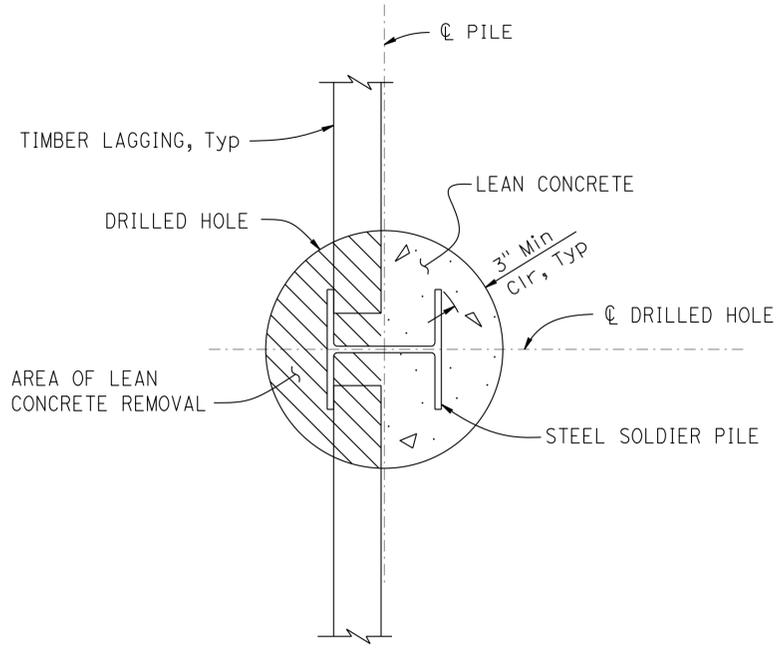


DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	9	2.5/7.0	101	124
Rosa M. Candiotti REGISTERED CIVIL ENGINEER			2-8-13 DATE		
6-10-13 PLANS APPROVAL DATE			The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.		



SECTION E-E
NO SCALE

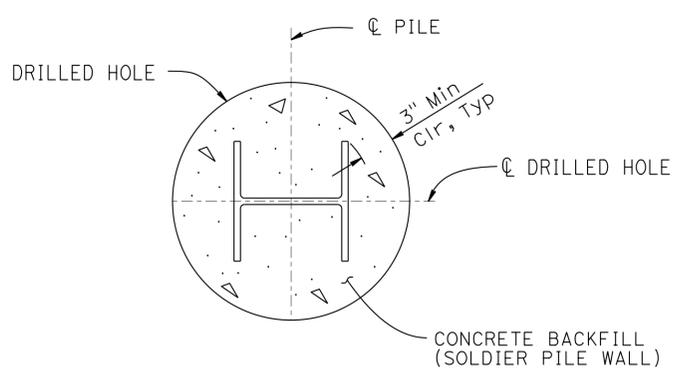


LIMITS OF CLEAN & PAINT STEEL SOLDIER PILE
NO SCALE

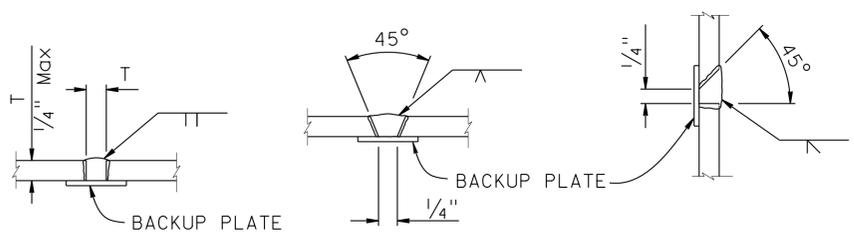
NOTE:
Finish coat not required

GENERAL NOTES

- DESIGN: AASHTO LRFD Bridge Design Specifications, 4th Edition with California Amendments.
- SOIL PARAMETERS: (For determination of Design Lateral Earth Pressures)
 Backfill soil weight = 135 lb/ft^3
 Friction Angle = 45°
 Active Pressure coefficient, $K_a = 0.17$
 Bedrock Unit Weight = 125 lb/ft^3
 Friction Angle = 40°
- STEEL SOLDIER PILES: ASTM A709, ASTM709M Grade 50 or 50 W
 $f_y = 50 \text{ ksi}$
- REINFORCED CONCRETE (WALERS): $f'_c = 4000 \text{ psi}$
 $f_y = 60 \text{ ksi}$
- STRUCTURAL TIMBER: Treated Douglas Fir, Grade No. 1 or better. Timber to be full sawn
- SEISMIC LOADING: Soil profile: Class C
 PGA: 0.81 $K_n = 0.27$



SECTION F-F
NO SCALE



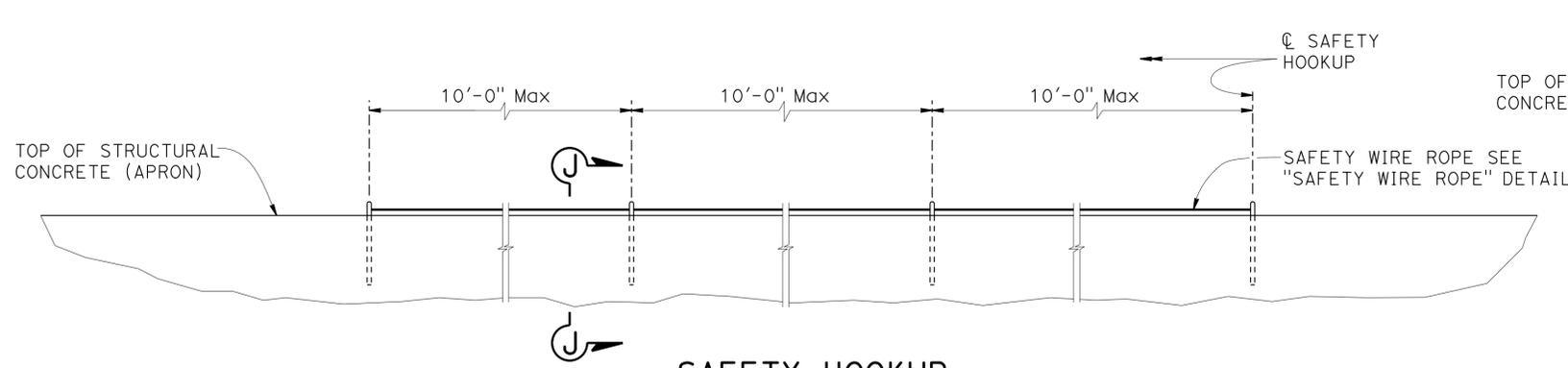
PILE WELDING DETAIL-BUTT JOINTS
NO SCALE

- NOTES:
1. Single vee-groove and square groove permitted for all positions
 2. Single bevel-groove permitted for horizontal joints only
 3. For location of "SECTION E-E" and "SECTION F-F" see "RETAINING WALL DETAILS No. 1" sheet

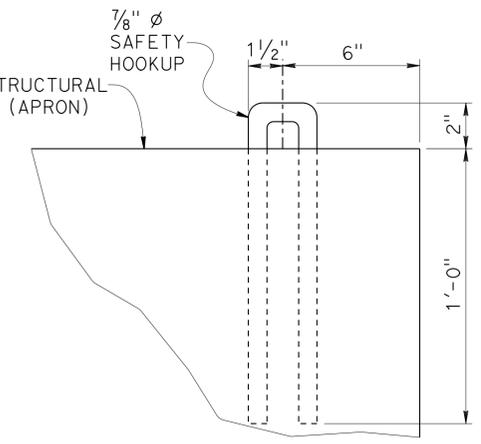
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY Rosa Candiotti	CHECKED Isaias Yalan	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 9	BRIDGE No.	SOLDIER PILE WALL AT PM 5.90			
	DETAILS	BY Tim Fairall	CHECKED Isaias Yalan			37E0101				
	QUANTITIES	BY Rosa Candiotti	CHECKED Isaias Yalan			POST MILE		5.90	RETAINING WALL DETAILS No. 3	
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS					UNIT: 3594	PROJECT NUMBER & PHASE: 04000008221	CONTRACT No.: 04-2A4304	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 11 OF 20

USERNAME => s121614 DATE PLOTTED => 12-JUN-2013 TIME PLOTTED => 08:03

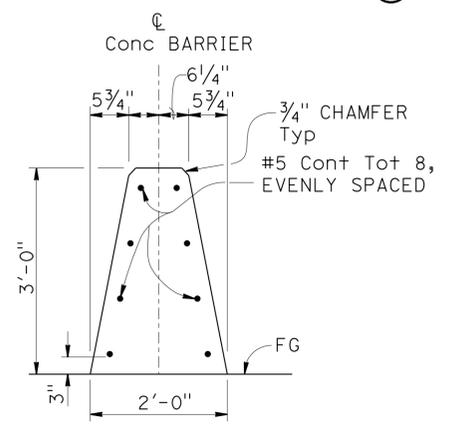
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	9	2.5/7.0	102	124
Rosa M. Candiotti REGISTERED CIVIL ENGINEER			2-8-13 DATE		
6-10-13 PLANS APPROVAL DATE					
<small>The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.</small>					



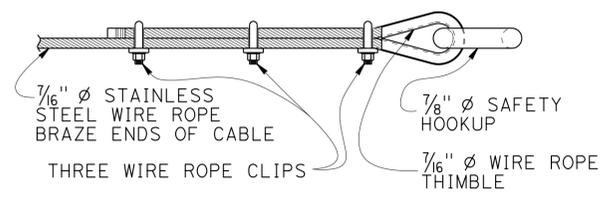
SAFETY HOOKUP ELEVATION
No Scale



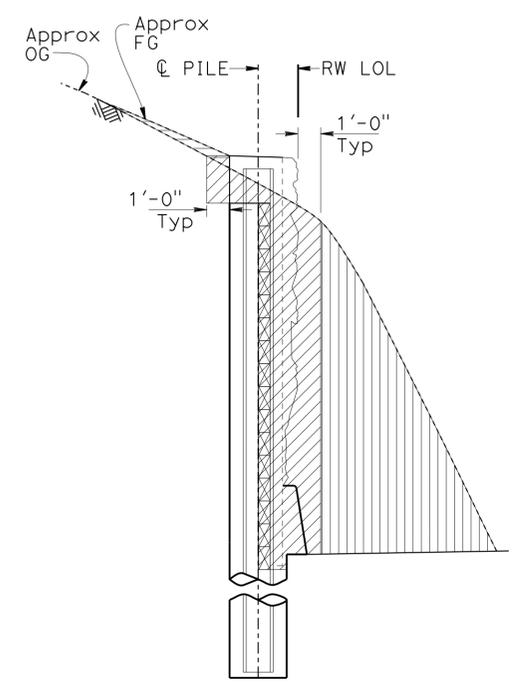
SECTION J-J
3" = 1'-0"



SECTION K-K
3/4" = 1'-0"



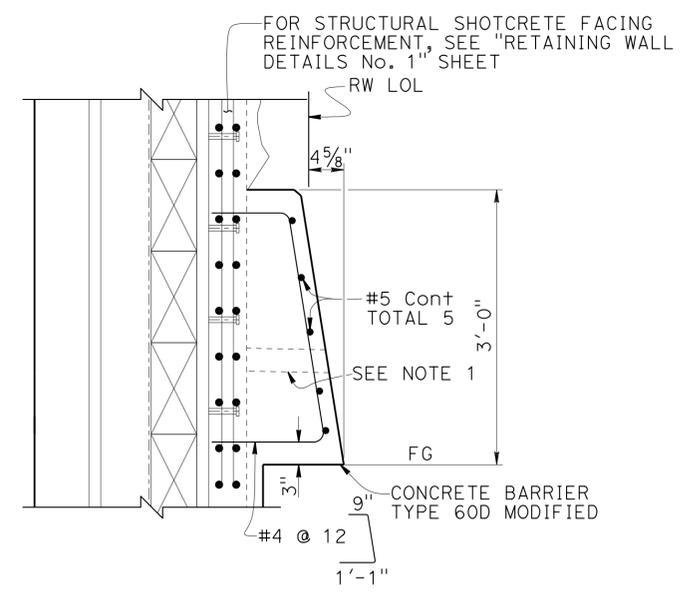
SAFETY WIRE ROPE DETAIL
No Scale



LEGEND:

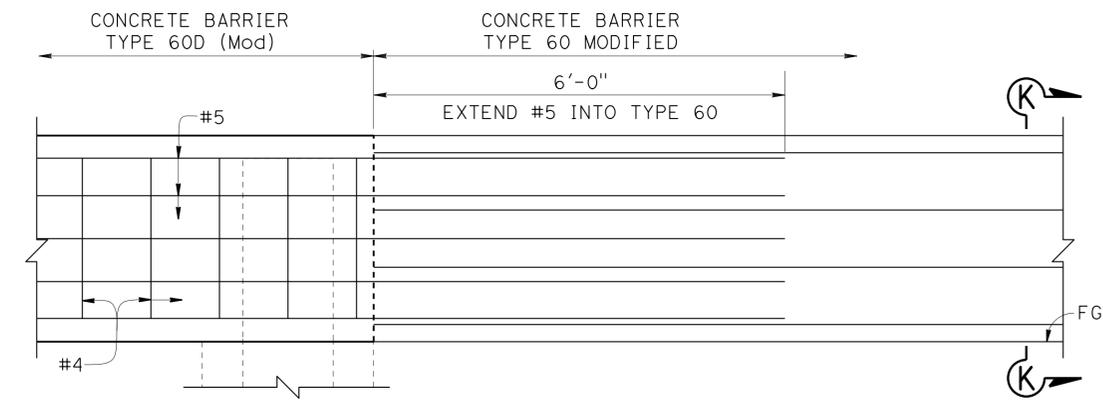
- STRUCTURE EXCAVATION (SOLDIER PILE WALL)
- ROADWAY EXCAVATION, SEE "ROADWAY PLANS"
- STRUCTURE BACKFILL (SOLDIER PILE WALL)

LIMITS OF EXCAVATION AND BACKFILL
NO SCALE



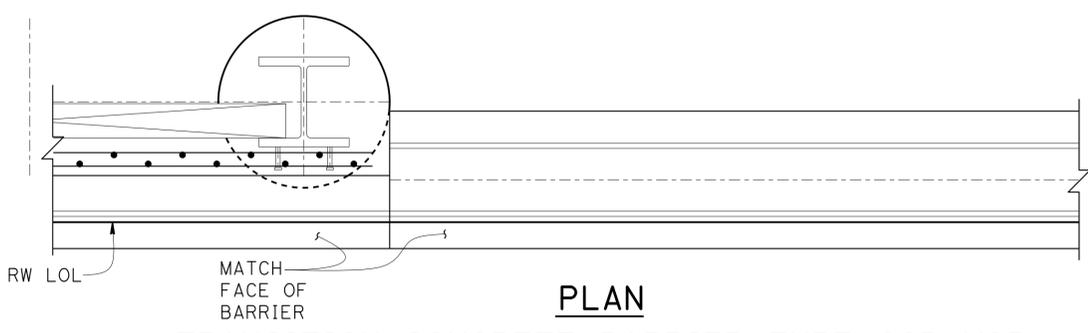
CONCRETE BARRIER REINFORCEMENT
1" = 1'-0"

NOTE:
1. See "WALL DRAIN DETAILS" sheet



ELEVATION

NOTE:
Concrete Barrier Transition shown at Station 15+18.52 and similar at Station 15+56.02

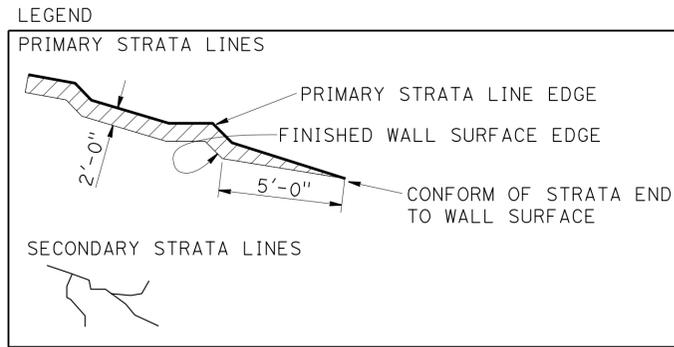


TRANSITION CONCRETE BARRIER TYPE 60D MOD TO CONCRETE BARRIER TYPE 60 MOD
3/4" = 1'-0"

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY Rosa Candiotti	CHECKED Isaias Yalan	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 9	BRIDGE No.	37E0101	SOLDIER PILE WALL AT PM 5.90 RETAINING WALL DETAILS No. 4	
	DETAILS	BY Tim Fairall	CHECKED Isaias Yalan			POST MILE	5.90		
	QUANTITIES	BY Rosa Candiotti	CHECKED Isaias Yalan			UNIT: 3594	PROJECT NUMBER & PHASE: 04000008221		CONTRACT No.: 04-2A4304
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				0 1 2 3		DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES 12-16-10 7-04-13 2-05-13	SHEET 12 OF 20

NOTES:

- ① Primary Strata lines drawn on the developed elevation are to be used as a general guide for layout of Primary Strata line reinforcement. See "SCULPTED SHOTCRETE DETAILS" Sheet.
- ② Secondary Strata lines drawn on the developed elevation are to be used as a general guide. Strata lines shall be sculpted to mimic local geology.
- ③ This sheet accurate for sculpted shotcrete only.
- ④ Sculpted shotcrete shall be continuous throughout the face of the wall.
- ⑤ Additional shotcrete needed for carving the Primary Strata lines to be reinforced as shown on "SCULPTED SHOTCRETE DETAILS" sheet.
- ⑥ Primary Strata lines to be tapered into the top and bottom of wall.
- ⑦ Secondary Strata lines are not to exceed 2" amplitude.



