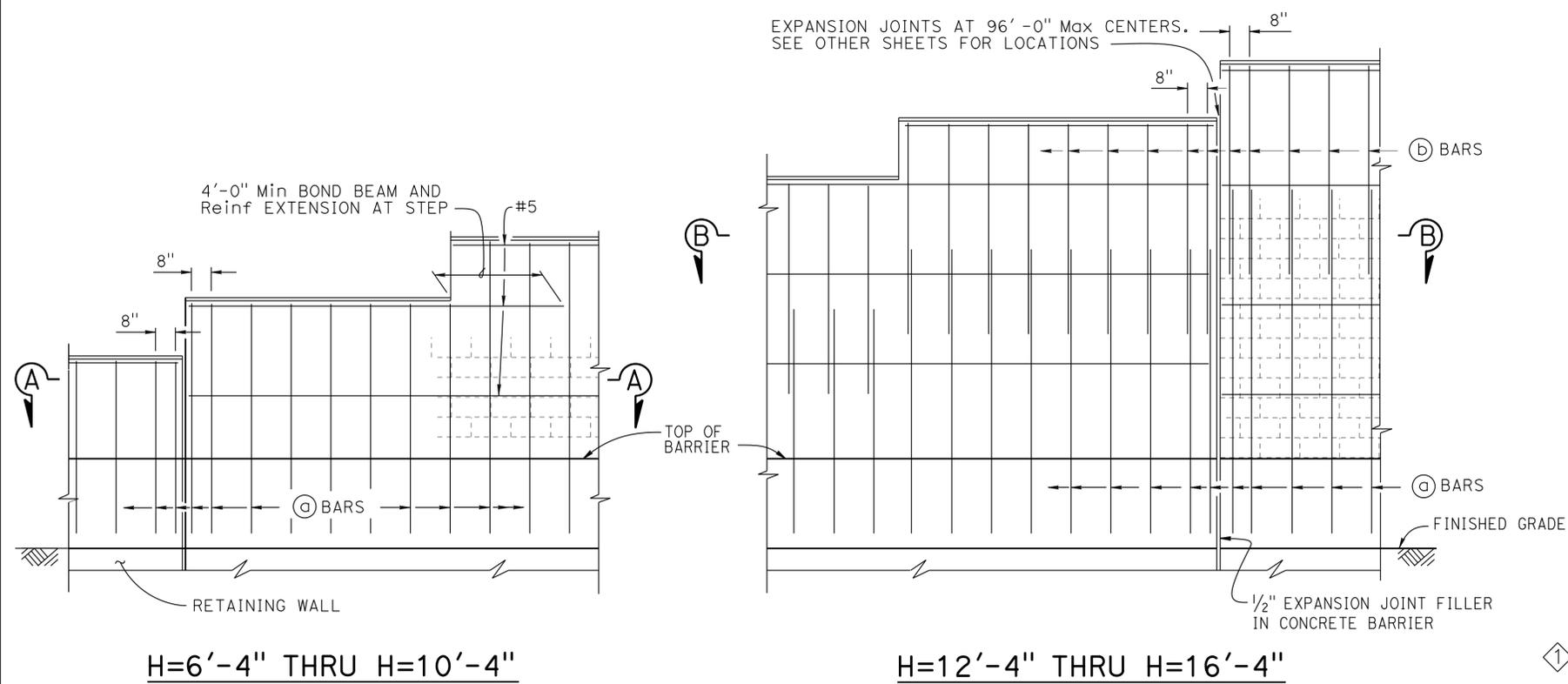


DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1901	2313

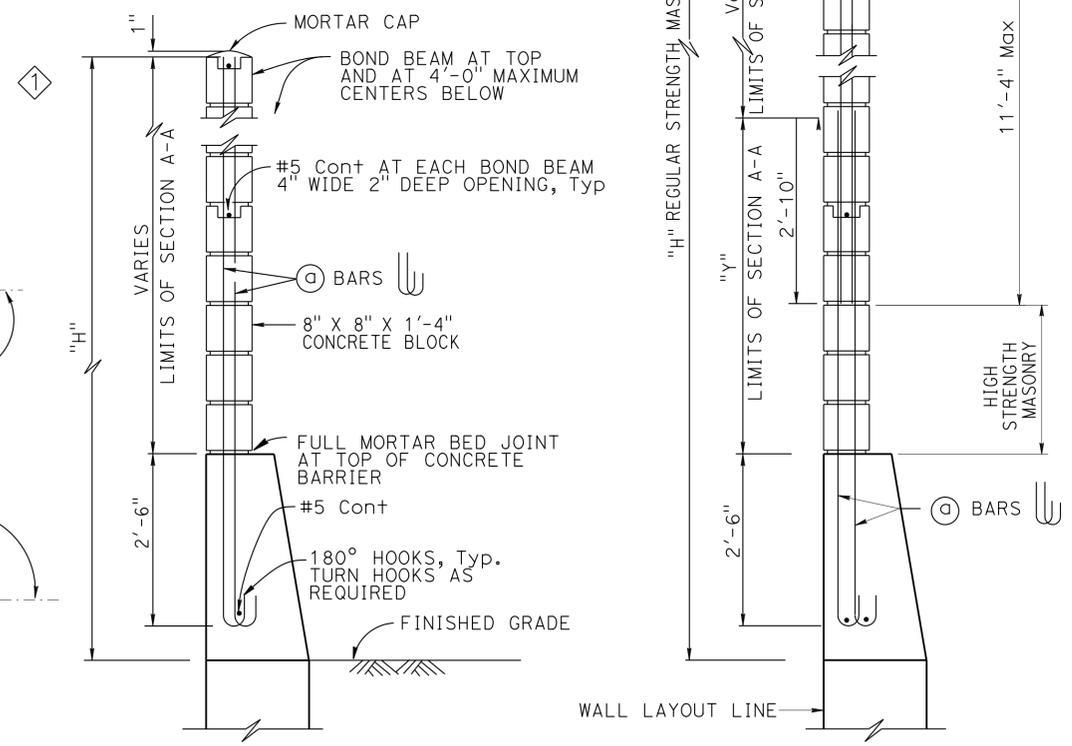
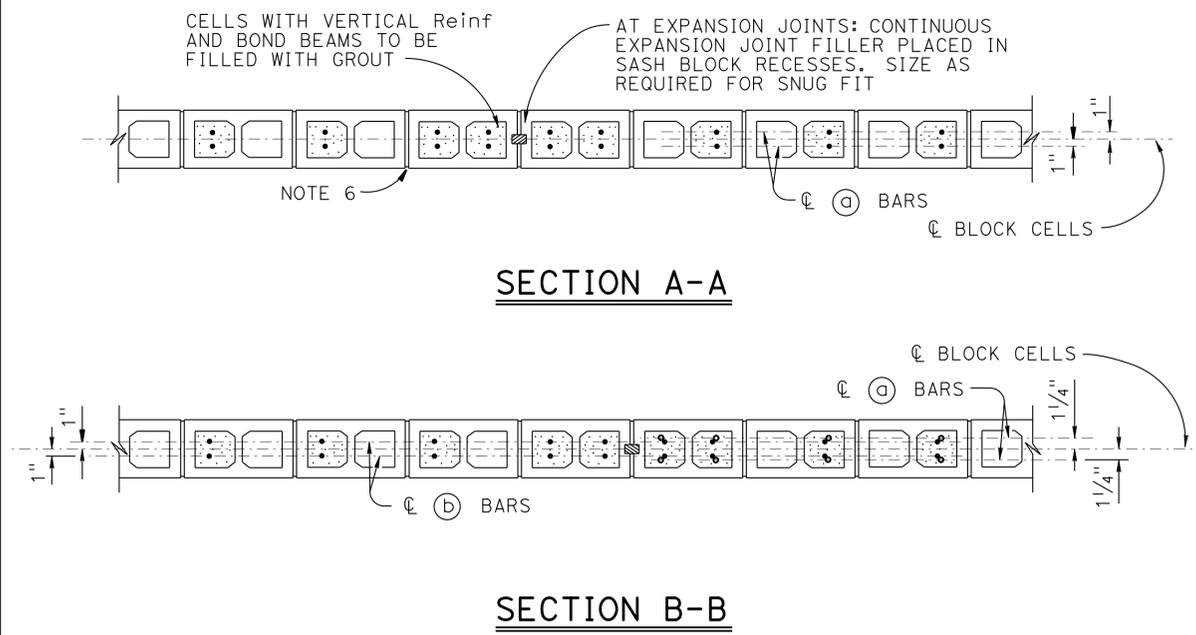
10/01/14
 REGISTERED CIVIL ENGINEER DATE
 6-1-15
 PLANS APPROVAL DATE
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

RICHARD E. SCHEDEL
 No. C 64259
 Exp. 06/30/15
 CIVIL
 STATE OF CALIFORNIA



MAXIMUM "H"	(a) BARS @ 1'-4" Max	(b) BARS @ 1'-4" Max	"Y"	f'm (psi)	COMPRESSIVE STRENGTH OF CMU (psi)	MAXIMUM "H"
6'-4"	#4	---	---	1500	1900	6'-4"
8'-4"	#4	---	---	1500	1900	8'-4"
10'-4"	#4	---	---	1500	1900	10'-4"
12'-4"	#5	#4	5'-0"	1500	1900	12'-4"
14'-4"	#6	#4	7'-0"	1500	1900	14'-4"
16'-4"	#6	#4	9'-0"	2500	3700	16'-4"

PART ELEVATION



TYPICAL SECTION

- NOTES:
- For details not shown, see "MASONRY BLOCK SOUND WALL WITH BARRIER ON RETAINING WALL - DETAILS NO. 2" sheet
 - Slope ground at traffic side of barrier to drain. Maximum slope ±10%
 - See STANDARD PLANS B15-9 for other details
 - For type of block and joint finish, see other sheets
 - When blocks are laid in stacked bond, ladder type, galvanized joint reinforcement shall be provided. A minimum of 2-9 gauge wire continuous at 4'-0" maximum to be used. Locate reinforcement in joints that are at the approximate midpoint between bond beams
 - Horizontal joints shall be tooled concave or may be weathered. Vertical joints shall be tooled concave or may be raked
 - For intermediate wall heights that are between the "H's" given, use the tabular information for the next higher "H"
 - Masonry strengths are listed in "SOUND WALL REINFORCEMENT TABLE"
 - Concrete to be used for the barrier shall contain not less than 590 pounds of cementitious material per cubic yard

SPECIAL DETAILS
NO SCALE

RETAINING WALL NO. 2084

MASONRY BLOCK SOUND WALL WITH BARRIER ON RETAINING WALL

DETAILS NO. 1

REVISED STANDARD DRAWING

FILE NO. **xs15-130-1**

APPROVAL DATE July 2012

Modified barrier width and sound wall location

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

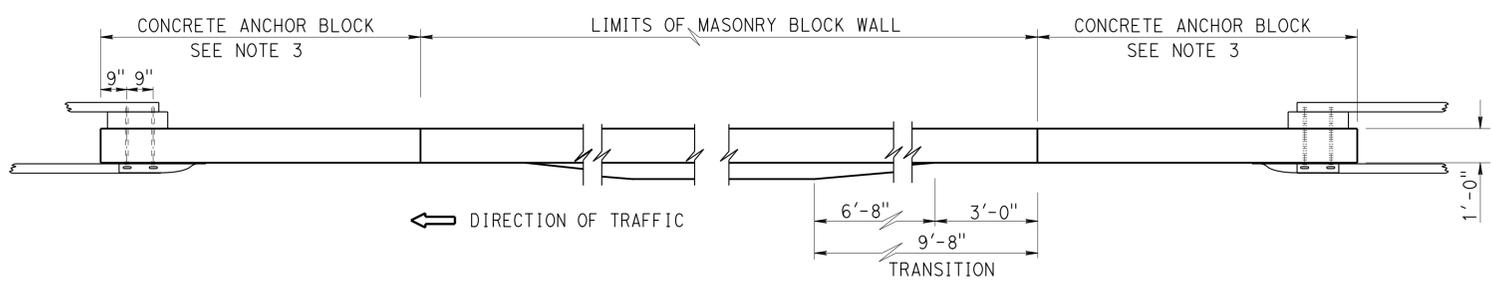
DIVISION OF ENGINEERING SERVICES

BRIDGE NO. 53E0300
POST MILE 39.47

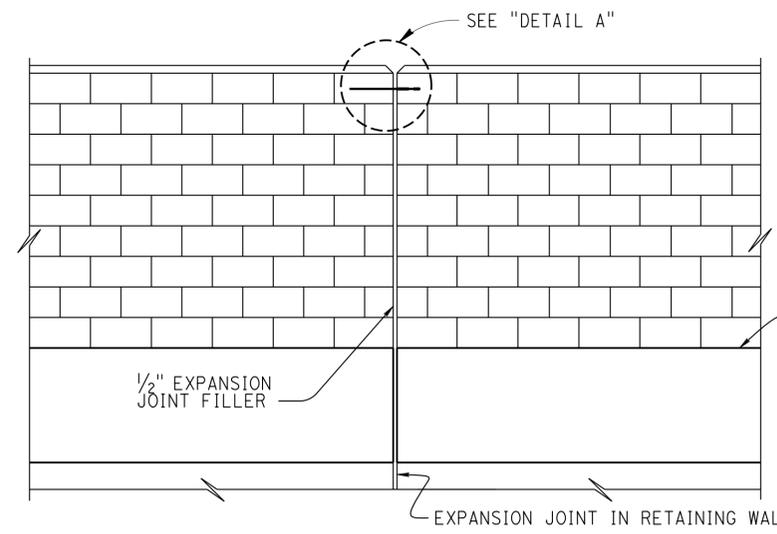
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1902	2313

Richard E. Schendel
 REGISTERED CIVIL ENGINEER
 DATE 10/01/14
 6-1-15
 PLANS APPROVAL DATE
 No. C 64259
 Exp. 06/30/15
 CIVIL
 STATE OF CALIFORNIA

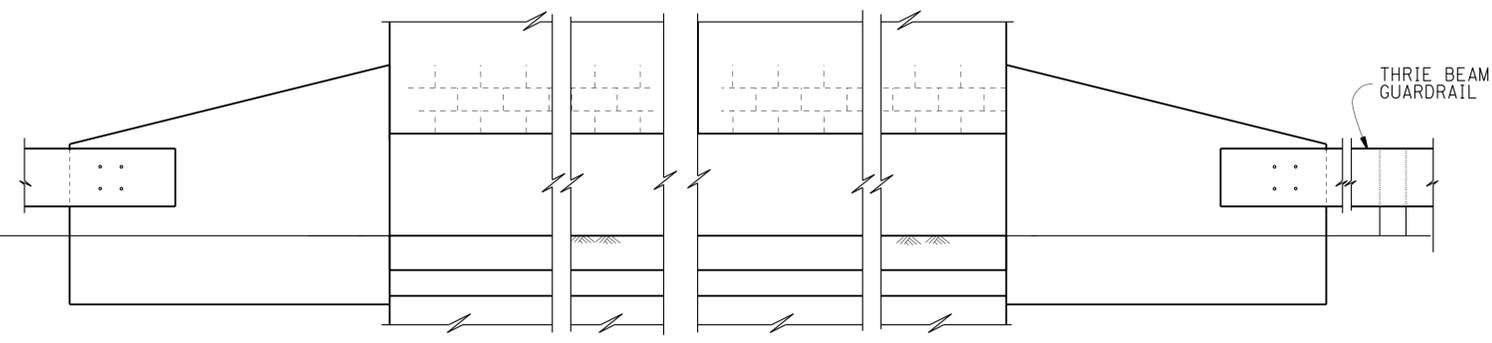
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PLAN



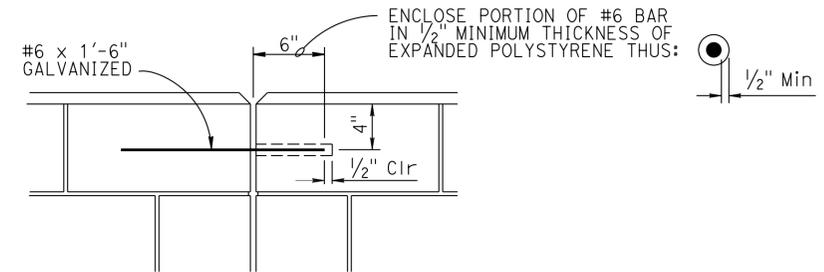
ALIGNMENT KEY DETAIL



ELEVATION

METAL BEAM GUARDRAIL ANCHORAGE

For details not shown, see STANDARD PLAN B11-56



DETAIL A

DESIGN NOTES

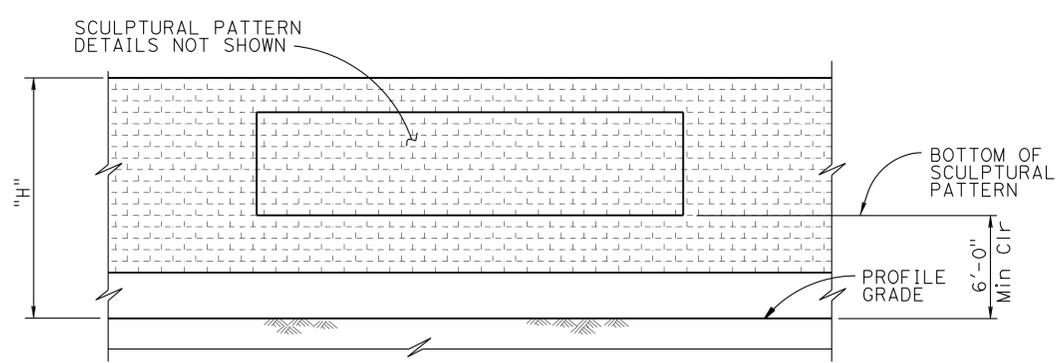
DESIGN
Uniform Building Code, 1997 Edition and the Bridge Design Specifications

DESIGN WIND LOAD
33 psf

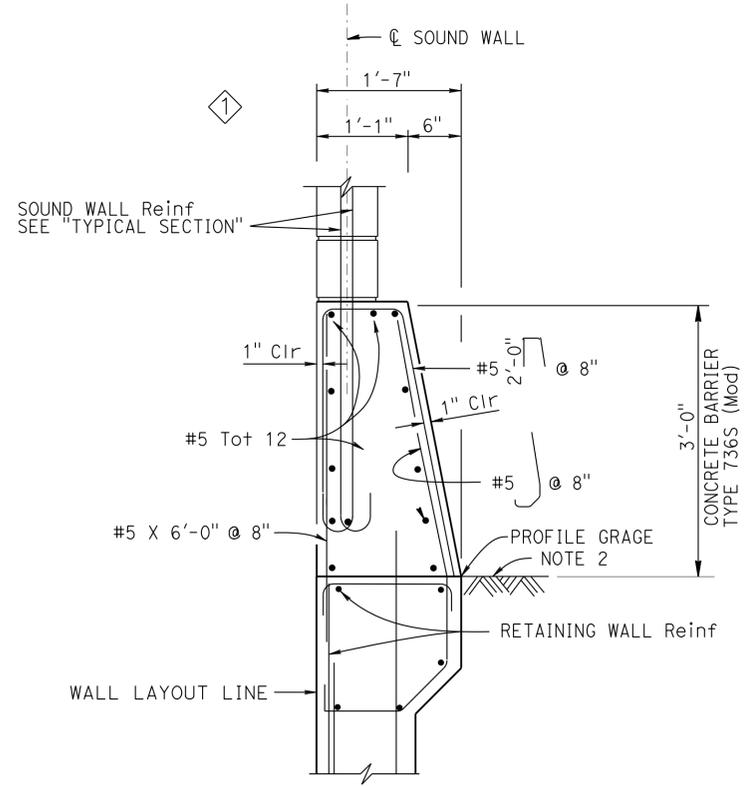
DESIGN SEISMIC LOAD
0.57 Dead load

REINFORCED CONCRETE	REGULAR STRENGTH	HIGH STRENGTH	
f'c = 3600 psi	f'm = 1500 psi	f'm = 2000 psi	f'm = 2500 psi
fy = 60 ksi	fb = 495 psi	fb = 660 psi	fb = 830 psi
	fs = 24,000 psi	fs = 24,000 psi	fs = 24,000 psi
	n = 25.8	n = 19.3	n = 15.5

- NOTES:
- For details not shown, see RSP B15-6
 - Slope ground at traffic side of barrier to drain. Maximum slope ±10%. See RSP B11-56, Note 3.
 - For Concrete Anchor Block and connection details, see "ANCHOR BLOCK FOR TRANSITION RAILING CONNECTION DETAIL C" on STANDARD PLAN A77J3.



CLEARANCE DETAIL



BARRIER SECTION

SPECIAL DETAILS
NO SCALE

RETAINING WALL No. 2084

MASONRY BLOCK SOUND WALL WITH BARRIER ON RETAINING WALL

DETAILS NO. 2

REVISED STANDARD DRAWING

FILE NO. **xs15-130-2**

APPROVAL DATE September 2013

① Modified barrier width and sound wall location

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

BRIDGE NO. 53E0300
POST MILE 39.47

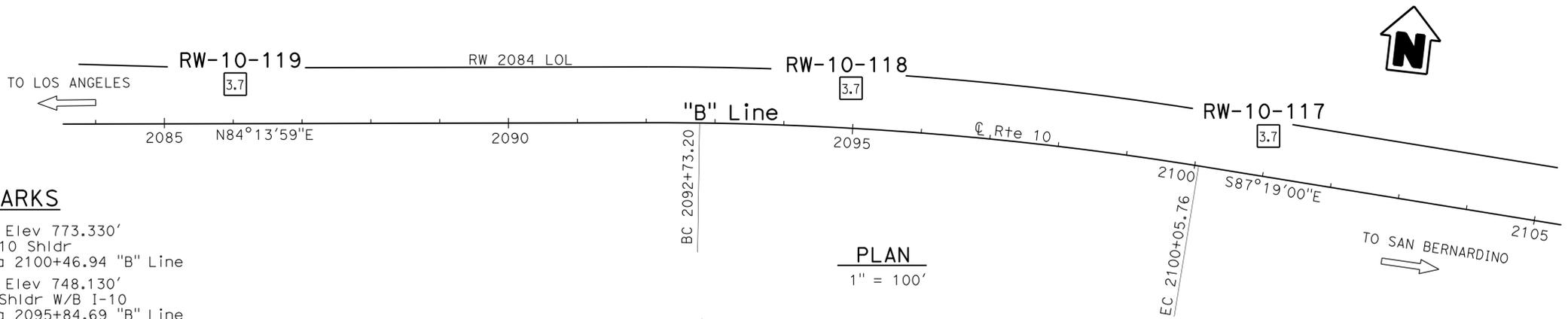
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	10	37.2/42.4	1904	2313

1-15-14
 CERTIFIED ENGINEERING GEOLOGIST
 Michael A. Salisbury
 No. 2462
 Exp. 2-28-15
 CERTIFIED ENGINEERING GEOLOGIST
 STATE OF CALIFORNIA

6-1-15
 PLANS APPROVAL DATE

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This LOTB sheet was prepared in accordance with the Caltrans Soil & Rock Logging, Classification, & Presentation Manual (2010 Edition).
 See 2010 Standard Plans A10F and A10G for Soil Legend, and A10H for Rock Legend.

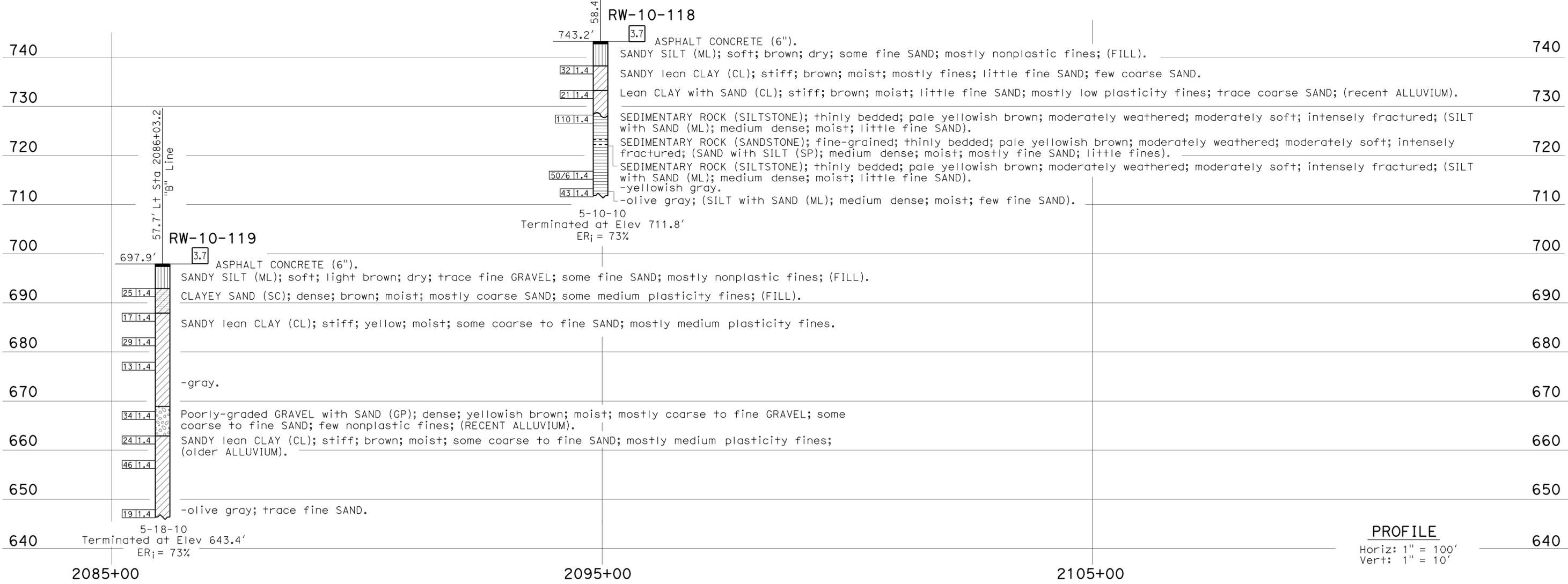


BENCH MARKS

- SUHV 1612 Elev 773.330'
PK N. W/B I-10 Shldr
62.07' Lt Sta 2100+46.94 "B" Line
- SUHV 1613 Elev 748.130'
PK N. in AC Shldr W/B I-10
62.44' Lt Sta 2095+84.69 "B" Line
- SUHV 1615 Elev 698.920'
PK N. in AC Shldr W/B I-10
63.27 LT Sta 2087+07.86 "B" Line
NAVD88

PLAN
 1" = 100'

Note: No groundwater encountered during field investigation.



PROFILE
 Horiz: 1" = 100'
 Vert: 1" = 10'

ENGINEERING SERVICES		MATERIALS AND GEOTECHNICAL SERVICES		STATE OF CALIFORNIA		DIVISION OF ENGINEERING SERVICES		BRIDGE NO.		RETAINING WALL No. 2084	
FUNCTIONAL SUPERVISOR		DRAWN BY: I.G-Remmen, 12/12		FIELD INVESTIGATION BY:		STRUCTURE DESIGN		53E0300		LOG OF TEST BORINGS 1 OF 2	
NAME: D. Jang		CHECKED BY: H. Liu		M. Salisbury, Hung Po		DESIGN BRANCH 18		POST MILE			
065 CIVIL LOG OF TEST BORINGS SHEET		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		0 1 2 3		UNIT: 3643		CONTRACT NO.: 07-1193U1		REVISION DATES	
						PROJECT NUMBER & PHASE: 07130000071		DISREGARD PRINTS BEARING EARLIER REVISION DATES		SHEET 22 OF 23	

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	10	37.2/42.4	1905	2313

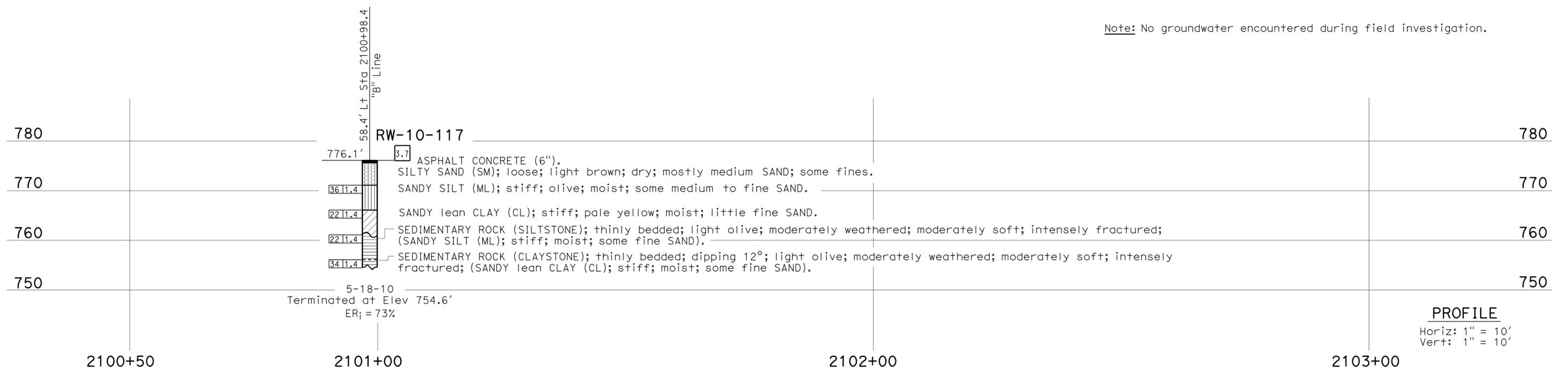

 CERTIFIED ENGINEERING GEOLOGIST
 1-15-14
 6-1-15
 PLANS APPROVAL DATE

PROFESSIONAL GEOLOGIST
 Michael A. Salisbury
 No. 2462
 Exp. 2-28-15
 CERTIFIED ENGINEERING GEOLOGIST
 STATE OF CALIFORNIA

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FOR PLAN VIEW, SEE
 "LOG OF TEST BORINGS 1 OF 2"



ENGINEERING SERVICES		MATERIALS AND GEOTECHNICAL SERVICES		STATE OF CALIFORNIA		DIVISION OF ENGINEERING SERVICES		BRIDGE NO.		RETAINING WALL No. 2084	
FUNCTIONAL SUPERVISOR		DRAWN BY: I.G-Remmen, 12/12		FIELD INVESTIGATION BY:		DEPARTMENT OF TRANSPORTATION		53E0300		LOG OF TEST BORINGS 2 OF 2	
NAME: D. Jang		CHECKED BY: H. Liu		M. Salisbury, Hung Po		DESIGN BRANCH 18		POST MILE			
								39.47			
065 CIVIL LOG OF TEST BORINGS SHEET		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		0 1 2 3		UNIT: 3643		PROJECT NUMBER & PHASE: 07130000071		CONTRACT NO.: 07-1193U1	
								DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES	
										09-03-13 01-15-14 11-21-13	
										SHEET OF	
										23 23	

FILE => 53e0300-z-1tb2of2.dgn

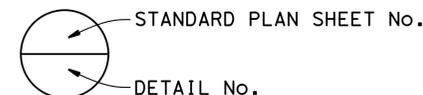
STANDARD PLANS DATED 2010

SHEET NO.	TITLE
RSP A10A	ABBREVIATIONS (SHEET 1 OF 2)
RSP A10B	ABBREVIATIONS (SHEET 2 OF 2)
RSP A10C	LINES AND SYMBOLS (SHEET 1 OF 3)
RSP A10D	LINES AND SYMBOLS (SHEET 2 OF 3)
RSP A10E	LINES AND SYMBOLS (SHEET 3 OF 3)
RSP A10F	LEGEND - SOIL (SHEET 1 OF 2)
RSP A10G	LEGEND - SOIL (SHEET 2 OF 2)
RSP A10H	LEGEND - ROCK
RSP A76A	CONCRETE BARRIER TYPE 60
RSP B11-47	CABLE RAILING

NOTES:

- ① Cable Railing RSP (B11-47)
- ② Concrete Gutter, see "ROAD PLANS"
- ③ Concrete Barrier Type 60D Mod (A76A)
- ④ Architectural Treatment
- ⑤ Geocomposite Drain
- ⑥ Ⓞ Lighting Standard, see "ROAD PLANS"

LEGEND:



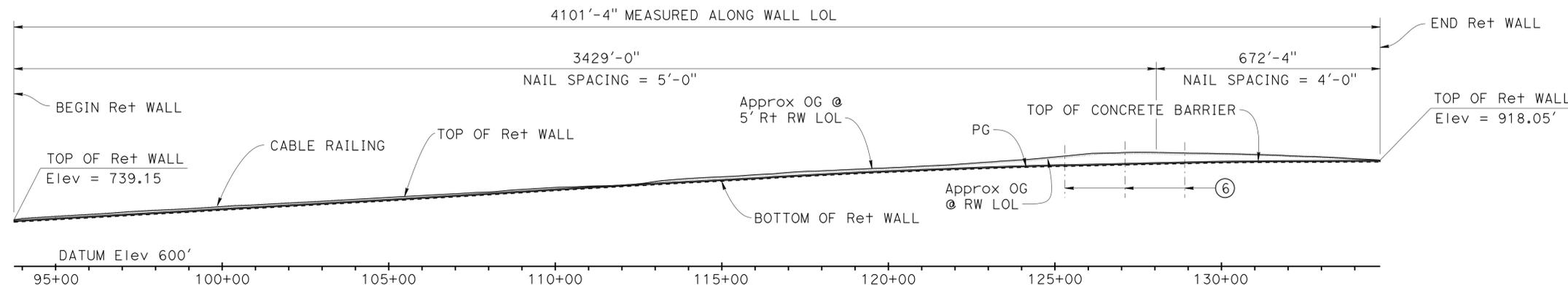
For "GENERAL NOTES", "INDEX TO PLANS" and "QUANTITIES", see "INDEX TO PLANS" sheet.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1906	2313

Richard E. Schendel
REGISTERED CIVIL ENGINEER
DATE 10/01/14
6-1-15
PLANS APPROVAL DATE

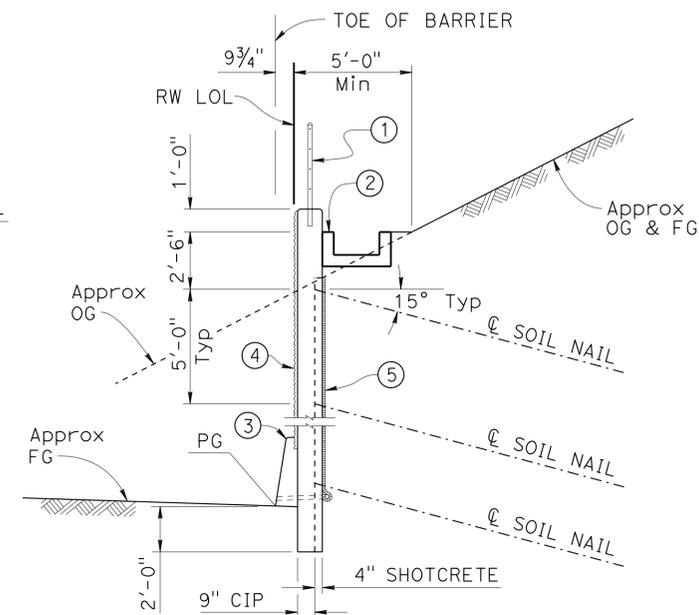
REGISTERED PROFESSIONAL ENGINEER
RICHARD E. SCHEDEL
No. C 64259
Exp. 06/30/15
CIVIL
STATE OF CALIFORNIA

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DEVELOPED MIRRORED ELEVATION

1" = 200'



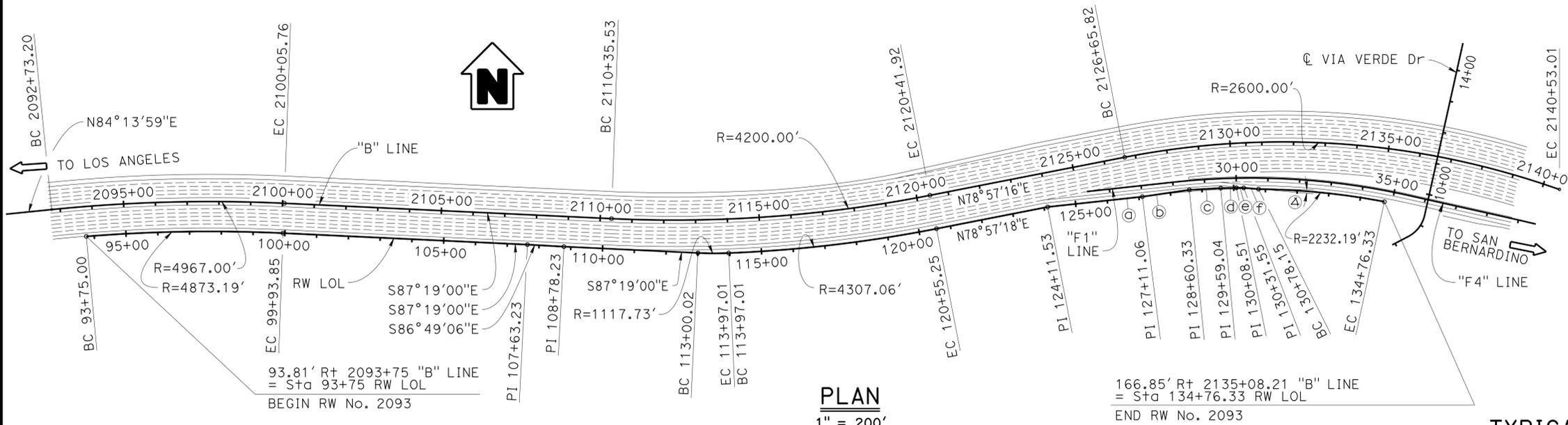
TYPICAL SECTION - STA 93+75 TO 128+04

1/4" = 1'-0"

CURVE DATA "B" LINE			CURVE DATA RW LOL		
R = 4967.00'	R = 4200.00'	R = 2600.00'	R = 4873.19'	R = 1117.73'	R = 4307.06'
Δ = 8°27'01"	Δ = 13°43'44"	Δ = 30°34'09"	Δ = 7°16'34"	Δ = 4°58'19"	Δ = 8°45'23"
T = 366.94'	T = 505.61'	T = 710.53'	T = 309.84'	T = 48.53'	T = 329.76'
L = 732.56'	L = 1006.39'	L = 1387.18'	L = 618.85'	L = 96.99'	L = 658.24'

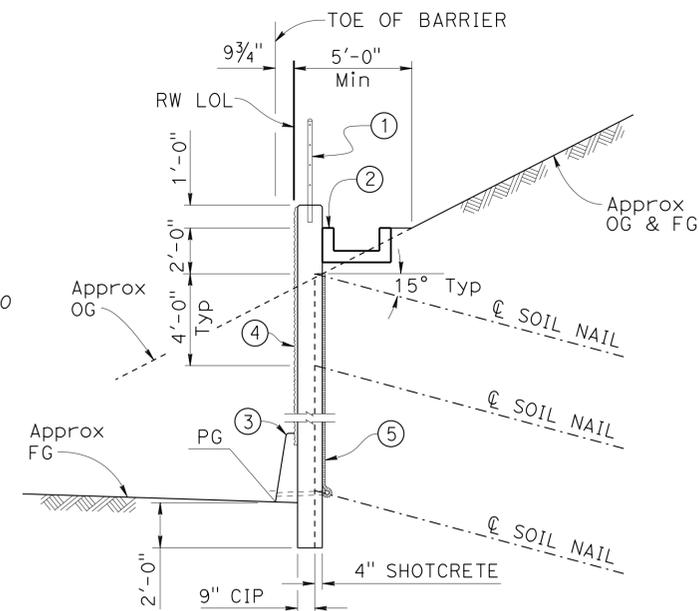
NOTES

- | | |
|-----------------|-----------------|
| ⓐ N 83°49'24" E | ⓔ S 89°46'43" E |
| ⓑ N 81°45'01" E | ⓕ S 85°08'23" E |
| ⓒ N 86°52'03" E | ⓖ 4°15'41" E |
| ⓓ N 88°45'49" E | |



PLAN

1" = 200'



TYPICAL SECTION - STA 128+04 TO 134+77

1/4" = 1'-0"

MICHAEL POPE DESIGN ENGINEER	DESIGN BY Michael Pope	CHECKED Matt Schott	LOAD & RESISTANCE FACTOR DESIGN BY Michael Pope	LIVE LOADING: HL93 W/"LOW-BOY"; PERMIT DESIGN VEHICLE	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 18	BRIDGE NO. 53E0301 POST MILE 39.65	RETAINING WALL NO. 2093 GENERAL PLAN
	DETAILS BY Michael Pope	CHECKED Matt Schott	LAYOUT BY Michael Pope	CHECKED Matt Schott	PLANS AND SPECS COMPARED BY Xiaodong Chen	UNIT: 3603 PROJECT NUMBER & PHASE: 07 1300 0007 1 CONTRACT NO.: 07-1193U1	DISREGARD PRINTS BEARING EARLIER REVISION DATES	
	QUANTITIES BY Michael Pope	CHECKED Matt Schott	SPECIFICATIONS BY Xiaodong Chen	CHECKED Xiaodong Chen	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	REVISION DATES	SHEET 1 OF 41	

STRUCTURES DESIGN GENERAL PLAN SHEET (ENGLISH) (REV.09-01-10) FILE => 53e0301-a-gp01.dgn

INDEX TO PLANS

Sheet No.	Title
1	GENERAL PLAN
2	INDEX TO PLANS
3	FOUNDATION PLAN NO. 1
4	FOUNDATION PLAN NO. 2
5	FOUNDATION PLAN NO. 3
6	FOUNDATION PLAN NO. 4
7	FOUNDATION PLAN NO. 5
8	FOUNDATION PLAN NO. 6
9	FOUNDATION PLAN NO. 7
10	STRUCTURE PLAN NO. 1
11	STRUCTURE PLAN NO. 2
12	STRUCTURE PLAN NO. 3
13	STRUCTURE PLAN NO. 4
14	STRUCTURE PLAN NO. 5
15	STRUCTURE PLAN NO. 6
16	STRUCTURE PLAN NO. 7
17	STRUCTURE PLAN NO. 8
18	STRUCTURE PLAN NO. 9
19	TYPICAL SECTION
20	SOIL NAIL ASSEMBLY
21	DRAINAGE DETAILS NO. 1
22	DRAINAGE DETAILS NO. 2
23	ARCHITECTURAL DETAILS NO. 1
24	ARCHITECTURAL DETAILS NO. 2
25	ARCHITECTURAL DETAILS NO. 3
26	ARCHITECTURAL DETAILS NO. 4
27	ARCHITECTURAL DETAILS NO. 5
28	ARCHITECTURAL DETAILS NO. 6
29	ARCHITECTURAL DETAILS NO. 7
30	ARCHITECTURAL DETAILS NO. 8
31	ARCHITECTURAL DETAILS NO. 9
32	LOG OF TEST BORINGS SHEET 1 OF 4
33	LOG OF TEST BORINGS SHEET 2 OF 4
34	LOG OF TEST BORINGS SHEET 3 OF 4
35	LOG OF TEST BORINGS SHEET 4 OF 4
36	LOG OF TEST BORINGS 1 OF 6
37	LOG OF TEST BORINGS 2 OF 6
38	LOG OF TEST BORINGS 3 OF 6
39	LOG OF TEST BORINGS 4 OF 6
40	LOG OF TEST BORINGS 5 OF 6
41	LOG OF TEST BORINGS 6 OF 6

GENERAL NOTES

DESIGN:
Federal Highway Administration Publication
Geotechnical Engineering Circular No. 7
Soil Nail Walls, Publication FHWA-IF-03-017

AASHTO LRFD Bridge Design Specifications,
4th edition and the Caltrans Amendments,
preface dated November 2011

LIVE LOADING:
No Live Loading

REINFORCED CONCRETE AND SHOTCRETE:
 $f_y = 60$ ksi (Yield Strength of Reinforcement)
 $f_c = 3.6$ ksi (Compressive Strength at 28 days)

BEARING PLATES:
ASTM Designation: A36/A 36M, Grade 36, $F_y = 36$ ksi

SOIL NAILS:
ASTM Designation: A 615/A 615M, Grade 75, $f_y = 75$ ksi

CONCRETE ANCHORS ON BEARING PLATES:
AWS Designation: D1.5, $F_Y = 36$ ksi Min

QUANTITIES

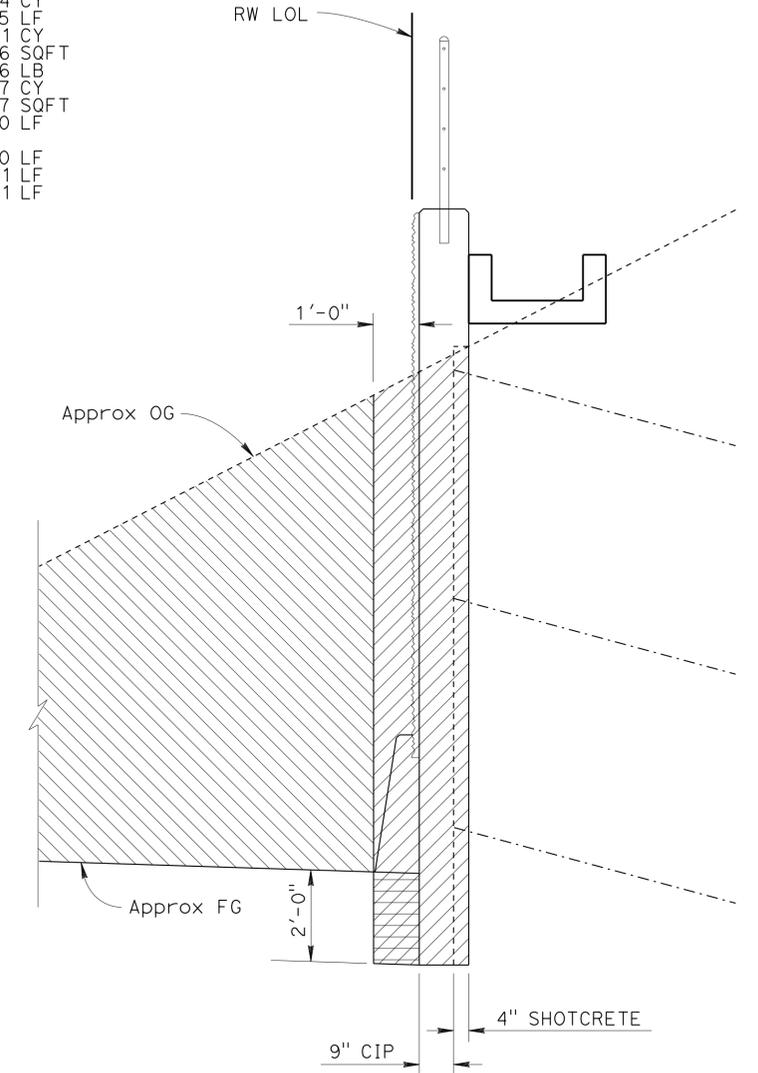
STRUCTURE EXCAVATION (SOIL NAIL WALL)	3,828	CY
STRUCTURE BACKFILL (SOIL NAIL WALL)	304	CY
SOIL NAIL	62,965	LF
STRUCTURAL CONCRETE, RETAINING WALL	1,921	CY
CONCRETE SURFACE TEXTURE	44,786	SQFT
BAR REINFORCING STEEL (RETAINING WALL)	285,046	LB
STRUCTURAL SHOTCRETE	627	CY
PREPARE AND STAIN CONCRETE	43,407	SQFT
FURNISH AND INSTALL DRAIN PIPE (HORIZONTAL DRAIN)	1,460	LF
DRILL HOLE (HORIZONTAL DRAIN)	4,101	LF
CABLE RAILING	4,101	LF
CONCRETE BARRIER (TYPE 60D)	4,101	LF

SOIL NAIL WALL DESIGN TABLE

Wall Zone	Station ("B" Line)	Maximum Wall Height (ft)	Minimum Nail Embedment Length (ft)	Maximum Nail Spacing Vertical (ft)	Maximum Nail Spacing Horizontal (ft)	Pullout Resistance Q_d (lb/ft)	Grade/Dia of Rebar (ksi/inch)	Minimum Allowable Facing Resistance (Static/Seismic)
1	2093+75 to 2101+00	8.5	10	5	5	2,720	75/1.0	(30/38) kips
2	2101+00 to 2109+00	7.7	10	5	5	2,720	75/1.0	(30/38) kips
3	2109+00 to 2115+00	10.4	20	5	5	2,720	75/1.0	(30/38) kips
4	2115+00 to 2121+00	11.7	20	5	5	2,720	75/1.0	(30/38) kips
5	2121+00 to 2125+00	25.7	35	5	5	3,200	75/1.0	(30/38) kips
6	2125+00 to 2127+50	34.5	35	5	5	3,200	75/1.0	(30/38) kips
7	2127+50 to 2127+96	34.4	30	5	5	3,200	75/1.0	(30/38) kips
	2127+96 to 2128+50	32.7	30	4	4	3,200	75/1.0	(30/38) kips
8	2128+50 to 2129+50	30.5	25	4	4	3,200	75/1.0	(30/38) kips
9	2129+50 to 2130+50	26.6	20	4	4	3,200	75/1.0	(30/38) kips
10	2130+50 to 2132+50	23.1	15	4	4	3,200	75/1.0	(30/38) kips
11	2132+50 to 2134+73	14.7	10	4	4	3,200	75/1.0	(30/38) kips
	2134+73 to 2135+08	4.5	9	4	4	3,200	75/1.0	(30/38) kips

Note:

Wall Height is a vertical distance from the finished grade of roadway to the top of gutter.



LIMITS OF PAYMENT FOR RETAINING WALL EXCAVATION AND BACKFILL

NO SCALE

LEGEND:

	Structure Excavation (Soil Nail Wall)
	Roadway Excavation, see "ROAD PLANS"
	Structure Backfill (Soil Nail Wall)

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY Michael Pope	CHECKED Matt Schott	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 18	BRIDGE NO.	53E0301	RETAINING WALL NO. 2093 INDEX TO PLANS					
	DETAILS	BY Michael Pope	CHECKED Matt Schott			POST MILE	39.65						
	QUANTITIES	BY Michael Pope	CHECKED Matt Schott			CONTRACT NO.:	07-1193U1						
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				0	1	2	3	UNIT: 3603 PROJECT NUMBER & PHASE: 0713000007 1	CONTRACT NO.: 07-1193U1	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 2	OF 41

CURVE DATA				
No.	R	Δ	T	L
(A)	4967.00	08°27'01"	366.94	732.56
(B)	4873.19	07°16'34"	309.84	618.85

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1908	2313

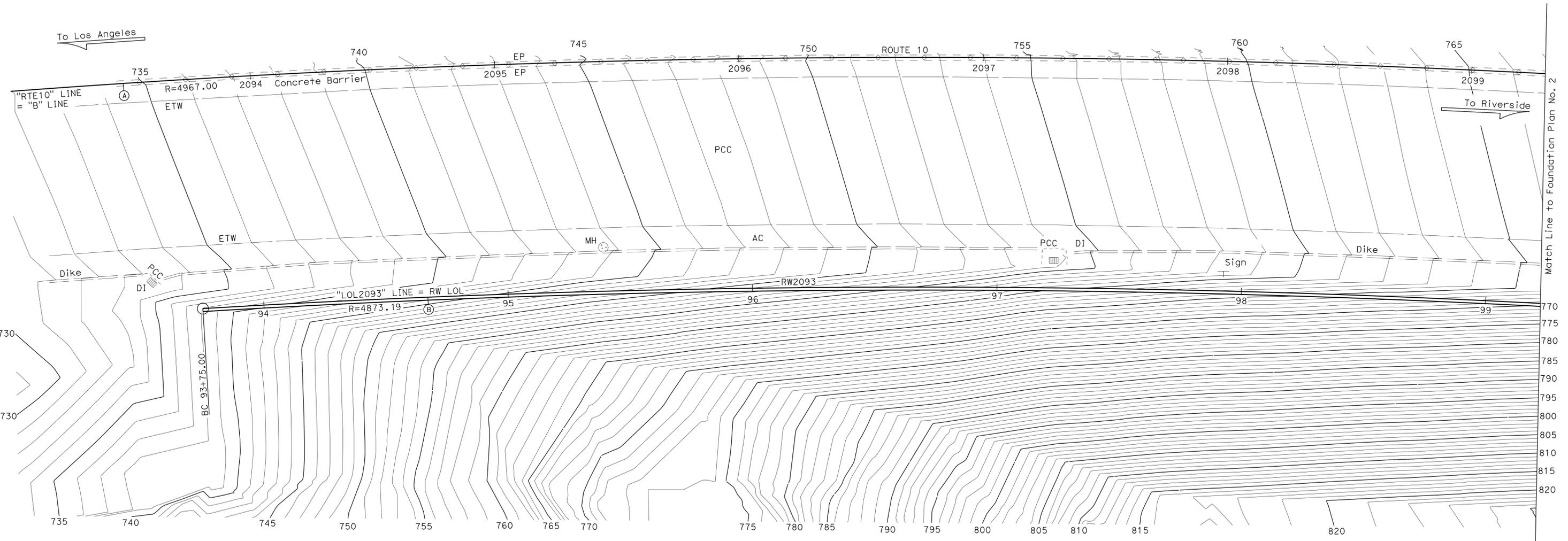


Richard E. Schendel
 REGISTERED CIVIL ENGINEER DATE 10/01/14

6-1-15
 PLANS APPROVAL DATE

RICHARD E. SCHEDEL
 No. C 64259
 Exp. 06/30/15
 CIVIL
 STATE OF CALIFORNIA

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SURVEY CONTROL
 PRHV10 (Not Shown On Plan)
 Fnd L&T w/ LA Co Eng Washer
 169.30 Ft Rt "RTE10" Line, Rte 10
 Sta 2136+50.57
 N 1,847,291.22
 E 6,610,239.06
 Elev= 914.10

PRHV4029 (Not Shown On Plan)
 Fnd 1" IP w/ CT Plug
 70.28 Ft Lt "RTE10" Line, Rte 10
 Sta 2135+79.53
 N 1,847,539.18
 E 6,610,211.48
 Elev= 930.99

PRELIMINARY INVESTIGATION SECTION				DESIGN	BY Michael Pope	CHECKED Matt Schott	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 18	BRIDGE NO.	RETAINING WALL NO. 2093		
SCALE	VERT. DATUM NAVD88	PHOTOGRAMMETRY AS OF: X	DETAILS	BY Minh Tran	CHECKED Michael Pope	53E0301			FOUNDATION PLAN NO. 1			
1"=20'	HORZ. DATUM NAD83 (1991.35)	SURVEYED BY District	QUANTITIES	BY Michael Pope	CHECKED Matt Schott	POST MILE			39.65			
ALIGNMENT TIES Dist. Traverse Sheet			DRAFTED BY JM 07/10/Z. Jin 06/11	CHECKED BY T. Schmalz 06/2011		39.65	UNIT: 3646	PROJECT NUMBER & PHASE: 0713000007 1	CONTRACT NO.: 07-1193U	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 3 OF 41

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

FILE => 53e0301-c-fp101.dgn

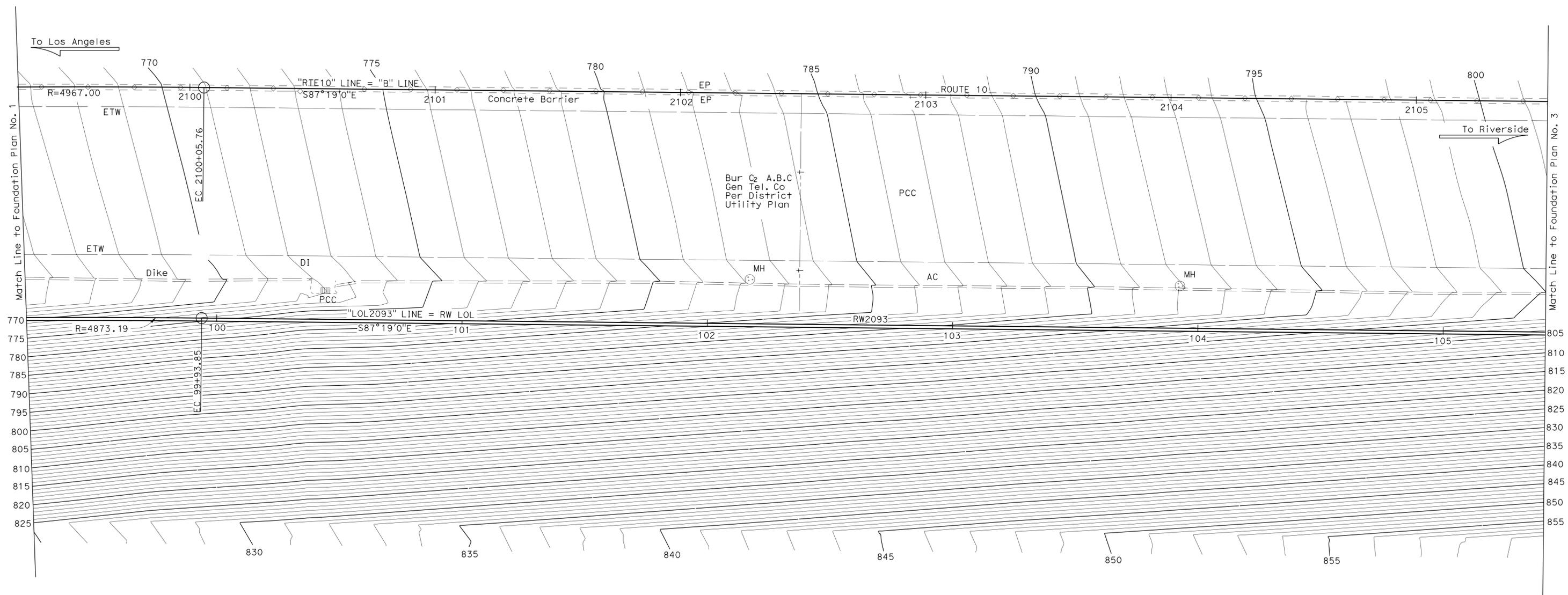
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1909	2313



Richard E. Schedel
REGISTERED CIVIL ENGINEER
DATE 10/01/14
PLANS APPROVAL DATE 6-1-15

RICHARD E. SCHEDEL
No. C 64259
Exp. 06/30/15
CIVIL
STATE OF CALIFORNIA

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For District Controls and Curve Data See "Foundation Plan No.1"

PRELIMINARY INVESTIGATION SECTION				DESIGN BY Michael Pope	CHECKED Matt Schott	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 18	BRIDGE NO. 53E0301	RETAINING WALL NO. 2093 FOUNDATION PLAN NO. 2			
SCALE 1"=20'	VERT. DATUM NAVD88	PHOTOGRAMMETRY AS OF: X	DETAILS BY Minh Tran	CHECKED Michael Pope	POST MILE 39.65							
ALIGNMENT TIES Dist. Traverse Sheet	DRAFTED BY JM 07/10/Z. Jin 06/11	CHECKED BY T. Schmalz 06/2011	QUANTITIES BY Michael Pope	CHECKED Matt Schott								
STRUCTURES FOUNDATION PLAN SHEET (ENGLISH) (REV. 09-01-10)						ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	UNIT: 3646	PROJECT NUMBER & PHASE: 0713000007 1	CONTRACT NO.: 07-1193U	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 4 OF 41

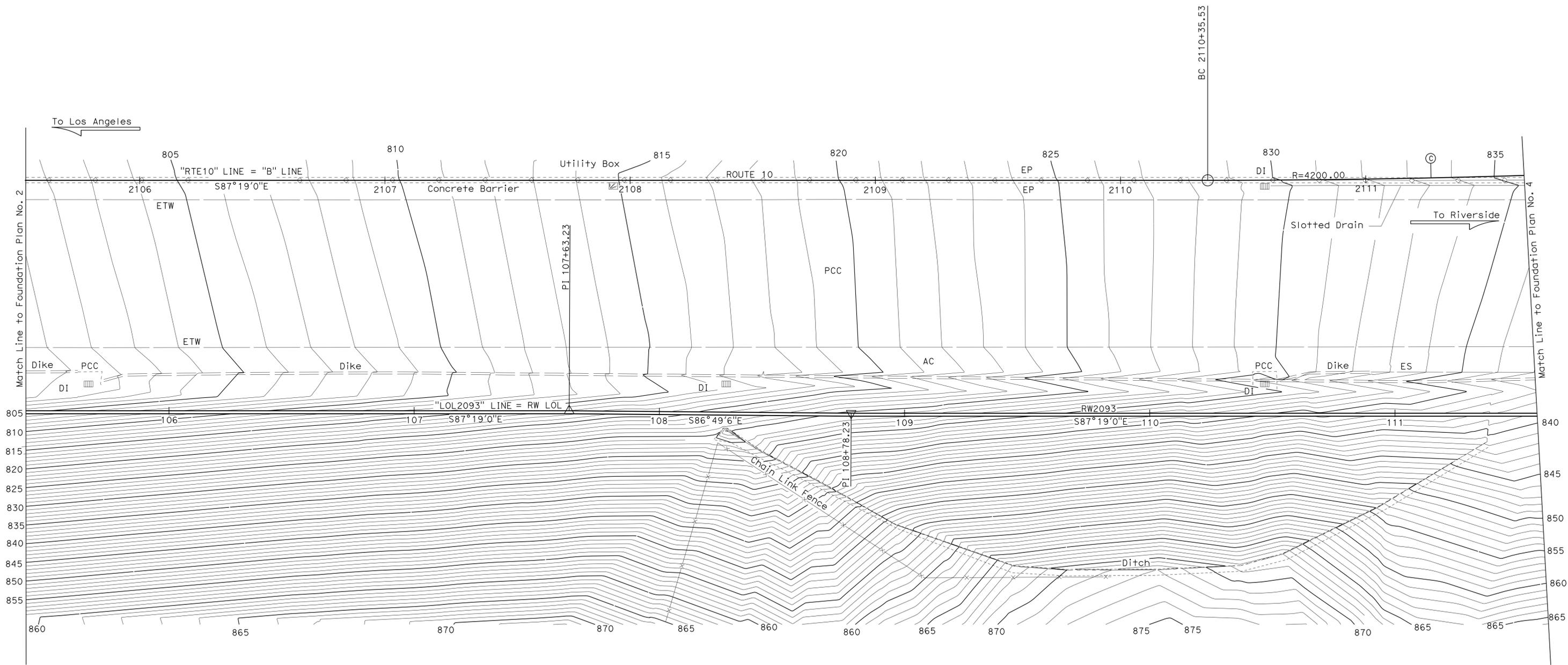
CURVE DATA				
No.	R	Δ	T	L
©	4200.00	13°43'44"	505.61	1006.38

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1910	2313

Richard Schendel
 REGISTERED CIVIL ENGINEER DATE 10/01/14
 PLANS APPROVAL DATE 6-1-15

RICHARD E. SCHENDEL
 No. C 64259
 Exp. 06/30/15
 CIVIL
 STATE OF CALIFORNIA

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For District Controls See "Foundation Plan No.1"

PRELIMINARY INVESTIGATION SECTION				DESIGN BY Michael Pope CHECKED Matt Schott	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 18	BRIDGE NO. 53E0301	RETAINING WALL NO. 2093 FOUNDATION PLAN NO. 3
SCALE 1"=20' VERT. DATUM NAVD88 HORZ. DATUM NAD83 (1991.35)	PHOTOGRAMMETRY AS OF: X SURVEYED BY District DRAFTED BY JM 07/10/2, Jin 06/11	CHECKED BY C.Fasett 06/2011 CHECKED BY T.Schmalz 06/2011	DETAILS BY Minh Tran CHECKED Michael Pope	POST MILE 39.65				
STRUCTURES FOUNDATION PLAN SHEET (ENGLISH) (REV. 09-01-10)				QUANTITIES BY Michael Pope CHECKED Matt Schott			UNIT: 3646 PROJECT NUMBER & PHASE: 0713000007 1 CONTRACT NO.: 07-1193U	

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

FILE => 53e0301-c-fp103.dgn

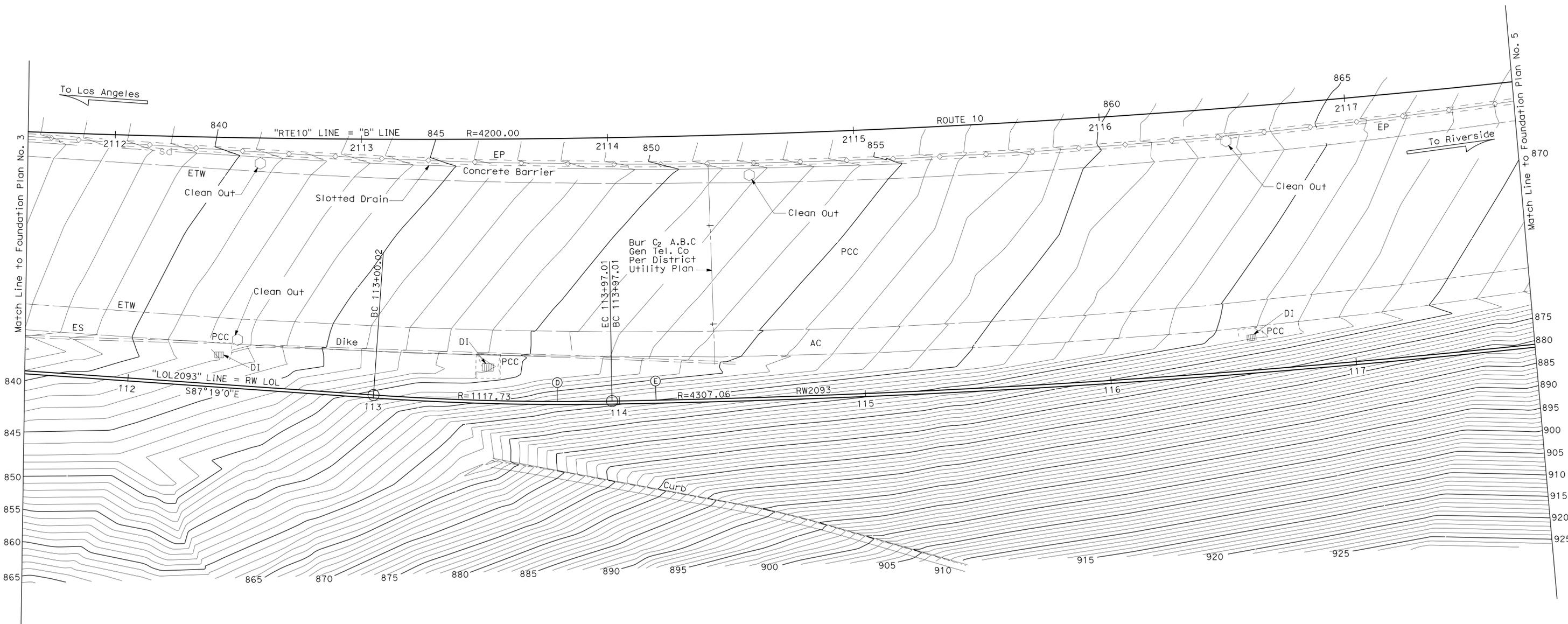
CURVE DATA				
No.	R	Δ	T	L
(D)	1117.73	04°58'19"	48.53	96.99
(E)	4307.06	08°45'23"	329.76	658.24

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1911	2313

Richard Schendel
 REGISTERED CIVIL ENGINEER DATE 10/01/14
 PLANS APPROVAL DATE 6-1-15

REGISTERED PROFESSIONAL ENGINEER
 RICHARD E. SCHEDEL
 No. C 64259
 Exp. 06/30/15
 CIVIL
 STATE OF CALIFORNIA

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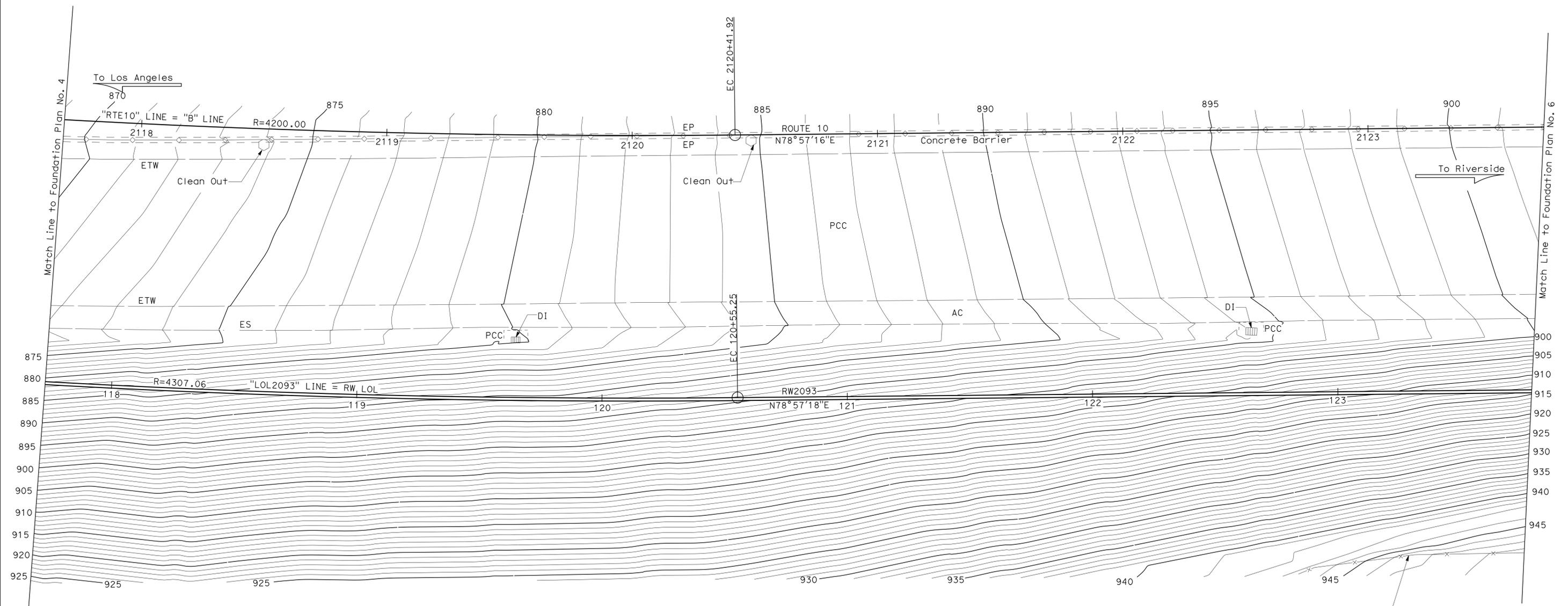
For District Controls See "Foundation Plan No.1"

PRELIMINARY INVESTIGATION SECTION				DESIGN	BY Michael Pope	CHECKED Matt Schott	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 18	BRIDGE NO.	53E0301	RETAINING WALL NO. 2093 FOUNDATION PLAN NO. 4							
SCALE	VERT. DATUM NAVD88	PHOTOGRAMMETRY AS OF: X	DETAILS	BY Minh Tran	CHECKED Michael Pope	POST MILE			39.65									
ALIGNMENT TIES	Dist. Traverse Sheet	DRAFTED BY JM 07/10/12, Jin 06/11	QUANTITIES	BY Michael Pope	CHECKED Matt Schott													
STRUCTURES FOUNDATION PLAN SHEET (ENGLISH) (REV. 09-01-10)				ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				UNIT: 3646	PROJECT NUMBER & PHASE: 0713000007 1	CONTRACT NO.: 07-1193U	DISREGARD PRINTS BEARING EARLIER REVISION DATES	<table border="1" style="font-size: 8px;"> <tr> <th>REVISION DATES</th> <th>SHEET</th> <th>OF</th> </tr> <tr> <td>12-31-13</td> <td>6</td> <td>41</td> </tr> </table>	REVISION DATES	SHEET	OF	12-31-13	6	41
REVISION DATES	SHEET	OF																
12-31-13	6	41																

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1912	2313

<i>Richard E. Schendel</i>	10/01/14
REGISTERED CIVIL ENGINEER	DATE
6-1-15	
PLANS APPROVAL DATE	

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- NOTES:
1. For District Controls, see "Foundation Plan No. 1"
 2. For Curve Date, see "Foundation Plan No. 4"

PRELIMINARY INVESTIGATION SECTION				DESIGN	BY Michael Pope	CHECKED Matt Schott	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 18	BRIDGE NO.	53E0301	RETAINING WALL NO. 2093 FOUNDATION PLAN NO. 5
SCALE	VERT. DATUM NAVD88	PHOTOGRAMMETRY AS OF: X	DETAILS	BY Minh Tran	CHECKED Michael Pope	POST MILE			39.65		
ALIGNMENT TIES Dist. Traverse Sheet	DRAFTED BY JM 07/10/Z. Jin 06/11	CHECKED BY T. Schmalz 06/2011	QUANTITIES	BY Michael Pope	CHECKED Matt Schott						

STRUCTURES FOUNDATION PLAN SHEET (ENGLISH) (REV. 09-01-10)	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	0 1 2 3	UNIT: 3646	PROJECT NUMBER & PHASE: 0713000007 1	CONTRACT NO.: 07-1193U	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 7 OF 41
--	--	---------	------------	--------------------------------------	------------------------	---	----------------	---------------

CURVE DATA

No.	R	Δ	T	L
ⓕ	2600.00	30°34'09"	710.53	1387.18

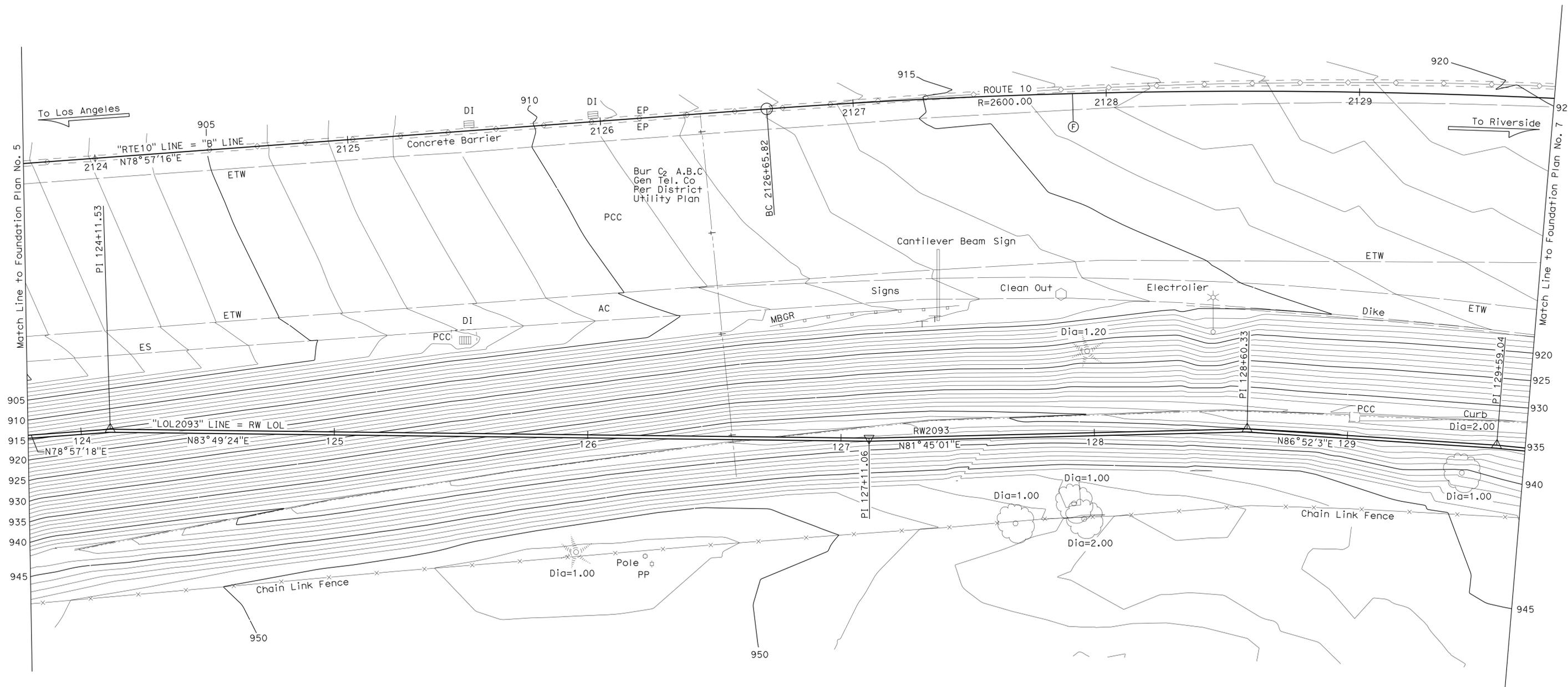
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1913	2313

Richard E. Schendel
 REGISTERED CIVIL ENGINEER DATE 10/01/14

6-1-15
 PLANS APPROVAL DATE

Richard E. Schendel
 No. C 64259
 Exp. 06/30/15
 CIVIL

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For District Controls, see "Foundation Plan No. 1"

PRELIMINARY INVESTIGATION SECTION				DESIGN BY Michael Pope	CHECKED Matt Schott	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 18	BRIDGE NO. 53E0301	RETAINING WALL NO. 2093 FOUNDATION PLAN NO. 6
SCALE VERT. DATUM NAVD88	PHOTOGRAMMETRY AS OF: X	DETAILS BY Minh Tran	CHECKED Michael Pope	POST MILE 39.65					
1"=20'	HORZ. DATUM NAD83 (1991.35)	QUANTITIES BY Michael Pope	CHECKED Matt Schott						
ALIGNMENT TIES Dist. Traverse Sheet		DRAFTED BY JM 07/10/Z. Jin 06/11	CHECKED BY T. Schmalz 06/2011	UNIT: 3646		PROJECT NUMBER & PHASE: 0713000007 1	CONTRACT NO.: 07-1193U	DISREGARD PRINTS BEARING EARLIER REVISION DATES	
STRUCTURES FOUNDATION PLAN SHEET (ENGLISH) (REV. 09-01-10)						ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	0 1 2 3	REVISION DATES	SHEET 8 OF 41

CURVE DATA				
No.	R	Δ	T	L
①	2232.19	10°13'14"	199.62	398.18

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1914	2313

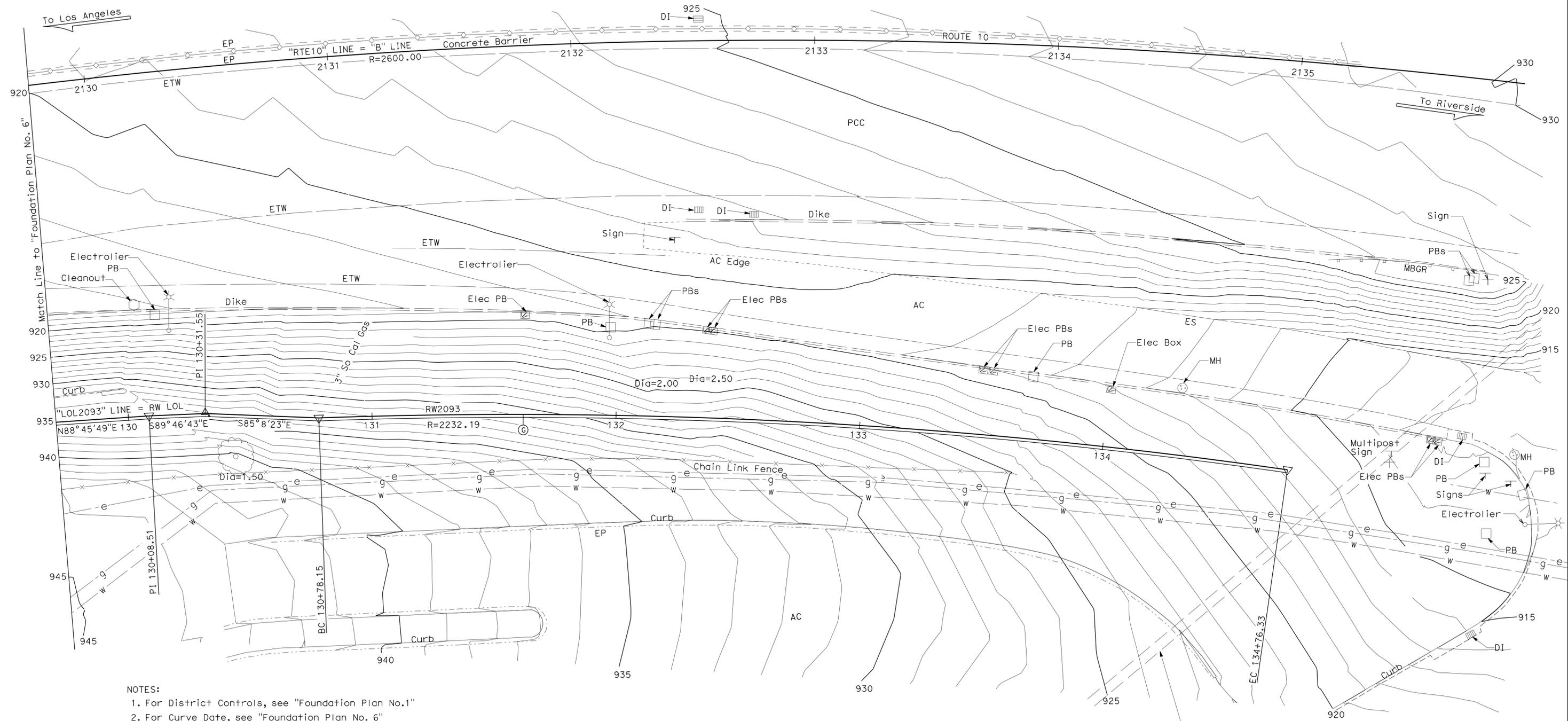


Richard E. Schendel
 REGISTERED CIVIL ENGINEER DATE 10/01/14

6-1-15
 PLANS APPROVAL DATE

Richard E. Schendel
 No. C 64259
 Exp. 06/30/15
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- NOTES:
1. For District Controls, see "Foundation Plan No.1"
 2. For Curve Date, see "Foundation Plan No. 6"

4X4 RCB
 For Details see District Drainage Details

PRELIMINARY INVESTIGATION SECTION				DESIGN BY Michael Pope	CHECKED Matt Schott	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 18	BRIDGE NO. 53E0301	RETAINING WALL NO. 2093 FOUNDATION PLAN NO. 7		
SCALE VERT. DATUM NAVD88	PHOTOGRAMMETRY AS OF: X		DETAILS BY Minh Tran	CHECKED Michael Pope	POST MILE 39.65						
1"=20'	HORZ. DATUM NAD83 (1991.35)	SURVEYED BY District	CHECKED BY C.Fasset 06/2011	CHECKED BY T.Schmalz 06/2011	QUANTITIES BY Michael Pope			CHECKED Matt Schott			
STRUCTURES FOUNDATION PLAN SHEET (ENGLISH) (REV. 09-01-10)											
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS						UNIT: 3646	PROJECT NUMBER & PHASE: 0713000007 1	CONTRACT NO.: 07-1193U	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 9 OF 41

NOTES:

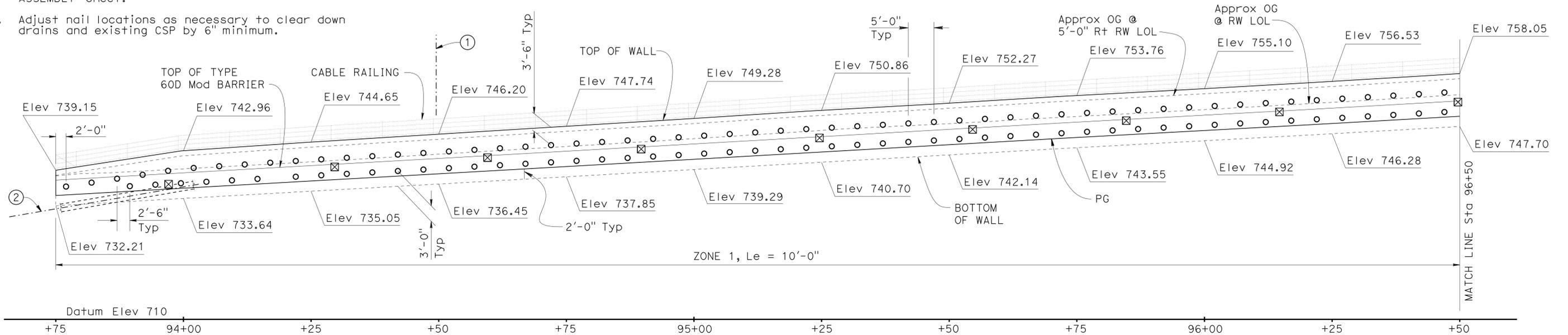
1. Top of wall must be a smooth curve between control points shown.
2. Unless otherwise noted, wall elevations are shown at even 25 ft stations along RW LOL.
3. All horizontal dimensions are measured along RW LOL.
4. Weep holes not shown.
5. The exact location of the test nails are to be determined by the Engineer.
6. For Soil Nail Assembly details, see "SOIL NAIL ASSEMBLY" sheet.
7. Adjust nail locations as necessary to clear down drains and existing CSP by 6" minimum.

