physical evidence and records made available to the surveyor. The surveyor makes no guarantees that the underground utilities shown comprise all such utilities in the area, either in service or abandoned. The surveyor further does not warrant that the underground utilities are in the exact locations indicated, although the surveyor does hereby state that they are shown as accurately as possible from the available information, noted above. The surveyor has not physically located the underground utilities.
 Call Underground Service Alert (USA) 1-800-642-2444 a minimum of 48 hours prior to any excavations.



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	ROAD NO: 2H090	MILE POST: 0.50-0.57	ENGINEERING
	FEMA PROJECT NO.: FEMA-4434-DR-CA PW#211	DESIGNED BY: MMS	
	CONTRACT NO.: 219308	DRAWN BY: MMS	
	DRAWING FILE NAME: 219308 Design	REVIEWED BY: JAB	
	PLOT DATE: 3/7/2023	APPROVED BY: TRS	

COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS COCK ROBIN ISLAND ROAD PM 0.50-0.57 SD REPAIR TYPICAL SECTION AND DETAILS
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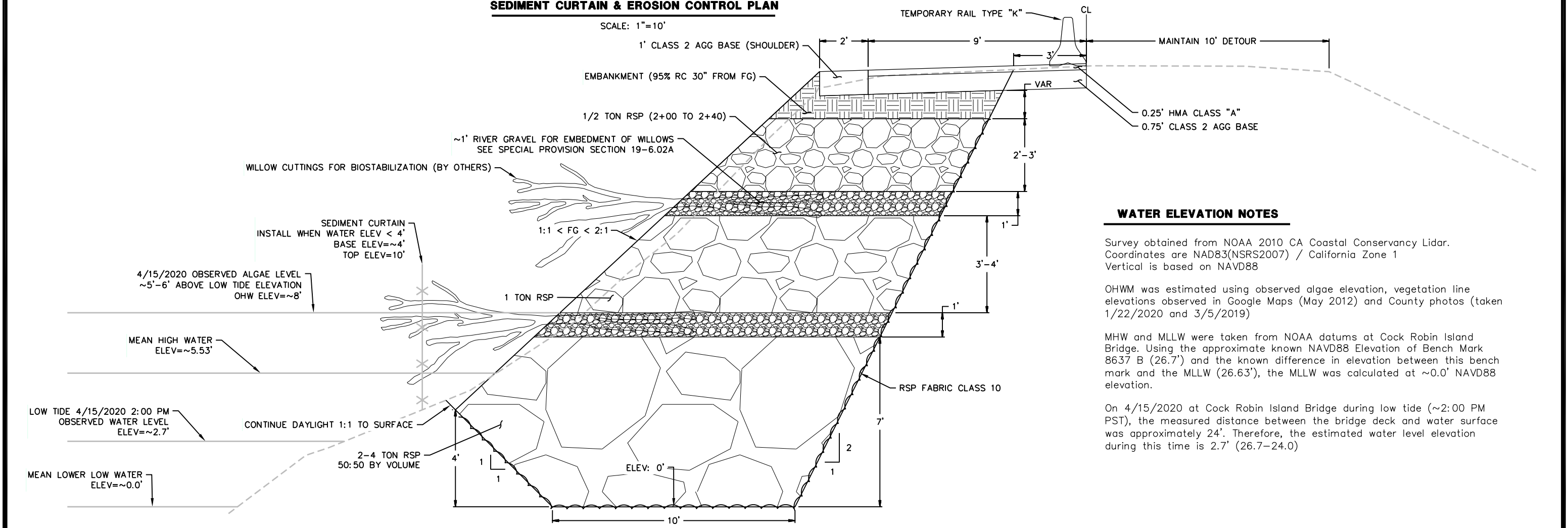
SHEET
4
OF
8



SEDIMENT CURTAIN DETAIL
NTS

SEDIMENT CURTAIN & EROSION CONTROL PLAN

SCALE: 1"=10'



TYPICAL SECTION
SCALE: 1"=2'

WATER ELEVATION NOTES

Survey obtained from NOAA 2010 CA Coastal Conservancy Lidar. Coordinates are NAD83(NSRS2007) / California Zone 1. Vertical is based on NAVD88.

OHW was estimated using observed algae elevation, vegetation line elevations observed in Google Maps (May 2012) and County photos (taken 1/22/2020 and 3/5/2019).