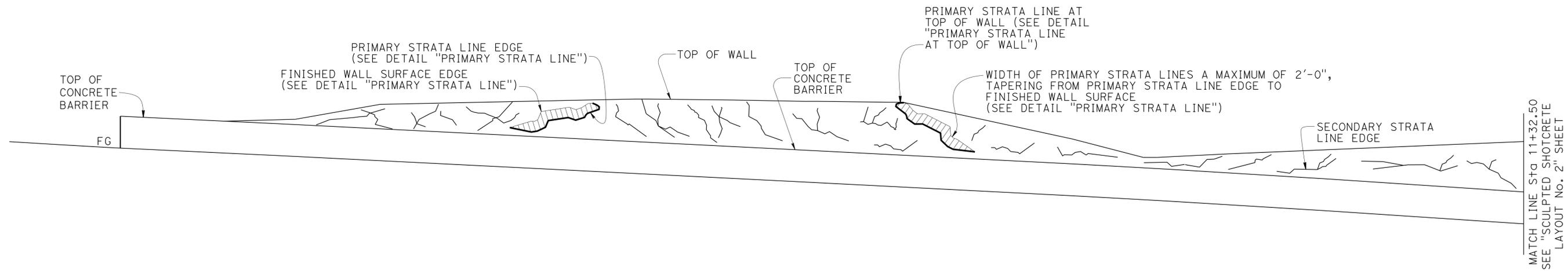
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	9	2.5/7.0	103	124

Rosa M. Candioti 2-8-13
 REGISTERED CIVIL ENGINEER DATE

6-10-13
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 ROSA CANDIOTTI
 No. 64626
 Exp. 6-30-2013
 CIVIL
 STATE OF CALIFORNIA

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**DEVELOPED ELEVATION
 SCULPTED SHOTCRETE WALL SURFACE**
 1" = 5'

NOTE:
 For Details see "SCULPTED SHOTCRETE DETAILS" Sheet

MATCH LINE Sta 11+32.50
 SEE "SCULPTED SHOTCRETE LAYOUT No. 2" SHEET

DESIGN	BY	Rosa Candioti	CHECKED	Isaias Yalan	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 9	BRIDGE No.	37E0101	SOLDIER PILE WALL AT PM 5.90 SCULPTED SHOTCRETE LAYOUT No. 1	
	DETAILS	BY	Tim Fairall	CHECKED			Isaias Yalan	POST MILE		5.90
	QUANTITIES	BY	Rosa Candioti	CHECKED			Isaias Yalan			

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3594 PROJECT NUMBER & PHASE: 0400008221 CONTRACT No.: 04-2A4304

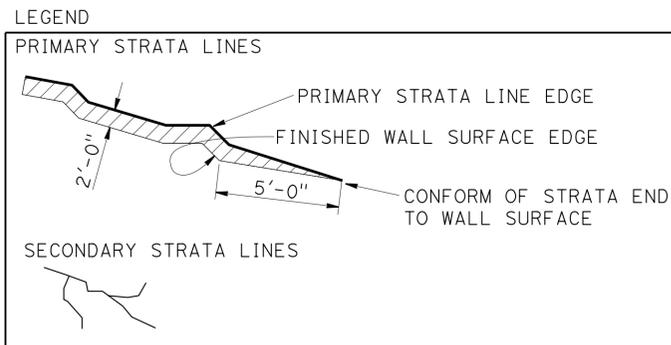
DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
11-20-12 1-09-13 2-05-13	13	20

FILE => 37e0101-1-archdets01.dgn

NOTES:

- ① Primary Strata lines drawn on the developed elevation are to be used as a general guide for layout of Primary Strata line reinforcement. See "SCULPTED SHOTCRETE DETAILS" Sheet.
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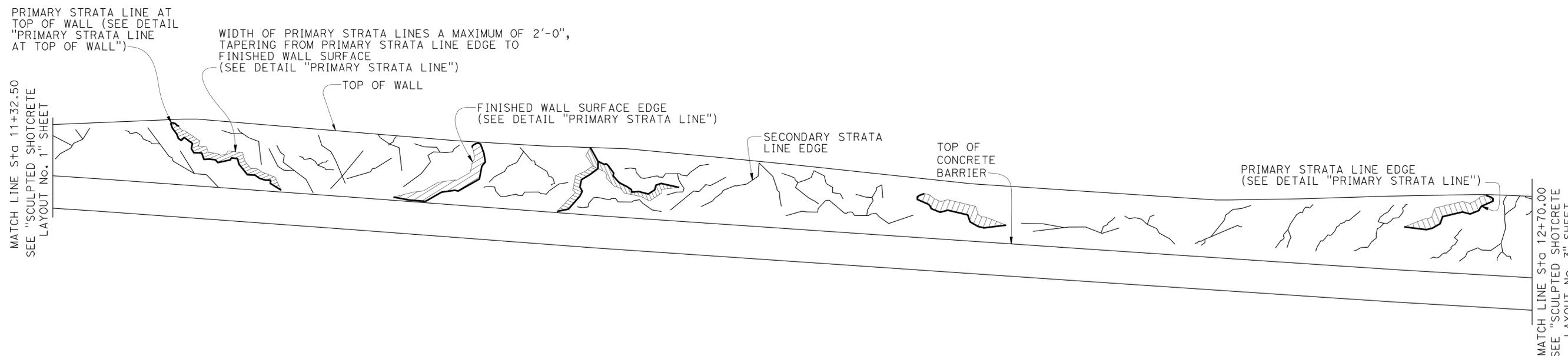
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	9	2.5/7.0	104	124

Rosa M. Candiotti 2-8-13
 REGISTERED CIVIL ENGINEER DATE

6-10-13
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 ROSA CANDIOTTI
 No. 64626
 Exp. 6-30-2013
 CIVIL
 STATE OF CALIFORNIA

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**DEVELOPED ELEVATION
 SCULPTED SHOTCRETE WALL SURFACE**

1" = 5'

NOTE:
 For Details see "SCULPTED SHOTCRETE DETAILS" Sheet

DESIGN	BY	Rosa Candiotti	CHECKED	Isaias Yalan	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 9	BRIDGE No.	37E0101	SOLDIER PILE WALL AT PM 5.90		
	DETAILS	BY	Tim Fairall	CHECKED			Isaias Yalan	POST MILE		5.90	SCULPTED SHOTCRETE LAYOUT No. 2
	QUANTITIES	BY	Rosa Candiotti	CHECKED			Isaias Yalan				

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

0 1 2 3

UNIT: 3594
 PROJECT NUMBER & PHASE: 0400008221

CONTRACT No.: 04-2A4304

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
9-11-12 1-09-13 2-05-13	14	20

FILE => 37e0101-1-archdets02.dgn

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	9	2.5/7.0	105	124

Rosa M. Candiotti 2-8-13
 REGISTERED CIVIL ENGINEER DATE

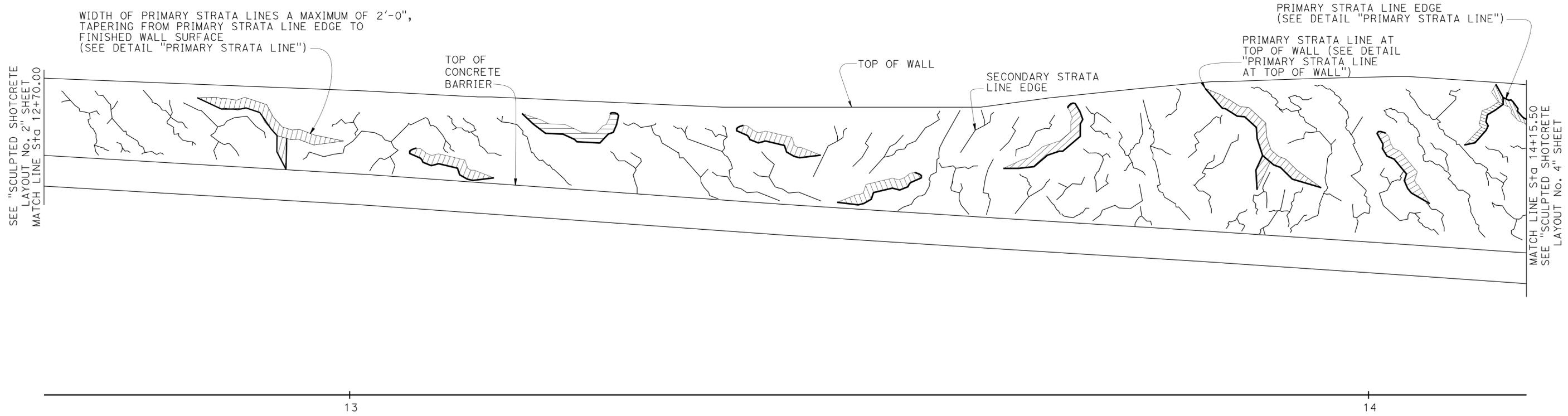
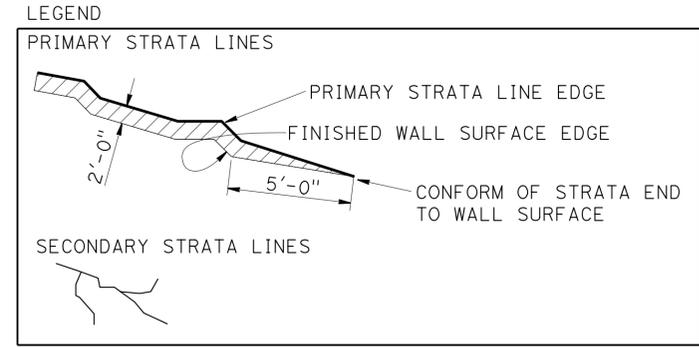
6-10-13
 PLANS APPROVAL DATE

REG. NO. 64626
 Exp. 6-30-2013
 CIVIL
 STATE OF CALIFORNIA

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NOTES:

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- ⑦ Secondary Strata lines are not to exceed 2" amplitude.



**DEVELOPED ELEVATION
 SCULPTED SHOTCRETE WALL SURFACE**

1" = 5'

NOTE:
 For Details see "SCULPTED SHOTCRETE DETAILS" Sheet

DESIGN	BY Rosa Candiotti	CHECKED Isaias Yalan
DETAILS	BY Tim Fairall	CHECKED Isaias Yalan
QUANTITIES	BY Rosa Candiotti	CHECKED Isaias Yalan

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 9

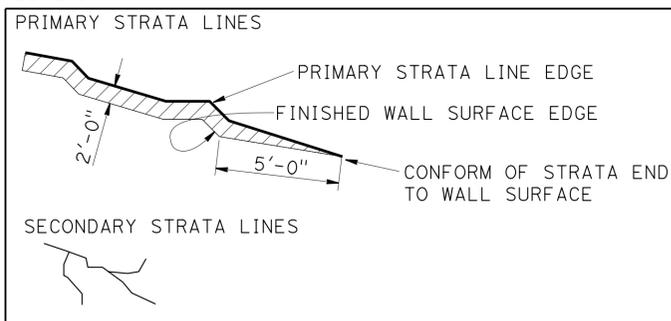
BRIDGE No.	37E0101
POST MILE	5.90

SOLDIER PILE WALL AT PM 5.90
SCULPTED SHOTCRETE LAYOUT No. 3

NOTES:

- ① Primary Strata lines drawn on the developed elevation are to be used as a general guide for layout of Primary Strata line reinforcement. See "SCULPTED SHOTCRETE DETAILS" Sheet.
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- ⑦ Secondary Strata lines are not to exceed 2" amplitude.

LEGEND



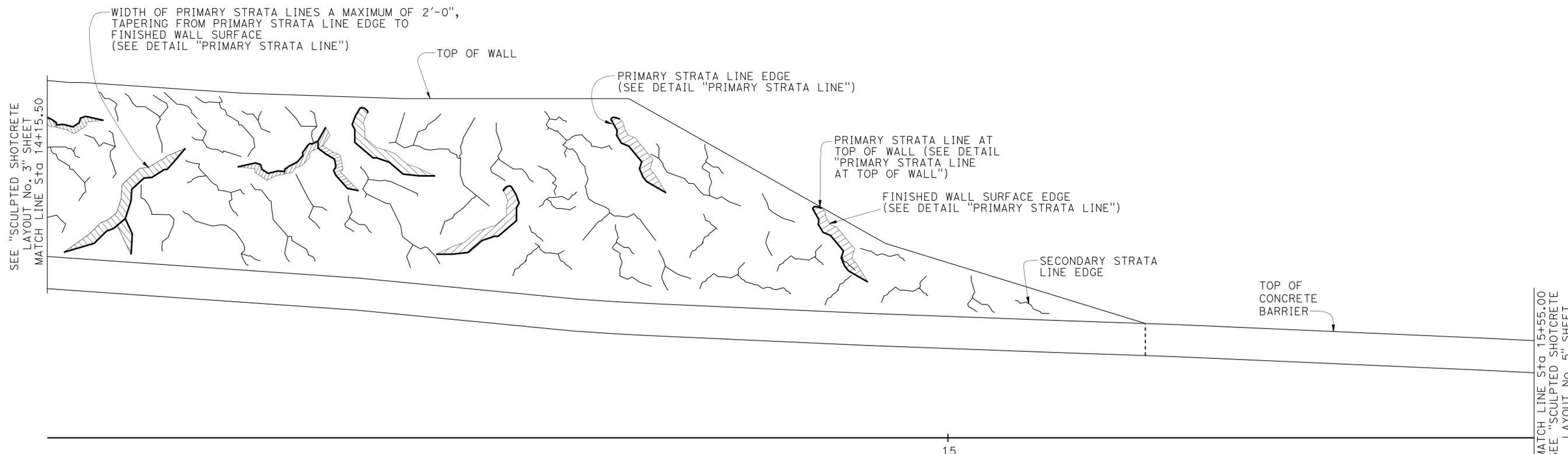
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	9	2.5/7.0	106	124

Rosa M. Candiotti 2-8-13
 REGISTERED CIVIL ENGINEER DATE

6-10-13
 PLANS APPROVAL DATE

ROSA CANDIOTTI
 No. 64626
 Exp. 6-30-2013
 CIVIL
 STATE OF CALIFORNIA

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DEVELOPED ELEVATION
SCULPTED SHOTCRETE WALL SURFACE

1" = 5'

NOTE:
 For Details see "SCULPTED SHOTCRETE DETAILS" Sheet

DESIGN	BY Rosa Candiotti	CHECKED Isaias Yalan
DETAILS	BY Tim Fairall	CHECKED Isaias Yalan
QUANTITIES	BY Rosa Candiotti	CHECKED Isaias Yalan

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
 DESIGN BRANCH 9

BRIDGE No.	37E0101
POST MILE	5.90

SOLDIER PILE WALL AT PM 5.90
SCULPTED SHOTCRETE LAYOUT No. 4



REVISION DATES	SHEET	OF
9-18-12 1-09-13 2-05-13	16	20

USERNAME => 6124486 DATE PLOTTED => 11-JUN-2013 TIME PLOTTED => 12:39

NOTES:

- ① Primary Strata lines drawn on the developed elevation are to be used as a general guide for layout of Primary Strata line reinforcement. See "SCULPTED SHOTCRETE DETAILS" Sheet.
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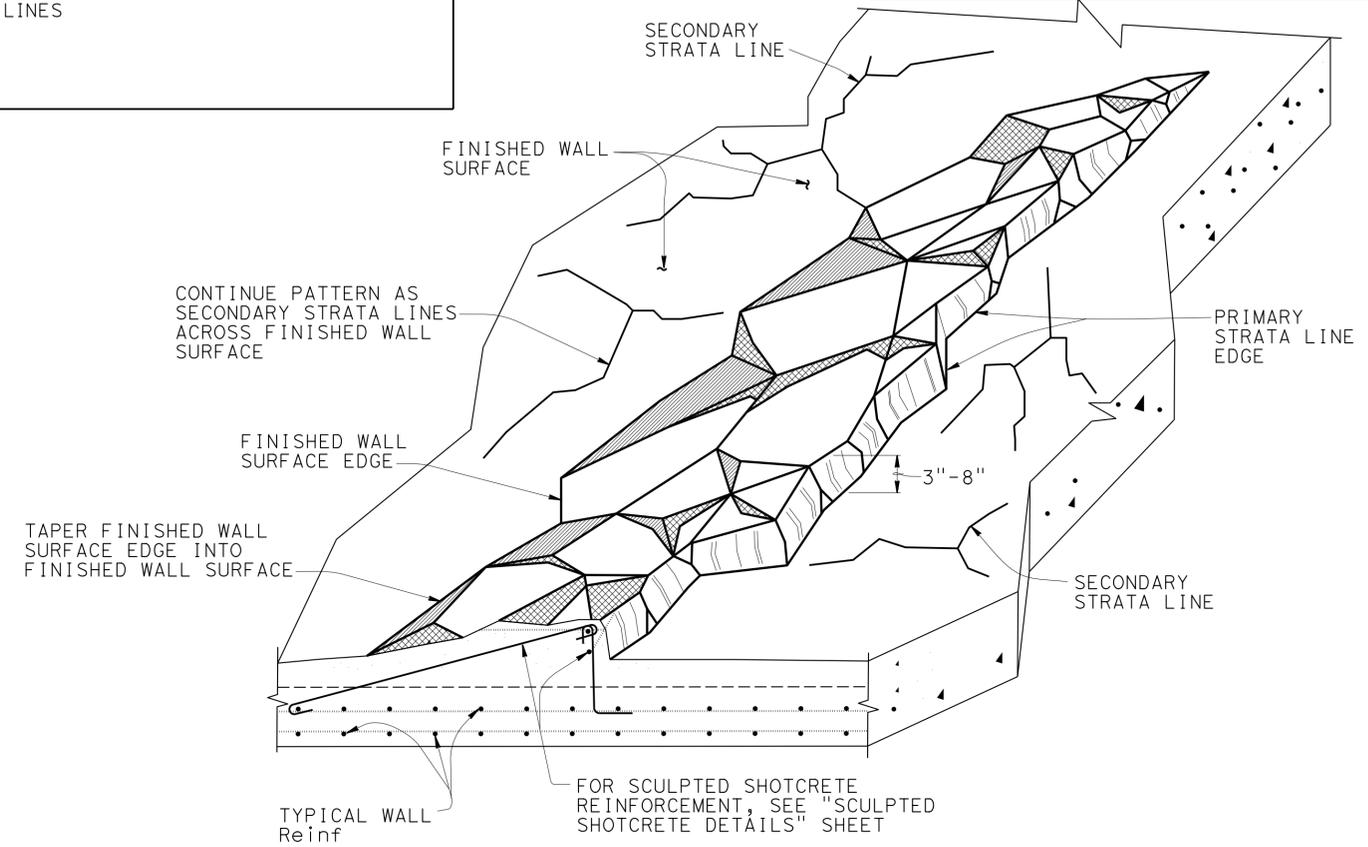
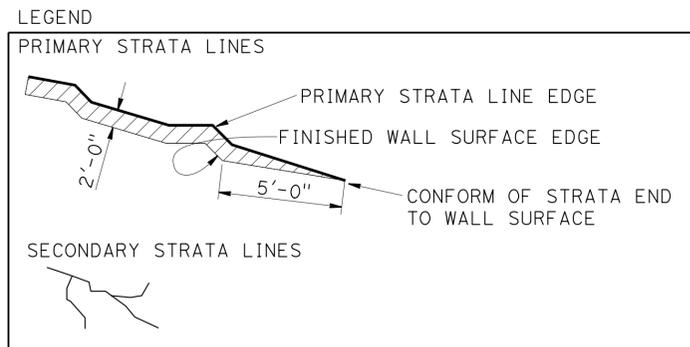
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	9	2.5/7.0	107	124

Rosa M. Candiotti 4-10-13
 REGISTERED CIVIL ENGINEER DATE

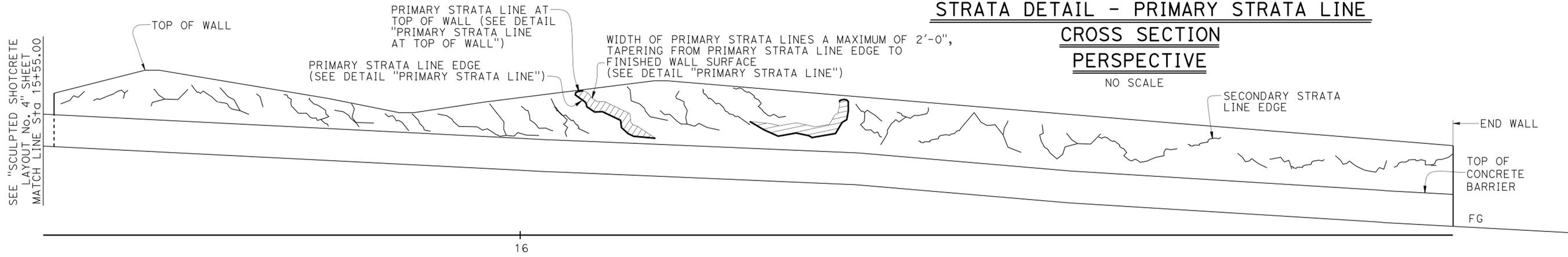
6-10-13
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 ROSA CANDIOTTI
 No. 64626
 Exp. 6-30-2013
 CIVIL
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STRATA DETAIL - PRIMARY STRATA LINE
CROSS SECTION
PERSPECTIVE
 NO SCALE