LEGEND

- Location of Soil Nail Assembly (Tot 207 this sheet).
- ⊠ Location of pull out test nail (Tot 17 this sheet).
- ① Approximate CL Down Drain, see "ROAD PLANS" and Note 7.
- ② Approximate CL Exist 18" CSP behind wall. Locate before constructing RW. See "ROAD PLANS" and Note 7.

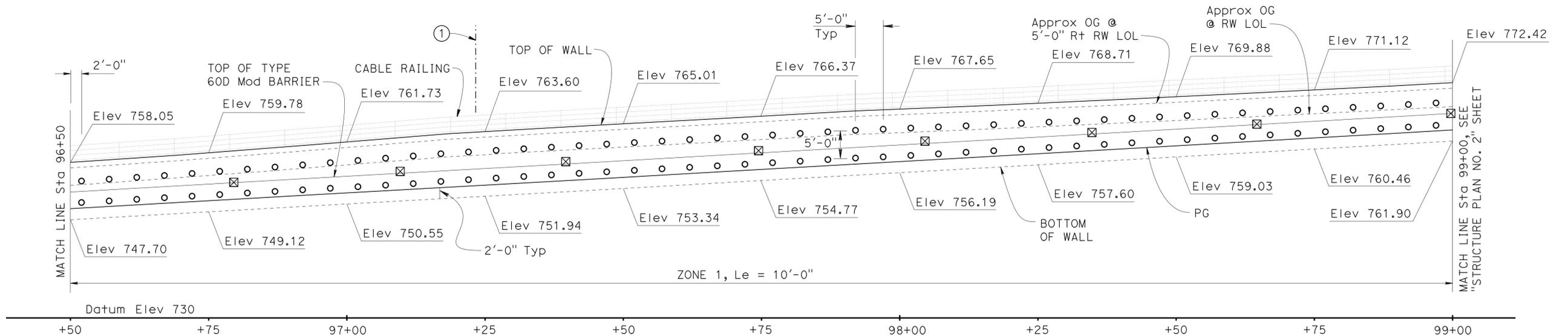
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	137.2/42.4	1915	2313

Richard E. Schendel
 REGISTERED CIVIL ENGINEER DATE 10/01/14
 PLANS APPROVAL DATE 6-1-15
 RICHARD E. SCHENDEL
 No. C 64259
 Exp. 06/30/15
 CIVIL
 STATE OF CALIFORNIA
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DEVELOPED MIRRORED ELEVATION

1" = 10'



DEVELOPED MIRRORED ELEVATION

1" = 10'

DESIGN	BY Michael Pope	CHECKED Matt Schott
DETAILS	BY Michael Pope	CHECKED Matt Schott
QUANTITIES	BY Michael Pope	CHECKED Matt Schott

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 18

BRIDGE NO.	53E0301
POST MILE	39.65

RETAINING WALL NO. 2093
STRUCTURE PLAN NO. 1



REVISION DATES	SHEET	OF
05-28-14	10	41

NOTES:

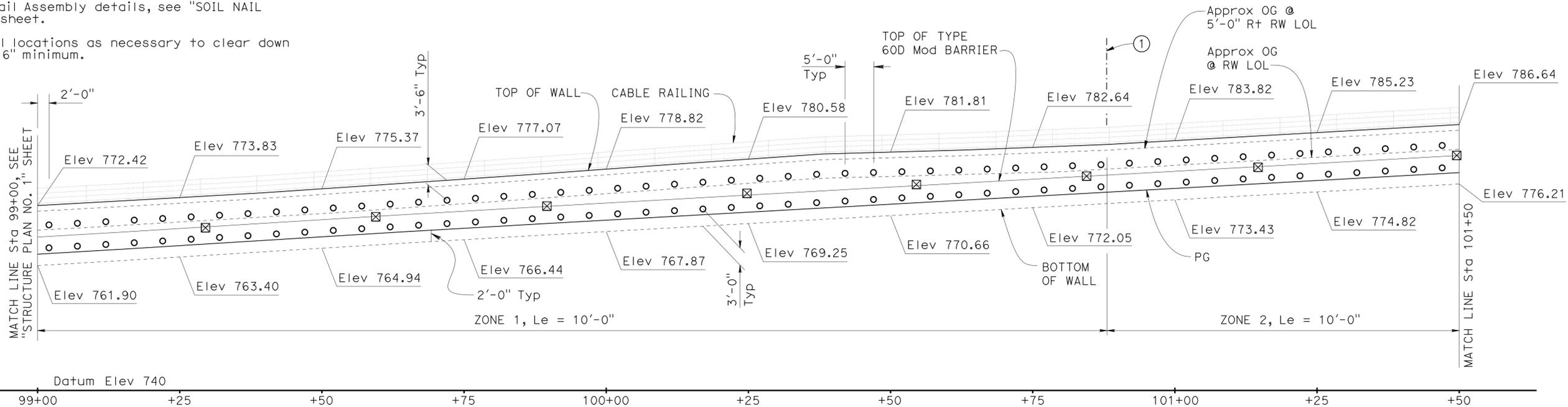
1. Top of wall must be a smooth curve between control points shown.
2. Unless otherwise noted, wall elevations are shown at even 25 ft stations along RW LOL.
3. All horizontal dimensions are measured along RW LOL.
4. Weep holes not shown.
5. The exact location of the test nails are to be determined by the Engineer.
6. For Soil Nail Assembly details, see "SOIL NAIL ASSEMBLY" sheet.
7. Adjust nail locations as necessary to clear down drains by 6" minimum.

LEGEND

- Location of Soil Nail Assembly (Tot 200 this sheet).
- ⊠ Location of pull out test nail (Tot 16 this sheet).
- ① Approximate \mathcal{C} Down Drain, see "ROAD PLANS" and Note 7.

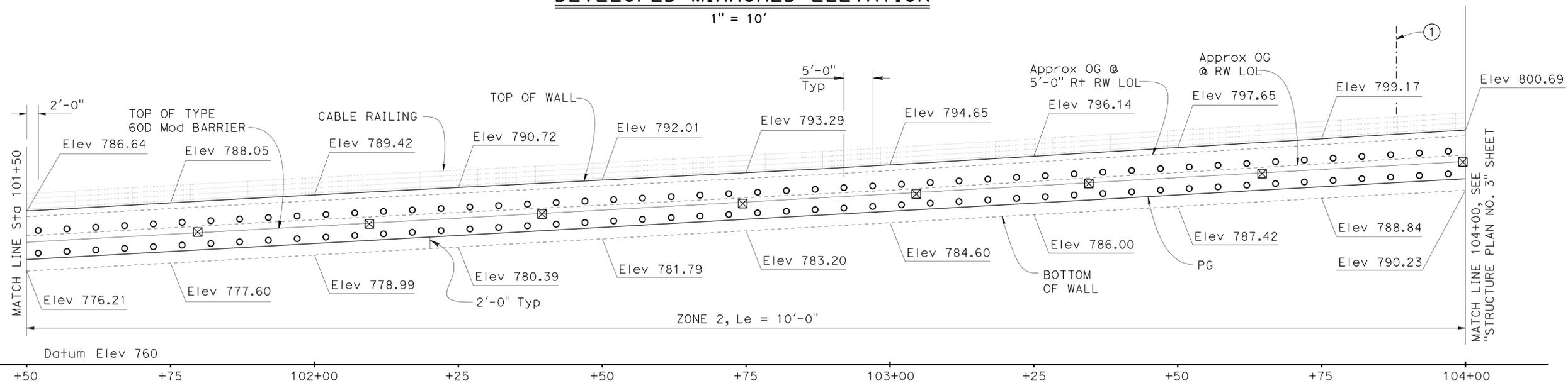
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1916	2313

Richard Schendel
 REGISTERED CIVIL ENGINEER DATE 10/01/14
 PLANS APPROVAL DATE 6-1-15
 RICHARD E. SCHENDEL
 No. C 64259
 Exp. 06/30/15
 CIVIL
 STATE OF CALIFORNIA
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DEVELOPED MIRRORED ELEVATION

1" = 10'



DEVELOPED MIRRORED ELEVATION

1" = 10'

DESIGN	BY Michael Pope	CHECKED Matt Schott
DETAILS	BY Michael Pope	CHECKED Matt Schott
QUANTITIES	BY Michael Pope	CHECKED Matt Schott

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 18

BRIDGE NO.	53E0301
POST MILE	39.65

RETAINING WALL NO. 2093
STRUCTURE PLAN NO. 2



REVISION DATES	SHEET	OF
05/28/14	11	41

NOTES:

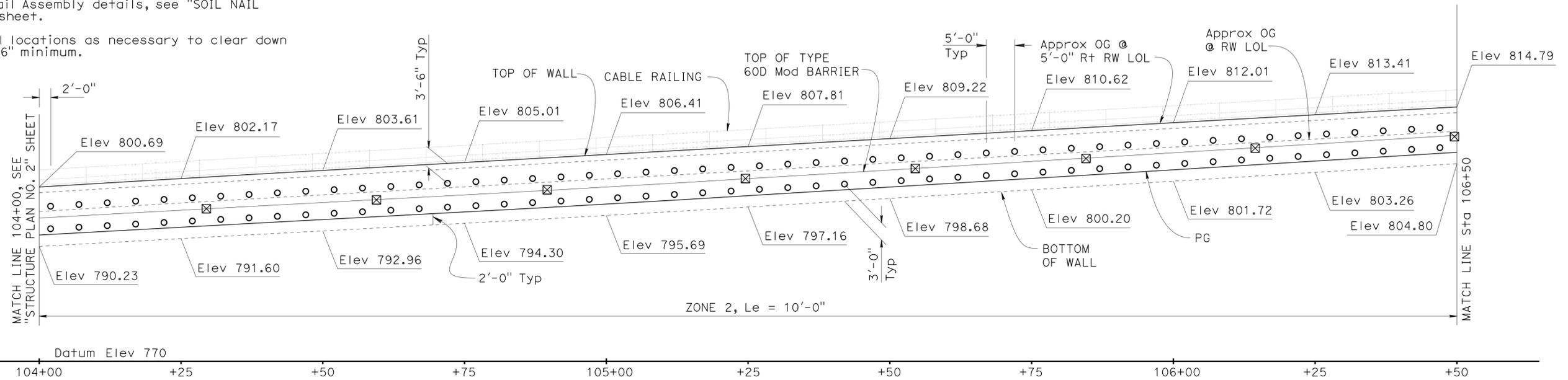
- Top of wall must be a smooth curve between control points shown.
- Unless otherwise noted, wall elevations are shown at even 25 ft stations along RW LOL.
- All horizontal dimensions are measured along RW LOL.
- Weep holes not shown.
- The exact location of the test nails are to be determined by the Engineer.
- For Soil Nail Assembly details, see "SOIL NAIL ASSEMBLY" sheet.
- Adjust nail locations as necessary to clear down drains by 6" minimum.

LEGEND

- Location of Soil Nail Assembly (Tot 199 this sheet).
- ⊗ Location of pull out test nail (Tot 16 this sheet).
- ① Approximate C Down Drain, see "ROAD PLANS" and Note 7.

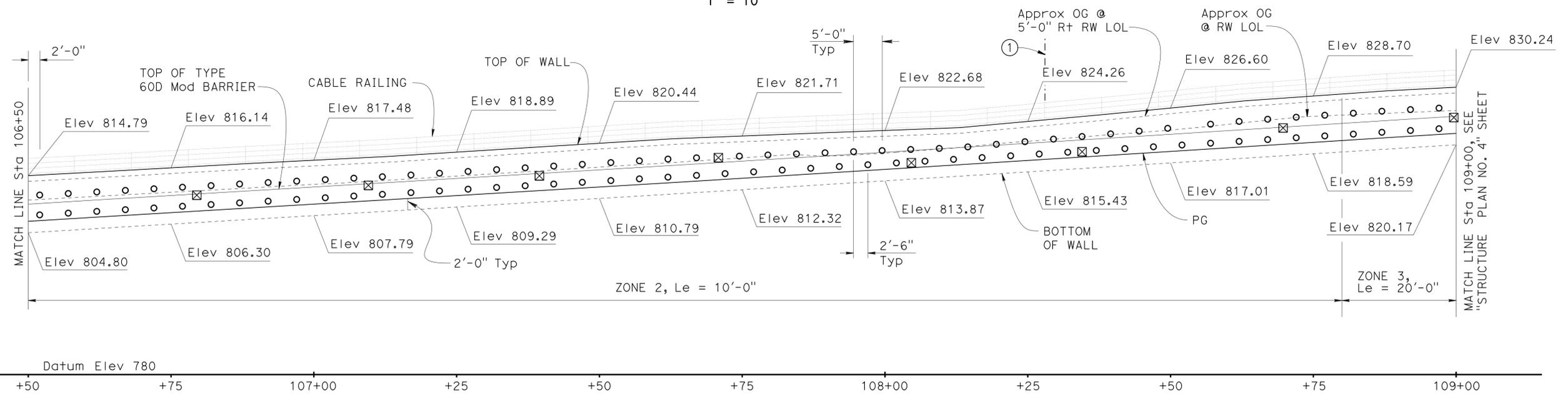
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1917	2313

Richard Schendel
 REGISTERED CIVIL ENGINEER DATE 10/01/14
 PLANS APPROVAL DATE 6-1-15
 RICHARD E. SCHENDEL
 No. C 64259
 Exp. 06/30/15
 CIVIL
 STATE OF CALIFORNIA
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DEVELOPED MIRRORED ELEVATION

1" = 10'



DEVELOPED MIRRORED ELEVATION

1" = 10'

DESIGN	BY Michael Pope	CHECKED Matt Schott
DETAILS	BY Michael Pope	CHECKED Matt Schott
QUANTITIES	BY Michael Pope	CHECKED Matt Schott

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 18

BRIDGE NO.	53E0301
POST MILE	39.65

RETAINING WALL NO. 2093
STRUCTURE PLAN NO. 3

NOTES:

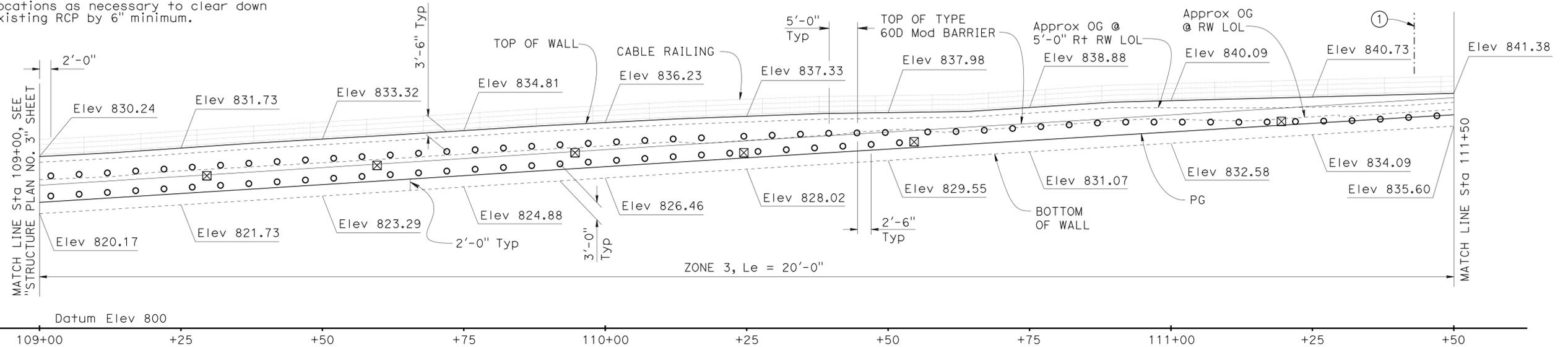
1. Top of wall must be a smooth curve between control points shown.
2. Unless otherwise noted, wall elevations are shown at even 25 ft stations along RW LOL.
3. All horizontal dimensions are measured along RW LOL.
4. Weep holes not shown.
5. The exact location of the test nails are to be determined by the Engineer.
6. For Soil Nail Assembly details, see "SOIL NAIL ASSEMBLY" sheet.
7. Adjust nail locations as necessary to clear down drains and existing RCP by 6" minimum.

LEGEND

- Location of Soil Nail Assembly (Tot 152 this sheet).
- ⊠ Location of pull out test nail (Tot 12 this sheet).
- Location of horizontal drain, see "DRAINAGE DETAILS NO. 2" SHEET
- ① Approximate C Down Drain, see "ROAD PLANS" and Note 7.
- ② Approximate location of Exist 30" RCP. Locate prior to constructing RW. See "ROAD PLANS" and Note 7.

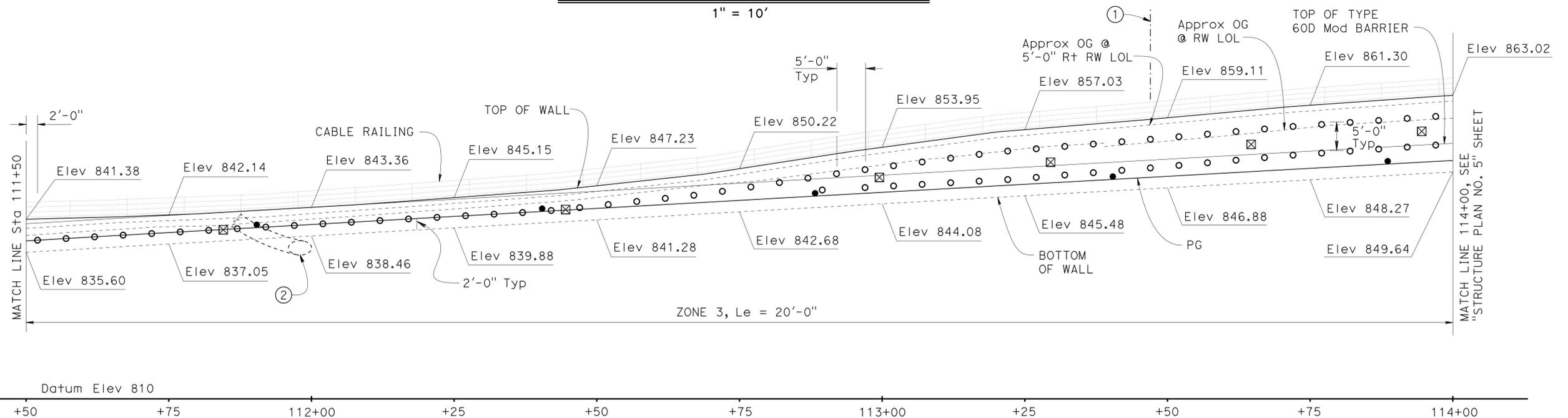
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1918	2313

Richard Schendel
 REGISTERED CIVIL ENGINEER DATE 10/01/14
 PLANS APPROVAL DATE 6-1-15
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DEVELOPED MIRRORED ELEVATION

1" = 10'



DEVELOPED MIRRORED ELEVATION

1" = 10'

DESIGN	BY Michael Pope	CHECKED Matt Schott
DETAILS	BY Michael Pope	CHECKED Matt Schott
QUANTITIES	BY Michael Pope	CHECKED Matt Schott

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 18

BRIDGE NO.	53E0301
POST MILE	39.65

RETAINING WALL NO. 2093
STRUCTURE PLAN NO. 4

NOTES:

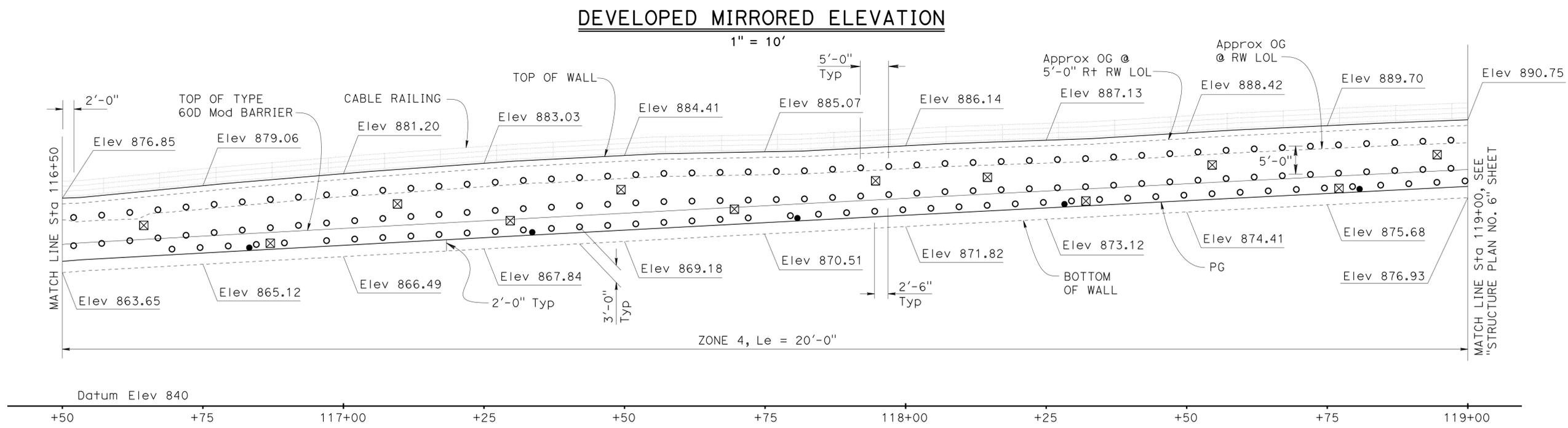
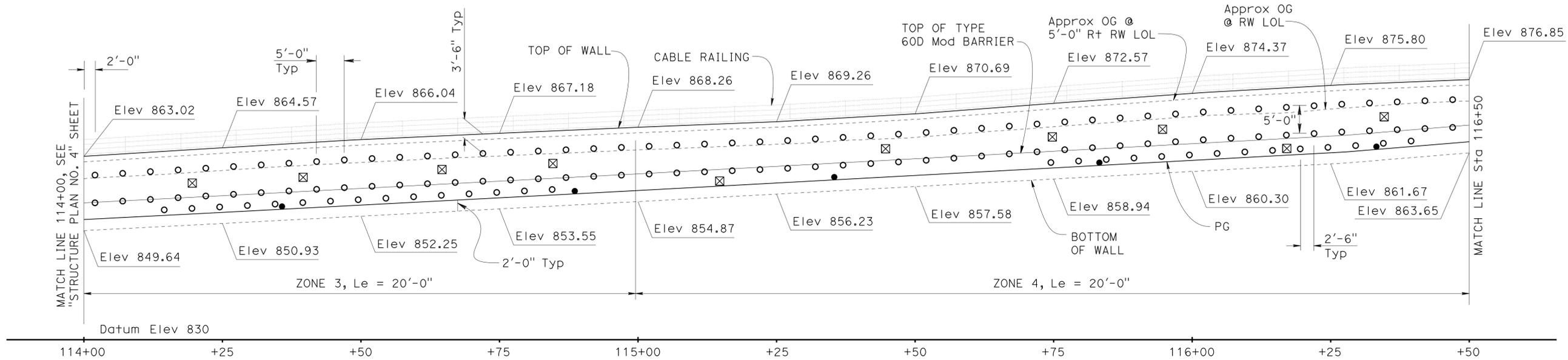
1. Top of wall must be a smooth curve between control points shown.
2. Unless otherwise noted, wall elevations are shown at even 25 ft stations along RW LOL.
3. All horizontal dimensions are measured along RW LOL.
4. Weep holes not shown.
5. The exact location of the test nails are to be determined by the Engineer.
6. For Soil Nail Assembly details, see "SOIL NAIL ASSEMBLY" sheet.

LEGEND

- Location of Soil Nail Assembly (Tot 275 this sheet).
- ⊠ Location of pull out test nail (Tot 22 this sheet).
- Location of horizontal drain, see "DRAINAGE DETAILS NO. 2" SHEET.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1919	2313

Richard Schendel
 REGISTERED CIVIL ENGINEER DATE 10/01/14
 PLANS APPROVAL DATE 6-1-15
 RICHARD E. SCHENDEL
 No. C. 64259
 Exp. 06/30/15
 CIVIL
 STATE OF CALIFORNIA
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DESIGN	BY Michael Pope	CHECKED Matt Schott
DETAILS	BY Michael Pope	CHECKED Matt Schott
QUANTITIES	BY Michael Pope	CHECKED Matt Schott

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 18

BRIDGE NO.	53E0301
POST MILE	39.65

RETAINING WALL NO. 2093
STRUCTURE PLAN NO. 5

REVISION DATES	SHEET	OF
10/01/14	14	41

NOTES:

1. Top of wall must be a smooth curve between control points shown.
2. Unless otherwise noted, wall elevations are shown at even 25 ft stations along RW LOL.
3. All horizontal dimensions are measured along RW LOL.
4. Weep holes not shown.
5. The exact location of the test nails are to be by the Engineer.
6. For Soil Nail Assembly details, see "SOIL NAIL ASSEMBLY" sheet.
7. Adjust nail and horizontal drain locations as necessary to clear down drains by 6" minimum.

LEGEND

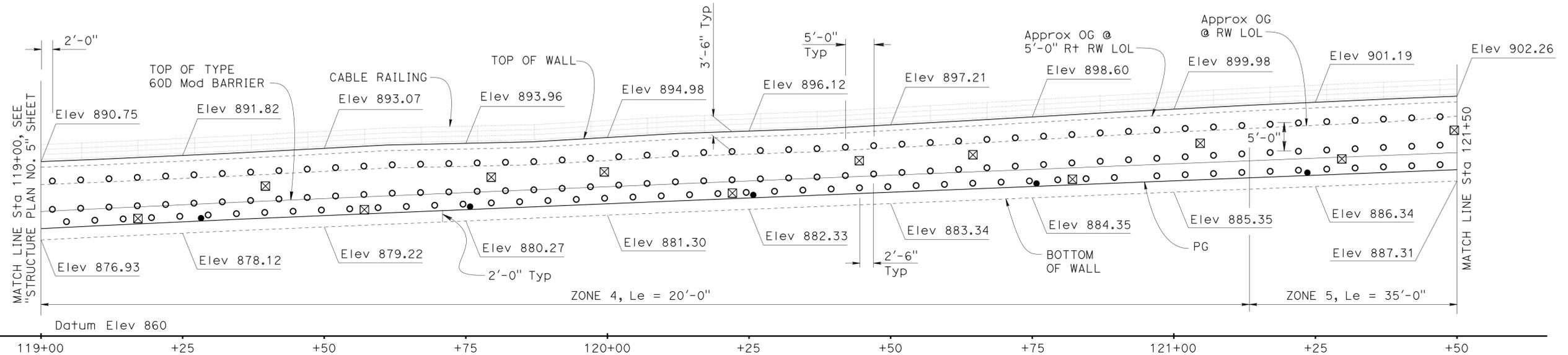
- Location of Soil Nail Assembly (Tot 324 this sheet).
- ⊠ Location of pull out test nail (Tot 26 this sheet).
- Location of horizontal drain, see "DRAINAGE DETAILS NO. 2" SHEET.
- ① Approximate \varnothing Down Drain, see "ROAD PLANS" and Note 7.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1920	2313

Richard E. Schendel
 REGISTERED CIVIL ENGINEER DATE 10/01/14
 6-1-15
 PLANS APPROVAL DATE

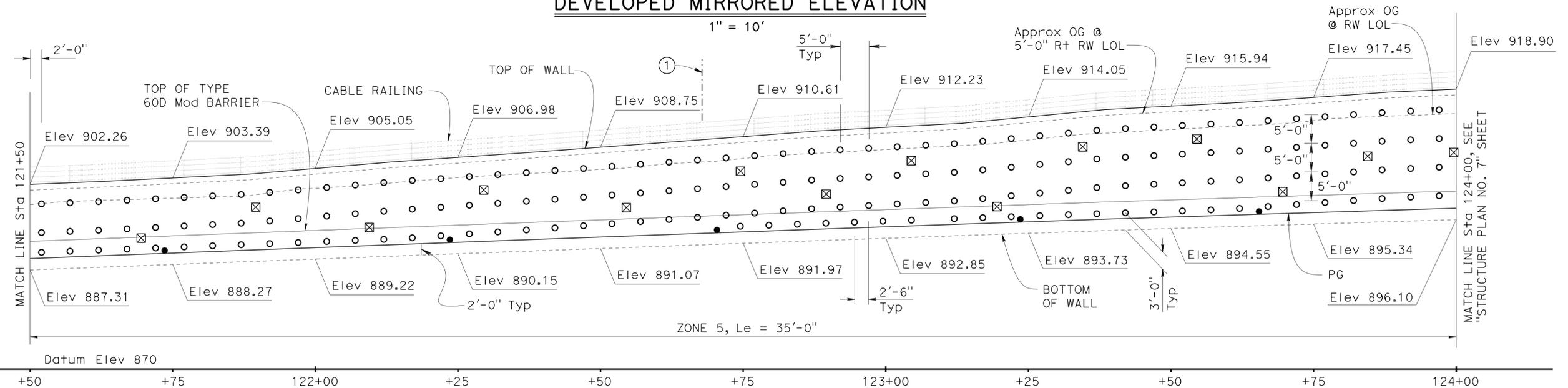
RICHARD E. SCHENDEL
 No. C 64259
 Exp. 06/30/15
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 STATE OF CALIFORNIA

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DEVELOPED MIRRORED ELEVATION

1" = 10'



DEVELOPED MIRRORED ELEVATION

1" = 10'

DESIGN	BY Michael Pope	CHECKED Matt Schott
DETAILS	BY Michael Pope	CHECKED Matt Schott
QUANTITIES	BY Michael Pope	CHECKED Matt Schott

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 18

BRIDGE NO.	53E0301
POST MILE	39.65

RETAINING WALL NO. 2093
STRUCTURE PLAN NO. 6



REVISION DATES	SHEET	OF
05-28-14	15	41

NOTES:

1. Top of wall must be a smooth curve between control points shown.
2. Unless otherwise noted, wall elevations are shown at even 25 ft stations along RW LOL.
3. All horizontal dimensions are measured along RW LOL.
4. Weep holes not shown.
5. The exact location of the test nails are to be determined by the Engineer.
6. For Soil Nail Assembly details, see "SOIL NAIL ASSEMBLY" sheet.

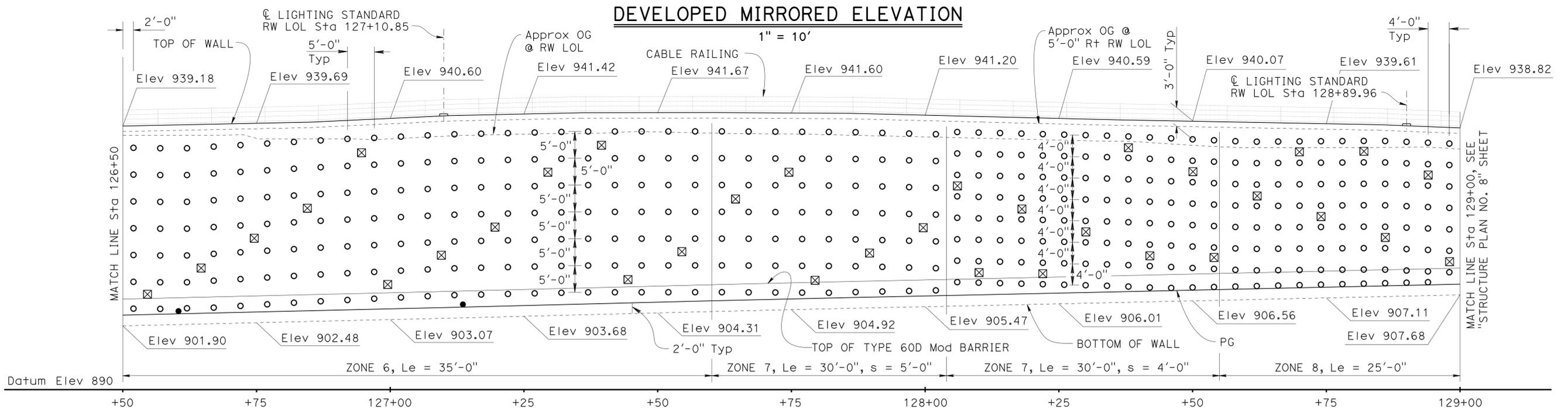
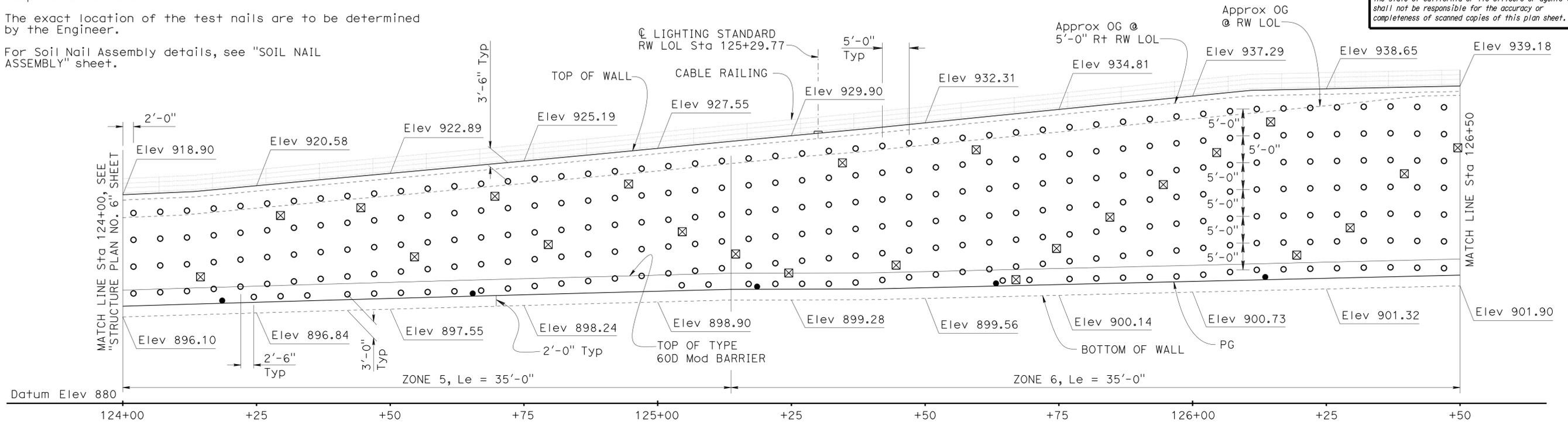
LEGEND

- Location of Soil Nail Assembly (Tot 699 this sheet).
- ⊗ Location of pull out test nail (Tot 56 this sheet).
- Location of horizontal drain, see "DRAINAGE DETAILS NO. 2" SHEET.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1921	2313

Richard E. Schendel
 REGISTERED CIVIL ENGINEER DATE 10/01/14
 6-1-15
 PLANS APPROVAL DATE
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REGISTERED PROFESSIONAL ENGINEER
 RICHARD E. SCHENDEL
 No. C. 64259
 Exp. 06/30/15
 CIVIL
 STATE OF CALIFORNIA



DEVELOPED MIRRORED ELEVATION
1" = 10'

Note: "s" = soil nail spacing

DESIGN	BY Michael Pope	CHECKED Matt Schott
DETAILS	BY Michael Pope	CHECKED Matt Schott
QUANTITIES	BY Michael Pope	CHECKED Matt Schott

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 18

BRIDGE NO.	53E0301
POST MILE	39.65

RETAINING WALL NO. 2093
STRUCTURE PLAN NO. 7

NOTES:

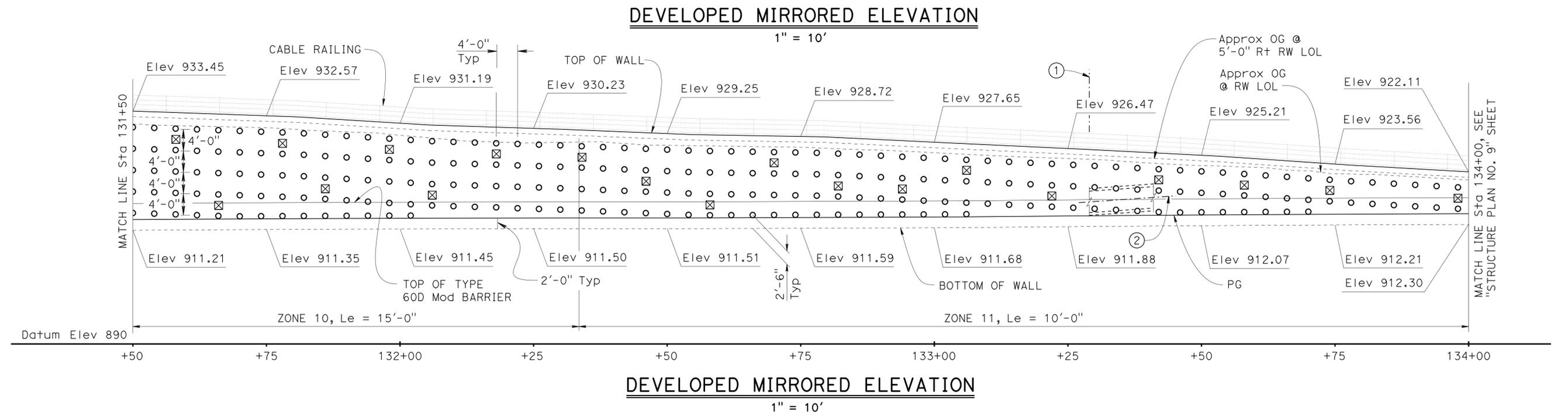
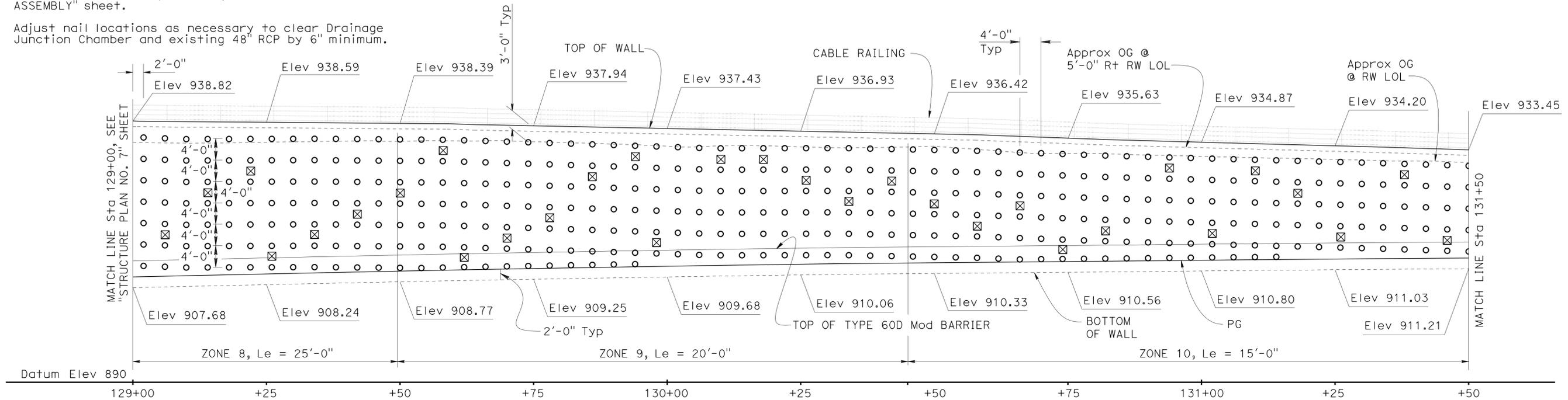
1. Top of wall must be a smooth curve between control points shown.
2. Unless otherwise noted, wall elevations are shown at even 25 ft stations along RW LOL.
3. All horizontal dimensions are measured along RW LOL.
4. Weep holes not shown.
5. The exact location of the test nails are to be determined by the Engineer.
6. For Soil Nail Assembly details, see "SOIL NAIL ASSEMBLY" sheet.
7. Adjust nail locations as necessary to clear Drainage Junction Chamber and existing 48" RCP by 6" minimum.

LEGEND

- Location of Soil Nail Assembly (Tot 624 this sheet).
- ⊗ Location of pull out test nail (Tot 50 this sheet).
- ① Approximate \bar{C} Drainage Junction Chamber behind wall, see "ROAD PLANS" and Note 7.
- ② Approximate \bar{C} Exist 48" RCP behind wall. Locate prior to constructing RW. See "ROAD PLANS" and Note 7.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1922	2313

Richard E. Schendel
 REGISTERED CIVIL ENGINEER DATE 10/01/14
 PLANS APPROVAL DATE 6-1-15
 RICHARD E. SCHENDEL
 No. C 64259
 Exp. 06/30/15
 CIVIL
 STATE OF CALIFORNIA
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DESIGN	BY Michael Pope	CHECKED Matt Schott
DETAILS	BY Michael Pope	CHECKED Matt Schott
QUANTITIES	BY Michael Pope	CHECKED Matt Schott

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 18

BRIDGE NO.	53E0301
POST MILE	39.65

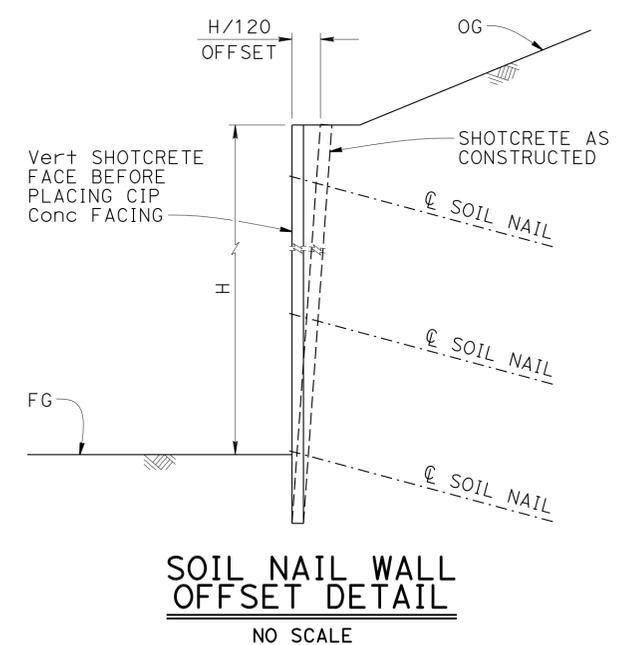
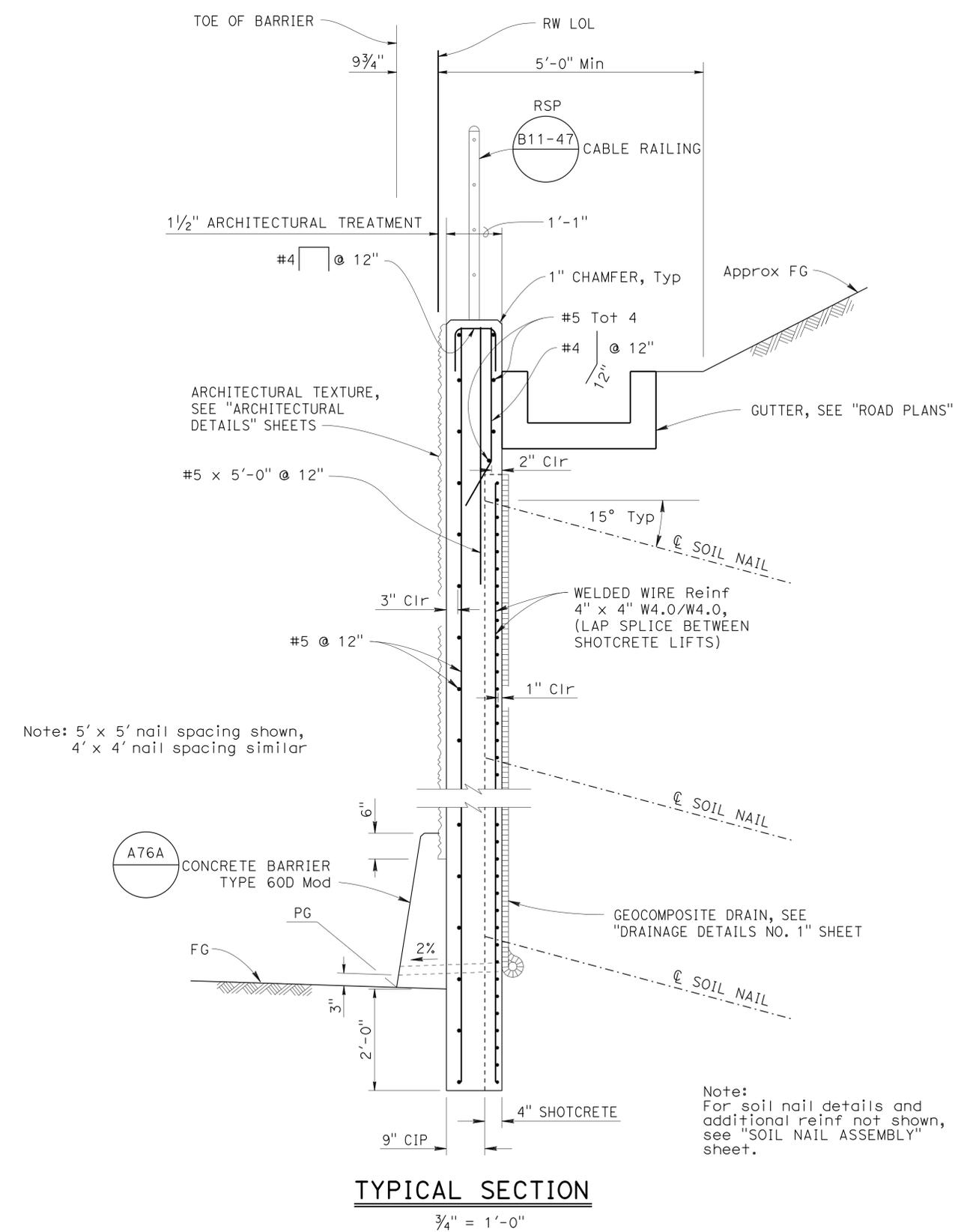
RETAINING WALL NO. 2093
STRUCTURE PLAN NO. 8

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1924	2313

Richard E. Schendel
REGISTERED CIVIL ENGINEER DATE 10/01/14
6-1-15
PLANS APPROVAL DATE

RICHARD E. SCHENDEL
No. C 64259
Exp. 06/30/15
CIVIL
STATE OF CALIFORNIA

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DESIGN BY Michael Pope CHECKED Matt Schott DETAILS BY Michael Pope CHECKED Matt Schott QUANTITIES BY Michael Pope CHECKED Matt Schott	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 18	BRIDGE NO. 53E0301	RETAINING WALL NO. 2093 TYPICAL SECTION
			POST MILE 39.65	
			UNIT: 3603 PROJECT NUMBER & PHASE: 0713000007 1 CONTRACT NO.: 07-1193U1	
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	0 1 2 3	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES 02-28-14 19 41

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DATE PLOTTED => 18-MAY-2015
TIME PLOTTED => 15:54

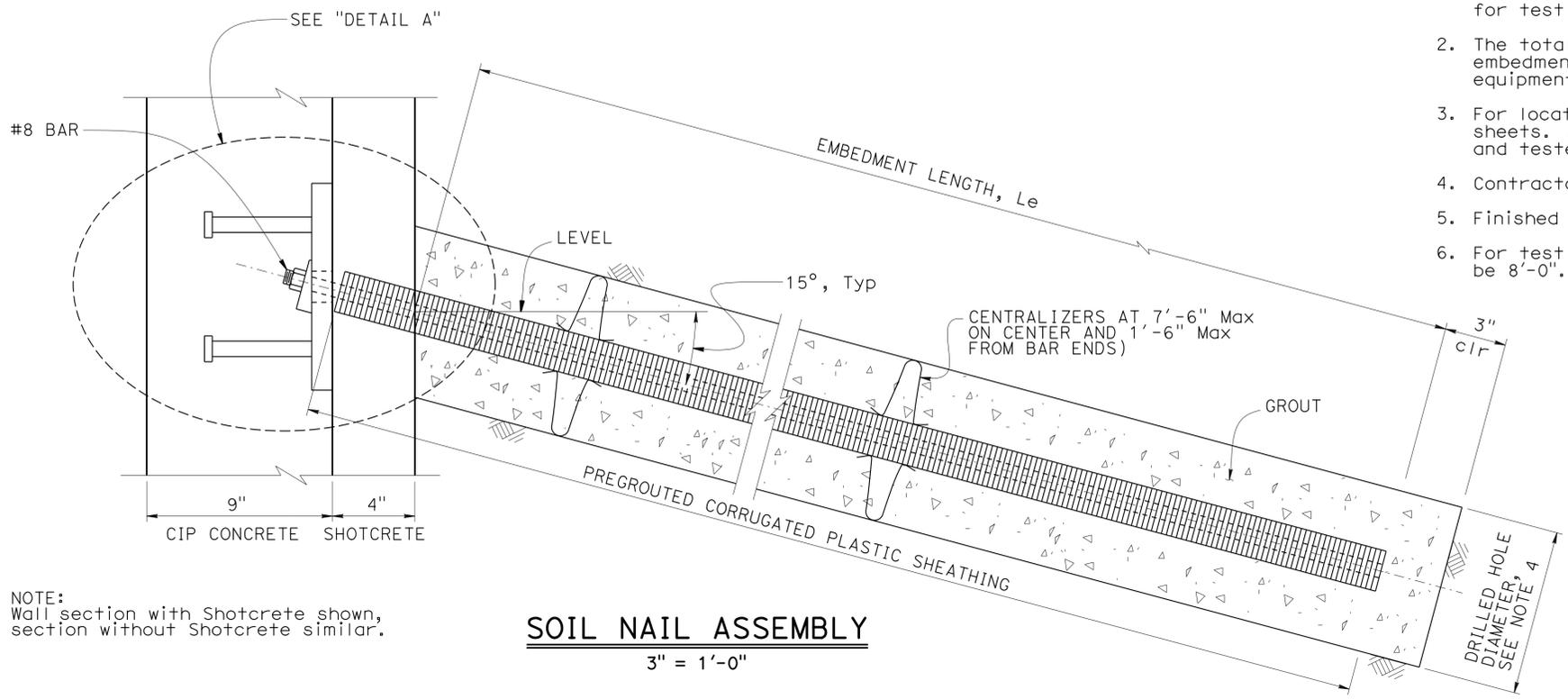
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1925	2313

<i>Richard E. Schendel</i>		10/01/14
REGISTERED CIVIL ENGINEER	DATE	
6-1-15		
PLANS APPROVAL DATE		

RICHARD E. SCHENDEL	
No. C 64259	
Exp. 06/30/15	
CIVIL	
STATE OF CALIFORNIA	

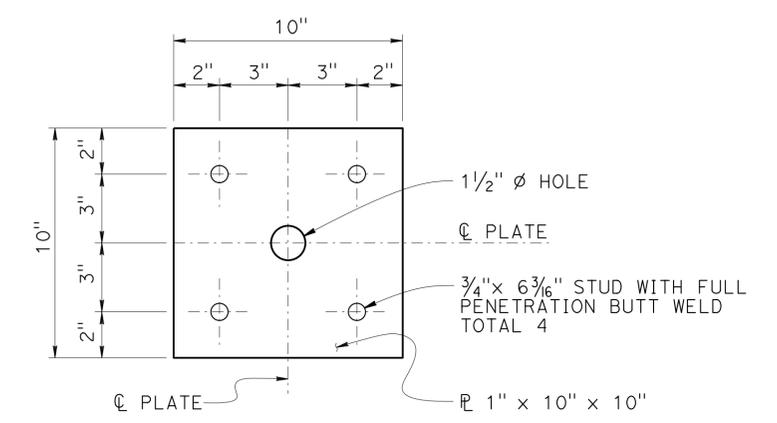
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.

- NOTES:
1. The test nail embedment length, L_{eT} , must be equal to $2/3$ of the embedment length, L_e , of the adjacent production soil nail assemblies, but not less than 12'-0" for test nails between stations 93+75.00 and 133+63.00. The test nail embedment length, L_{eT} , must be 9'-0" for test nails between stations 133+63.00 and 134+76.33.
 2. The total length of the test nail assembly equals the embedment length plus the length required for jacking equipment.
 3. For location of proof test nails, see "STRUCTURE PLAN" sheets. Additional proof test nails must be installed and tested per special provisions.
 4. Contractor to determine drilled hole diameter.
 5. Finished grout surface to be normal to the bar.
 6. For test nails with $L_{eT} = 9'-0"$, the bonded length L_B must be 8'-0".

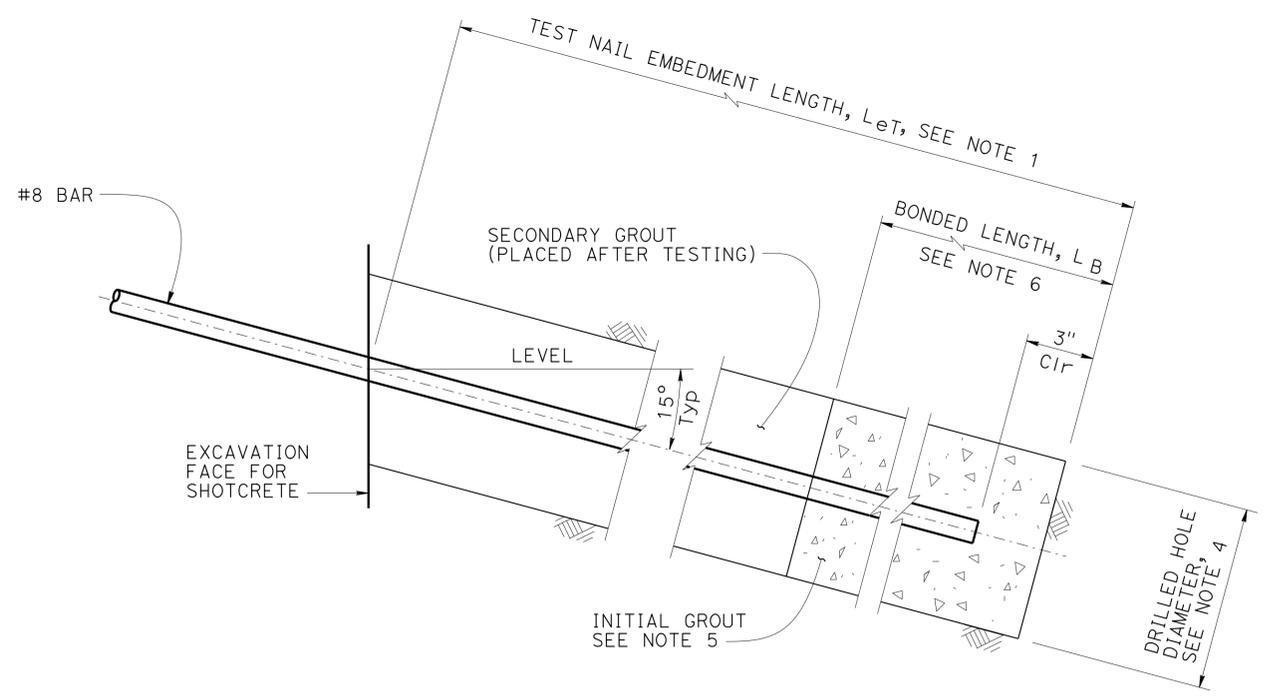


NOTE:
Wall section with Shotcrete shown,
section without Shotcrete similar.

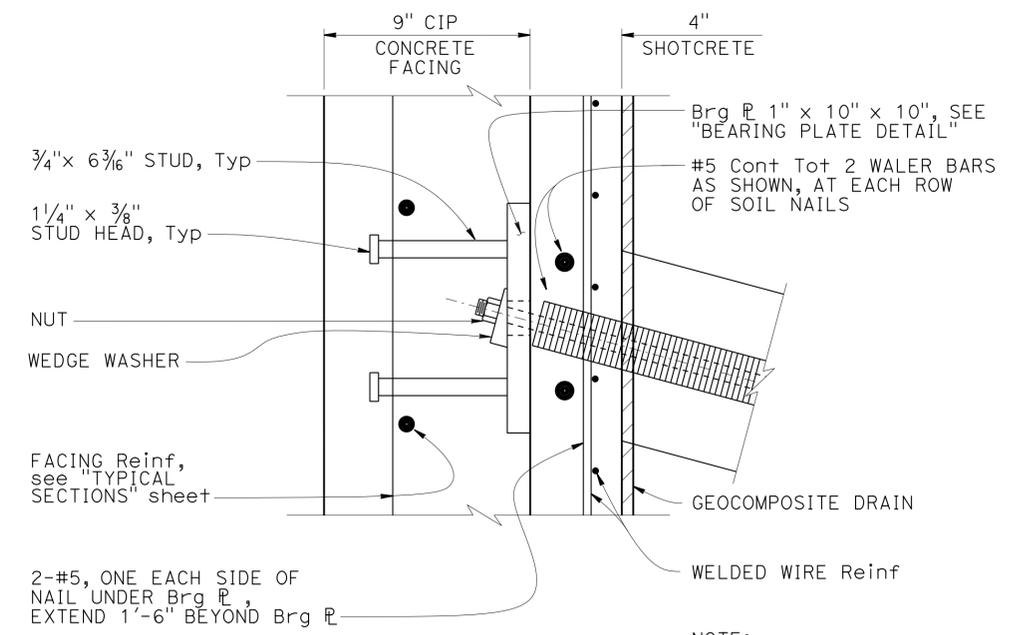
SOIL NAIL ASSEMBLY
3" = 1'-0"



BEARING PLATE DETAIL
3" = 1'-0"



TEST NAIL DETAIL
3" = 1'-0"



DETAIL A
3" = 1'-0"

NOTE:
Wall section with
Shotcrete shown,
section without
Shotcrete similar.

DESIGN	BY Michael Pope	CHECKED Matt Schott
DETAILS	BY Michael Pope	CHECKED Matt Schott
QUANTITIES	BY Michael Pope	CHECKED Matt Schott

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 18

BRIDGE NO.	53E0301
POST MILE	39.65

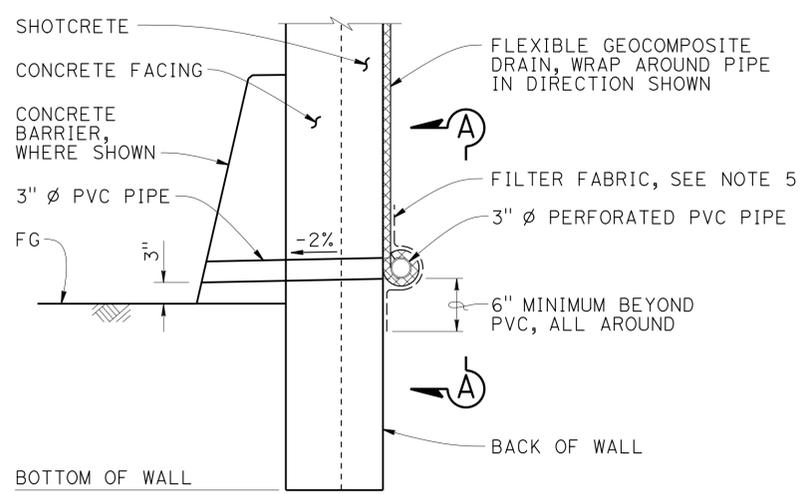
RETAINING WALL NO. 2093
SOIL NAIL ASSEMBLY

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1926	2313

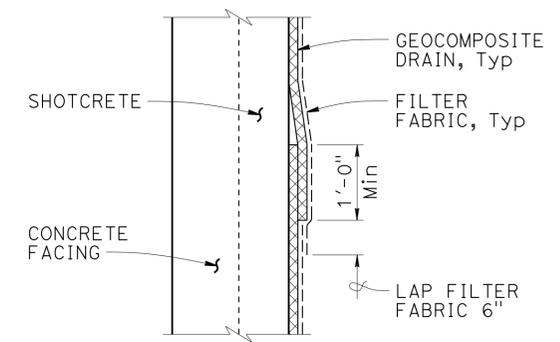
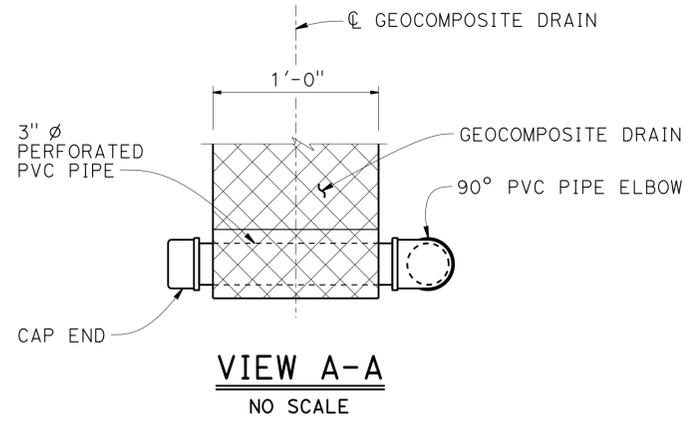
Richard Schendel
REGISTERED CIVIL ENGINEER DATE 10/01/14
6-1-15
PLANS APPROVAL DATE

RICHARD E. SCHENDEL
No. C 64259
Exp. 06/30/15
CIVIL
STATE OF CALIFORNIA

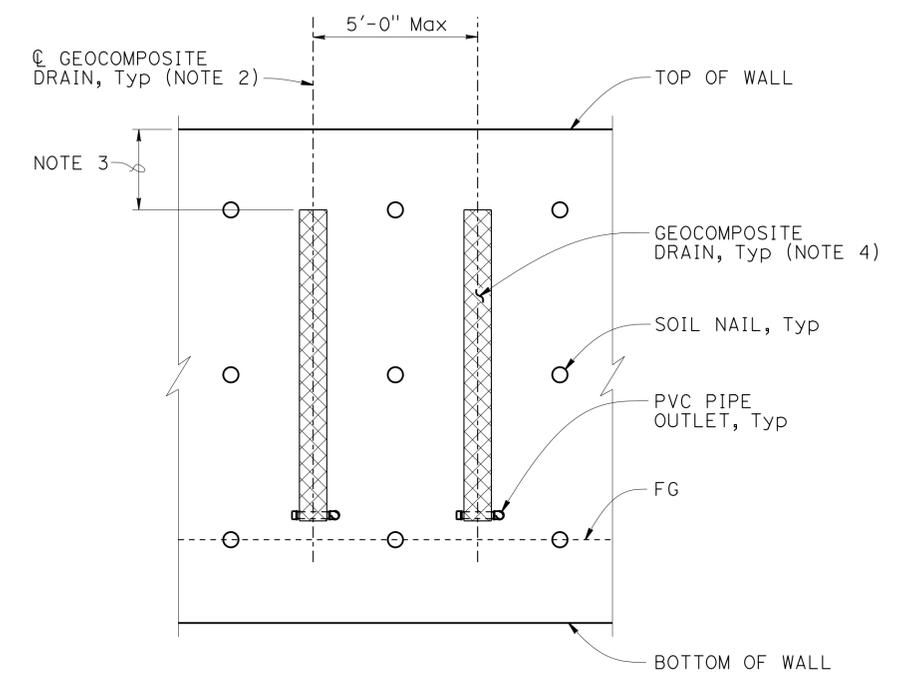
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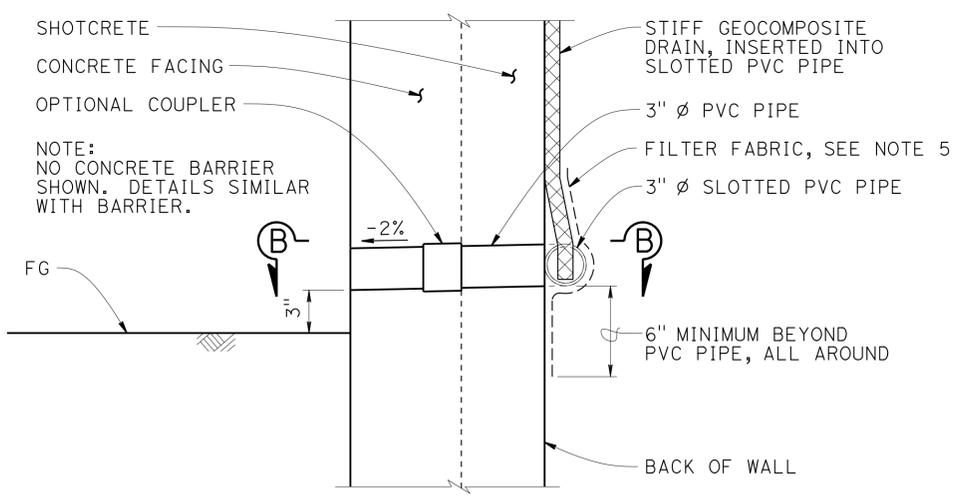
WALL DRAIN DETAIL AT WEEP HOLE - OPTION A
NO SCALE



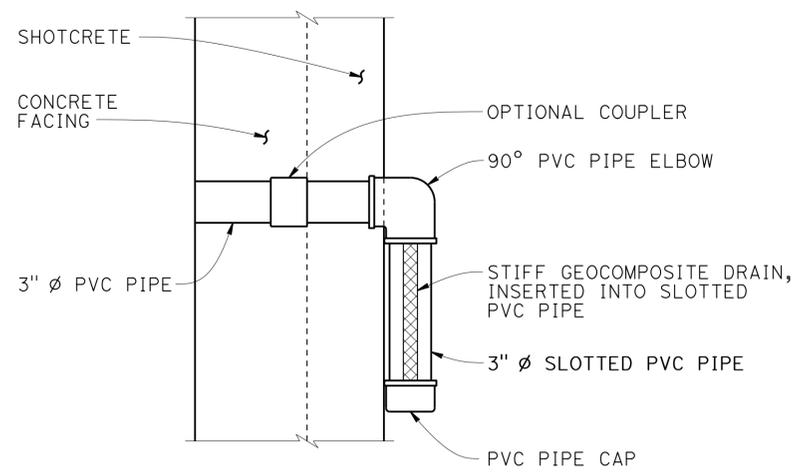
DRAIN SPLICE
NO SCALE



WALL PART ELEVATION
NO SCALE



WALL DRAIN DETAIL AT WEEP HOLE - OPTION B
NO SCALE



SECTION B-B
NO SCALE

- NOTES:
1. Geocomposite Drain is per Section 88 Geosynthetics of the Standard Specifications.
 2. Center Geocomposite Drains between soil nail columns.
 3. Begin Geocomposite Drain at top soil nail row.
 4. Geocomposite Drains must have filter fabric on soil side and wrapped around top and side edges.
 5. Provide filter fabric where necessary to prevent soil from entering drain.
 6. Alternative drain outlet details may be submitted for Engineer's approval.

DESIGN	BY Richard Schendel	CHECKED Michael Pope
DETAILS	BY Richard Schendel	CHECKED Michael Pope
QUANTITIES	BY Michael Pope	CHECKED Matt Schott

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 18

BRIDGE NO.	53E0301
POST MILE	39.65

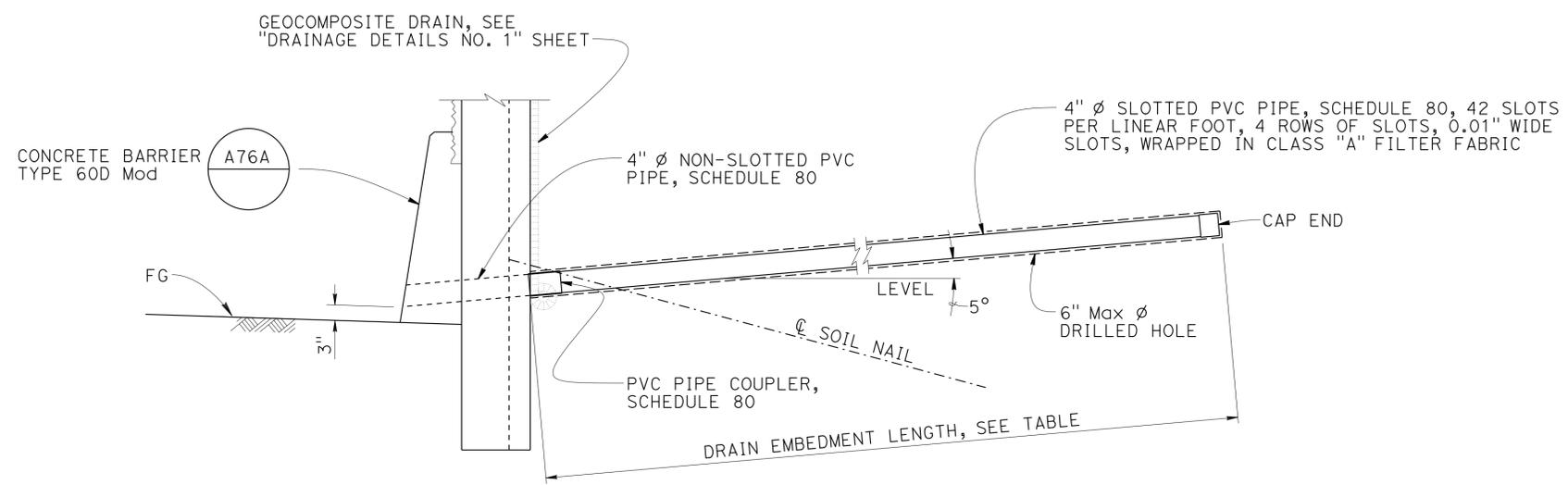
RETAINING WALL NO. 2093
DRAINAGE DETAILS NO. 1

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1927	2313

Richard Schendel
 REGISTERED CIVIL ENGINEER DATE 10/01/14
 6-1-15
 PLANS APPROVAL DATE
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HORIZONTAL DRAIN TABLE

Drain No.	RW LOL Station	Drain Embedment Length (ft)
1	111+90.4	50
2	112+40.4	
3	112+88.3	
4	113+40.4	
5	113+88.6	
6	114+35.8	
7	114+88.6	
8	115+35.4	
9	115+83.3	
10	116+33.3	
11	116+83.3	
12	117+33.6	
13	117+80.8	
14	118+28.3	
15	118+80.8	
16	119+28.3	
17	119+75.8	
18	120+25.8	
19	120+75.8	
20	121+23.6	
21	121+73.6	
22	122+23.6	
23	122+70.4	
24	123+23.6	
25	123+65.4	
26	124+18.6	30
27	124+65.4	
28	125+18.6	
29	125+63.3	
30	126+13.6	
31	126+60.4	
32	127+13.6	



NOTE:
Weep hole for Geocomposite Drain not shown for clarity.

HORIZONTAL DRAIN DETAIL
NO SCALE

NOTE:
Horizontal drains must be located to clear soil nails and geocomposite drains.