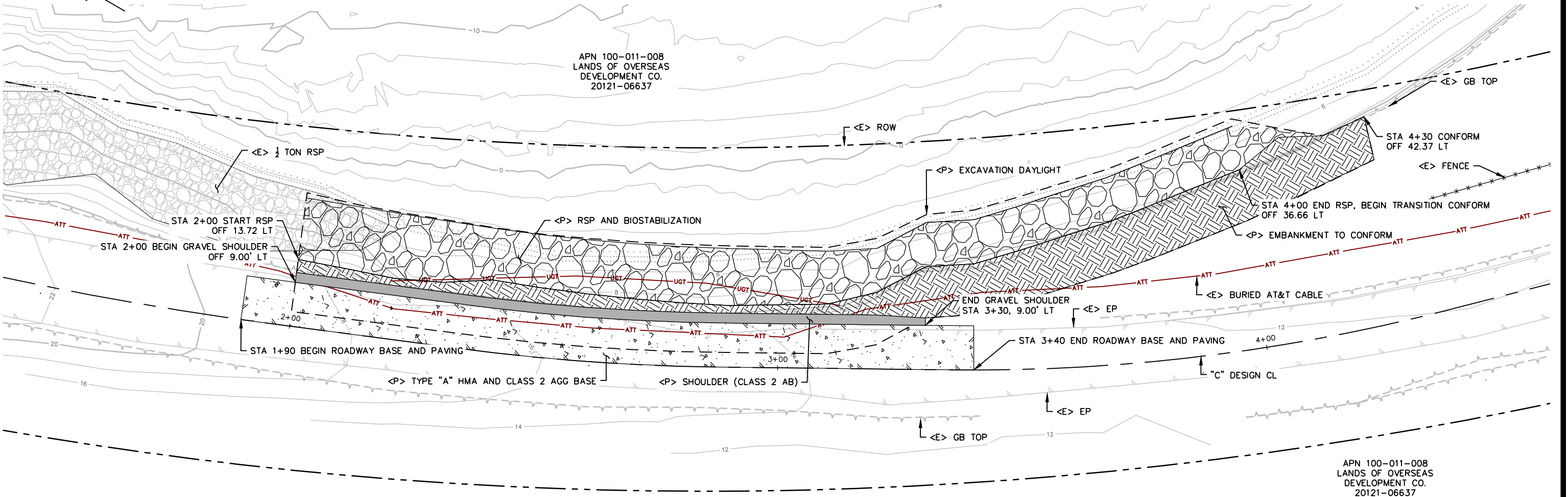
MHW and MLLW were taken from NOAA datums at Cock Robin Island Bridge. Using the approximate known NAVD88 Elevation of Bench Mark 8637 B (26.7') and the known difference in elevation between this bench mark and the MLLW (26.63'), the MLLW was calculated at ~0.0' NAVD88 elevation.

On 4/15/2020 at Cock Robin Island Bridge during low tide (~2:00 PM PST), the measured distance between the bridge deck and water surface was approximately 24'. Therefore, the estimated water level elevation during this time is 2.7' (26.7-24.0).



ROAD NAME: COCK ROBIN ISLAND ROAD
 ROAD NO.: 2H090 MILE POST: 0.50-0.57
 DESIGN SECTION ENGINEERING
 DESIGNED BY: MMS
 FEMA PROJECT NO.: FEMA-4434-DR-CA PW#211
 DRAWN BY: MMS
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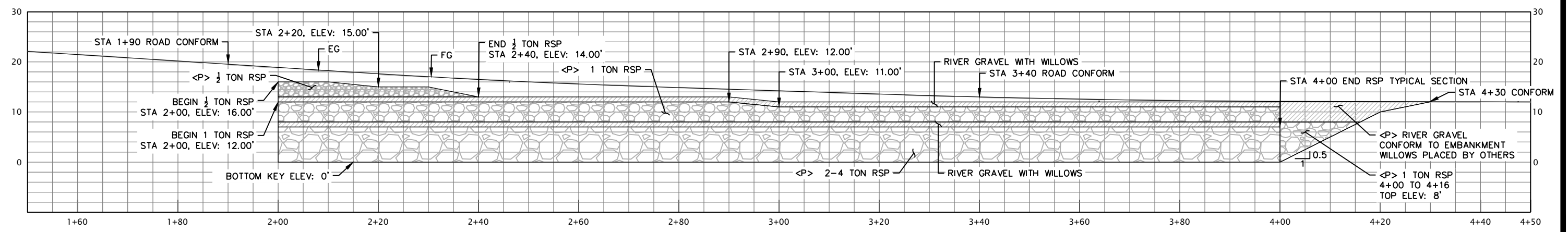
COUNTY OF HUMBOLDT
 DEPARTMENT OF PUBLIC WORKS
 COCK ROBIN ISLAND ROAD PM 0.50-0.57 SD REPAIR
 PLAN AND PROFILE
 SHEET 5 OF 8



No.	PVI Station	PVI Elevation	Grade In	Grade Out	A (Grade Change)	Profile Curve Type	Profile Curve Length	K Value	Curve Radius
1	0+00.44'	25.77'	-0.56%	-0.56%					
2	1+01.79'	25.19'	-0.56%	-6.40%	5.83%	Crest	92.94'	15.94	1593.51'
3	2+46.16'	15.96'	-6.40%	-3.21%	3.18%	Sag	61.23'	19.23	1923.27'
4	3+63.87'	12.18'	-3.21%	-0.17%	3.04%	Sag	84.92'	27.89	2789.19'
5	4+47.50'	12.04'	-0.17%	-0.50%	0.33%	Crest	73.30'	222.75	22275.38'
6	5+21.81'	11.67'	-0.50%						

'C' ALIGNMENT PLAN VIEW

SCALE: 1"=10'



'C' ALIGNMENT PROFILE VIEW

HORIZ: 1"=10'
VERT: 1"=10'