DEVELOPED ELEVATION
SCULPTED SHOTCRETE WALL SURFACE
 1" = 5'

NOTE:
 For Details see "SCULPTED SHOTCRETE DETAILS" Sheet

DESIGN	BY Rosa Candiotti	CHECKED Isaias Yalan
DETAILS	BY Tim Fairall	CHECKED Isaias Yalan
QUANTITIES	BY Rosa Candiotti	CHECKED Isaias Yalan

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 9

BRIDGE No.	37E0101
POST MILE	5.90

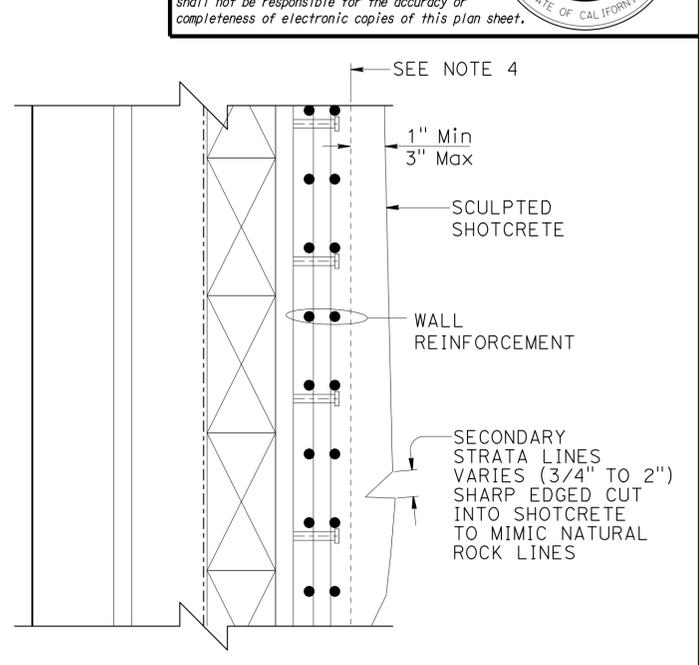
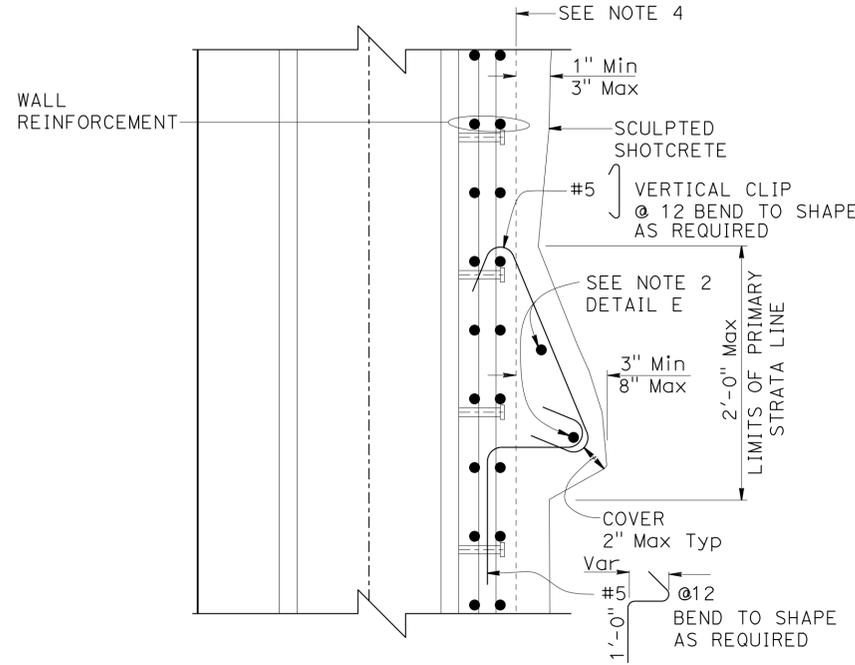
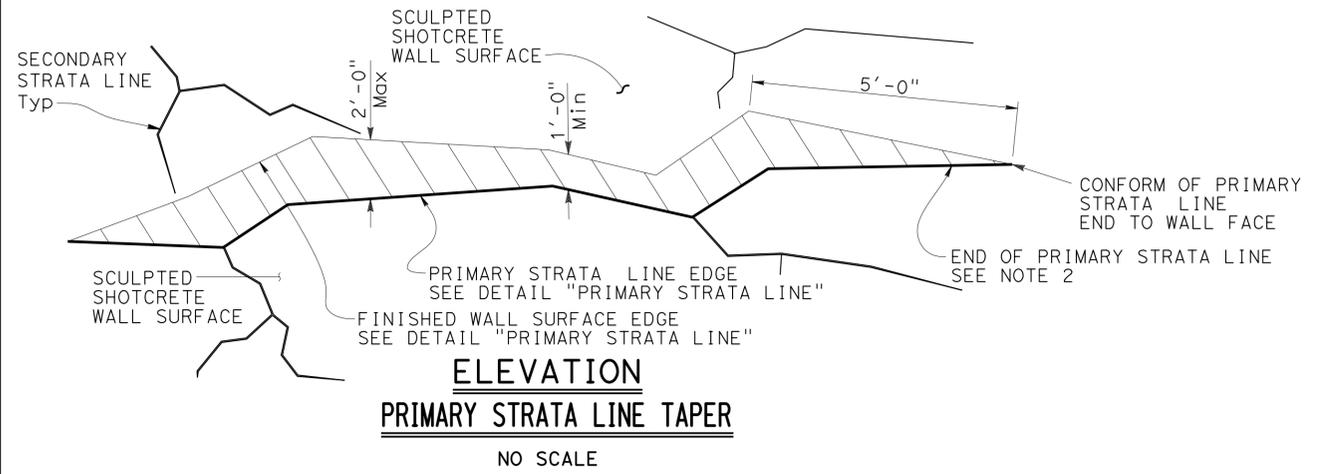
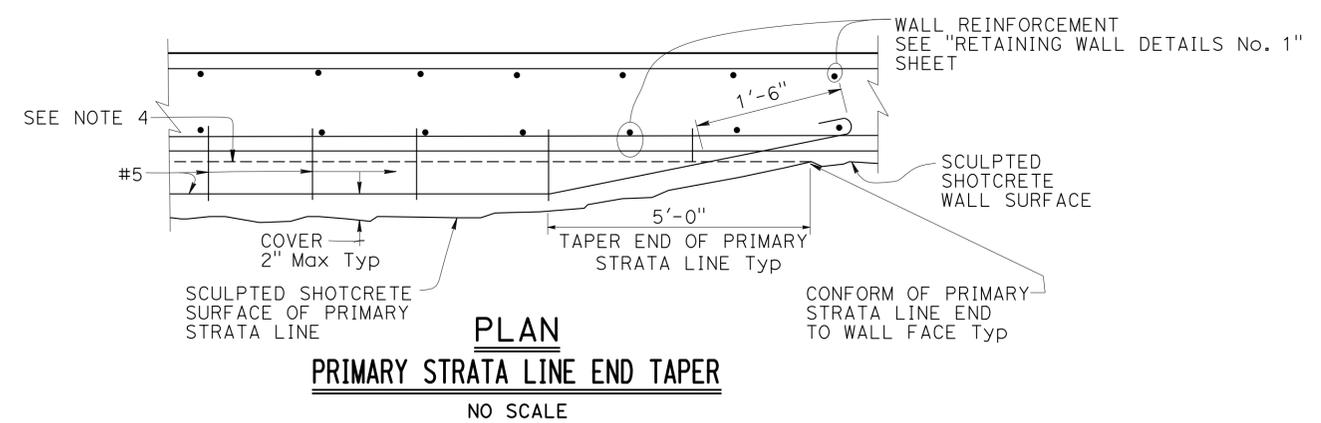
SOLDIER PILE WALL AT PM 5.90
SCULPTED SHOTCRETE LAYOUT No. 5



REVISION DATES	SHEET	OF
9-18-12 1-09-13 2-05-13 4-10-13	17	20

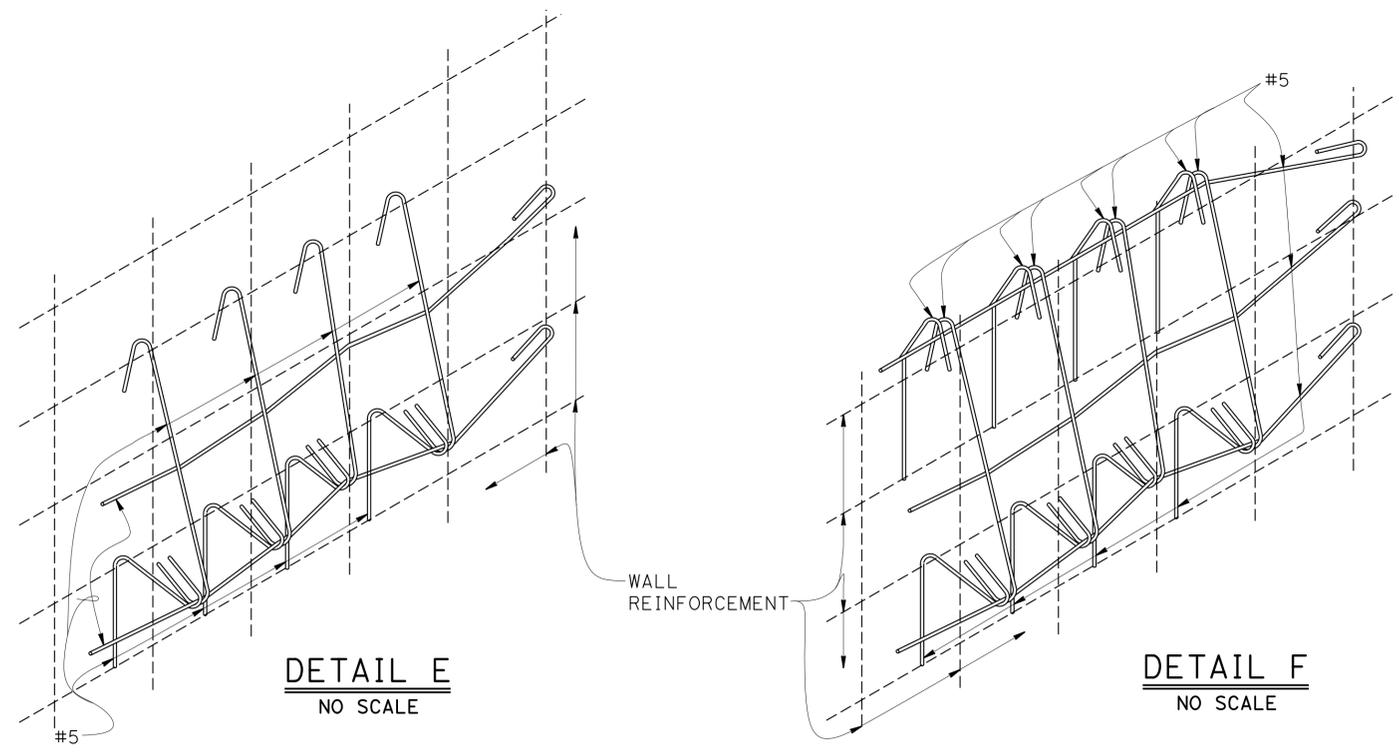
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	9	2.5/7.0	108	124
Rosa Candiotti REGISTERED CIVIL ENGINEER DATE 2-8-13				REGISTERED PROFESSIONAL ENGINEER ROSA CANDIOTTI No. 64626 Exp. 6-30-2013 CIVIL STATE OF CALIFORNIA	
6-10-13 PLANS APPROVAL DATE					
<small>The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.</small>					

- NOTES:
1. Maximum 6" thick reinforced shotcrete zone for top of wall sculpted shotcrete.
 2. #5 continuous @ 12 shall taper and embed into the wall to a minimum depth as shown on "PRIMARY STRATA LINE END TAPER" detail.
 3. Angle of primary strata line across wall apron 15 degrees for cross slopes 0-10%, 45 degrees for cross slopes greater than 10%.
 4. Face of structural shotcrete to which surface clearances are measured.



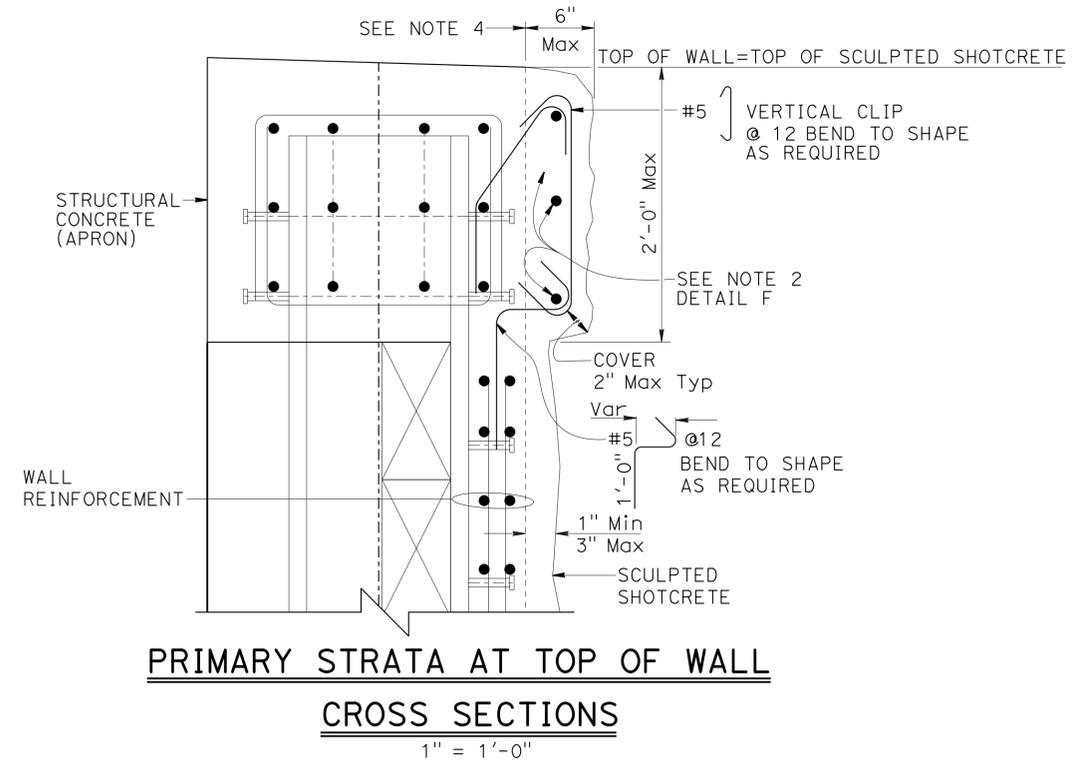
PRIMARY STRATA LINE

SECONDARY STRATA LINE



DETAIL E
NO SCALE

DETAIL F
NO SCALE



PRIMARY STRATA AT TOP OF WALL
CROSS SECTIONS
1" = 1'-0"

DESIGN	BY Rosa Candiotti	CHECKED Isaias Yalan
DETAILS	BY Tim Fairall	CHECKED Isaias Yalan
QUANTITIES	BY Rosa Candiotti	CHECKED Isaias Yalan

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 9

BRIDGE No. 37E0101
POST MILE 5.90

SOLDIER PILE WALL AT PM 5.90
SCULPTED SHOTCRETE DETAILS

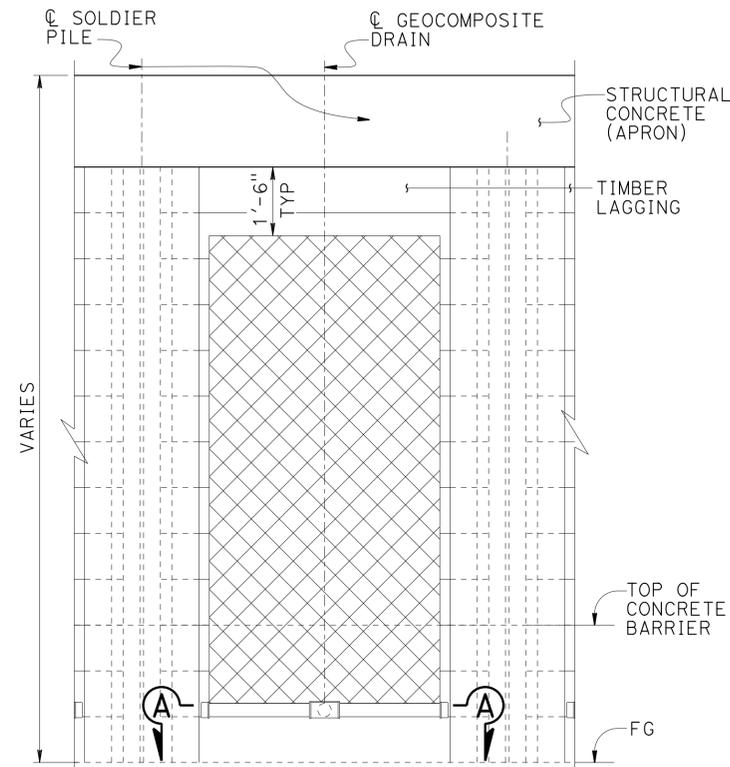
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	9	2.5/7.0	109	124

Rosa M. Candiotti 2-8-13
REGISTERED CIVIL ENGINEER DATE

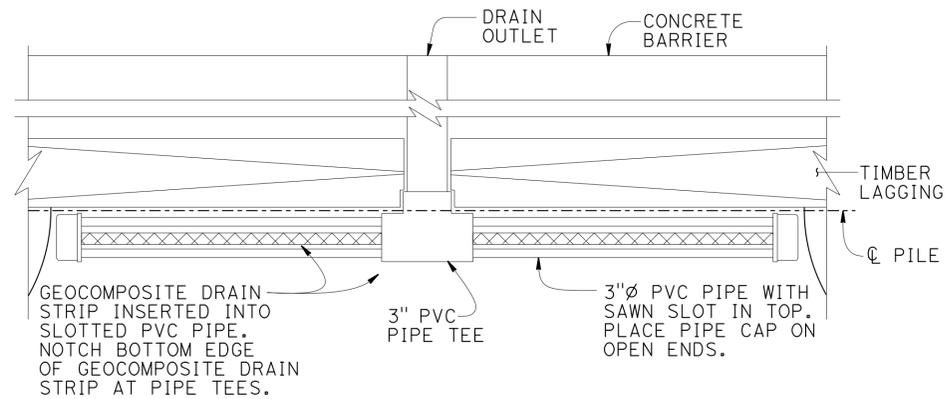
6-10-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
ROSA CANDIOTTI
No. 64626
Exp. 6-30-2013
CIVIL
STATE OF CALIFORNIA

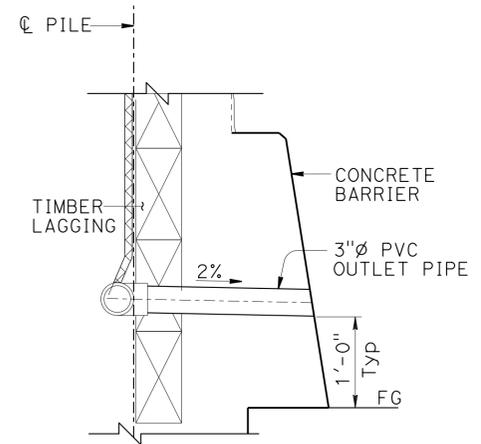
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PART ELEVATION WALL DRAIN
1/2" = 1'-0"



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



WALL DRAIN DETAIL AT WEEPHOLE
1" = 1'-0"

- NOTES:
- Center Geocomposite vertical drain between Soldier Piles.
 - Geocomposite drain not required for wall height less than 6'-6".
 - 1'-0" Minimum splice length required for Geocomposite drain.