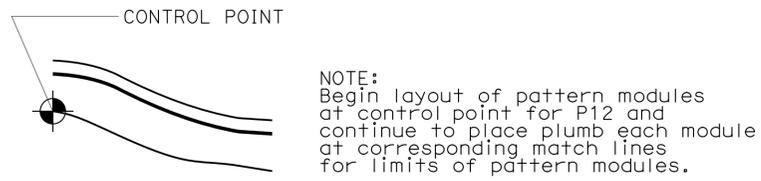
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	DESIGN	BY Richard Schendel	CHECKED Michael Pope	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 18	BRIDGE NO.	RETAINING WALL NO. 2093 DRAINAGE DETAILS NO. 2	
	DETAILS	BY Richard Schendel	CHECKED Michael Pope			53E0301		
	QUANTITIES	BY Michael Pope	CHECKED Matt Schott			POST MILE 39.65		
UNIT: 3603 PROJECT NUMBER & PHASE: 0713000007 1 CONTRACT NO.: 07-1193U1					DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES: 11-13, 12-13, 02-14, 05-28-14	SHEET 22 OF 41

FILE => 53e0301-r-dde+02.dgn

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1928	2313

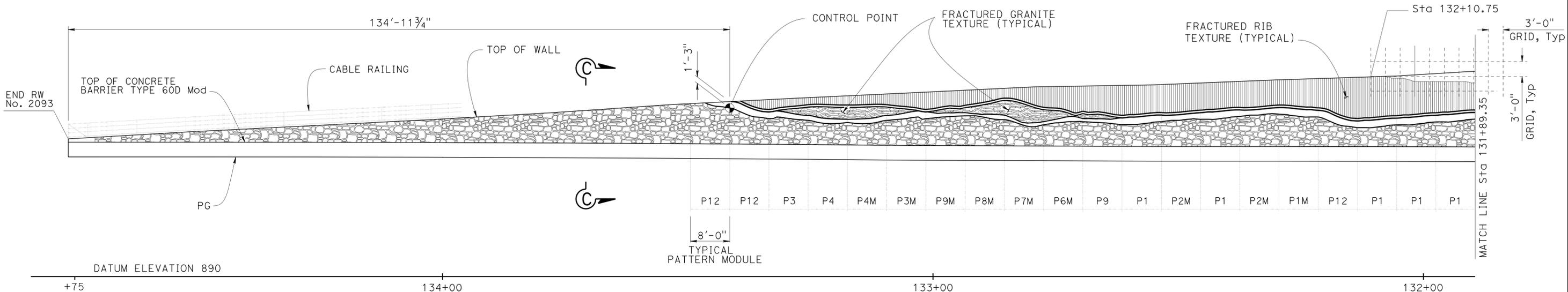
<i>Richard E. Schendel</i>		10/01/14
REGISTERED CIVIL ENGINEER	DATE	
6-1-15		
PLANS APPROVAL DATE		
No. C64259		
Exp. 6-30-15		
CIVIL		

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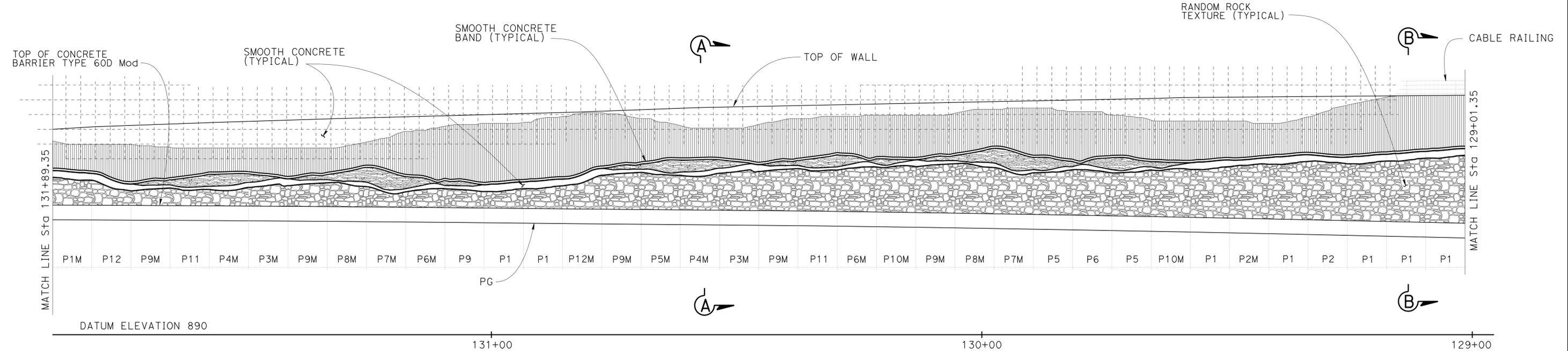


- NOTES:
1. Entire cable railing not shown for clarity.
 2. For SECTIONS "A-A", "B-B", and "C-C", see "ARCHITECTURAL DETAILS NO. 6" sheet.
 3. For Fractured Rib, Fractured Granite, and Random Rock Textures, see "ARCHITECTURAL DETAILS NO. 7" sheet.
 4. For Pattern Modules, see "ARCHITECTURAL DETAILS NO. 8 & NO. 9" sheets.

PATTERN MODULE LAYOUT DETAIL
NO SCALE



DEVELOPED ELEVATION
NO SCALE



DEVELOPED ELEVATION
NO SCALE

DESIGN	BY Valerie Moore	CHECKED Michael Pope
DETAILS	BY Farideh Hosseinioun	CHECKED Michael Pope
QUANTITIES	BY Michael Pope	CHECKED Matt Schott

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 18

BRIDGE NO.	53E0301
POST MILE	39.65

RETAINING WALL NO. 2093
ARCHITECTURAL DETAILS NO. 1

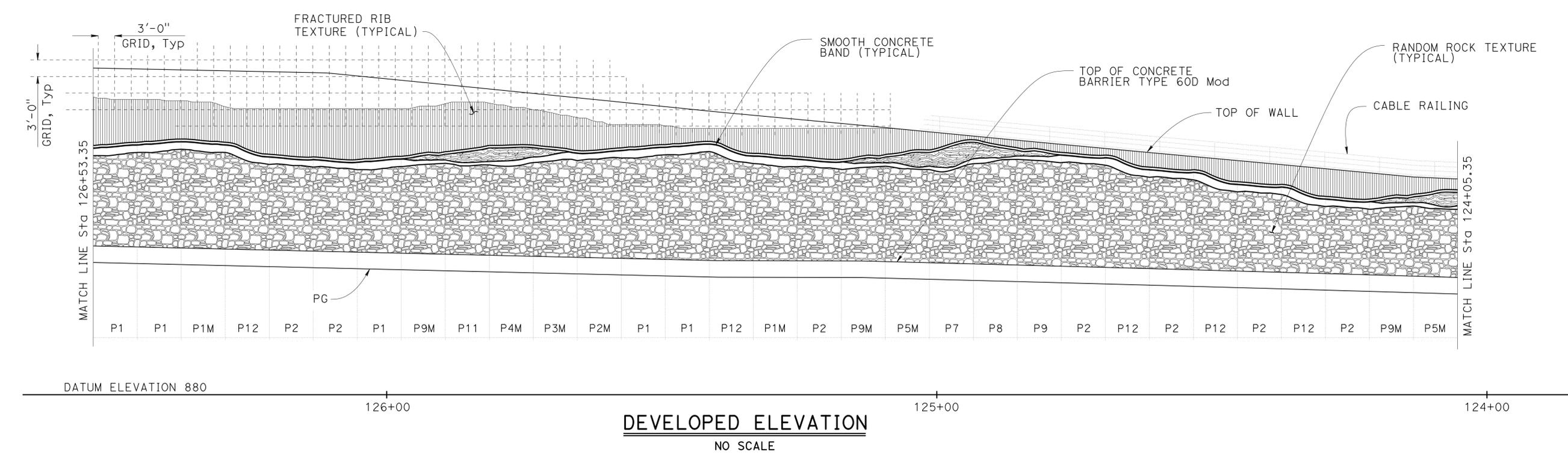
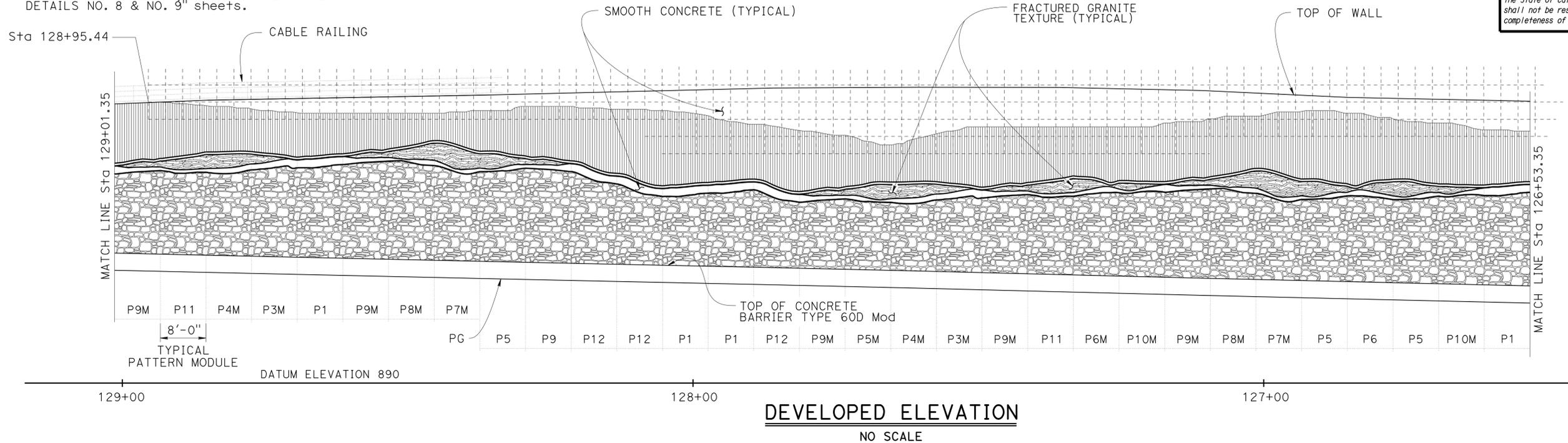
NOTES:

1. Entire cable railing not shown for clarity.
2. For Typical Sections, see "ARCHITECTURAL DETAILS NO. 1 and NO. 6" sheets.
3. For Fractured Rib, Fractured Granite, and Random Rock Textures, see "ARCHITECTURAL DETAILS NO.7" sheet.
4. For Pattern Modules, see "ARCHITECTURAL DETAILS NO. 8 & NO. 9" sheets.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1929	2313

Richard E. Schendel
 REGISTERED CIVIL ENGINEER DATE 10/01/14
 PLANS APPROVAL DATE 6-1-15
 No. C64259
 Exp. 6-30-15
 CIVIL
 STATE OF CALIFORNIA

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DESIGN	BY Valerie Moore	CHECKED Michael Pope
DETAILS	BY Farideh Hosseinioun	CHECKED Michael Pope
QUANTITIES	BY Michael Pope	CHECKED Matt Schott

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 18

BRIDGE NO.	53E0301
POST MILE	39.65

RETAINING WALL NO. 2093
ARCHITECTURAL DETAILS NO. 2



REVISION DATES	SHEET	OF
07/28/14	24	41

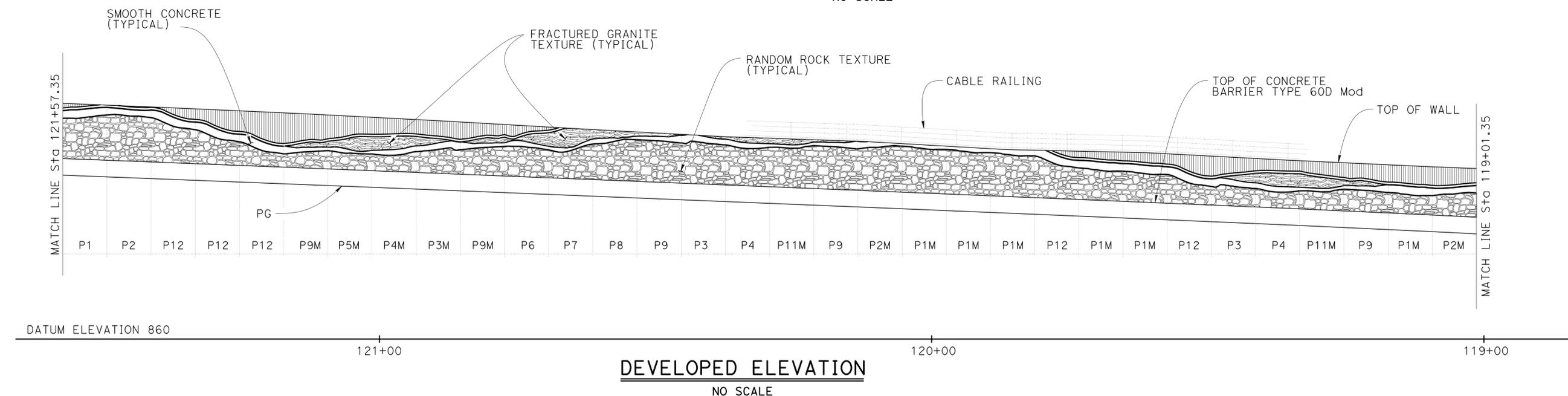
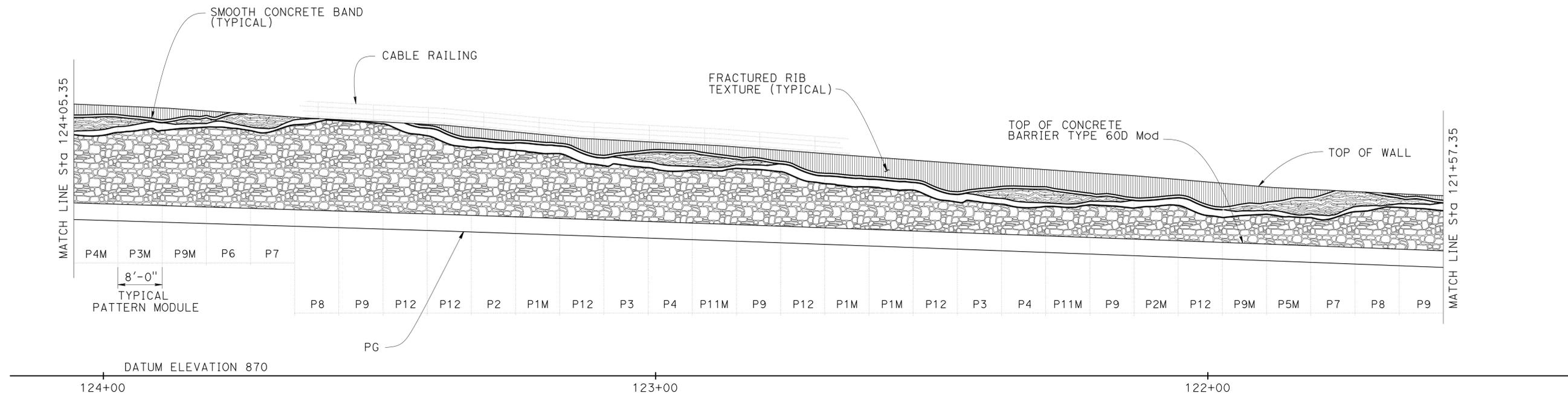
NOTES:

1. Entire cable railing not shown for clarity.
2. For Typical Sections, see "ARCHITECTURAL DETAILS NO. 1 and NO. 6" sheets.
3. For Fractured Rib, Fractured Granite, and Random Rock Textures, see "ARCHITECTURAL DETAILS NO.7" sheet.
4. For Pattern Modules, see "ARCHITECTURAL DETAILS NO. 8 & NO. 9" sheets.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1930	2313

Richard E. Schendel
 REGISTERED CIVIL ENGINEER DATE 10/01/14
 PLANS APPROVAL DATE 6-1-15
 No. C64259
 Exp. 6-30-15
 CIVIL
 STATE OF CALIFORNIA

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DESIGN	BY Valerie Moore	CHECKED Michael Pope
DETAILS	BY Farideh Hosseinioun	CHECKED Michael Pope
QUANTITIES	BY Michael Pope	CHECKED Matt Schott

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 18

BRIDGE NO.	53E0301
POST MILE	39.65

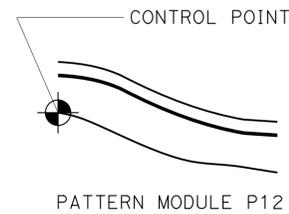
RETAINING WALL NO. 2093
ARCHITECTURAL DETAILS NO. 3

NOTES:

1. Entire cable railing not shown for clarity.
2. For Typical Sections, see "ARCHITECTURAL DETAILS NO. 1 and NO. 6" sheets.
3. For Fractured Rib, Fractured Granite, and Random Rock Textures, see "ARCHITECTURAL DETAILS NO.7" sheet.
4. For Pattern Modules, see "ARCHITECTURAL DETAILS NO. 8 & NO. 9" sheets.

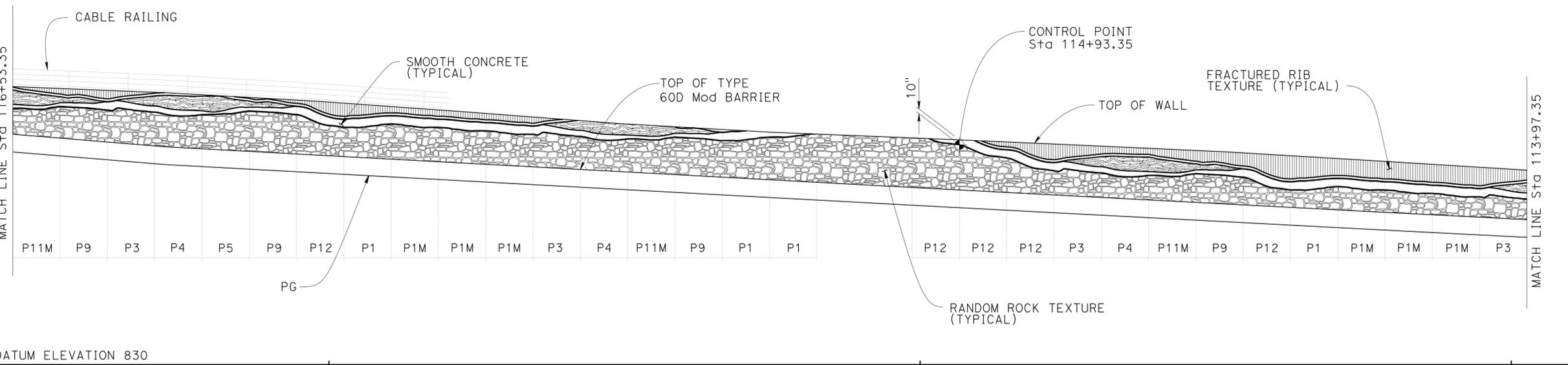
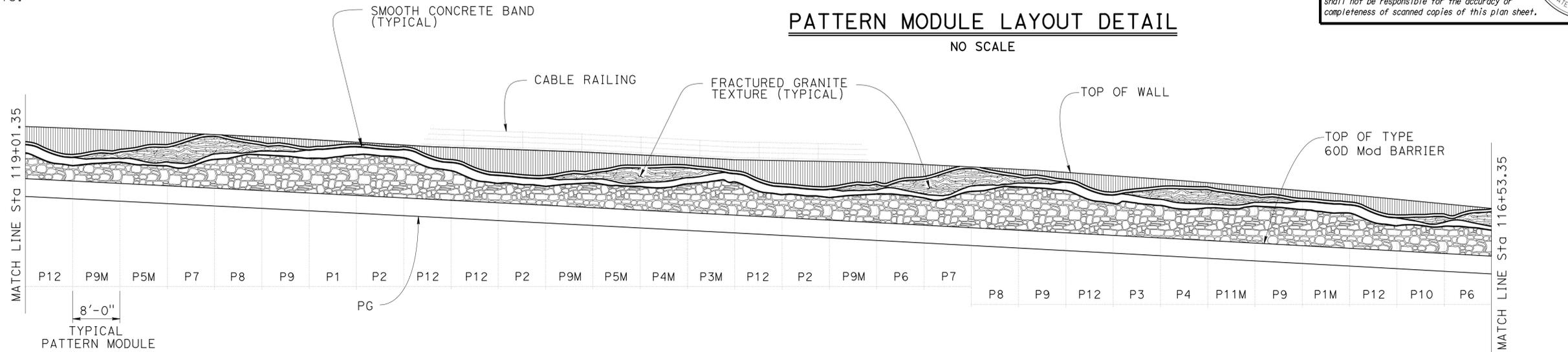
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1931	2313

Richard E. Schendel
 REGISTERED CIVIL ENGINEER DATE 10/01/14
 6-1-15
 PLANS APPROVAL DATE
 RICHARD E. SCHENDEL
 No. C64259
 Exp. 6-30-15
 CIVIL
 STATE OF CALIFORNIA
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NOTE:
 Begin layout of pattern modules at control point for P12 and continue to place plumb each module at corresponding match lines for limits of pattern modules.

PATTERN MODULE LAYOUT DETAIL
 NO SCALE



DESIGN	BY Valerie Moore	CHECKED Michael Pope
DETAILS	BY Farideh Hosseinioun	CHECKED Michael Pope
QUANTITIES	BY Michael Pope	CHECKED Matt Schott

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 18

BRIDGE NO.	53E0301
POST MILE	39.65

RETAINING WALL NO. 2093
ARCHITECTURAL DETAILS NO. 4



REVISION DATES	SHEET	OF
07/28/14	26	41

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1932	2313

NOTES:

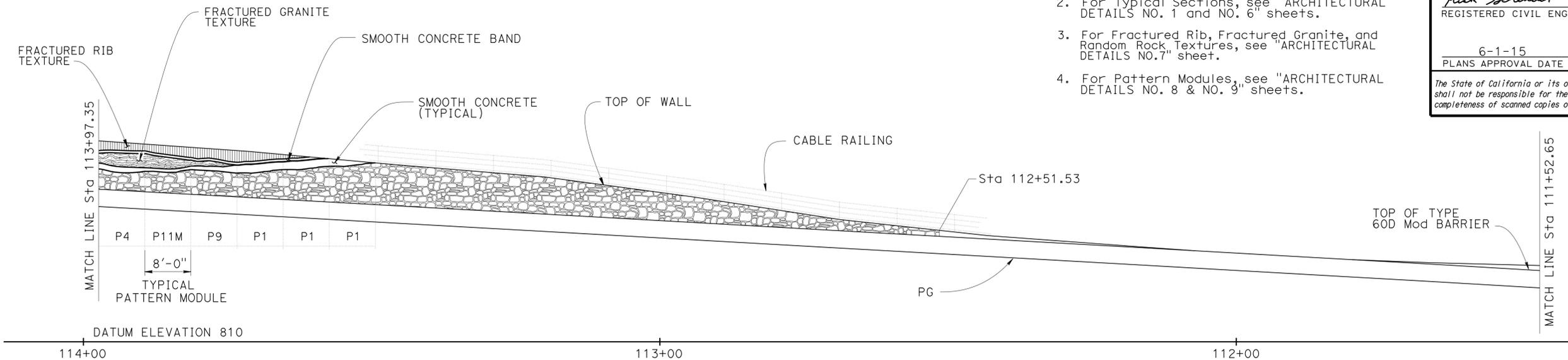
1. Entire cable railing not shown for clarity.
2. For Typical Sections, see "ARCHITECTURAL DETAILS NO. 1 and NO. 6" sheets.
3. For Fractured Rib, Fractured Granite, and Random Rock Textures, see "ARCHITECTURAL DETAILS NO.7" sheet.
4. For Pattern Modules, see "ARCHITECTURAL DETAILS NO. 8 & NO. 9" sheets.

REGISTERED CIVIL ENGINEER
 RICHARD E. SCHEDEL
 No. C64259
 Exp. 6-30-15
 CIVIL
 STATE OF CALIFORNIA

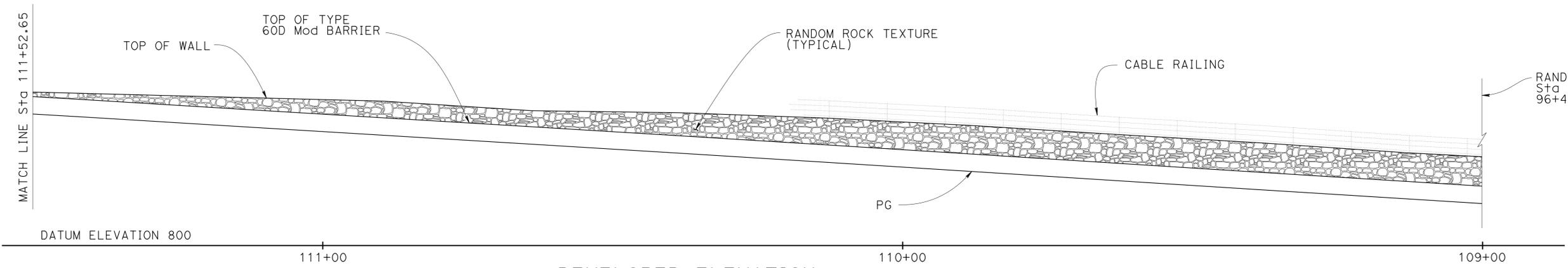
10/01/14
 DATE

6-1-15
 PLANS APPROVAL DATE

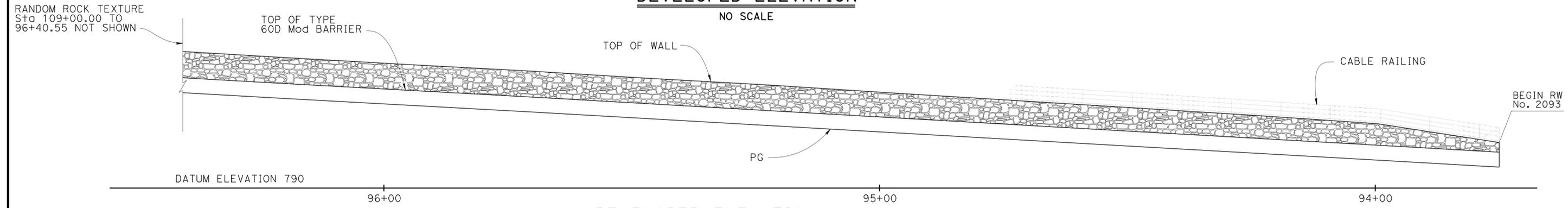
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DEVELOPED ELEVATION
NO SCALE



DEVELOPED ELEVATION
NO SCALE



DEVELOPED ELEVATION
NO SCALE

DESIGN BY Valerie Moore CHECKED Michael Pope DETAILS BY Farideh Hosseinioun CHECKED Michael Pope QUANTITIES BY Michael Pope CHECKED Matt Schott	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 18	BRIDGE NO. 53E0301	RETAINING WALL NO. 2093 ARCHITECTURAL DETAILS NO. 5
			POST MILE 39.65	
			UNIT: 3603 PROJECT NUMBER & PHASE: 07 1300 0007 1 CONTRACT NO.: 07-1193U1	
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS			REVISION DATES 07/28/14	SHEET 27 OF 41

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)

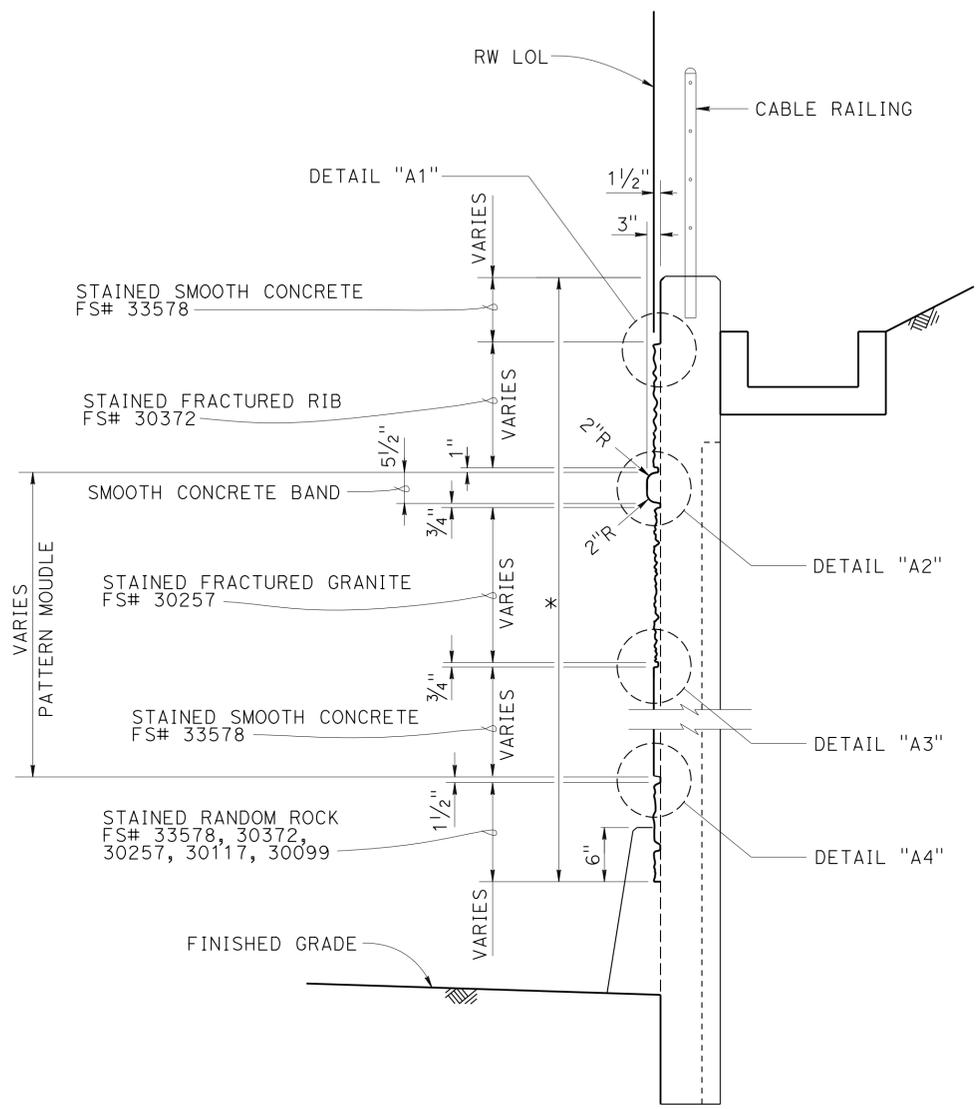
DISREGARD PRINTS BEARING EARLIER REVISION DATES

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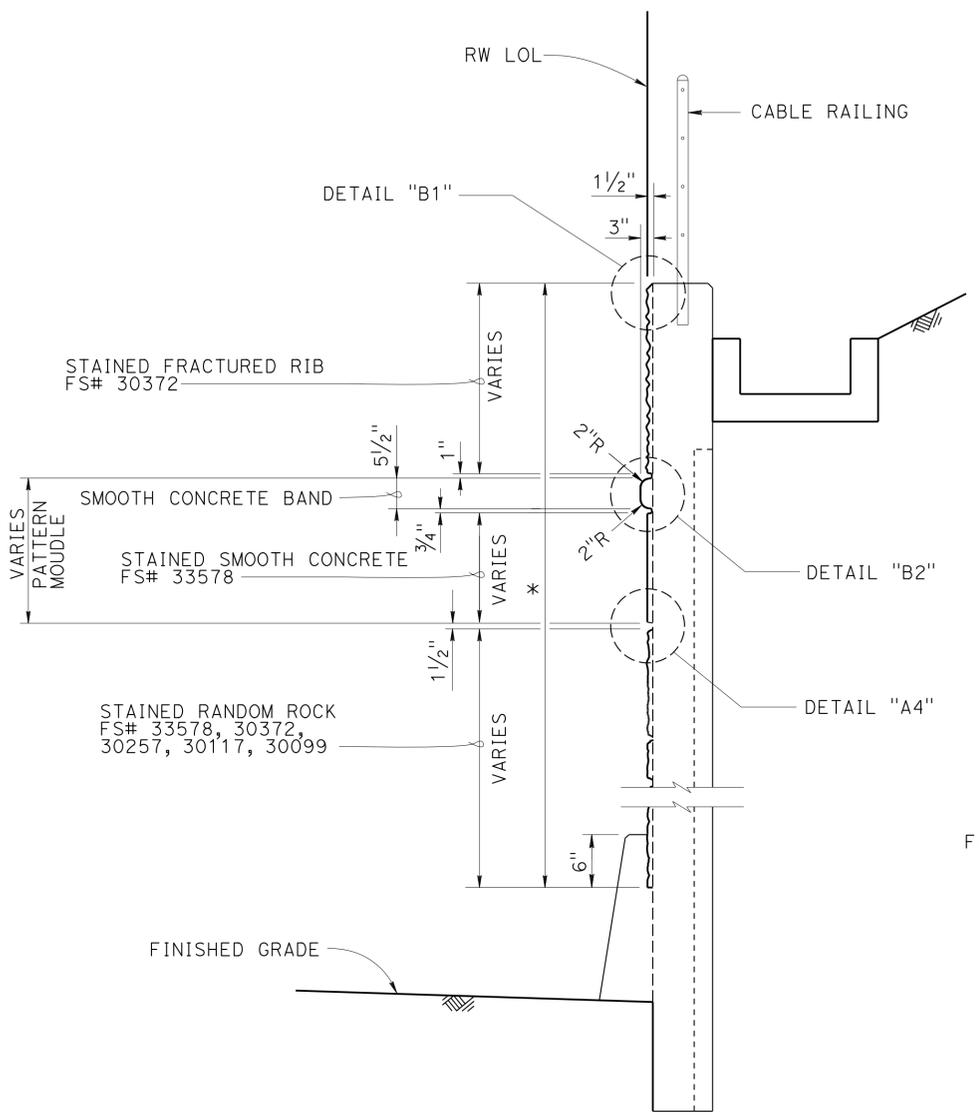
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1933	2313

Richard E. Schendel
 REGISTERED CIVIL ENGINEER
 DATE 10/01/14
 PLANS APPROVAL DATE 6-1-15
 No. C64259
 Exp. 6-30-15
 CIVIL
 STATE OF CALIFORNIA

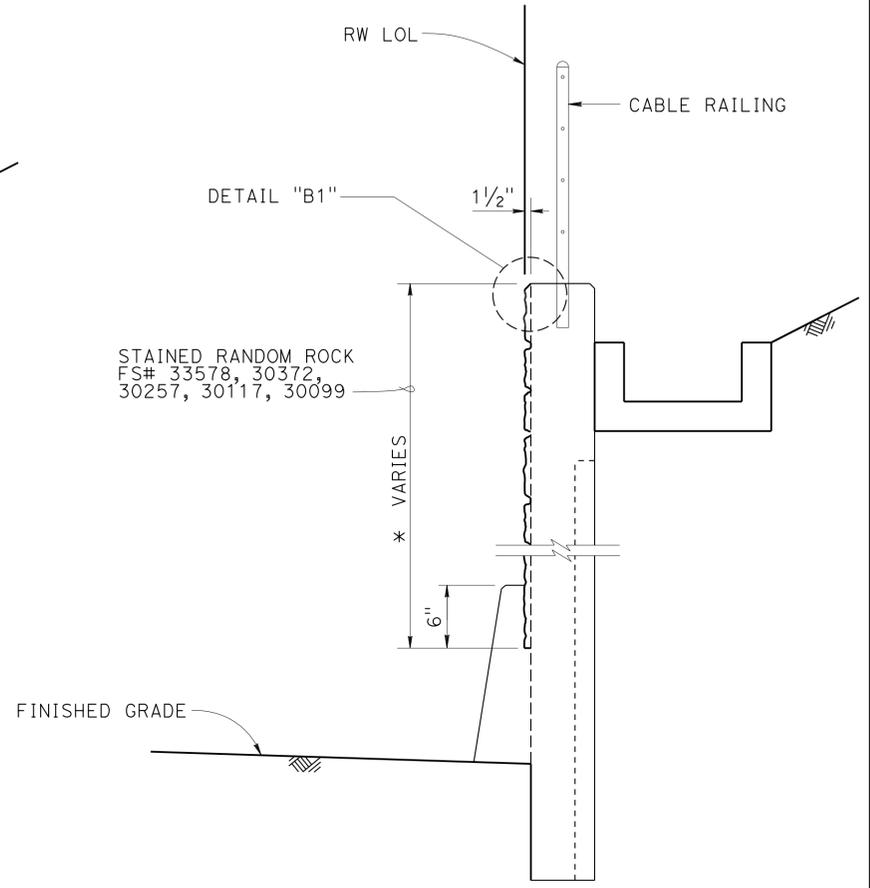
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.



TYPICAL SECTION A-A
NO SCALE



TYPICAL SECTION B-B
NO SCALE



TYPICAL SECTION C-C
NO SCALE

* Pay limits of Concrete Surface Texture

- NOTES:
- For DETAILS "A1", "A2", "A3", "A4", "B1", and "B2", see "ARCHITECTURAL DETAILS NO. 7" sheet.
 - "FS#" is Federal Standard Color Number.

DESIGN	BY Valerie Moore	CHECKED Michael Pope
DETAILS	BY Farideh Hosseinioun	CHECKED Michael Pope
QUANTITIES	BY Michael Pope	CHECKED Matt Schott

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 18

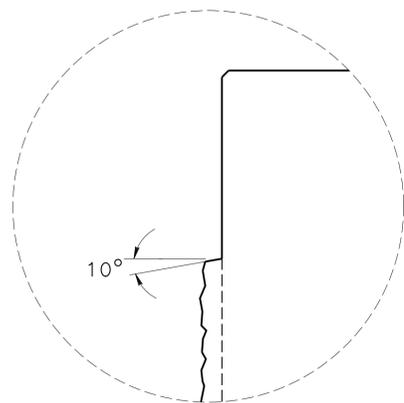
BRIDGE NO.	53E0301
POST MILE	39.65

RETAINING WALL NO. 2093
ARCHITECTURAL DETAILS NO. 6

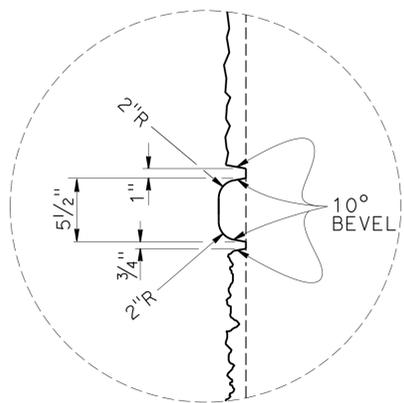
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1934	2313

Richard E. Schendel
 REGISTERED CIVIL ENGINEER 10/01/14 DATE
 6-1-15
 PLANS APPROVAL DATE
 No. C64259
 Exp. 6-30-15
 CIVIL
 STATE OF CALIFORNIA

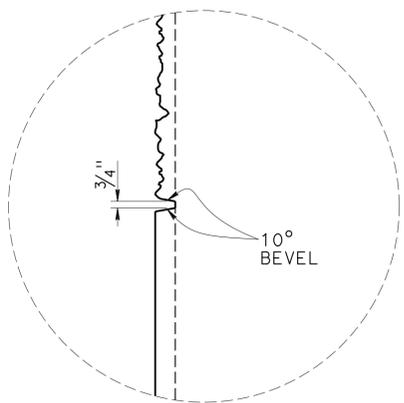
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.



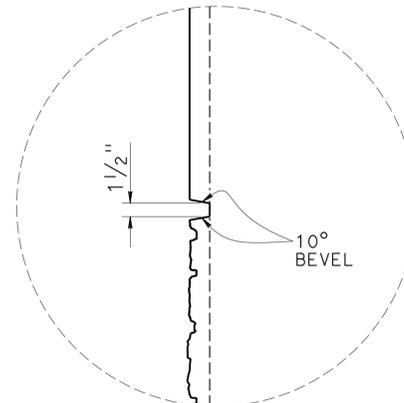
DETAIL A1
NO SCALE



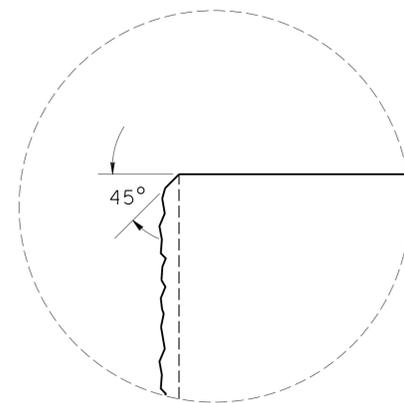
DETAIL A2
NO SCALE



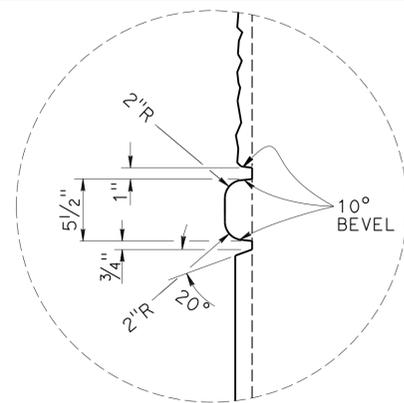
DETAIL A3
NO SCALE



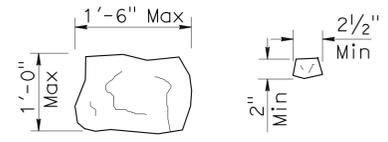
DETAIL A4
NO SCALE



DETAIL B1
NO SCALE

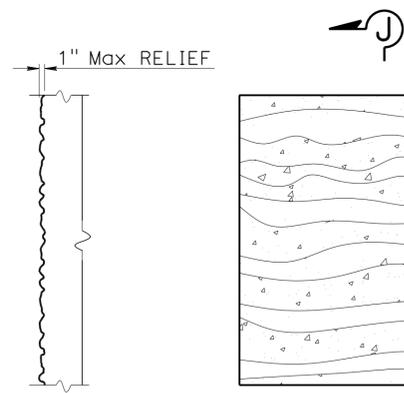


DETAIL B2
NO SCALE

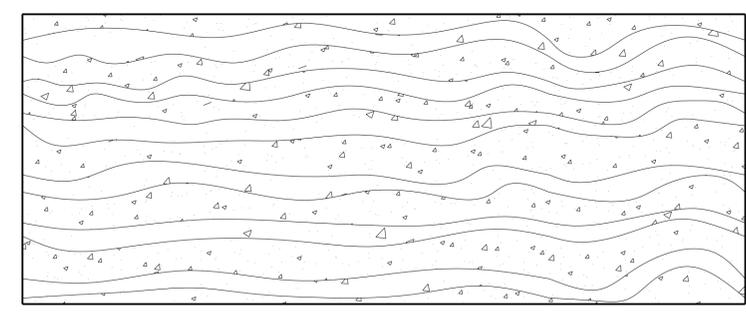


ROCK SIZE

NOTE:
Seamless Random Rock pattern to have a minimum of 2 to a maximum of 4 match points (denoted by "M") for each side (top to bottom and side to side).

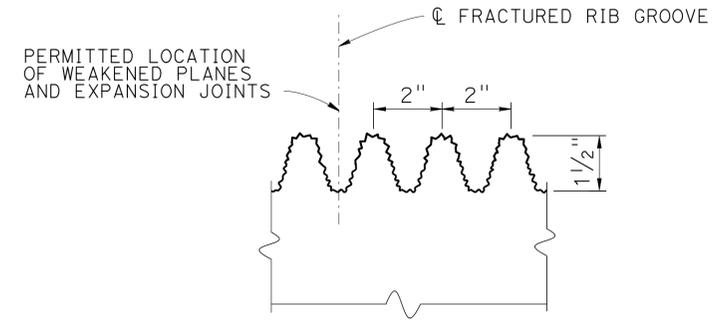


SECTION J-J

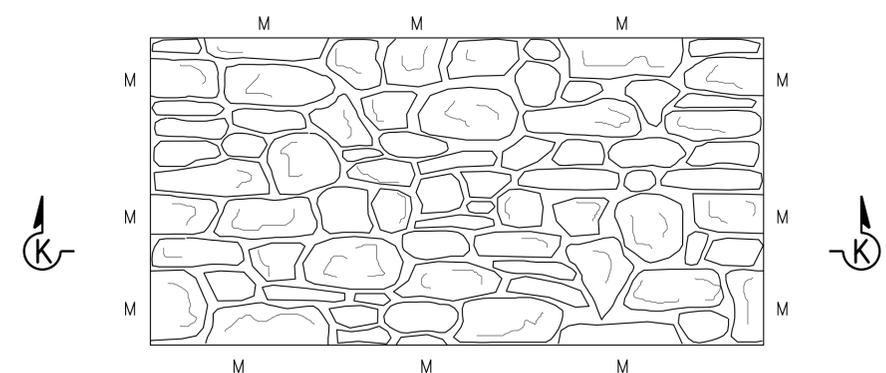


ELEVATION

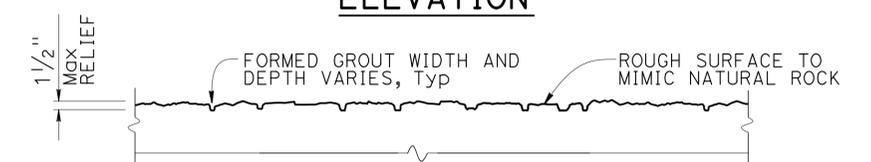
FRACTURED GRANITE TEXTURE
NO SCALE



FRACTURED RIB TEXTURE - SECTION
NO SCALE



ELEVATION



SECTION K-K
RANDOM ROCK TEXTURE
NO SCALE

DESIGN	BY Valerie Moore	CHECKED Michael Pope
DETAILS	BY Farideh Hosseinioun	CHECKED Michael Pope
QUANTITIES	BY Michael Pope	CHECKED Matt Schott

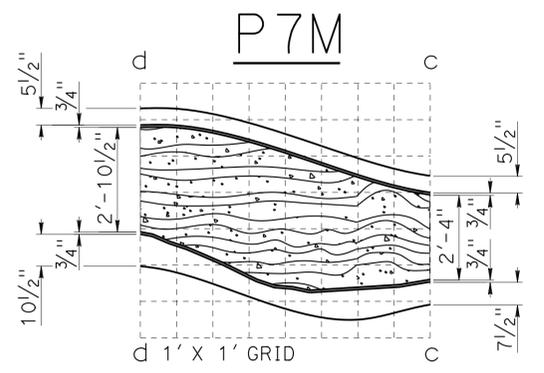
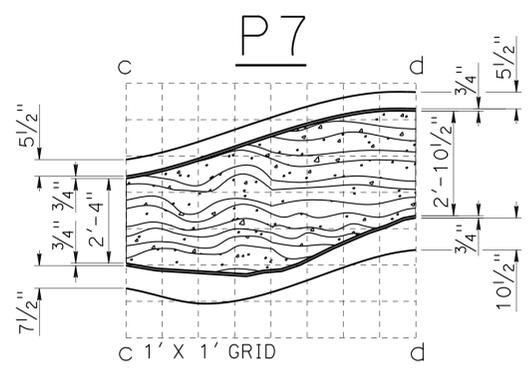
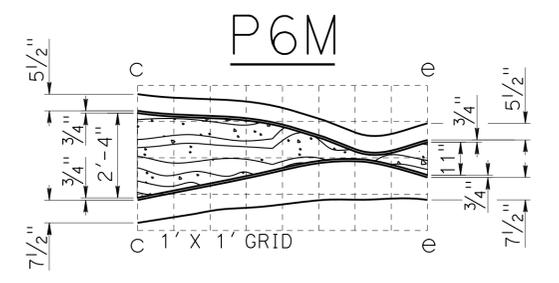
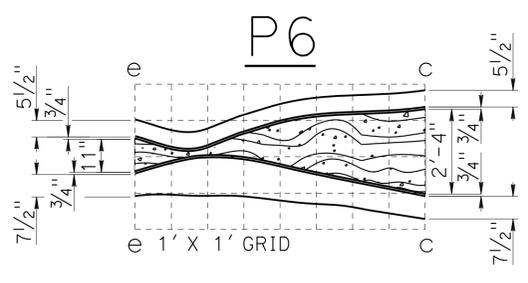
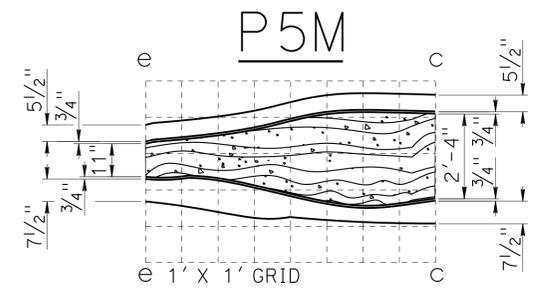
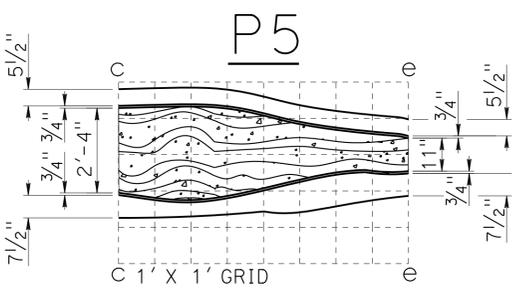
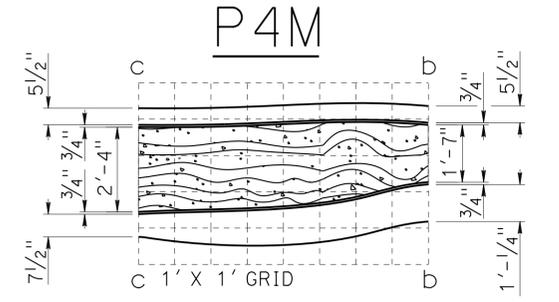
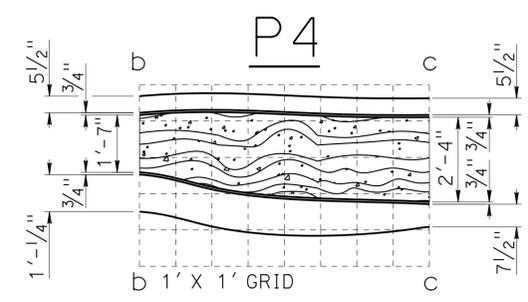
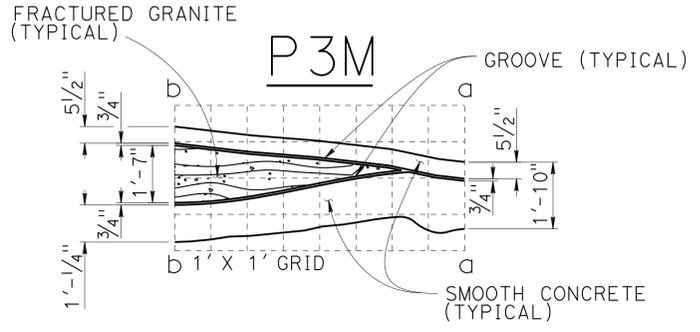
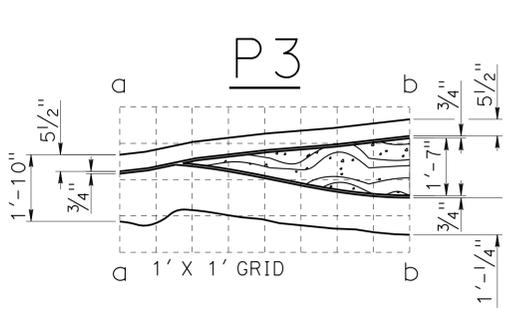
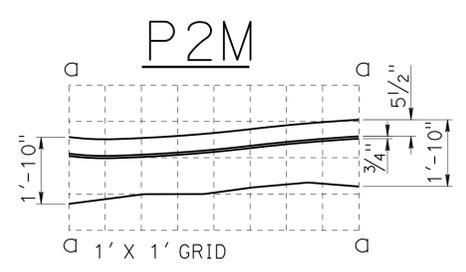
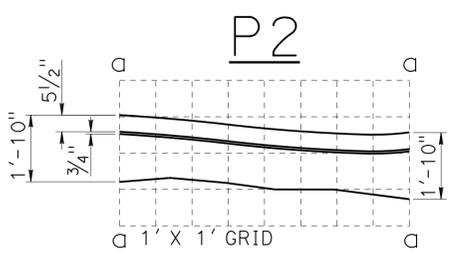
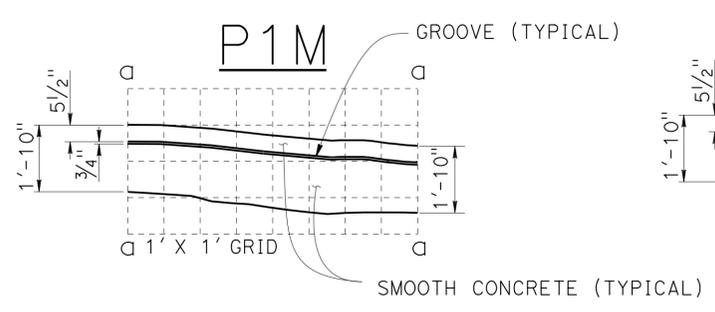
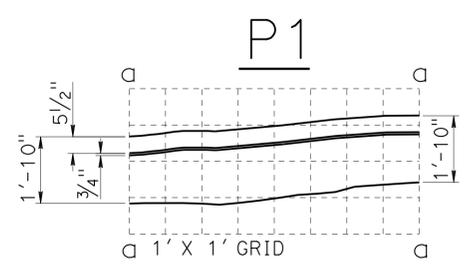
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 18

BRIDGE NO.	53E0301
POST MILE	39.65

RETAINING WALL NO. 2093
ARCHITECTURAL DETAILS NO. 7

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1935	2313
<i>Richard E. Schendel</i> REGISTERED CIVIL ENGINEER			10/01/14 DATE		
6-1-15 PLANS APPROVAL DATE					
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- NOTES:
- Fractured Granite texture at match lines a-a, b-b, c-c, d-d, and e-e must match seamlessly between the interchangeable modules.
 - Fractured Rib and Random Rock Textures not shown for clarity.

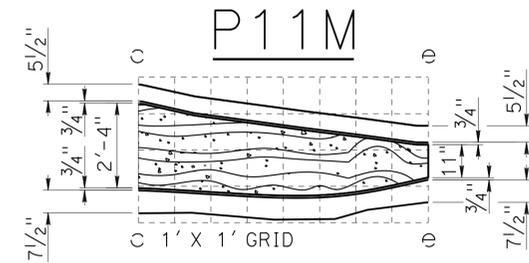
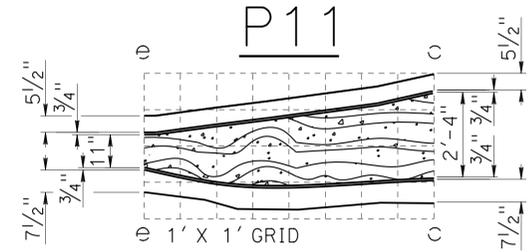
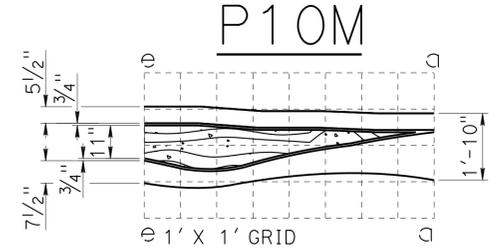
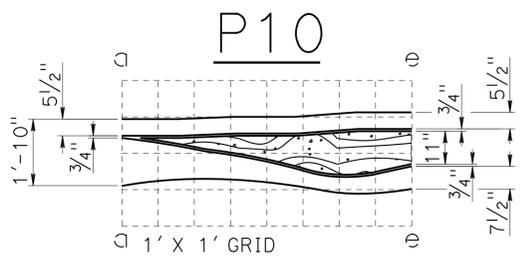
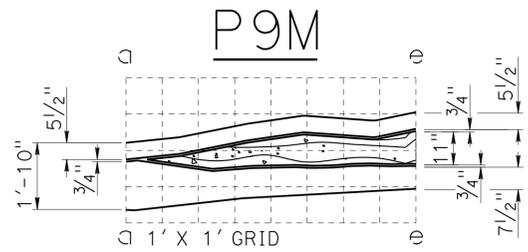
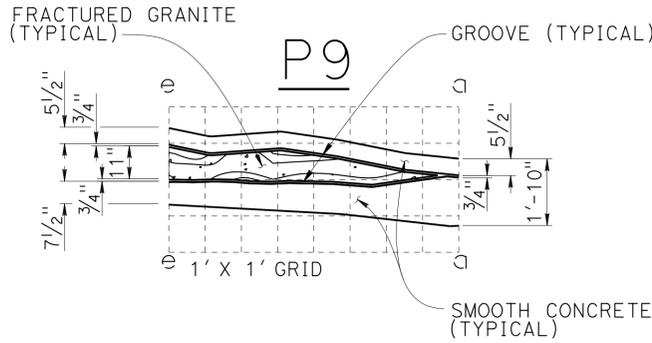
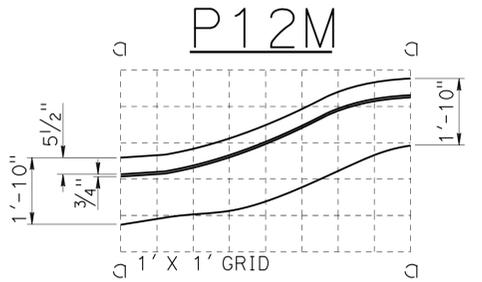
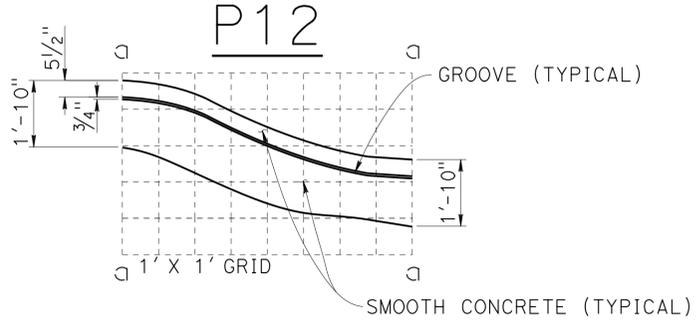
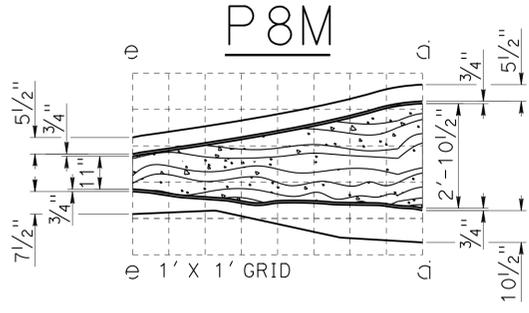
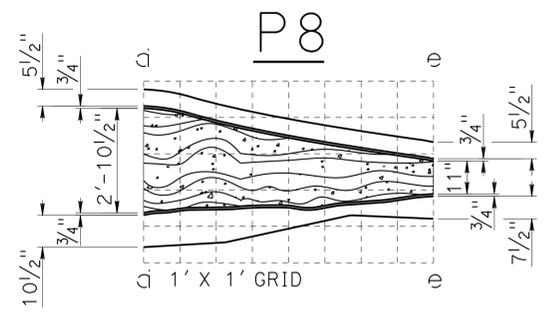
INTERCHANGEABLE PATTERN MOTIF MODULES
NO SCALE

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY Valerie Moore	CHECKED Michael Pope	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 18	BRIDGE NO.	53E0301	RETAINING WALL NO. 2093 ARCHITECTURAL DETAILS NO. 8		
	DETAILS	BY Farideh Hosseinioun	CHECKED Michael Pope			POST MILE	39.65			
	QUANTITIES	BY Michael Pope	CHECKED Matt Schott			UNIT: 3603	PROJECT NUMBER & PHASE: 07 1300 0007 1		CONTRACT NO.: 07-1193U1	
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS								DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES 12/27/13 02/28/14	SHEET 30 OF 41

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1936	2313

Richard E. Schendel
 REGISTERED CIVIL ENGINEER
 DATE 10/01/14
 PLANS APPROVAL DATE 6-1-15
 No. C64259
 Exp. 6-30-15
 CIVIL
 STATE OF CALIFORNIA

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- NOTES:
- Fractured Granite texture at match lines a-a, b-b, c-c, d-d, and e-e must match seamlessly between the interchangeable modules.
 - Fractured Rib and Random Rock Textures not shown for clarity.

INTERCHANGEABLE PATTERN MOTIF MODULES
NO SCALE

DESIGN	BY Valerie Moore	CHECKED Michael Pope
DETAILS	BY Farideh Hosseinioun	CHECKED Michael Pope
QUANTITIES	BY Michael Pope	CHECKED Matt Schott

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 18

BRIDGE NO.	53E0301
POST MILE	39.65

RETAINING WALL NO. 2093
ARCHITECTURAL DETAILS NO. 9

BENCH MARK

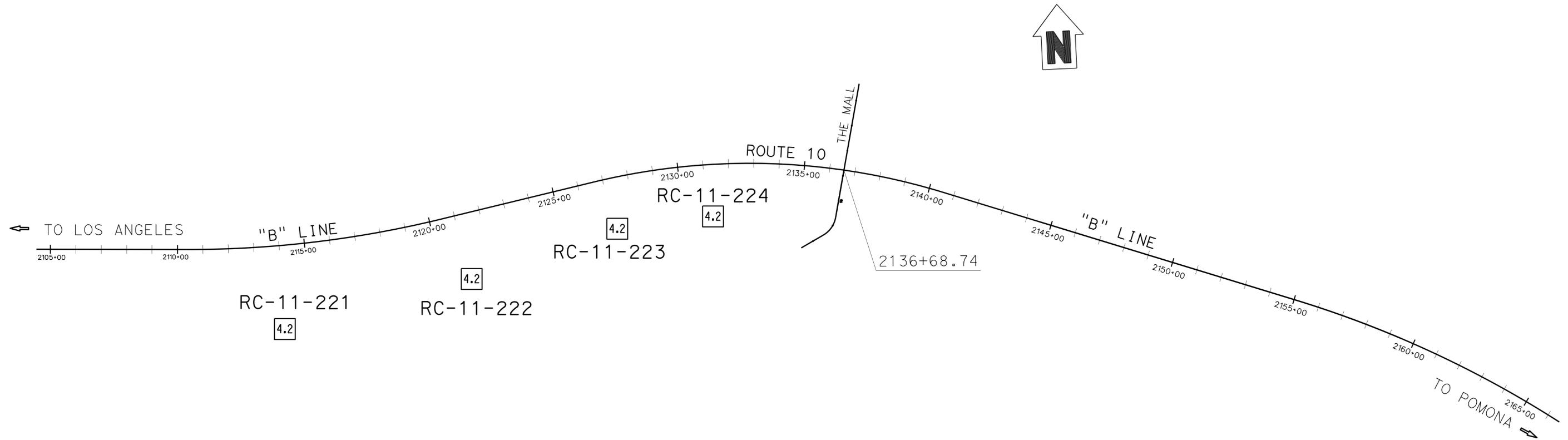
BM No.3003 SUHV
 ELEVATION 841.790 FT
 Fd Bt Spk&W E/B I-10 Shldr
 "B" Line Sta. 2112+49.37
 Rt 76.00'
 HORIZONTAL DATUM NAD83
 VERTICAL DATUM NAVD88.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1937	2313


 REGISTERED CIVIL ENGINEER DATE 06/2013
 PLANS APPROVAL DATE 6-1-15
 URS Corporation
 2020 E. First St., Santa Ana, CA 92705
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This LOTB sheet was prepared in accordance with the Caltrans Soil & Rock Logging, Classification, & Presentation Manual (2010 Edition).

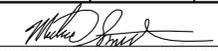


LOG OF TEST BORINGS SHEET 1 OF 4

ENGINEERING SERVICES		MATERIALS AND GEOTECHNICAL SERVICES		STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION		DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH		BRIDGE NO. 53E0301	RETAINING WALL NO. 2093		
FUNCTIONAL SUPERVISOR NAME: H. YANG	DRAWN BY: P. QUACH/T. PANAH CHECKED BY: D. ORRIS		FIELD INVESTIGATION BY: T. PANAH				POST MILE 39.65	LOG OF TEST BORINGS SHEET 1 OF 4			
06S CIVIL LOG OF TEST BORINGS SHEET				ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		UNIT: PROJECT NUMBER & PHASE: 07130000071		CONTRACT NO.: EA1193U1	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 32 OF 41

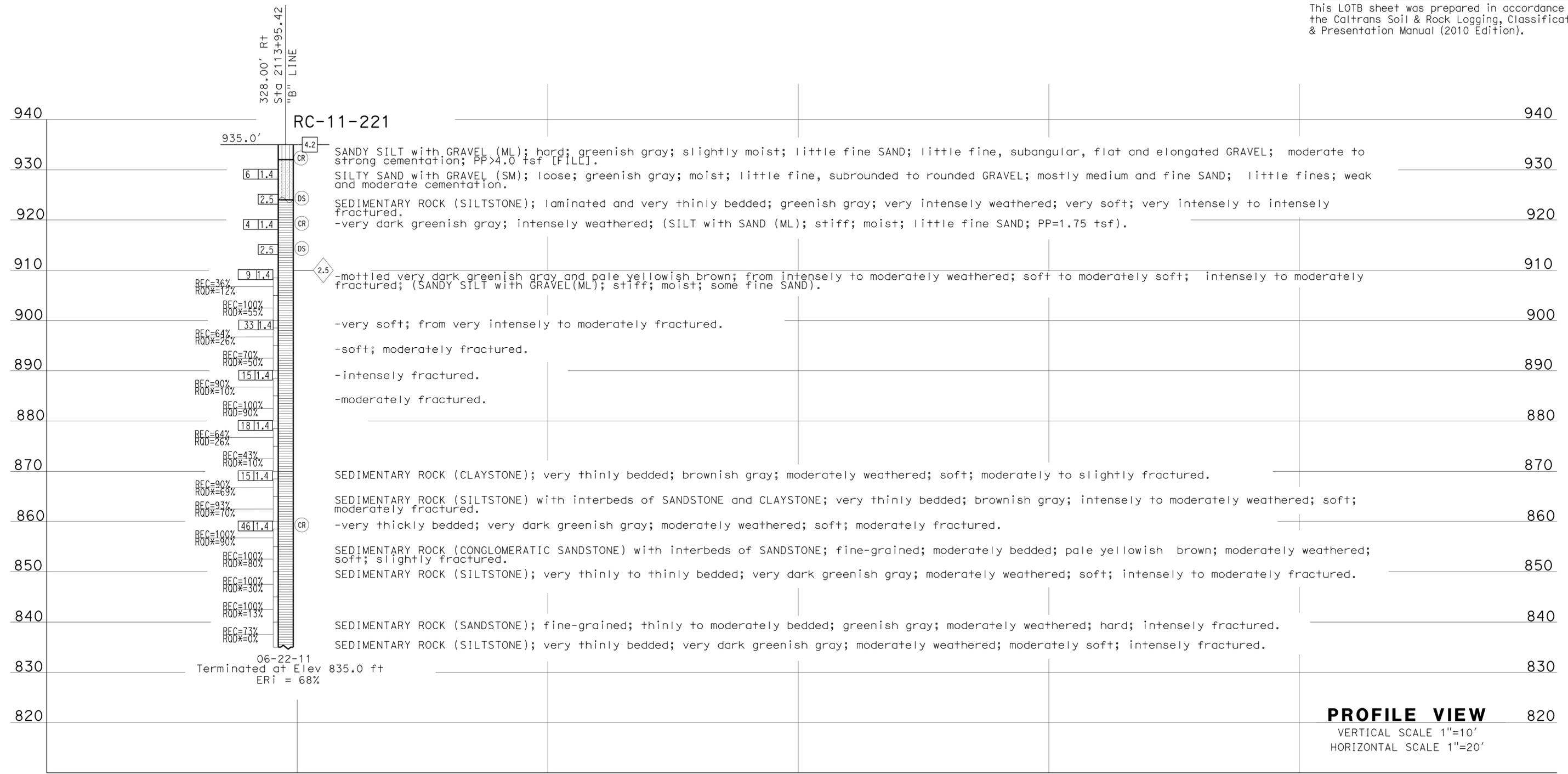
FOR PLAN VIEW, SEE
"LOG OF TEST BORINGS" 1 OF 4

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1938	2313


 REGISTERED CIVIL ENGINEER DATE 06/2013
 PLANS APPROVAL DATE 6-1-15
 MICHAEL G. SMITH
 No. 2229
 Exp. 3-31-2014
 GEOTECHNICAL
 STATE OF CALIFORNIA

URS Corporation
 2020 E. First St., Santa Ana, CA 92705
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2113+00 2114+00 2115+00 2116+00 2117+00 2118+00

ENGINEERING SERVICES		MATERIALS AND GEOTECHNICAL SERVICES		STATE OF CALIFORNIA		DIVISION OF ENGINEERING SERVICES		BRIDGE NO.		RETAINING WALL NO. 2093	
FUNCTIONAL SUPERVISOR		DRAWN BY: P.QUACH/T.PANAH		DEPARTMENT OF TRANSPORTATION		STRUCTURE DESIGN		53E0301		LOG OF TEST BORINGS SHEET 2 OF 4	
NAME: H.YANG		CHECKED BY: D.ORRIS		FIELD INVESTIGATION BY: T.PANAH		DESIGN BRANCH		POST MILE			
								39.65			
06S CIVIL LOG OF TEST BORINGS SHEET		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		0 1 2 3		UNIT: PROJECT NUMBER & PHASE: 07130000071		CONTRACT NO.: EA1193U1		DISREGARD PRINTS BEARING EARLIER REVISION DATES	
										REVISION DATES	
										SHEET 33 OF 41	

FILE => 53e0301-z-1+tb02.dgn

FOR PLAN VIEW, SEE
"LOG OF TEST BORINGS" 1 OF 4

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1939	2313
			06/2013	DATE	
			6-1-15	PLANS APPROVAL DATE	

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PROFILE VIEW
VERTICAL SCALE 1"=10'
HORIZONTAL SCALE 1"=20'

ENGINEERING SERVICES		MATERIALS AND GEOTECHNICAL SERVICES		STATE OF CALIFORNIA		DIVISION OF ENGINEERING SERVICES		BRIDGE NO.		RETAINING WALL NO. 2093	
FUNCTIONAL SUPERVISOR		DRAWN BY: P.QUACH/T.PANAH		DEPARTMENT OF TRANSPORTATION		STRUCTURE DESIGN		53E0301		LOG OF TEST BORINGS SHEET 3 OF 4	
NAME: H.YANG		CHECKED BY: D.ORRIS		FIELD INVESTIGATION BY: T.PANAH		DESIGN BRANCH		POST MILE			
								39.65			
065 CIVIL LOG OF TEST BORINGS SHEET		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		UNIT: PROJECT NUMBER & PHASE: 0713000071		CONTRACT NO.: EA1193U1		DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES	
				0 1 2 3						SHEET 34 OF 41	

USERNAME => s125624 DATE PLOTTED => 16-MAY-2015 TIME PLOTTED => 15:54

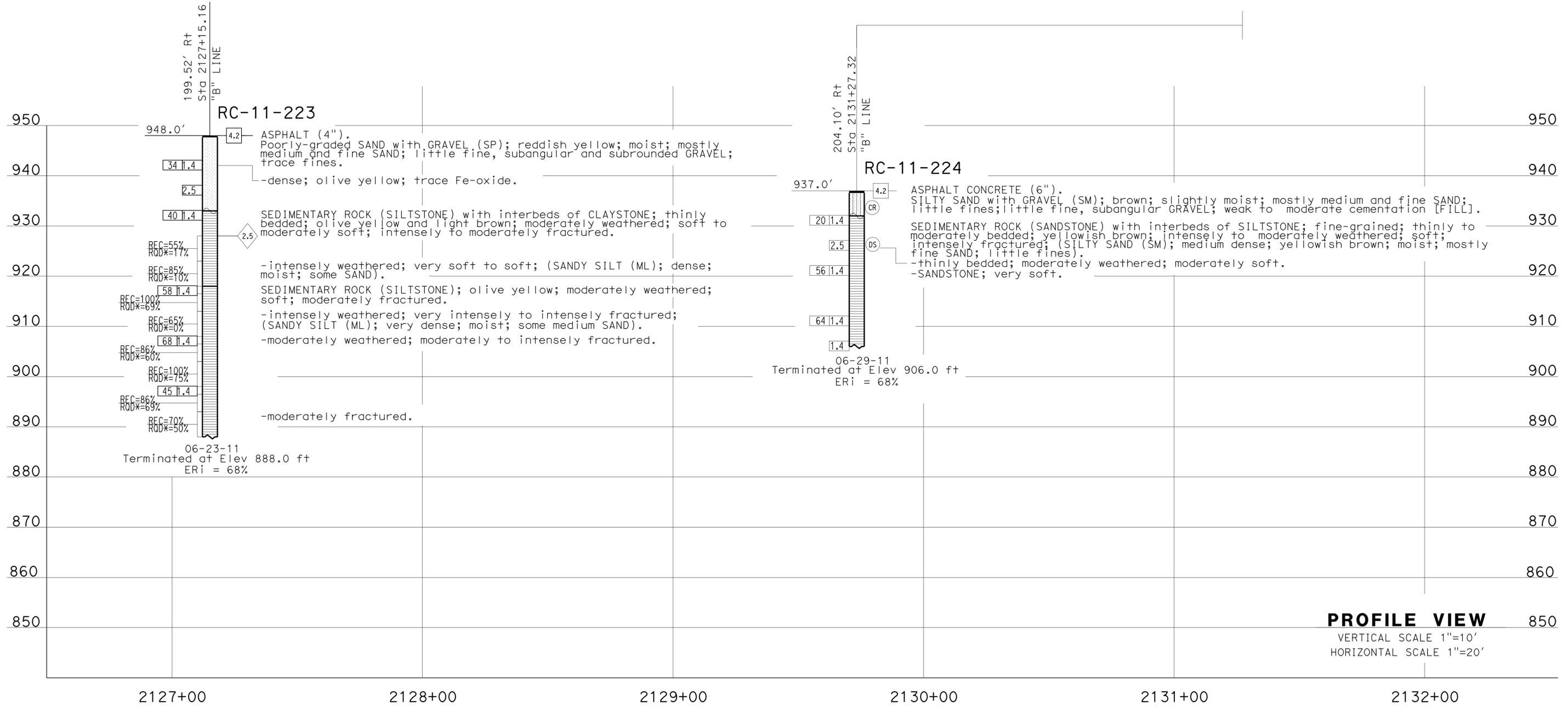
FOR PLAN VIEW, SEE
"LOG OF TEST BORINGS" 1 OF 4

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1940	2313

 06/2013
 REGISTERED CIVIL ENGINEER DATE
 6-1-15
 PLANS APPROVAL DATE

URS Corporation
2020 E. First St., Santa Ana, CA 92705
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ENGINEERING SERVICES		MATERIALS AND GEOTECHNICAL SERVICES		STATE OF CALIFORNIA		DIVISION OF ENGINEERING SERVICES		BRIDGE NO.		RETAINING WALL NO. 2093	
FUNCTIONAL SUPERVISOR		DRAWN BY: P.QUACH/T.PANAH		DEPARTMENT OF TRANSPORTATION		STRUCTURE DESIGN		53E0301		LOG OF TEST BORINGS SHEET 4 OF 4	
NAME: H.YANG		CHECKED BY: D.ORRIS		FIELD INVESTIGATION BY: T.PANAH		DESIGN BRANCH		POST MILE			
06S CIVIL LOG OF TEST BORINGS SHEET		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		0 1 2 3		UNIT: PROJECT NUMBER & PHASE: 0713000071		CONTRACT NO.: EA1193U1		DISREGARD PRINTS BEARING EARLIER REVISION DATES	
										REVISION DATES	
										SHEET 35 OF 41	

USERNAME => s125624 DATE PLOTTED => 16-MAY-2015 TIME PLOTTED => 15:54

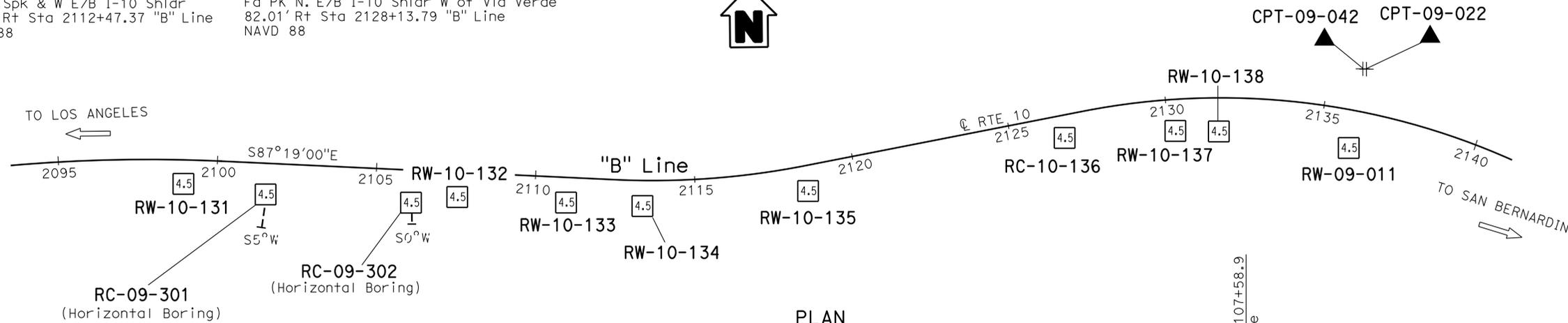
BENCH MARKS

SUHV 3002 Elev 769.628
 Fd Bt Spk & W E/B I-10 Shldr
 76.00' Rt Sta 2100+16.68 "B" Line
 NAVD 88

SUHV 3003 Elev 841.790
 Fd Bt Spk & W E/B I-10 Shldr
 76.00' Rt Sta 2112+47.37 "B" Line
 NAVD 88

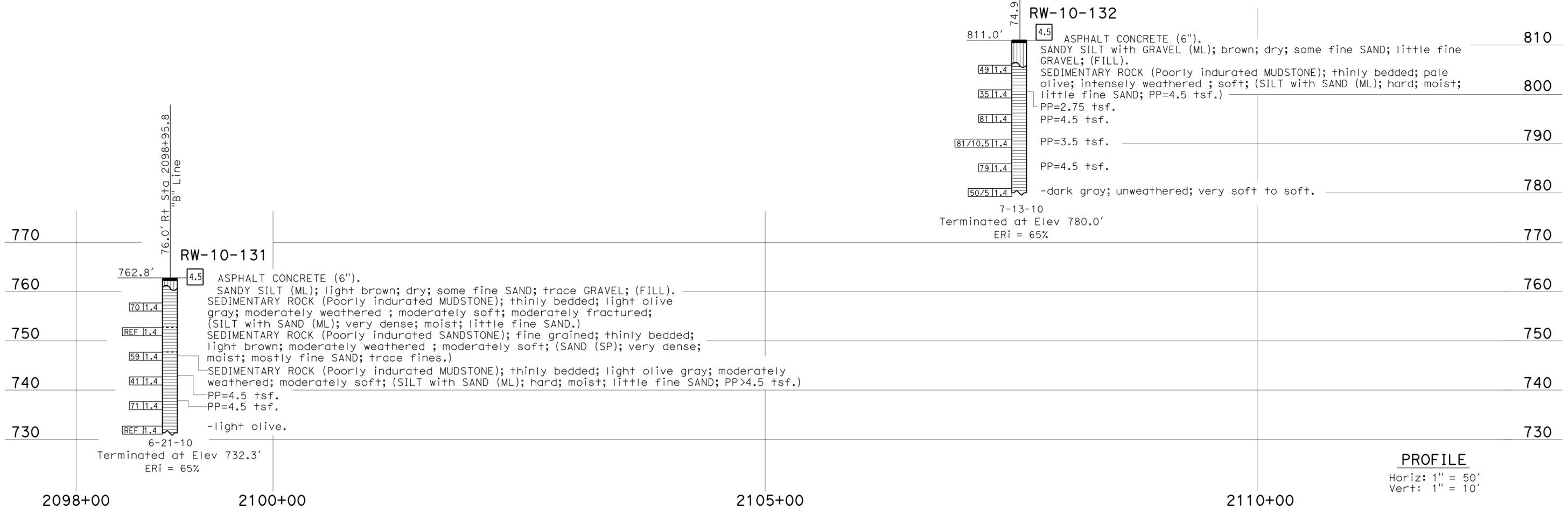
SUHV 3004 Elev 875.316
 Fd Bt Spk & W E/B I-10 Shldr
 76.00' Rt Sta 2118+49.10 "B" Line
 NAVD 88

SUHV 4041 Elev 913.920
 Fd PK N. E/B I-10 Shldr W of Via Verde
 82.01' Rt Sta 2128+13.79 "B" Line
 NAVD 88



PLAN
 1" = 200'

Note: No ground water encountered during field investigation.