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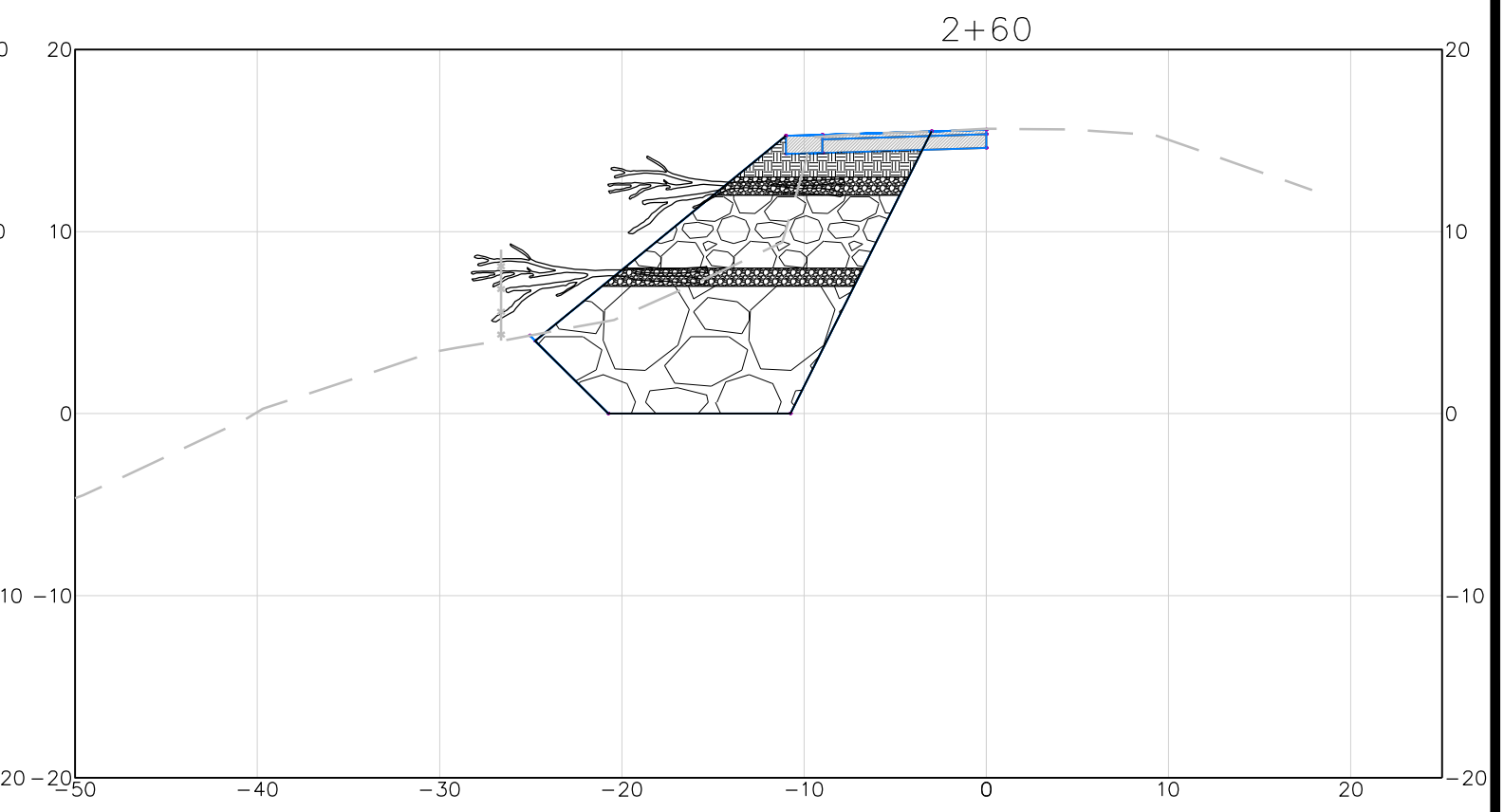