DESIGN	BY Rosa Candiotti	CHECKED Isaias Yalan
DETAILS	BY Tim Fairall	CHECKED Isaias Yalan
QUANTITIES	BY Rosa Candiotti	CHECKED Isaias Yalan

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 9

BRIDGE No.	37E0101
POST MILE	5.90

SOLDIER PILE WALL AT PM 5.90
WALL DRAIN DETAILS

TIME PLOTTED => 12:39
DATE PLOTTED => 11-JUN-2013
USERNAME => s124486

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	9	2.5/7.0	110	124

REGISTERED CIVIL ENGINEER	DATE
6-10-13	06-15-12
PLANS APPROVAL DATE	

Samuel Awad
No. 64589
Exp. 6-30-13
CIVIL

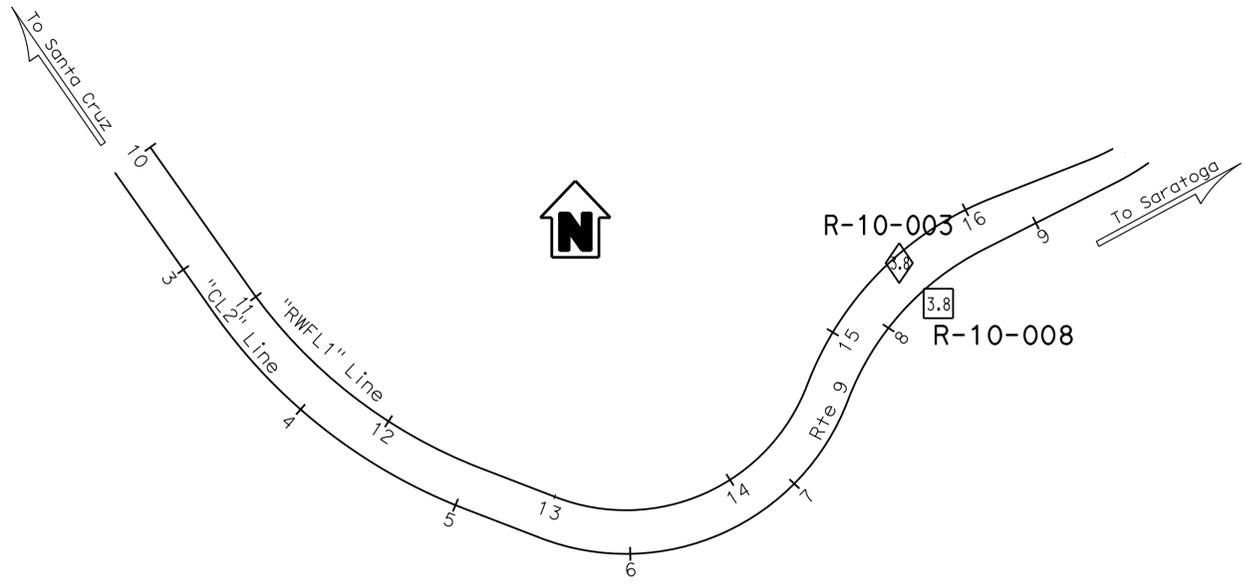
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

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.

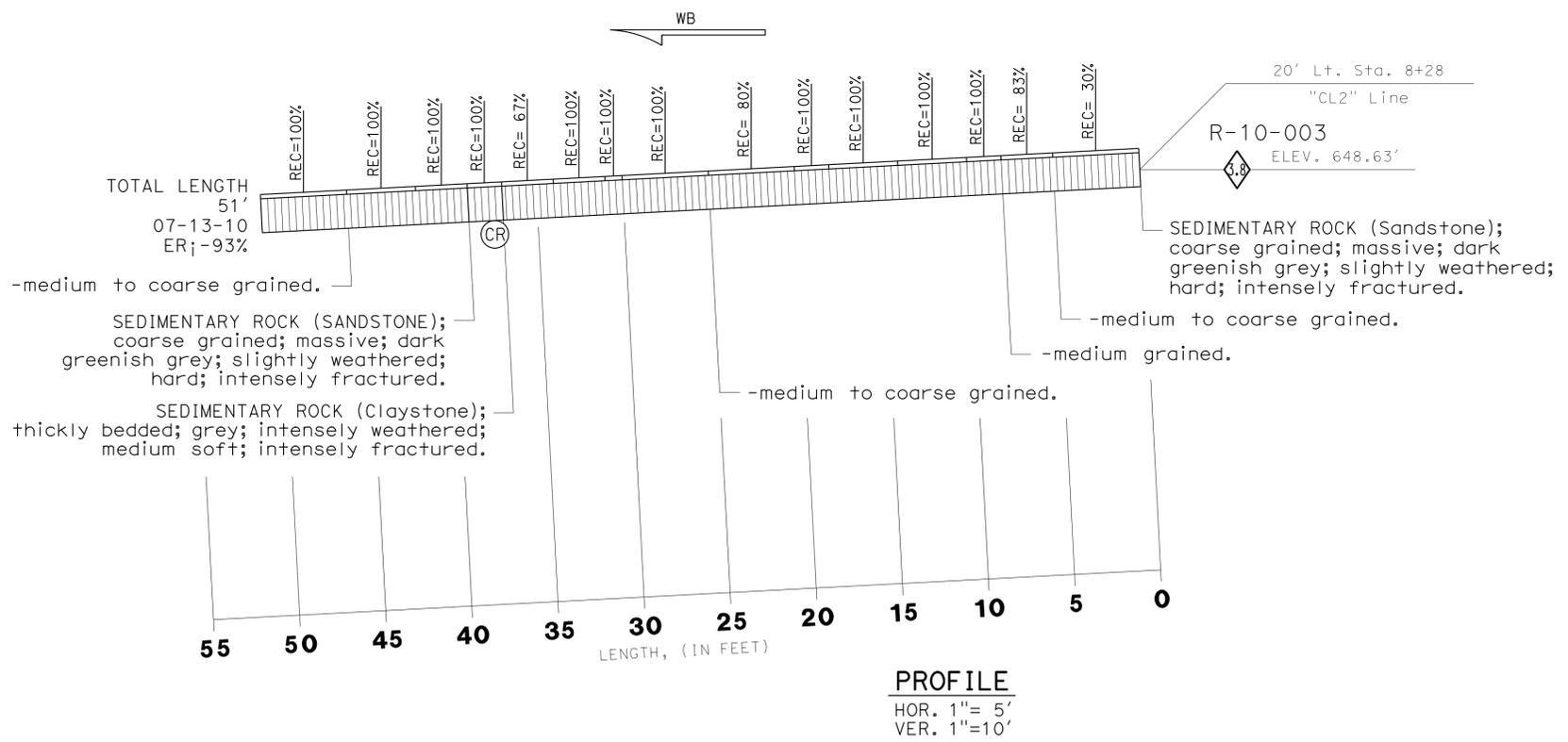
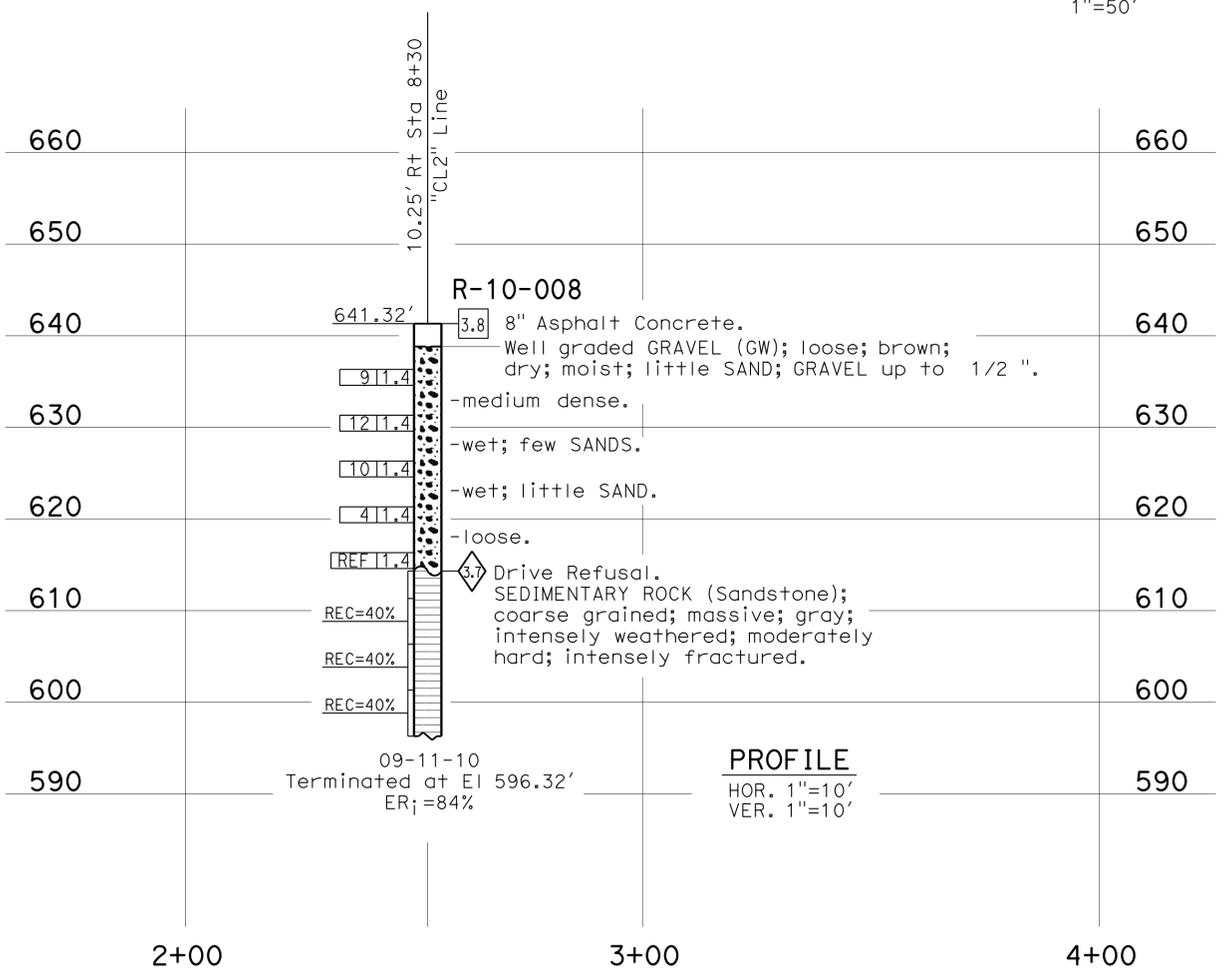
BENCH MARK

IP 224
 Fnd Spike
 23.64 Lt. "CL2" Line, @ Rte 9
 Sta. 6+16.86
 N 1,917,638.46
 E 6,109,626.80
 EL. =666.72

IP 226
 Fnd 8" Spike
 18.83 Rt. "CL2" Line, @ Rte 9
 Sta. 9+21.33
 N 1,917,786.98
 E 6,109,862.96
 EL. =638.62



PLAN
1"=50'



ENGINEERING SERVICES		MATERIALS AND GEOTECHNICAL SERVICES		STATE OF CALIFORNIA		DIVISION OF ENGINEERING SERVICES		BRIDGE No.		SOLDIER PILE WALL AT PM 5.90	
FUNCTIONAL SUPERVISOR		DRAWN BY: M. Reynolds 11/10		DEPARTMENT OF TRANSPORTATION		STRUCTURE DESIGN		37E0101		LOG OF TEST BORINGS	
NAME: Hooshmand Nikou		CHECKED BY: E. Kretschmer		FIELD INVESTIGATION BY: S. Awad, V. Khotan		DESIGN BRANCH 9		POST MILE 5.90			
06S CIVIL LOG OF TEST BORINGS SHEET		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		UNIT: X		PROJECT NUMBER & PHASE: 04000008221		CONTRACT No.: 04-2A4304		REVISION DATES	
				0 1 2 3		DISREGARD PRINTS BEARING EARLIER REVISION DATES		03-08-11 7-18-12		SHEET 20 OF 20	

USERNAME => s124496 DATE PLOTTED => 11-JUN-2013 TIME PLOTTED => 12:40
 FILE => 37e0101-z-1+b01.dgn

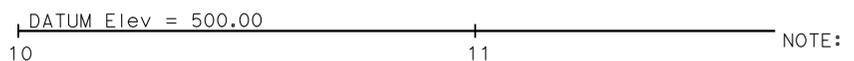
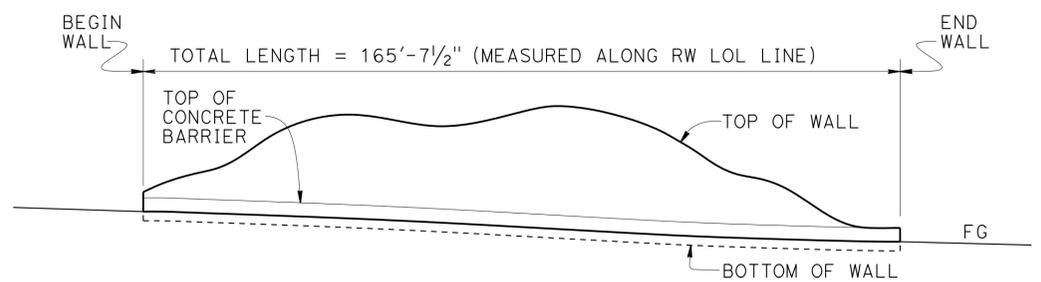
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	9	2.5/7.0	111	124

Rosa M Candiotti 2-8-13
REGISTERED CIVIL ENGINEER DATE

6-10-13
PLANS APPROVAL DATE

REG. NO. 64626
EXP. 6-30-2013
CIVIL

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DEVELOPED MIRRORED ELEVATION
1" = 20'

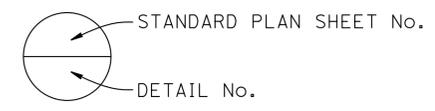
NOTE:
Structural Concrete Apron and Sculpted Shotcrete not shown

QUANTITIES

STRUCTURE EXCAVATION (SOIL NAIL WALL)	253	CY
STRUCTURE BACKFILL (SOIL NAIL WALL)	21	CY
SOIL NAIL	4,090	LF
STRUCTURAL CONCRETE, APRON	21	CY
BAR REINFORCING STEEL (RETAINING WALL)	16,200	LB
SCULPTED SHOTCRETE	2,328	SQFT
STRUCTURAL SHOTCRETE	119	CY
PREPARE AND STAIN SCULPTED SHOTCRETE	2,328	SQFT
MISCELLANEOUS METAL (SAFETY HOOKUP)	152	LB
CONCRETE BARRIER (TYPE 60D MODIFIED)	166	LF

STANDARD PLANS 2010

- A10A ABBREVIATIONS (SHEET 1 OF 2)
- 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

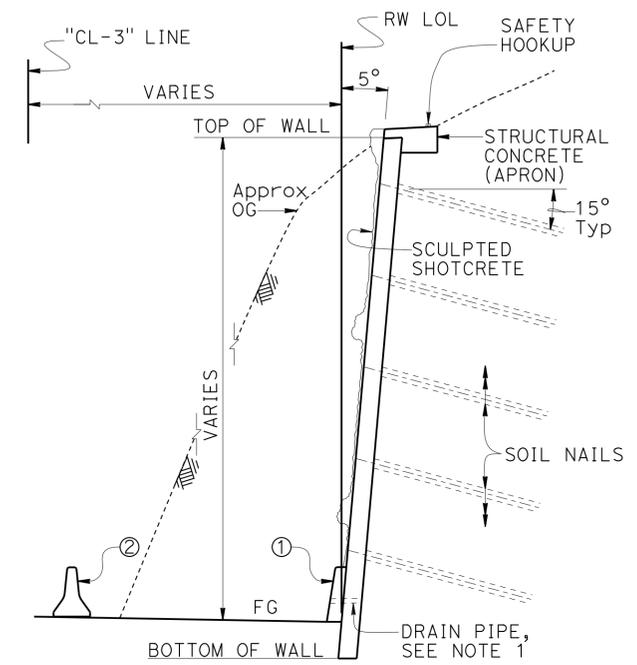


INDEX TO PLANS

SHEET No.	TITLE
1	GENERAL PLAN
2	STRUCTURE PLAN No. 1
3	STRUCTURE PLAN No. 2
4	FOUNDATION PLAN
5	RETAINING WALL DETAILS No. 1
6	RETAINING WALL DETAILS No. 2
7	RETAINING WALL DETAILS No. 3
8	SCULPTED SHOTCRETE LAYOUT No. 1
9	SCULPTED SHOTCRETE LAYOUT No. 2
10	SCULPTED SHOTCRETE DETAILS
11	WALL DRAIN DETAILS
12	LOG OF TEST BORINGS 1 OF 3
13	LOG OF TEST BORINGS 2 OF 3
14	LOG OF TEST BORINGS 3 OF 3

NOTES:
① CONCRETE BARRIER TYPE 60D MODIFIED
② TEMPORARY RAILING (TYPE K) SEE "ROADWAY PLANS"
For "GENERAL NOTES" See "RETAINING WALL DETAILS No. 2" Sheet

- 1. Prepare and Stain Sculpted Shotcrete
- 2. Prepare and Stain Concrete Barrier

