

SHEET No.	DESCRIPTION
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1	TITLE SHEET
2	TYPICAL CROSS SECTIONS
3	ROADWAY LAYOUT PLAN & PROFILE
4	SOLDIER PILE WALL ELEVATION
5	SOLDIER PILE DETAILS No. 1
6	SOLDIER PILE DETAILS No. 2
7	EROSION CONTROL PLAN

1. ALL CONSTRUCTION SHALL CONFORM TO THE COUNTY OF SANTA CRUZ DESIGN CRITERIA, THE STATE STANDARD PLANS AND THE APPLICABLE E PROVISIONS OF THE STATE STANDARD SPECIFICATIONS.
2. THERE SHALL BE NO CHANGES IN THE APPROVED IMPROVEMENT PLANS WITHOUT PRIOR APPROVAL BY THE SANTA CRUZ COUNTY DEPARTMENT OF PUBLIC WORKS.
3. PLEASE CALL "UNDERGROUND SERVICE ALERT" (U.S.A.) AT 811 OR 800-227-2600 BEFORE DIGGING.
4. THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE APPROVED BY THE SANTA CRUZ COUNTY DEPARTMENT OF PUBLIC WORKS.
5. THE CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY, AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.
6. THE CONTRACTOR SHALL POSSESS A CLASS "A" LICENSE AT THE TIME THE CONTRACT IS AWARDED.
7. A PROPOSED TRAFFIC CONTROL PLAN WITH ANY PROPOSED DETOUR ROUTES WILL NEED TO BE SUBMITTED FOR APPROVAL BY THE COUNTY OF SANTA CRUZ A MINIMUM OF THREE (3) DAYS PRIOR TO THE SCHEDULED DRILLING OPERATIONS AND MUST COMPLY WITH THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
8. ALLOWABLE ROAD CLOSURE HOURS ARE DURING NORMAL WORKING HOURS 7:30 AM TO 5:00 PM MONDAY THROUGH FRIDAY. FOR FULL ROAD CLOSURE, THE ROADWAY CAN BE CLOSED FOR PERIODS NOT TO EXCEED 4 HOURS. AFTER EACH STOPPAGE, ALL ACCUMULATED TRAFFIC MUST PASS THROUGH THE WORK ZONE BEFORE ANOTHER STOPPAGE IS MADE.
9. TRAFFIC CONTROL MUST BE UNDER FLAGGER CONTROL, BETWEEN 8:00 A.M. AND 4:30 PM WEEKDAYS ONLY.

AB	AGGREGATE BASE	KIP	1000 POUNDS FORCE
AC	ASPHALT CONCRETE	L	LENGTH
APN	ASSESSOR'S PARCEL NUMBER	LOL	LAYOUT LINE
APPROX	APPROXIMATE	MGS	METAL BEAM GUARD RAIL SYSTEM
BC	BEGINNING OF CURVE	MIN	MINIMUM
BOT	BOTTOM	N	NORTH
BP	BOTTOM CONCRETE PIER	(n)	NEW
CL	CENTER LINE	O.C.	ON CENTER
CL	CONTROL LINE	OH	OVERHEAD
CONC	CONCRETE	PERF	PERFORATED
CONN	CONNECTION	PG&E	PACIFIC GAS AND ELECTRIC
CONST	CONSTRUCTION	PM	POST MILE
CP	CONTROL POINT	PRIN	PRINCIPAL
DIA	DIAMETER	PROP	PROPOSED
E	EAST	PT	POINT
(E), EX	EXISTING	PVC	POLY VINYL CHLORIDE
EA	EACH	R	RADIUS
EC	END OF CURVE	RD	ROAD
EG	EXISTING GRADE	REINF	REINFORCED
EL, ELEV	ELEVATION	RT	RIGHT
ENGR	ENGINEER	R/W	RIGHT OF WAY
EP	EDGE OF PAVEMENT	S	SOUTH
EST	ESTIMATE	SEC	SECTION
ETW	EDGE OF TRAVEL WAY	SHT	SHEET
EXCAV	EXCAVATE, EXCAVATION	SP	STEEL POST
FD	FOUND	S.S.	SANDSTONE
FG	FINISH GRADE	STA	STATION
FT	FOOT, FEET	TP	TOP OF PILE
FTG	FOOTING	TYP	TYPICAL
GEN	GENERAL	U.B.	UNBONDED
GRD	GRADE	W	WEST
HDPE	HIGH DENSITY POLYETHYLENE	W/	WITH
HMA	HOT MIXED ASPHALT	&	AND
HT	HEIGHT	@	AT
INV	INVERT	1ST	FIRST
IP	IRON PIPE	<	LESS THAN
JP	JOINT POLE	#	POUND