PROFILE

Horiz: 1" = 50'
 Vert: 1" = 10'

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1941	2313

1-13-14
 CERTIFIED ENGINEERING GEOLOGIST DATE

6-1-15
 PLANS APPROVAL DATE

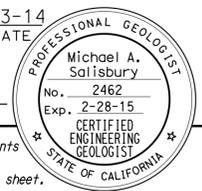
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Michael A. Salisbury
 No. 2462
 Exp. 2-28-15
 CERTIFIED ENGINEERING GEOLOGIST
 STATE OF CALIFORNIA

This LOTB sheet was prepared in accordance with the Caltrans Soil & Rock Logging, Classification, & Presentation Manual (2010 Edition). See 2010 Standard Plans A10F and A10G for Soil Legend, and A10H for Rock Legend.

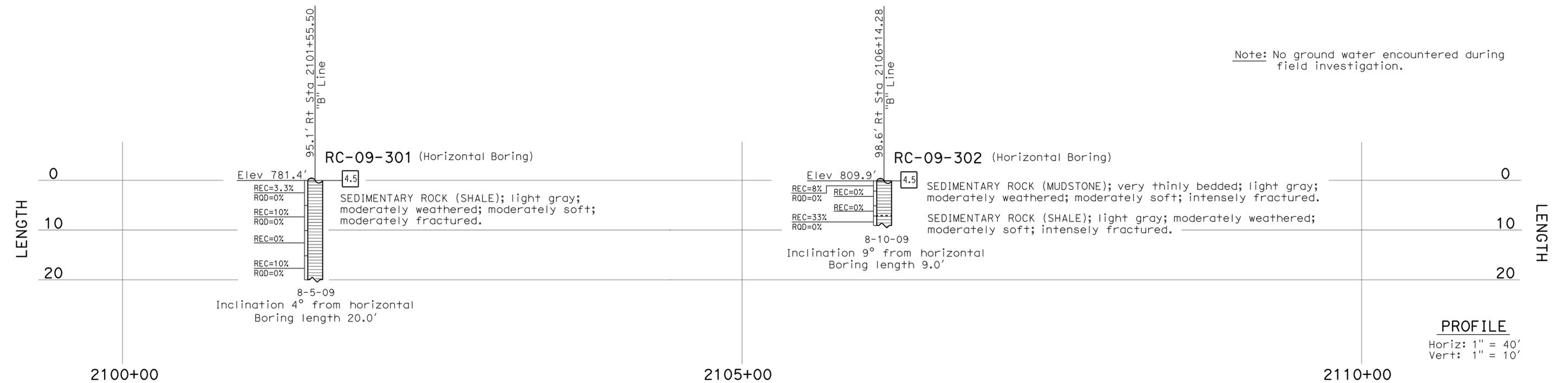
ENGINEERING SERVICES		MATERIALS AND GEOTECHNICAL SERVICES		STATE OF CALIFORNIA		DIVISION OF ENGINEERING SERVICES		BRIDGE NO.		RETAINING WALL NO. 2093	
FUNCTIONAL SUPERVISOR		DRAWN BY: W. Tang 6/12, I.G.-Remmen 11/13		FIELD INVESTIGATION BY:		STRUCTURE DESIGN		53E0301		LOG OF TEST BORINGS 1 OF 6	
NAME: D-J. Jang		CHECKED BY: H. Liu		M. Salisbury		DESIGN BRANCH 18		POST MILE			
06S CIVIL LOG OF TEST BORINGS SHEET		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		0 1 2 3		UNIT: 3643		CONTRACT NO.: 07-1193U1		REVISION DATES	
						PROJECT NUMBER & PHASE: 0713000007 1		DISREGARD PRINTS BEARING EARLIER REVISION DATES		SHEET OF	
						FILE => 53e0301-z-1+b05.dgn				36 41	

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1942	2313


 CERTIFIED ENGINEERING GEOLOGIST DATE 1-13-14
 PLANS APPROVAL DATE 6-1-15

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This LOTB sheet was prepared in accordance with the Caltrans Soil & Rock Logging, Classification, & Presentation Manual (2010 Edition).
 See 2010 Standard Plans A10F and A10G for Soil Legend, and A10H for Rock Legend.

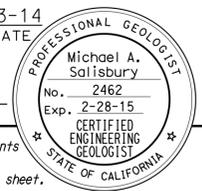
FOR PLAN VIEW, SEE
"LOG OF TEST BORINGS 1 OF 6"



ENGINEERING SERVICES		MATERIALS AND GEOTECHNICAL SERVICES		STATE OF CALIFORNIA		DIVISION OF ENGINEERING SERVICES		BRIDGE NO.		RETAINING WALL NO. 2093	
FUNCTIONAL SUPERVISOR		DRAWN BY: I. G-Remmen		FIELD INVESTIGATION BY:		STRUCTURE DESIGN		53E0301		LOG OF TEST BORINGS 2 OF 6	
NAME: D-J. Jang		CHECKED BY: H. Liu		M. Salisbury		DESIGN BRANCH 18		POST MILE			
								39.65			
OGS CIVIL LOG OF TEST BORINGS SHEET		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		0 1 2 3		UNIT: 3643		PROJECT NUMBER & PHASE: 0713000007 1		CONTRACT NO.: 07-1193U1	
						DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES		SHEET OF	
								07-11-12 08-11-12 09-11-12 11-15-13		37 41	

USERNAME => s125624 DATE PLOTTED => 16-MAY-2015 TIME PLOTTED => 15:54

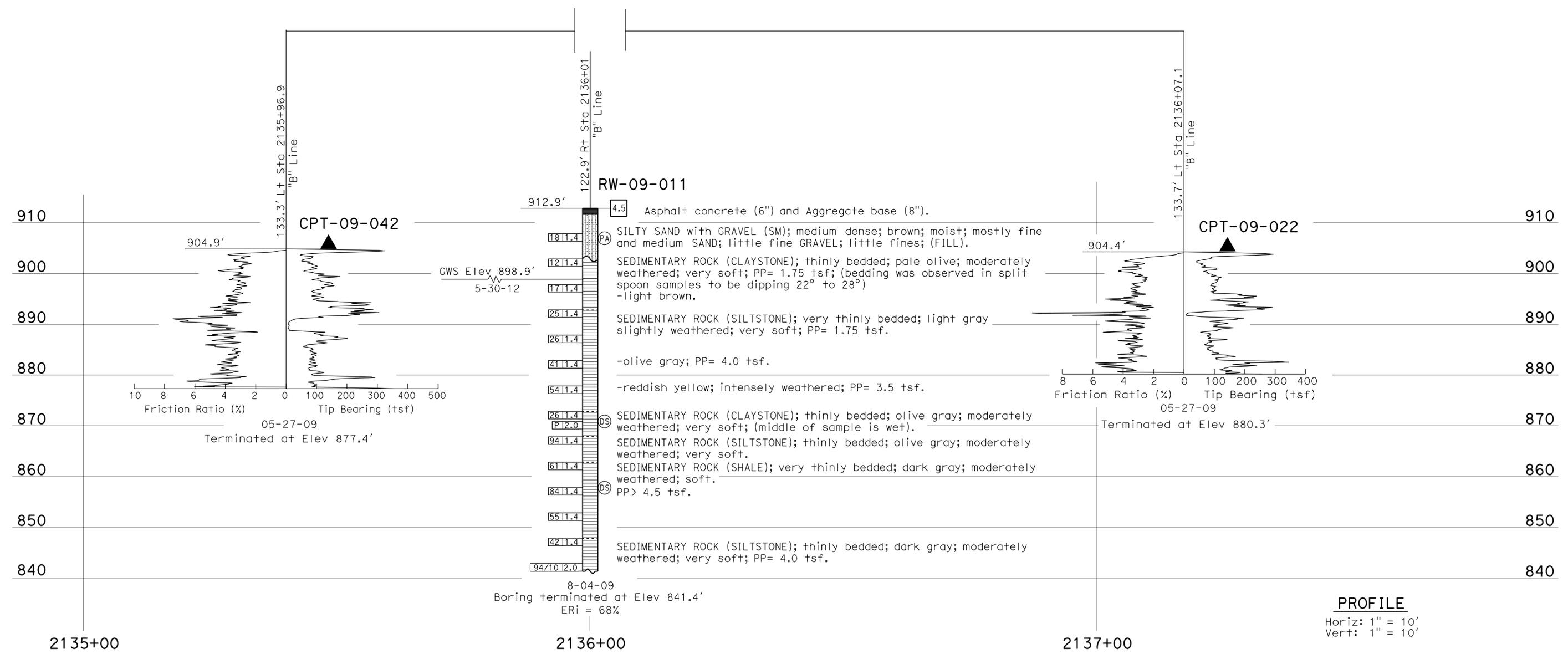
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1946	2313
			1-13-14	DATE	
			6-1-15	PLANS APPROVAL DATE	
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.					



FOR PLAN VIEW, SEE
"LOG OF TEST BORINGS 1 OF 6"

This LOTB sheet was prepared in accordance with the Caltrans Soil & Rock Logging, Classification, & Presentation Manual (2010 Edition). See 2010 Standard Plans A10F and A10G for Soil Legend, and A10H for Rock Legend.

Note: Groundwater was not encountered at RW-09-011 during drilling. Boring was converted to piezometer and monitored.



PROFILE
Horiz: 1" = 10'
Vert: 1" = 10'

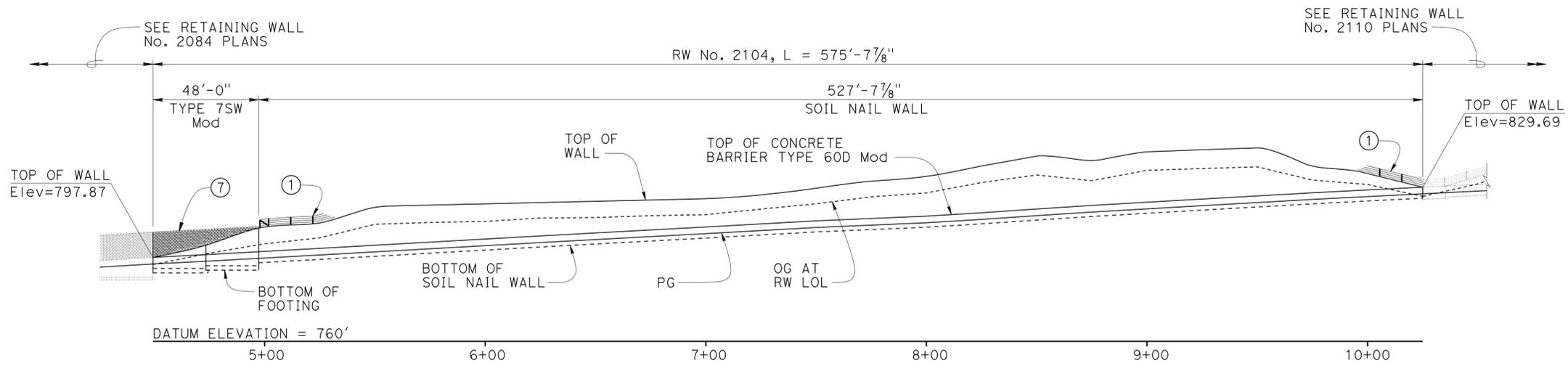
ENGINEERING SERVICES		MATERIALS AND GEOTECHNICAL SERVICES		STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION		DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 18		BRIDGE NO. 53E0301 POST MILE 39.65		RETAINING WALL NO. 2093 LOG OF TEST BORINGS 6 OF 6	
FUNCTIONAL SUPERVISOR NAME: D-J. Jang		DRAWN BY: W. Tang 6/12, I.G-Remmen CHECKED BY: H. Liu		FIELD INVESTIGATION BY: M. Salisbury		UNIT: 3643 PROJECT NUMBER & PHASE: 0713000007 1		CONTRACT NO.: 07-1193U1		DISREGARD PRINTS BEARING EARLIER REVISION DATES	
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS										REVISION DATES SHEET 41 OF 41	

USERNAME => s125624 DATE PLOTTED => 16-MAY-2015 TIME PLOTTED => 15:54

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1947	2313

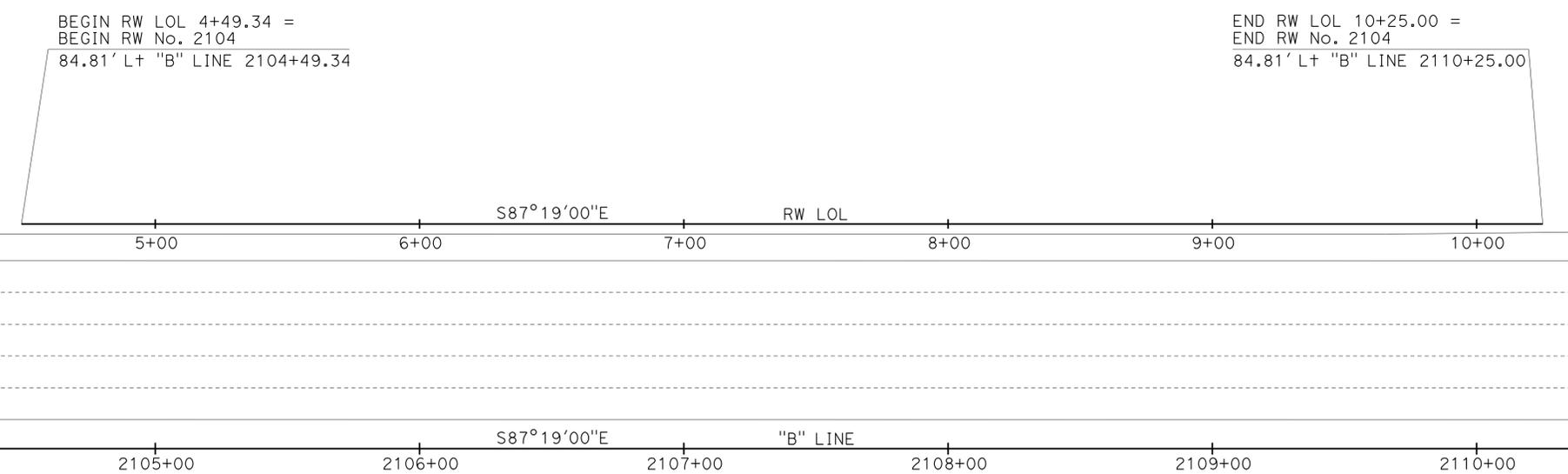
Richard Schendel
 REGISTERED CIVIL ENGINEER
 DATE 10/01/14
 PLANS APPROVAL DATE 6-1-15
 No. C64259
 Exp. 6-30-15
 CIVIL
 STATE OF CALIFORNIA

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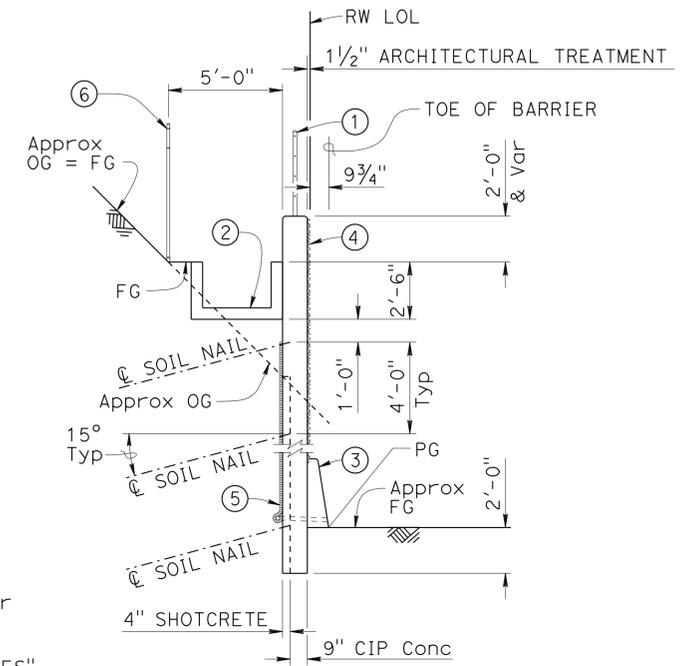


ELEVATION
1" = 30'

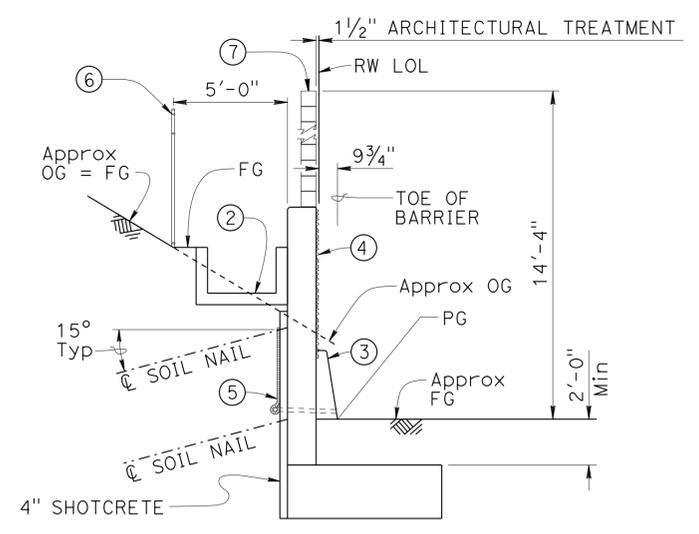
- NOTES:**
- ① Cable Railing RSP (B11-47)
 - ② Concrete Gutter, see "ROAD PLANS"
 - ③ Concrete Barrier Type 60D Mod (A76A)
 - ④ Architectural Treatment
 - ⑤ Geocomposite Drain (A85), see "ROAD PLANS"
 - ⑥ Chain Link Fence (A85), see "ROAD PLANS"
 - ⑦ Masonry Block Soundwall, see "ROAD PLANS" for architectural details
- For "GENERAL NOTES", "STANDARD PLANS", "QUANTITIES", and "INDEX TO PLANS", see "INDEX TO PLANS" sheet.



PLAN
1" = 30'



SOIL NAIL WALL



RW TYPE 7SW MODIFIED

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

MICHAEL POPE
DESIGN ENGINEER

DESIGN	BY Matthew Schott	CHECKED Richard Schendel	LOAD & RESISTANCE FACTOR DESIGN	LIVE LOADING: HL93 W/"LOW-BOY"; PERMIT DESIGN VEHICLE
DETAILS	BY Matthew Schott	CHECKED Richard Schendel	LAYOUT	BY Matthew Schott
QUANTITIES	BY Matthew Schott	CHECKED Michael Pope	SPECIFICATIONS	BY Xiaodong Chen

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 18

BRIDGE NO.	53E0302
POST MILE	39.86

RETAINING WALL NO. 2104
GENERAL PLAN

STANDARD PLANS DATED 2010

SHEET NO.	TITLE
A10A	ABBREVIATIONS (SHEET 1 OF 2)
RSP A10B	ABBREVIATIONS (SHEET 2 OF 2)
A10C	LINES AND SYMBOLS (SHEET 1 OF 3)
A10D	LINES AND SYMBOLS (SHEET 2 OF 3)
A10E	LINES AND SYMBOLS (SHEET 3 OF 3)
A10F	LEGEND - SOIL (SHEET 1 OF 2)
A10G	LEGEND - SOIL (SHEET 2 OF 2)
A10H	LEGEND - ROCK
A76A	CONCRETE BARRIER TYPE 60
A85	CHAIN LINK FENCE
A85A	CHAIN LINK FENCE DETAILS
RSP A85B	CHAIN LINK FENCE DETAILS
B0-3	BRIDGE DETAILS
RSP B3-5	RETAINING WALL DETAILS No. 1
RSP B11-47	CABLE RAILING

GENERAL NOTES

DESIGN: Federal Highway Administration Publication Geotechnical Engineering Circular No. 7 Soil Nail Walls, Publication FHWA-IF-03-017

AASHTO LRFD Bridge Design Specifications, 4th edition and the Caltrans Amendments, preface dated November 2011

LIVE LOADING: No Live Loading

REINFORCED CONCRETE AND SHOTCRETE:
 $f_y = 60$ ksi (Yield Strength of Reinforcement)
 $f_c = 3.6$ ksi (Compressive Strength at 28 days)

BEARING PLATES:
 ASTM Designation: A36/A 36M, Grade 36, $F_y = 36$ ksi

SOIL NAILS:
 ASTM Designation: A 615/A 615M, Grade 75, $f_y = 75$ ksi

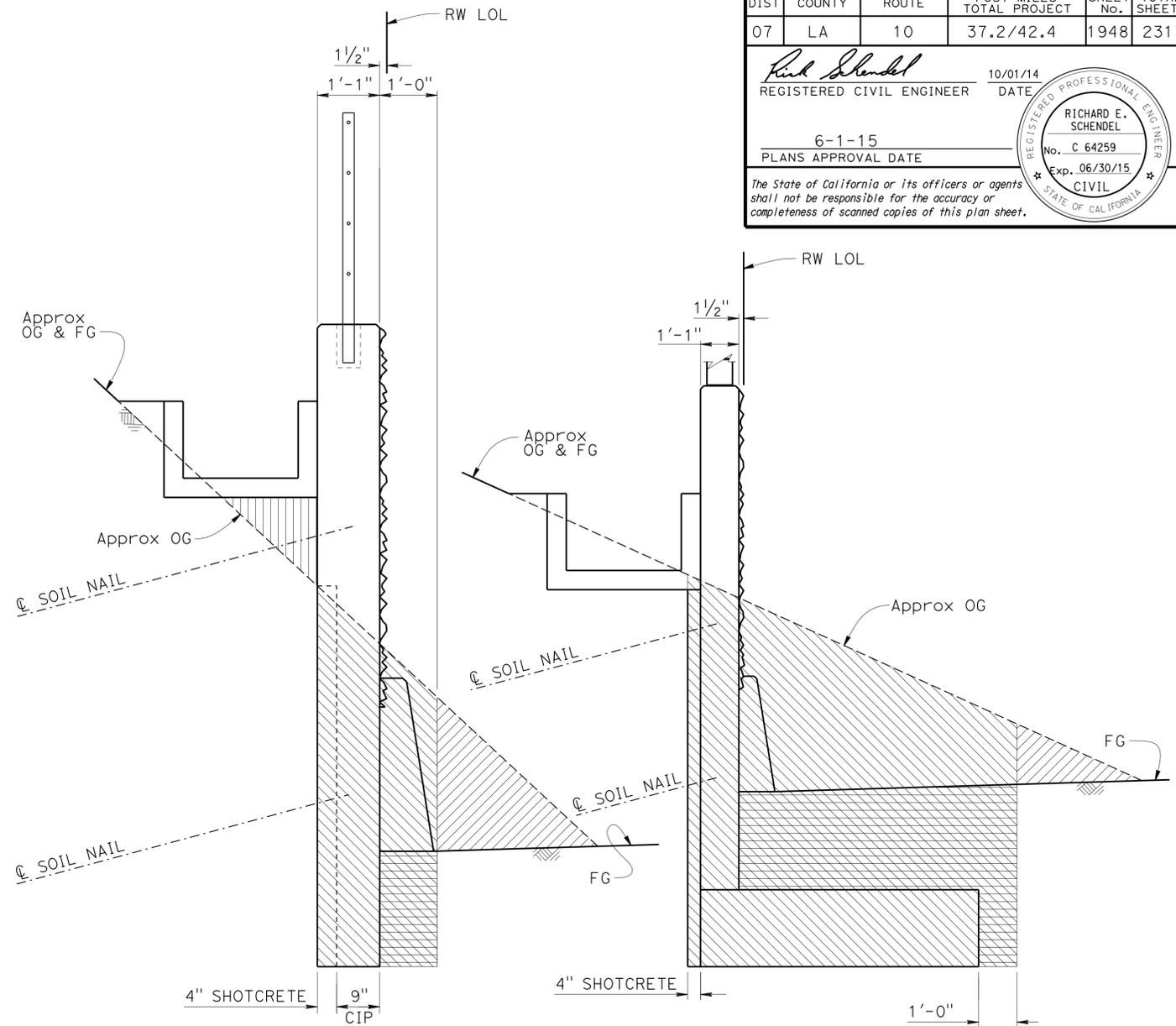
CONCRETE ANCHORS ON BEARING PLATES:
 AWS Designation: D1.5, $F_y = 36$ ksi Min

INDEX TO PLANS

SHEET NO.	TITLE
1	GENERAL PLAN
2	INDEX TO PLANS
3	FOUNDATION PLAN NO. 1
4	FOUNDATION PLAN NO. 2
5	STRUCTURE PLAN
6	TYPICAL SECTION
7	SOIL NAIL ASSEMBLY
8	MASONRY BLOCK SOUNDWALL ON RETAINING WALL - DETAILS NO. 1
9	MASONRY BLOCK SOUNDWALL ON RETAINING WALL - DETAILS NO. 2
10	DRAINAGE DETAILS
11	ARCHITECTURAL DETAILS NO. 1
12	ARCHITECTURAL DETAILS NO. 2
13	ARCHITECTURAL DETAILS NO. 3
14	ARCHITECTURAL DETAILS NO. 4
15	ARCHITECTURAL DETAILS NO. 5
16	ARCHITECTURAL DETAILS NO. 6
17	LOG OF TEST BORINGS 1 OF 3
18	LOG OF TEST BORINGS 2 OF 3
19	LOG OF TEST BORINGS 3 OF 3

QUANTITIES

STRUCTURE EXCAVATION (SOIL NAIL WALL)	694 CY
STRUCTURE BACKFILL (SLURRY CEMENT)	36 CY
STRUCTURE BACKFILL (SOIL NAIL WALL)	79 CY
SOIL NAIL	15,531 LF
STRUCTURAL CONCRETE, RETAINING WALL	408 CY
CONCRETE SURFACE TEXTURE	9,016 SQFT
BAR REINFORCING STEEL (RETAINING WALL)	56,792 LB
STRUCTURAL SHOTCRETE	99 CY
SOUND WALL (MASONRY BLOCK)	316 SQFT
PREPARE AND STAIN CONCRETE	8,659 SQFT
CABLE RAILING	528 LF
CONCRETE BARRIER (TYPE 60D)	576 LF



NOTE: For details shown but not noted, see "TYPICAL SECTION" sheet.

SOIL NAIL WALL DESIGN TABLE

Wall Zone	Station ("B" Line)	Maximum Wall Height (ft)	Minimum Nail Embedment Length (ft)	Maximum Vertical Nail Spacing (ft)	Maximum Horizontal Nail Spacing (ft)	Pullout Resistance Q_d (lb/ft)	Rebar		Min Allowable Facing Resistance (kips)	
							Grade (ksi)	Diameter (in)	Static	Seismic
1	2104+49.34 to 2104+97.34	7.4	10	5	5	2720	75	1.0	30	38
2	2104+97.34 to 2107+65.00	18.3	20	4	4	3620	75	1.0	30	38
3	2107+65.00 to 2109+75.00	25.0	30	4	4	3620	75	1.0	30	38
	2109+75.00 to 2110+25.00	13.0	10	4	4	3620	75	1.0	30	38

NOTE: Wall height is a vertical distance from the finished grade of roadway to the top of gutter.

SOIL NAIL WALL

RW TYPE 7SW MODIFIED

- Denotes Structure Excavation (Soil Nail Wall)
- Denotes Structure Backfill (Soil Nail Wall)
- Denotes Structure Backfill (Slurry Cement)
- Denotes Roadway Excavation, see "ROAD PLANS"

**TYPICAL SECTION
 PAY LIMITS FOR STRUCTURE
 EXCAVATION AND BACKFILL
 & SLURRY CEMENT BACKFILL**

NO SCALE

DESIGN	BY Matthew Schott	CHECKED Richard Schendel
DETAILS	BY Matthew Schott	CHECKED Richard Schendel
QUANTITIES	BY Matthew Schott	CHECKED Michael Pope

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 18

BRIDGE NO.
53E0302
 POST MILE
39.86

RETAINING WALL NO. 2104
INDEX TO PLANS

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1949	2313

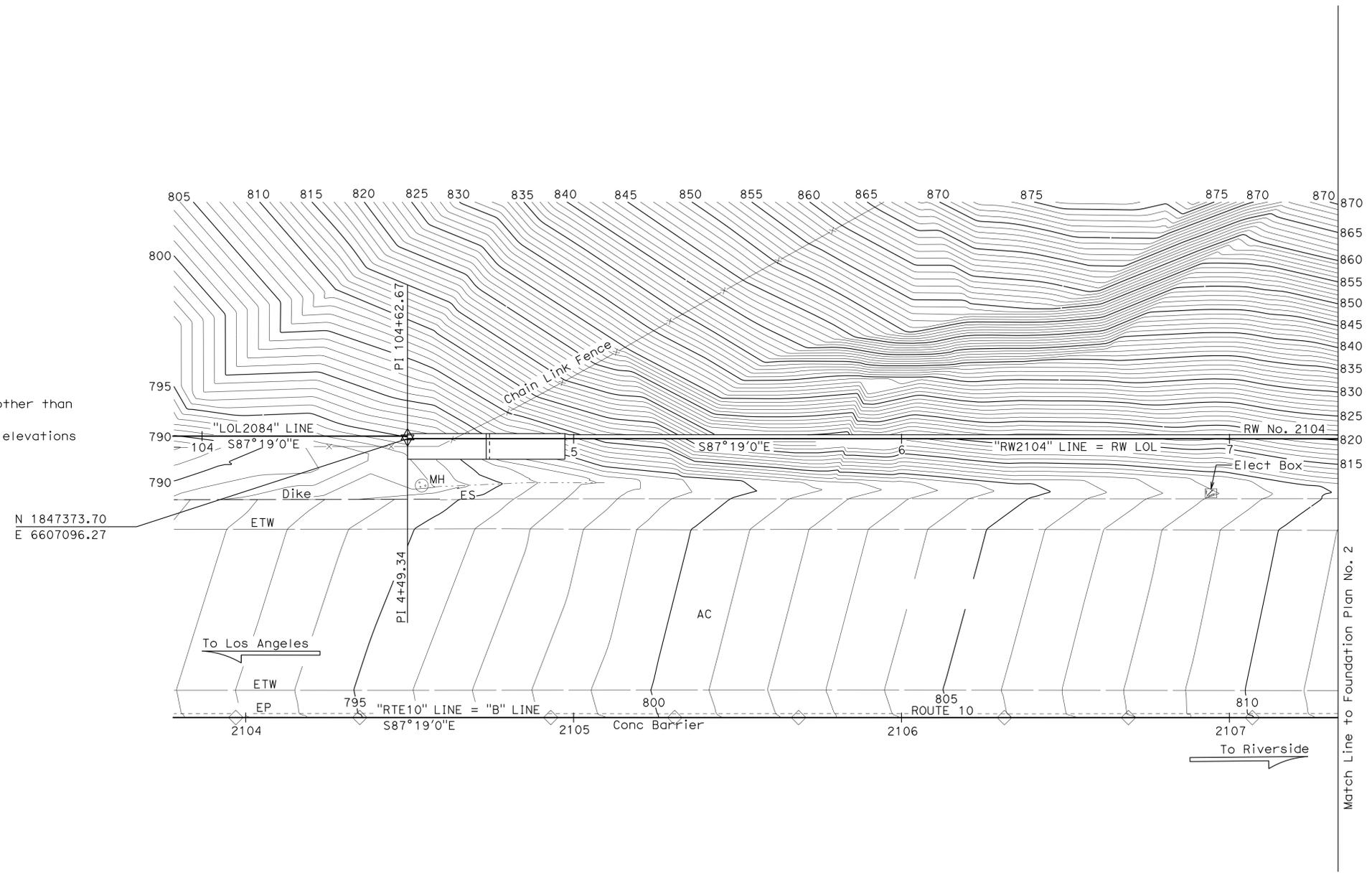
<i>Richard Schendel</i>		10/01/14
REGISTERED CIVIL ENGINEER	DATE	
6-1-15		
PLANS APPROVAL DATE		

REGISTERED PROFESSIONAL ENGINEER
 RICHARD E. SCHEDEL
 No. C64259
 Exp. 6-30-15
 CIVIL
 STATE OF CALIFORNIA

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- NOTES:
1. Foundations for walls other than RW No. 2104 not shown.
 2. For bottom of footing elevations see "STRUCTURE PLAN".



SURVEY CONTROL
 PRHV 4029 (Not Shown On Plan)
 Fnd 1" IP w/CT Plug
 70.28 FT Lt. "A" Line Rte 10
 Sta. 2135+79.53
 N 1,847,539.18
 E 6,610,211.48
 Elev. = 930.99

PRHV 10 (Not Shown On Plan)
 Fnd L&T w/LA Co Eng Washer
 169.30 FT Rt. "RTE10" LINE Rte 10
 Sta. 2136+50.57
 N 1,847,291.22
 E 6,610,239.06
 Elev. = 914.10

PRELIMINARY INVESTIGATION SECTION				DESIGN	BY Matthew Schott	CHECKED Richard Schendel	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 18	BRIDGE NO.	53E0302	RETAINING WALL NO. 2104 FOUNDATION PLAN NO. 1	
SCALE	VERT. DATUM NAVD88	PHOTOGRAMMETRY AS OF: 2/2008	DETAILS	BY Matthew Schott	CHECKED Richard Schendel	POST MILE			39.86			
1"=20'	HORIZ. DATUM NAD83	SURVEYED BY District 04/2008	CHECKED BY C. Fassett 03/2011	QUANTITIES	BY Matthew Schott	CHECKED Michael Pope						
ALIGNMENT TIES Dist. Traverse Sheet DRAFTED BY C. Fassett 02/2011				CHECKED BY T. Schmalz 03/2011			UNIT: 3603	PROJECT NUMBER & PHASE: 07 1300 0007 1	CONTRACT NO.: 07-1193U1	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 3 OF 19

STRUCTURES FOUNDATION PLAN SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3 FILE => 53e0302-b-fp1001.dgn

CURVE DATA				
No.	R	Δ	T	L
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(B)	4200.00	13°43'44"	505.61	1006.39

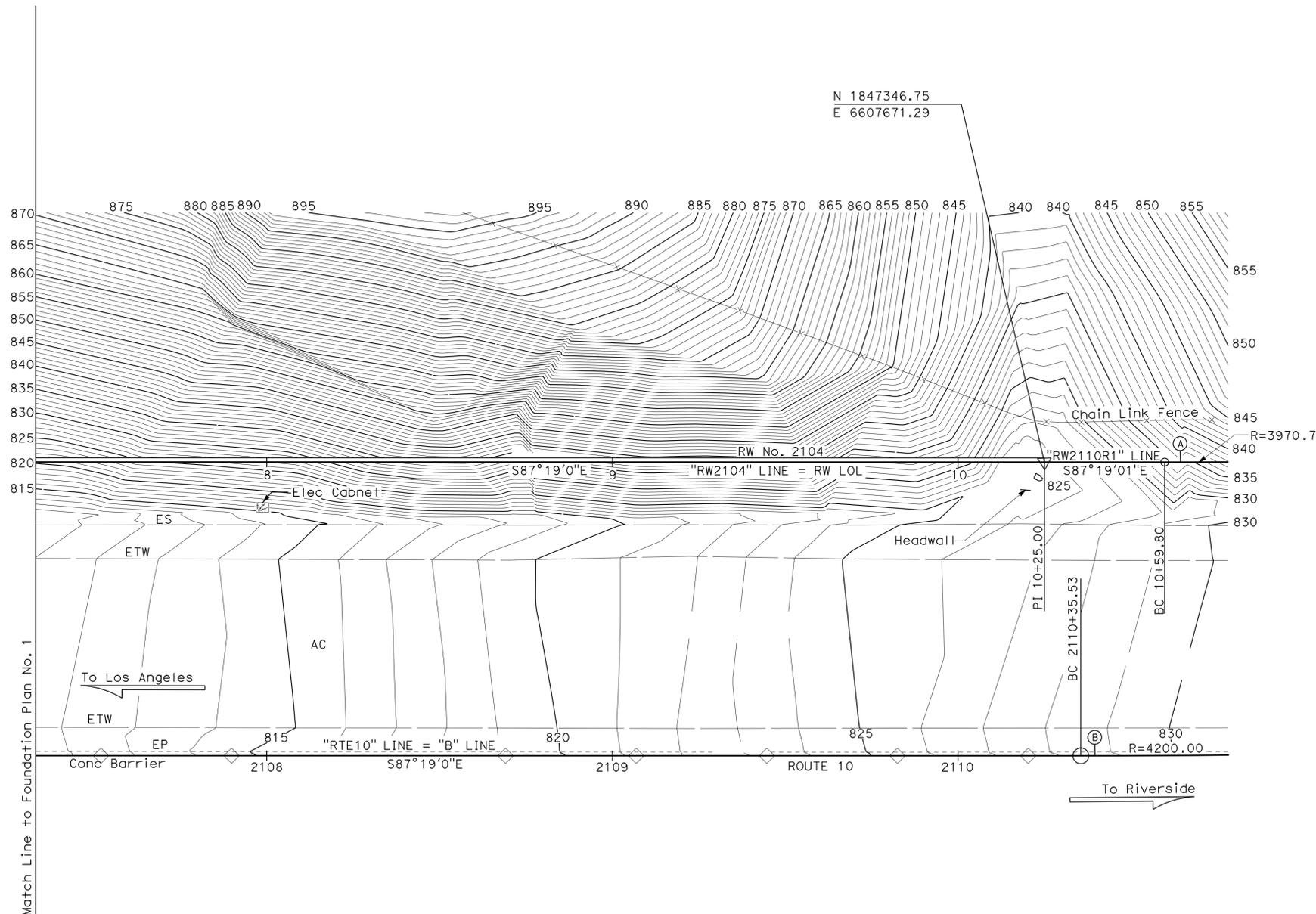
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1950	2313

Richard Schendel
 REGISTERED CIVIL ENGINEER DATE 10/01/14

6-1-15
 PLANS APPROVAL DATE

Richard E. Schendel
 No. C64259
 Exp. 6-30-15
 CIVIL
 STATE OF CALIFORNIA

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Note:
 For Survey Control Information,
 See "FOUNDATION PLAN NO. 1"

PRELIMINARY INVESTIGATION SECTION				DESIGN BY Matthew Schott	CHECKED Richard Schendel	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 18	BRIDGE NO. 53E0302	RETAINING WALL NO. 2104 FOUNDATION PLAN NO. 2	
SCALE 1"=20'	VERT.DATUM NAVD88	PHOTOGRAMMETRY AS OF: 2/2008	DETAILS BY Matthew Schott	CHECKED Richard Schendel	POST MILE 39.86					
ALIGNMENT TIES Dist. Traverse Sheet	DRAFTED BY C. Fassett	CHECKED BY T. Schmalz	QUANTITIES BY Matthew Schott	CHECKED Michael Pope						
STRUCTURES FOUNDATION PLAN SHEET (ENGLISH) (REV. 09-01-10)						ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	UNIT: 3603 PROJECT NUMBER & PHASE: 07 1300 0007 1 CONTRACT NO.: 07-1193U1	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 4 OF 19

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1951	2313

<i>Richard E. Schendel</i>		10/01/14
REGISTERED CIVIL ENGINEER	DATE	
6-1-15		
PLANS APPROVAL DATE		

REGISTERED PROFESSIONAL ENGINEER	
RICHARD E. SCHENDEL	
No. C64259	Exp. 6-30-15
CIVIL	

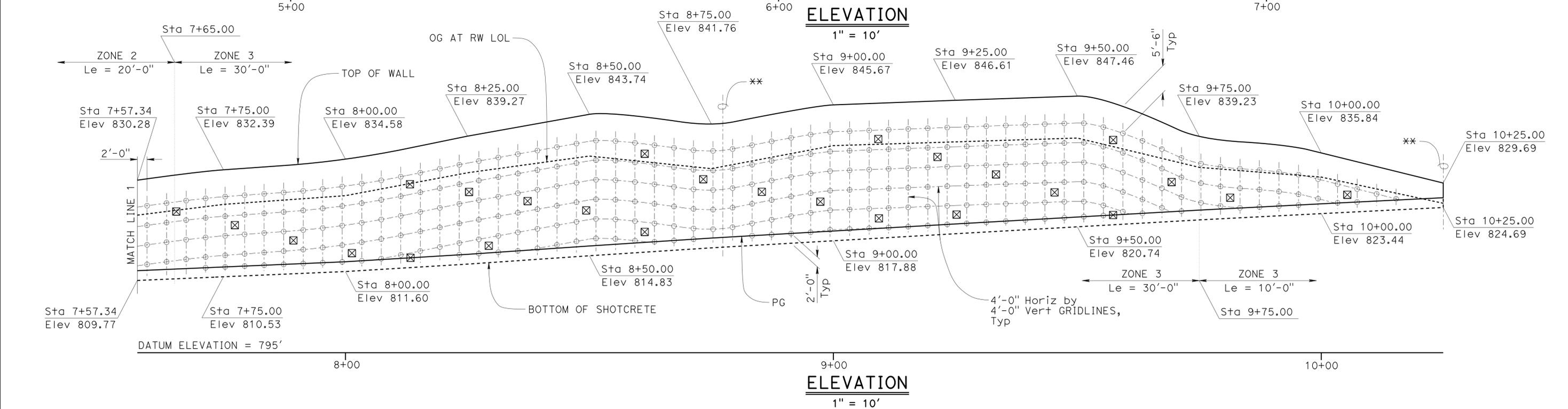
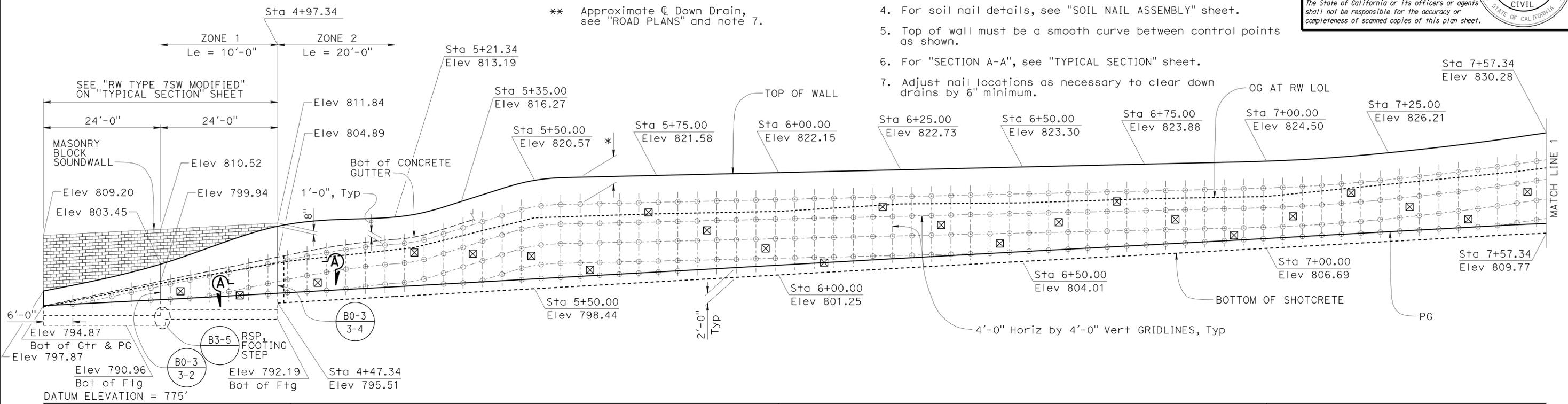
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LEGEND:

- Location of Soil Nail Assembly, Tot 603
- ⊠ Location of pull out test nail, Tot 49
- * Varies from beginning of wall to Sta 5+21.34. 5'-6" from Sta 5+21.34 to end of wall.
- ** Approximate \varnothing Down Drain, see "ROAD PLANS" and note 7.

NOTES:

1. The exact location of the test nails are to be determined by the Engineer.
2. Cable railing, concrete barrier, and weep holes not shown for clarity.
3. Bottom row of soil nails are no more than 4'-0" and no less than 2'-0" from bottom of wall.
4. For soil nail details, see "SOIL NAIL ASSEMBLY" sheet.
5. Top of wall must be a smooth curve between control points as shown.
6. For "SECTION A-A", see "TYPICAL SECTION" sheet.
7. Adjust nail locations as necessary to clear down drains by 6" minimum.



<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">DESIGN</td> <td style="width: 30%;">BY Matthew Schott</td> <td style="width: 30%;">CHECKED Richard Schendel</td> </tr> <tr> <td>DETAILS</td> <td>BY Matthew Schott</td> <td>CHECKED Richard Schendel</td> </tr> <tr> <td>QUANTITIES</td> <td>BY Matthew Schott</td> <td>CHECKED Michael Pope</td> </tr> </table>	DESIGN	BY Matthew Schott	CHECKED Richard Schendel	DETAILS	BY Matthew Schott	CHECKED Richard Schendel	QUANTITIES	BY Matthew Schott	CHECKED Michael Pope	<p>STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION</p>	<p>DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 18</p>	<p>BRIDGE NO. 53E0302 POST MILE 39.86</p>	<p>RETAINING WALL NO. 2104 STRUCTURE PLAN</p>
DESIGN	BY Matthew Schott	CHECKED Richard Schendel											
DETAILS	BY Matthew Schott	CHECKED Richard Schendel											
QUANTITIES	BY Matthew Schott	CHECKED Michael Pope											
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	UNIT: 3603 PROJECT NUMBER & PHASE: 07 1300 0007 1	CONTRACT NO.: 07-1193U1	DISREGARD PRINTS BEARING EARLIER REVISION DATES								
				REVISION DATES	SHEET 5 OF 19								

USERNAME => s125624 DATE PLOTTED => 18-MAY-2015 TIME PLOTTED => 15:54

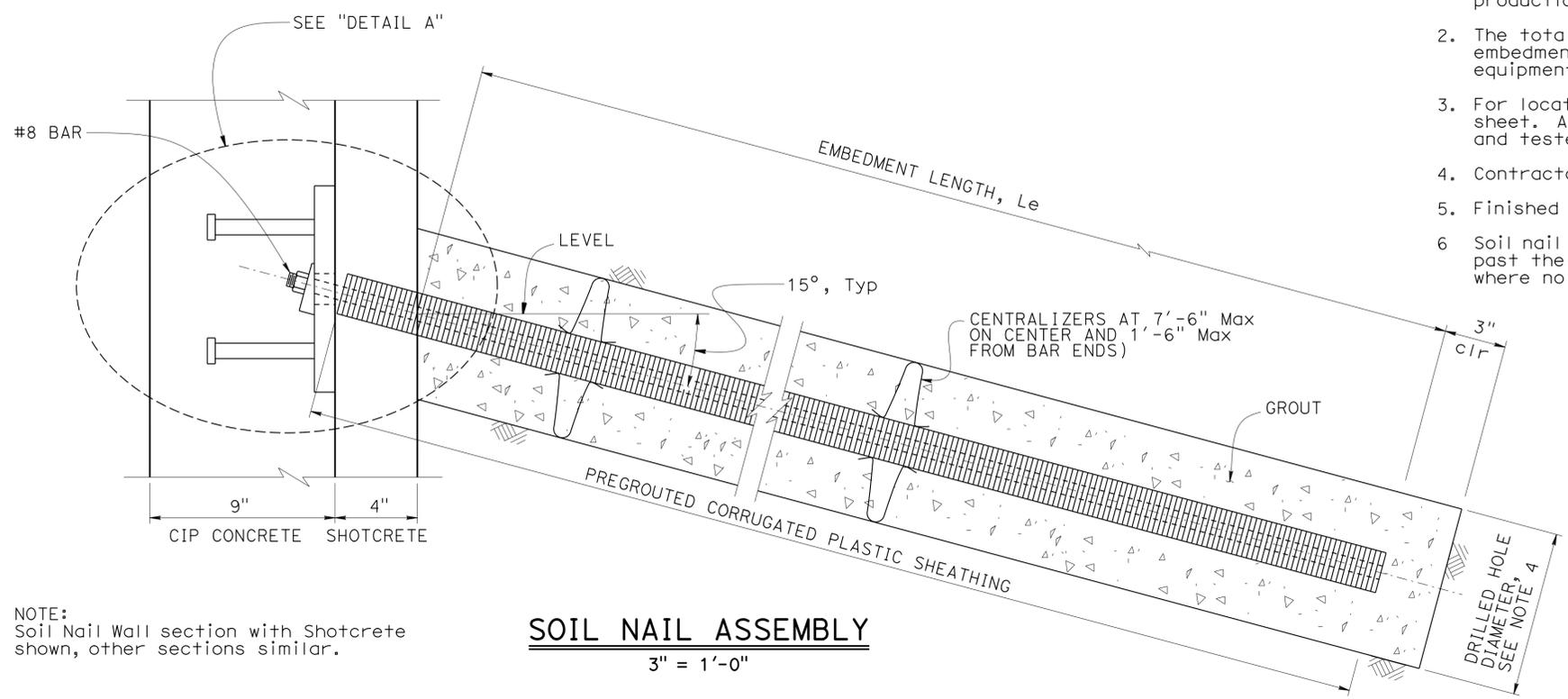
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1953	2313

<i>Richard Schendel</i>	10/01/14
REGISTERED CIVIL ENGINEER	DATE
6-1-15	
PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER	
RICHARD E. SCHENDEL	
No. C 64259	
Exp. 06/30/15	
CIVIL	
STATE OF CALIFORNIA	

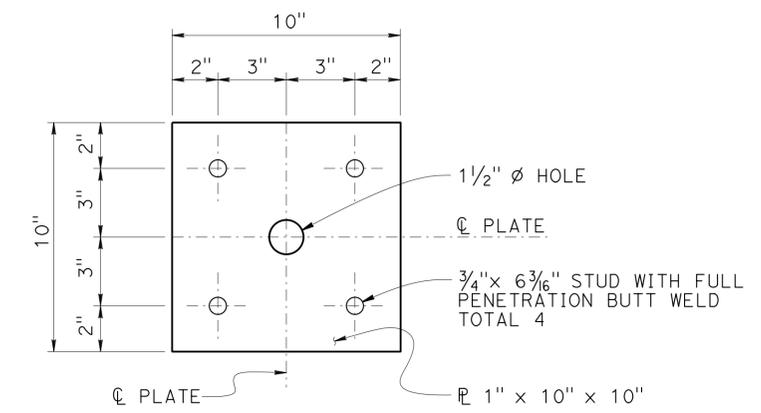
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- NOTES:
1. The test nail embedment length, L_{eT} , must be equal to $2/3$ of the embedment length, L_e , of the adjacent production soil nail assemblies, but not less than 12'-0".
 2. The total length of the test nail assembly equals the embedment length plus the length required for jacking equipment.
 3. For location of proof test nails, see "STRUCTURE PLAN" sheet. Additional proof test nails shall be installed and tested per special provisions.
 4. Contractor to determine drilled hole diameter.
 5. Finished grout surface to be normal to the bar.
 6. Soil nail and test soil nail assemblies must not extend past the foundation easement line, or the R/W line where no foundation easement exists.

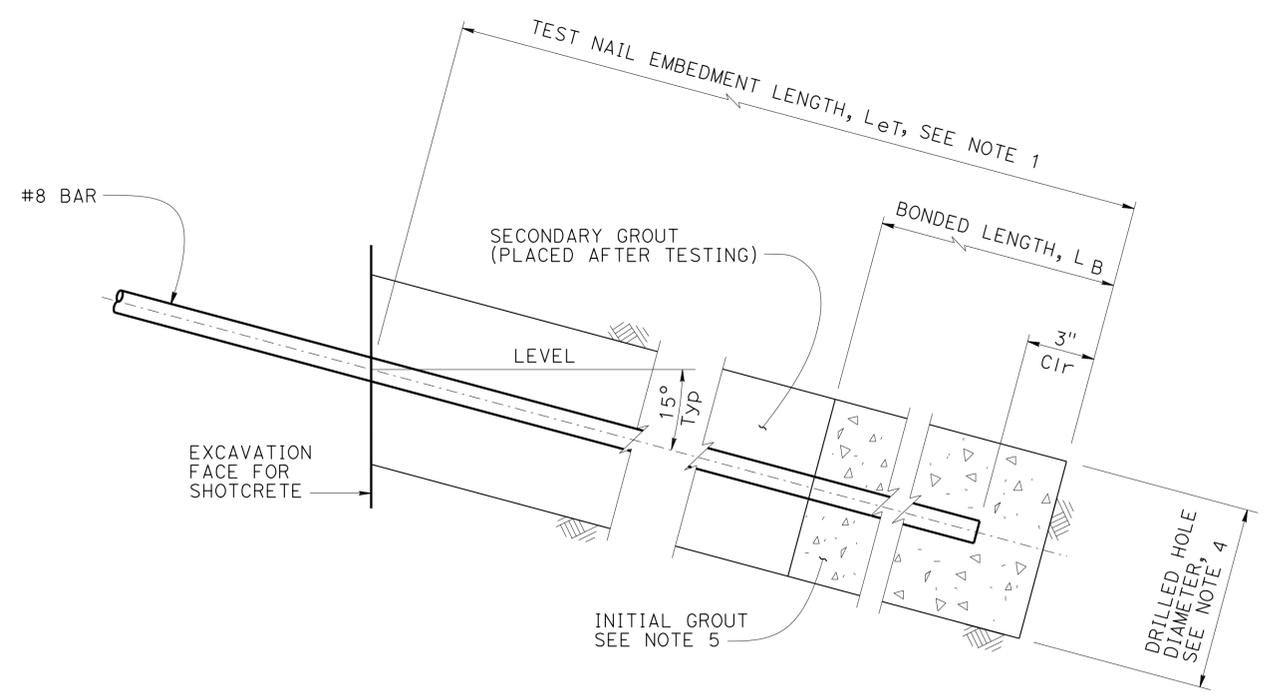


NOTE:
Soil Nail Wall section with Shotcrete shown, other sections similar.

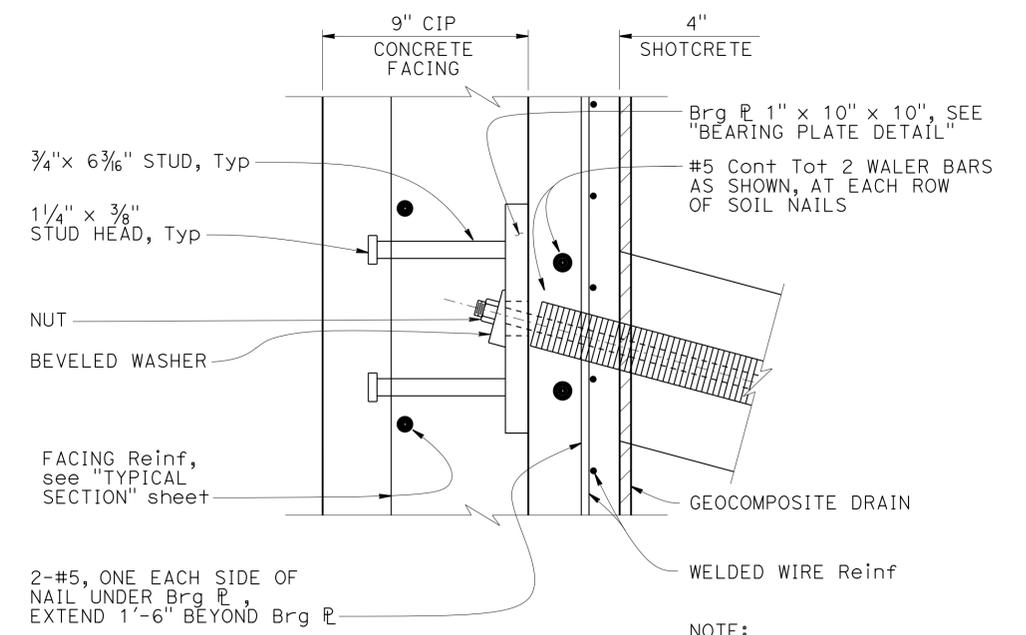
SOIL NAIL ASSEMBLY
3" = 1'-0"



BEARING PLATE DETAIL
3" = 1'-0"



TEST NAIL DETAIL
3" = 1'-0"



DETAIL A
3" = 1'-0"

NOTE:
Soil Nail Wall section with Shotcrete shown, other sections similar.

DESIGN	BY Matthew Schott	CHECKED Richard Schendel
DETAILS	BY Michael Pope	CHECKED Richard Schendel
QUANTITIES	BY Matthew Schott	CHECKED Michael Pope

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 18

BRIDGE NO.	53E0302
POST MILE	39.86

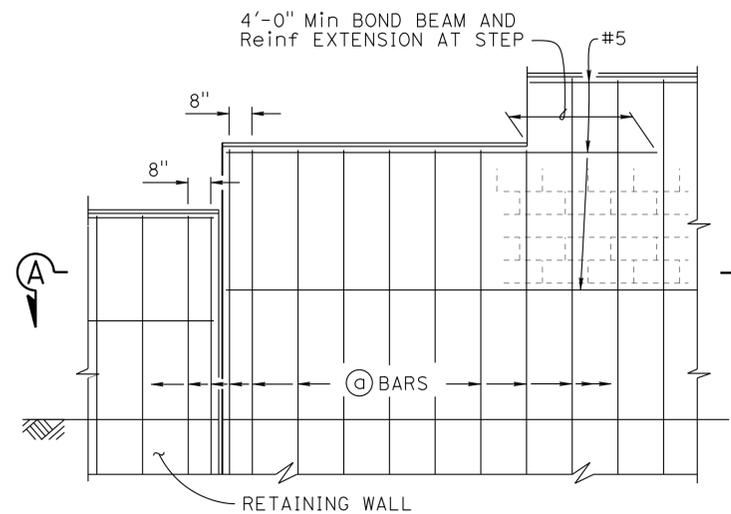
RETAINING WALL NO. 2104
SOIL NAIL ASSEMBLY

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1954	2313

Richard E. Schendel
 REGISTERED CIVIL ENGINEER
 DATE 10/01/14
 PLANS APPROVAL DATE 6-1-15
 No. C 64259
 Exp. 06/30/15
 CIVIL
 STATE OF CALIFORNIA

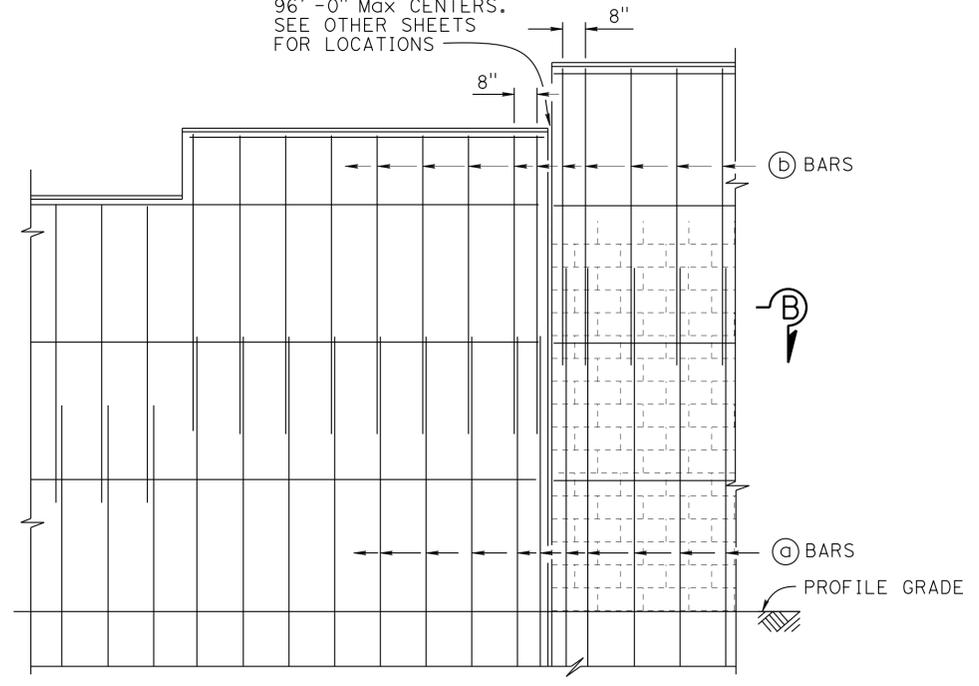
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EXPANSION JOINTS AT 96'-0" Max CENTERS. SEE OTHER SHEETS FOR LOCATIONS



H=6'-0" THRU H=10'-0"

PART ELEVATION



H=12'-0" THRU H=16'-0"

MAXIMUM "H"	(A) BARS @ 1'-4" Max	(B) BARS @ 1'-4" Max	"γ"	f'm (psi)	COMPRESSIVE STRENGTH OF CMU (psi)	MAXIMUM "H"
6'-0"	#4	---	---	1500	1900	6'-0"
8'-0"	#4	---	---	1500	1900	8'-0"
10'-0"	#4	---	---	1500	1900	10'-0"
12'-0"	#5	#4	6'-0"	2000	2800	12'-0"
14'-0"	#6	#4	8'-0"	2500	3750	14'-0"
16'-0"	#6	#4	10'-0"	2500	3750	16'-0"

DESIGN NOTES

DESIGN
Uniform Building Code, 1997 Edition and the Bridge Design Specifications

DESIGN WIND LOAD
33 psf

DESIGN SEISMIC LOAD
0.57 Dead load

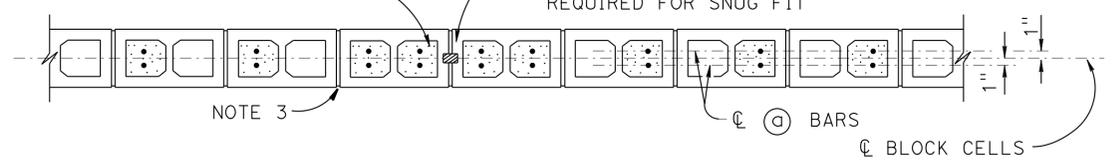
REINFORCED CONCRETE
f'c = 3600 ksi
fy = 60 ksi

REGULAR STRENGTH
f'm = 1500 psi
fb = 495 psi
fs = 24,000 psi
n = 25.8

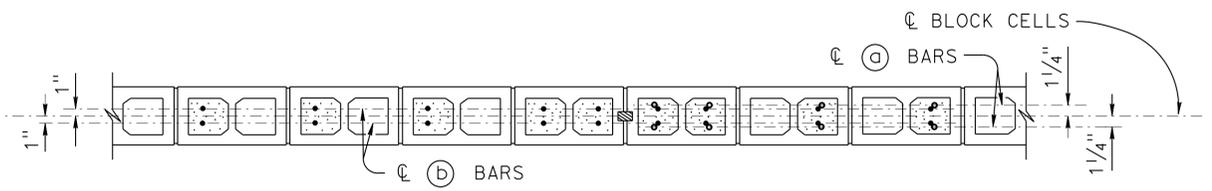
HIGH STRENGTH
f'm = 2000 psi
fb = 660 psi
fs = 24,000 psi
n = 19.3

CELLS WITH VERTICAL Reinf AND BOND BEAMS TO BE FILLED WITH GROUT

AT EXPANSION JOINTS: CONTINUOUS EXPANSION JOINT FILLER PLACED IN SASH BLOCK RECESSES. SIZE AS REQUIRED FOR SNUG FIT



SECTION A-A



SECTION B-B

NOTES:

- For type of block and joint finish, see other sheets
- When blocks are laid in stacked bond, ladder type, galvanized joint reinforcement shall be provided. A minimum of 2 - 9 gauge wires continuous at 4'-0" maximum to be used. Locate reinforcement in joints that are at the approximate midpoint between bond beams
- Horizontal joints must be tooled concave or may be weathered
Vertical joints must be tooled concave or may be raked
- For intermediate wall heights that are between the "H's" given, use the tabular information for the next higher "H"
- See STANDARD PLANS B15-9 for other details

NO SCALE

RETAINING WALL NO. 2104

MASONRY BLOCK SOUND WALL ON RETAINING WALL

DETAILS NO. 1

STANDARD DRAWING

FILE NO. **xs15-120-1**

APPROVAL DATE July 2011

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

BRIDGE NO. 53E0302
POST MILE 39.86

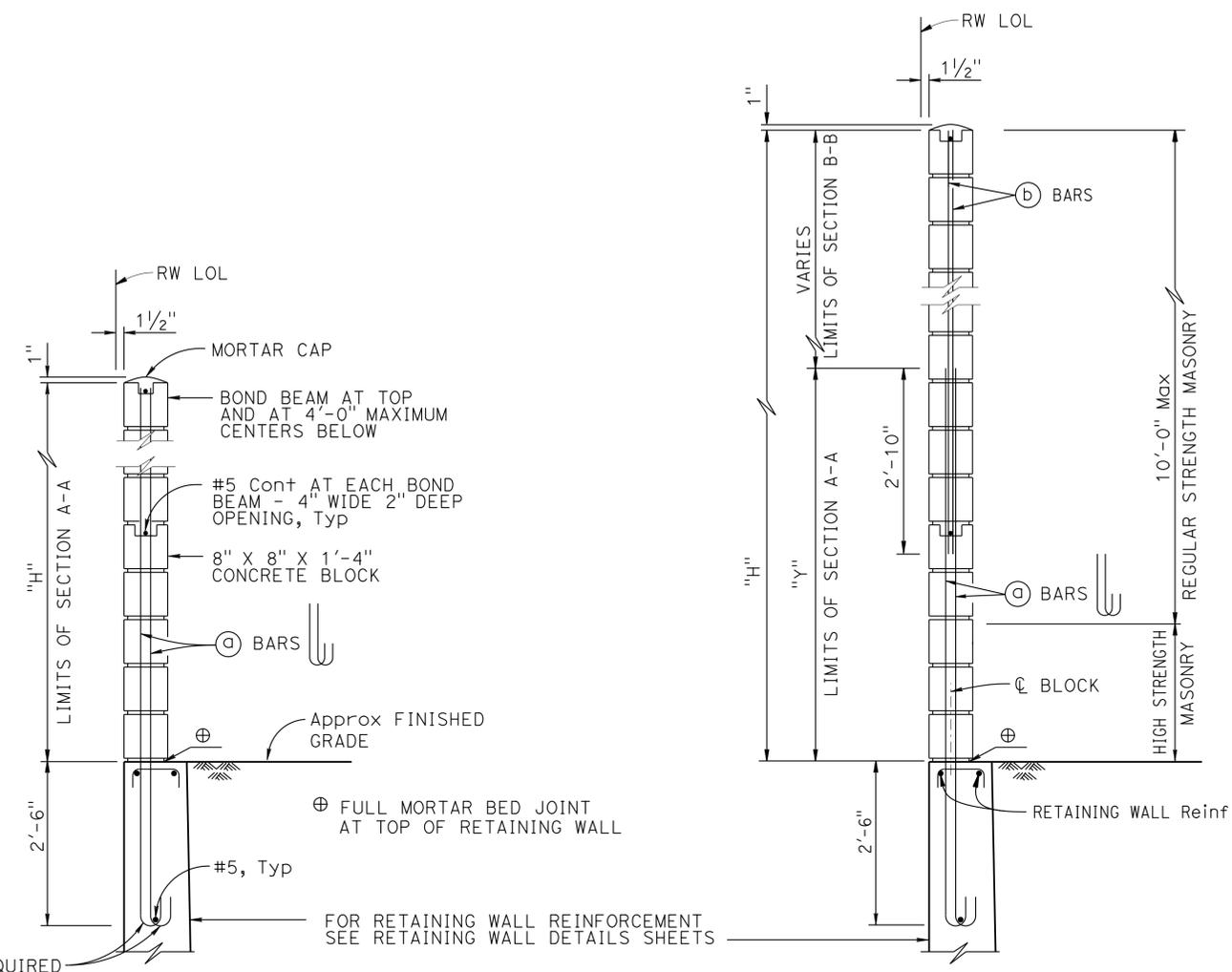
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07	LA	10	37.2/42.4	1955	2313

Richard E. Schendel
REGISTERED CIVIL ENGINEER DATE 10/01/14

6-1-15
PLANS APPROVAL DATE

Richard E. Schendel
No. C64259
Exp. 06/30/15
CIVIL
STATE OF CALIFORNIA

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180° HOOKS.
TURN HOOKS AS REQUIRED

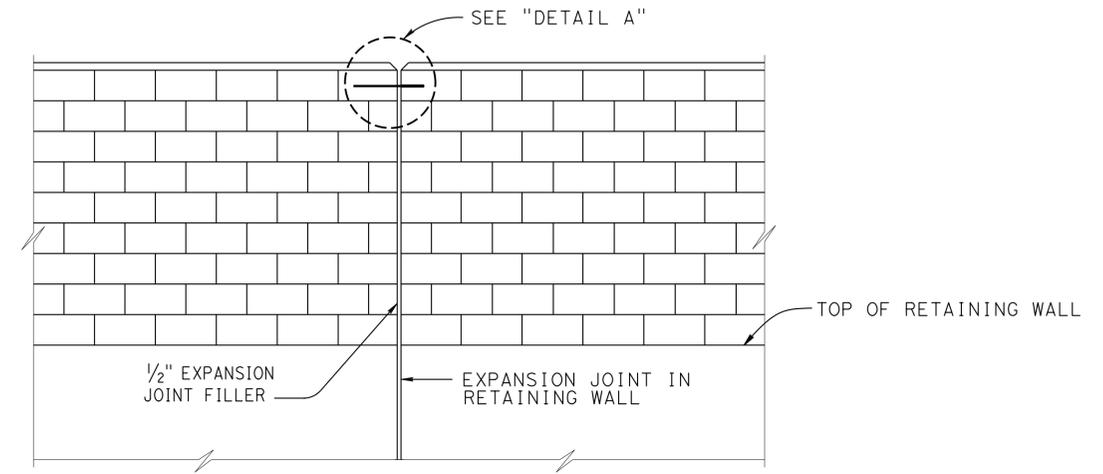
NOTE:
For details not shown, see H=12'-0" thru H=16'-0"

H=6'-0" THRU H=10'-0" ⚠

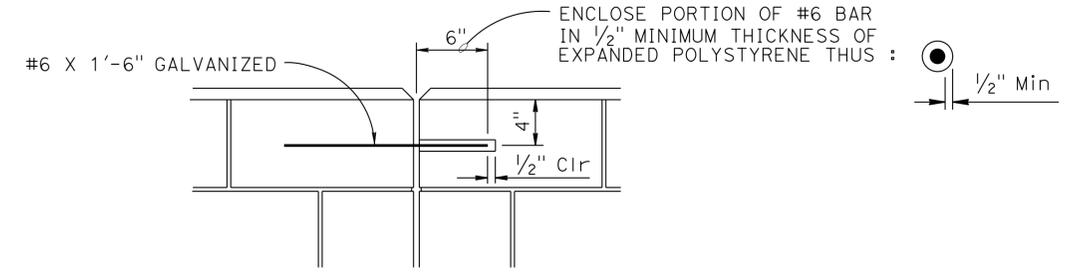
TYPICAL SECTION

NOTE:
For details not shown, see H=6'-0" thru H=10'-0"

H=12'-0" THRU H=16'-0" ⚠



ALIGNMENT KEY DETAIL



DETAIL A

NO SCALE SPECIAL DETAILS

RETAINING WALL NO. 2104

MASONRY BLOCK SOUND WALL ON RETAINING WALL

DETAILS NO. 2

REVISED STANDARD DRAWING

FILE NO. **xs15-120-2**

APPROVAL DATE July 2012

⚠ Changed location of sound wall

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

BRIDGE NO. 53E0302
POST MILE 39.86

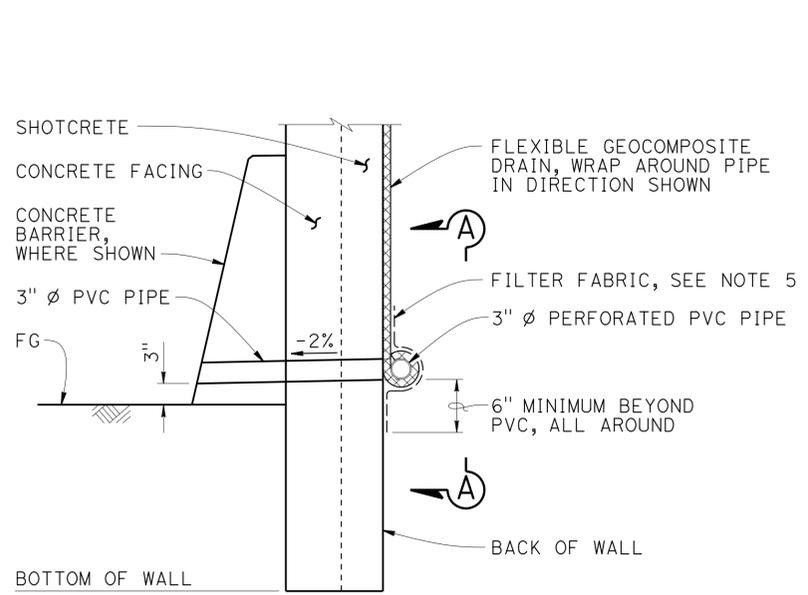
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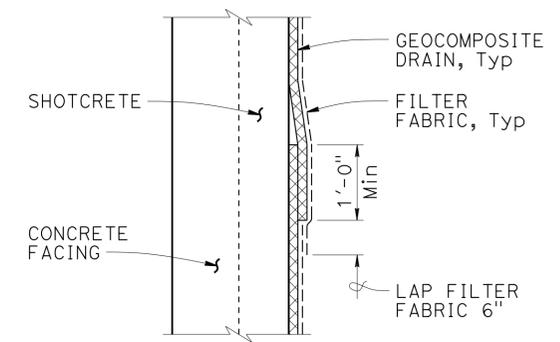
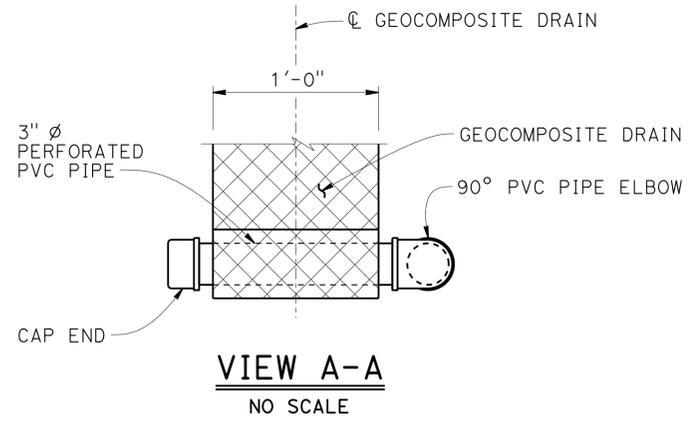
Richard Schendel
REGISTERED CIVIL ENGINEER DATE 10/01/14
6-1-15
PLANS APPROVAL DATE

RICHARD E. SCHENDEL
No. C64259
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

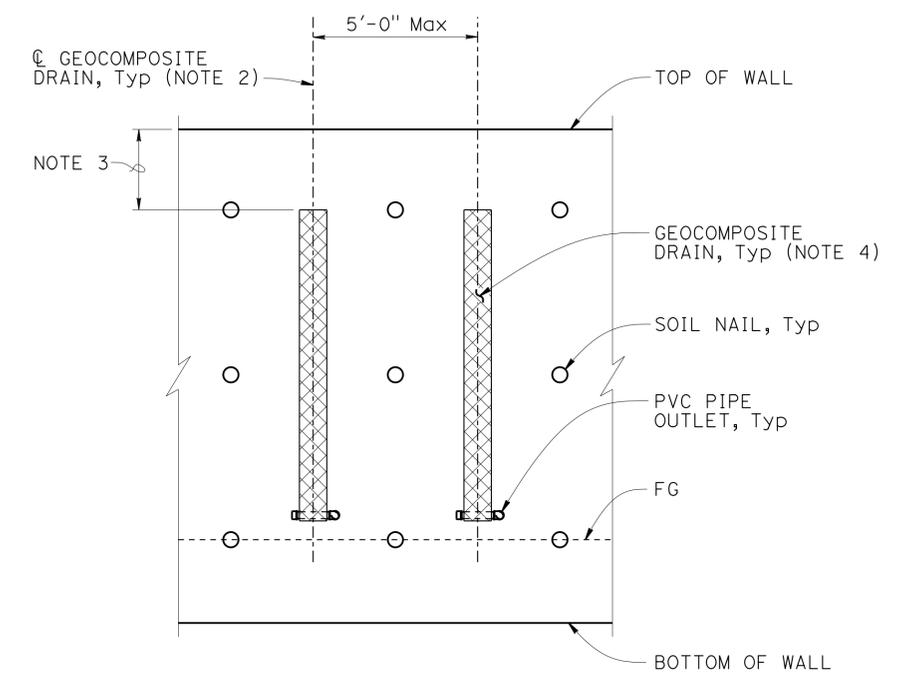
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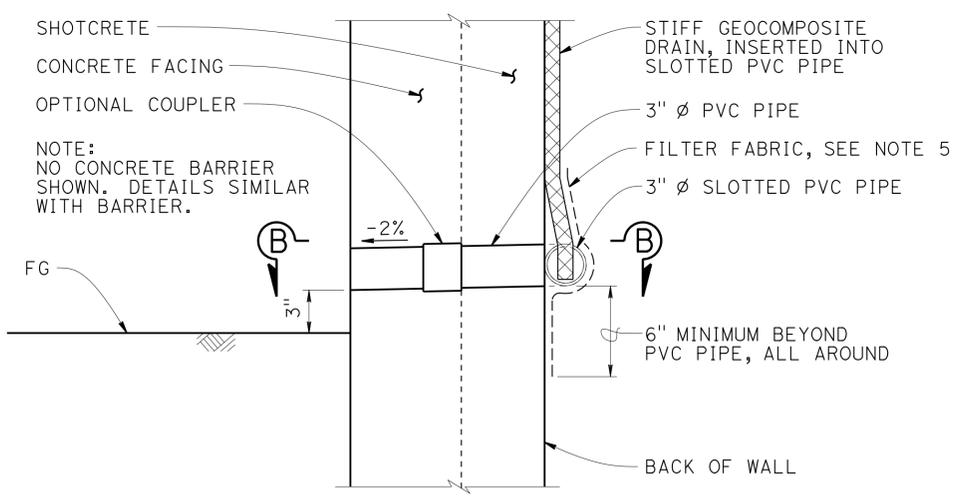
WALL DRAIN DETAIL AT WEEP HOLE - OPTION A
NO SCALE



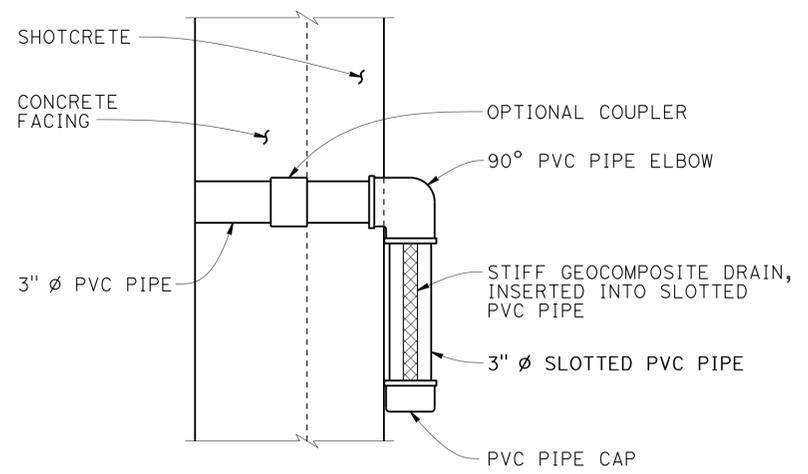
DRAIN SPLICE
NO SCALE



WALL PART ELEVATION
NO SCALE



WALL DRAIN DETAIL AT WEEP HOLE - OPTION B
NO SCALE

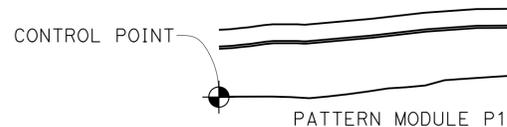


SECTION B-B
NO SCALE

- NOTES:
1. Geocomposite Drain is per Section 88 Geosynthetics of the Standard Specifications.
 2. Center Geocomposite Drains between soil nail columns.
 3. Begin Geocomposite Drain at top soil nail row.
 4. Geocomposite Drains must have filter fabric on soil side and wrapped around top and side edges.
 5. Provide filter fabric where necessary to prevent soil from entering drain.
 6. Alternative drain outlet details may be submitted for Engineer's approval.