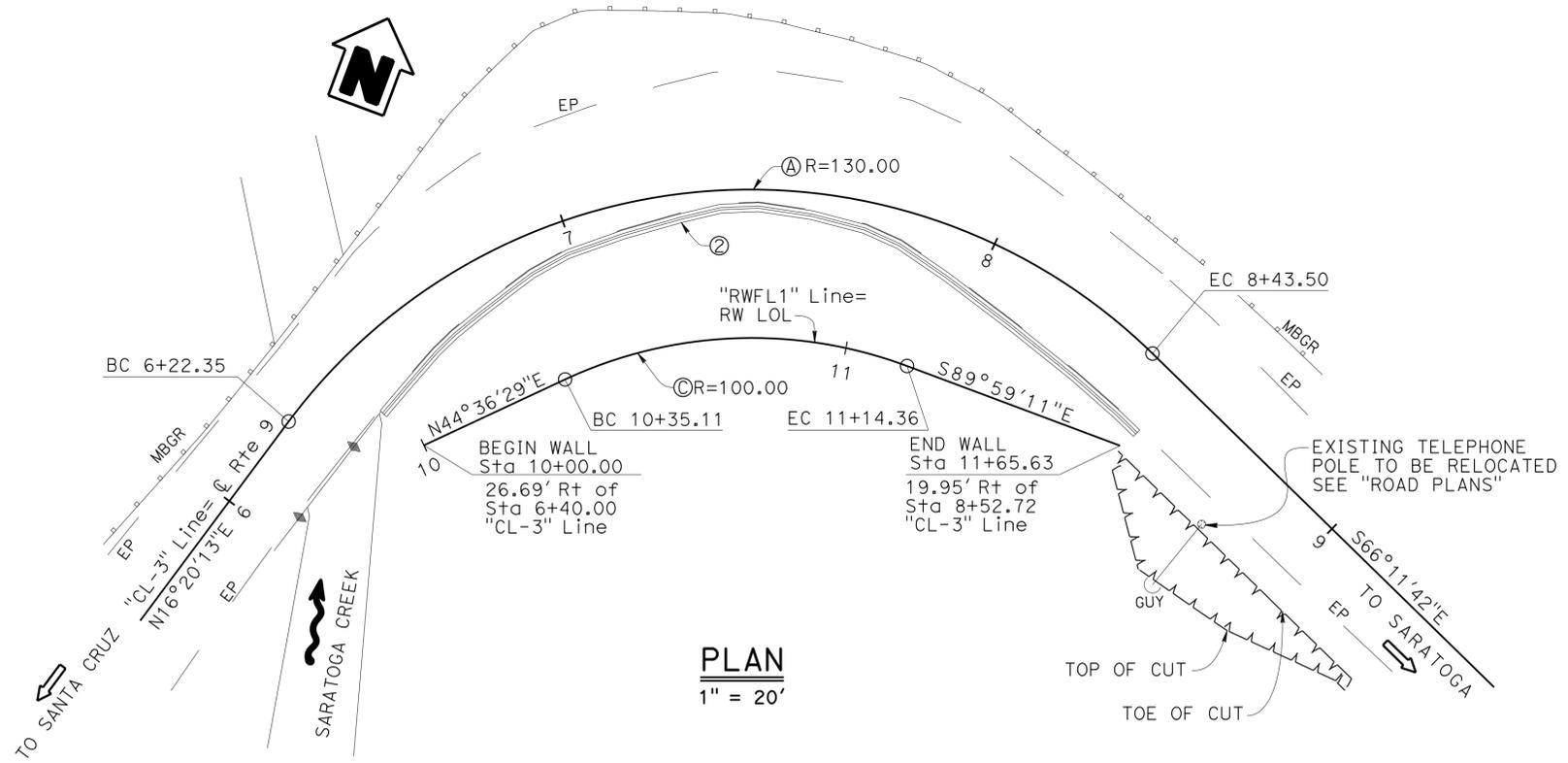


TYPICAL SECTION
1" = 5'

NOTE:
1. All Drain Pipe Outlets along Barrier to be parallel to Finished Grade

CURVE DATA

No.	R	Δ	T	L
Ⓐ	130.00	97°28'04"	148.15	221.15
Ⓒ	100.00	45°24'18"	41.84	79.25



PLAN
1" = 20'

Gordon Danke DESIGN ENGINEER	DESIGN	BY Rosa Candiotti	CHECKED Isaias Yalan	LOAD & RESISTANCE FACTOR DESIGN	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN	BRIDGE No. 37E0102	SOIL NAIL WALL AT PM 6.70 GENERAL PLAN	
	DETAILS	BY D. Elliot/ Tim Fairall	CHECKED Isaias Yalan	LAYOUT		BY D. Elliot/ Tim Fairall	POST MILE 6.70		
	QUANTITIES	BY Rosa Candiotti	CHECKED Isaias Yalan	SPECIFICATIONS		BY Tina Chen	CHECKED Rosa Candiotti PLANS AND SPECS COMPARED Tina Chen		
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS						UNIT: 3594 PROJECT NUMBER & PHASE: 04000008221	CONTRACT No.: 04-2A4304	REVISION DATES	SHEET 1 OF 14

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	9	2.5/7.0	112	124

Rosa M. Candiotti 2-8-13
REGISTERED CIVIL ENGINEER DATE

6-10-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
ROSA CANDIOTTI
No. 64626
Exp. 6-30-2013
CIVIL
STATE OF CALIFORNIA

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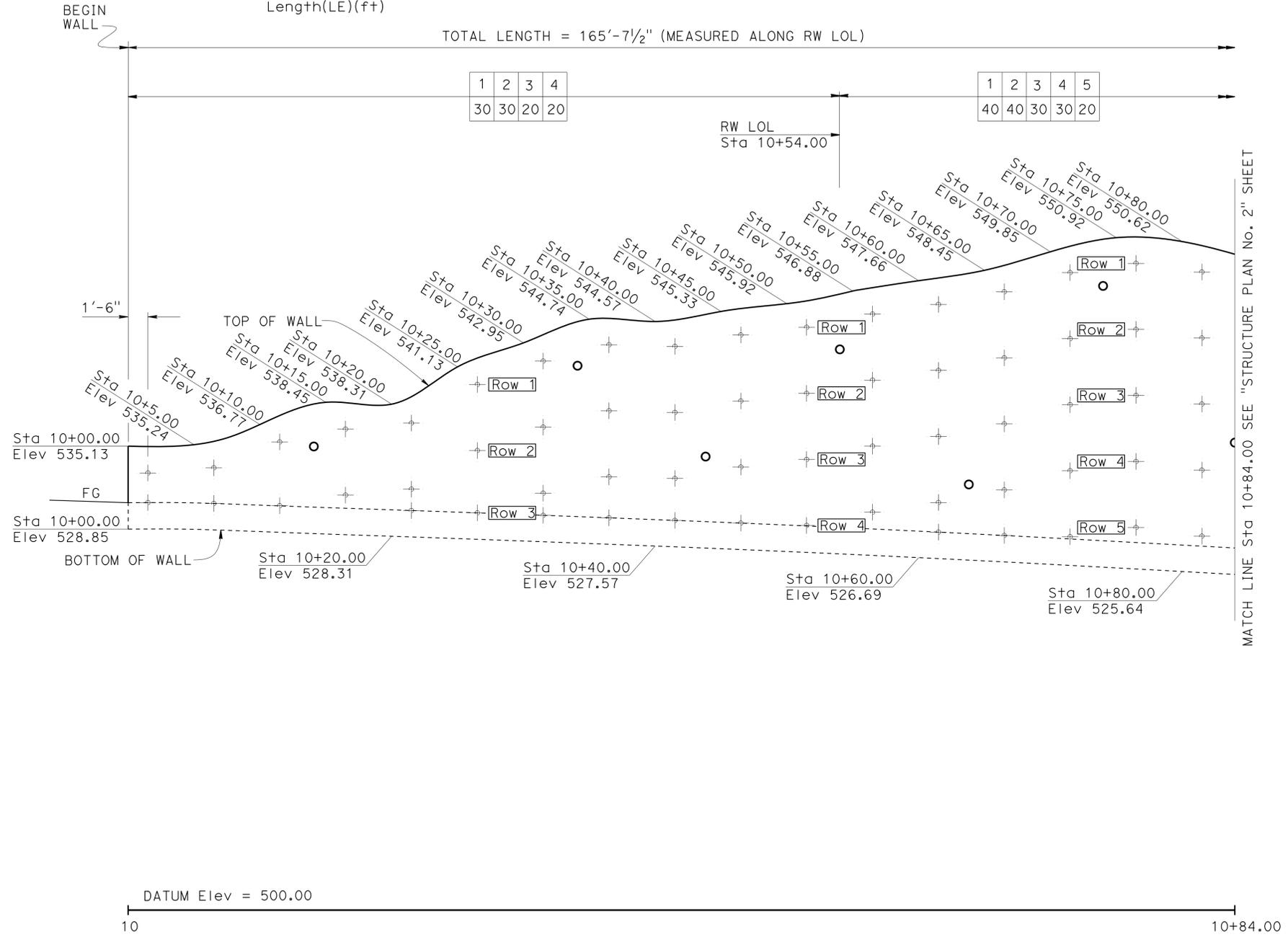
LEGEND

- + APPROXIMATE LOCATION OF SOIL NAIL
 - o APPROXIMATE LOCATION OF PROOF TEST SOIL NAIL
- Row No. →

1	2	3
---	---	---
- Soil Nail Embedment Length(LE)(ft) →

30	20	20
----	----	----

NOTES:
Maximum Vertical Soil Nail Spacing= 5'-0"
Minimum Vertical Soil Nail Spacing= 1'-6"
Maximum Horizontal Soil Nail Spacing= 5'-0"



DEVELOPED MIRRORED ELEVATION

1" = 5'

NOTE:
Structural Concrete Apron, Concrete Barrier and Sculpted Shotcrete not shown

DESIGN	BY Rosa Candiotti	CHECKED Isaias Yalan
DETAILS	BY Tim Fairall	CHECKED Isaias Yalan
QUANTITIES	BY Rosa Candiotti	CHECKED Isaias Yalan

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 9

BRIDGE No.	37E0102
POST MILE	6.70

SOIL NAIL WALL AT PM 6.70
STRUCTURE PLAN No. 1

LEGEND

- ⊕ APPROXIMATE LOCATION OF SOIL NAIL
- APPROXIMATE LOCATION OF PROOF TEST SOIL NAIL

NOTES:

Maximum Vertical Soil Nail Spacing= 5'-0"
 Minimum Vertical Soil Nail Spacing= 1'-6"
 Maximum Horizontal Soil Nail Spacing= 5'-0"

Row No.	→	1	2	3
Soil Nail Embedment Length(LE)(ft)	→	30	20	20

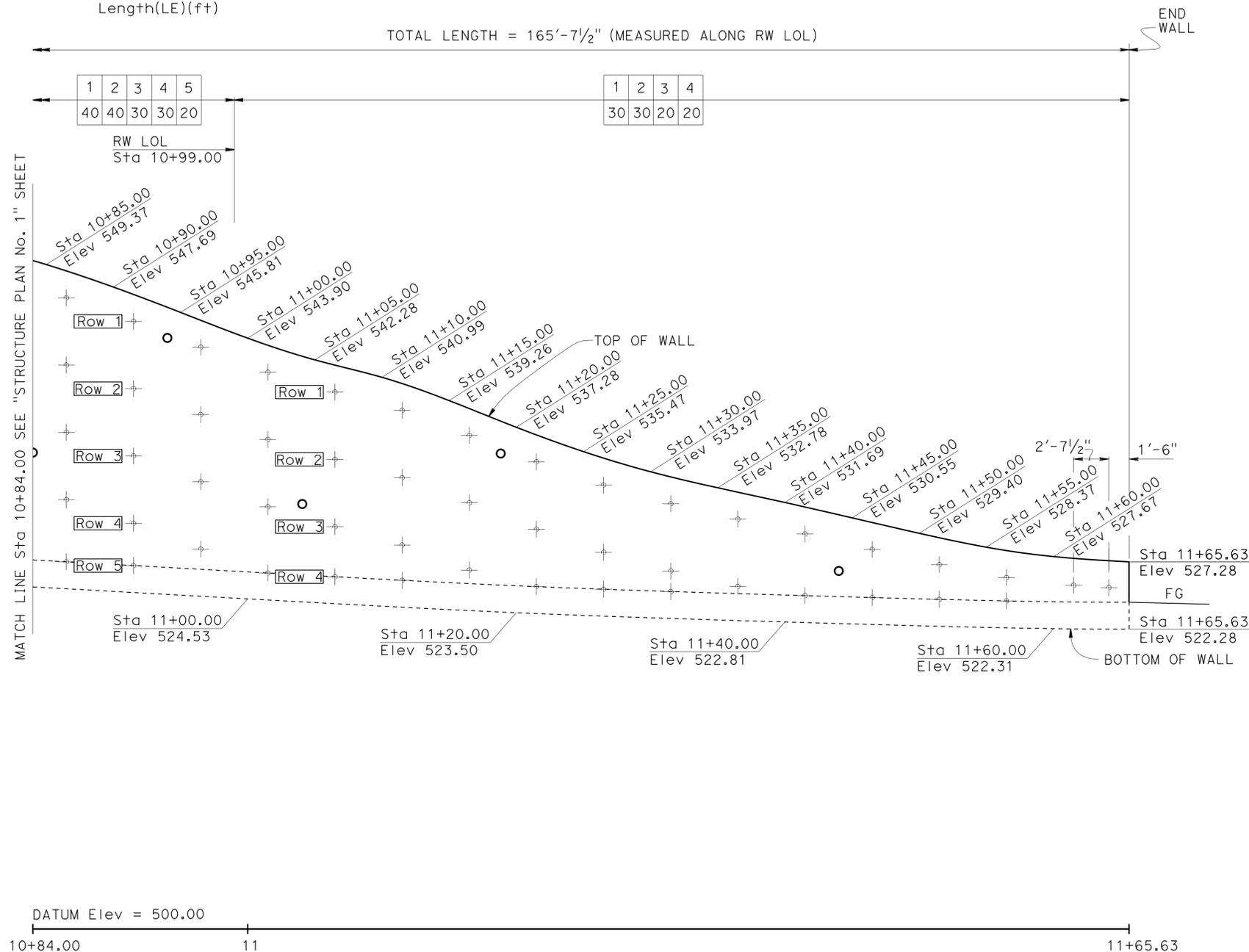
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	9	2.5/7.0	113	124

Rosa M. Candiotti 2-8-13
 REGISTERED CIVIL ENGINEER DATE

6-10-13
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 ROSA CANDIOTTI
 No. 64626
 Exp. 6-30-2013
 CIVIL
 STATE OF CALIFORNIA

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.



DEVELOPED MIRRORED ELEVATION

1" = 5'

NOTE:

Structural Concrete Apron, Concrete Barrier and Sculpted Shotcrete not shown

DESIGN	BY	Rosa Candiotti	CHECKED	Isaias Yalan	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 9	BRIDGE No.	37E0102	SOIL NAIL WALL AT PM 6.70 STRUCTURE PLAN No. 2	
	DETAILS	BY	Tim Fairall	CHECKED			Isaias Yalan	POST MILE		6.70
	QUANTITIES	BY	Rosa Candiotti	CHECKED			Isaias Yalan			

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

UNIT: 3594
 PROJECT NUMBER & PHASE: 04000008221
 CONTRACT No.: 04-2A4304

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
12-16-10	3	14

FILE => 37e0102-b-sp02.dgn

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	9	2.5/7.0	114	124

Rosa M Candiotti 2-8-13
REGISTERED CIVIL ENGINEER DATE

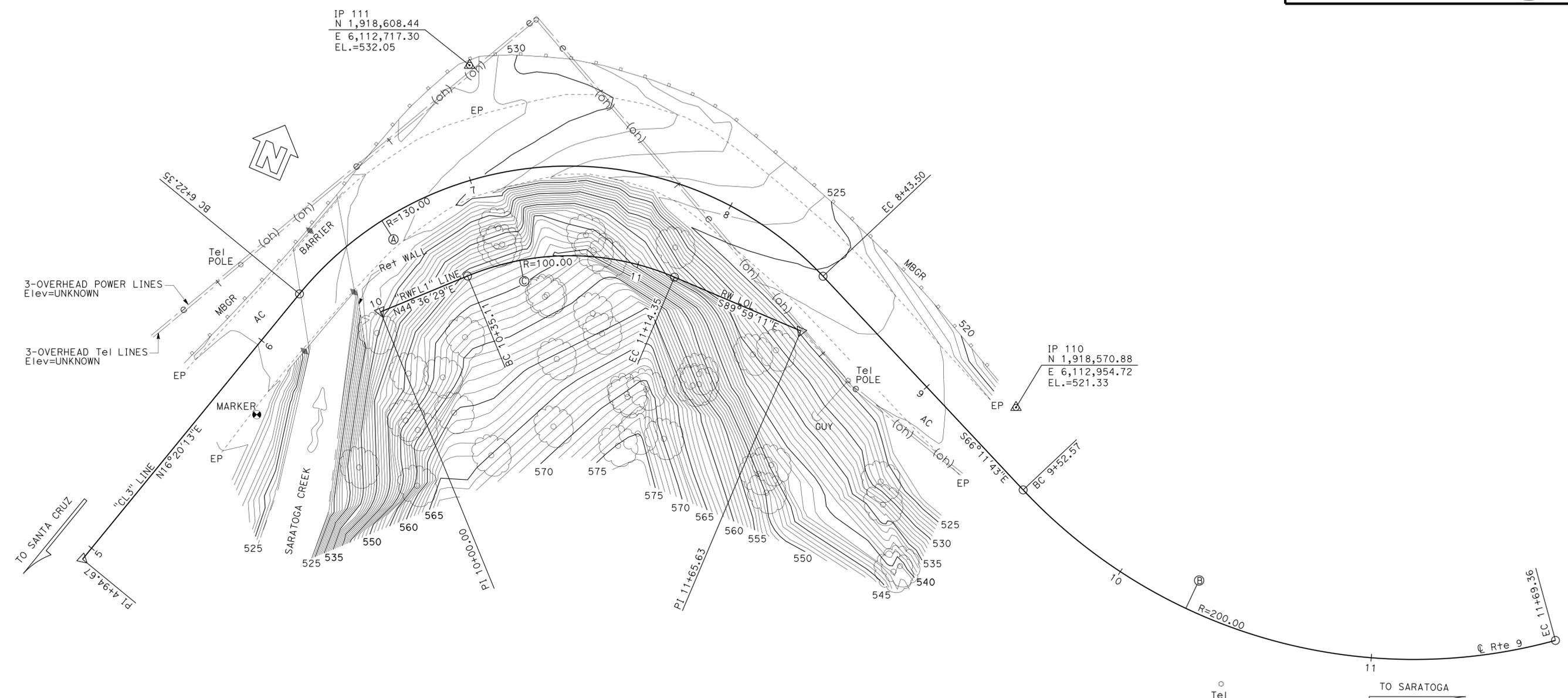
6-10-13
PLANS APPROVAL DATE

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.