COUNTY OF SANTA CRUZ
DEPARTMENT OF PUBLIC WORKS

PROJECT PLANS FOR CONSTRUCTION ON

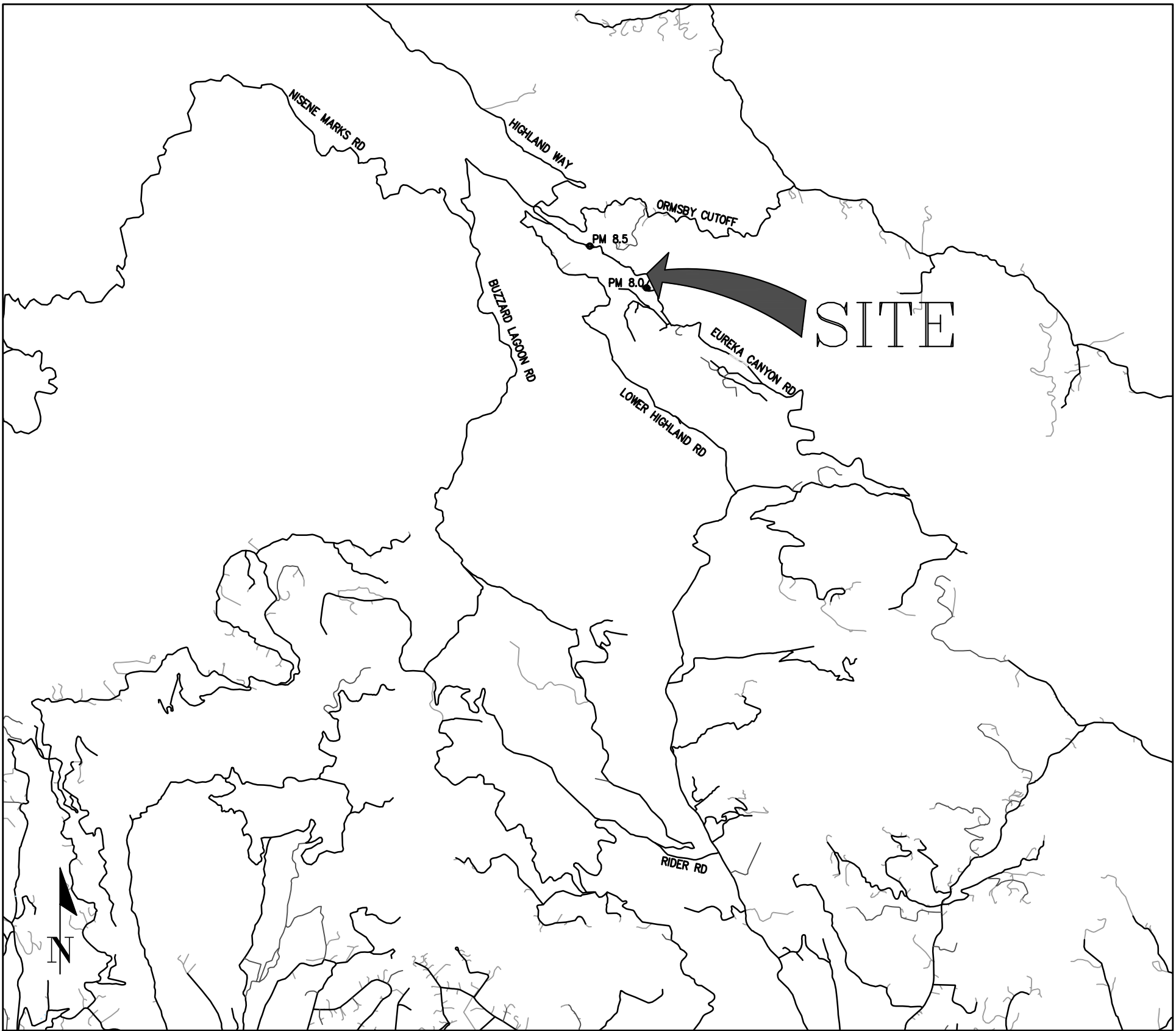
EUREKA CANYON ROAD PM 8.11

STORM DAMAGE REPAIR PROJECT

December 2021 Storm Event

FEDERAL PROJECT No. ER-15J2 (001)