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY Richard Schendel	CHECKED Matthew Schott	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 18	BRIDGE NO.	RETAINING WALL NO. 2104 DRAINAGE DETAILS
	DETAILS	BY Richard Schendel	CHECKED Matthew Schott			53E0302	
	QUANTITIES	BY Matthew Schott	CHECKED Michael Pope			POST MILE 39.86	
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS					UNIT: 3603 PROJECT NUMBER & PHASE: 07 1300 0007 1	CONTRACT NO.: 07-1193U1	DISREGARD PRINTS BEARING EARLIER REVISION DATES
						REVISION DATES	SHEET 10 OF 19

- NOTES:
- Entire Cable railing not shown for clarity.
 - For TYPICAL SECTIONS "A-A", "B-B", and "C-C", see "ARCHITECTURAL DETAILS NO. 3" sheet.
 - For Fractured Rib, Fractured Granite, and Random Rock Textures, see "ARCHITECTURAL DETAILS NO. 4" sheet.
 - For Pattern Modules, see "ARCHITECTURAL DETAILS NO. 5 & NO. 6" sheets.



NOTE:
Begin layout of pattern modules at control point for P1 and continue to place plumb each module at corresponding match lines for limits of pattern modules.

PATTERN MODULE LAYOUT DETAIL

NO SCALE

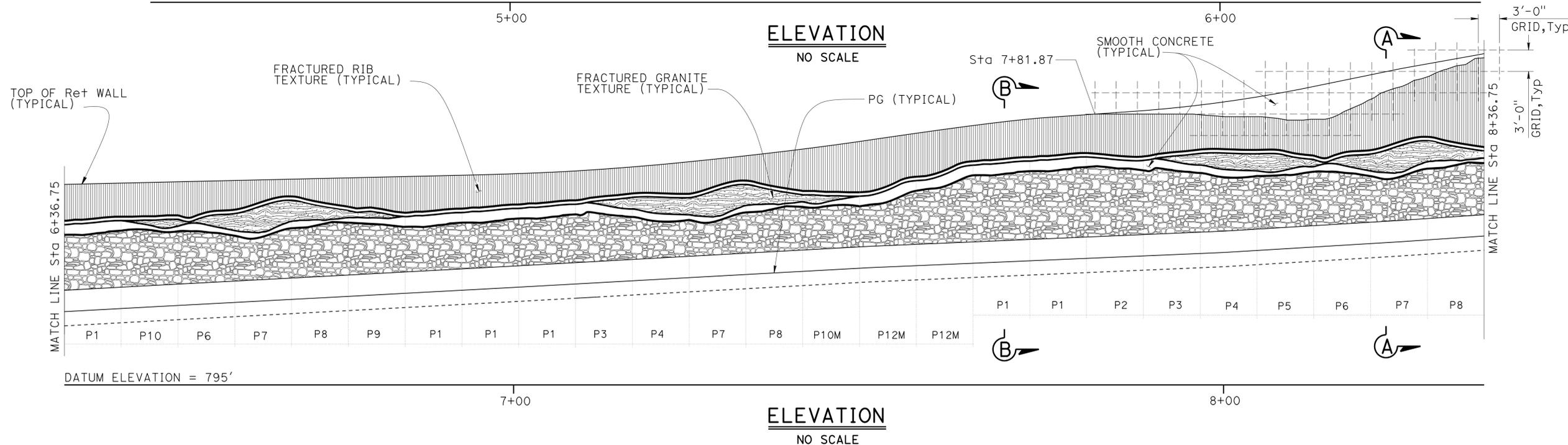
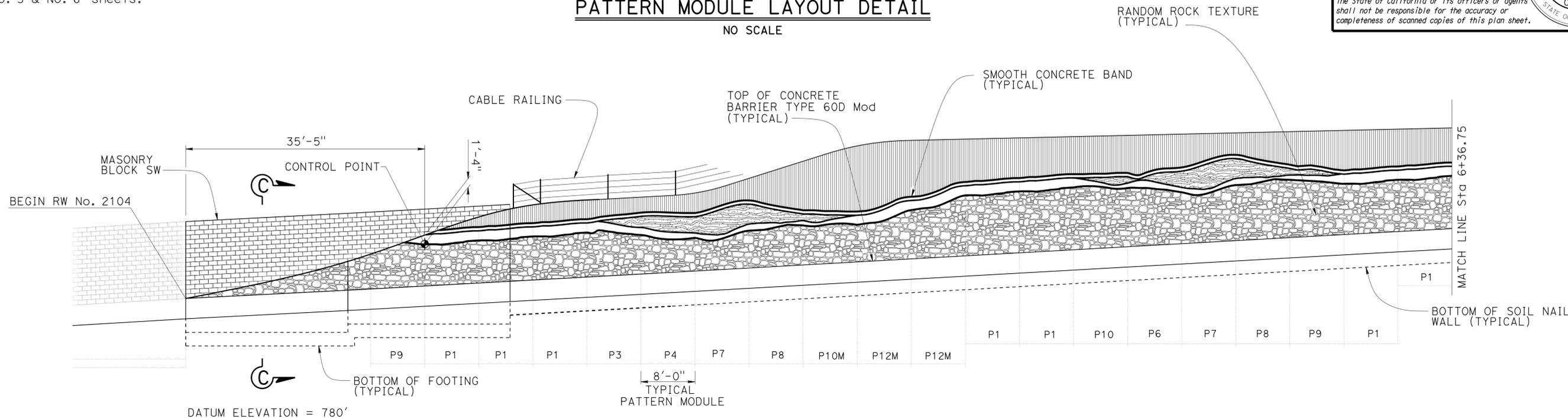
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1957	2313

Richard E. Schendel
REGISTERED CIVIL ENGINEER
DATE 10/01/14

6-1-15
PLANS APPROVAL DATE

Richard E. Schendel
REGISTERED PROFESSIONAL ENGINEER
No. C64259
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

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DESIGN	BY Valerie Moore	CHECKED Matthew Schott
DETAILS	BY Farideh Hosseinioun	CHECKED Matthew Schott
QUANTITIES	BY Matthew Schott	CHECKED Michael Pope

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 18

BRIDGE NO.	53E0302
POST MILE	39.86

RETAINING WALL NO. 2104
ARCHITECTURAL DETAILS NO. 1



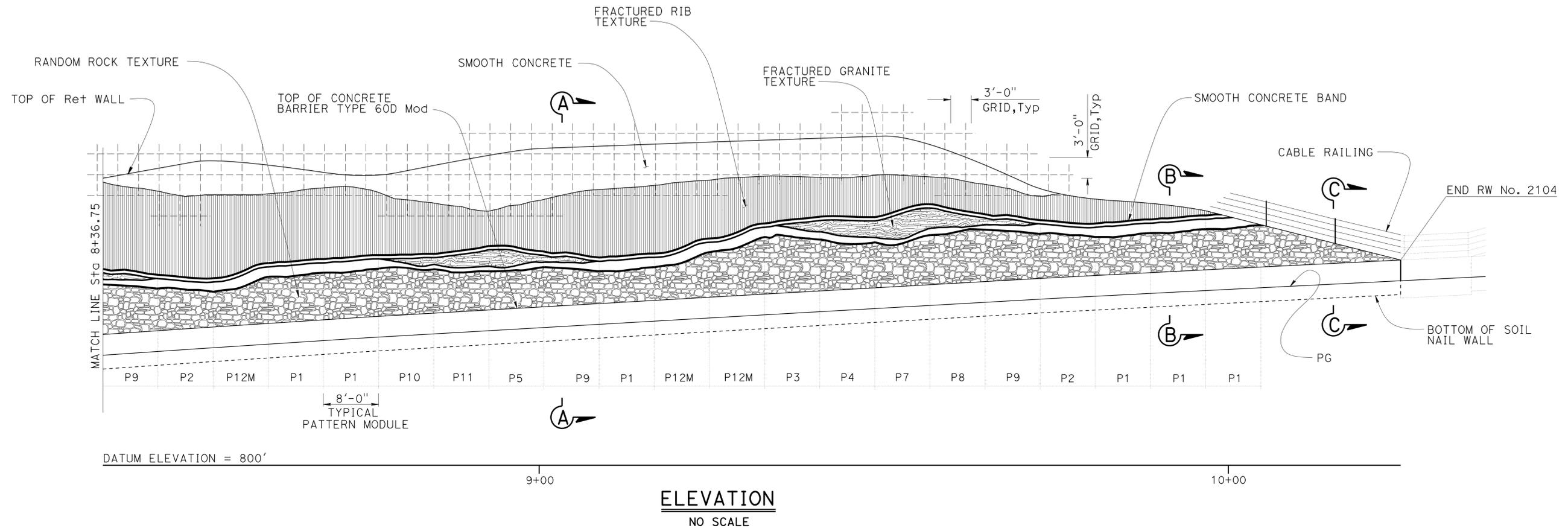
REVISION DATES	SHEET	OF
12/11/13 01/08/14 01/17/14 03/03/14	11	19

- NOTES:
1. Entire Cable railing not shown for clarity.
 2. For TYPICAL SECTIONS "A-A", "B-B", and "C-C", see "ARCHITECTURAL DETAILS NO. 3" sheet.
 3. For Fractured Rib, Fractured Granite, and Random Rock Textures, see "ARCHITECTURAL DETAILS NO. 4" sheet.
 4. For Pattern Modules, see "ARCHITECTURAL DETAILS NO. 5 & NO. 6" sheets.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1958	2313

Richard E. Schendel
 REGISTERED CIVIL ENGINEER
 DATE 10/01/14
 PLANS APPROVAL DATE 6-1-15
 No. C64259
 Exp. 6-30-15
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STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 18

BRIDGE NO.	53E0302
POST MILE	39.86

RETAINING WALL NO. 2104
ARCHITECTURAL DETAILS NO. 2



REVISION DATES	SHEET	OF
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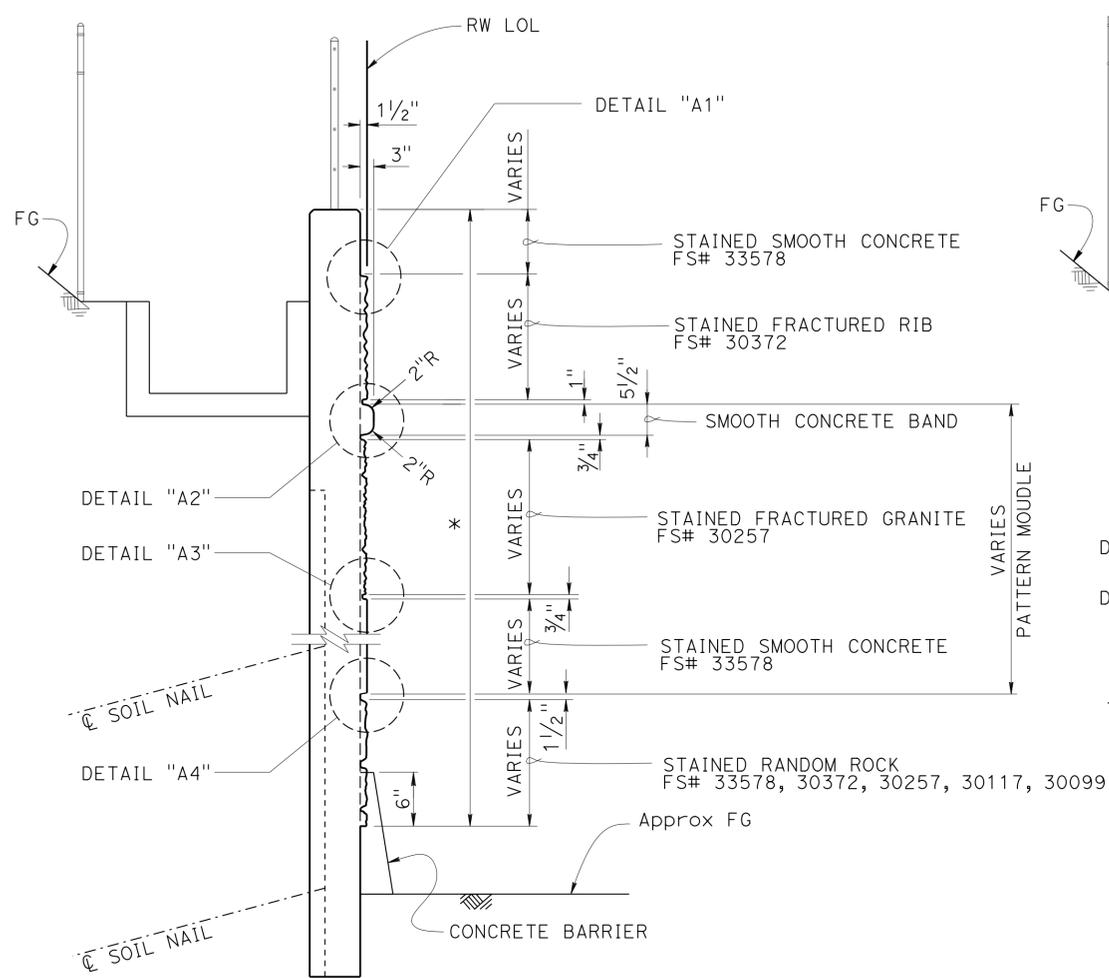
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Richard E. Schendel
REGISTERED CIVIL ENGINEER 10/01/14 DATE

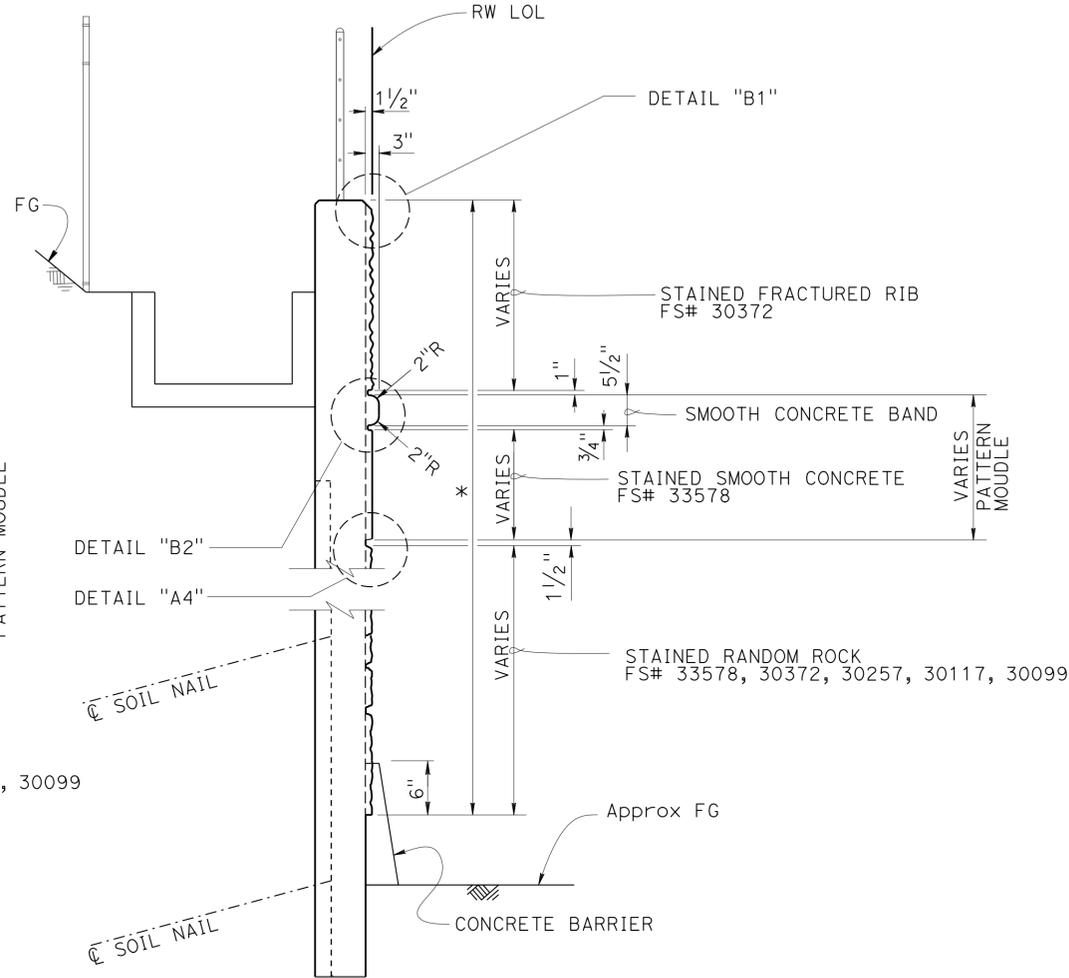
6-1-15
PLANS APPROVAL DATE

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REGISTERED PROFESSIONAL ENGINEER
No. C64259
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

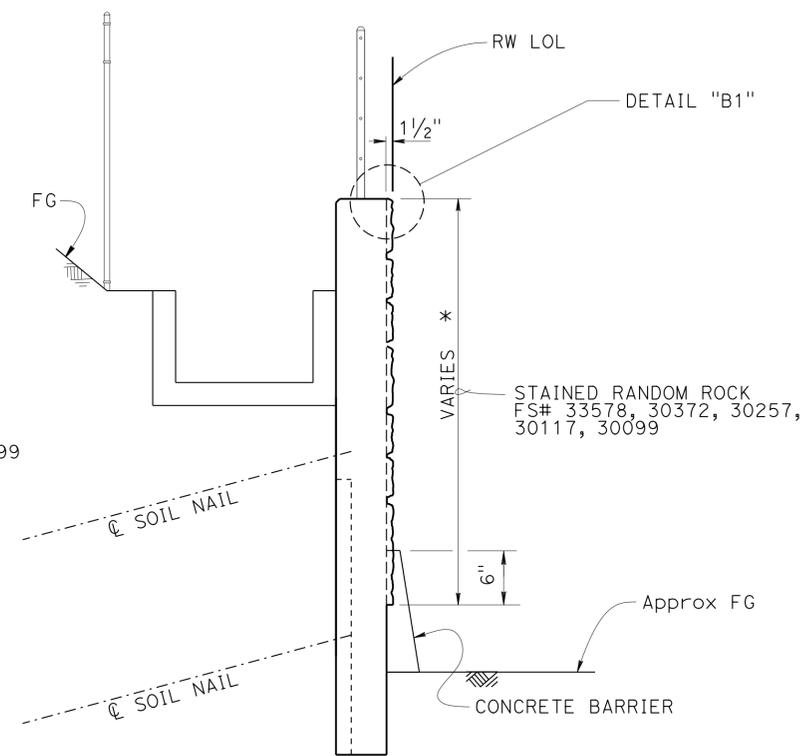
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TYPICAL SECTION A-A
NO SCALE



TYPICAL SECTION B-B
NO SCALE



TYPICAL SECTION C-C
NO SCALE

* Indicates pay limits of Concrete Surface Texture

- NOTES:
- For DETAILS "A1", "A2", "A3", "A4", "B1", and "B2", see "ARCHITECTURAL DETAILS NO. 4" sheet.
 - "FS#" is Federal Standard color number.

DESIGN	BY Valerie Moore	CHECKED Matthew Schott
DETAILS	BY Farideh Hosseinioun	CHECKED Matthew Schott
QUANTITIES	BY Matthew Schott	CHECKED Michael Pope

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 18

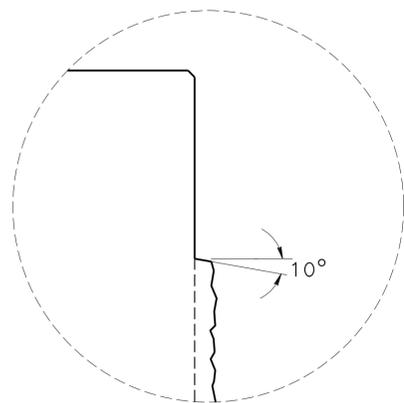
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POST MILE	39.86

RETAINING WALL NO. 2104
ARCHITECTURAL DETAILS NO. 3

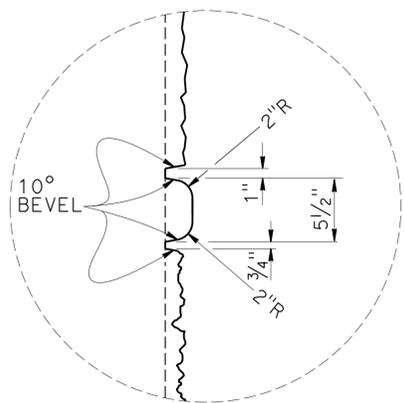
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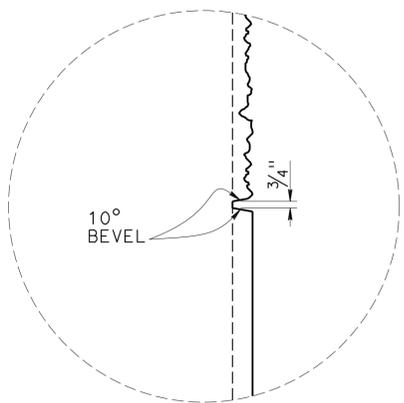
Richard E. Schendel
 REGISTERED CIVIL ENGINEER DATE 10/01/14
 6-1-15
 PLANS APPROVAL DATE
 No. C64259
 Exp. 6-30-15
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 STATE OF CALIFORNIA
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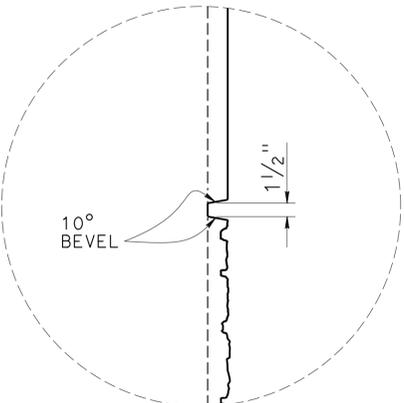
DETAIL A1
NO SCALE



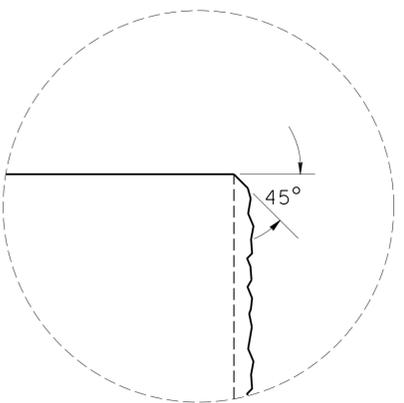
DETAIL A2
NO SCALE



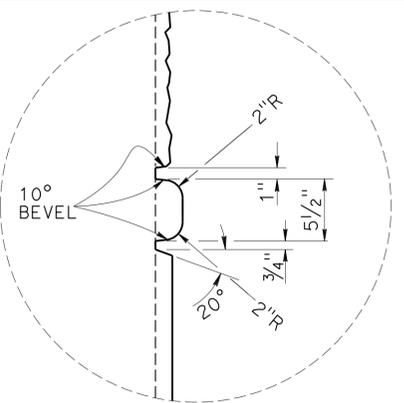
DETAIL A3
NO SCALE



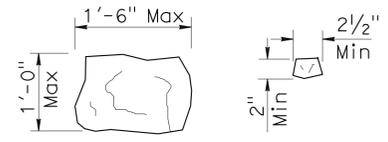
DETAIL A4
NO SCALE



DETAIL B1
NO SCALE

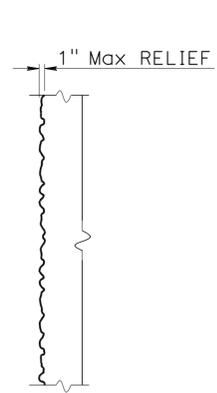


DETAIL B2
NO SCALE

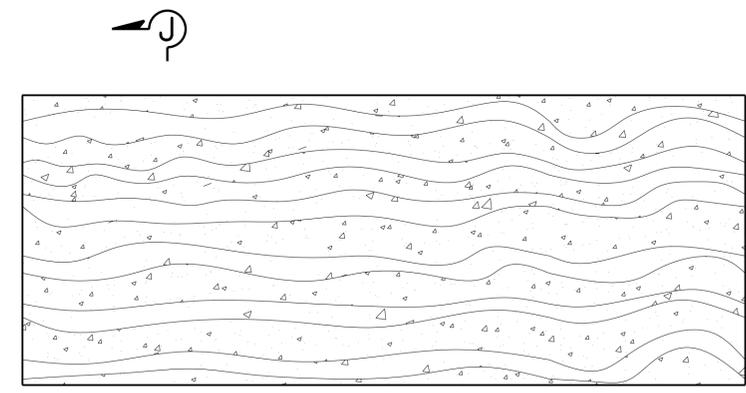


ROCK SIZE

NOTE:
Seamless Random Rock pattern to have a minimum of 2 to a maximum of 4 match points (denoted by "M") for each side (top to bottom and side to side).

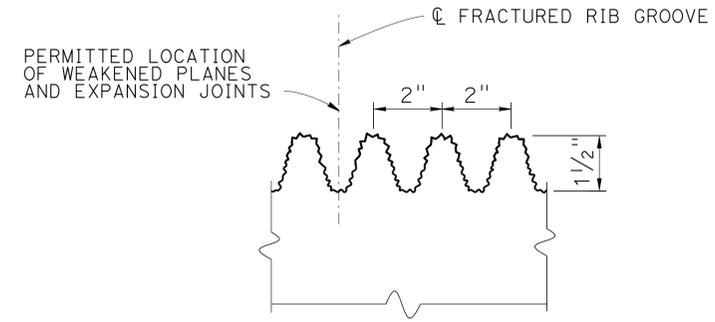


SECTION J-J

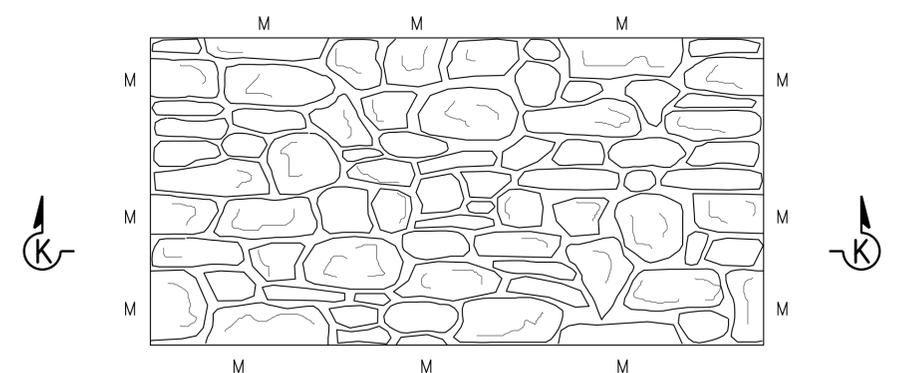


ELEVATION

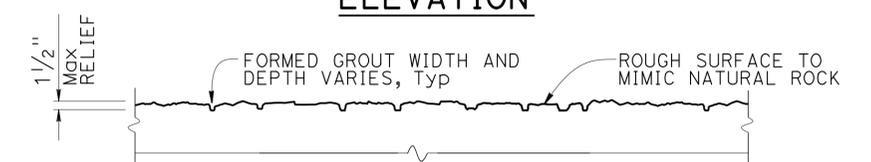
FRACTURED GRANITE TEXTURE
NO SCALE



FRACTURED RIB TEXTURE - SECTION
NO SCALE



ELEVATION



SECTION K-K
RANDOM ROCK TEXTURE
NO SCALE

DESIGN	BY Valerie Moore	CHECKED Matthew Schott
DETAILS	BY Farideh Hosseinioun	CHECKED Matthew Schott
QUANTITIES	BY Matthew Schott	CHECKED Michael Pope

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 18

BRIDGE NO.	53E0302
POST MILE	39.86

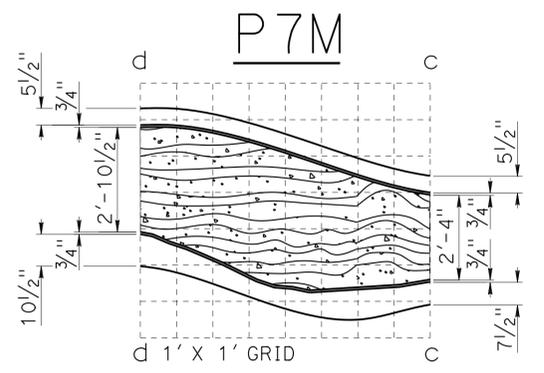
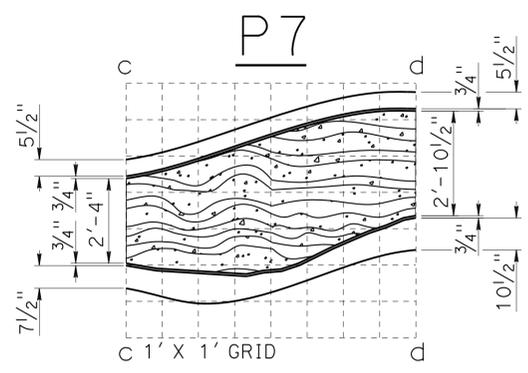
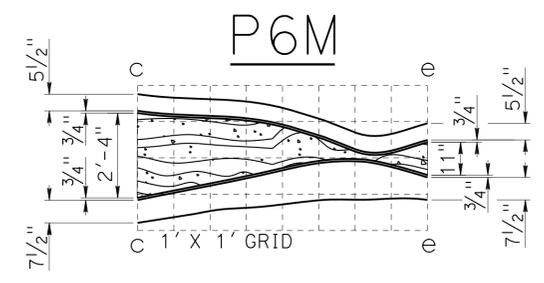
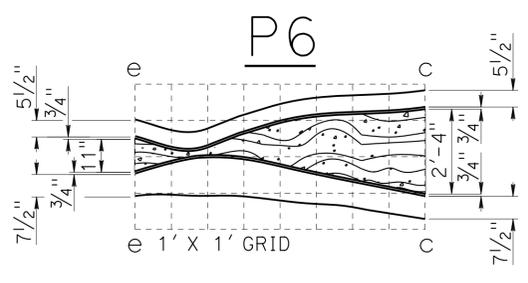
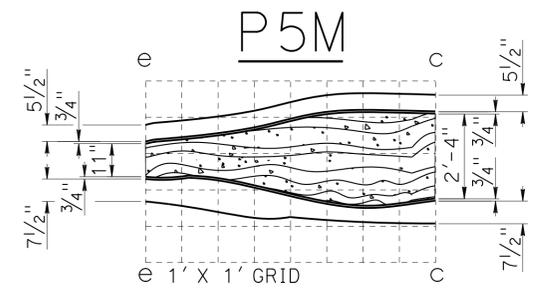
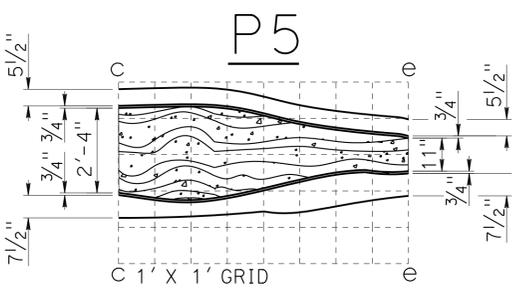
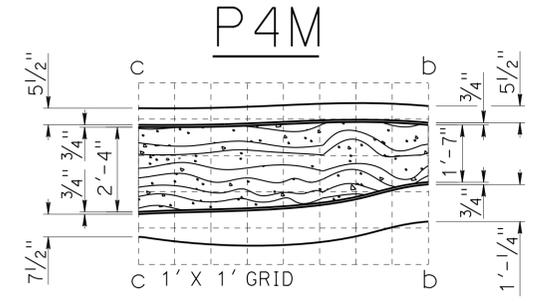
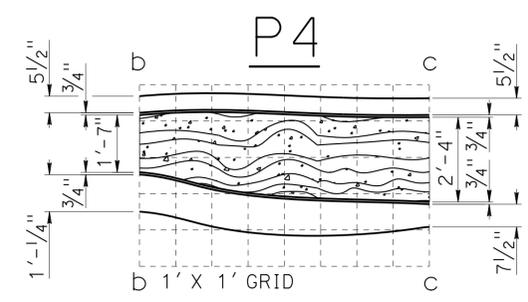
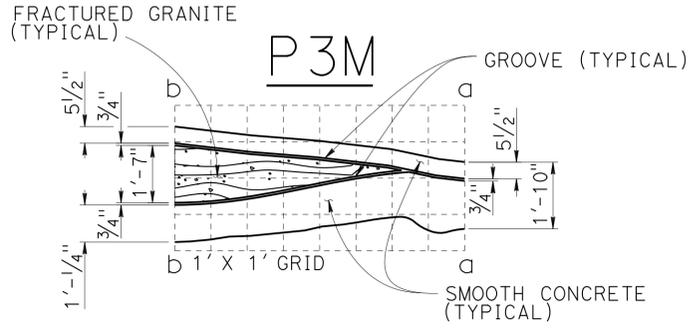
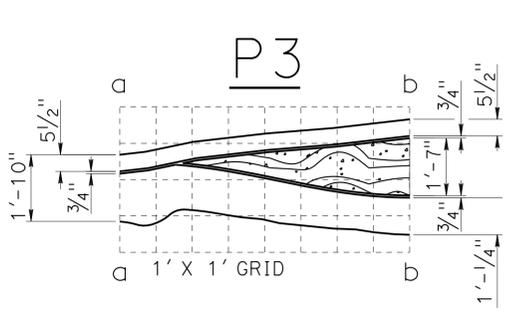
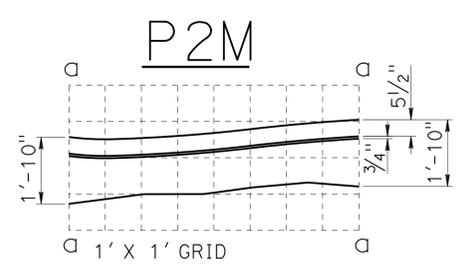
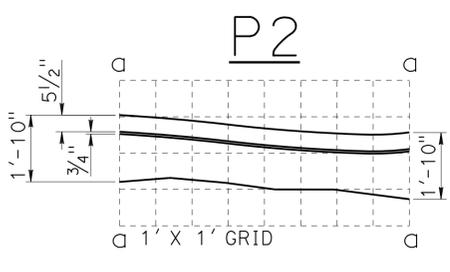
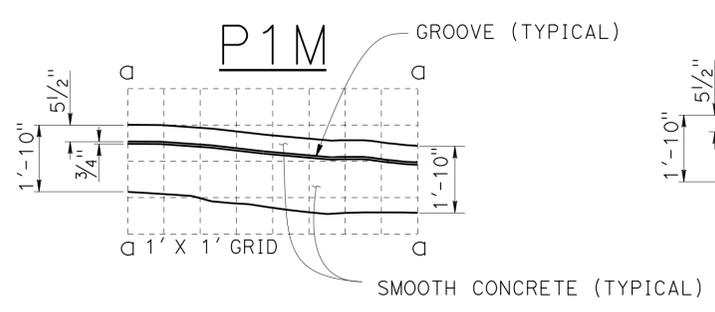
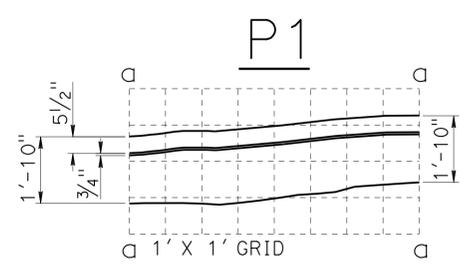
RETAINING WALL NO. 2104
ARCHITECTURAL DETAILS NO. 4

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1961	2313

Richard E. Schendel
REGISTERED CIVIL ENGINEER
10/01/14 DATE
6-1-15
PLANS APPROVAL DATE

RICHARD E. SCHEDEL
No. C64259
Exp. 6-30-15
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STATE OF CALIFORNIA

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FRACTURED GRANITE (TYPICAL)

- NOTES:
1. Fractured Granite texture at match lines a-a, b-b, c-c, d-d, and e-e must match seamlessly between the interchangeable modules.
 2. Fractured Rib and Random Rock Textures not shown for clarity.

INTERCHANGEABLE PATTERN MOTIF MODULES
NO SCALE

DESIGN	BY Valerie Moore	CHECKED Matthew Schott
DETAILS	BY Farideh Hosseinioun	CHECKED Matthew Schott
QUANTITIES	BY Matthew Schott	CHECKED Michael Pope

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 18

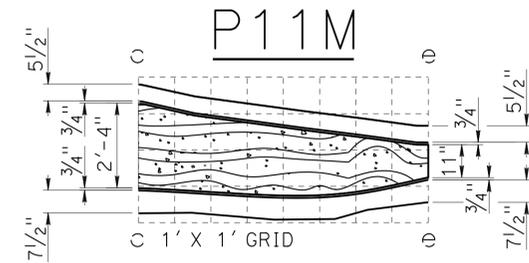
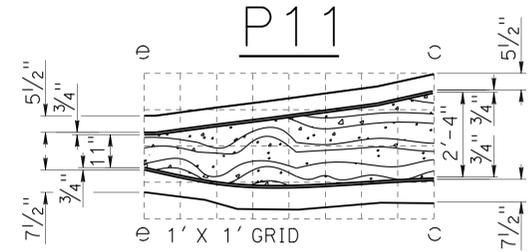
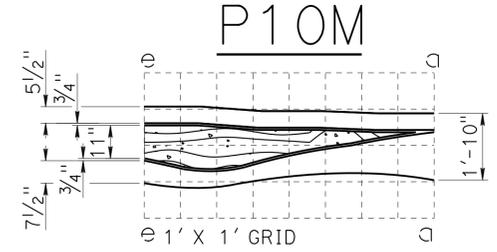
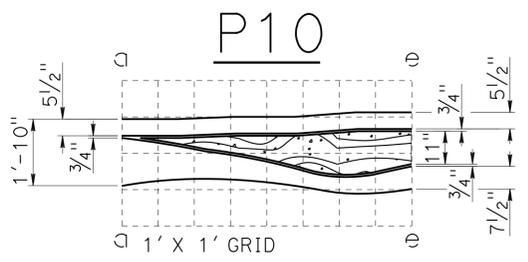
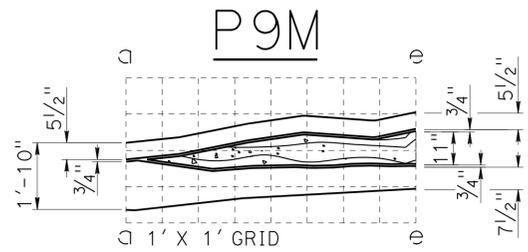
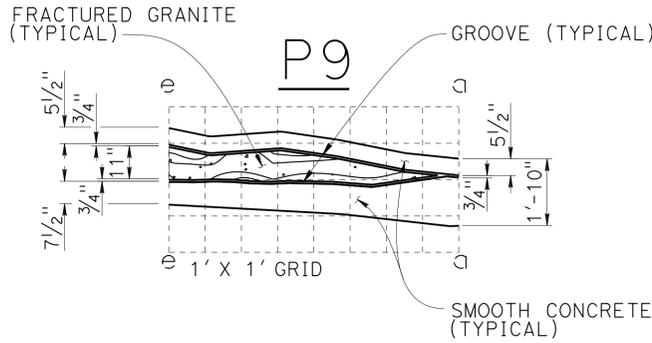
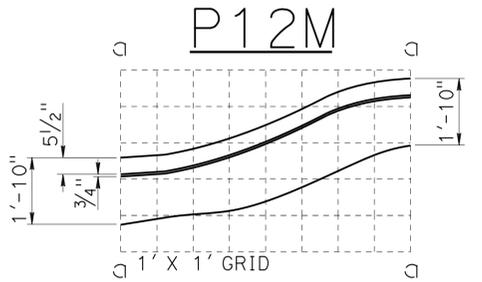
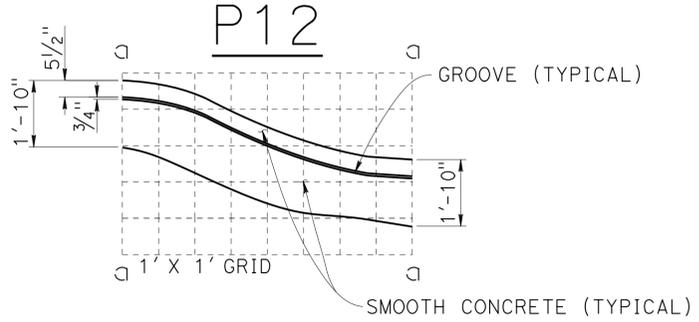
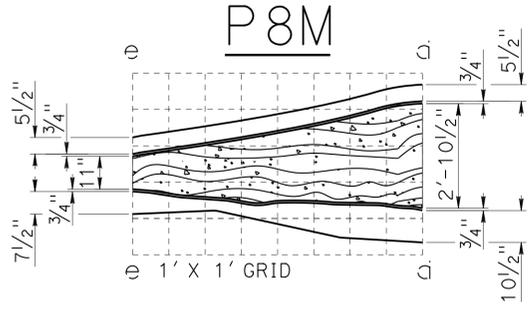
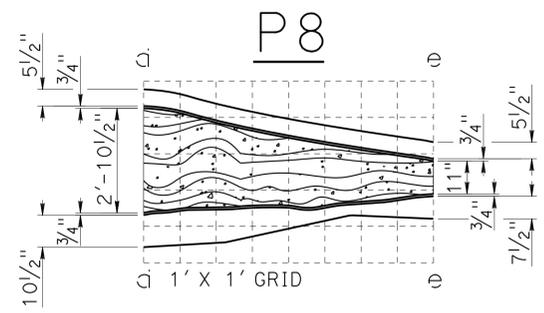
BRIDGE NO.	53E0302
POST MILE	39.86

RETAINING WALL NO. 2104
ARCHITECTURAL DETAILS NO. 5

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1962	2313

Richard Schendel
 REGISTERED CIVIL ENGINEER DATE 10/01/14
 PLANS APPROVAL DATE 6-1-15
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REGISTERED PROFESSIONAL ENGINEER	
RICHARD E. SCHENDEL	
No.	C64259
Exp.	6-30-15
CIVIL	
STATE OF CALIFORNIA	



- NOTES:
1. Fractured Granite texture at match lines a-a, b-b, c-c, d-d, and e-e must match seamlessly between the interchangeable modules.
 2. Fractured Rib and Random Rock Textures not shown for clarity.

INTERCHANGEABLE PATTERN MOTIF MODULES
NO SCALE

DESIGN	BY Valerie Moore	CHECKED Matthew Schott
DETAILS	BY Farideh Hosseinioun	CHECKED Matthew Schott
QUANTITIES	BY Matthew Schott	CHECKED Michael Pope

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 18

BRIDGE NO.	53E0302
POST MILE	39.86

RETAINING WALL NO. 2104
ARCHITECTURAL DETAILS NO. 6

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	10	37.2/42.4	1963	2313

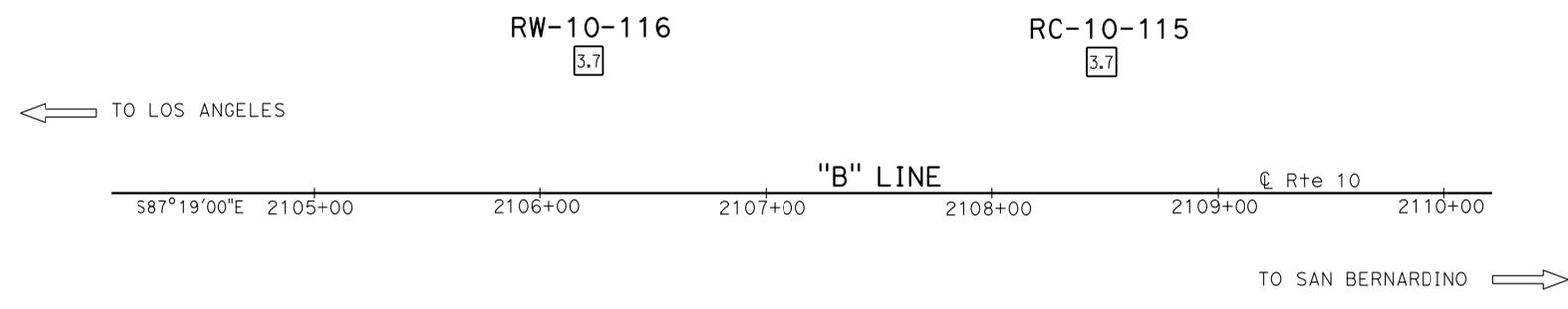
1-15-14
 CERTIFIED ENGINEERING GEOLOGIST
 Michael A. Salisbury
 No. 2462
 Exp. 2-28-15
 CERTIFIED ENGINEERING GEOLOGIST
 STATE OF CALIFORNIA

6-1-15
 PLANS APPROVAL DATE

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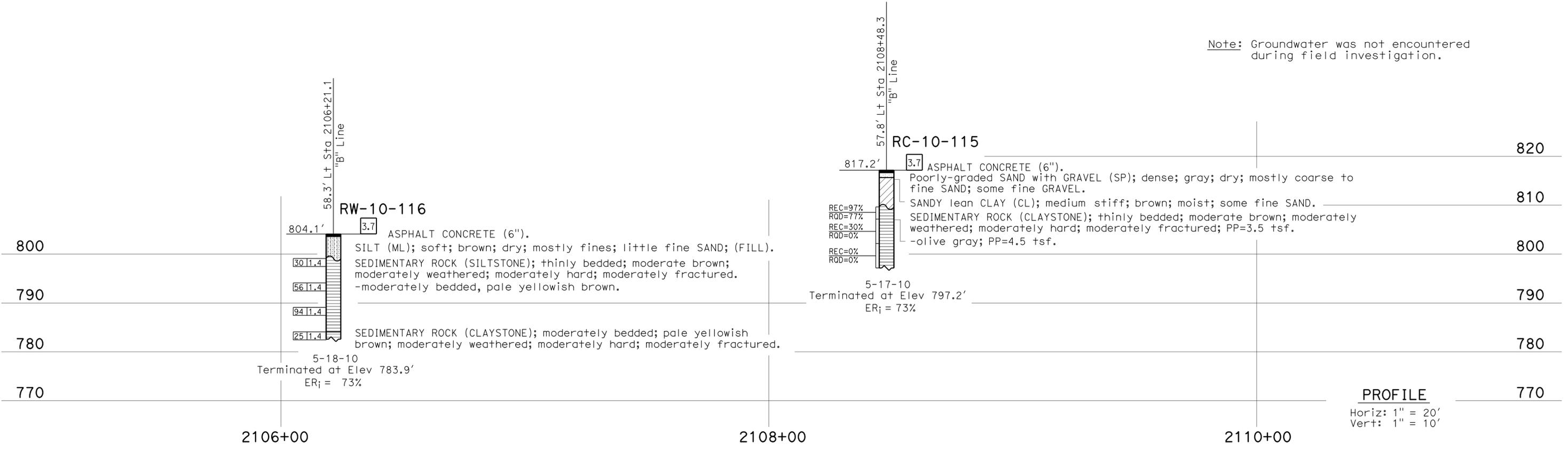
BENCH MARK

SUHV 1608 Elev 798.501'
 PK N, in Shldr of Via Verde
 W/B On Ramp, 63.02' Lt
 Sta 2105+26.90 "B" Line
 NAVD 88



PLAN
 1" = 40'

Note: Groundwater was not encountered during field investigation.



PROFILE
 Horiz: 1" = 20'
 Vert: 1" = 10'

ENGINEERING SERVICES		MATERIALS AND GEOTECHNICAL SERVICES		STATE OF CALIFORNIA		DIVISION OF ENGINEERING SERVICES		BRIDGE NO.		RETAINING WALL NO. 2104	
FUNCTIONAL SUPERVISOR		DRAWN BY: I.G-Remmen, 11/12		FIELD INVESTIGATION BY:		STRUCTURE DESIGN		53E0302		LOG OF TEST BORINGS 1 OF 3	
NAME: D. Jang		CHECKED BY: H. Liu		M. Salisbury		DESIGN BRANCH 18		POST MILE			
								39.86			
065 CIVIL LOG OF TEST BORINGS SHEET		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		0 1 2 3		UNIT: 3643		PROJECT NUMBER & PHASE: 0713000071		CONTRACT NO.: 07-1193U1	
						DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES		SHEET OF	
								09-09-13 11-19-13 01-14-14		17 19	

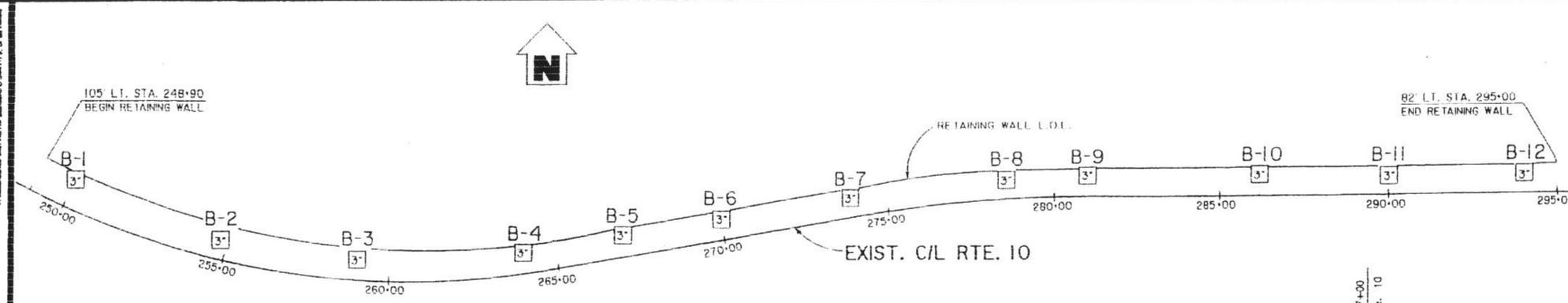
USERNAME => s125624 DATE PLOTTED => 16-MAY-2015 TIME PLOTTED => 15:55

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	10	37.2/42.4		

W. Cain
CERTIFIED ENGINEERING GEOLOGIST

6-1-15
PLANS APPROVAL DATE

REGISTERED GEOLOGIST
W.C. CAIN
No. 732
Exp. 6-30-94
CERTIFIED ENGINEERING GEOLOGIST
STATE OF CALIFORNIA

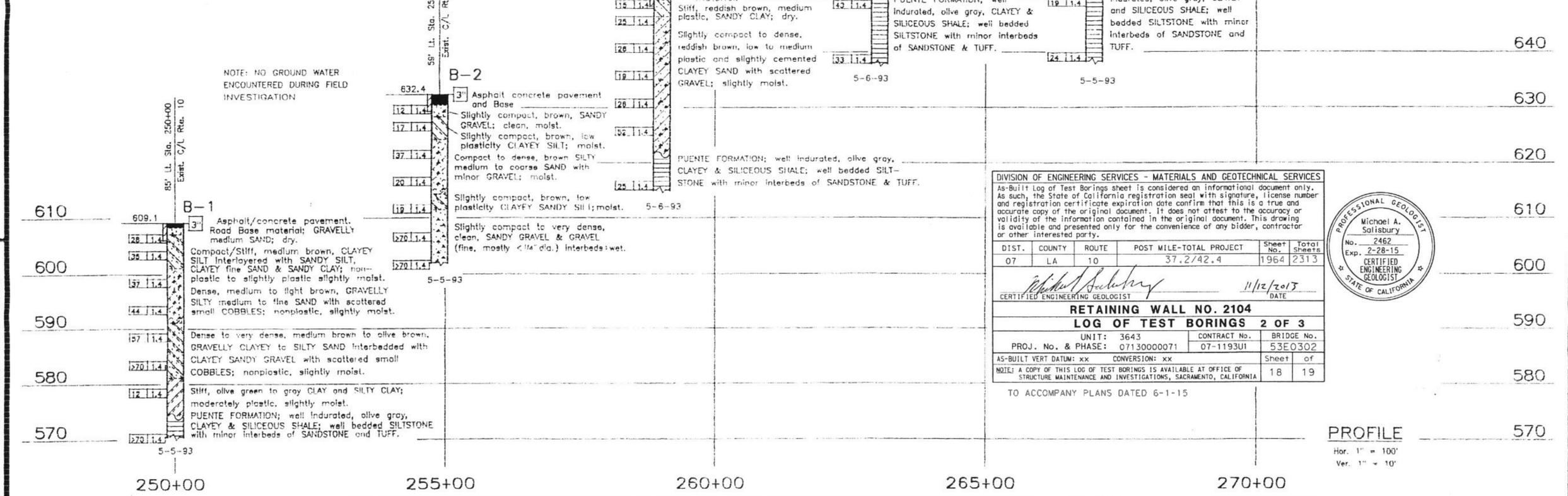


BENCH MARK

TBM AT STA. 270+00 Elev. 704.4 FD. PAINTED "+" AT LT. STA. 270+00	TBM AT STA. 290+00 Elev. 614.8 FD. PAINTED "+" AT LT. STA. 290+00
TBM AT STA. 267+00 Elev. 689.4 FD. PAINTED "+" AT LT. STA. 267+00	TBM AT STA. 286+00 Elev. 792.0 FD. PAINTED "+" AT LT. STA. 286+00
TBM AT STA. 284+00 Elev. 674.3 FD. PAINTED "+" AT LT. STA. 284+00	TBM AT STA. 281+00 Elev. 766.6 FD. PAINTED "+" AT LT. STA. 281+00
TBM AT STA. 259+00 Elev. 651.1 FD. PAINTED "+" AT LT. STA. 259+00	TBM AT STA. 279+00 Elev. 755.5 FD. PAINTED "+" AT LT. STA. 279+00
TBM AT STA. 255+00 Elev. 632.7 FD. PAINTED "+" AT LT. STA. 255+00	TBM AT STA. 274+00 Elev. 727.9 FD. PAINTED "+" AT LT. STA. 274+00
TBM AT STA. 250+00 Elev. 608.7 FD. PAINTED "+" AT LT. STA. 250+00	WEST BOUND RTE. 10 SURVEY BY J.F. DAVIDSON ASSOC. 4-14-93 PAGE 9 9,10,11, OF 16.
TBM AT STA. 294+00 Elev. 635.5 FD. PAINTED "+" AT LT. STA. 294+00	

NOTE: NO GROUND WATER ENCOUNTERED DURING FIELD INVESTIGATION

PLAN
1" = 200'



DIVISION OF ENGINEERING SERVICES - MATERIALS AND GEOTECHNICAL SERVICES

As-Built Log of Test Borings sheet is considered an informational document only. As such, the State of California registration seal with signature, license number and registration certificate expiration date confirm that this is a true and accurate copy of the original document. It does not attest to the accuracy or validity of the information contained in the original document. This drawing is available and presented only for the convenience of any bidder, contractor or other interested party.

DIST.	COUNTY	ROUTE	POST MILE-TOTAL PROJECT	Sheet No.	Total Sheets
07	LA	10	37.2/42.4	1964	2313

Michael A. Salisbury
CERTIFIED ENGINEERING GEOLOGIST
DATE: 11/12/2015

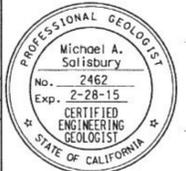
RETAINING WALL NO. 2104
LOG OF TEST BORINGS 2 OF 3

UNIT: 3643	CONTRACT NO. 07-1193U1	BRIDGE NO. 53E0302
PROJ. No. & PHASE: 0713000071		

AS-BUILT VERT DATUM: xx CONVERSION: xx
NOTE: A COPY OF THIS LOG OF TEST BORINGS IS AVAILABLE AT OFFICE OF STRUCTURE MAINTENANCE AND INVESTIGATIONS, SACRAMENTO, CALIFORNIA

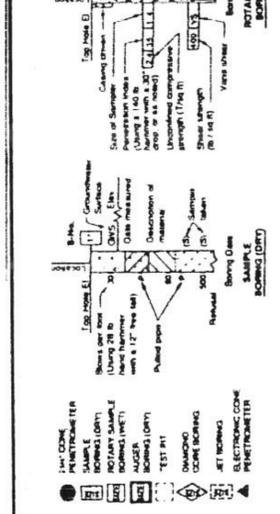
Sheet	of
18	19

TO ACCOMPANY PLANS DATED 6-1-15



PROFILE
Hor. 1" = 100'
Ver. 1" = 10'

LEGEND OF BORING OPERATIONS



CONSISTENCY CLASSIFICATION FOR SOILS

According to the Standard Penetration Test

Penetration (Blows/ft)	Consistency
0-4	Very loose
5-9	Loose
10-19	Slightly compact
20-29	Compact
30-39	Very compact
>40	Very dense

NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.

DIVISION OF NEW TECHNOLOGY, MATERIALS AND RESEARCH	OFFICE OF ENGINEERING GEOLOGY	FIELD INVESTIGATION BY: F. GERAMI	BRIDGE NO.	RETAINING WALL NO. 265
DRAWN BY: I. GAMARRA 5/93			POST MILE: 37.5/42.4	LOG OF TEST BORINGS 1 OF 2
CHECKED BY: Faramarz Gerami 8-93				

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

CU 07234
EA 11934K

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES (PRELIMINARY STAGE ONLY) SHEET 04

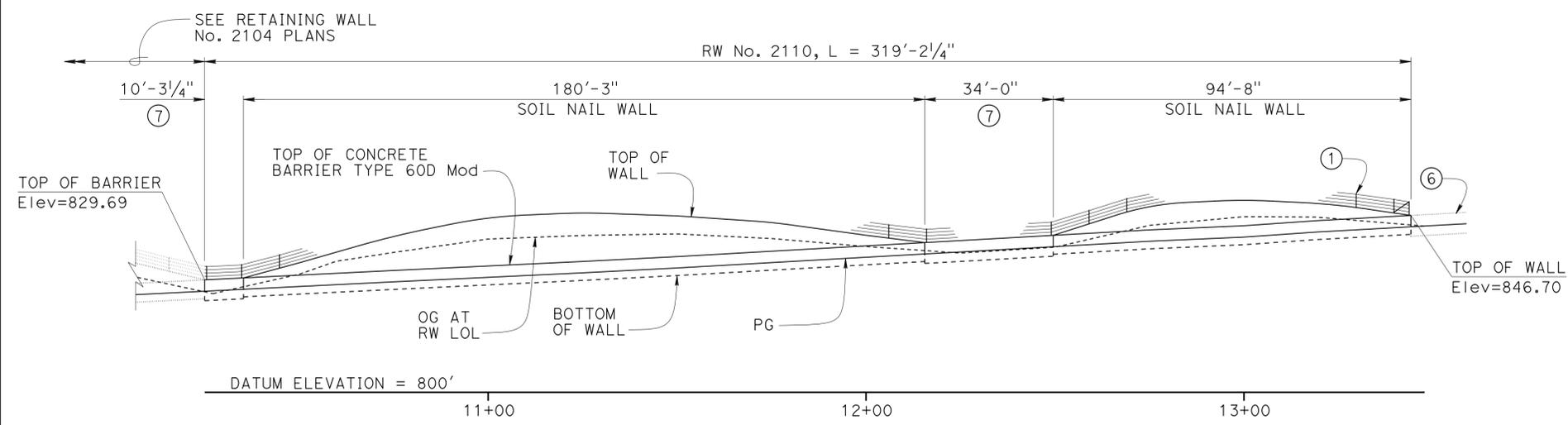
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1966	2313

REGISTERED CIVIL ENGINEER	DATE 10/01/14
PLANS APPROVAL DATE 6-1-15	
<small>The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.</small>	

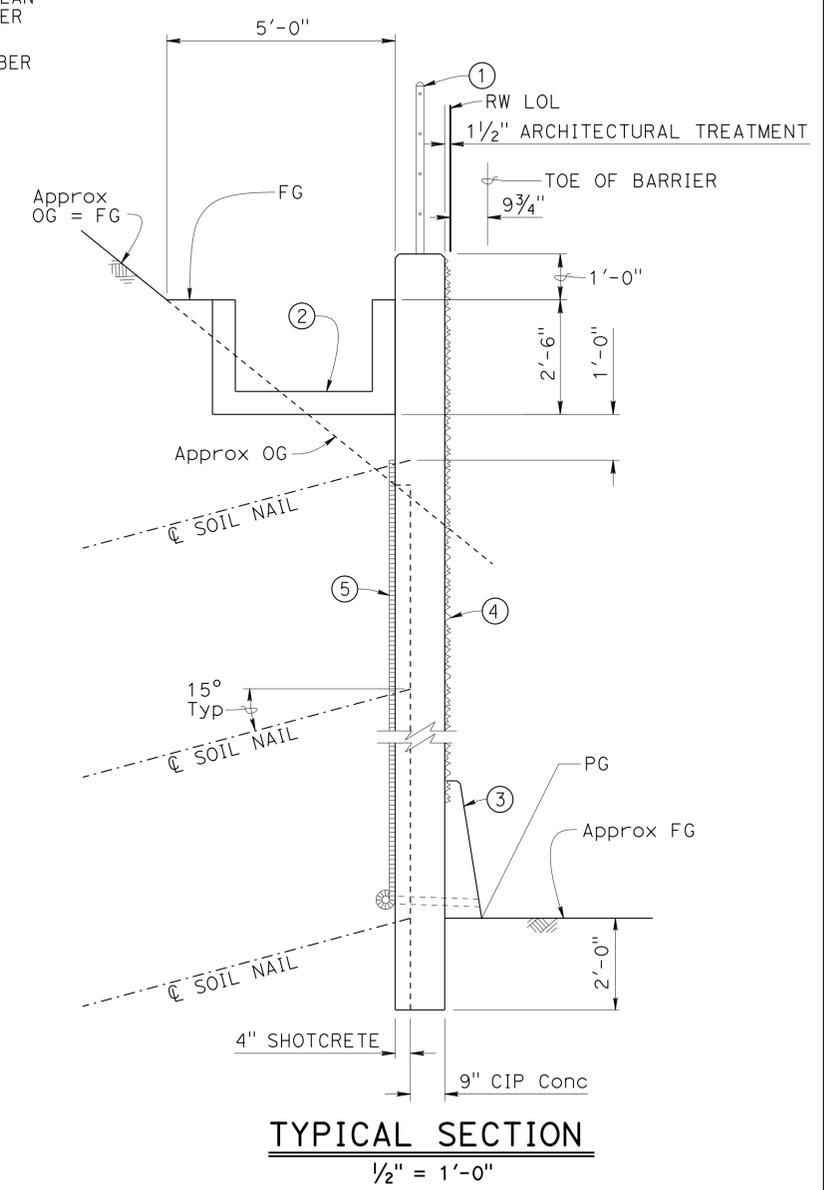
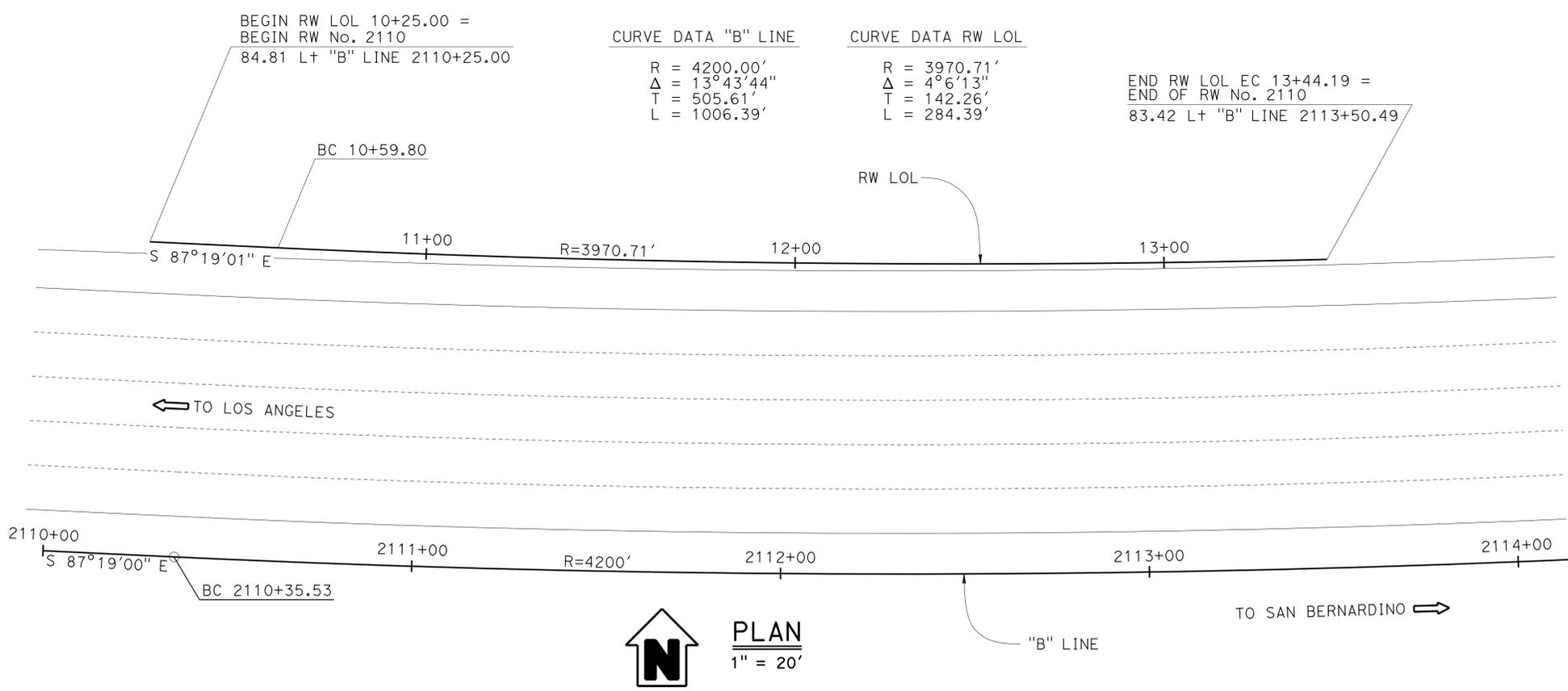
NOTES:

- ① Cable Railing RSP B11-47
- ② Concrete Gutter, see "ROAD PLANS"
- ③ Concrete Barrier, Type 60D Mod A76A
- ④ Architectural Treatment
- ⑤ Geocomposite Drain
- ⑥ Concrete Barrier, see "ROAD PLANS"
- ⑦ Concrete Barrier, Type 736B Mod

For "GENERAL NOTES", "STANDARD PLANS", "QUANTITIES", and "INDEX TO PLANS", see "INDEX TO PLANS" sheet



DEVELOPED ELEVATION
1" = 20'



MICHAEL POPE
DESIGN ENGINEER

DESIGN	BY Matthew Schott	CHECKED Michael Pope	LOAD & RESISTANCE FACTOR DESIGN	LIVE LOADING: HL93 W/"LOW-BOY"; PERMIT DESIGN VEHICLE
DETAILS	BY Matthew Schott	CHECKED Michael Pope	LAYOUT	BY Matthew Schott
QUANTITIES	BY Matthew Schott	CHECKED Michael Pope	SPECIFICATIONS	BY Xiaodong Chen

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 18

BRIDGE NO.	53E0303
POST MILE	39.97

RETAINING WALL NO. 2110
GENERAL PLAN

STANDARD PLANS DATED 2010

SHEET NO.	TITLE
A10A	ABBREVIATIONS (SHEET 1 OF 2)
RSP A10B	ABBREVIATIONS (SHEET 2 OF 2)
A10C	LINES AND SYMBOLS (SHEET 1 OF 3)
A10D	LINES AND SYMBOLS (SHEET 2 OF 3)
A10E	LINES AND SYMBOLS (SHEET 3 OF 3)
A10F	LEGEND - SOIL (SHEET 1 OF 2)
A10G	LEGEND - SOIL (SHEET 2 OF 2)
A10H	LEGEND - ROCK
A76A	CONCRETE BARRIER TYPE 60
B0-3	BRIDGE DETAILS
RSP B11-47	CABLE RAILING
RSP B11-56	CONCRETE BARRIER TYPE 736

GENERAL NOTES

DESIGN:
Federal Highway Administration Publication
Geotechnical Engineering Circular No. 7
Soil Nail Walls, Publication FHWA-IF-03-017

AASHTO LRFD Bridge Design Specifications,
4th edition and the Caltrans Amendments,
preface dated November 2011

LIVE LOADING:
No Live Loading

REINFORCED CONCRETE AND SHOTCRETE:
 $f_y = 60$ ksi (Yield Strength of Reinforcement)
 $f_c = 3.6$ ksi (Compressive Strength at 28 days)

BEARING PLATES:
ASTM Designation: A36/A 36M, Grade 36, $F_y = 36$ ksi

SOIL NAILS:
ASTM Designation: A 615/A 615M, Grade 75, $f_y = 75$ ksi

CONCRETE ANCHORS ON BEARING PLATES:
AWS Designation: D1.5, $F_y = 36$ ksi Min

INDEX TO PLANS

SHEET NO.	TITLE
1	GENERAL PLAN
2	INDEX TO PLANS
3	FOUNDATION PLAN
4	STRUCTURE PLAN
5	TYPICAL SECTION
6	SOIL NAIL ASSEMBLY
7	DRAINAGE DETAILS
8	ARCHITECTURAL DETAILS No. 1
9	ARCHITECTURAL DETAILS No. 2
10	ARCHITECTURAL DETAILS No. 3
11	ARCHITECTURAL DETAILS No. 4
12	ARCHITECTURAL DETAILS No. 5
13	LOG OF TEST BORINGS 1 OF 2
14	LOG OF TEST BORINGS 2 OF 2

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1967	2313

Richard E. Schendel
REGISTERED CIVIL ENGINEER DATE 10/01/14

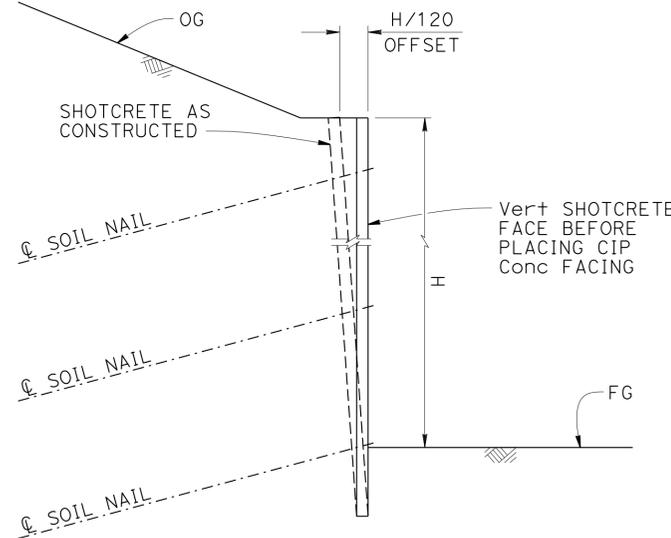
6-1-15
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
RICHARD E. SCHENDEL
No. C 64259
Exp. 06/30/15
CIVIL
STATE OF CALIFORNIA

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QUANTITIES

STRUCTURE EXCAVATION (SOIL NAIL WALL)	162 CY
STRUCTURE BACKFILL (SLURRY CEMENT)	1 CY
STRUCTURE BACKFILL (SOIL NAIL WALL)	20 CY
SOIL NAIL	1,286 LF
STRUCTURAL CONCRETE, RETAINING WALL	102 CY
CONCRETE SURFACE TEXTURE	2,010 SQFT
BAR REINFORCING STEEL (RETAINING WALL)	14,793 LB
STRUCTURAL SHOTCRETE	30 CY
PREPARE AND STAIN CONCRETE	1,898 SQFT
CABLE RAILING	319 LF
CONCRETE BARRIER (TYPE 60D)	275 LF
CONCRETE BARRIER (TYPE 736B MODIFIED)	45 LF



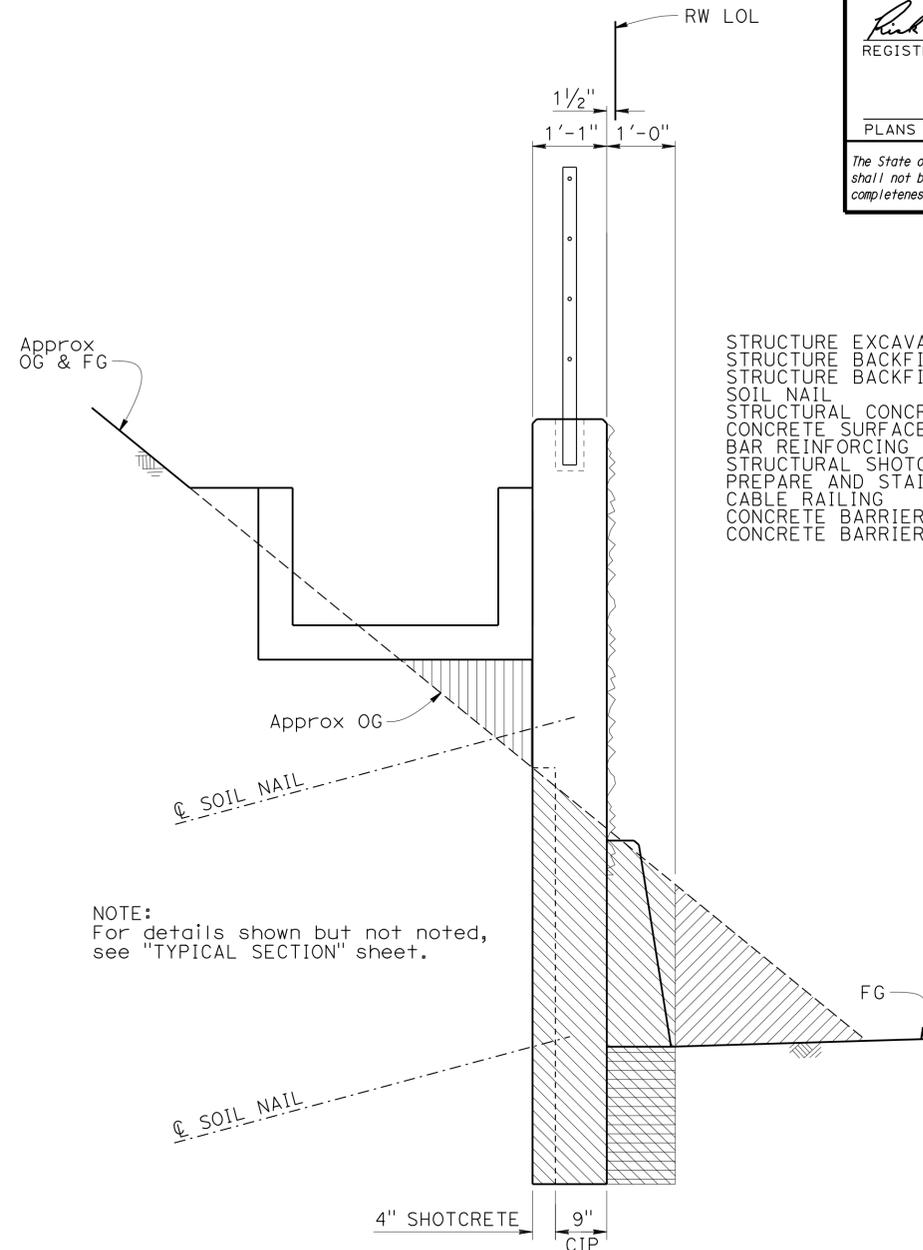
SOIL NAIL WALL OFFSET DETAIL

NO SCALE

SOIL NAIL WALL DESIGN TABLE

Wall Zone	Station ("B" Line)	Maximum Wall Height (ft)	Minimum Nail Embedment Length (ft)	Maximum Nail Spacing Vertical (ft)	Maximum Nail Spacing Horizontal (ft)	Pullout Resistance Q_d (lb/ft)	Rebar		Min Allowable Facing Resistance (kips)	
							Grade (ksi)	Diameter (in)	Static	Seismic
1	2110+25.00 to 2113+50.49	15.0	10	5	5	2720	75	1.0	30	38

NOTE:
Wall height is a vertical distance from the finished grade of roadway to the top of gutter.