REGISTERED PROFESSIONAL ENGINEER
 ROSA CANDIOTTI
 No. 64626
 Exp. 6-30-2013
 CIVIL
 STATE OF CALIFORNIA

CURVE DATA

No.	R	Δ	T	L
Ⓐ	130.00	97°28'04"	148.15	221.15
Ⓑ	200.00	62°06'23"	120.43	216.79
Ⓒ	100.00	45°24'18"	41.84	79.25



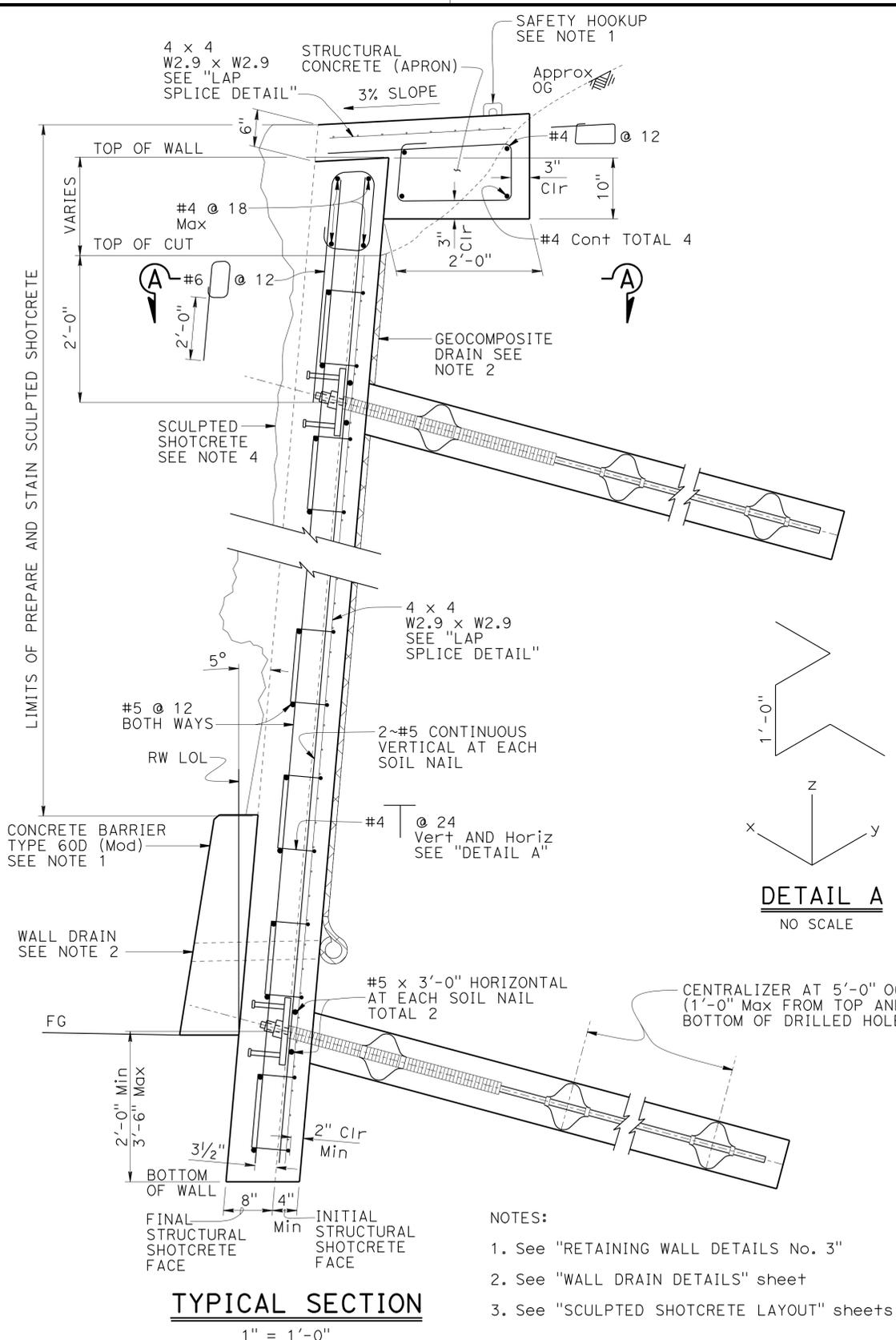
SURVEY CONTROL
 IP 110
 Fnd Spike
 19.06 Lt. "CL3" Line, C Rte 9
 Sta. 9+28.37
 N 1,918,570.88
 E 6,112,954.72
 EL.=521.33
 IP 111
 Fnd Spike
 41.56 Lt. "CL3" Line, C Rte 9
 Sta. 7+08.96
 N 1,918,608.44
 E 6,112,717.30
 EL.=532.05

Note:
 All dia. of tree on construction class

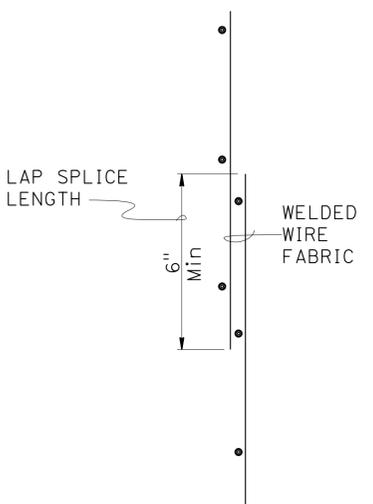
PRELIMINARY INVESTIGATION SECTION				DESIGN BY <i>Rosa Candiotti</i>	CHECKED <i>Isaias Yalan</i>	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 9	BRIDGE No. 37E0102	SOIL NAIL WALL AT PM 6.70 FOUNDATION PLAN	
SCALE 1"=20'	VERT. DATUM NAVD 88	PHOTOGRAMMETRY AS OF: X	DETAILS BY <i>Tim Fairall</i>	CHECKED <i>Isaias Yalan</i>	POST MILE 6.70					
ALIGNMENT TIES Dist. Traverse Sheet	DRAFTED BY <i>Sharon Zheng</i> 08/2010	CHECKED BY <i>T.Zelnikov</i> 08/2010	QUANTITIES BY <i>Rosa Candiotti</i>	CHECKED <i>Isaias Yalan</i>						
STRUCTURES FOUNDATION PLAN SHEET (ENGLISH) (REV. 09-01-10)						ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	UNIT: 3646 PROJECT NUMBER & PHASE: 0400008221	CONTRACT No.: 04-2A4304	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES 8/31/2010 11/2/2010 1/11/11 1/16/12 SHEET 4 OF 14

FILE => 37e0102-e-fp101.dgn

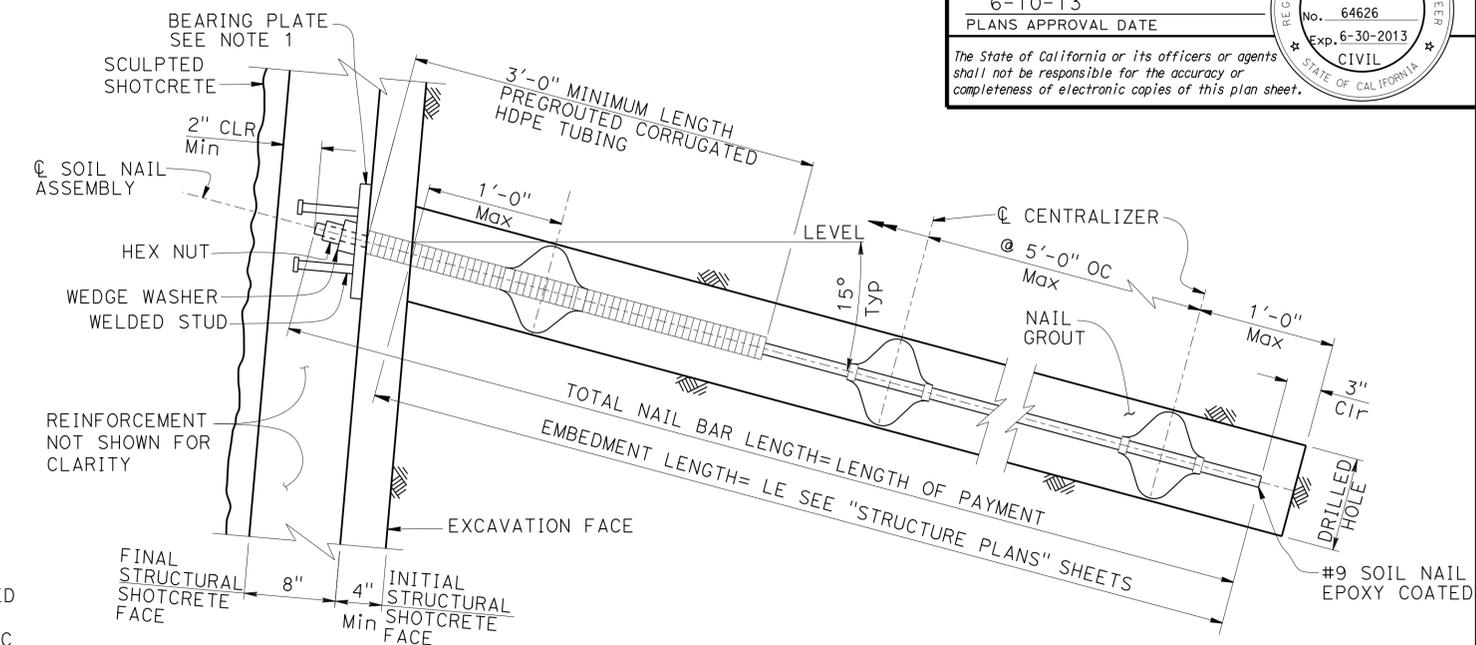
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	9	2.5/7.0	115	124
Rosa M Candiotti REGISTERED CIVIL ENGINEER				2-8-13	DATE
PLANS APPROVAL DATE 6-10-13				REGISTERED PROFESSIONAL ENGINEER No. 64626 Exp. 6-30-2013 CIVIL STATE OF CALIFORNIA	
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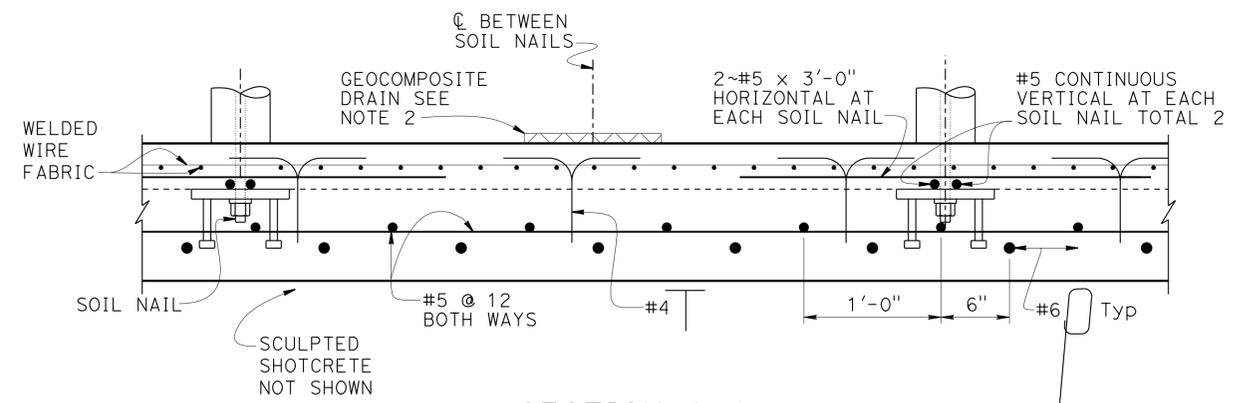
TYPICAL SECTION
1" = 1'-0"



LAP SPLICE DETAIL
NO SCALE



SOIL NAIL DETAIL
1/2" = 1'-0"

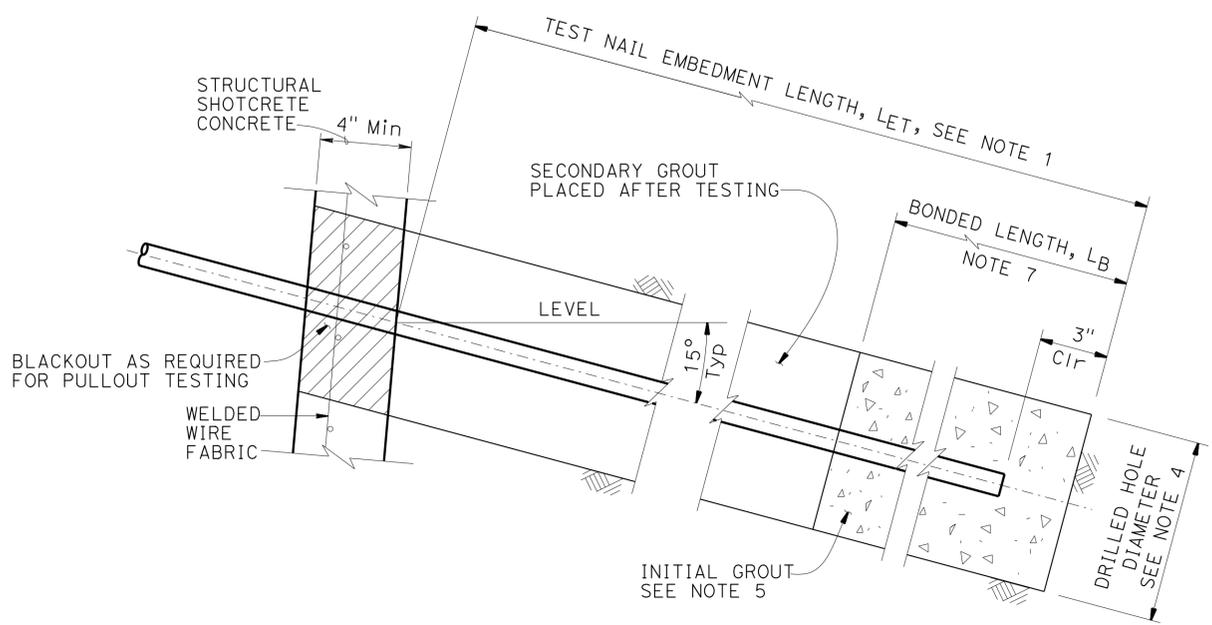


SECTION A-A
1/2" = 1'-0"

- NOTES:
1. See "RETAINING WALL DETAILS No. 3"
 2. See "WALL DRAIN DETAILS" sheet
 3. See "SCULPTED SHOTCRETE LAYOUT" sheets
 4. For Soil Nail spacing, see "STRUCTURE PLAN" Sheets
 5. Bottom of Wall to be placed against undisturbed material

DESIGN BY Rosa Candiotti		CHECKED Isaias Yalan	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 9	BRIDGE No. 37E0102	SOIL NAIL WALL AT PM 6.70 RETAINING WALL DETAILS No. 1
DETAILS BY Tim Fairall		CHECKED Isaias Yalan			POST MILE 6.70	
QUANTITIES BY Rosa Candiotti		CHECKED Isaias Yalan				
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)			ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	UNIT: 3594 PROJECT NUMBER & PHASE: 04000008221	CONTRACT No.: 04-2A4304	DISREGARD PRINTS BEARING EARLIER REVISION DATES
			0 1 2 3	FILE => 37e0102-k-det1s01.dgn	REVISION DATES	SHEET 5 OF 14

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	9	2.5/7.0	116	124
Rosa M Candiotti REGISTERED CIVIL ENGINEER			2-8-13 DATE		
6-10-13 PLANS APPROVAL DATE					
<small>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.</small>					

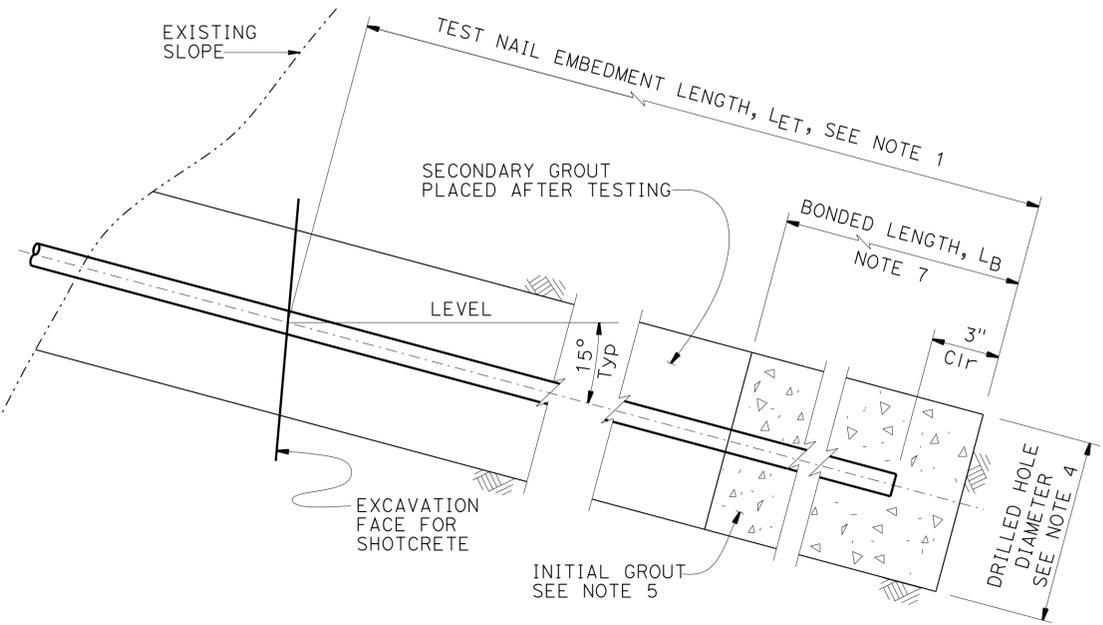


PROOF TEST SOIL NAIL DETAIL

3" = 1'-0"

NOTES:

1. The test nail embedment length L_{eT} , shall be equal to $2/3$ of the embedment length, L_e , of adjacent production soil nail assemblies, but not less than 12'-0".
2. The total length of the proof test soil nail assembly equals to the embedment length plus the length required for jacking equipment.
3. For location of proof test nail see "STRUCTURE PLAN" sheets. Additional proof test nails will 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 location of verification test nails to be determined in the field by the Engineer.
7. For bonded length L_B , see Special Provisions.
8. Not all reinforcement shown, see "RETAINING WALL DETAILS No. 1" sheet



VERIFICATION TEST SOIL NAIL DETAIL

3" = 1'-0"

GENERAL NOTES

DESIGN:
 Bridge Design Specifications-2004
 (1996 AASHTO with Interims and Revisions by CALTRANS)

SOIL PARAMETERS - SOIL NAIL DESIGN
 Friction Angle, $\phi = 20^\circ$
 Cohesion, $c = 1200$ psf
 Unit Weight, $\gamma = 135$ pcf
 Design Pullout Resistance = 1.6k/ft

GROUT
 $f'_c = 3,600$ psi

SHOTCRETE
 $f'_c = 3,600$ psi
 $f_y = 60$ ksi

CONCRETE
 $f'_c = 3,600$ psi
 $f_y = 60$ ksi

SOIL NAILS
 ASTM Designation A615/A615M, Grade 420
 $f_s = 60$ ksi

SEISMIC LOADING
 Soil profile: Class C
 PGA: 0.81 $K_n = 0.27$

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY Rosa Candiotti	CHECKED Isaias Yalan	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 9	BRIDGE No.	37E0102	SOIL NAIL WALL AT PM 6.70 RETAINING WALL DETAILS No. 2	
	DETAILS	BY Tim Fairall	CHECKED Isaias Yalan			POST MILE	6.70		
	QUANTITIES	BY Rosa Candiotti	CHECKED Isaias Yalan						
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				UNIT: 3594 PROJECT NUMBER & PHASE: 04000008221		CONTRACT No.: 04-2A4304		DISREGARD PRINTS BEARING EARLIER REVISION DATES	
				0 1 2 3		REVISION DATES		SHEET OF 6 14	

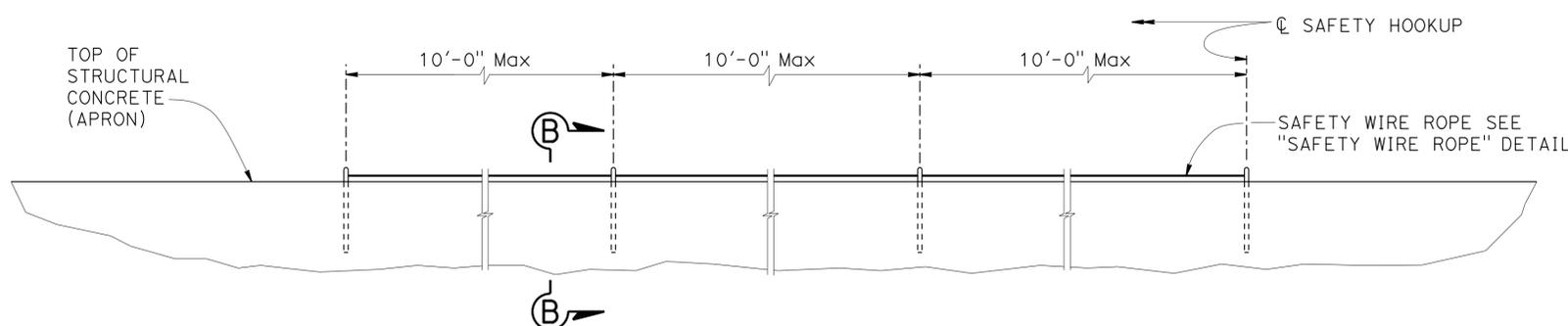
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	9	2.5/7.0	117	124

Rosa M. Candiotti 2-8-13
REGISTERED CIVIL ENGINEER DATE

6-10-13
PLANS APPROVAL DATE

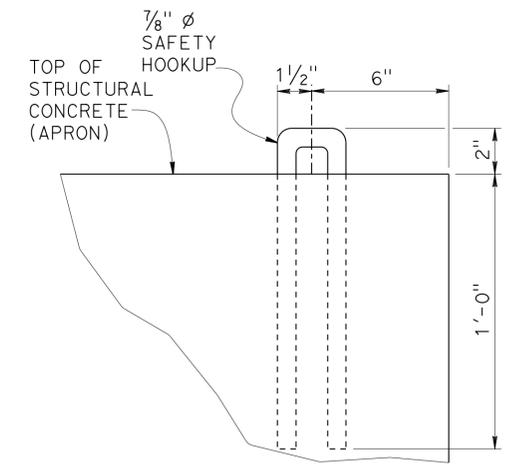
REGISTERED PROFESSIONAL ENGINEER
ROSA CANDIOTTI
No. 64626
Exp. 6-30-2013
CIVIL
STATE OF CALIFORNIA

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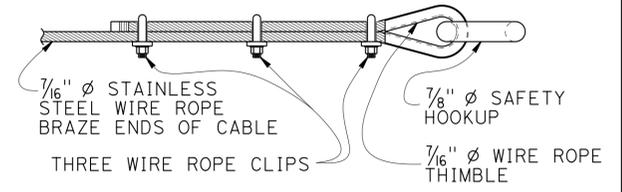


SAFETY HOOKUP ELEVATION
No Scale

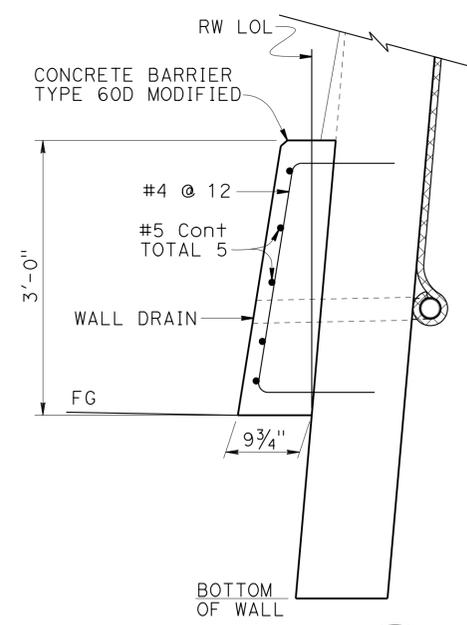
NOTE:
Safety Hookup to be located on Structural Concrete Apron only.