To be supplemented by CalTrans Standard Plans dated 2023









VICINITY MAP
NOT TO SCALE

DIST	COUNTY	ROUTE	POST MILE OF PROJECT	SHEET No.	TOTAL SHEETS
2	Scr	EUREKA CANYON RD	P.M. 8.11	1	8


The map shows Santa Cruz County with its neighboring counties: San Mateo to the northwest, Santa Clara to the northeast, and Monterey to the south. Monterey Bay is to the southwest. Major highways are depicted: Highway 1 runs along the coast; Highway 17 runs north-south through the center; Highway 101 runs east-west through the south. Towns and cities marked include Boulder Creek, Brookdale, Ben Lomond, Felton, Davenport, Santa Cruz, Capitola, Soquel, Aptos, Fornalutes, Freedom, and Watsonville. A specific location is marked with a circle and labeled 'PROJECT LOCATION' near the intersection of Highway 1 and Highway 101, south of Watsonville. A north arrow is located in the bottom left corner.

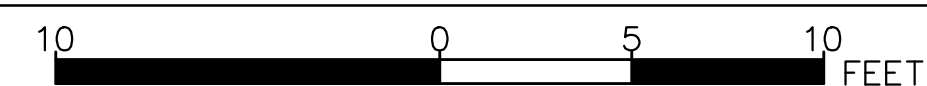
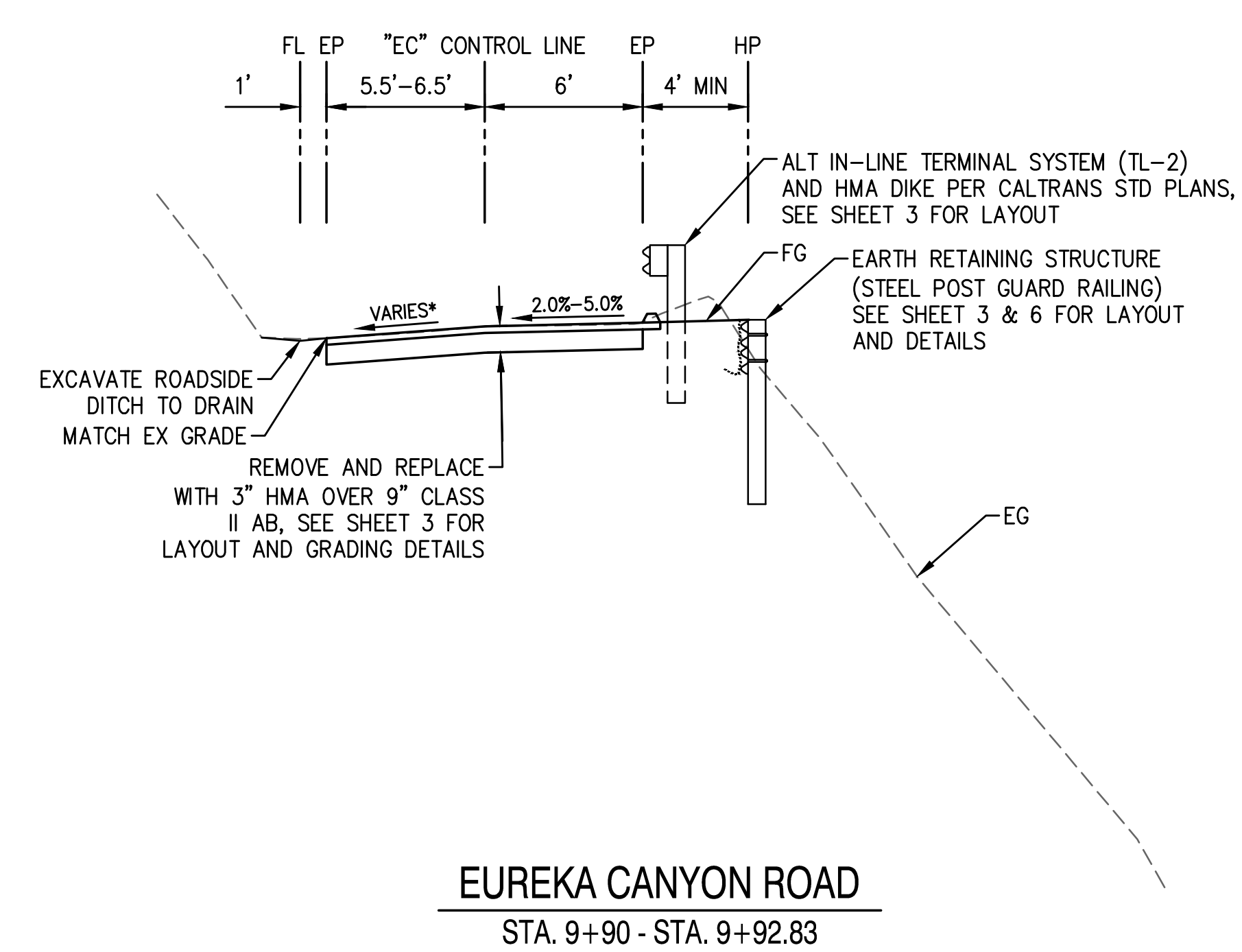
LOCATION MAP