- Denotes Structure Excavation (Soil Nail Wall)
- Denotes Structure Backfill (Soil Nail Wall)
- Denotes Structure Backfill (Slurry Cement)
- Denotes Roadway Excavation, see "ROAD PLANS"

TYPICAL SECTION PAY LIMITS FOR STRUCTURE EXCAVATION AND BACKFILL & SLURRY CEMENT BACKFILL

NO SCALE

DESIGN	BY Matthew Schott	CHECKED Michael Pope
DETAILS	BY Matthew Schott	CHECKED Michael Pope
QUANTITIES	BY Matthew Schott	CHECKED Michael Pope

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 18

BRIDGE NO.	53E0303
POST MILE	39.97

RETAINING WALL NO. 2110
INDEX TO PLANS

CURVE DATA

No.	R	Δ	T	L
(A)	3970.71	04°06'13"	142.26	284.39
(B)	4200.00	13°43'44"	505.61	1006.39

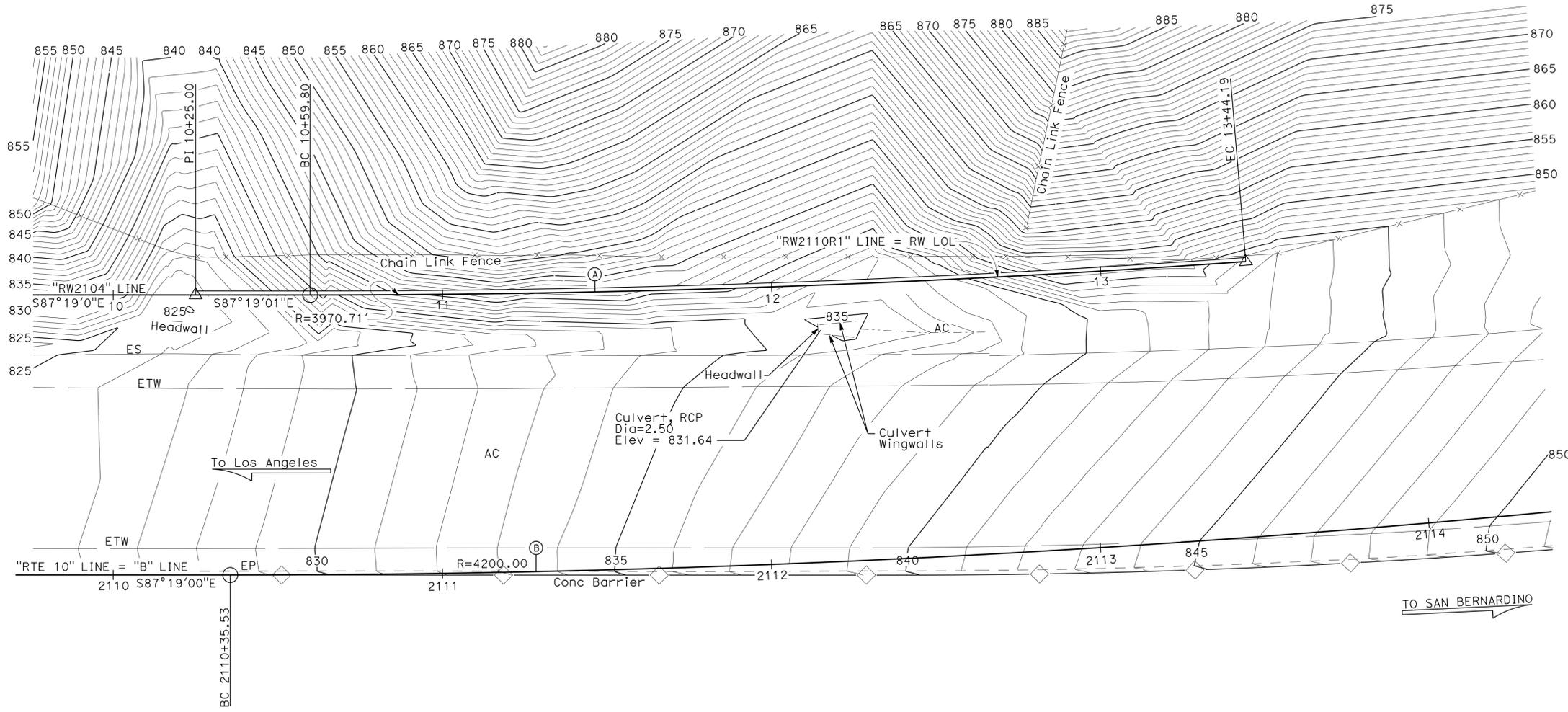
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1968	2313

Richard E. Schendel
 REGISTERED CIVIL ENGINEER DATE 10/01/14

6-1-15
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 RICHARD E. SCHENDEL
 No. C64259
 Exp. 6-30-15
 CIVIL
 STATE OF CALIFORNIA

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SURVEY CONTROL
 PRHV 4029 (Not Shown On Plan)
 Fnd 1" IP w/CT Plug
 70.28 FT Lt. "A" Line Rte 10
 Sta. 2135+79.53
 N 1,847,539.18
 E 6,610,211.48
 Elev. = 930.99

PRHV 10 (Not Shown On Plan)
 Fnd L&T w/LA Co Eng Washer
 169.30 FT Rt. "RTE10" LINE Rte 10
 Sta. 2136+50.57
 N 1,847,291.22
 E 6,610,239.06
 Elev. = 914.10

NOTE:
 Foundations for walls other than
 RW No. 2116 not shown.

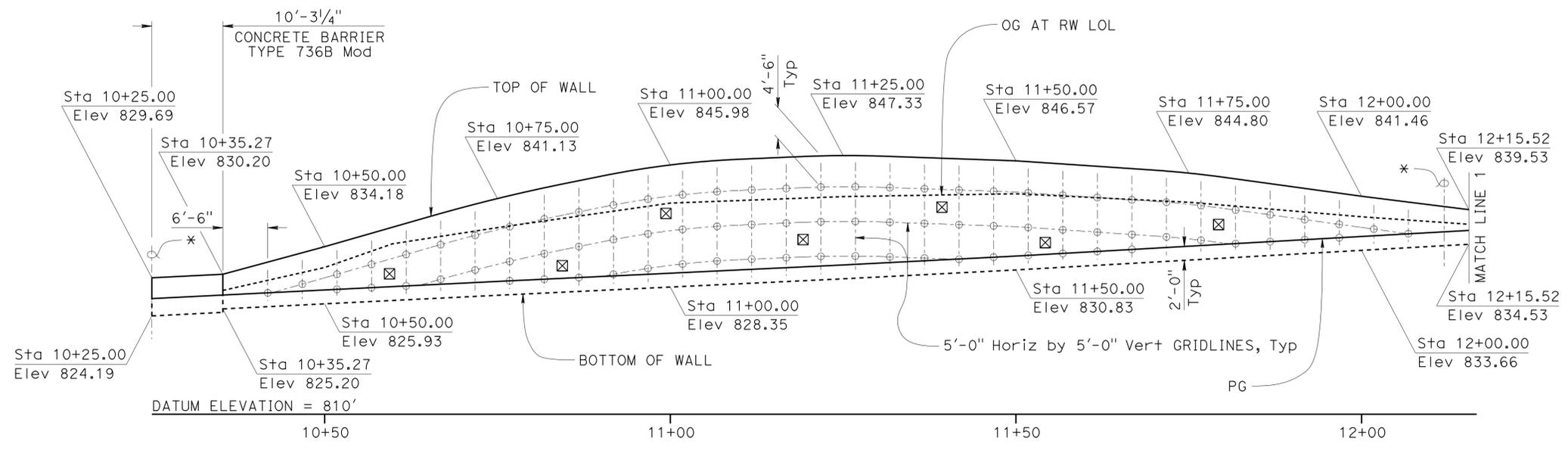
PRELIMINARY INVESTIGATION SECTION				DESIGN BY Matthew Schott	CHECKED Michael Pope	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 18	BRIDGE NO. 53E0303	RETAINING WALL NO. 2110 FOUNDATION PLAN	
SCALE 1"=20'	VERT. DATUM NAVD88	PHOTOGRAMMETRY AS OF: 2/2008	DETAILS BY Matthew Schott	CHECKED Michael Pope	POST MILE 39.97					
ALIGNMENT TIES Dist. Traverse Sheet	DRAFTED BY C. Fassett	CHECKED BY C. Fassett	QUANTITIES BY Matthew Schott	CHECKED Michael Pope						
STRUCTURES FOUNDATION PLAN SHEET (ENGLISH) (REV. 09-01-10)						ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	UNIT: 07 PROJECT NUMBER & PHASE: 0713000007 1	CONTRACT NO.: 07-1193U1	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES 03/08/11 12/08/13 01/09/14 01/13/14 SHEET 3 OF 14

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1969	2313

<i>Richard E. Schendel</i>	10/01/14
REGISTERED CIVIL ENGINEER	DATE
6-1-15	
PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER
RICHARD E. SCHENDEL
No. C64259
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

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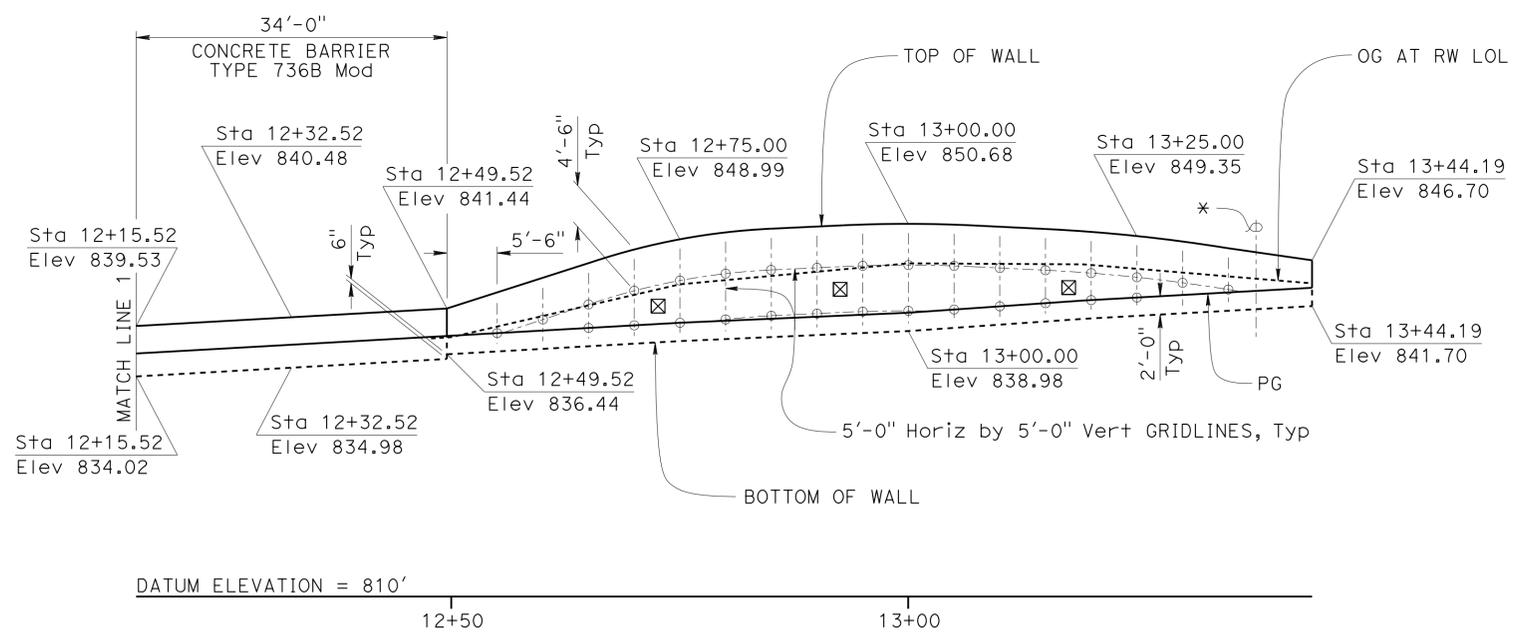


NOTES:

1. The exact location of the test nails are to be determined by the Engineer in the field.
2. Cable railing, concrete barrier, and weep holes not shown for clarity.
3. Bottom row of soil nails are no more than 5'-0" and no less than 2'-0" from bottom of wall.
4. For soil nail assembly details, see "SOIL NAIL ASSEMBLY" sheet.
5. Top of wall must be a smooth curve between control points as shown.
6. Adjust nail locations as necessary to clear down drains by 6" minimum.

LEGEND:

- Location of Soil Nail Assembly, Tot 113.
- ⊠ Location of pull out test nail, Tot 10.
- * Approximate Ⓞ Down Drain, see "ROAD PLANS" and Note 6.



DEVELOPED ELEVATION
1" = 10'

DESIGN BY Matthew Schott CHECKED Michael Pope DETAILS BY Matthew Schott CHECKED Michael Pope QUANTITIES BY Matthew Schott CHECKED Michael Pope	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 18	BRIDGE NO. 53E0303	RETAINING WALL NO. 2110 STRUCTURE PLAN
			POST MILE 39.97	
			UNIT: 3603 PROJECT NUMBER & PHASE: 07 1300 0007 1 CONTRACT NO.: 07-1193U1	
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS			REVISION DATES 05/16/14 12/06/13 01/23/14	SHEET OF 4 14

FILE => 53e0303-c-sp01.dgn

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1970	2313

Richard E. Schendel
REGISTERED CIVIL ENGINEER DATE 10/01/14

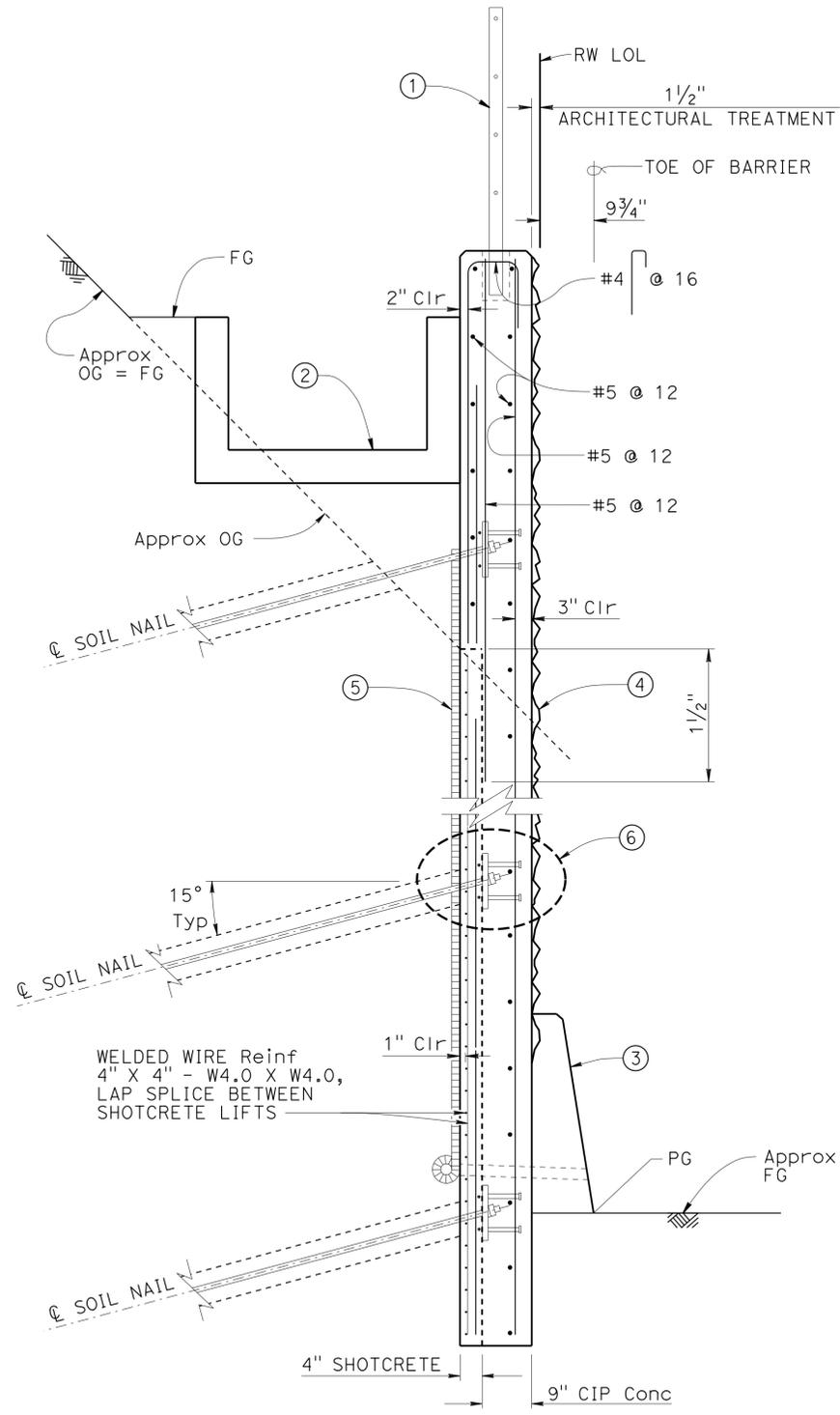
6-1-15
PLANS APPROVAL DATE

Richard E. Schendel
No. C64259
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

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NOTES:

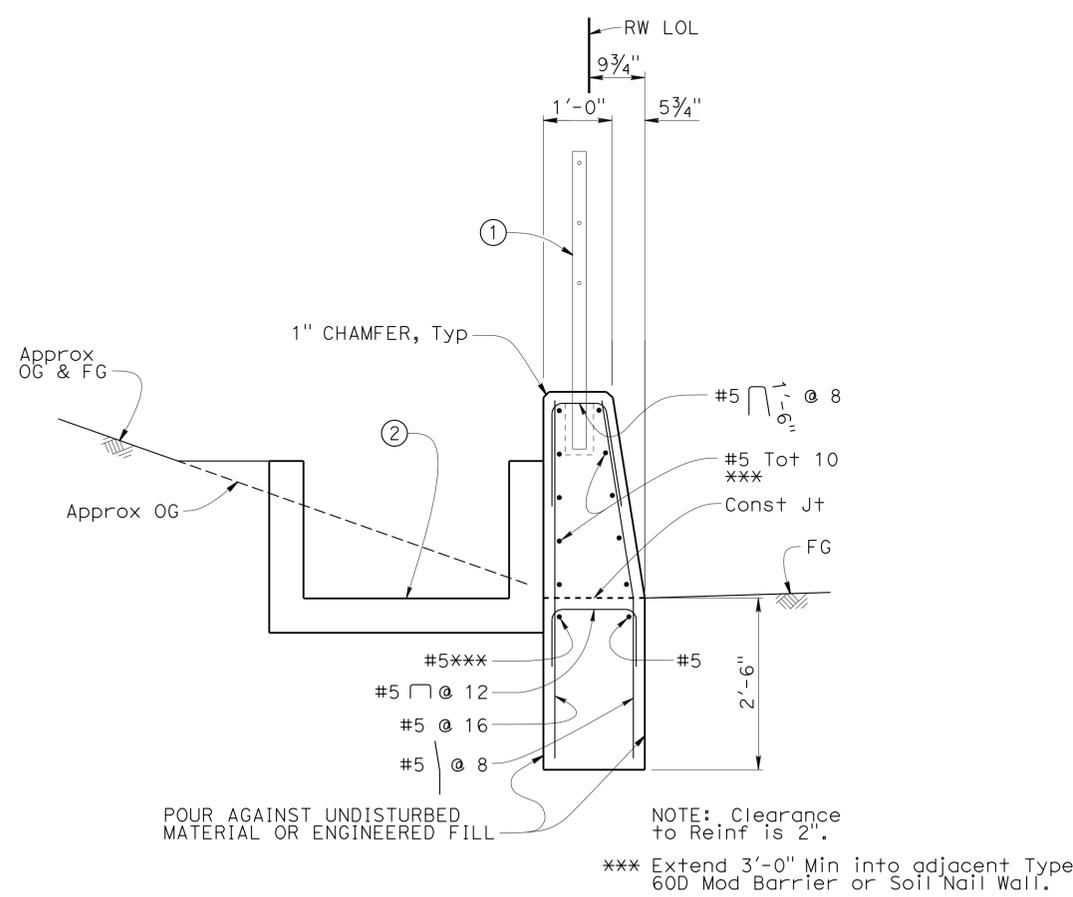
- ① Cable Railing RSP **B11-47**
- ② Concrete Gutter, see "ROAD PLANS"
- ③ Concrete Barrier Type 60D Mod **A76A**
- ④ Architectural Treatment
- ⑤ Geocomposite Drain
- ⑥ For soil nail details, see "SOIL NAIL ASSEMBLY" sheet



TYPICAL SECTION

$\frac{3}{4}'' = 1'-0''$

NOTE
For Reinf shown but not noted,
see, "SOIL NAIL ASSEMBLY"
sheet



TYPE 736B MODIFIED

$\frac{3}{4}'' = 1'-0''$

NOTE: Clearance to Reinf is 2".
*** Extend 3'-0" Min into adjacent Type 60D Mod Barrier or Soil Nail Wall.

DESIGN	BY Matthew Schott	CHECKED Michael Pope
DETAILS	BY Matthew Schott	CHECKED Michael Pope
QUANTITIES	BY Matthew Schott	CHECKED Michael Pope

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 18

BRIDGE NO.	53E0303
POST MILE	39.97

RETAINING WALL NO. 2110
TYPICAL SECTION

TIME PLOTTED => 15:55
18-MAY-2015
DATE PLOTTED => 8:25:24
USER NAME =>

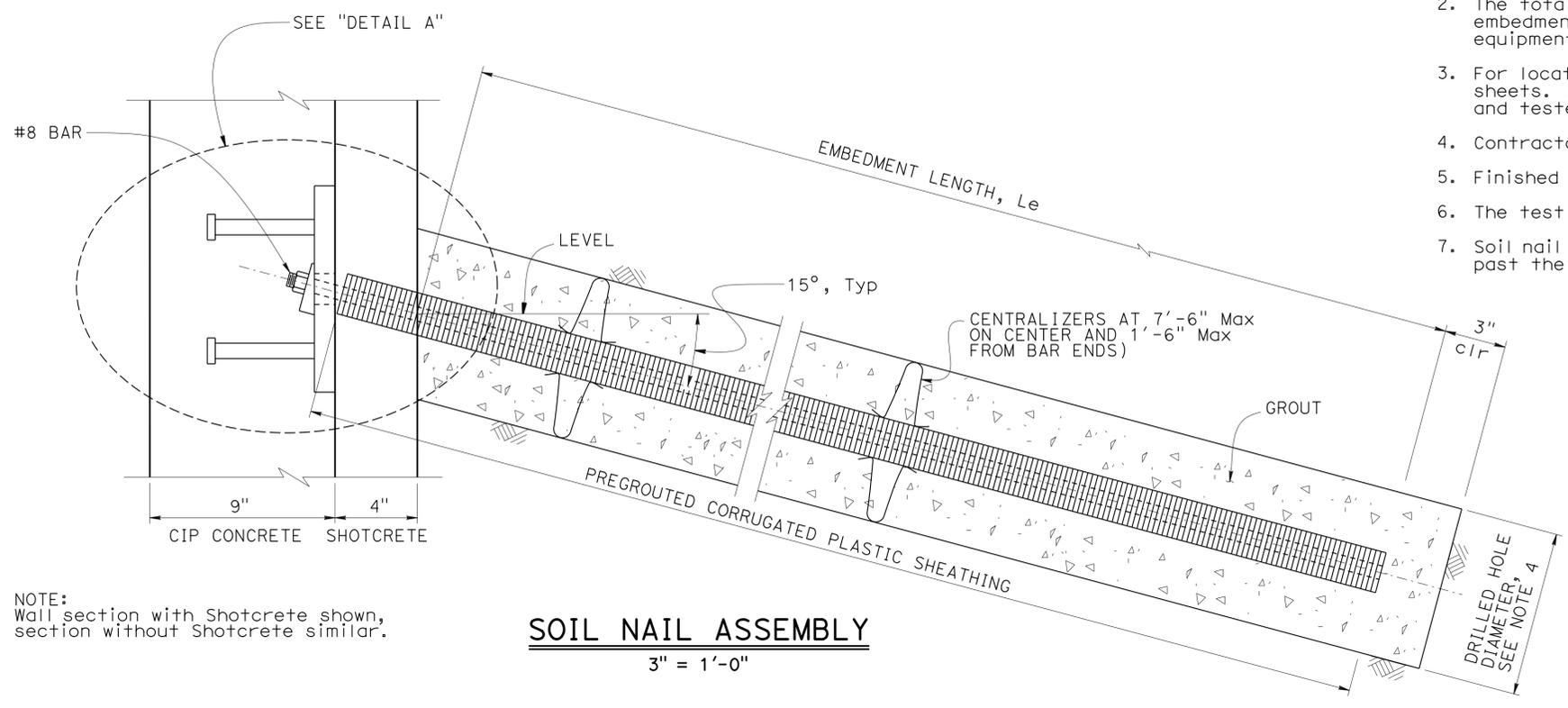
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1971	2313

<i>Richard Schendel</i>		10/01/14
REGISTERED CIVIL ENGINEER	DATE	
6-1-15		
PLANS APPROVAL DATE		

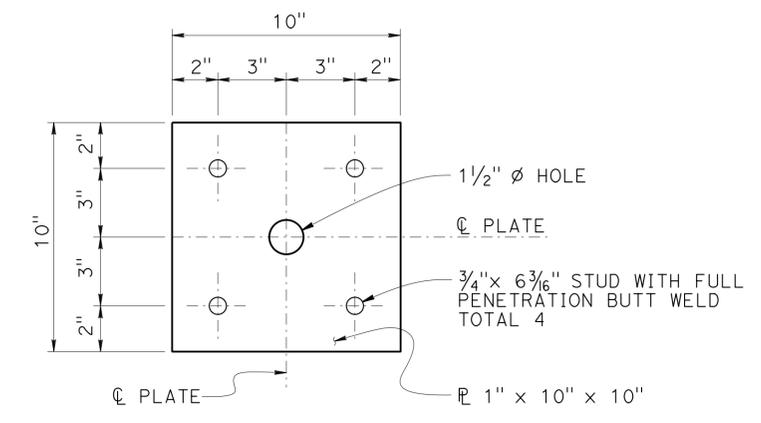
RICHARD E. SCHENDEL	
No. C 64259	
Exp. 06/30/15	
CIVIL	
STATE OF CALIFORNIA	

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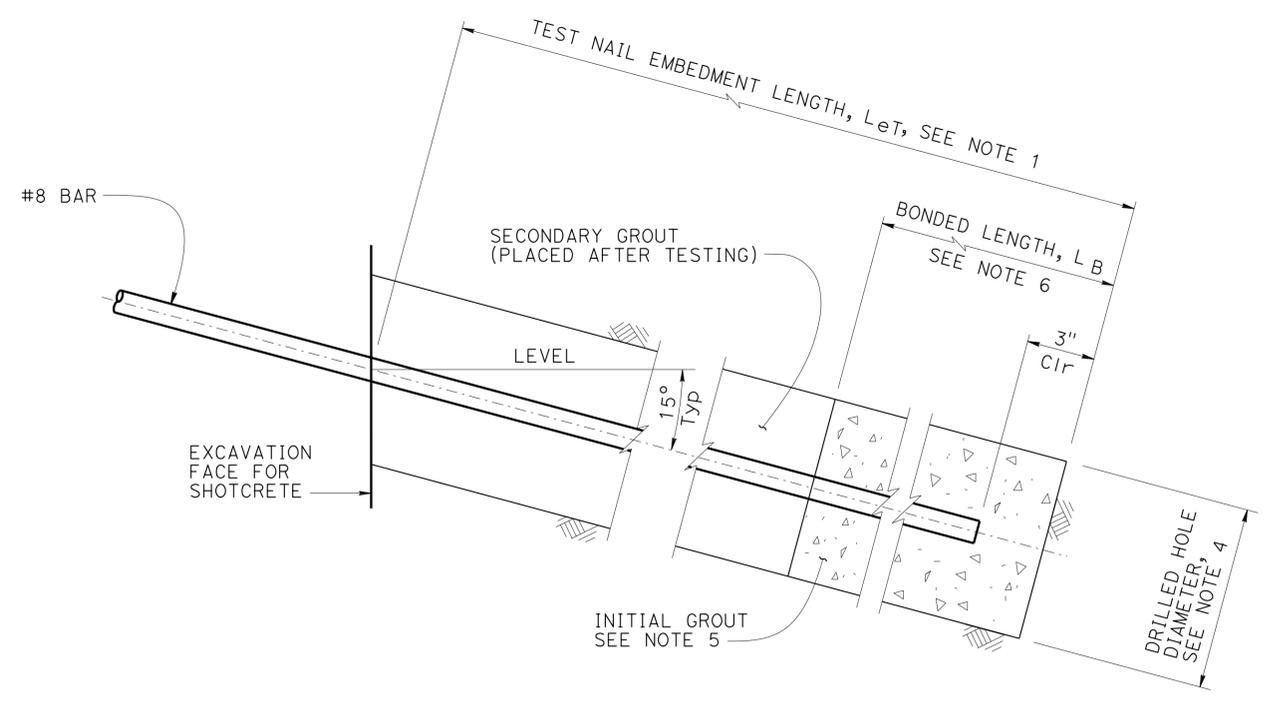
- NOTES:
1. The test nail embedment length L_{eT} , must be 10'-0".
 2. The total length of the test nail assembly equals the embedment length plus the length required for jacking equipment.
 3. For location of proof test nails, see "STRUCTURE PLAN" sheets. Additional proof test nails shall be installed and tested per special provisions.
 4. Contractor to determine drilled hole diameter.
 5. Finished grout surface to be normal to the bar.
 6. The test nail bonded length, L_B , must be 8'-0".
 7. Soil nail and test soil nail assemblies must not extend past the R/W line.



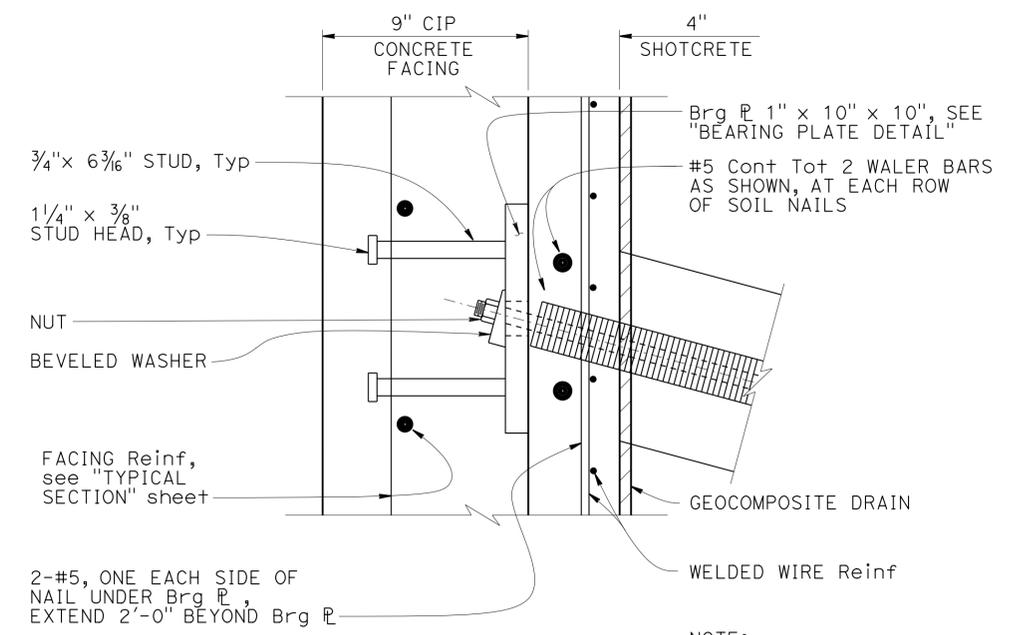
SOIL NAIL ASSEMBLY
3" = 1'-0"



BEARING PLATE DETAIL
3" = 1'-0"



TEST NAIL DETAIL
3" = 1'-0"



DETAIL A
3" = 1'-0"

NOTE:
Wall section with Shotcrete shown, section without Shotcrete similar.

DESIGN	BY Matthew Schott	CHECKED Michael Pope
DETAILS	BY Richard Schendel	CHECKED Matthew Schott
QUANTITIES	BY Matthew Schott	CHECKED Michael Pope

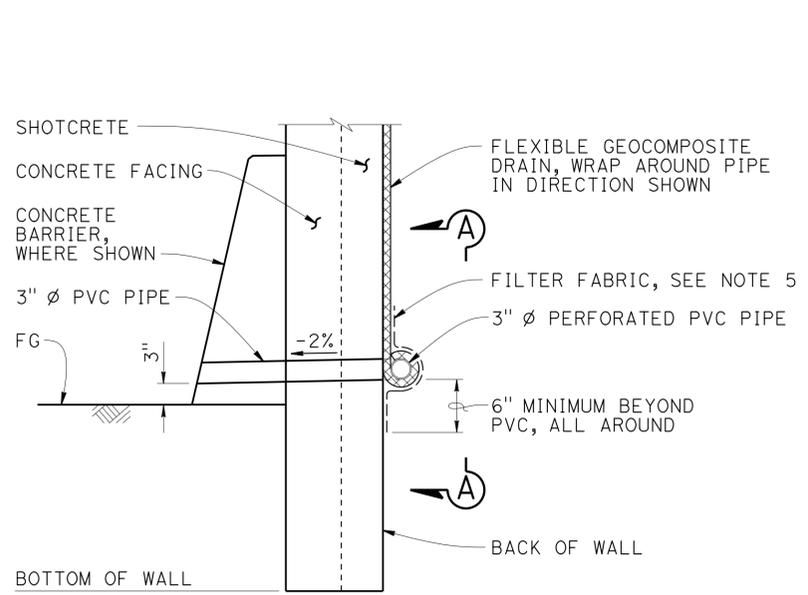
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
BRIDGE NO. 53E0303
POST MILE 39.97
DESIGN BRANCH 18

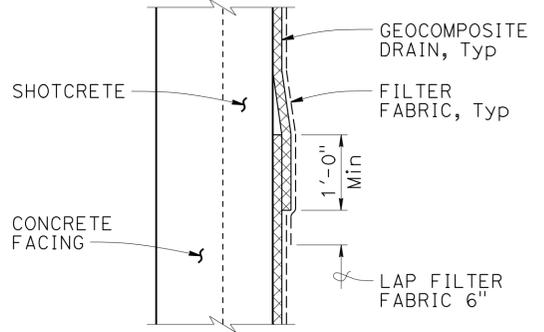
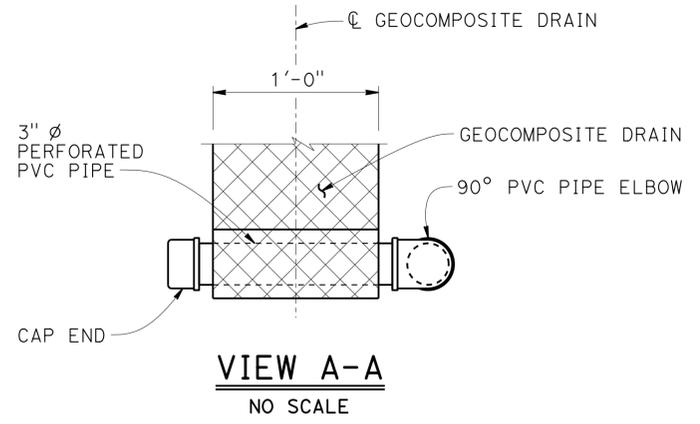
RETAINING WALL NO. 2110
SOIL NAIL ASSEMBLY

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1972	2313

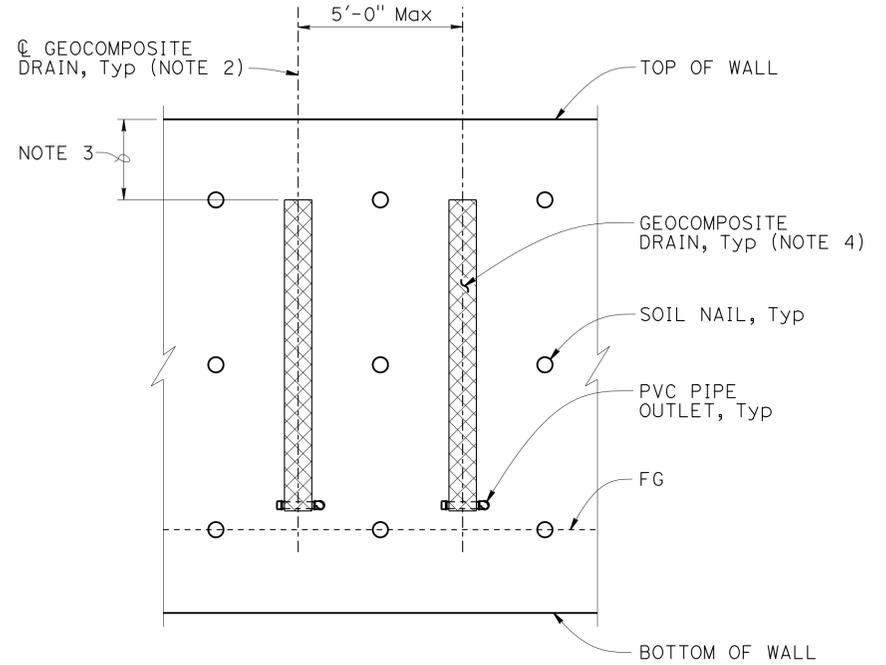
Richard Schendel
 REGISTERED CIVIL ENGINEER DATE 10/01/14
 6-1-15
 PLANS APPROVAL DATE
 RICHARD E. SCHENDEL
 No. C64259
 Exp. 6-30-15
 CIVIL
 STATE OF CALIFORNIA
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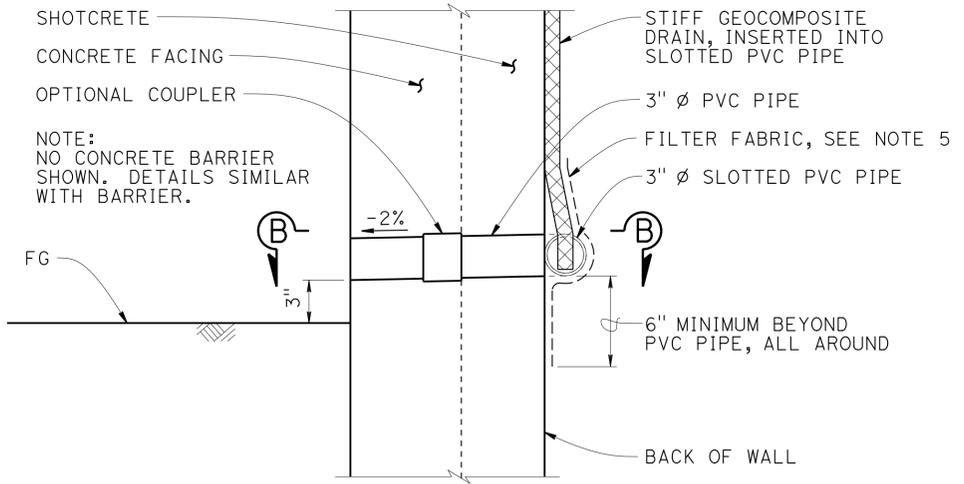
WALL DRAIN DETAIL AT WEEP HOLE - OPTION A
NO SCALE



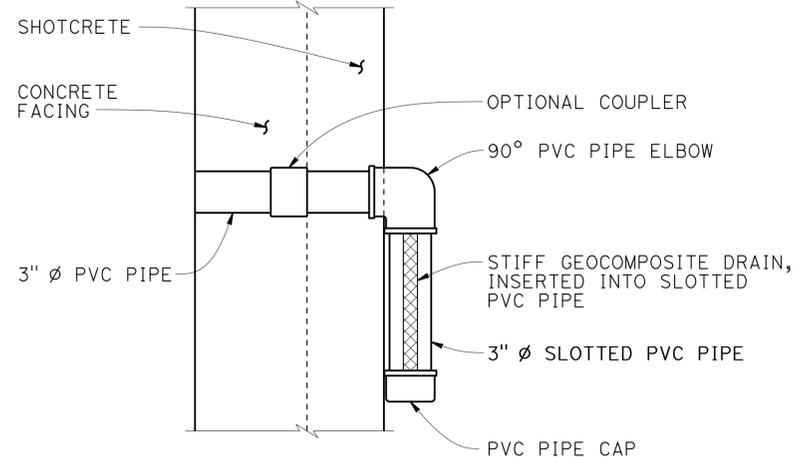
DRAIN SPLICE
NO SCALE



WALL PART ELEVATION
NO SCALE



WALL DRAIN DETAIL AT WEEP HOLE - OPTION B
NO SCALE



SECTION B-B
NO SCALE

- NOTES:
1. Geocomposite Drain is per Section 88 Geosynthetics of the Standard Specifications.
 2. Center Geocomposite Drains between soil nail columns.
 3. Begin Geocomposite Drain at top soil nail row.
 4. Geocomposite Drains must have filter fabric on soil side and wrapped around top and side edges.
 5. Provide filter fabric where necessary to prevent soil from entering drain.
 6. Alternative drain outlet details may be submitted for Engineer's approval.

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY Richard Schendel	CHECKED Matthew Schott	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 18	BRIDGE NO.	RETAINING WALL NO. 2110 DRAINAGE DETAILS
	DETAILS	BY Richard Schendel	CHECKED Matthew Schott			53E0303	
	QUANTITIES	BY Matthew Schott	CHECKED Michael Pope			POST MILE 39.97	
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS					UNIT: 3603 PROJECT NUMBER & PHASE: 07 1300 0007 1	CONTRACT NO.: 07-1193U1	DISREGARD PRINTS BEARING EARLIER REVISION DATES
						REVISION DATES	SHEET 7 OF 14

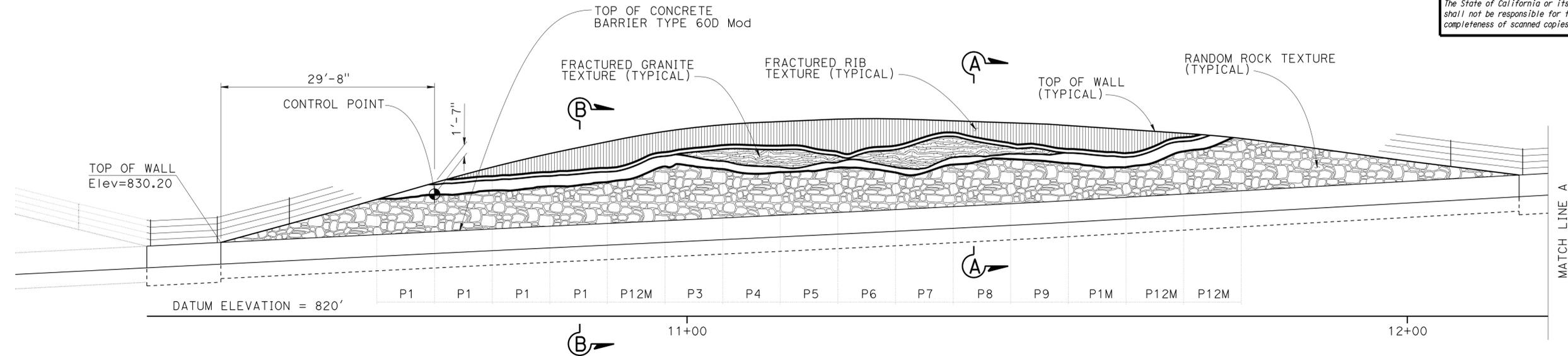
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1973	2313

Richard E. Schendel
REGISTERED CIVIL ENGINEER DATE 10/01/14

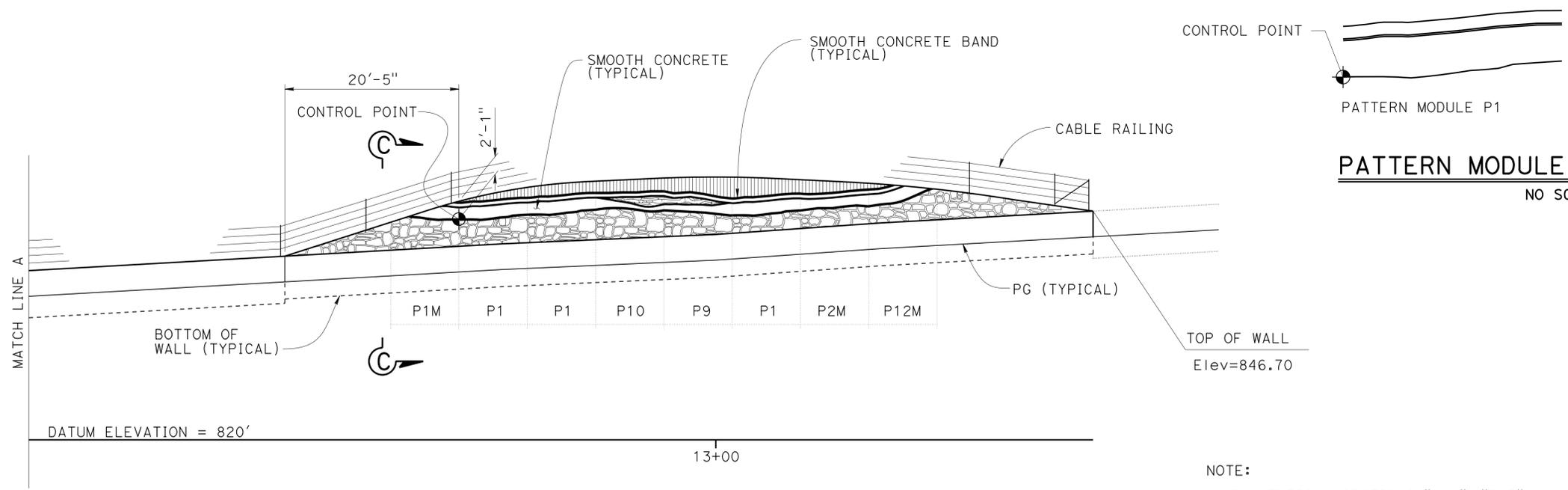
6-1-15
PLANS APPROVAL DATE

RICHARD E. SCHENDEL
No. C64259
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

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DEVELOPED ELEVATION
NO SCALE



PATTERN MODULE LAYOUT DETAIL
NO SCALE

NOTE:
Begin layout of pattern modules at control point for P1 and continue to place plumb each module at corresponding match lines for limits of pattern modules.

DEVELOPED ELEVATION
NO SCALE

- NOTE:
1. For TYPICAL SECTIONS "A-A", "B-B", and "C-C", see "ARCHITECTURAL DETAILS NO. 2" sheet.
 2. For details of Fractured Rib, Fractured Granite, and Random Rock Textures, see "ARCHITECTURAL DETAILS No. 3" sheet.
 3. For Pattern Modules, see "ARCHITECTURAL DETAILS NO. 4 & NO. 5" sheets.

DESIGN	BY Valerie Moore	CHECKED Matthew Schott
DETAILS	BY Farideh Hosseinioun	CHECKED Matthew Schott
QUANTITIES	BY Matthew Schott	CHECKED Michael Pope

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 18

BRIDGE NO.	53E0303
POST MILE	39.97

RETAINING WALL NO. 2110
ARCHITECTURAL DETAILS NO. 1

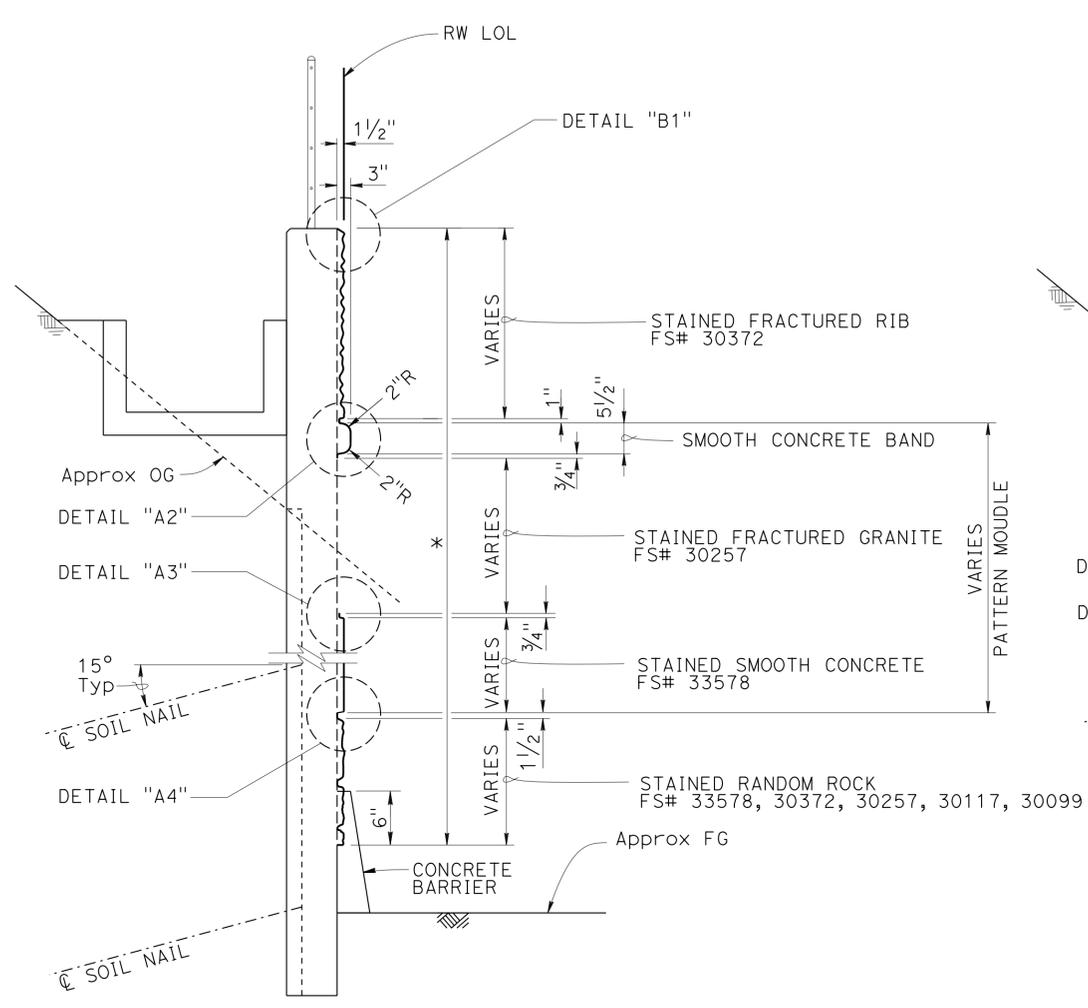
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1974	2313

Richard E. Schendel
REGISTERED CIVIL ENGINEER DATE 10/01/14

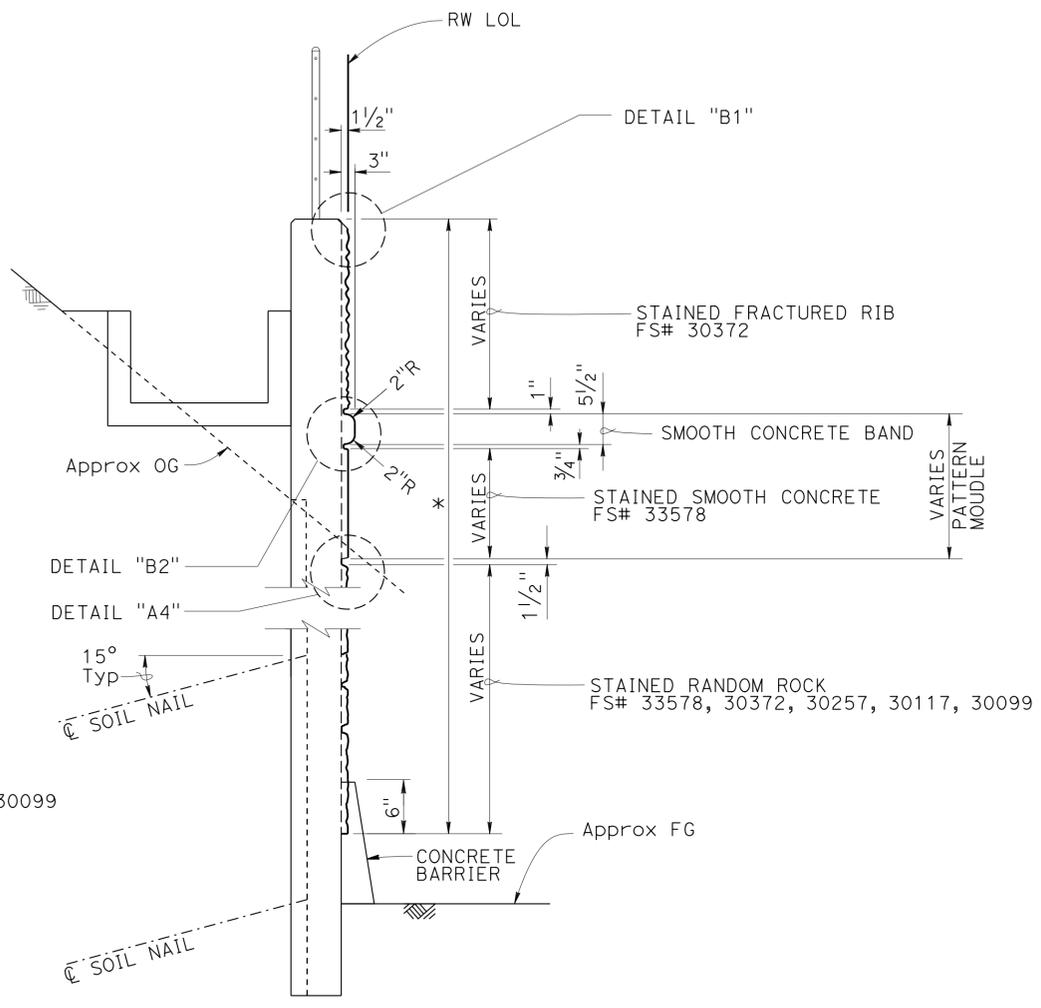
6-1-15
PLANS APPROVAL DATE

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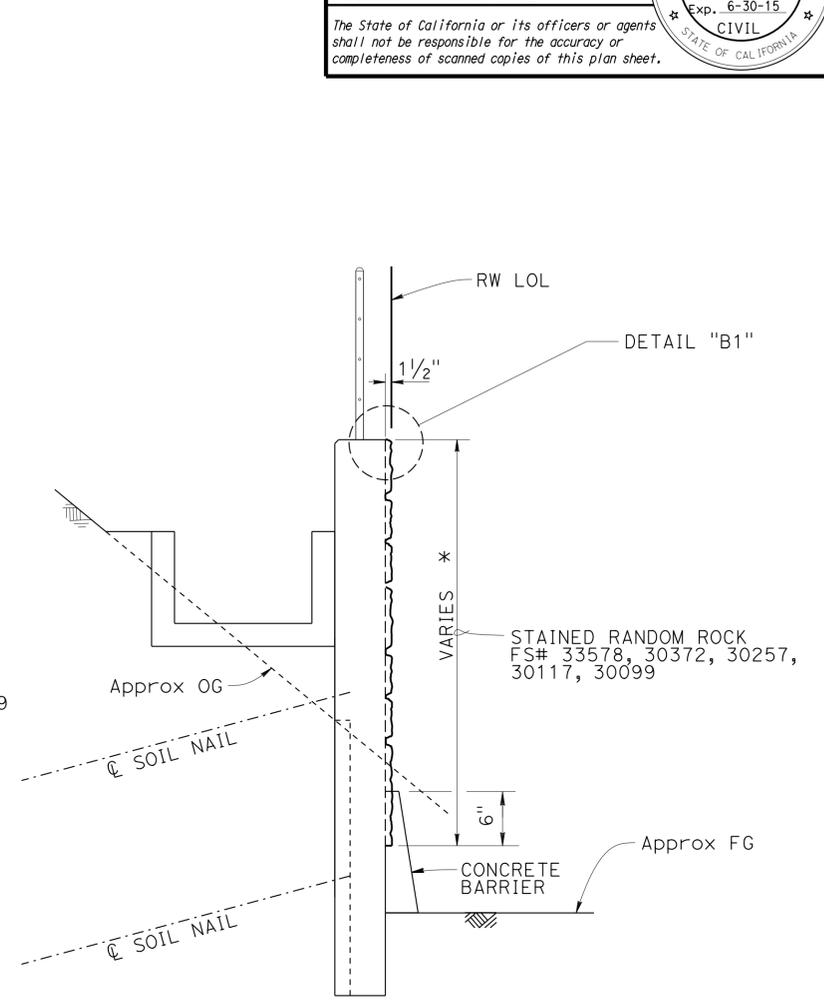
RICHARD E. SCHEDEL
REGISTERED PROFESSIONAL ENGINEER
No. C64259
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA



TYPICAL SECTION A-A
NO SCALE



TYPICAL SECTION B-B
NO SCALE



TYPICAL SECTION C-C
NO SCALE

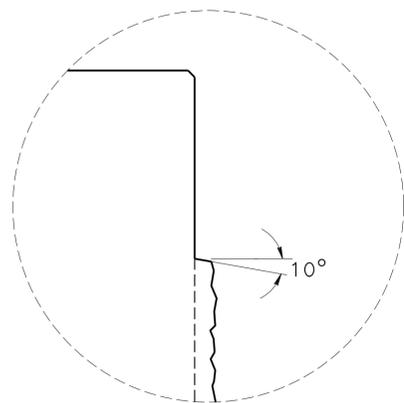
LEGEND

* Indicates pay limits of Concrete Surface Texture

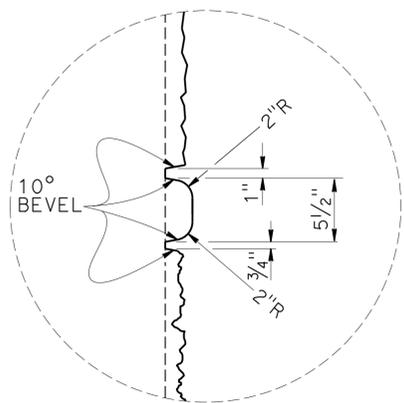
- NOTES:
1. For DETAILS "A2", "A3", "A4", "B1", and "B2", see "ARCHITECTURAL DETAILS NO. 3" sheet.
 2. "FS#" is Federal Standard color number.

DESIGN	BY	Valerie Moore	CHECKED	Matthew Schott	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 18	BRIDGE NO.	53E0303	RETAINING WALL NO. 2110 ARCHITECTURAL DETAILS NO. 2	
	DETAILS	BY	Farideh Hosseinioun	CHECKED			Matthew Schott	POST MILE		39.97
QUANTITIES	BY	Matthew Schott	CHECKED	Michael Pope	UNIT: 3603	PROJECT NUMBER & PHASE: 07 1300 0007 1	CONTRACT NO.: 07-1193U1	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 9 OF 14

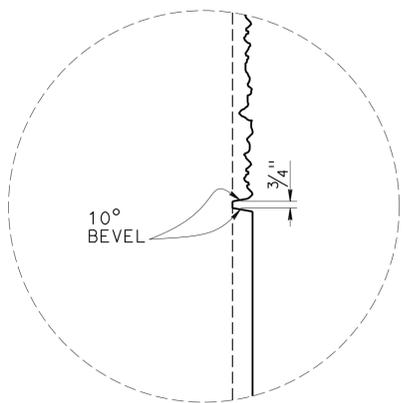
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1975	2313
<i>Richard Schendel</i> REGISTERED CIVIL ENGINEER			10/01/14 DATE	RICHARD E. SCHEDEL No. C64259 Exp. 6-30-15 CIVIL STATE OF CALIFORNIA	
6-1-15 PLANS APPROVAL DATE					
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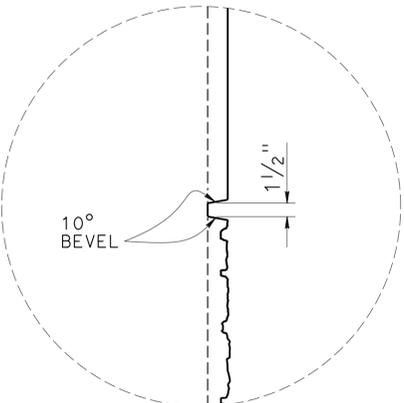
DETAIL A1
NO SCALE



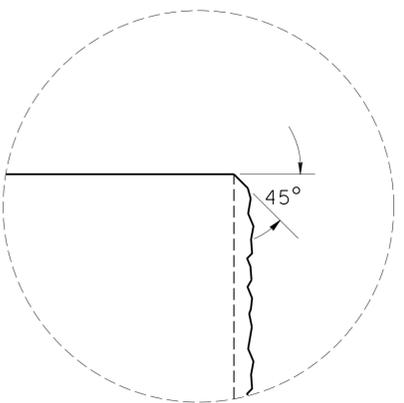
DETAIL A2
NO SCALE



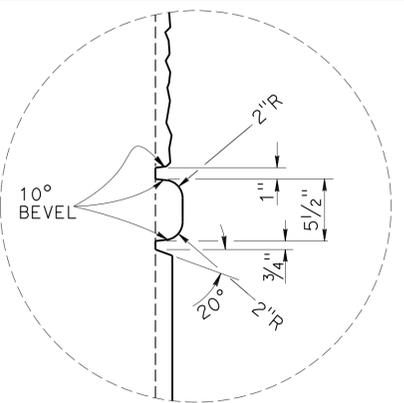
DETAIL A3
NO SCALE



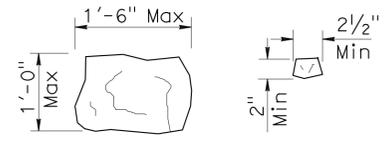
DETAIL A4
NO SCALE



DETAIL B1
NO SCALE

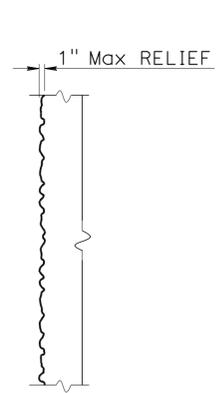


DETAIL B2
NO SCALE

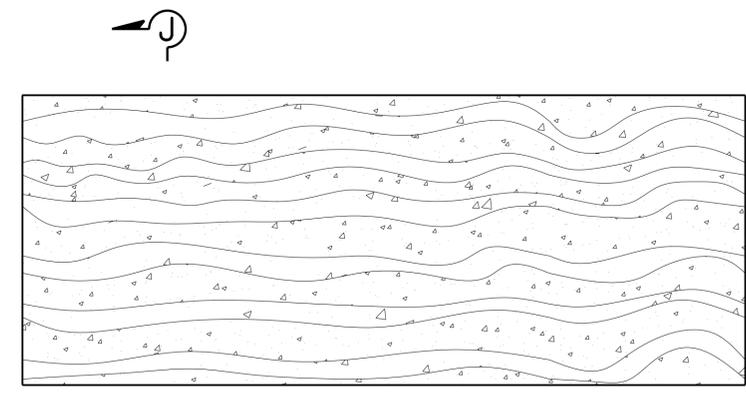


ROCK SIZE

NOTE:
Seamless Random Rock pattern to have a minimum of 2 to a maximum of 4 match points (denoted by "M") for each side (top to bottom and side to side).

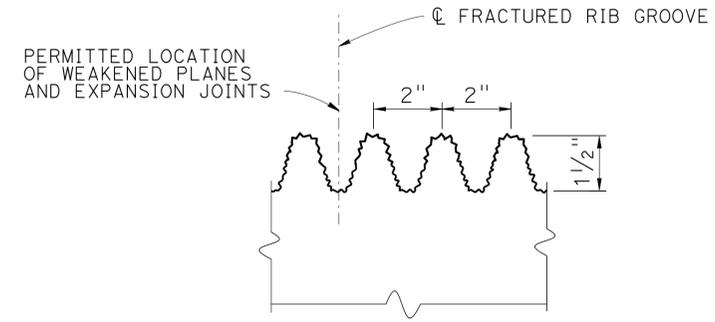


SECTION J-J

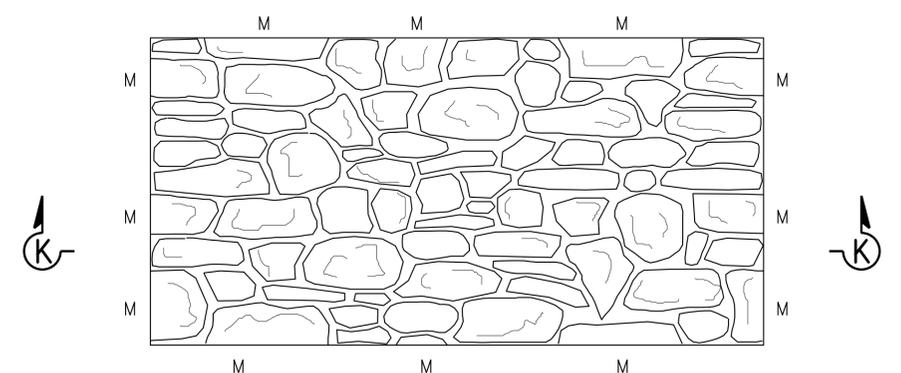


ELEVATION

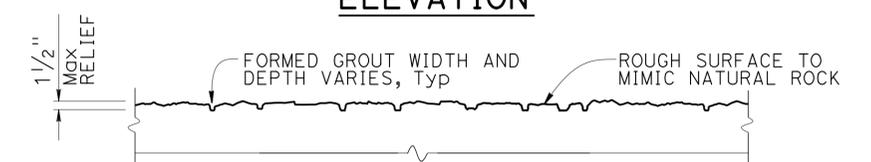
FRACTURED GRANITE TEXTURE
NO SCALE



FRACTURED RIB TEXTURE - SECTION
NO SCALE



ELEVATION



SECTION K-K

RANDOM ROCK TEXTURE
NO SCALE

DESIGN	BY Valerie Moore	CHECKED Matthew Schott
DETAILS	BY Farideh Hosseinioun	CHECKED Matthew Schott
QUANTITIES	BY Matthew Schott	CHECKED Michael Pope

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 18

BRIDGE NO.	53E0303
POST MILE	39.97

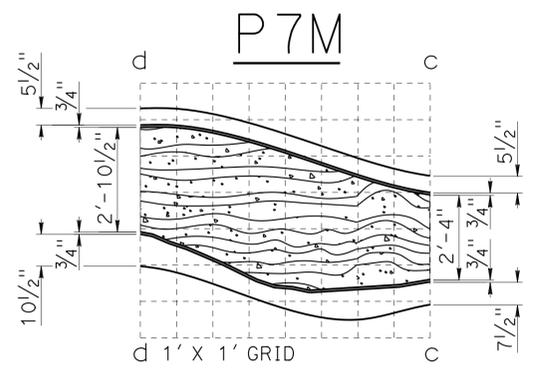
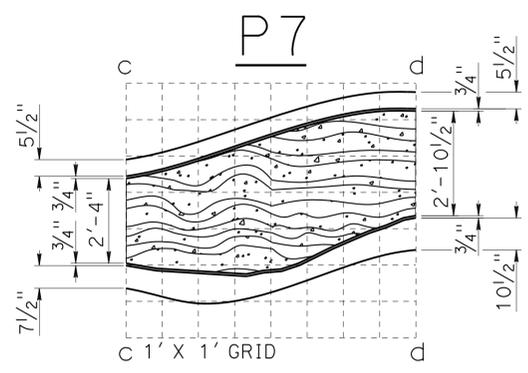
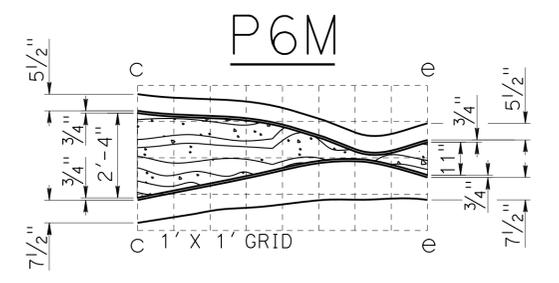
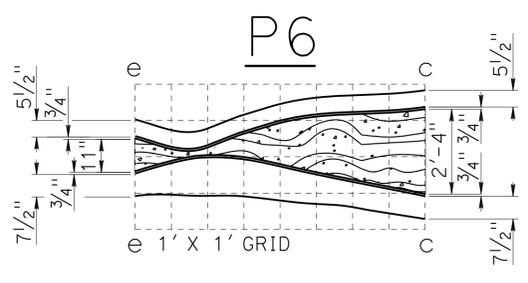
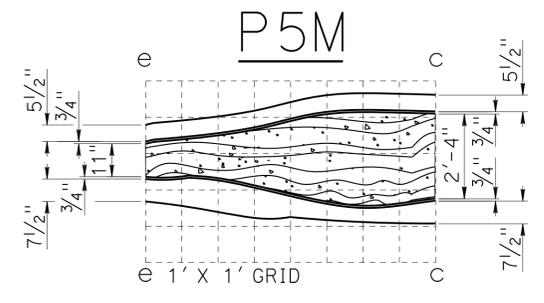
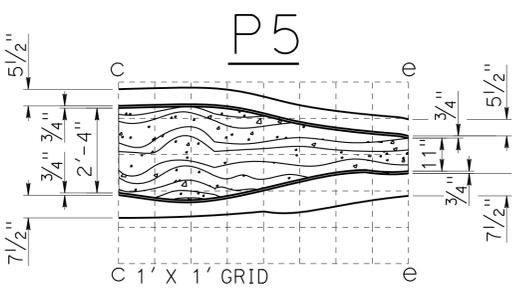
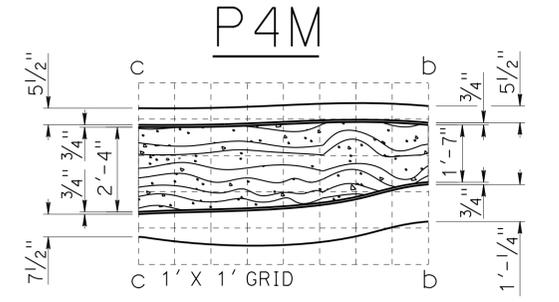
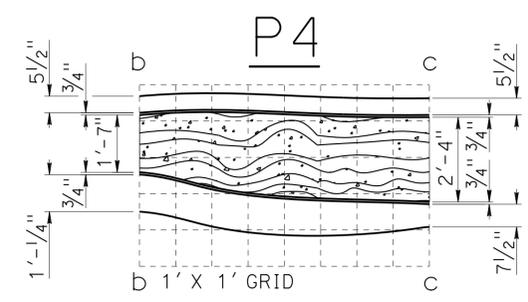
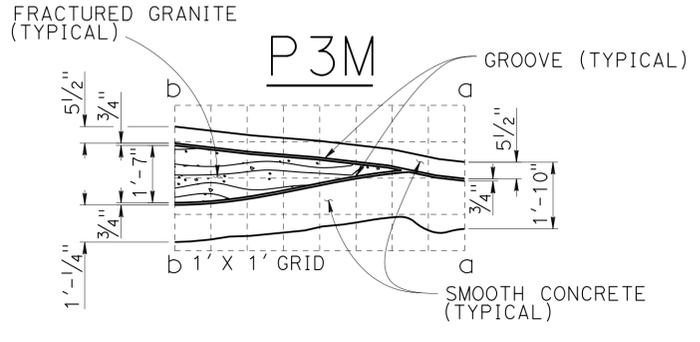
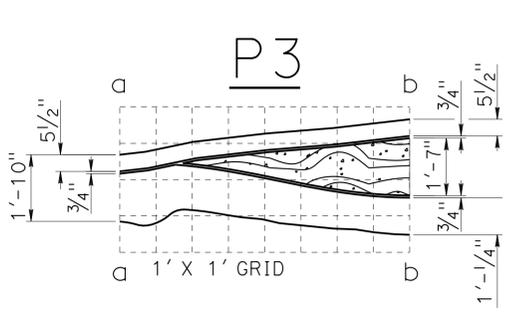
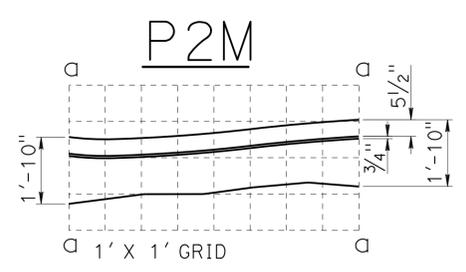
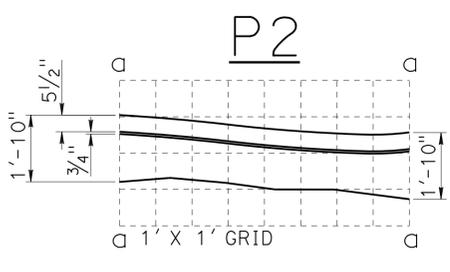
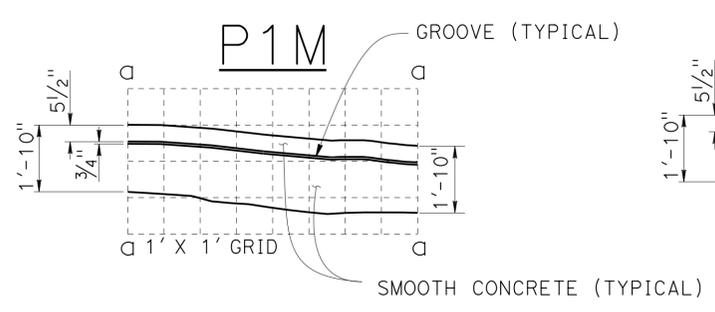
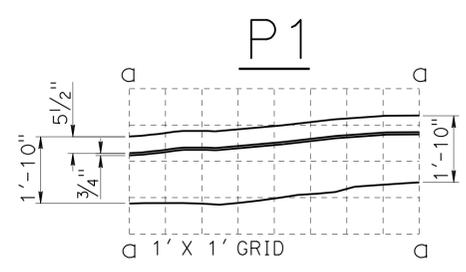
RETAINING WALL NO. 2110
ARCHITECTURAL DETAILS NO. 3

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1976	2313

<i>Richard Schendel</i>	10/01/14
REGISTERED CIVIL ENGINEER	DATE
6-1-15	
PLANS APPROVAL DATE	

RICHARD E. SCHENDEL
No. C64259
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

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- NOTES:
1. Fractured Granite texture at match lines a-a, b-b, c-c, d-d, and e-e must match seamlessly between the interchangeable modules.
 2. Fractured Rib and Random Rock Textures not shown for clarity.