SECTION B-B
3" = 1'-0"

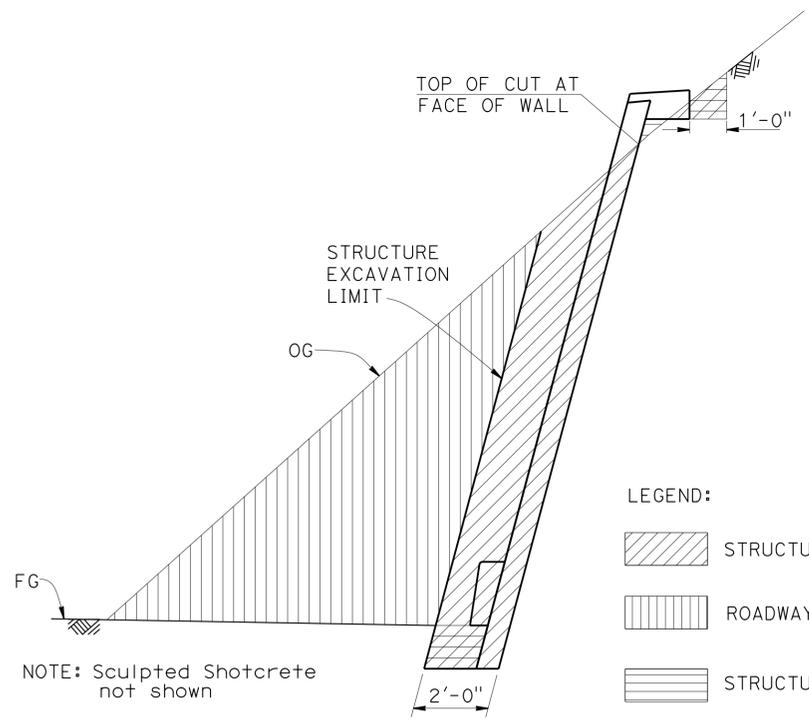


SAFETY WIRE ROPE DETAIL
No Scale



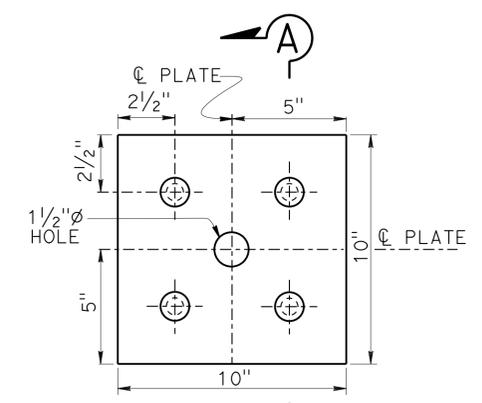
CONCRETE BARRIER REINFORCEMENT
1" = 1'-0"

NOTE: For Details Not Shown See A76A

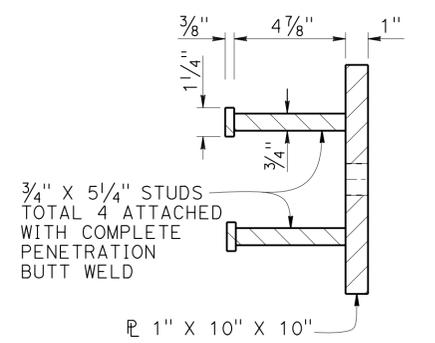


LIMITS OF EXCAVATION AND BACKFILL
NO SCALE

- LEGEND:
- STRUCTURE EXCAVATION (SOIL NAIL WALL)
 - ROADWAY EXCAVATION, SEE "ROADWAY PLANS"
 - STRUCTURE BACKFILL (SOIL NAIL WALL)



BEARING PLATE DETAIL
3" = 1'-0"



SECTION A-A
3" = 1'-0"

DESIGN	BY	Rosa Candiotti	CHECKED	Isaias Yalan	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 9	BRIDGE No.	37E0102	SOIL NAIL WALL AT PM 6.70 RETAINING WALL DETAILS No. 3	
	DETAILS	BY	Tim Fairall	CHECKED			Isaias Yalan	POST MILE		6.70
	QUANTITIES	BY	Rosa Candiotti	CHECKED			Isaias Yalan	CONTRACT No.:		04-2A4304

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

UNIT: 3594
PROJECT NUMBER & PHASE: 04000008221
CONTRACT No.: 04-2A4304

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
12-28-10	7	14

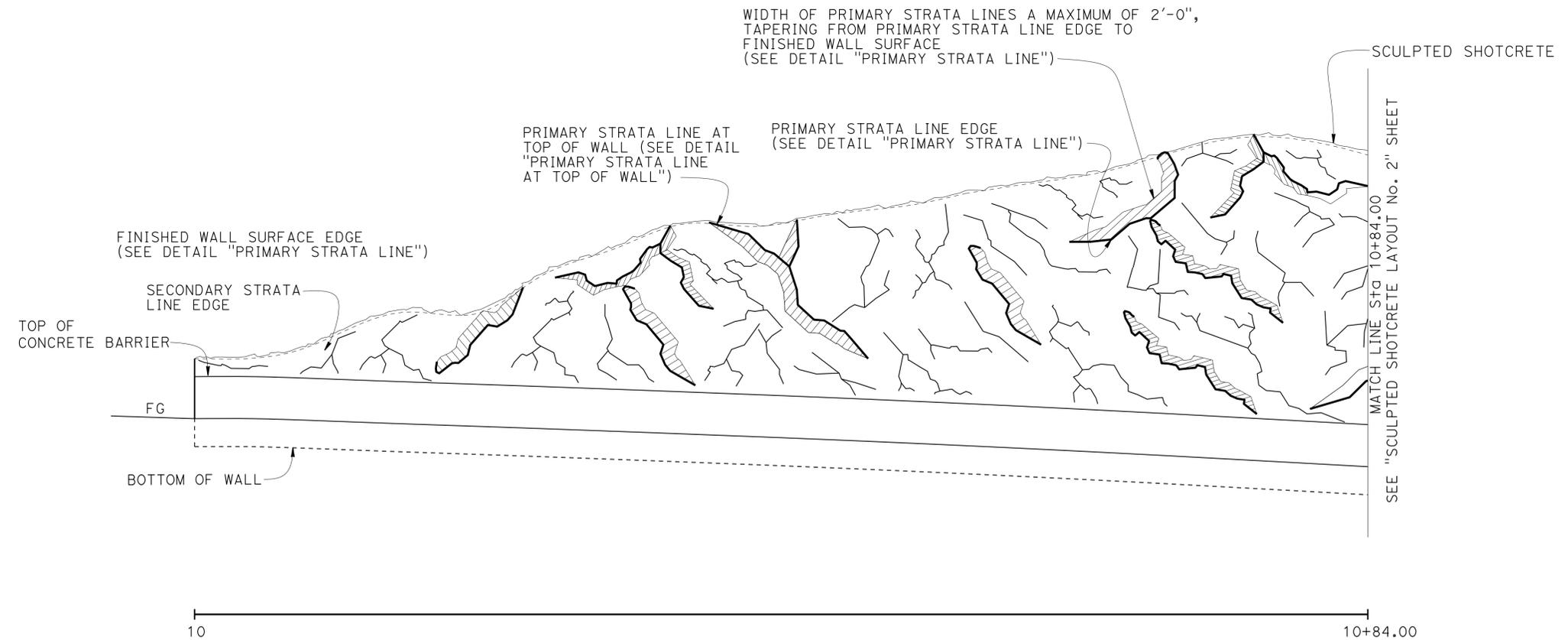
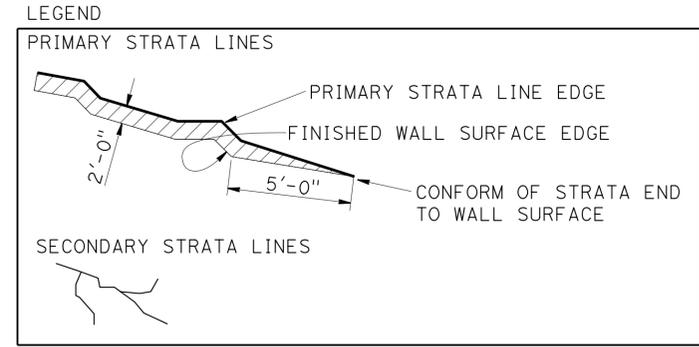
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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	9	2.5/7.0	118	124
Rosa M Candiotti			2-8-13		
REGISTERED CIVIL ENGINEER			DATE		
6-10-13			PLANS APPROVAL DATE		
			REGISTERED PROFESSIONAL ENGINEER ROSA CANDIOTTI No. 64626 Exp. 6-30-2013 CIVIL STATE OF CALIFORNIA		
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NOTES:

- ① Primary Strata lines drawn on the developed mirrored elevation are to be used as a general guide for layout of Primary Strata line reinforcement. See "SCULPTED SHOTCRETE DETAILS" Sheet.
- ② Secondary Strata lines drawn on the developed mirrored elevation are to be used as a general guide. Strata lines shall be sculpted to mimic local geology.
- ③ This sheet accurate for sculpted shotcrete only.
- ④ Sculpted shotcrete shall be continuous throughout the face of the wall.

- ⑤ Additional shotcrete needed for carving the Primary Strata lines to be reinforced as shown on "SCULPTED SHOTCRETE DETAILS" sheet.
- ⑥ Primary Strata lines to be tapered into the top and bottom of wall.
- ⑦ Secondary Strata lines are not to exceed 2" amplitude.



**DEVELOPED MIRRORED ELEVATION
SCULPTED SHOTCRETE WALL SURFACE**

1" = 5'

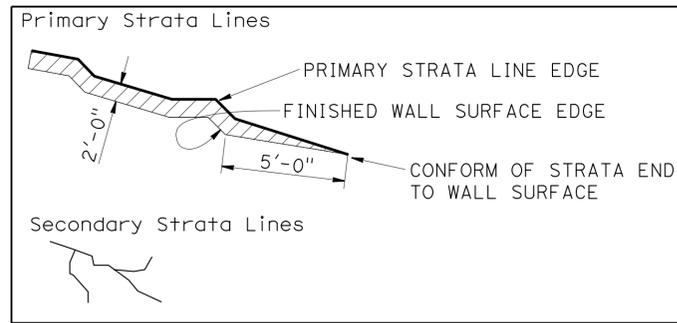
NOTE:
For Details see "SCULPTED SHOTCRETE DETAILS" Sheet

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY Rosa Candiotti	CHECKED Isaias Yalan	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 9	BRIDGE No.	SOIL NAIL WALL AT PM 6.70 SCULPTED SHOTCRETE LAYOUT No. 1
	DETAILS	BY Tim Fairall	CHECKED Isaias Yalan			37E0102	
	QUANTITIES	BY Rosa Candiotti	CHECKED Isaias Yalan			POST MILE 6.70	
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				UNIT: 3594	PROJECT NUMBER & PHASE: 04000008221	CONTRACT No.: 04-2A4304	DISREGARD PRINTS BEARING EARLIER REVISION DATES REVISION DATES: 3-28-11, 4-28-11, 1-14-13 SHEET 8 OF 14

NOTES:

- ① Primary Strata lines drawn on the developed mirrored elevation are to be used as a general guide for layout of Primary Strata line reinforcement. See "SCULPTED SHOTCRETE DETAILS" Sheet.
- ② Secondary Strata lines drawn on the developed mirrored elevation are to be used as a general guide. Strata lines shall be sculpted to mimic local geology.
- ③ This sheet accurate for sculpted shotcrete only.
- ④ Sculpted shotcrete shall be continuous throughout the face of the wall.
- ⑤ Additional shotcrete needed for carving the Primary Strata lines to be reinforced as shown on "SCULPTED SHOTCRETE DETAILS" sheet.
- ⑥ Primary Strata lines to be tapered into the top and bottom of wall.
- ⑦ Secondary Strata lines are not to exceed 2" amplitude.

LEGEND



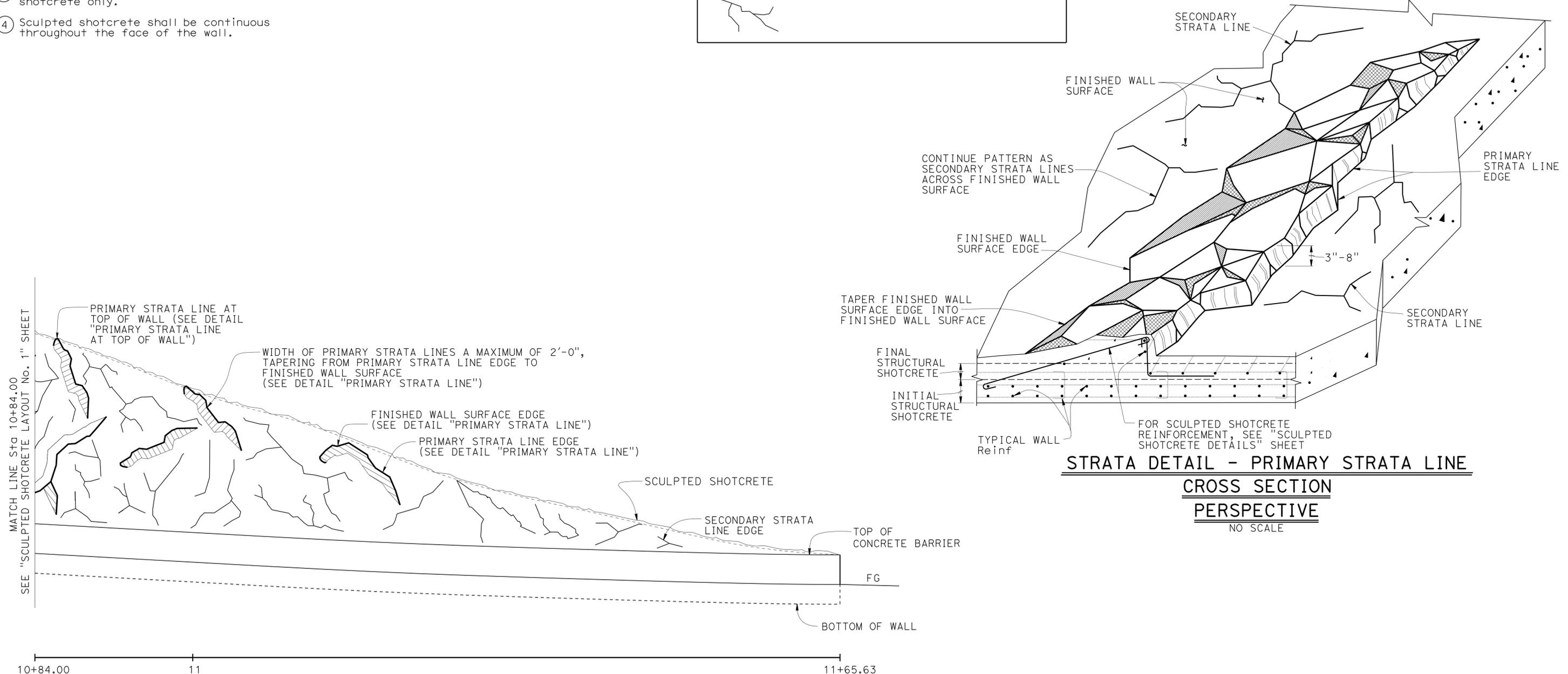
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	9	2.5/7.0	119	124

Rosa M Candiotti 2-8-13
 REGISTERED CIVIL ENGINEER DATE

6-10-13
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 ROSA CANDIOTTI
 No. 64626
 Exp. 6-30-2013
 CIVIL
 STATE OF CALIFORNIA

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**DEVELOPED MIRRORED ELEVATION
 SCULPTED SHOTCRETE WALL SURFACE**

1" = 5'

NOTE:
 For Details see "SCULPTED SHOTCRETE DETAILS" Sheet

DESIGN	BY Rosa Candiotti	CHECKED Isaias Yalan
DETAILS	BY Tim Fairall	CHECKED Isaias Yalan
QUANTITIES	BY Rosa Candiotti	CHECKED Isaias Yalan