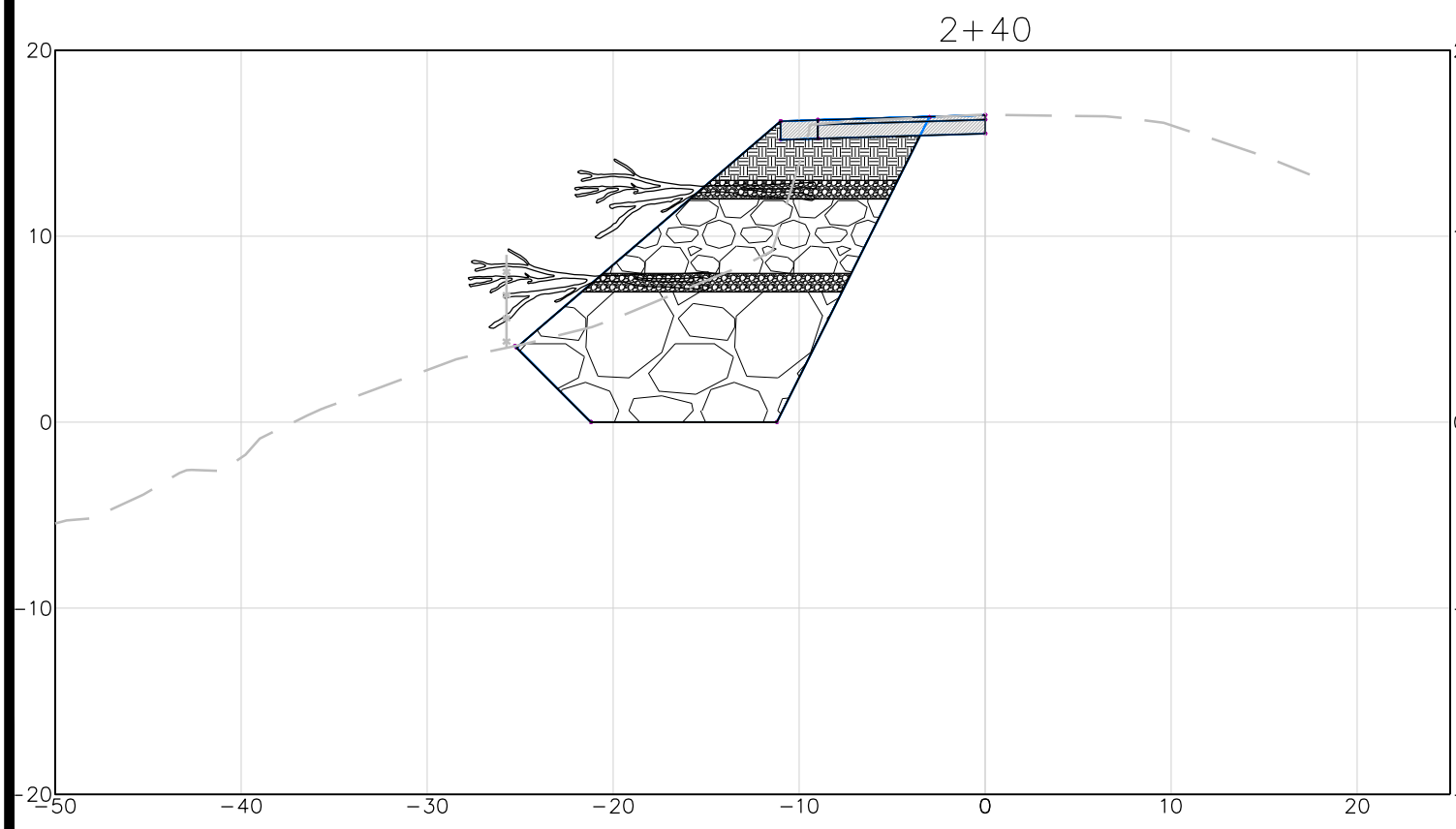
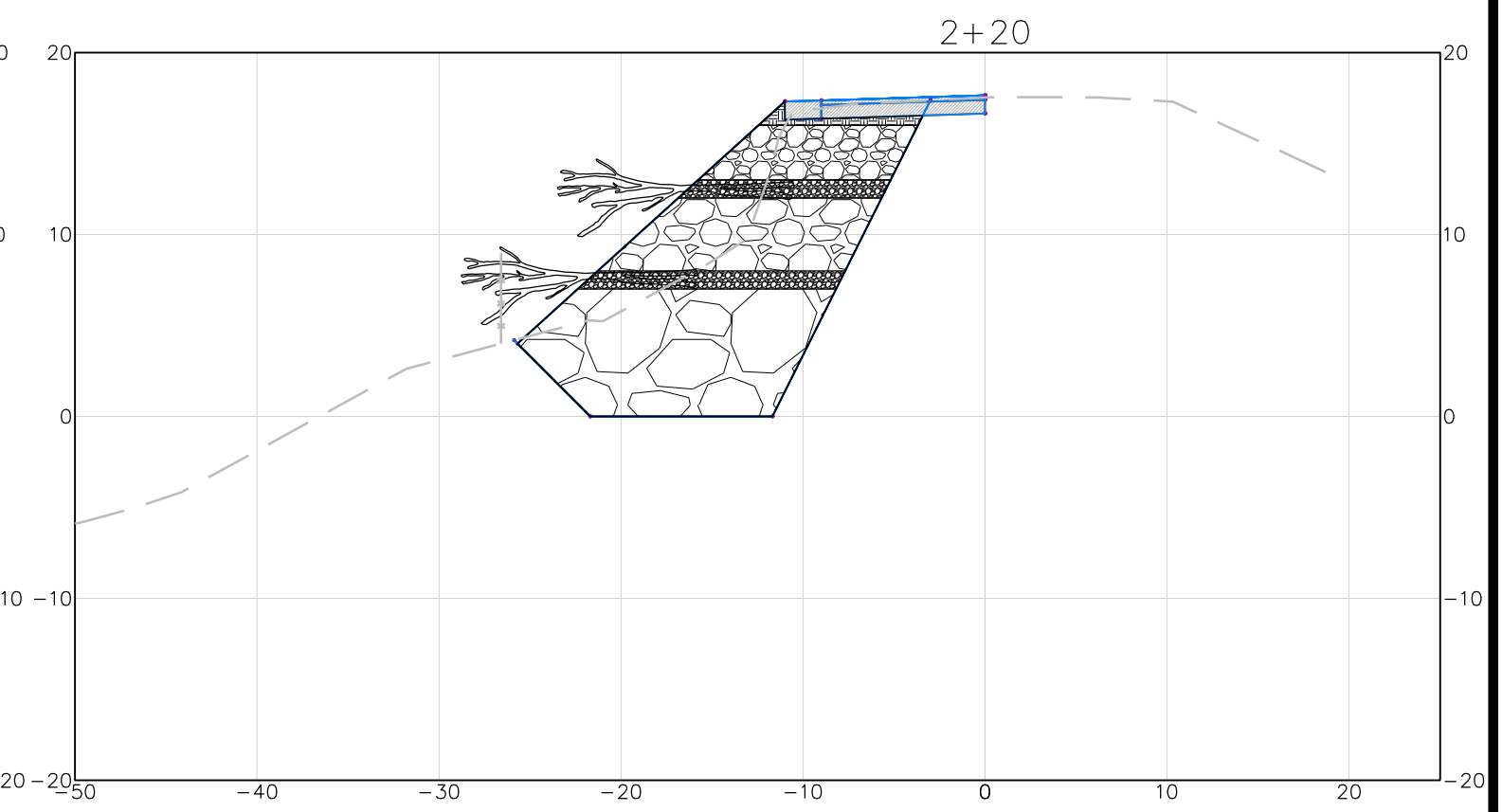
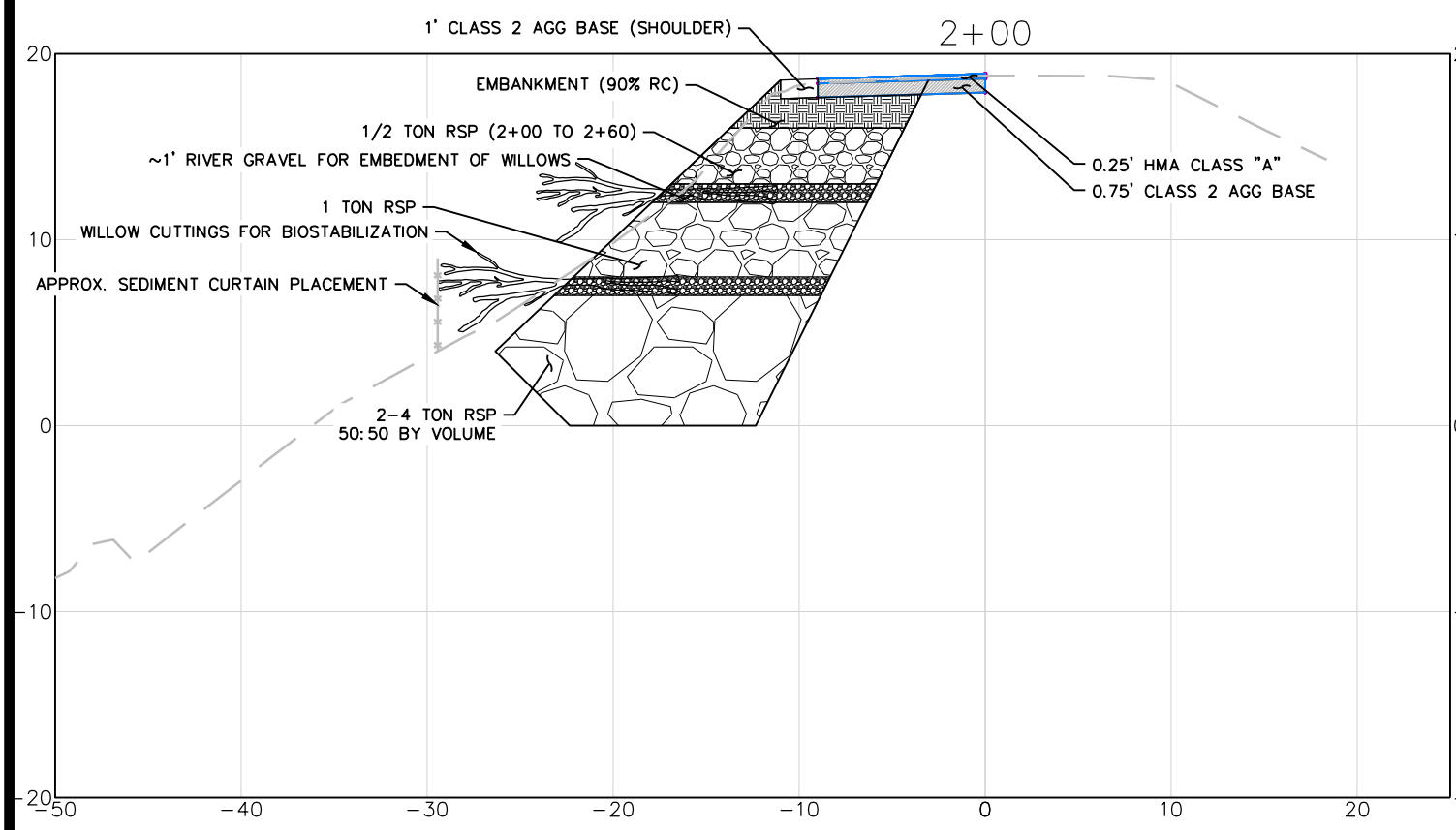
DESIGN SECTION
ENGINEERING
DESIGNED BY: MMS
DRAWN BY: MMS
REVIEWED BY: JAB
APPROVED BY: TRS

COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS
COCK ROBIN ISLAND ROAD PM 0.50-0.57 SD REPAIR
SECTION VIEWS (2+00 TO 2+60)

SHEET
6
OF
8

SECTION VIEWS (2+00 TO 2+60)

HORIZ: 1"=5'
VERT: 1"=5'





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IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

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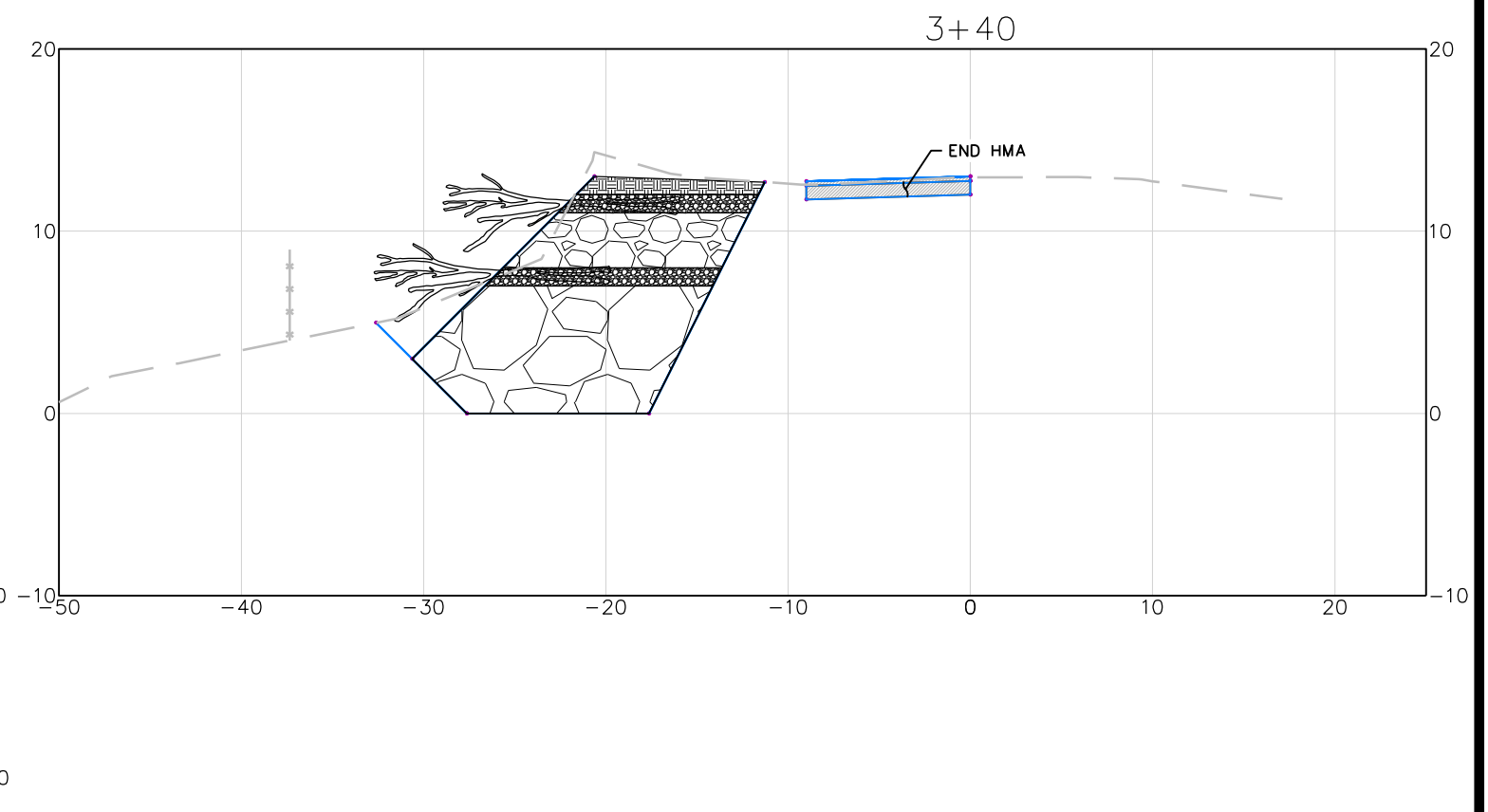
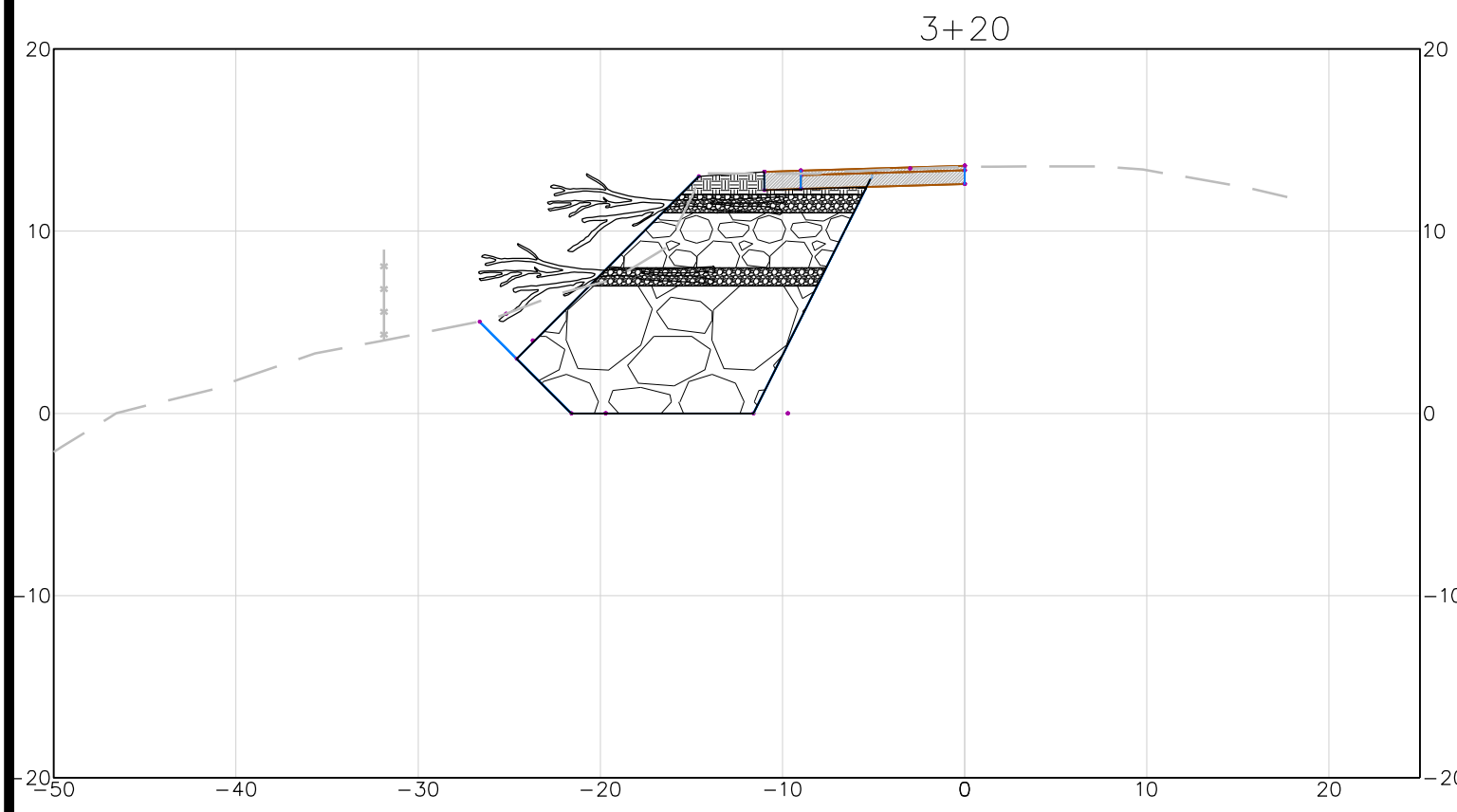
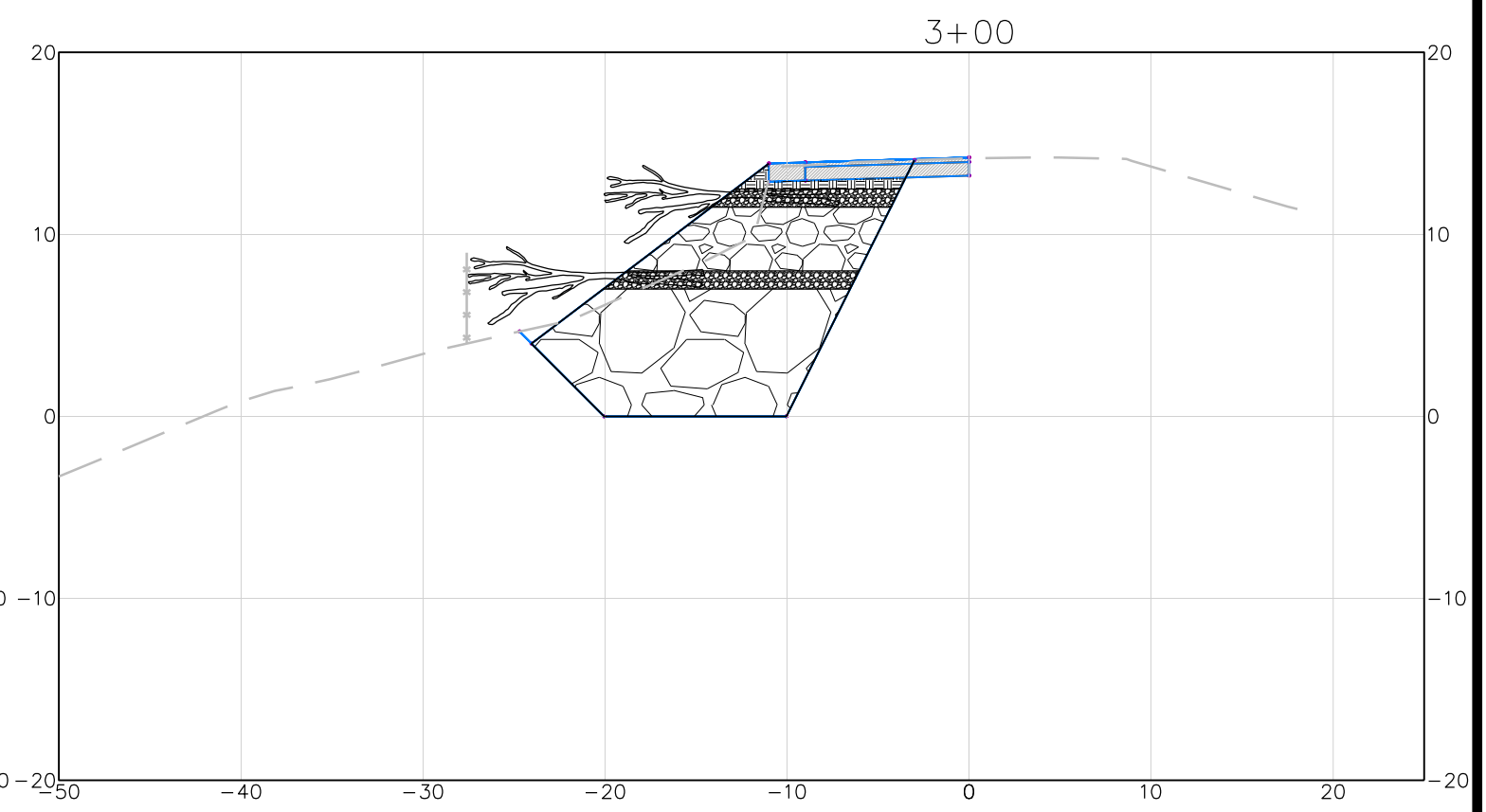
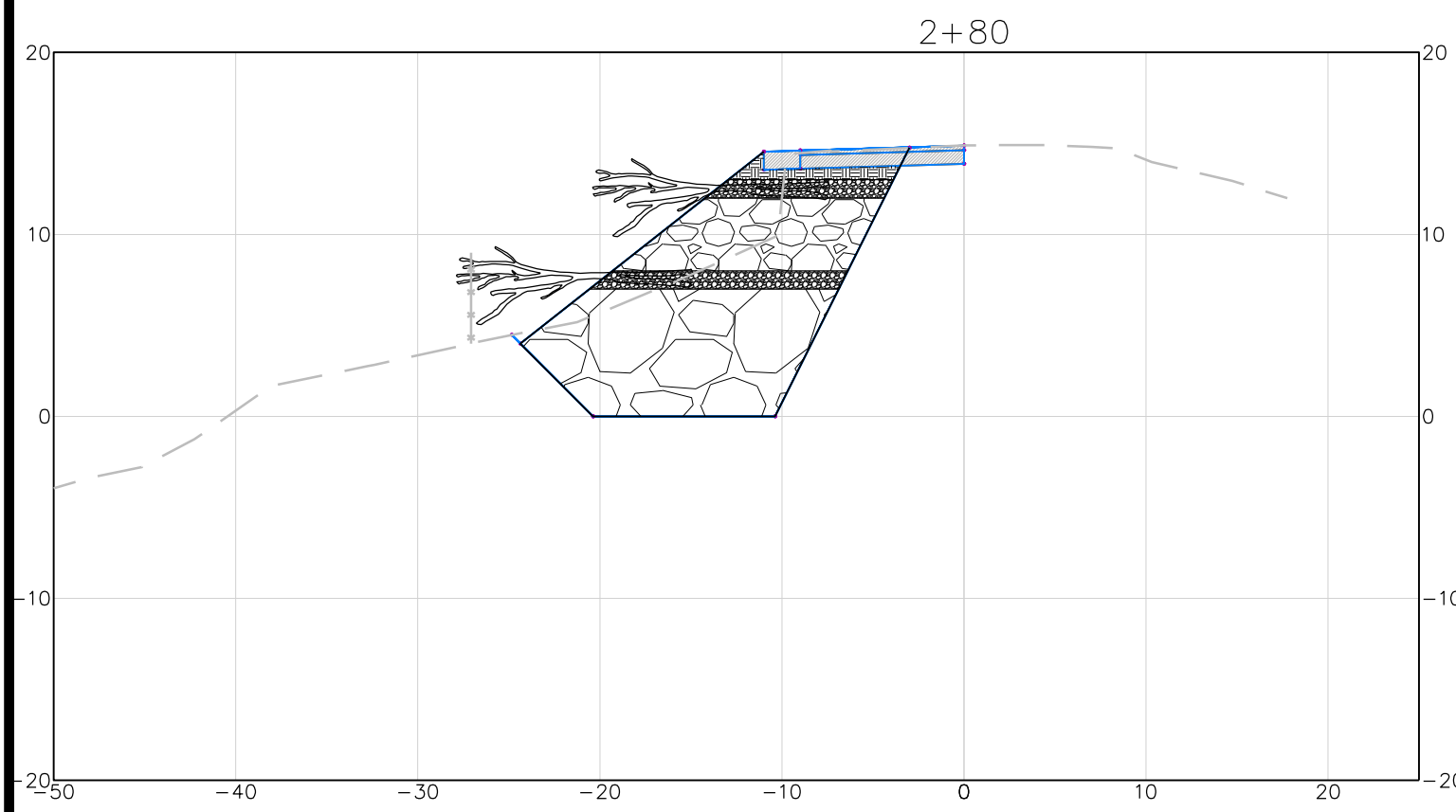
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COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS
COCK ROBIN ISLAND ROAD PM 0.50-0.57 SD REPAIR
SECTION VIEWS (2+80 TO 3+40)

SHEET
7
OF
8

SECTION VIEWS (2+80 TO 3+40)

HORIZ: 1"=5'
VERT: 1"=5'





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SHEET
8
OF
8

SECTION VIEWS (3+60 TO 4+00)

HORIZ: 1"=5'
VERT: 1"=5'