INTERCHANGEABLE PATTERN MOTIF MODULES
NO SCALE

DESIGN	BY Valerie Moore	CHECKED Matthew Schott
DETAILS	BY Farideh Hosseinioun	CHECKED Matthew Schott
QUANTITIES	BY Matthew Schott	CHECKED Michael Pope

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 18

BRIDGE NO.	53E0303
POST MILE	39.97

RETAINING WALL NO. 2110
ARCHITECTURAL DETAILS NO. 4

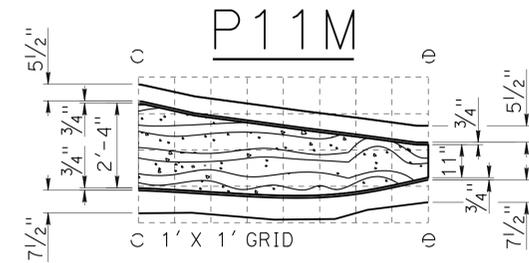
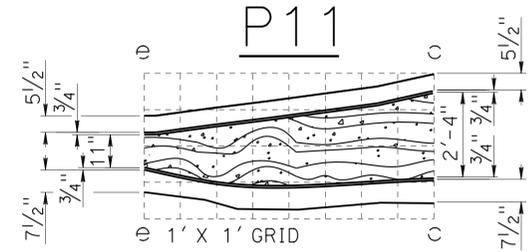
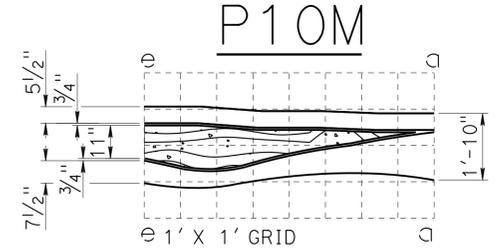
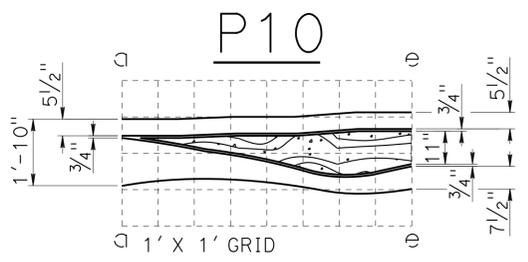
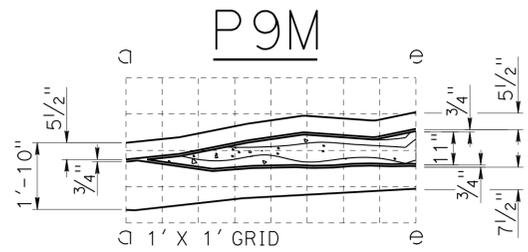
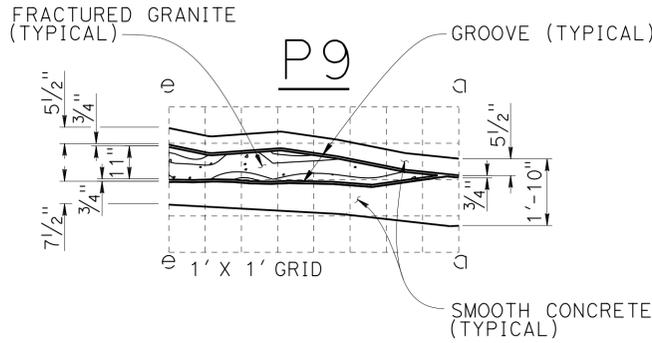
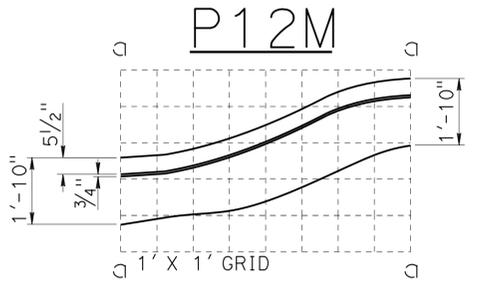
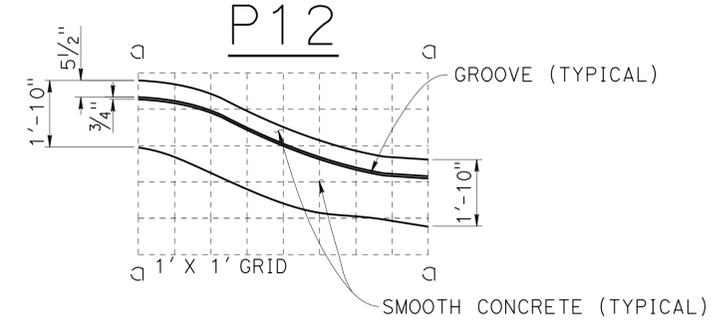
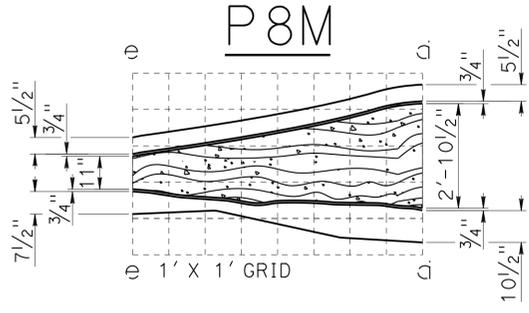
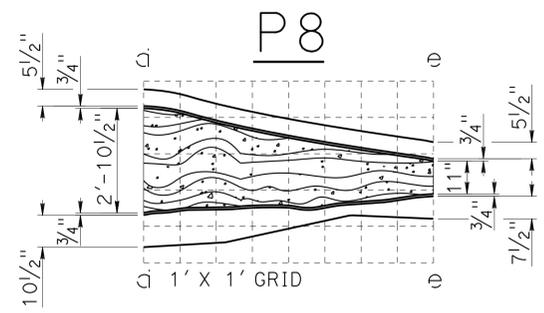
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1977	2313

Richard E. Schendel
REGISTERED CIVIL ENGINEER DATE 10/01/14

6-1-15
PLANS APPROVAL DATE

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- NOTES:
1. Fractured Granite texture at match lines a-a, b-b, c-c, d-d, and e-e must match seamlessly between the interchangeable modules.
 2. Fractured Rib and Random Rock Textures not shown for clarity.

INTERCHANGEABLE PATTERN MOTIF MODULES
NO SCALE

DESIGN	BY Valerie Moore	CHECKED Matthew Schott
DETAILS	BY Farideh Hosseinioun	CHECKED Matthew Schott
QUANTITIES	BY Matthew Schott	CHECKED Michael Pope

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 18

BRIDGE NO.	53E0303
POST MILE	39.97

RETAINING WALL NO. 2110
ARCHITECTURAL DETAILS NO. 5

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	10	37.2/42.4	1978	2313


 CERTIFIED ENGINEERING GEOLOGIST
 1-21-14
 6-1-15
 PLANS APPROVAL DATE

PROFESSIONAL GEOLOGIST

Michael A. Salisbury

No. 2462

Exp. 2-28-15

CERTIFIED ENGINEERING GEOLOGIST

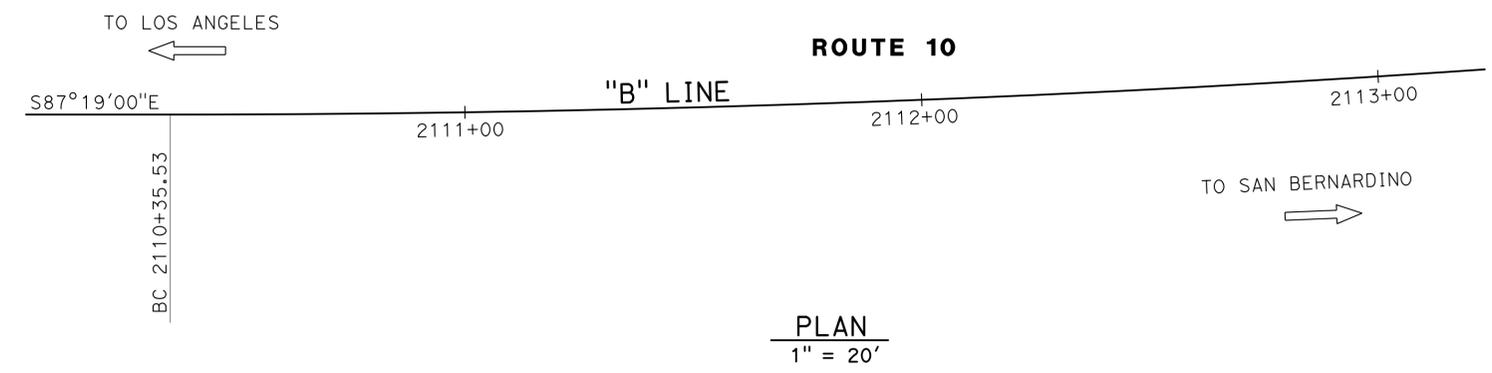
STATE OF CALIFORNIA

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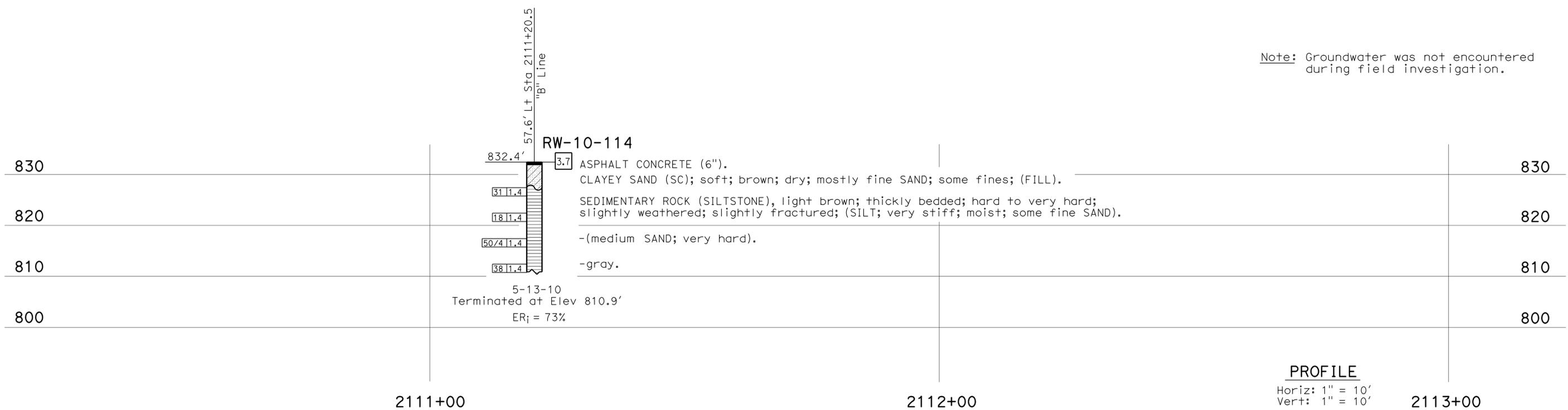
BENCH MARK

SUHV 1608 Elev 925.672
 Fd PK N, in Shldr of Via Verde
 W/B On Ramp.
 NAVD88

RW-10-114
3.7



Note: Groundwater was not encountered during field investigation.



PROFILE
 Horiz: 1" = 10'
 Vert: 1" = 10'

ENGINEERING SERVICES		MATERIALS AND GEOTECHNICAL SERVICES		STATE OF CALIFORNIA	DIVISION OF ENGINEERING SERVICES	BRIDGE NO.	RETAINING WALL NO. 2110	
FUNCTIONAL SUPERVISOR	DRAWN BY: I.G-Remmen, 11/12	FIELD INVESTIGATION BY:		DEPARTMENT OF TRANSPORTATION	STRUCTURE DESIGN	53E0303	LOG OF TEST BORINGS 1 OF 2	
NAME: D. Jang	CHECKED BY: H. Liu	M. Salisbury			DESIGN BRANCH 18	POST MILE		
06S CIVIL LOG OF TEST BORINGS SHEET		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		0 1 2 3	UNIT: 3643	CONTRACT NO.: 07-1193U1	DISREGARD PRINTS BEARING EARLIER REVISION DATES	
					PROJECT NUMBER & PHASE: 07130000071	REVISION DATES		SHEET OF
					FILE => 53e0303-z-10tb01.dgn	09-03-13	09-04-13	11-14-13
						01-21-14	13	14

USERNAME => s125624 DATE PLOTTED => 16-MAY-2015 TIME PLOTTED => 15:55

FOR PLAN VIEW SEE
"LOG OF TEST BORINGS" 1 OF 2

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	10			

W.C. Cain
CERTIFIED ENGINEERING GEOLOGIST

REGISTERED GEOLOGIST
W.C. CAIN
No. 732
Exp. 8-30-94
CERTIFIED ENGINEERING GEOLOGIST
STATE OF CALIFORNIA

PLANS APPROVAL DATE _____

LEGEND OF BORING OPERATIONS

2 1/4" CONE PENETROMETER TEST
Pressure measured on top of penetrometer (150 cm² area) divided by pressure measured on top of penetrometer (10 cm² area)

2 1/4" CONE PENETROMETER TEST
Cone Penetration Test and bearing procedures are in accordance with ASTM standard D 3641-79, or its revision.

ROTARY SAMPLE BORING (WET)
Borehole diameter
Description of material
Unit weight (B.C.U. ft)
% moisture
Unconfined compression strength (1/4 in. dia.)
Compressive material change
Unconformable material change

2 1/4" CONE PENETROMETER TEST
No count recorded
Driving rate in seconds
Blow count (Using No. 2 hammer at 115 psi or as noted)

LEGEND OF EARTH MATERIALS

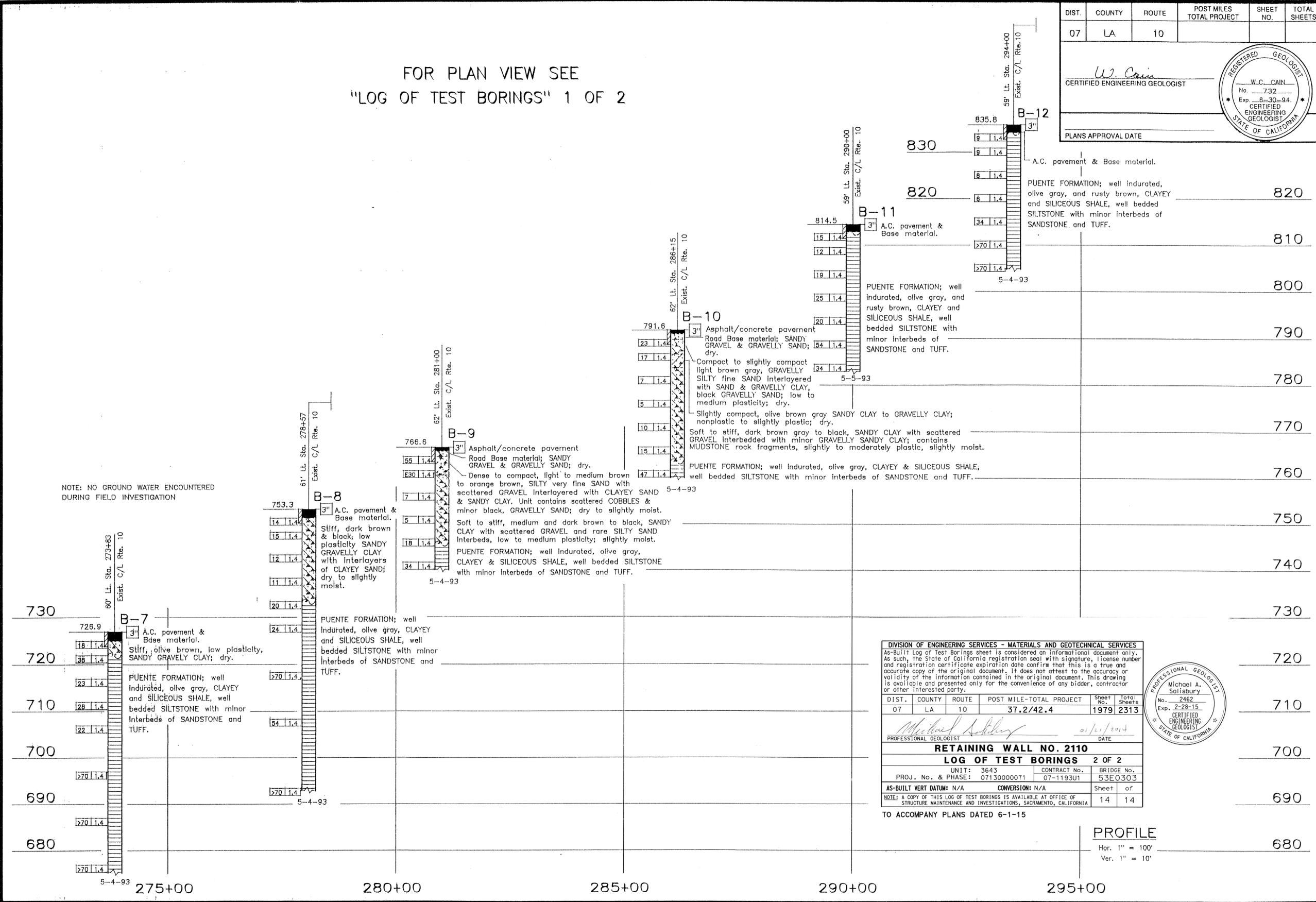
GRAVEL
SAND
SILT
CLAY
SANDY CLAY or CLAYEY SAND
SANDY SILT or SILTY SAND
SILTY CLAY

CLAYEY SILT
BEST SOFT ORGANIC MATTER
FILL MATERIAL
GENEIOUS ROCK
RESIDUAL ROCK
METAMORPHIC ROCK

CONSISTENCY CLASSIFICATION FOR SOILS
According to the Standard Penetration Test

Penetration Index (Blows / Ft)	Consistency
0-4	Very loose
5-9	Loose
10-19	Slightly compact
20-34	Compact
35-69	Dense
>70	Very dense

NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.



DIVISION OF ENGINEERING SERVICES - MATERIALS AND GEOTECHNICAL SERVICES
 As-Built Log of Test Borings sheet is considered an informational document only. As such, the State of California registration seal with signature, license number and registration certificate expiration date confirm that this is a true and accurate copy of the original document. It does not attest to the accuracy or validity of the information contained in the original document. This drawing is available and presented only for the convenience of any bidder, contractor or other interested party.

DIST.	COUNTY	ROUTE	POST MILE-TOTAL PROJECT	Sheet No.	Total Sheets
07	LA	10	37.2/42.4	1979	2313

Michael A. Salisbury
 No. 2462
 Exp. 2-28-15
 CERTIFIED ENGINEERING GEOLOGIST
 STATE OF CALIFORNIA

DATE: 01/21/2014

RETAINING WALL NO. 2110
LOG OF TEST BORINGS 2 OF 2

UNIT: 3643 CONTRACT No. BRIDGE No.
 PROJ. No. & PHASE: 07130000071 07-1193U1 53E0303

AS-BUILT VERT DATUM: N/A CONVERSION: N/A Sheet of
 14 14

NOTE: A COPY OF THIS LOG OF TEST BORINGS IS AVAILABLE AT OFFICE OF STRUCTURE MAINTENANCE AND INVESTIGATIONS, SACRAMENTO, CALIFORNIA

TO ACCOMPANY PLANS DATED 6-1-15

DIVISION OF NEW TECHNOLOGY, MATERIALS AND RESEARCH OFFICE OF ENGINEERING GEOLOGY FIELD INVESTIGATION BY: F. GERAMI		State of CALIFORNIA DEPARTMENT OF TRANSPORTATION DIVISION OF STRUCTURES STRUCTURE DESIGN		BRIDGE NO. _____ POST MILE 37.5/42.4	
DRAWN BY: I. GAMARRA 5/93 CHECKED BY: Farahmarz Gerami 8/93	RETAINING WALL NO. 265 LOG OF TEST BORINGS 2 OF 2				SHEET 01

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

CU 07234
EA 11934K

DISREGARD PRINTS BEARING EARLIER REVISION DATES

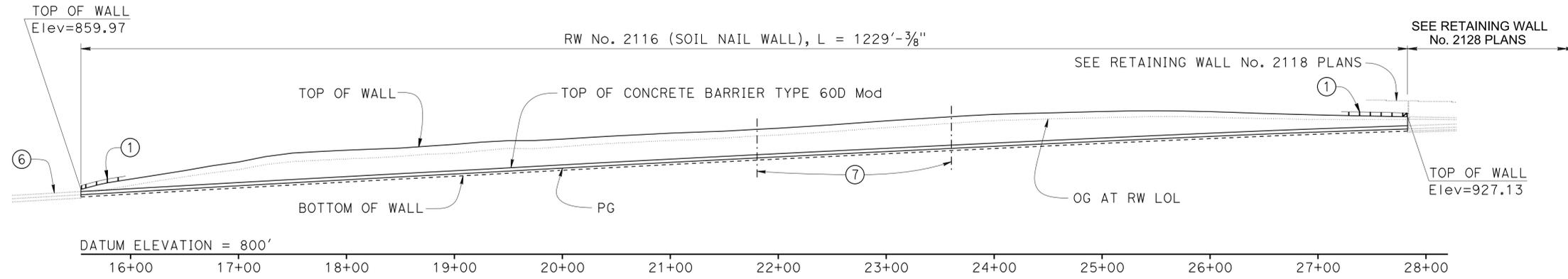
REVISION DATES (PRELIMINARY STAGE ONLY)	SHEET	OF

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1980	2313

<i>Richard E. Schendel</i>		10/01/14
REGISTERED CIVIL ENGINEER		DATE
6-1-15		
PLANS APPROVAL DATE		

REGISTERED PROFESSIONAL ENGINEER
 RICHARD E. SCHEDEL
 No. C64259
 Exp. 6-30-15
 CIVIL
 STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.

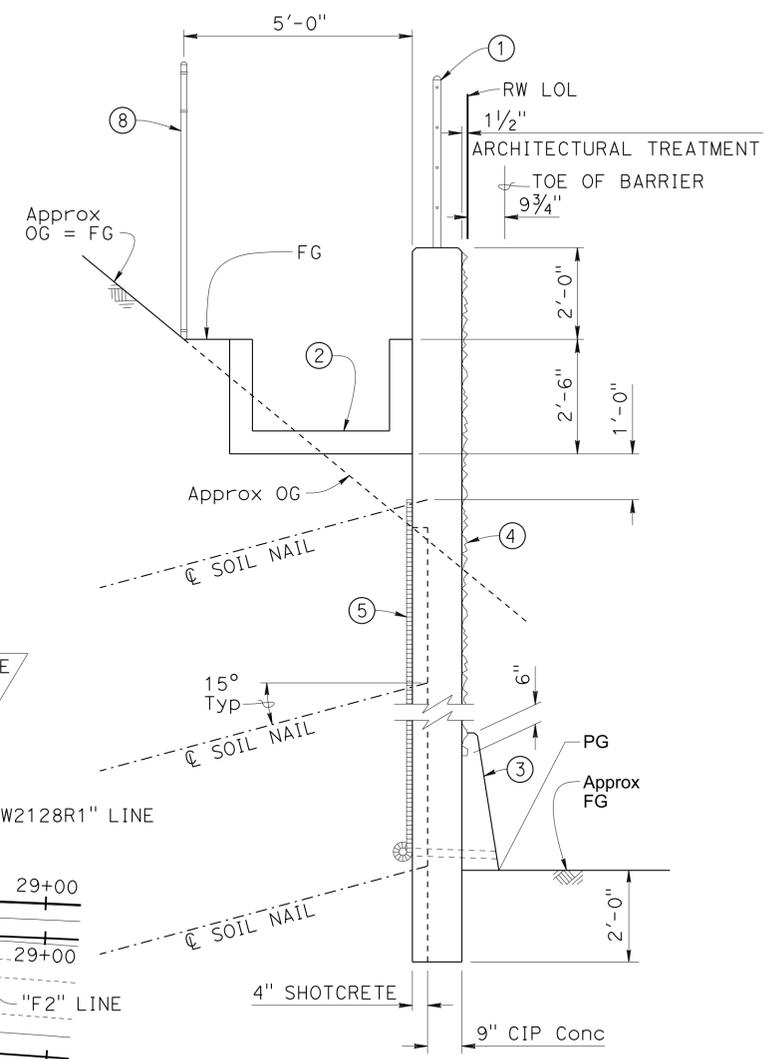


DEVELOPED ELEVATION
1" = 60'

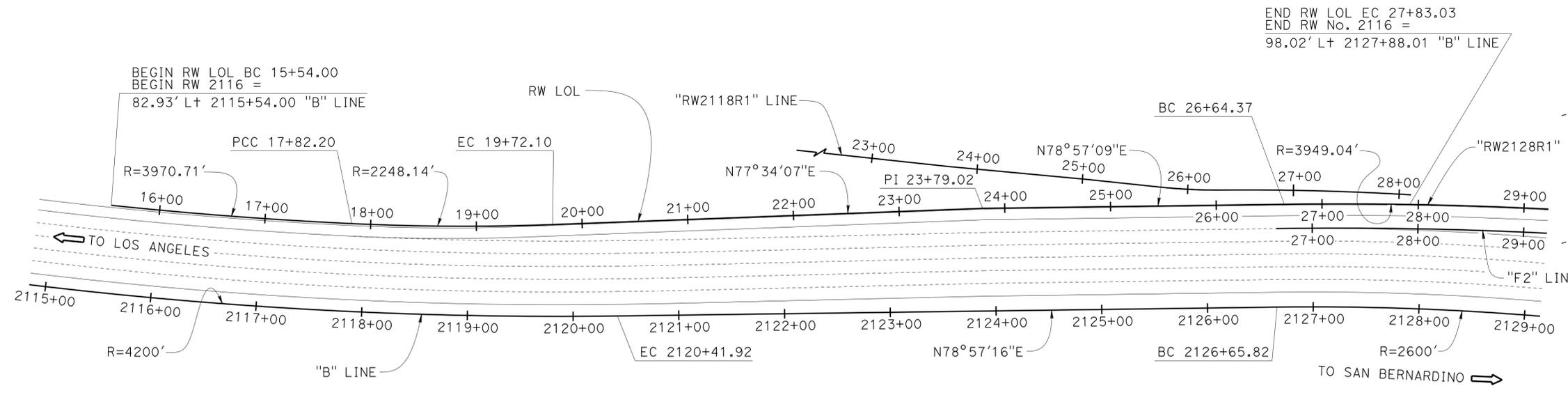
- NOTES:**
- ① Cable Railing RSP B11-47
 - ② Concrete Gutter, see "ROAD PLANS"
 - ③ Concrete Barrier Type 60D Mod A76A
 - ④ Architectural Treatment
 - ⑤ Geocomposite Drain
 - ⑥ Concrete Barrier, see "ROAD PLANS"
 - ⑦ ϕ Lighting Standard, see "ROAD PLANS"
 - ⑧ Chain Link Fence, see "ROAD PLANS" A85



For "GENERAL NOTES", "STANDARD PLANS", "QUANTITIES", and "INDEX TO PLANS", see "INDEX TO PLANS" sheet



TYPICAL SECTION
1/2" = 1'-0"



PLAN
1" = 60'

CURVE DATA RW LOL		
R = 3970.71'	R = 2248.14'	R = 3949.04'
$\Delta = 3^{\circ}17'34''$	$\Delta = 4^{\circ}50'23''$	$\Delta = 1^{\circ}43'18''$
T = 114.13'	T = 95.01'	T = 59.33'
L = 228.20'	L = 189.90'	L = 118.66'

CURVE DATA "B" LINE	
R = 4200.00'	R = 2600.00'
$\Delta = 13^{\circ}43'44''$	$\Delta = 30^{\circ}34'09''$
T = 505.61'	T = 710.53'
L = 1006.39'	L = 1387.18'

MICHAEL POPE DESIGN ENGINEER	DESIGN BY Matthew Schott	CHECKED Michael Pope	LOAD & RESISTANCE FACTOR DESIGN	LIVE LOADING: HL93 W/"LOW-BOY"; PERMIT DESIGN VEHICLE	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 18	BRIDGE NO. 53E0304	RETAINING WALL NO. 2116 GENERAL PLAN
	DETAILS BY Matthew Schott	CHECKED Michael Pope	LAYOUT BY Matthew Schott	CHECKED Michael Pope			POST MILE 40.07	
	QUANTITIES BY Matthew Schott	CHECKED Michael Pope	SPECIFICATIONS BY Xiaodong Chen	CHECKED Xiaodong Chen				

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

UNIT: 3603 PROJECT NUMBER & PHASE: 07 1300 0007 1 CONTRACT NO.: 07-1193U1

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
01/15/14 03/05/14 12/08/15	1	19

STRUCTURES DESIGN GENERAL PLAN SHEET (ENGLISH) (REV.09-01-10) FILE => 53e0304-a-gp01.dgn

STANDARD PLANS DATED 2010

SHEET NO.	TITLE
A10A	ABBREVIATIONS (SHEET 1 OF 2)
RSP A10B	ABBREVIATIONS (SHEET 2 OF 2)
A10C	LINES AND SYMBOLS (SHEET 1 OF 3)
A10D	LINES AND SYMBOLS (SHEET 2 OF 3)
A10E	LINES AND SYMBOLS (SHEET 3 OF 3)
A10F	LEGEND - SOIL (SHEET 1 OF 2)
A10G	LEGEND - SOIL (SHEET 2 OF 2)
A10H	LEGEND - ROCK
A76A	CONCRETE BARRIER TYPE 60
A85	CHAIN LINK FENCE
A85A	CHAIN LINK FENCE DETAILS
RSP A85B	CHAIN LINK FENCE DETAILS
B0-3	BRIDGE DETAILS
RSP B11-47	CABLE RAILING

GENERAL NOTES

DESIGN:
Federal Highway Administration Publication
Geotechnical Engineering Circular No. 7
Soil Nail Walls, Publication FHWA-IF-03-017

AASHTO LRFD Bridge Design Specifications,
4th edition and the Caltrans Amendments,
preface dated November 2011

LIVE LOADING:
No Live Loading

REINFORCED CONCRETE AND SHOTCRETE:
 $f_y = 60$ ksi (Yield Strength of Reinforcement)
 $f_c = 3.6$ ksi (Compressive Strength at 28 days)

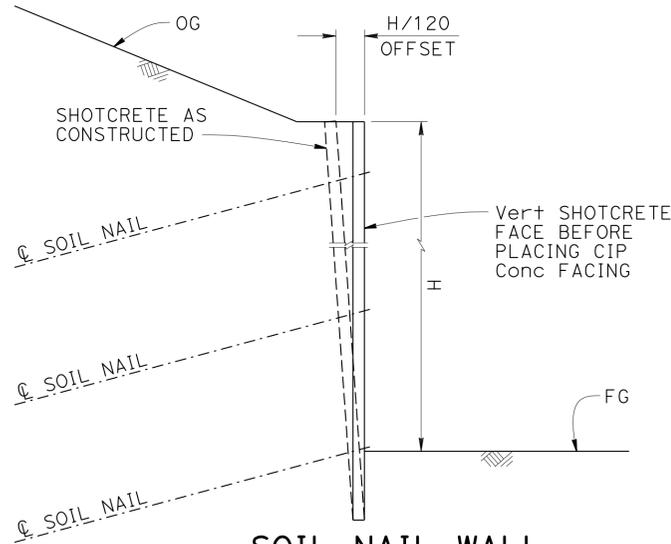
BEARING PLATES:
ASTM Designation: A36/A 36M, Grade 36, $F_y = 36$ ksi

SOIL NAILS:
ASTM Designation: A 615/A 615M, Grade 75, $f_y = 75$ ksi

CONCRETE ANCHORS ON BEARING PLATES:
AWS Designation: D1.5, $F_y = 36$ ksi Min

INDEX TO PLANS

SHEET NO.	TITLE
1	GENERAL PLAN
2	INDEX TO PLANS
3	FOUNDATION PLAN NO. 1
4	FOUNDATION PLAN NO. 2
5	STRUCTURE PLAN NO. 1
6	STRUCTURE PLAN NO. 2
7	STRUCTURE PLAN NO. 3
8	TYPICAL SECTION
9	SOIL NAIL ASSEMBLY
10	DRAINAGE DETAILS
11	ARCHITECTURAL DETAILS NO. 1
12	ARCHITECTURAL DETAILS NO. 2
13	ARCHITECTURAL DETAILS NO. 3
14	ARCHITECTURAL DETAILS NO. 4
15	ARCHITECTURAL DETAILS NO. 5
16	ARCHITECTURAL DETAILS NO. 6
17	LOG OF TEST BORINGS 1 OF 3
18	LOG OF TEST BORINGS 2 OF 3
19	LOG OF TEST BORINGS 3 OF 3



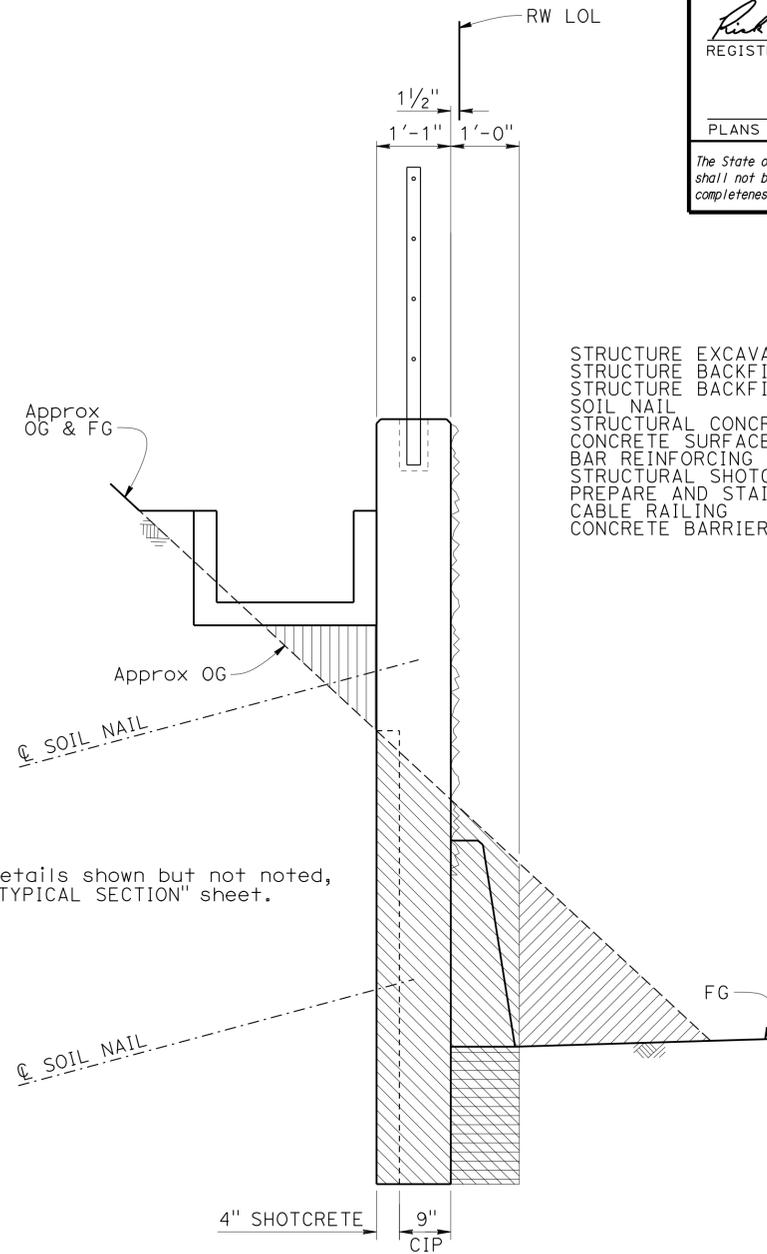
SOIL NAIL WALL OFFSET DETAIL

NO SCALE

SOIL NAIL WALL DESIGN TABLE

Wall Zone	Station ("B" Line)	Maximum Wall Height (ft)	Minimum Nail Embedment Length (ft)	Maximum Vertical Nail Spacing (ft)	Maximum Horizontal Nail Spacing (ft)	Pullout Resistance Q_d (lb/ft)	Rebar		Min Allowable Facing Resistance (kips)	
							Grade (ksi)	Diameter (in)	Static	Seismic
1	2115+54.00 to 2116+50.00	13.0	15	4	4	2720	75	1.0	30	38
2	2116+50.00 to 2126+00.00	27.6	25	4	4	2720	75	1.0	30	38
3	2126+00.00 to 2127+87.93	20.0	20	4	4	2720	75	1.0	30	38

NOTE:
Wall height is a vertical distance from the finished grade of roadway to the top of gutter.



NOTE:
For details shown but not noted, see "TYPICAL SECTION" sheet.

- Denotes Structure Excavation (Soil Nail Wall)
- Denotes Structure Backfill (Soil Nail Wall)
- Denotes Structure Backfill (Slurry Cement)
- Denotes Roadway Excavation, see "ROAD PLANS"

TYPICAL SECTION PAY LIMITS FOR STRUCTURE EXCAVATION AND BACKFILL & SLURRY CEMENT BACKFILL

NO SCALE

QUANTITIES

STRUCTURE EXCAVATION (SOIL NAIL WALL)	1,891	CY
STRUCTURE BACKFILL (SLURRY CEMENT)	22	CY
STRUCTURE BACKFILL (SOIL NAIL WALL)	91	CY
SOIL NAIL	44,137	LF
STRUCTURAL CONCRETE, RETAINING WALL	975	CY
CONCRETE SURFACE TEXTURE	26,592	SOFT
BAR REINFORCING STEEL (RETAINING WALL)	141,882	LB
STRUCTURAL SHOTCRETE	319	CY
PREPARE AND STAIN CONCRETE	25,791	SOFT
CABLE RAILING	1,229	LF
CONCRETE BARRIER (TYPE 60D)	1,229	LF

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1981	2313

Richard E. Schendel
REGISTERED CIVIL ENGINEER DATE 10/01/14

6-1-15
PLANS APPROVAL DATE

RICHARD E. SCHENDEL
No. C 64259
Exp. 06/30/15
CIVIL
STATE OF CALIFORNIA

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DESIGN	BY	CHECKED
BY	Matthew Schott	Michael Pope
DETAILS	BY	CHECKED
	Matthew Schott	Michael Pope
QUANTITIES	BY	CHECKED
	Matthew Schott	Michael Pope

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 18

BRIDGE NO.
53E0304
POST MILE
40.07

RETAINING WALL NO. 2116
INDEX TO PLANS

CURVE DATA				
No.	R	Δ	T	L
(A)	997.00	14°57'26"	130.88	260.27
(B)	3970.71	03°17'34"	114.13	228.20
(C)	2248.14	04°50'23"	95.01	189.90
(D)	4200.00	13°43'44"	505.61	1006.39

SURVEY CONTROL
 PRHV 4029 (Not Shown On Plan)
 Fnd 1" IP w/CT Plug
 70.28 FT Lt. "A" Line Rte 10
 Sta. 2135+79.53
 N 1,847,539.18
 E 6,610,211.48
 Elev. = 930.99

PRHV 10 (Not Shown On Plan)
 Fnd L&T w/LA Co Eng Washer
 169.30 FT Rt. "RTE10" LINE Rte 10
 Sta. 2136+50.57
 N 1,847,291.22
 E 6,610,239.06
 Elev. = 914.10

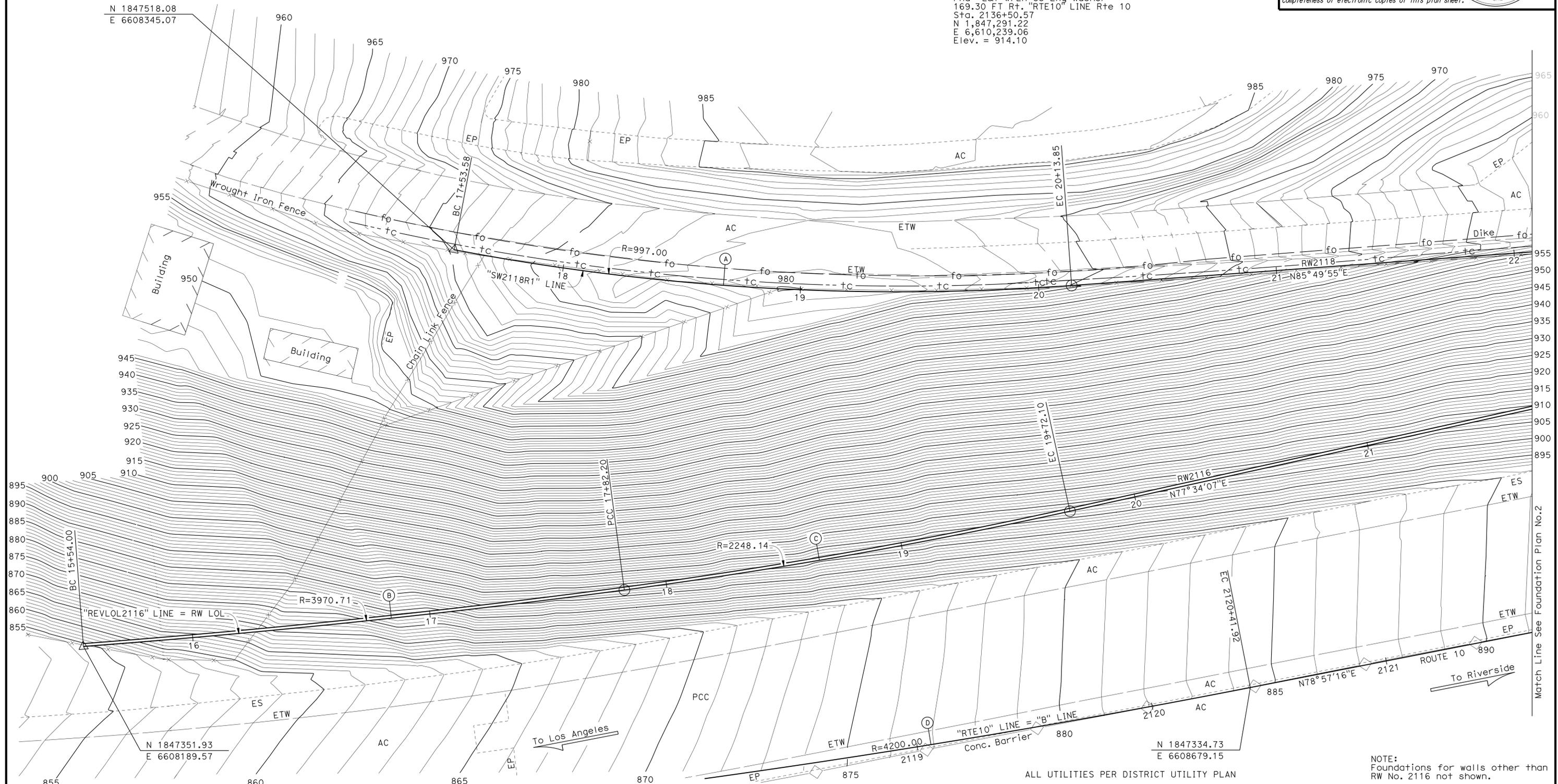


DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1982	2313

Richard E. Schendel
 REGISTERED CIVIL ENGINEER DATE 10/01/14

6-1-15
 PLANS APPROVAL DATE

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PRELIMINARY INVESTIGATION SECTION				DESIGN	BY	CHECKED	STATE OF CALIFORNIA		DIVISION OF ENGINEERING SERVICES		BRIDGE NO.	RETAINING WALL NO. 2116			
SCALE	VERT. DATUM	PHOTOGRAMMETRY	AS OF:	BY	Matthew Schott	Michael Pope	CALIFORNIA		STRUCTURE DESIGN		53E0304	FOUNDATION PLAN NO. 1			
1"=20'	HORIZ. DATUM	SURVEYED	BY	BY	Matthew Schott	Michael Pope	DEPARTMENT OF TRANSPORTATION		DESIGN BRANCH 18		POST MILE				
ALIGNMENT TIES	Dist. Traverse Sheet	DRAFTED	BY	BY	Matthew Schott	Michael Pope					40.07				
STRUCTURES FOUNDATION PLAN SHEET (ENGLISH) (REV. 09-01-10)				ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				UNIT: 3646		PROJECT NUMBER & PHASE: 071300007 1		CONTRACT NO.: 07-1193U1		DISREGARD PRINTS BEARING EARLIER REVISION DATES	
										REVISION DATES		SHEET OF			
										03/07/11 01/08/14 01/07/14 01/15/14		3 19			

CURVE DATA				
No.	R	Δ	T	L
(E)	520.00	06°31'11"	29.62	59.17
(F)	2599.92	03°56'30"	89.47	178.87
(G)	3949.04	01°43'18"	59.33	118.66
(H)	2600.00	30°34'09"	710.53	1387.18
(I)	3949.04	02°32'22"	87.53	175.03



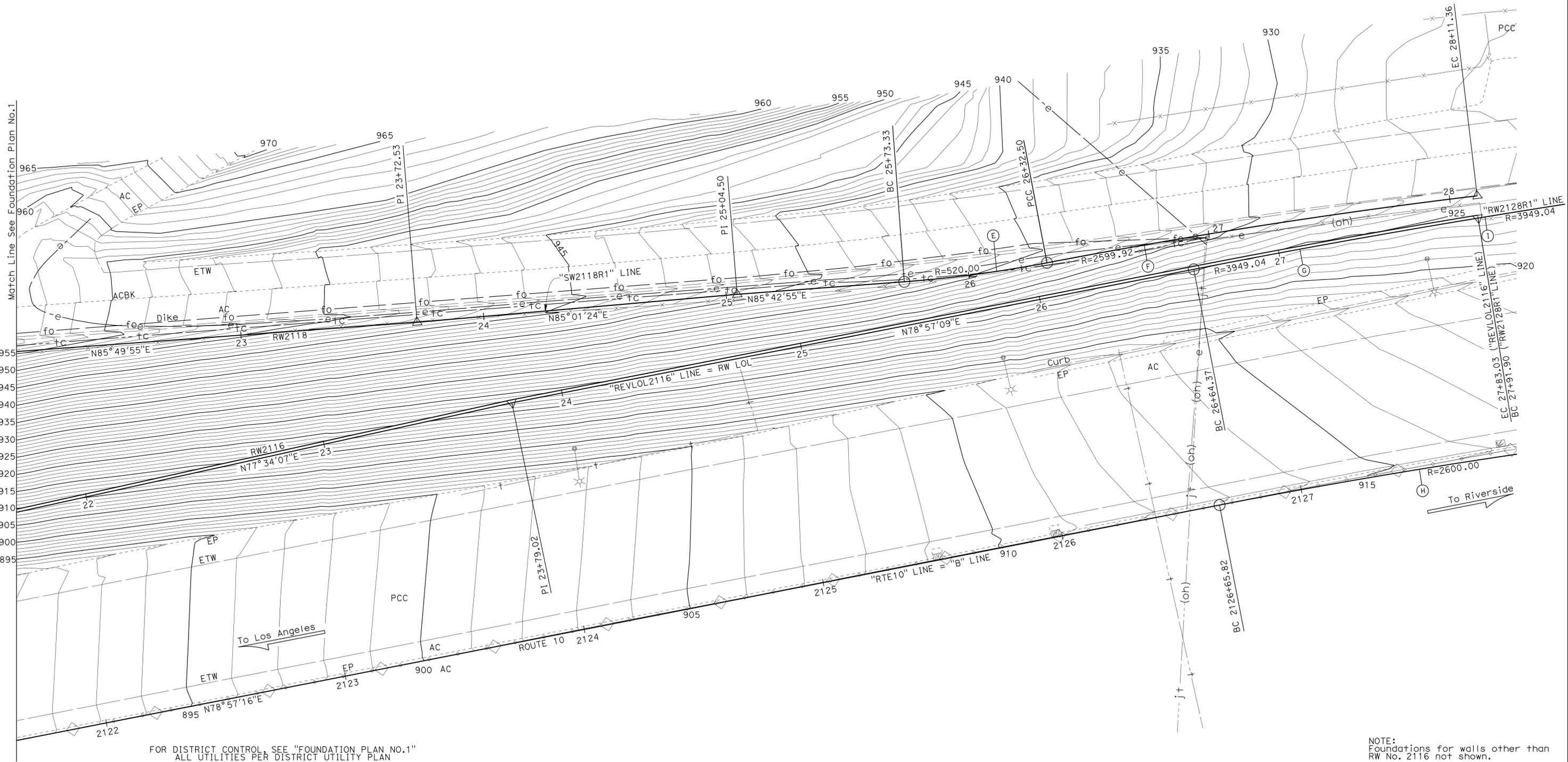
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1983	2313

Richard E. Schendel
 REGISTERED CIVIL ENGINEER DATE 10/01/14

6-1-15
 PLANS APPROVAL DATE

Richard E. Schendel
 REGISTERED PROFESSIONAL ENGINEER
 No. C64259
 Exp. 6-30-15
 CIVIL
 STATE OF CALIFORNIA

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FOR DISTRICT CONTROL, SEE "FOUNDATION PLAN NO.1"
 ALL UTILITIES PER DISTRICT UTILITY PLAN

NOTE:
 Foundations for walls other than
 RW No. 2116 not shown.

PRELIMINARY INVESTIGATION SECTION				STATE OF CALIFORNIA		DIVISION OF ENGINEERING SERVICES		BRIDGE NO.		RETAINING WALL NO. 2116	
SCALE	VERT. DATUM	PHOTOGRAMMETRY	DESIGN	BY	CHECKED	STRUCTURE DESIGN	53E0304	FOUNDATION PLAN NO. 2			
1"=20'	NAVD88	AS OF: X	DETAILS	Matthew Schott	Michael Pope	DESIGN BRANCH 18	POST MILE				
ALIGNMENT TIES	DIST. TRAVERSE SHEET	DRAFTED	QUANTITIES	Matthew Schott	Michael Pope	40.07					
STRUCTURES FOUNDATION PLAN SHEET (ENGLISH) (REV. 09-01-10)				ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		UNIT: 3646		PROJECT NUMBER & PHASE: 071300007 1		CONTRACT NO.: 07-1193U1	
						DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES		SHEET OF	
								03/07/11 01/08/14 01/07/14 01/15/14		4 19	

NOTES:

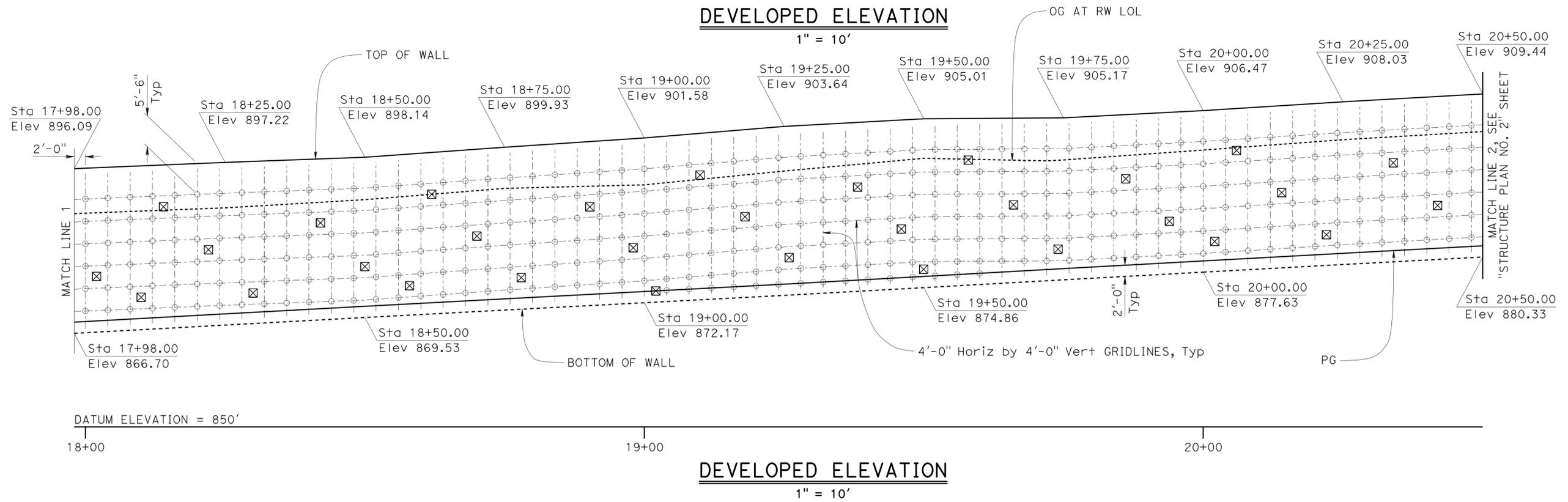
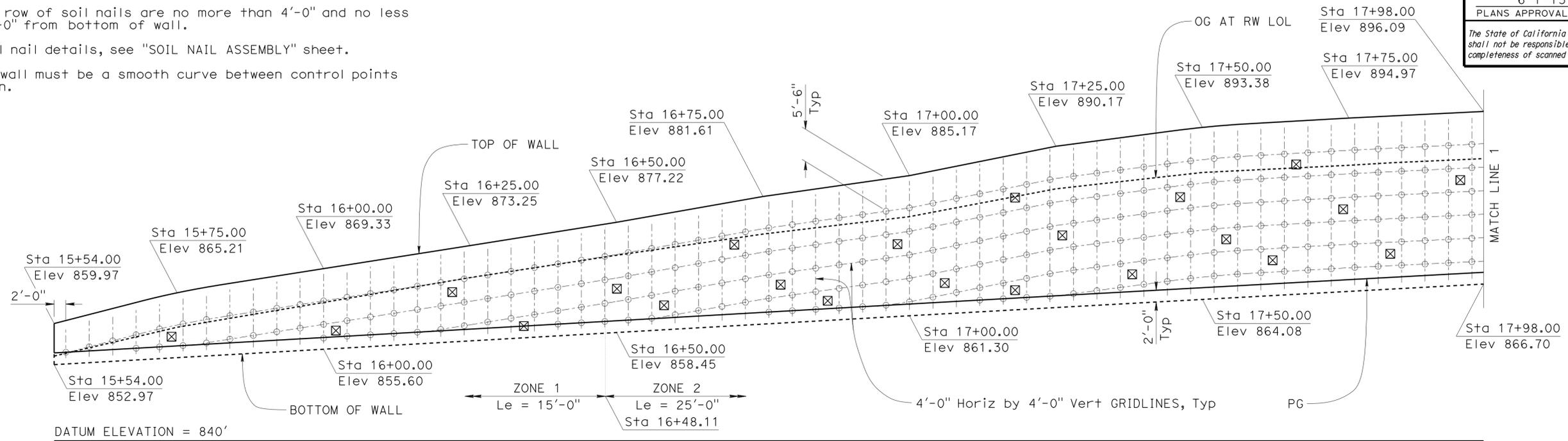
1. The exact location of the test nails are to be determined by the Engineer in the field.
2. Cable railing, chain link fence, concrete barrier, and weep holes not shown for clarity.
3. Bottom row of soil nails are no more than 4'-0" and no less than 2'-0" from bottom of wall.
4. For soil nail details, see "SOIL NAIL ASSEMBLY" sheet.
5. Top of wall must be a smooth curve between control points as shown.

LEGEND:

- Location of Soil Nail Assembly, Tot 655 this page
- ⊗ Location of pull out test nail, Tot 53 this page

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1984	2313

Richard E. Schendel
 REGISTERED CIVIL ENGINEER DATE 10/01/14
 6-1-15
 PLANS APPROVAL DATE
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DESIGN	BY Matthew Schott	CHECKED Michael Pope
DETAILS	BY Matthew Schott	CHECKED Michael Pope
QUANTITIES	BY Matthew Schott	CHECKED Michael Pope

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 18

BRIDGE NO.	53E0304
POST MILE	40.07

RETAINING WALL NO. 2116
STRUCTURE PLAN NO. 1

NOTES:

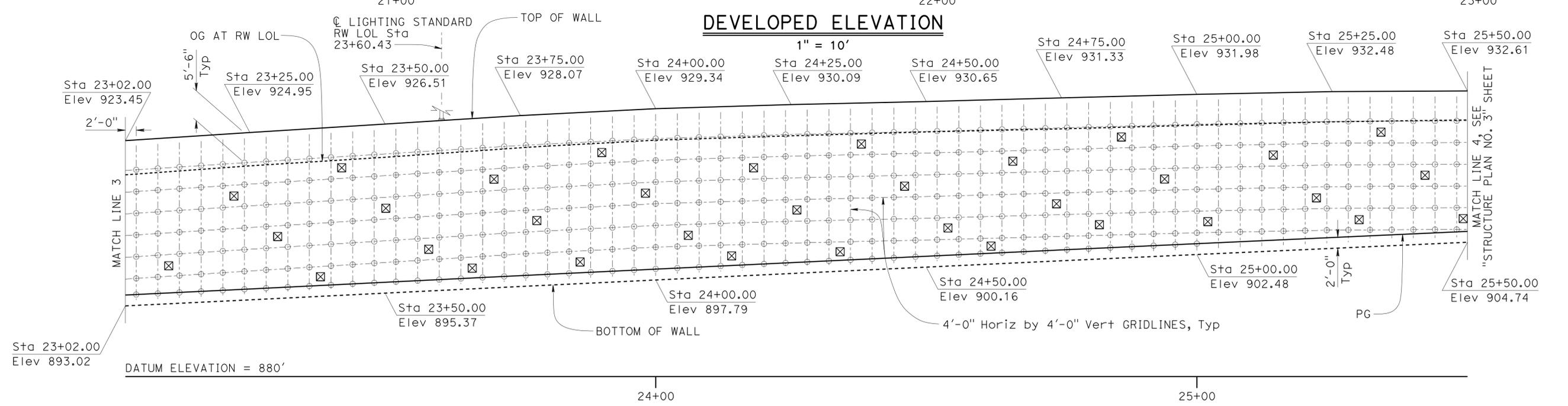
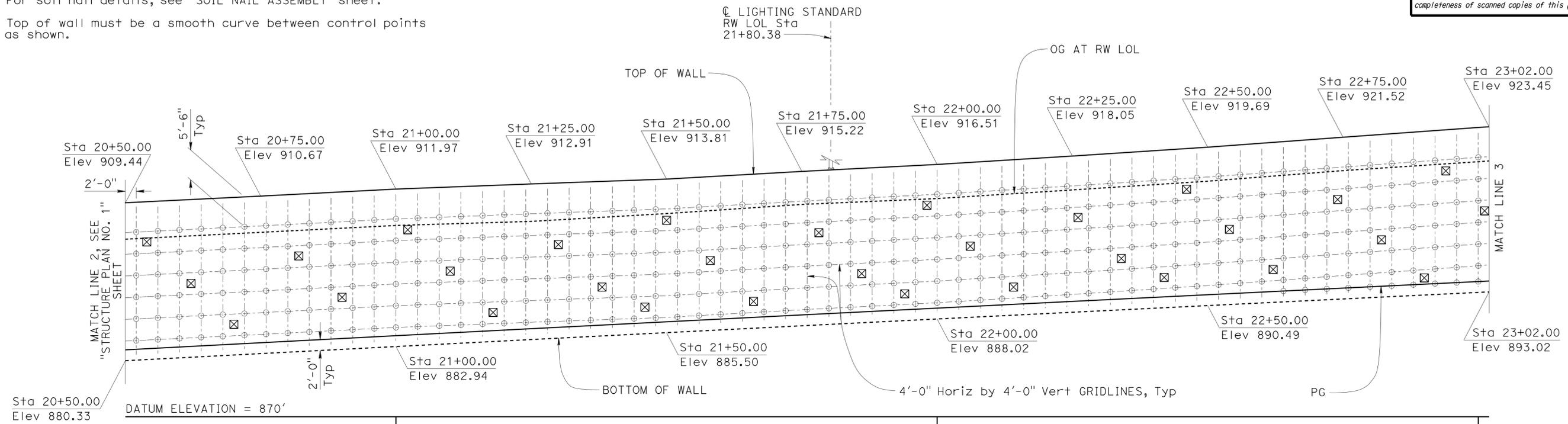
1. The exact location of the test nails are to be determined by the Engineer in the field.
2. Cable railing, chain link fence, concrete barrier, and weep holes not shown for clarity.
3. Bottom row of soil nails are no more than 4'-0" and no less than 2'-0" from bottom of wall.
4. For soil nail details, see "SOIL NAIL ASSEMBLY" sheet.
5. Top of wall must be a smooth curve between control points as shown.

LEGEND:

- Location of Soil Nail Assembly, Tot 810 this page
- ⊠ Location of pull out test nail, Tot 65 this page

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1985	2313

Richard Schendel
 REGISTERED CIVIL ENGINEER DATE 10/01/14
 6-1-15
 PLANS APPROVAL DATE
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DESIGN	BY Matthew Schott	CHECKED Michael Pope
DETAILS	BY Matthew Schott	CHECKED Michael Pope
QUANTITIES	BY Matthew Schott	CHECKED Michael Pope

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 18

BRIDGE NO.	53E0304
POST MILE	40.07

RETAINING WALL NO. 2116
STRUCTURE PLAN NO. 2

NOTES:

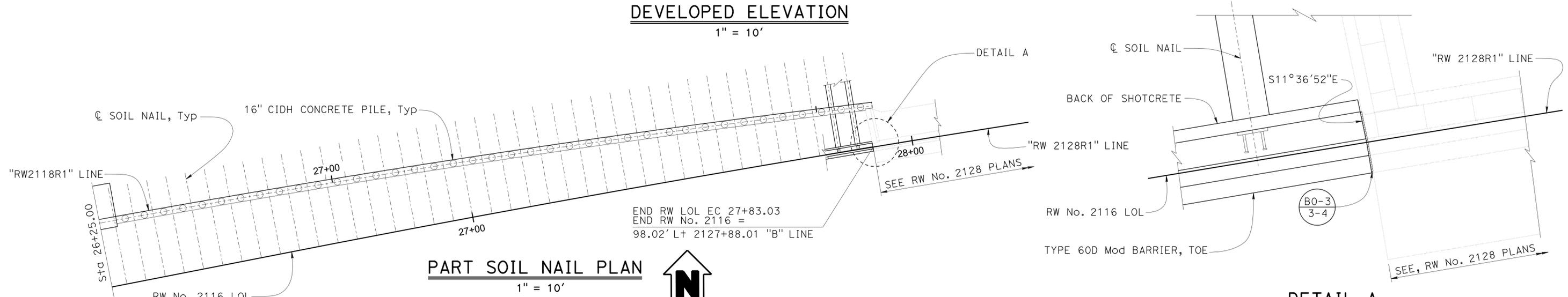
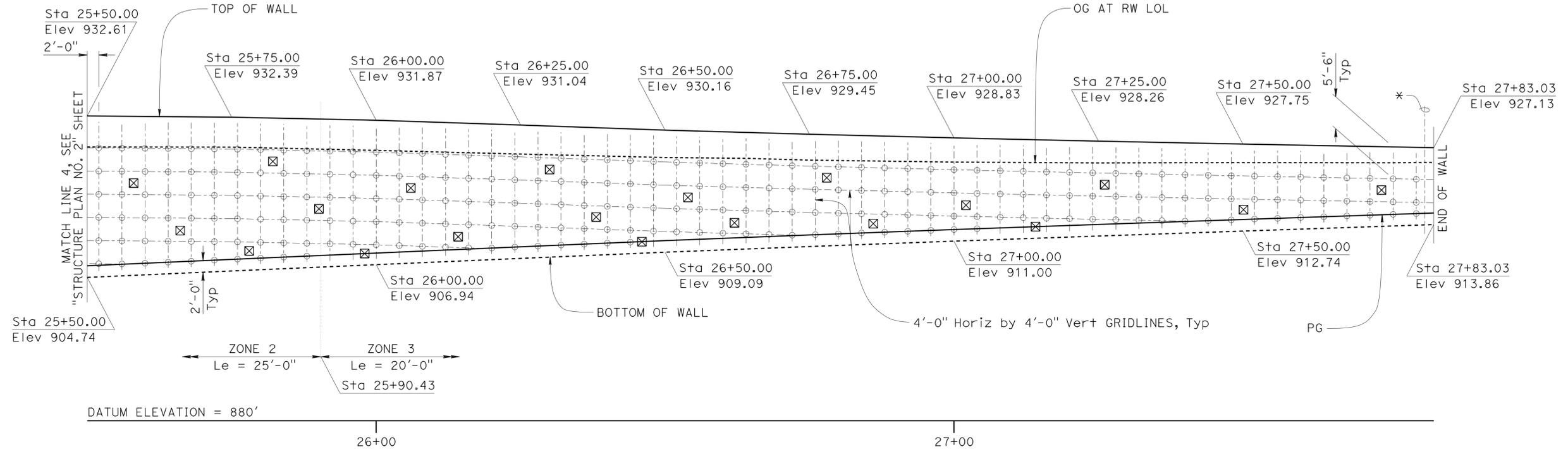
1. The exact location of the test nails are to be determined by the Engineer in the field.
2. Cable railing, chain link fence, concrete barrier, and weep holes not shown for clarity.
3. Bottom row of soil nails are no more than 4'-0" and no less than 2'-0" from bottom of wall.
4. For soil nail details, see "SOIL NAIL ASSEMBLY" sheet.
5. Top of wall must be a smooth curve between control points as shown.
6. Adjust nail locations as necessary to clear down drains by 6" minimum.

LEGEND:

- Location of Soil Nail Assembly, Tot 247 this page.
- ☒ Location of pull out test nail, Tot 20 this page.
- * Approximate \bar{C} Down Drain, see "ROAD PLANS" and Note 6.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1986	2313

Richard E. Schendel
 REGISTERED CIVIL ENGINEER DATE 10/01/14
 PLANS APPROVAL DATE 6-1-15
 RICHARD E. SCHEDEL
 No. C64259
 Exp. 6-30-15
 CIVIL
 STATE OF CALIFORNIA
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Note:
For pile layout, see RW No. 2118 plans.
The Contractor is to insure that no conflicts exist between the CIDH Piles and the Soil Nails.

DESIGN	BY Matthew Schott	CHECKED Michael Pope
DETAILS	BY Matthew Schott	CHECKED Michael Pope
QUANTITIES	BY Matthew Schott	CHECKED Michael Pope

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 18

BRIDGE NO.	53E0304
POST MILE	40.07

RETAINING WALL NO. 2116
STRUCTURE PLAN NO. 3



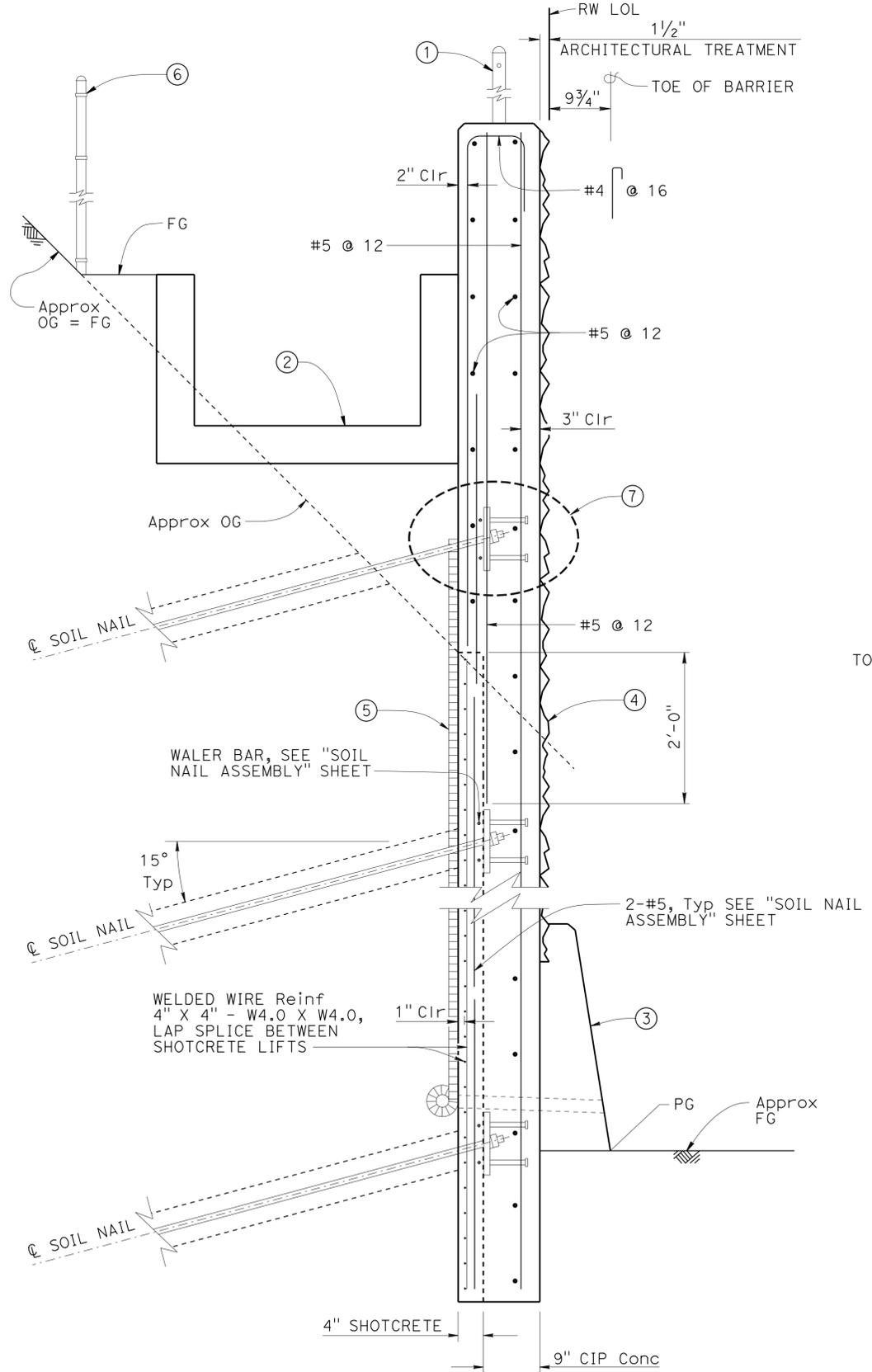
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1987	2313

<i>Richard E. Schendel</i>		10/01/14
REGISTERED CIVIL ENGINEER	DATE	
6-1-15		
PLANS APPROVAL DATE		
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.		

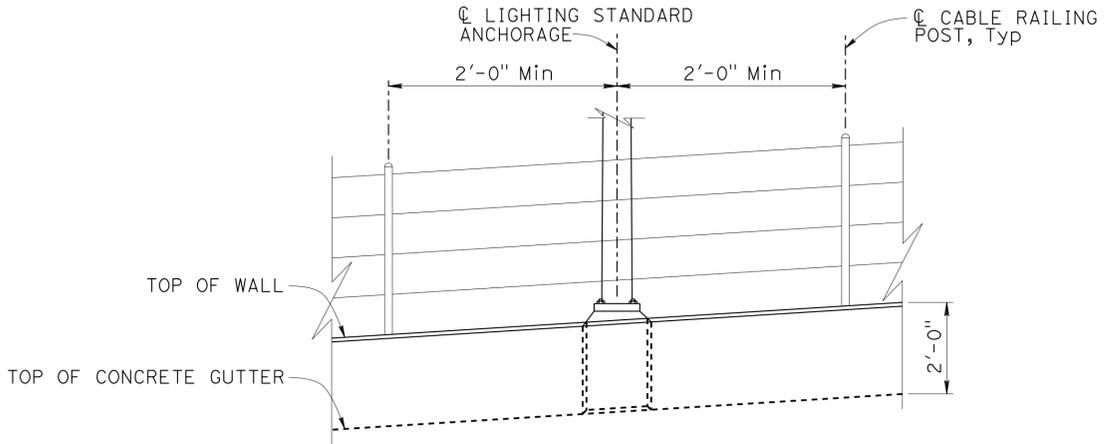
REGISTERED PROFESSIONAL ENGINEER
 RICHARD E. SCHEDEL
 No. C64259
 Exp. 6-30-15
 CIVIL
 STATE OF CALIFORNIA

NOTES:

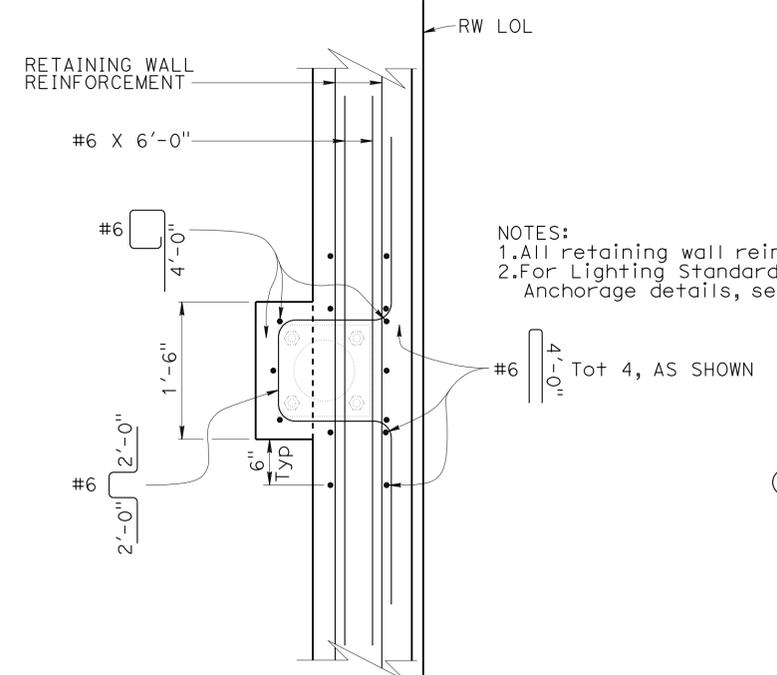
- ① Cable Railing RSP B11-47
- ② Concrete Gutter, see "ROAD PLANS"
- ③ Concrete Barrier Type 60D Mod A76A
- ④ Architectural Treatment
- ⑤ Geocomposite Drain A85 A85A A85B RSP
- ⑥ Chain Link Fence, see "ROAD PLANS"
- ⑦ For soil nail details, see "SOIL NAIL ASSEMBLY" sheet.