DocuSigned by:  F9ED8BC84210459	4/24/2025
Civil Engineer in Responsible Charge/ Senior Civil Engineer	
DocuSigned by:  5B6D8EFC20AA4A6	4/24/2025
Assistant Director of Public Works Transportation Engineering Division	
DocuSigned by:  50EB6A64454648C	4/23/2025
Director of Public Works	
Chair, Board of Supervisors	
Approved by Board of Supervisors	

Reviewed by:	DocuSigned by:  4/25/2025	Reviewed by:	DocuSigned by:  4/24/2025	Reviewed by:	DocuSigned by:  4/24/2025	COUNTY OF SANTA CRUZ, PUBLIC WORKS 701 OCEAN St. ROOM 410 SANTA CRUZ, CA 95060
Greg Martin Traffic Engineer	63B54F826F17460	Alex Sandoval Road Superintendent	11468D80567D4F3	Katie Beach Construction Engineer	F9D07780816442D	


SHEET NAME: TITLE SHEET

COUNTY OF SANTA CRUZ — DEPARTMENT OF PUBLIC WORKS		DESIGN ENGINEER		DATE	REVISION	BY
EUREKA CANYON ROAD PM 8.11 STORM DAMAGE REPAIR PROJECT		HILARY WHELAN				
DRAWN:	HAW					
CHECKED:	AGM					
DATE:	4/23/2025					
SCALE:	AS SHOWN					
JOB NO.	P40692					
SHEET						
01 of 07						

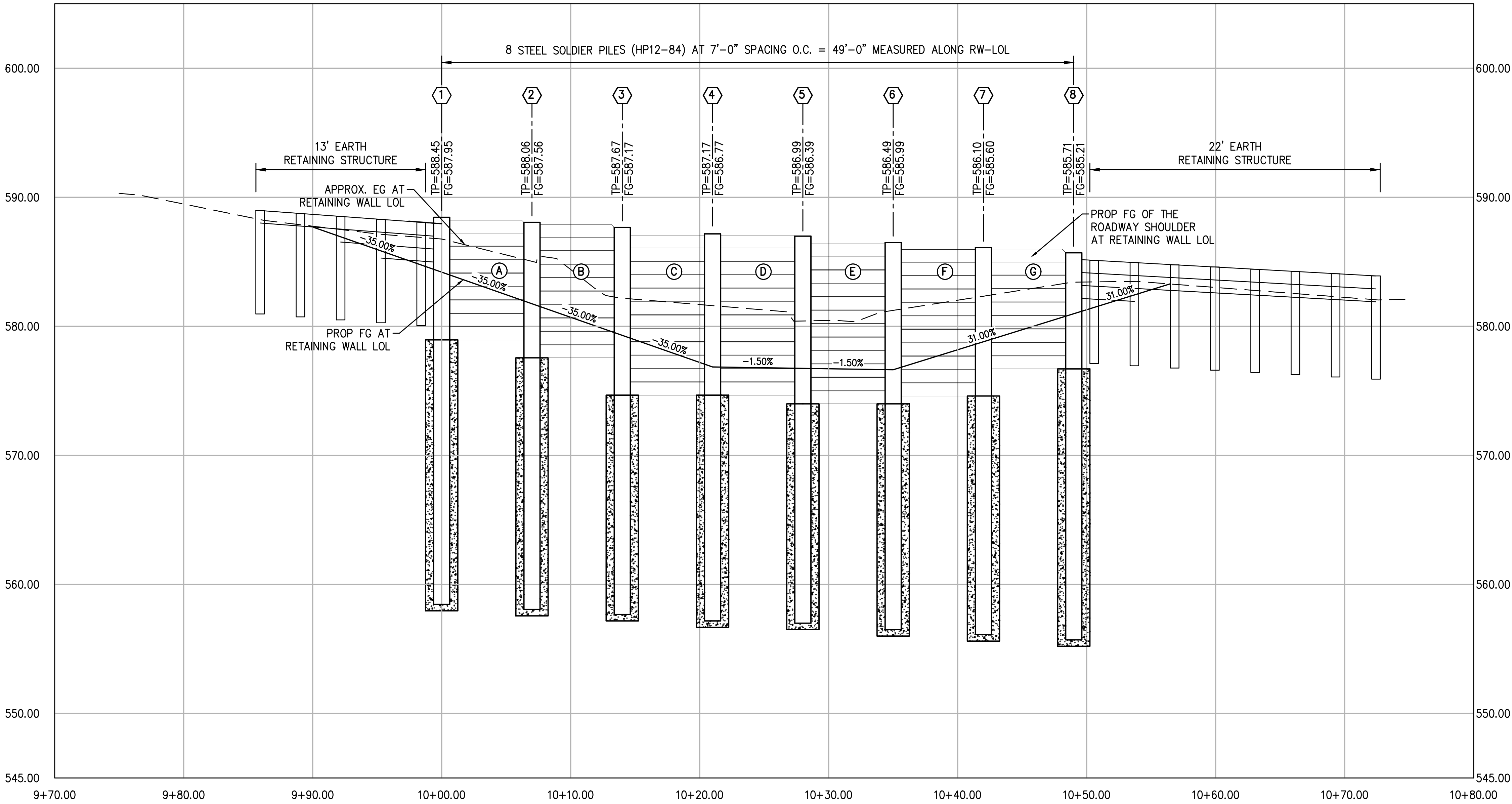


SHEET NAME:

TYPICAL CROSS SECTIONS

COUNTY OF SANTA CRUZ – DEPARTMENT OF PUBLIC WORKS EUREKA CANYON ROAD PM 8.11 STORM DAMAGE REPAIR PROJECT	DESIGN ENGINEER		DATE	REVISION	BY
	HILARY WHELAN				
DRAWN: HAW CHECKED: TJB DATE: 10/09/2024 SCALE: 1"=5' JOB NO. P40692 SHEET 02 OF 07					

10/25/2024 10:09 AM
C:\Users\jwheeler\OneDrive\Documents\Projects\2024\Storm Damage\CDM\Bureau Canyon PM 8.11\PM811\Bureau Canyon PM 8.11\Storm Dam.dwg



SOLDIER PILE WALL ELEVATION

SCALE: 1"=5'

SOLDIER PILE DATA TABLE

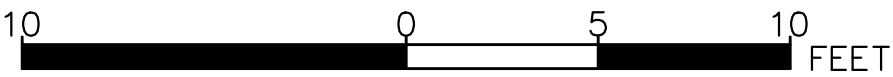
PILE No.	STATION ON RW-LOL	STATION ON "EC" CONTROL LINE	PILE OFFSET FROM EC-8.11 LINE	TOP OF PILE ELEV (FT)	TOP OF STRUCTURAL CONCRETE (FT)	PILE TIP ELEV (FT)	PILE LENGTH (FT)	PILE SECTION	DRILLED HOLE DIAMETER (IN)
①	10+00.00	9+92.83	10.00'	588.45	578.95	558.45	30	HP12-84	30
②	10+07.00	10+10.00	10.28'	588.06	577.56	558.06	30	HP12-84	30
③	10+14.00	10+07.17	10.45'	587.67	574.67	557.67	30	HP12-84	30
④	10+21.00	10+14.34	10.50'	587.17	574.67	557.17	30	HP12-84	30
⑤	10+28.00	10+21.52	10.43'	586.99	573.99	556.99	30	HP12-84	30
⑥	10+35.00	10+28.54	10.29'	586.49	573.99	556.49	30	HP12-84	30
⑦	10+42.00	10+35.54	10.14'	586.10	574.60	556.10	30	HP12-84	30
⑧	10+49.00	10+42.53	10.00'	585.71	576.71	555.71	30	HP12-84	30