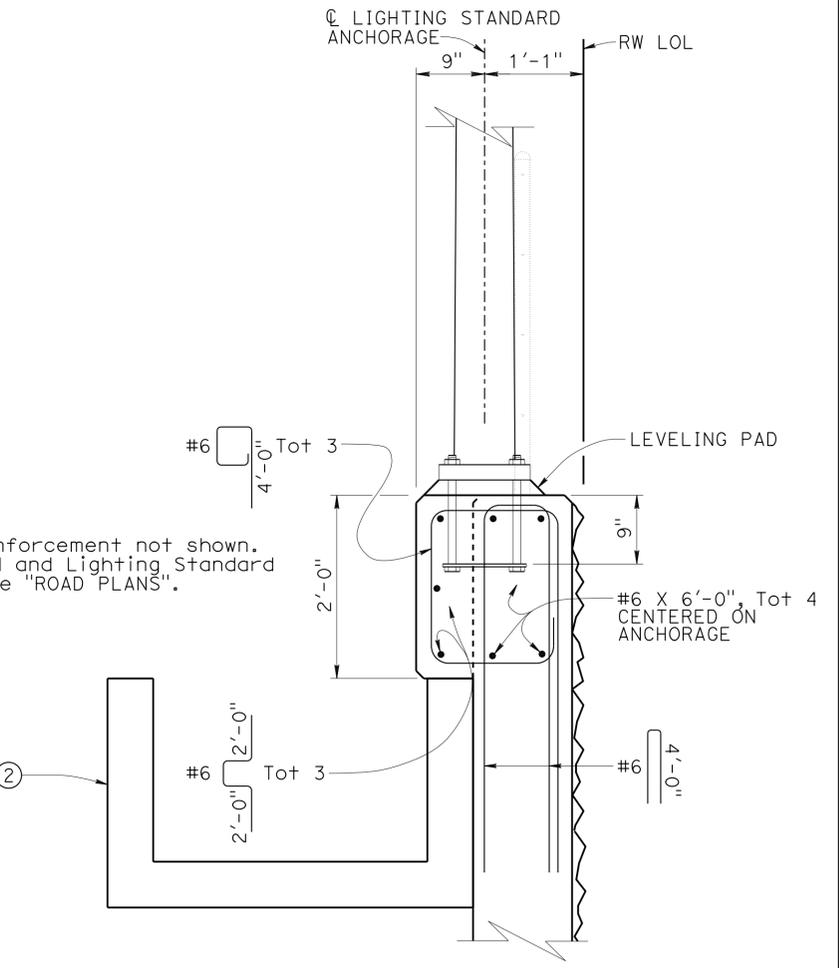
TYPICAL SECTION
1" = 1'-0"



LIGHTING STANDARD PEDESTAL - ELEVATION
1/2" = 1'-0"



LIGHTING STANDARD PEDESTAL - PLAN
1" = 1'-0"



LIGHTING STANDARD PEDESTAL - SECTION
1" = 1'-0"

DESIGN	BY Matthew Schott	CHECKED Michael Pope
DETAILS	BY Matthew Schott	CHECKED Michael Pope
QUANTITIES	BY Matthew Schott	CHECKED Michael Pope

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 18

BRIDGE NO.	53E0304
POST MILE	40.07

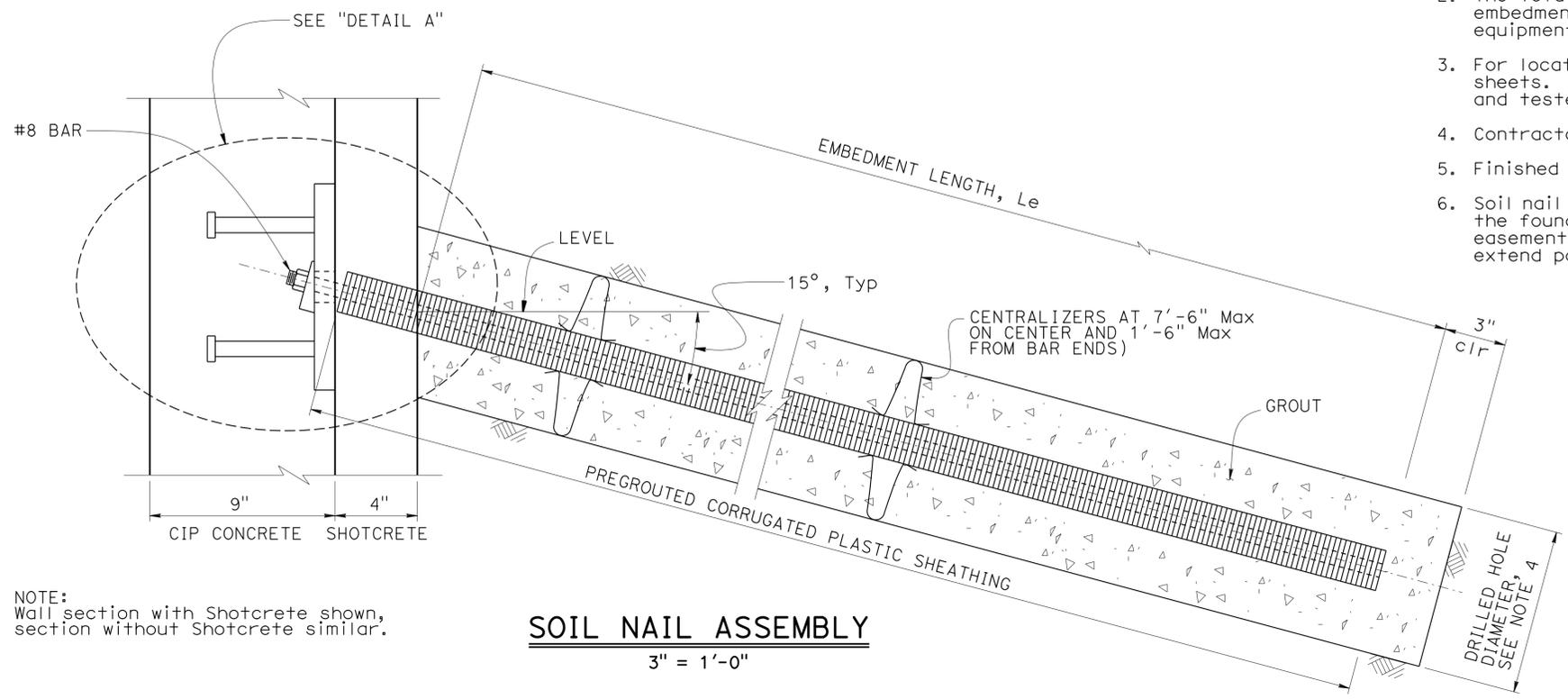
RETAINING WALL NO. 2116
TYPICAL SECTION

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1988	2313

10/01/14
 REGISTERED CIVIL ENGINEER DATE
 6-1-15
 PLANS APPROVAL DATE
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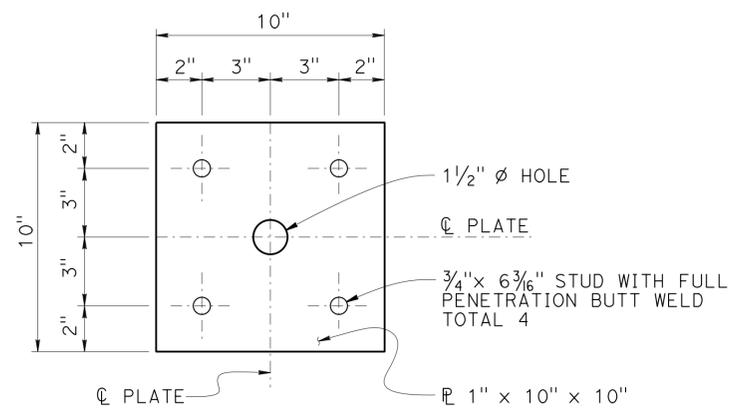
RICHARD E. SCHENDEL
 No. C 64259
 Exp. 06/30/15
 CIVIL
 STATE OF CALIFORNIA

- NOTES:
- The test nail embedment length L_{eT} , must be equal to $2/3$ of the embedment length, L_e , of the adjacent production soil nail assemblies, but not less than 12'-0".
 - The total length of the test nail assembly equals the embedment length plus the length required for jacking equipment.
 - For location of proof test nails, see "STRUCTURE PLAN" sheets. Additional proof test nails must be installed and tested per special provisions.
 - Contractor to determine drilled hole diameter.
 - Finished grout surface to be normal to the bar.
 - Soil nail and test soil nail assemblies must not extend past the foundation easement line. At locations without foundation easements, the soil nail and test soil nail assemblies must not extend past the R/W line.

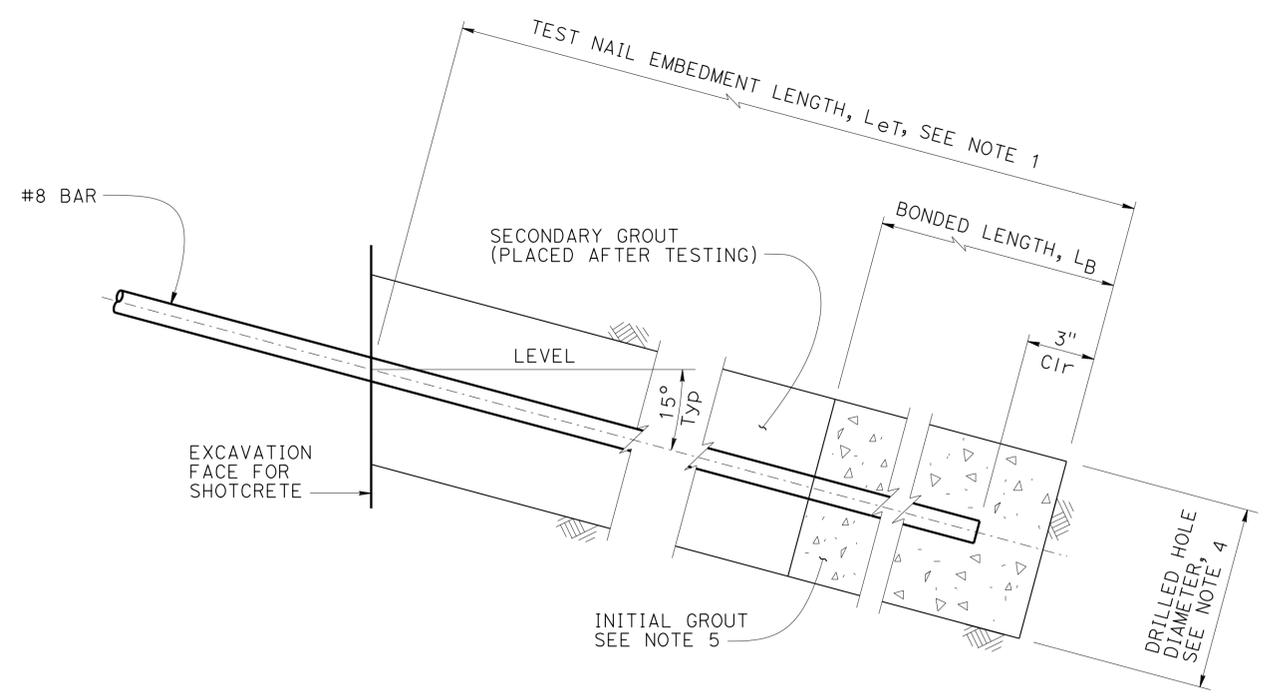


SOIL NAIL ASSEMBLY
3" = 1'-0"

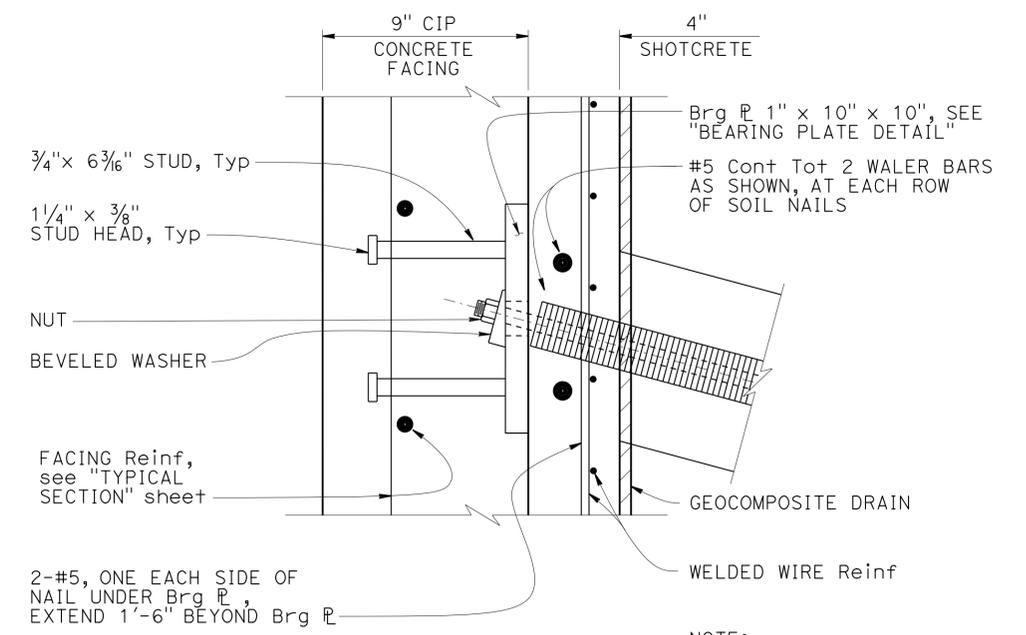
NOTE:
Wall section with Shotcrete shown, section without Shotcrete similar.



BEARING PLATE DETAIL
3" = 1'-0"



TEST NAIL DETAIL
3" = 1'-0"



DETAIL A
3" = 1'-0"

NOTE:
Wall section with Shotcrete shown, section without Shotcrete similar.

DESIGN	BY Matthew Schott	CHECKED Michael Pope
DETAILS	BY Michael Pope	CHECKED Matthew Schott
QUANTITIES	BY Matthew Schott	CHECKED Michael Pope

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 18

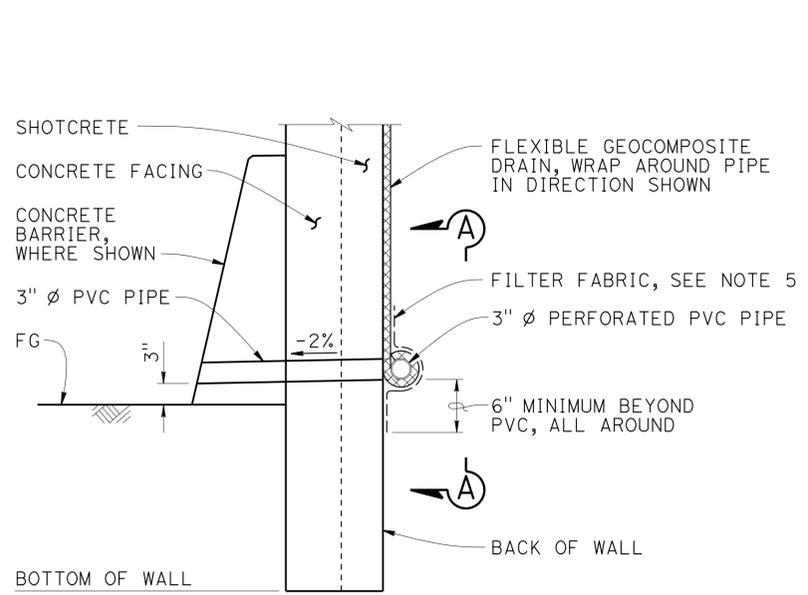
BRIDGE NO.	53E0304
POST MILE	40.07

RETAINING WALL NO. 2116
SOIL NAIL ASSEMBLY

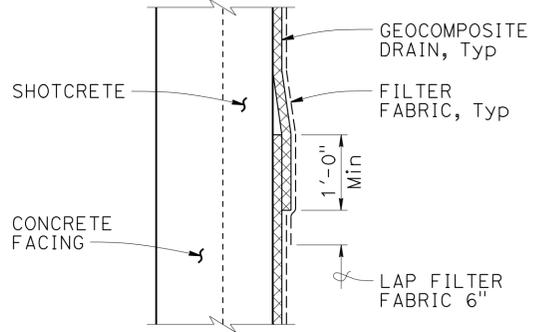
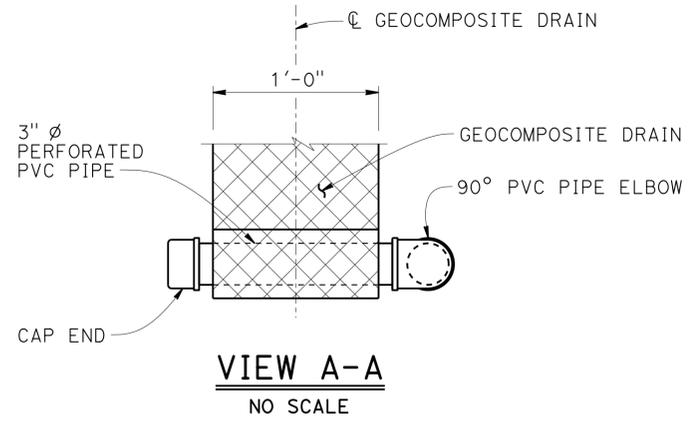
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1989	2313

Richard Schendel
 REGISTERED CIVIL ENGINEER DATE 10/01/14
 6-1-15
 PLANS APPROVAL DATE
 No. C64259
 Exp. 6-30-15
 CIVIL
 STATE OF CALIFORNIA
 RICHARD E. SCHENDEL
 REGISTERED PROFESSIONAL ENGINEER

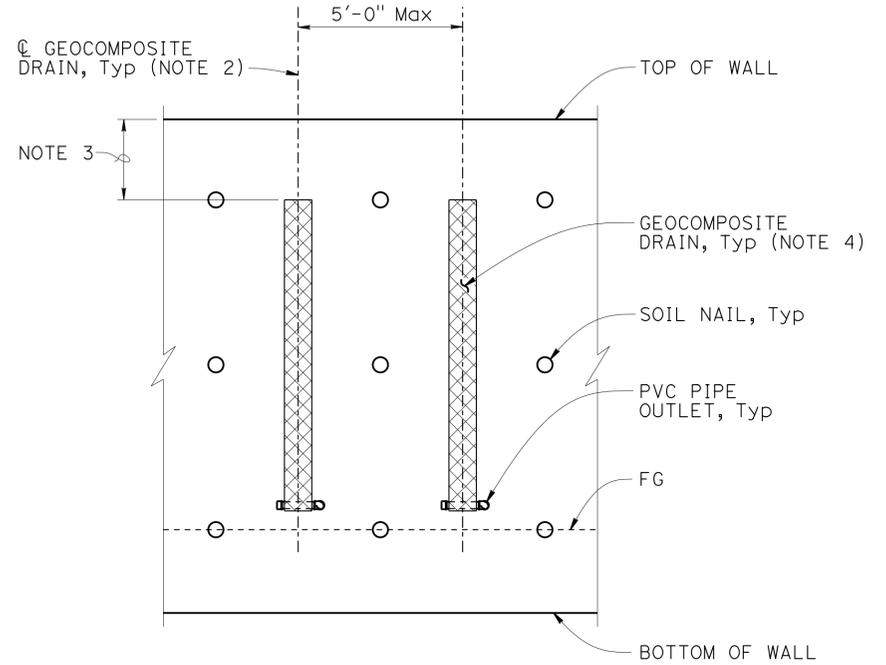
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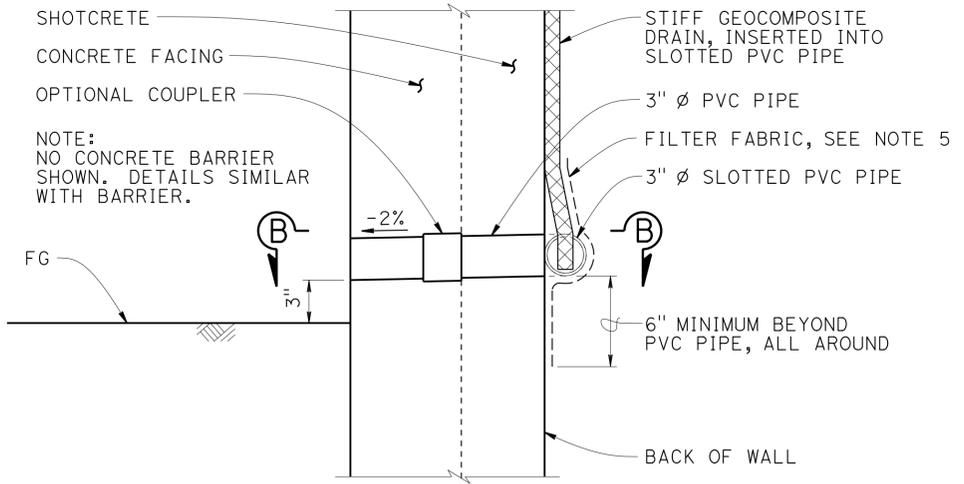
WALL DRAIN DETAIL AT WEEP HOLE - OPTION A
NO SCALE



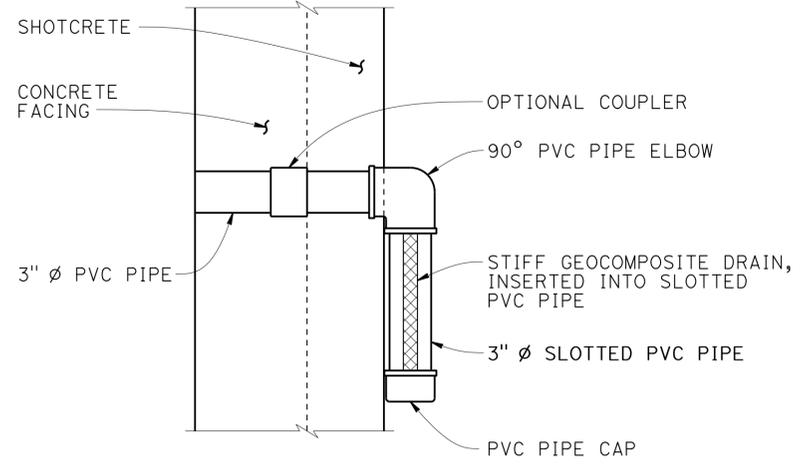
DRAIN SPLICE
NO SCALE



WALL PART ELEVATION
NO SCALE



WALL DRAIN DETAIL AT WEEP HOLE - OPTION B
NO SCALE



SECTION B-B
NO SCALE

- NOTES:
1. Geocomposite Drain is per Section 88 Geosynthetics of the Standard Specifications.
 2. Center Geocomposite Drains between soil nail columns.
 3. Begin Geocomposite Drain at top soil nail row.
 4. Geocomposite Drains must have filter fabric on soil side and wrapped around top and side edges.
 5. Provide filter fabric where necessary to prevent soil from entering drain.
 6. Alternative drain outlet details may be submitted for Engineer's approval.

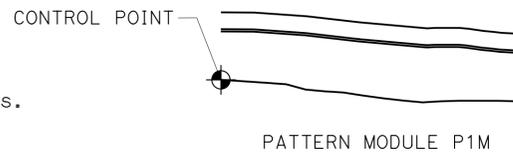
NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

DESIGN	BY Richard Schendel	CHECKED Michael Pope	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 18	BRIDGE NO.	RETAINING WALL NO. 2116 DRAINAGE DETAILS	
DETAILS	BY Richard Schendel	CHECKED Matthew Schott			53E0304		
QUANTITIES	BY Matthew Schott	CHECKED Michael Pope			40.07		
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)				ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3	UNIT: 3603 PROJECT NUMBER & PHASE: 07 1300 0007 1 CONTRACT NO.: 07-1193U1	DISREGARD PRINTS BEARING EARLIER REVISION DATES REVISION DATES 10/16/13	SHEET 10 OF 19

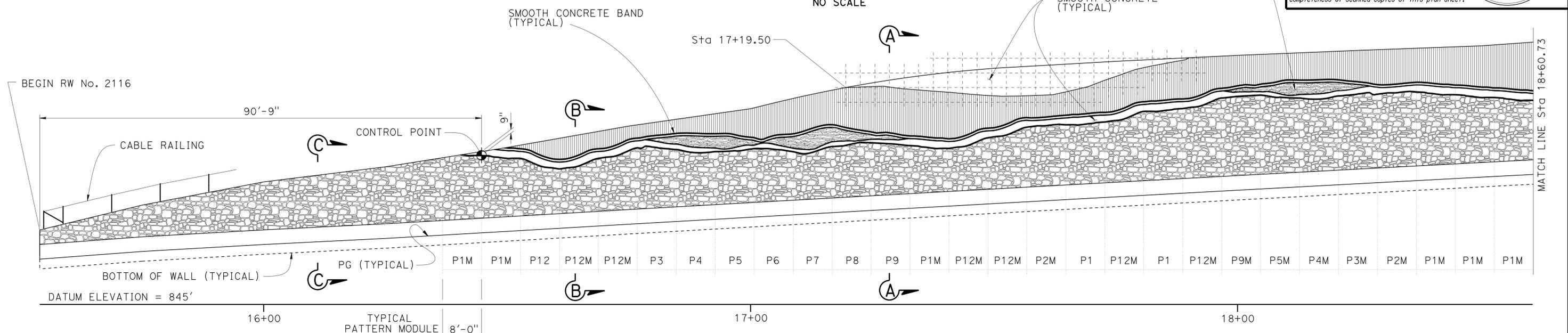
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1990	2313
<i>Richard E. Schendel</i> REGISTERED CIVIL ENGINEER			10/01/14 DATE	RICHARD E. SCHENDEL No. C64259 Exp. 6-30-15 CIVIL STATE OF CALIFORNIA	
6-1-15 PLANS APPROVAL DATE					
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- NOTES:
- Entire Cable railing not shown for clarity.
 - For TYPICAL SECTIONS "A-A", "B-B", and "C-C", see "ARCHITECTURAL DETAILS NO. 3" sheet.
 - For Fractured Rib, Fractured Granite, and Random Rock Textures, see "ARCHITECTURAL DETAILS NO. 4" sheet.
 - For Pattern Modules, see "ARCHITECTURAL DETAILS NO. 5 & NO. 6" sheets.

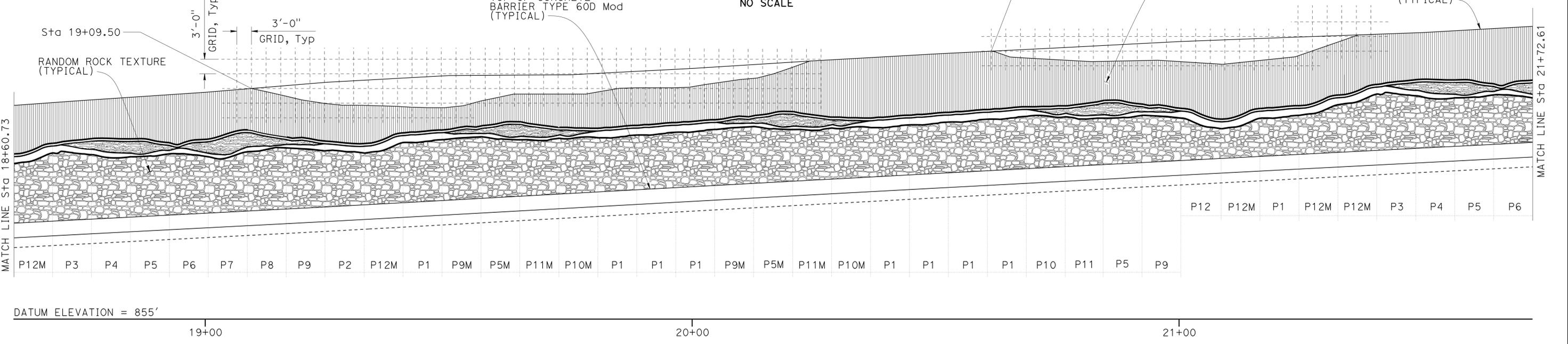
NOTE:
 Begin layout of pattern modules at control point for P1M and continue to place plumb each module at corresponding match lines for limits of pattern modules.



PATTERN MODULE LAYOUT DETAIL
 NO SCALE



DEVELOPED ELEVATION
 NO SCALE



DEVELOPED ELEVATION
 NO SCALE

DESIGN	BY Valerie Moore	CHECKED Matthew Schott
DETAILS	BY Farideh Hosseinioun	CHECKED Matthew Schott
QUANTITIES	BY Matthew Schott	CHECKED Michael Pope

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 18

BRIDGE NO.	53E0304
POST MILE	40.07

RETAINING WALL NO. 2116
ARCHITECTURAL DETAILS NO. 1



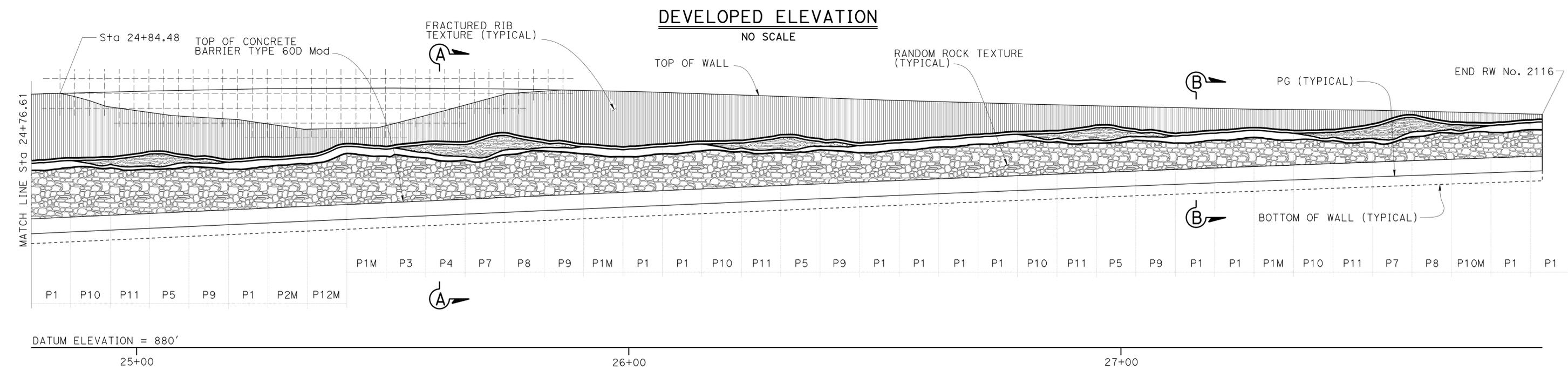
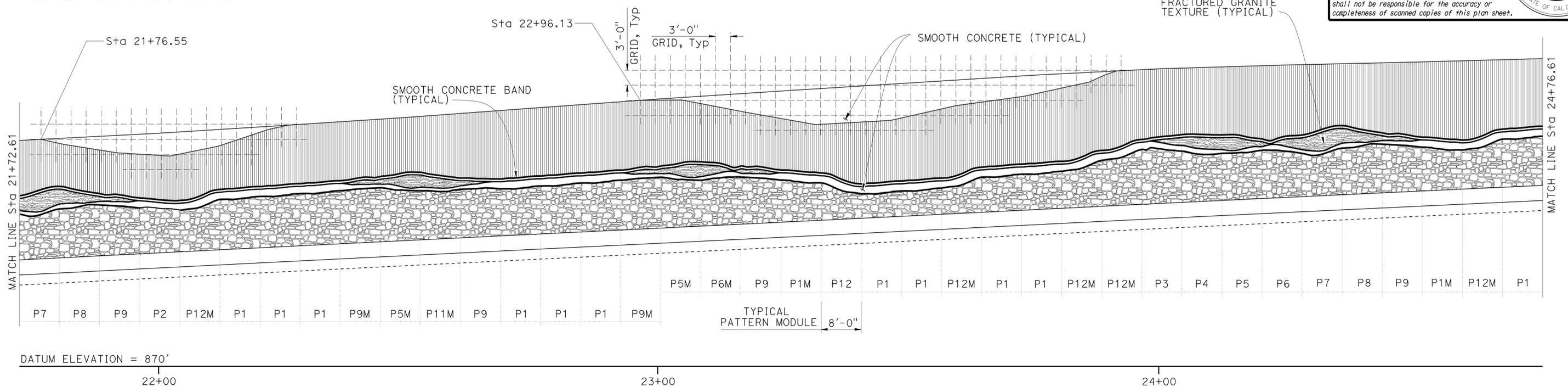
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1991	2313

<i>Richard E. Schendel</i>		10/01/14
REGISTERED CIVIL ENGINEER	DATE	
6-1-15		
PLANS APPROVAL DATE		

RICHARD E. SCHEDEL	
No. C64259	Exp. 6-30-15
CIVIL	

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- NOTES:
- Cable railing not shown for clarity.
 - For TYPICAL SECTIONS "A-A", "B-B", and "C-C", see "ARCHITECTURAL DETAILS NO. 3" sheet.
 - For Fractured Rib, Fractured Granite, and Random Rock Textures, see "ARCHITECTURAL DETAILS NO. 4" sheet.
 - For Pattern Modules, see "ARCHITECTURAL DETAILS NO. 5 & NO. 6" sheets.



DESIGN	BY Valerie Moore	CHECKED Matthew Schott
DETAILS	BY Farideh Hosseinioun	CHECKED Matthew Schott
QUANTITIES	BY Matthew Schott	CHECKED Michael Pope

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 18

BRIDGE NO.	53E0304
POST MILE	40.07

RETAINING WALL NO. 2116
ARCHITECTURAL DETAILS NO. 2

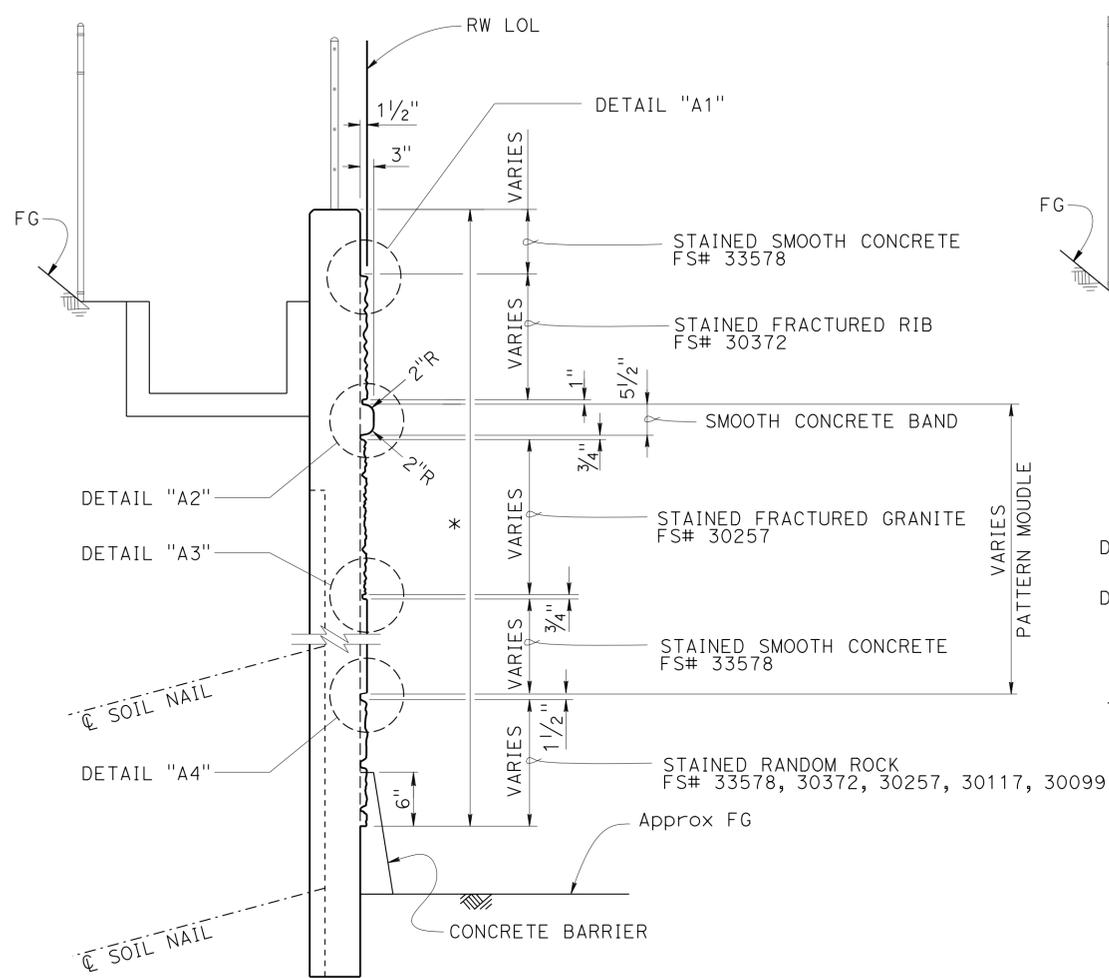
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1992	2313

Richard E. Schendel
REGISTERED CIVIL ENGINEER DATE 10/01/14

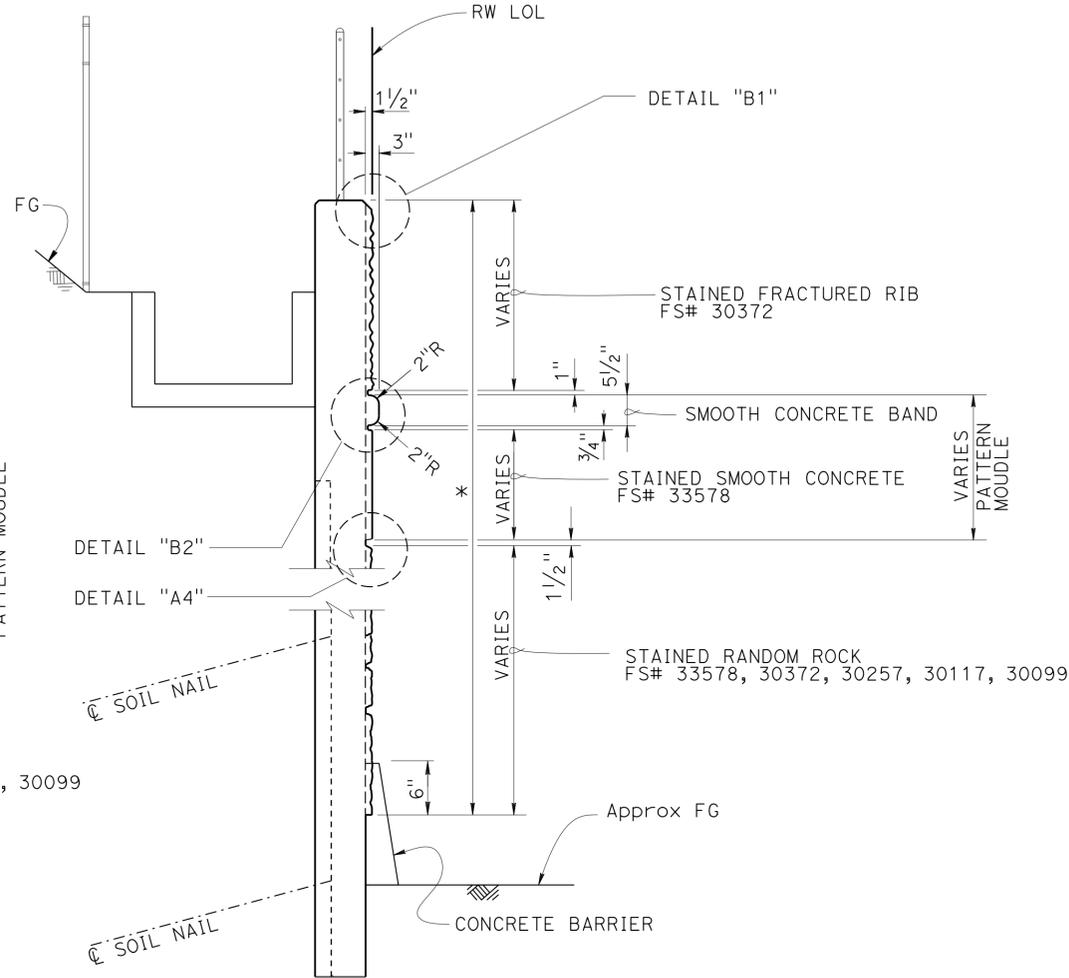
6-1-15
PLANS APPROVAL DATE

Richard E. Schendel
No. C64259
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

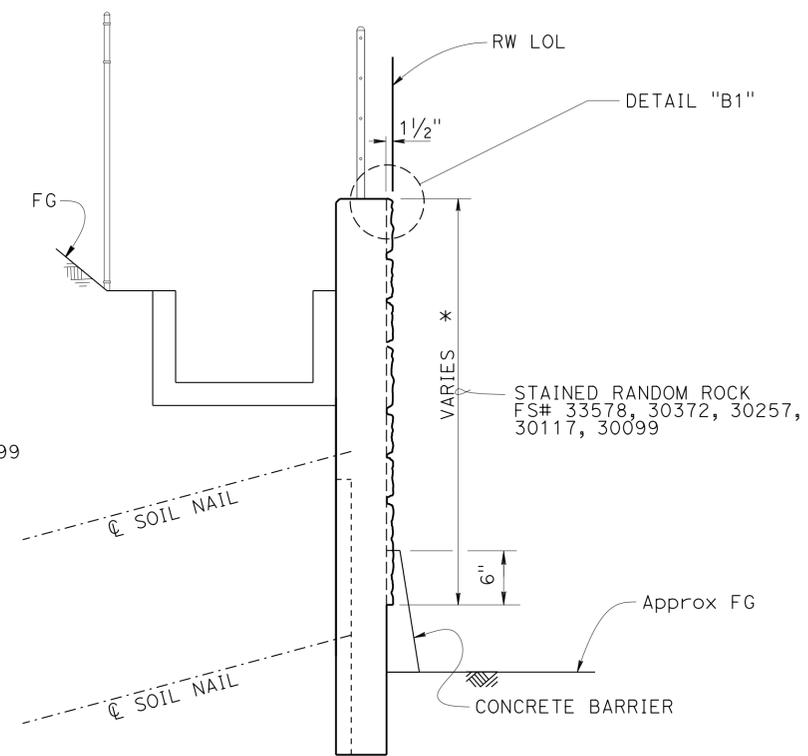
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TYPICAL SECTION A-A
NO SCALE



TYPICAL SECTION B-B
NO SCALE



TYPICAL SECTION C-C
NO SCALE

* Indicates pay limits of Concrete Surface Texture

- NOTES:
- For DETAILS "A1", "A2", "A3", "A4", "B1", and "B2", see "ARCHITECTURAL DETAILS NO. 4" sheet.
 - "FS#" is Federal Standard color number.

DESIGN	BY Valerie Moore	CHECKED Matthew Schott
DETAILS	BY Farideh Hosseinioun	CHECKED Matthew Schott
QUANTITIES	BY Matthew Schott	CHECKED Michael Pope

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 18

BRIDGE NO.	53E0304
POST MILE	40.07

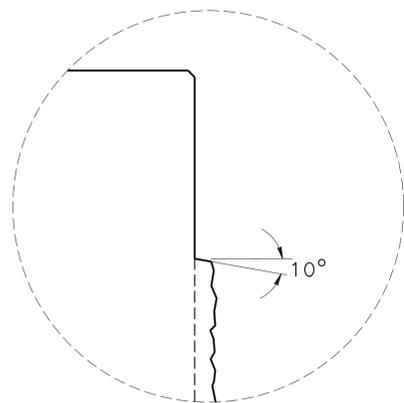
RETAINING WALL NO. 2116
ARCHITECTURAL DETAILS NO. 3

TIME PLOTTED => 15:55
18-MAY-2015
DATE PLOTTED => 8:25:24
USER NAME =>

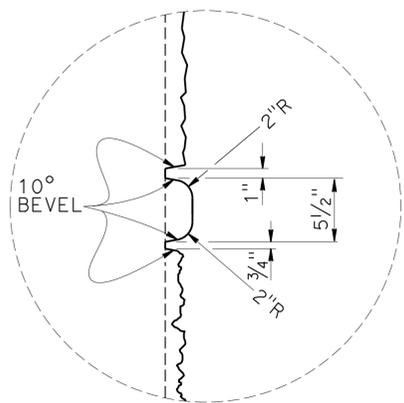
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1993	2313

Richard E. Schendel
 REGISTERED CIVIL ENGINEER
 DATE: 10/01/14
 PLANS APPROVAL DATE: 6-1-15
 No. C64259
 Exp. 6-30-15
 CIVIL
 STATE OF CALIFORNIA

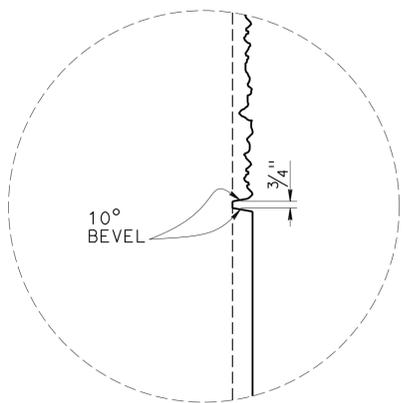
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.



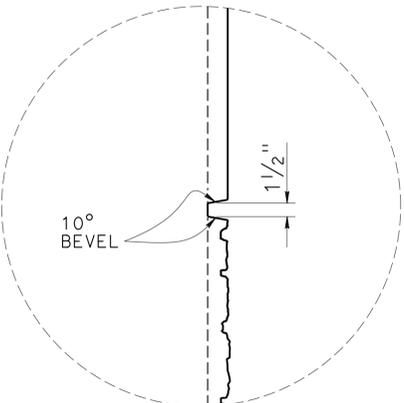
DETAIL A1
NO SCALE



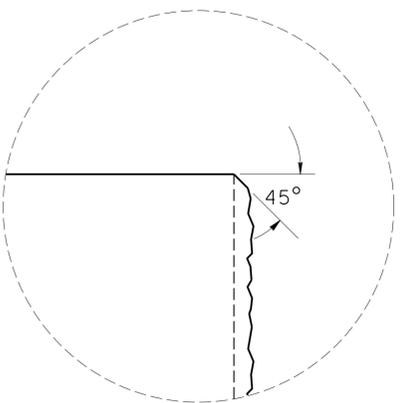
DETAIL A2
NO SCALE



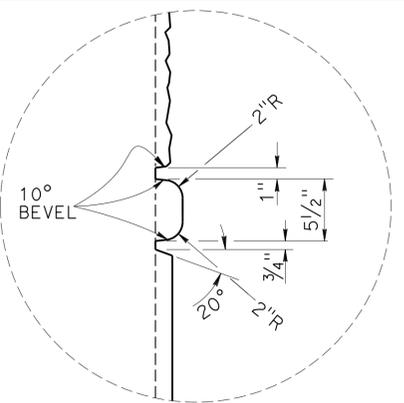
DETAIL A3
NO SCALE



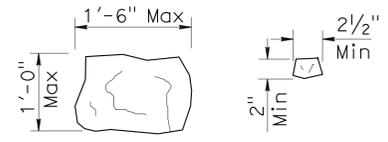
DETAIL A4
NO SCALE



DETAIL B1
NO SCALE

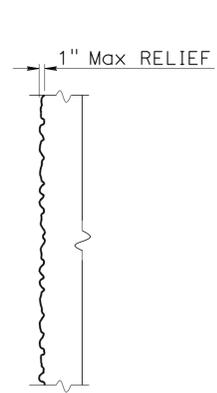


DETAIL B2
NO SCALE

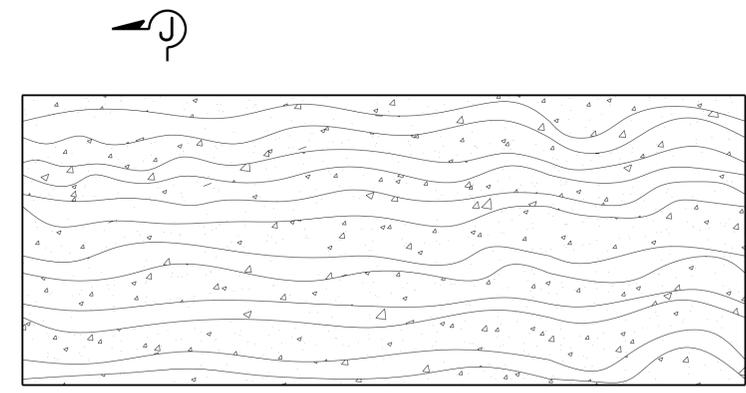


ROCK SIZE

NOTE:
Seamless Random Rock pattern to have a minimum of 2 to a maximum of 4 match points (denoted by "M") for each side (top to bottom and side to side).

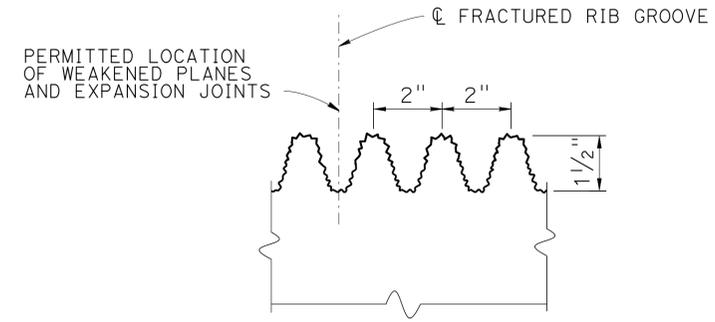


SECTION J-J

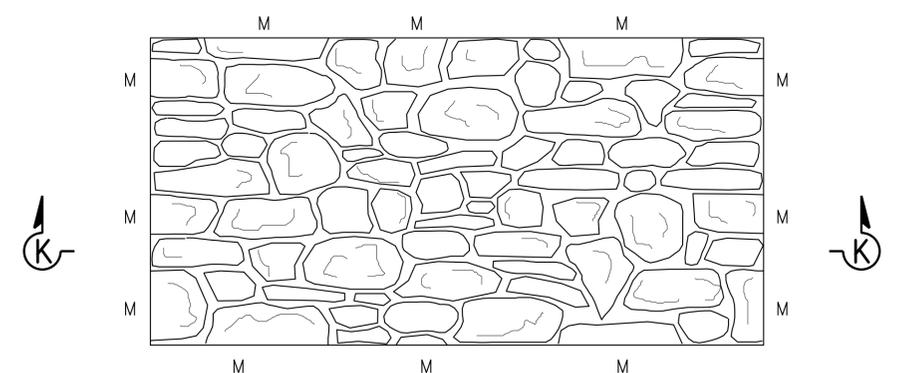


ELEVATION

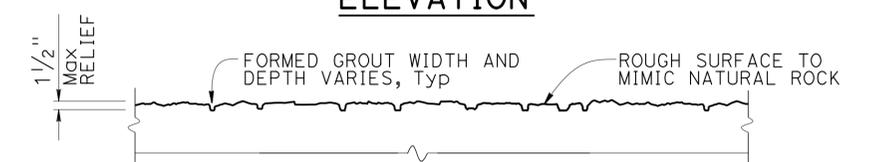
FRACTURED GRANITE TEXTURE
NO SCALE



FRACTURED RIB TEXTURE - SECTION
NO SCALE



ELEVATION



SECTION K-K

RANDOM ROCK TEXTURE
NO SCALE

DESIGN	BY Valerie Moore	CHECKED Matthew Schott
DETAILS	BY Farideh Hosseinioun	CHECKED Matthew Schott
QUANTITIES	BY Matthew Schott	CHECKED Michael Pope

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 18

BRIDGE NO.	53E0304
POST MILE	40.07

RETAINING WALL NO. 2116
ARCHITECTURAL DETAILS NO. 4

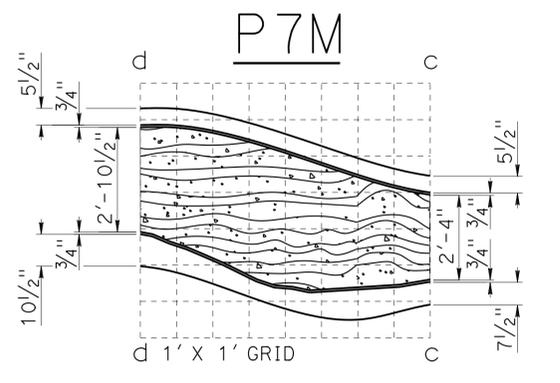
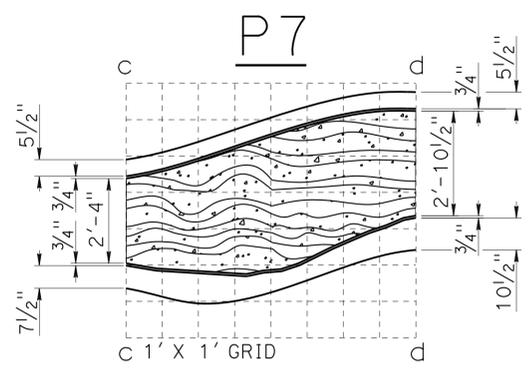
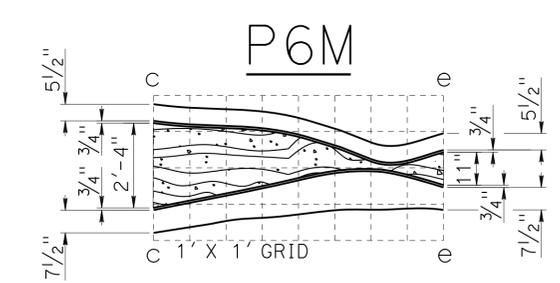
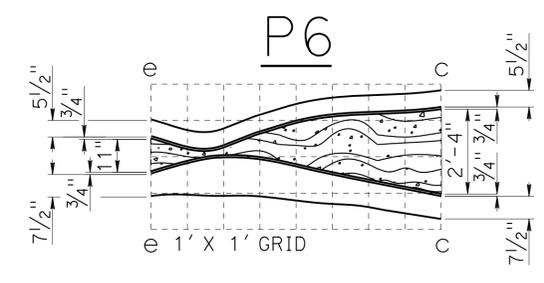
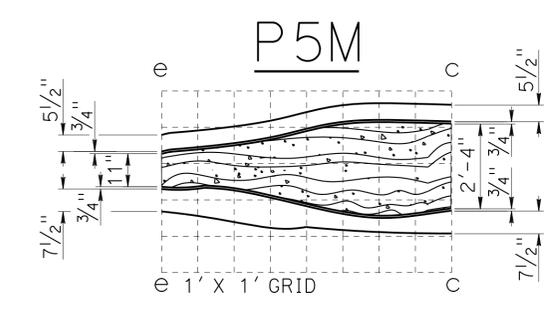
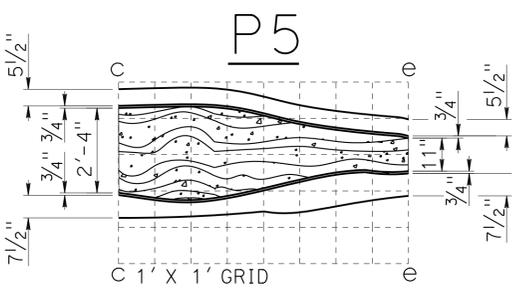
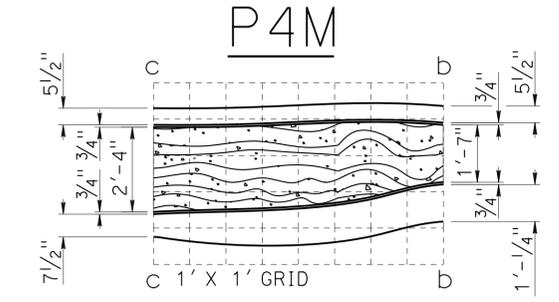
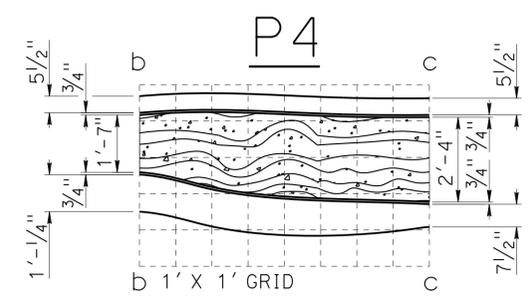
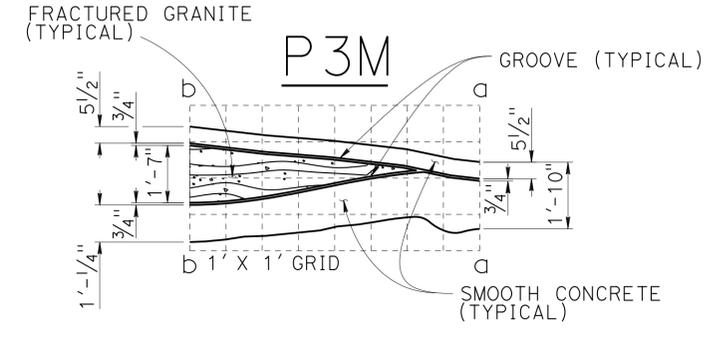
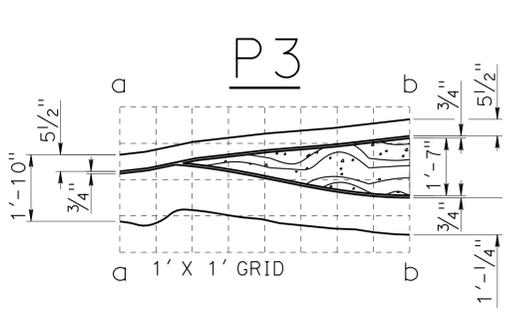
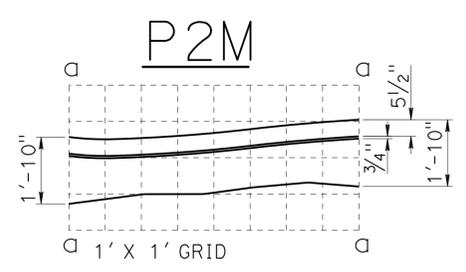
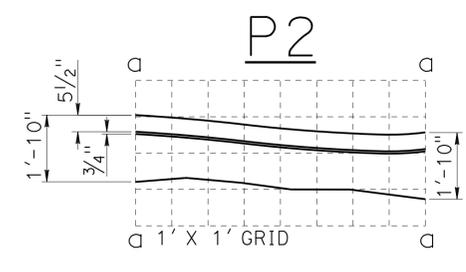
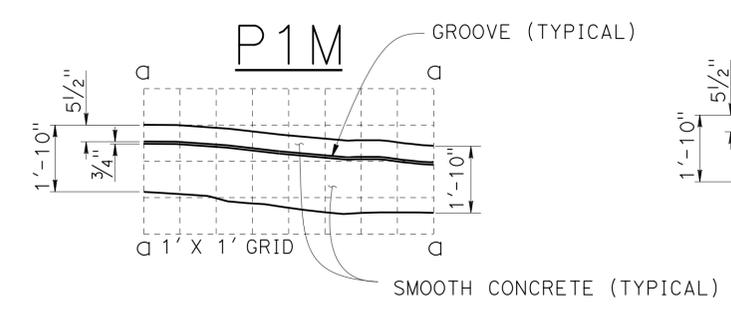
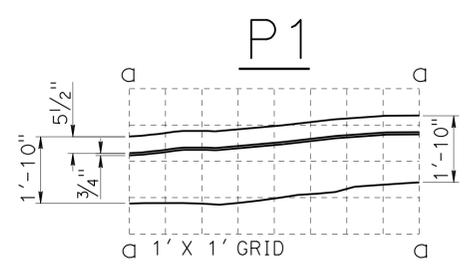
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1994	2313

Richard E. Schendel
REGISTERED CIVIL ENGINEER DATE 10/01/14

6-1-15
PLANS APPROVAL DATE

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RICHARD E. SCHENDEL
No. C64259
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA



- NOTES:
1. Fractured Granite texture at match lines a-a, b-b, c-c, d-d, and e-e must match seamlessly between the interchangeable modules.
 2. Fractured Rib and Random Rock Textures not shown for clarity.

INTERCHANGEABLE PATTERN MOTIF MODULES
NO SCALE

DESIGN	BY Valerie Moore	CHECKED Matthew Schott
DETAILS	BY Farideh Hosseinioun	CHECKED Matthew Schott
QUANTITIES	BY Matthew Schott	CHECKED Michael Pope

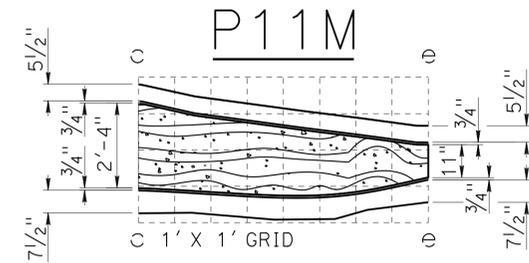
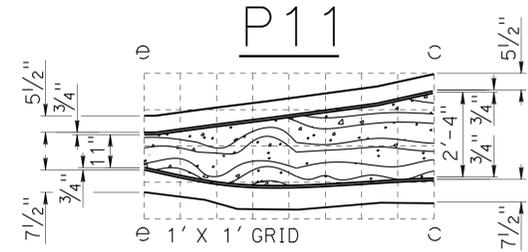
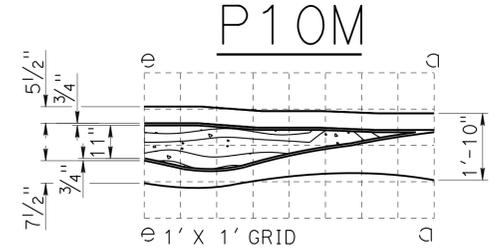
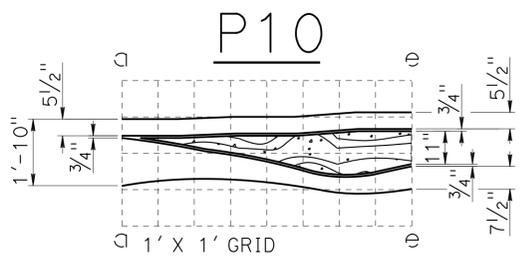
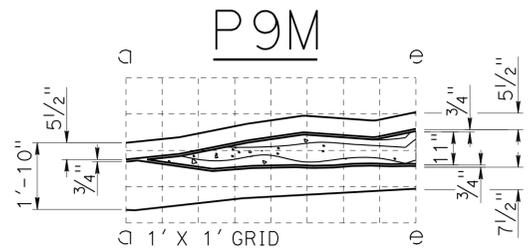
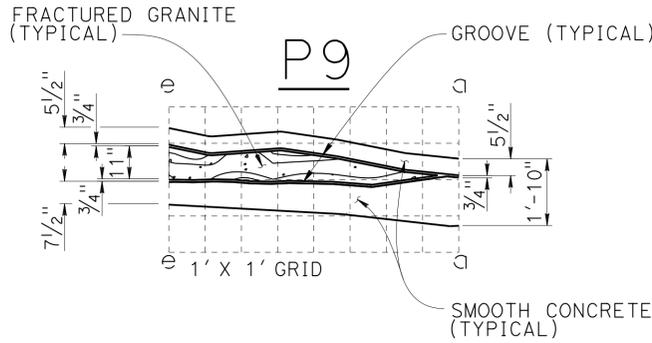
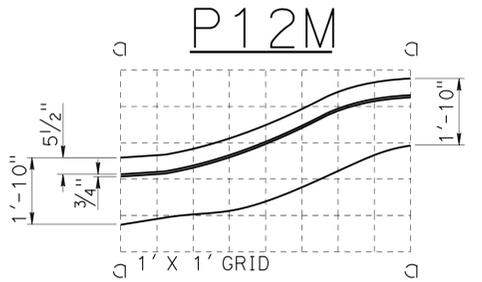
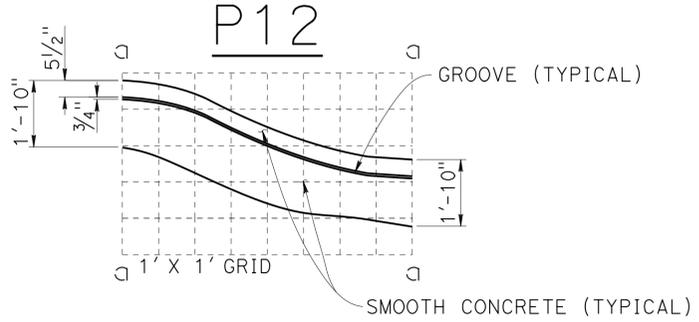
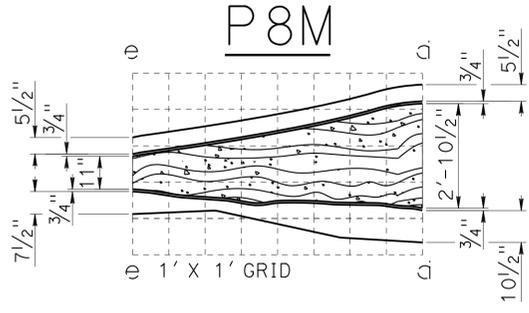
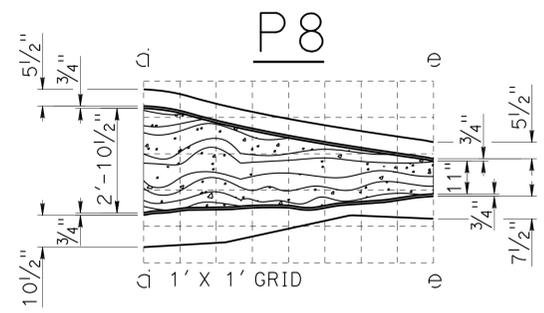
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 18

BRIDGE NO.	53E0304
POST MILE	40.07

RETAINING WALL NO. 2116
ARCHITECTURAL DETAILS NO. 5

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1995	2313
<i>Richard E. Schendel</i> REGISTERED CIVIL ENGINEER			10/01/14 DATE	REGISTERED PROFESSIONAL ENGINEER RICHARD E. SCHEDEL No. C64259 Exp. 6-30-15 CIVIL STATE OF CALIFORNIA	
6-1-15 PLANS APPROVAL DATE					
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- NOTES:
1. Fractured Granite texture at match lines a-a, b-b, c-c, d-d, and e-e must match seamlessly between the interchangeable modules.
 2. Fractured Rib and Random Rock Textures not shown for clarity.

INTERCHANGEABLE PATTERN MOTIF MODULES
NO SCALE

DESIGN	BY Valerie Moore	CHECKED Matthew Schott
DETAILS	BY Farideh Hosseinioun	CHECKED Matthew Schott
QUANTITIES	BY Matthew Schott	CHECKED Michael Pope

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 18

BRIDGE NO.	53E0304
POST MILE	40.07

RETAINING WALL NO. 2116
ARCHITECTURAL DETAILS NO. 6

INDEX TO PLANS

SHEET NO.	TITLE
1.	GENERAL PLAN
2.	FOUNDATION PLAN NO. 1
3.	FOUNDATION PLAN NO. 2
4.	STRUCTURE PLAN NO. 1
5.	STRUCTURE PLAN NO. 2
6.	STRUCTURE PLAN NO. 3
7.	STRUCTURE PLAN NO. 4
8.	STRUCTURE PLAN NO. 5
9.	STRUCTURE PLAN NO. 6
10.	RETAINING WALL TYPE 5SWB - DETAILS NO. 1
11.	RETAINING WALL TYPE 5SWB - DETAILS NO. 2
12.	MASONRY BLOCK SOUND WALL WITH BARRIER ON RETAINING WALL - DETAILS NO. 1
13.	MASONRY BLOCK SOUND WALL WITH BARRIER ON RETAINING WALL - DETAILS NO. 2
14.	LOG TEST BORINGS 1 OF 2
15.	LOG TEST BORINGS 2 OF 2

STANDARD PLANS DATED 2010

SHEET NO.	TITLE
A10A	ABBREVIATIONS (SHEET 1 OF 2)
RSP A10B	ABBREVIATIONS (SHEET 2 OF 2)
A10C	LINES AND SYMBOLS (SHEET 1 OF 3)
A10D	LINES AND SYMBOLS (SHEET 2 OF 3)
A10E	LINES AND SYMBOLS (SHEET 3 OF 3)
A10F	LEGEND - SOIL (SHEET 1 OF 2)
A10G	LEGEND - SOIL (SHEET 2 OF 2)
A10H	LEGEND - ROCK
A62B	LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL - BRIDGE SURCHARGE AND WALL
B0-3	BRIDGE DETAILS
RSP B3-5	RETAINING WALL DETAILS No. 1
B3-6	RETAINING WALL DETAILS No. 2
RSP B15-6	SOUND WALL MASONRY BLOCK ON TYPE 736S/SV BARRIER DETAILS (1)
RSP B15-7	SOUND WALL MASONRY BLOCK ON TYPE 736S/SV BARRIER DETAILS (2)
B15-8	SOUND WALL MASONRY BLOCK ON TYPE 736S/SV BARRIER DETAILS (3)

NOTE:
For "QUANTITIES" see
"STRUCTURE PLAN NO. 1"
sheet.

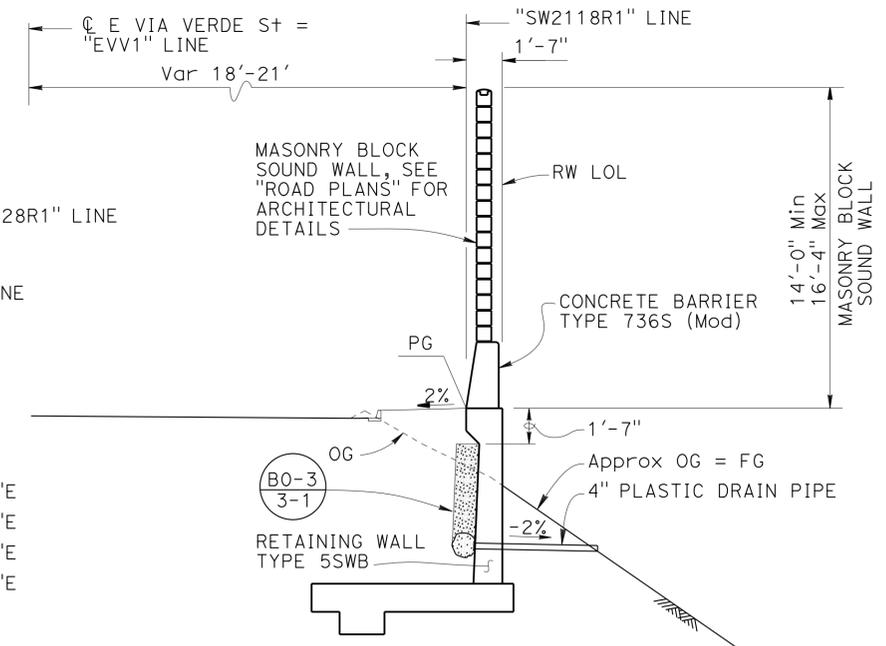
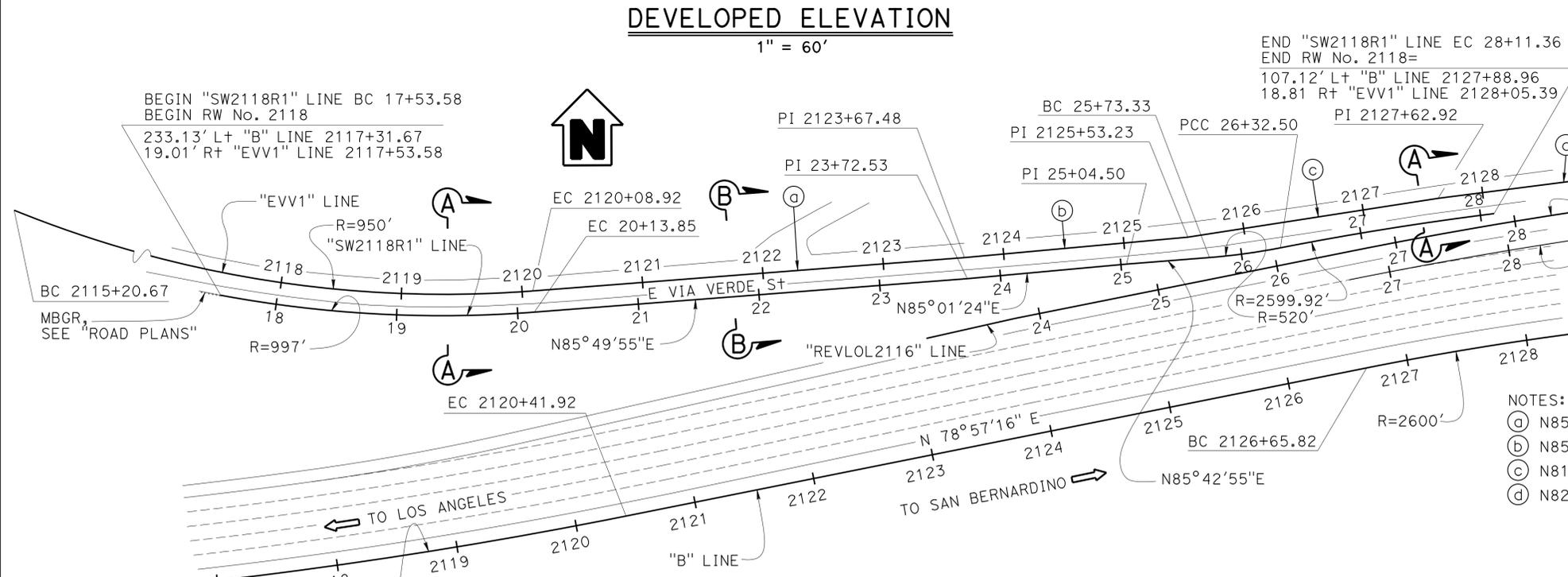
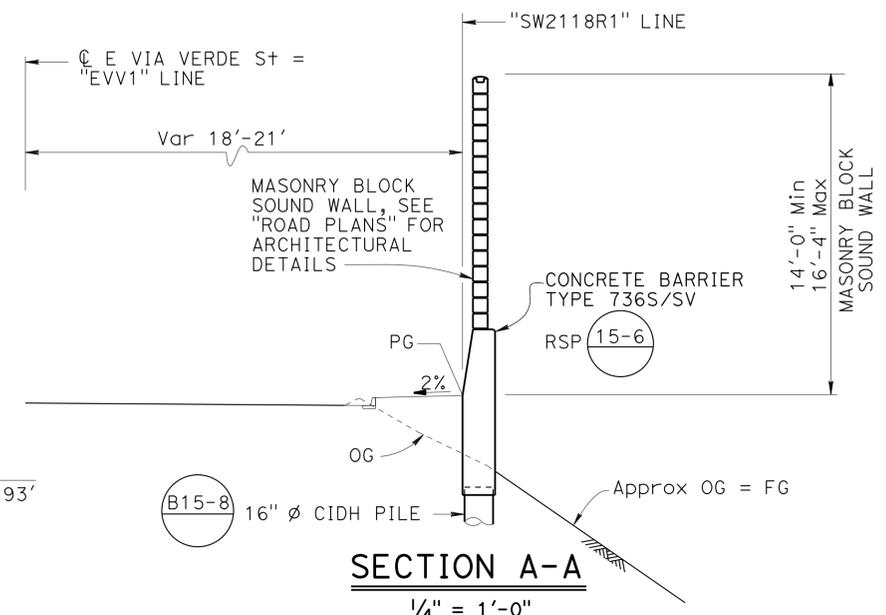
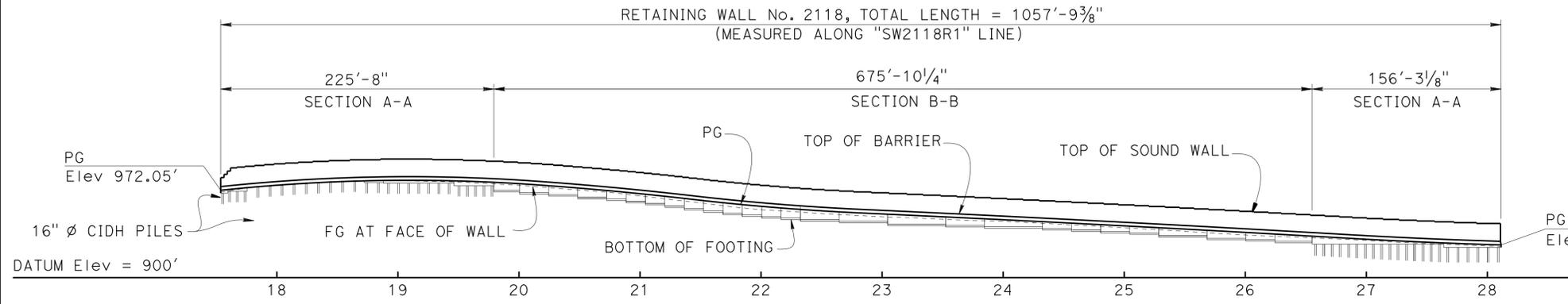
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	1999	2313

Richard Schendel
REGISTERED CIVIL ENGINEER DATE 10/01/14

6-1-15
PLANS APPROVAL DATE

Richard E. Schendel
No. C64259
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

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CURVE DATA "SW2118R1" LINE			CURVE DATA "B" LINE		CURVE DATA "EVV1" LINE	
R = 997.00'	R = 520.00'	R = 2599.92'	R = 4200'	R = 2600'	R = 950.00'	
Δ = 14°57'26"	Δ = 6°31'11"	Δ = 3°56'30"	Δ = 13°43'44"	Δ = 30°34'09"	Δ = 29°26'49"	
T = 130.88'	T = 29.62'	T = 89.47'	T = 505.61'	T = 710.53'	T = 249.64'	
L = 260.27'	L = 59.17'	L = 178.87'	L = 1006.39'	L = 1387.18'	L = 488.25'	

- NOTES:
- (a) N85°49'55"E
 - (b) N85°01'24"E
 - (c) N81°26'31"E
 - (d) N82°56'45"E

NOTE:
For Retaining Wall Type 5SWB details see
"RETAINING WALL TYPE 5SWB" sheets.

MICHAEL POPE DESIGN ENGINEER	DESIGN	BY DAVID P. MURRAY	CHECKED GERRARD HIGHT	LOAD & RESISTANCE FACTOR DESIGN	LIVE LOADING: HL93 W/"LOW-BOY"; PERMIT DESIGN VEHICLE	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 18	BRIDGE NO.	RETAINING WALL NO. 2118 GENERAL PLAN	
	DETAILS	BY MINH TRAN / JINLI GUO	CHECKED GERRARD HIGHT	LAYOUT	BY MINH TRAN			CHECKED GERRARD HIGHT		53E0305
	QUANTITIES	BY DAVID P. MURRAY	CHECKED GERRARD HIGHT	SPECIFICATIONS	BY XIAODONG CHEN			CHECKED XIAODONG CHEN		POST MILE 40.10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

UNIT: 3603
PROJECT NUMBER & PHASE: 071300007-1
CONTRACT NO.: 07-1193U1

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
06/29/13 02/05/14 09/10/14	1	15

STRUCTURES DESIGN GENERAL PLAN SHEET (ENGLISH) (REV.09-01-10)

FILE => 53e0305-a-gpnew.dgn

CURVE DATA				
No.	R	Δ	T	L
(A)	997.00	14°57'26"	130.88	260.27
(B)	3970.71	03°17'34"	114.13	228.20
(C)	2248.14	04°50'23"	95.01	189.90
(D)	4200.00	13°43'44"	505.61	1006.38

NOTES:
 1. Foundations for walls other than RW No. 2118 are not shown.
 2. For bottom of footing elevations, see "STRUCTURE PLAN" sheets.

SURVEY CONTROL
 PRHV 4029 (Not Shown On Plan)
 Fnd 1" IP w/CT Plug
 70.28 FT Lt. "A" Line Rte 10
 Sta. 2135+79.53
 N 1,847,539.18
 E 6,610,211.48
 Elev. = 930.99
 PRHV 10 (Not Shown On Plan)
 Fnd L&T w/LA Co Eng Washer
 169.30 FT Rt. "RTE10" LINE Rte 10
 Sta. 2136+50.57
 N 1,847,291.22
 E 6,610,239.06
 Elev. = 914.10



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	37.2/42.4	2000	2313

10/01/14
 REGISTERED CIVIL ENGINEER DATE
 RICHARD E. SCHEDEL
 No. C64259
 Exp. 6-30-15
 CIVIL
 PLANS APPROVAL DATE
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PRELIMINARY INVESTIGATION SECTION				DESIGN		STATE OF CALIFORNIA		DIVISION OF ENGINEERING SERVICES		BRIDGE NO.		RETAINING WALL NO. 2118	
SCALE	VERT. DATUM	PHOTOGRAMMETRY	AS OF:	BY	CHECKED	DEPARTMENT OF TRANSPORTATION	STRUCTURE DESIGN	53E0305	FOUNDATION PLAN NO. 1				
1"=20'	HORIZ. DATUM	SURVEYED	BY	MINH TRAN	GERRARD HIGHT	DESIGN BRANCH 18		POST MILE					
ALIGNMENT TIES	Dist. Traverse Sheet	DRAFTED	BY	DAVID P. MURRAY	GERRARD HIGHT			40.10					
STRUCTURES FOUNDATION PLAN SHEET (ENGLISH) (REV. 09-01-10)				ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				UNIT: 3646		PROJECT NUMBER & PHASE: 0713000007 1		CONTRACT NO.: 07-1193U1	
								DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES		SHEET OF	
										03/07/11 01/15/14 03/05/14		2 15	

FILE => 53e0305-b-fp1001.dgn