GENERAL CONSTRUCTION NOTES

- DESIGN: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 6TH EDITION WITH CALIFORNIA AMENDMENTS, PREFACE DATED JANUARY 2014
- SEISMIC DESIGN: CALTRANS SEISMIC DESIGN CRITERIA (SDC)
- LIVE LOAD: 250 PSF EQUIVALENT TO 2 FEET SOIL WEIGHT
- SOIL PARAMETERS (FOR DETERMINATION OF DESIGN LATERAL EARTH PRESSURES)
BACKFILL SOIL WEIGHT = 125 LB/FT³
FRICTION ANGLE = 40°
ACTIVE PRESSURE COEFFICIENT, K_a = 0.22
- STEEL SOLDIER PILES: ASTM A572/A, ASTM 572M GRADE 50 MIN
- CONCRETE: f'_c = 4000 psi
- STRUCTURAL TIMBER: TREATED DOUGLAS FIR, GRADE No. 1 OR BETTER
TIMBER TO BE FULL SAWN
 F_{bo} = 1.20 KSI

LAGGING DATA TABLE

BAY No.	NUMBER OF LAGGING MEMBERS	TOP OF LAGGING ELEVATION	BOTTOM OF LAGGING ELEVATION
Ⓐ	9	588.23	578.95
Ⓑ	10	587.88	577.56
Ⓒ	12	587.07	574.67
Ⓓ	12	587.07	574.67
Ⓔ	12	586.39	573.99
Ⓕ	11	585.96	574.60
Ⓖ	9	585.98	576.71



SHEET NAME:


SOLDIER PILE WALL ELEVATION

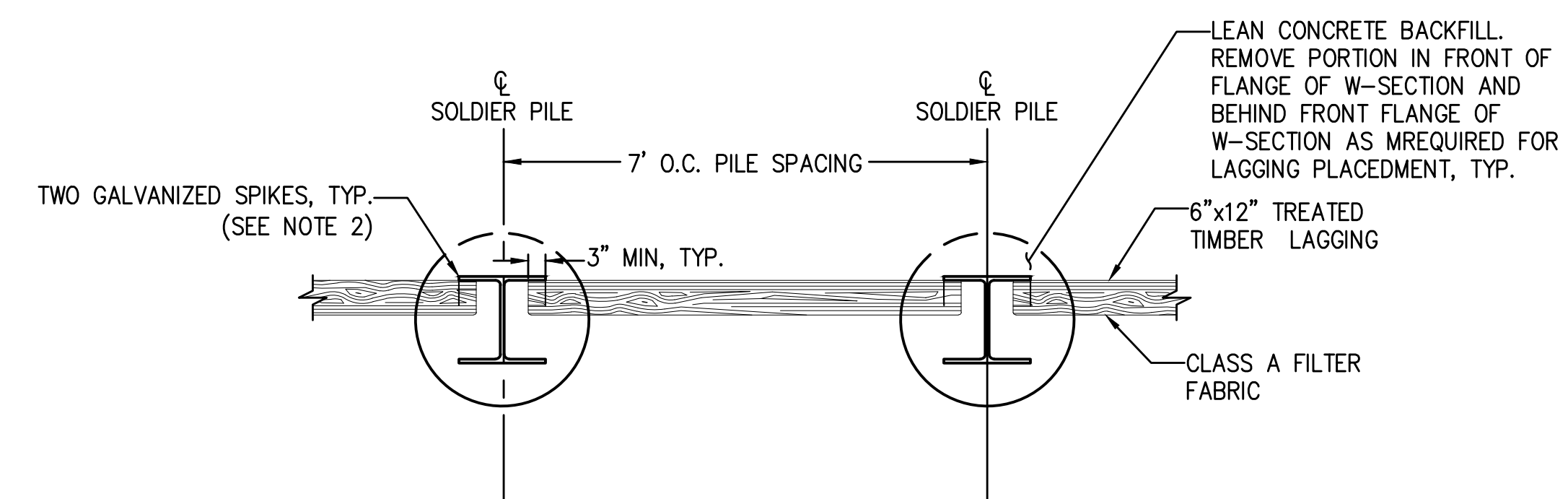
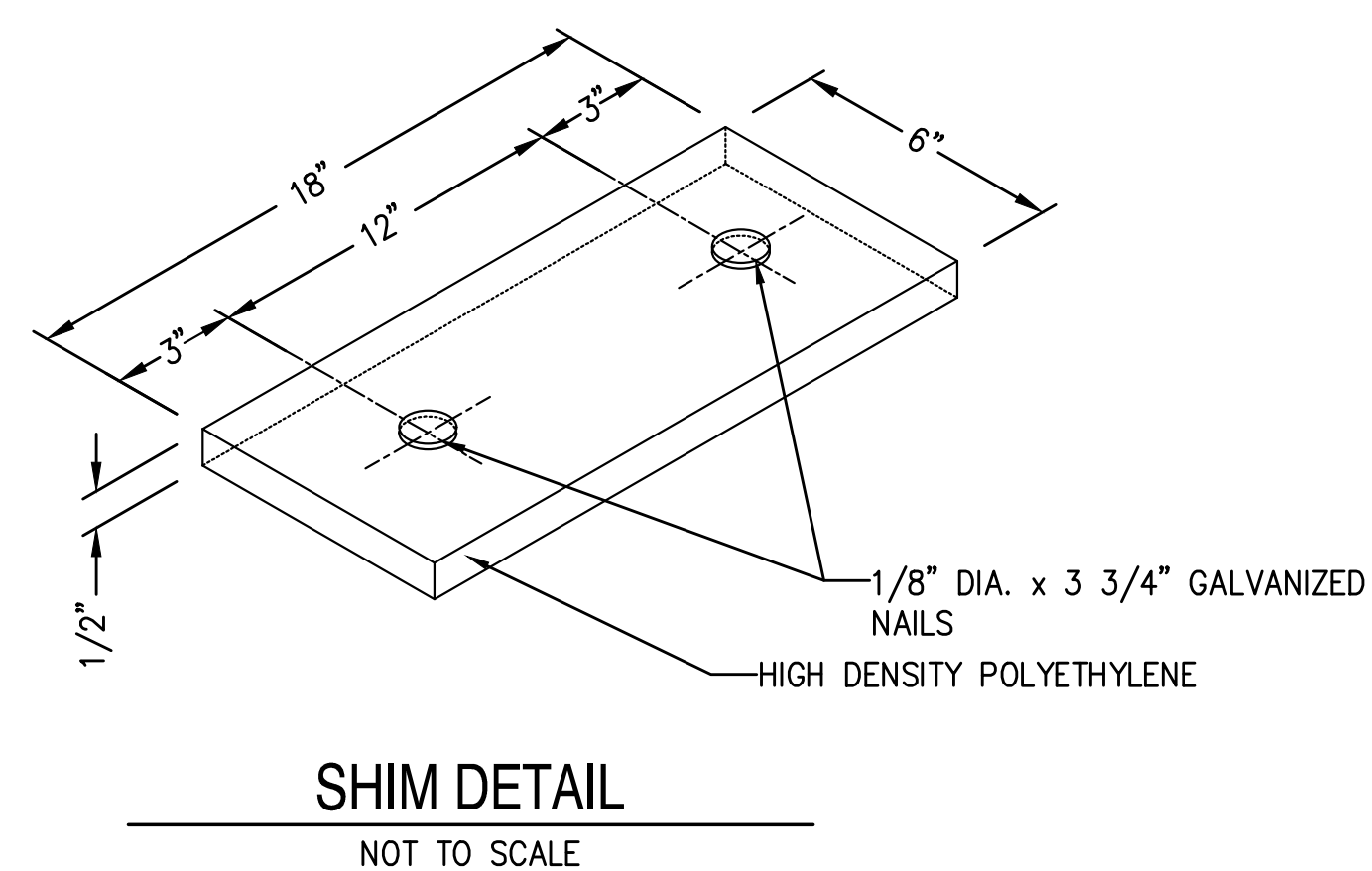
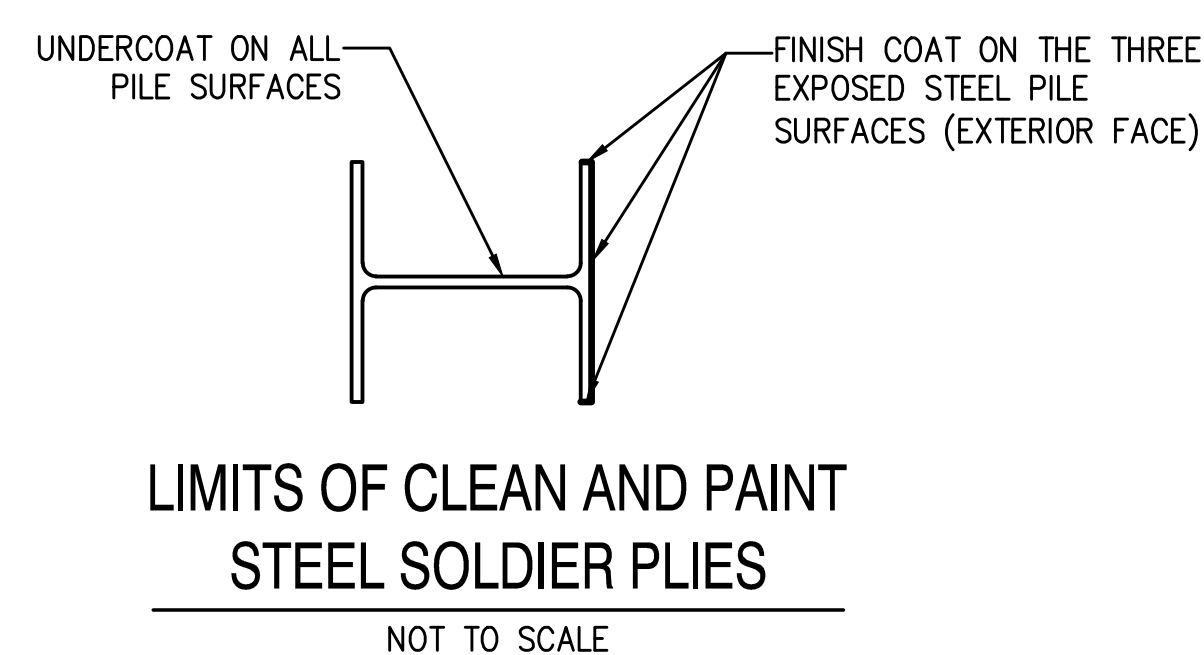
BY				
REVISION				
DATE				

DESIGN ENGINEER	HILARY WHELAN
COUNTY OF SANTA CRUZ – DEPARTMENT OF PUBLIC WORKS	EUREKA CANYON ROAD PM 8.11 STORM DAMAGE REPAIR PROJECT
DRAWN:	HAW
CHECKED:	TJB
DATE:	10/09/2024
SCALE:	AS SHOWN
JOB NO.	P40692
SHEET	04 of 07



SOLDIER PILE DETAILS No 1

DRAWN: HAW			DATE	REVISION	BY
CHECKED: TJB	DESIGN ENGINEER				
DATE: 10/09/2024	COUNTY OF SANTA CRUZ – DEPARTMENT OF PUBLIC WORKS EUREKA CANYON ROAD PM 8.11 STORM DAMAGE REPAIR PROJECT				
SCALE: AS SHOWN					
JOB NO. P40692					
SHEET					
05 OF 07					

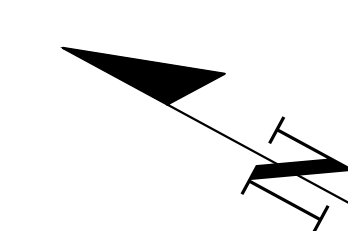


1. LAGGING MAY BE CHAMFERED TO FACILITATE PLACEMENT. MAXIMUM OF TWO CORNERS
2. USE 40d GALVANIZED WIRE SPIKES FOR 6"x12" LAGGING
3. SPIKES MUST NOT BE BENT

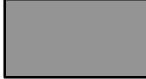




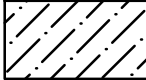


TIMBER LAGGING MEMBER (PLAN VIEW)

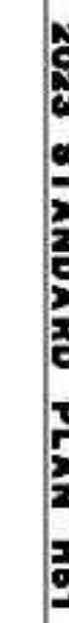
NOT TO SCALE

06 OF 07

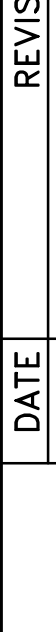


LEGEND

- | | |
|---|---|
|  | 3" HMA OVER 9" CLASS II AGGREGATE BASE
(± 820 S.F.) |
|  | HP12-84 STEEL SOLDIER PILE W/30" DIA. CAST IN DRILLED HOLE |
|  | SOLDIER PILE RETAINING WALL |
|  | EARTH RETAINING STRUCTURE |
|  | LIMITS OF GRADING |
|  | PERMANENT HYDROSEEDING (± 635 S.F.) |
|  | FIBER ROLLS PER STANDARD PLAN H51 (± 86 L.F.) |
|  | TEMPORARY REINFORCED SILT FENCE PER STANDARD PLAN T51
(± 86 L.F.) |



EROSION CONTROL PLAN

DRAWN: HAW		COUNTY OF SANTA CRUZ – DEPARTMENT OF PUBLIC WORKS	DESIGN ENGINEER		DATE	REVISION	BY
CHECKED: TJB	EUREKA CANYON ROAD PM 8.11 STORM DAMAGE REPAIR PROJECT						
DATE: 10/09/2024							
SCALE: AS SHOWN							
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SHEET							
07 OF 07							