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
 DESIGN BRANCH 9

BRIDGE No.	37E0102
POST MILE	6.70

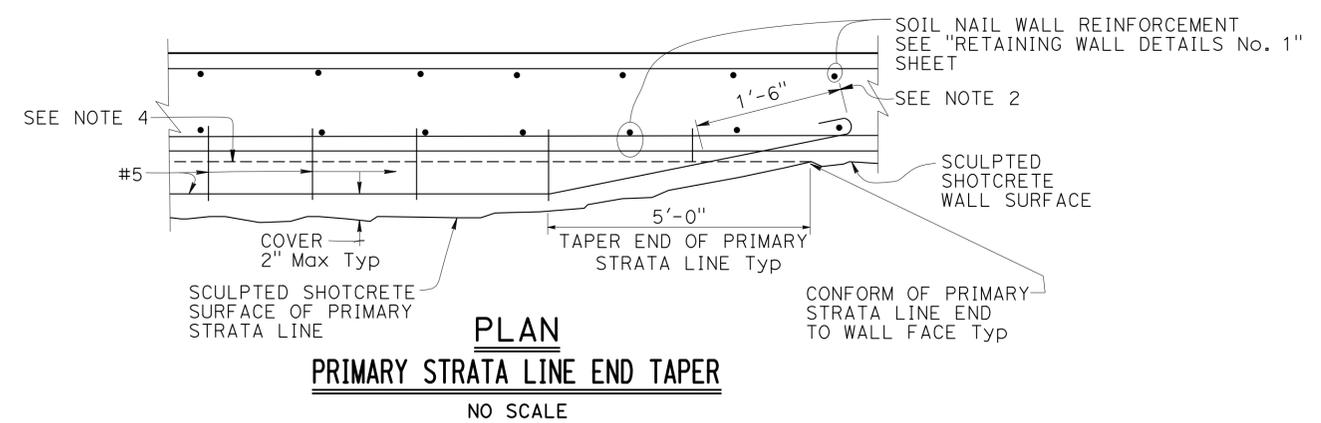
SOIL NAIL WALL AT PM 6.70
 SCULPTED SHOTCRETE LAYOUT No. 2



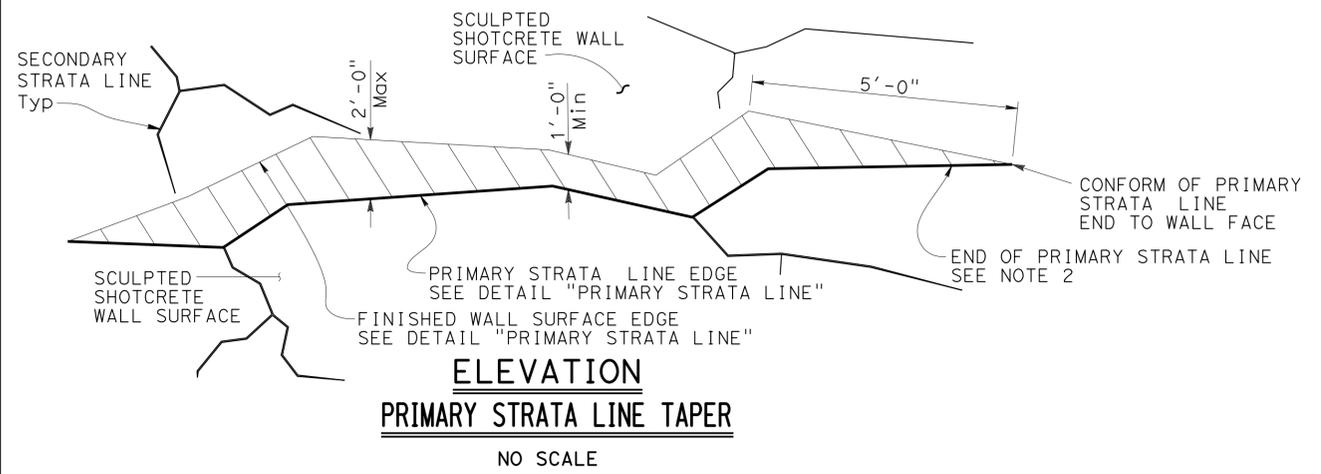
REVISION DATES	SHEET	OF
3-28-11 4-28-11 1-14-13	9	14

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	9	2.5/7.0	120	124
Rosa M Candiotti REGISTERED CIVIL ENGINEER			2-8-13 DATE	ROSA CANDIOTTI No. 64626 Exp. 6-30-2012 CIVIL STATE OF CALIFORNIA	
6-10-13 PLANS APPROVAL DATE					
<small>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.</small>					

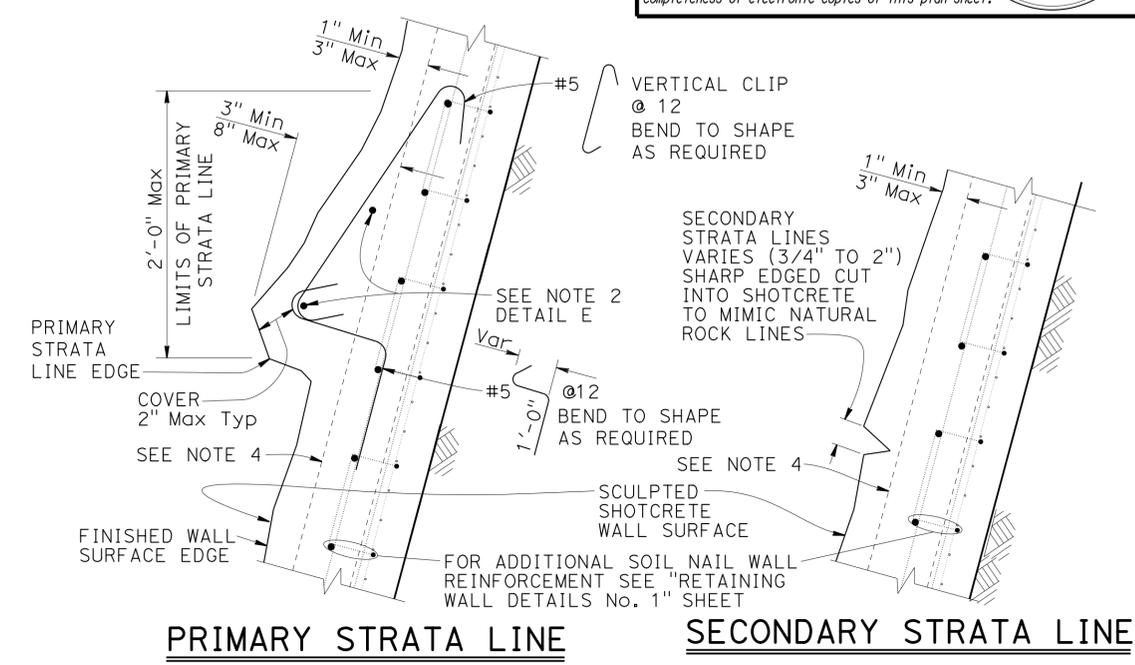
- NOTES:
- Maximum 6" thick reinforced shotcrete zone for top of wall sculpted shotcrete.
 - #5 continuous @ 12 shall taper and embed into the wall to a minimum depth as shown on "PRIMARY STRATA LINE END TAPER" detail.
 - Angle of primary strata line across wall apron 15 degrees for cross slopes 0-10%, 45 degrees for cross slopes greater than 10%.
 - Face of untreated surface to which surface clearances are measured.



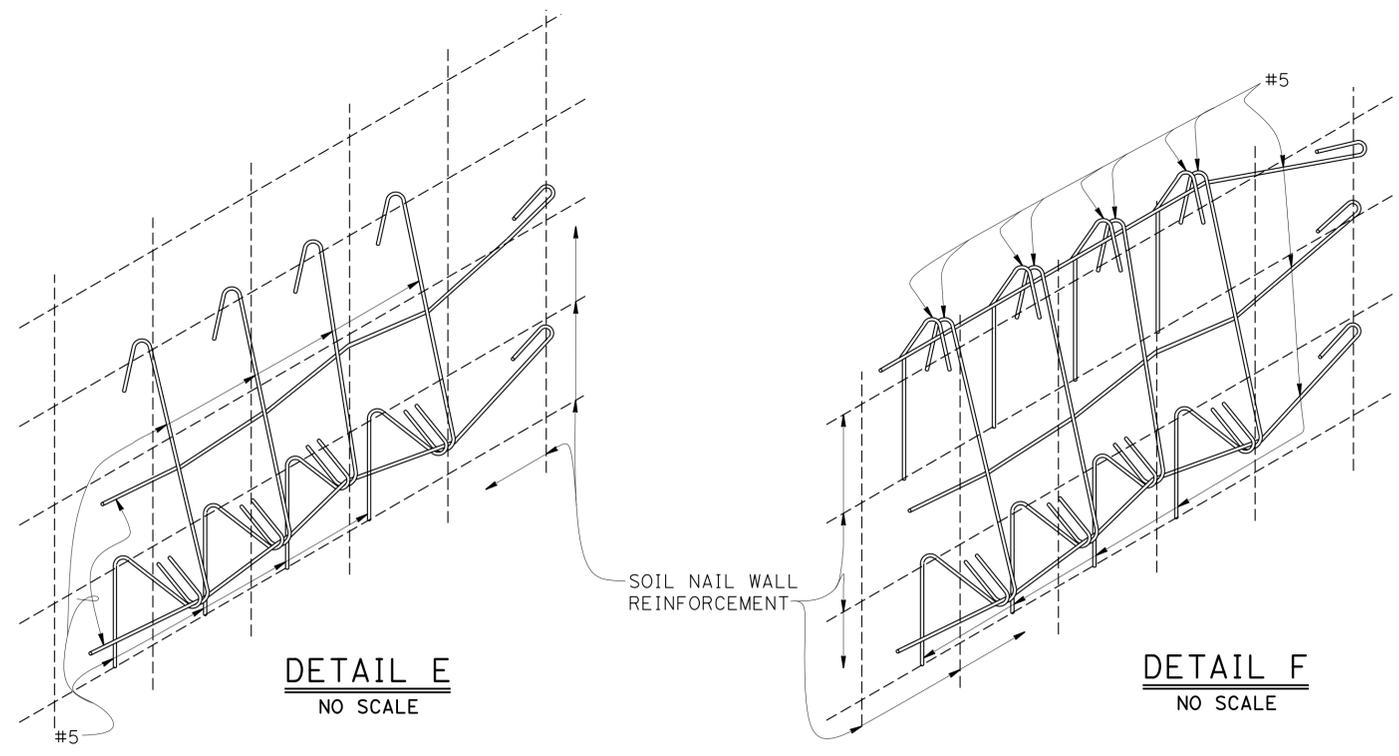
PLAN
PRIMARY STRATA LINE END TAPER
NO SCALE



ELEVATION
PRIMARY STRATA LINE TAPER
NO SCALE



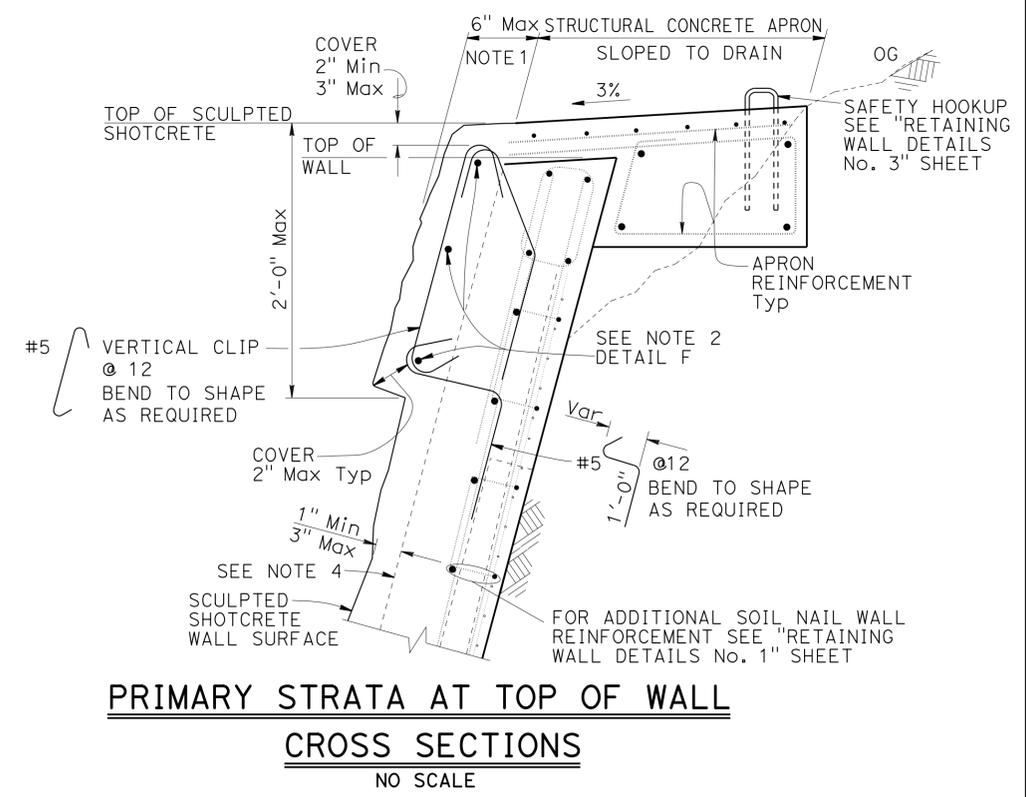
PRIMARY STRATA LINE **SECONDARY STRATA LINE**



DETAIL E
NO SCALE

DETAIL F
NO SCALE

- NOTES:
- For Soil Nail Wall Reinforcement see "RETAINING WALL DETAILS No. 1" sheet



PRIMARY STRATA AT TOP OF WALL
CROSS SECTIONS
NO SCALE

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY Rosa Candiotti	CHECKED Isaias Yalan	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 9	BRIDGE No.	SOIL NAIL WALL AT PM 6.70 SCULPTED SHOTCRETE DETAILS
	DETAILS	BY Tim Fairall	CHECKED Isaias Yalan			37E0102	
	QUANTITIES	BY Rosa Candiotti	CHECKED Isaias Yalan			POST MILE 6.70	
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				UNIT: 3594	PROJECT NUMBER & PHASE: 04000008221	CONTRACT No.: 04-2A4304	DISREGARD PRINTS BEARING EARLIER REVISION DATES
				0	1	2	3
				FILE => 37e0102-1-arcdet+s03.dgn		REVISION DATES	
						3-28-11	4-18-11
						1-14-13	10
							14

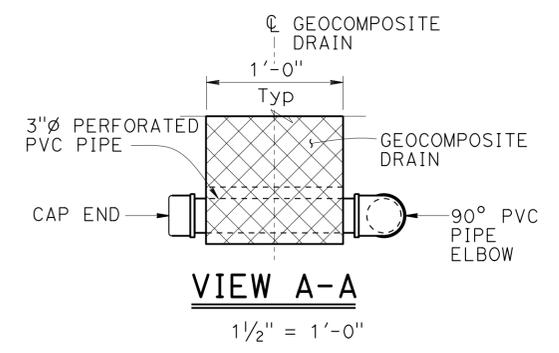
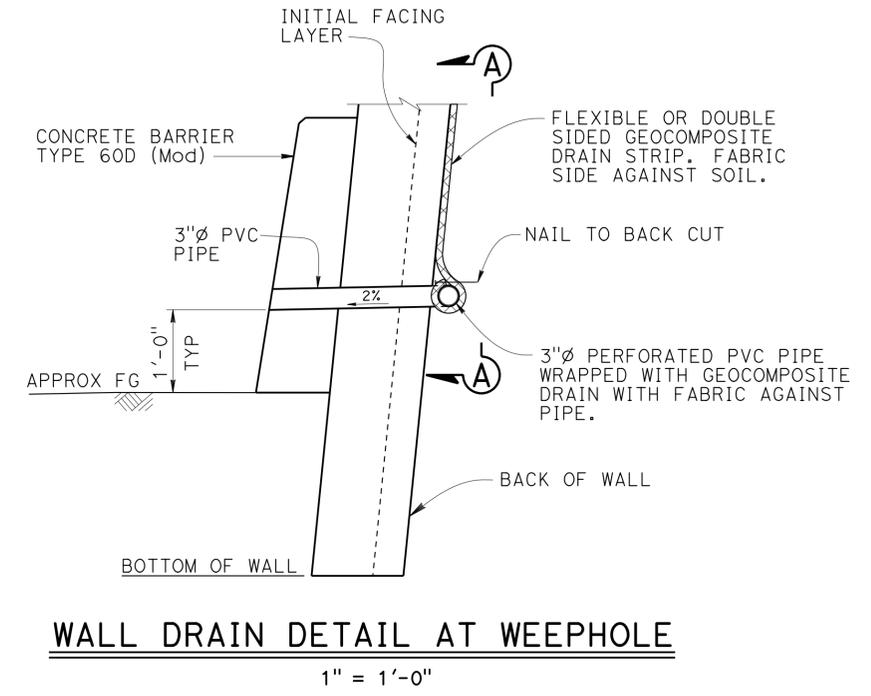
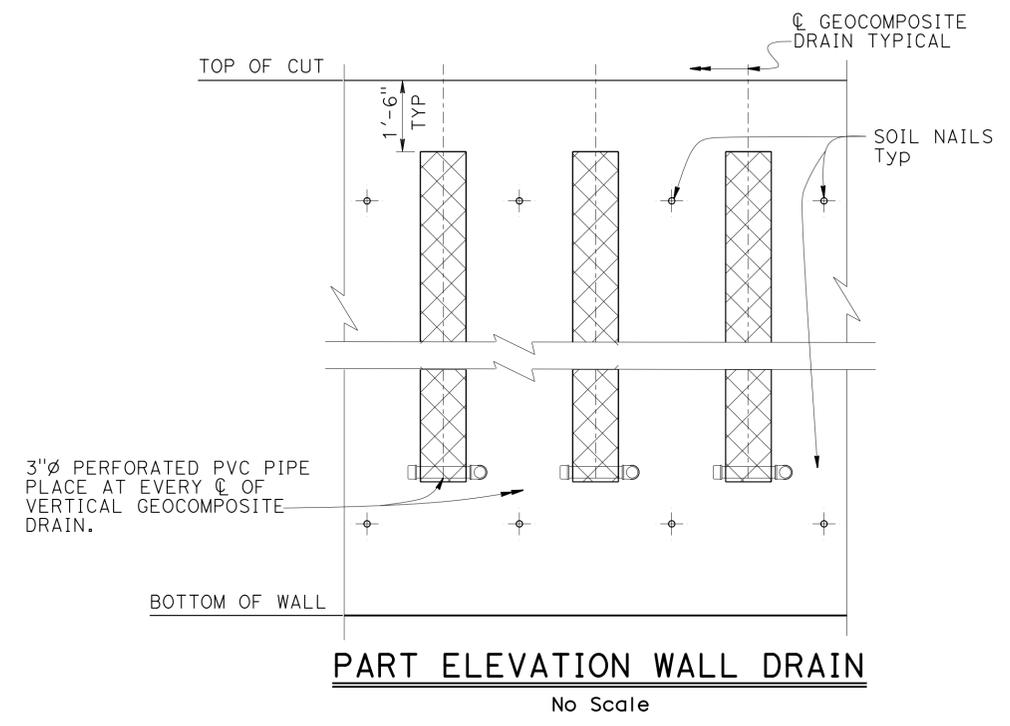
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	9	2.5/7.0	121	124

Rosa M. Candiotti 2-8-13
REGISTERED CIVIL ENGINEER DATE

6-10-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
ROSA CANDIOTTI
No. 64626
Exp. 6-30-2013
CIVIL
STATE OF CALIFORNIA

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- Notes:
1. Center Geocomposite vertical drain between soil nails.
 2. Geocomposite drain not required for wall height less than 6'-6".
 3. 1'-0" Minimum splice length required for Geocomposite drain.

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY Rosa Candiotti	CHECKED Isaias Yalan	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 9	BRIDGE No.	SOIL NAIL WALL AT PM 6.70			
	DETAILS	BY Tim Fairall	CHECKED Isaias Yalan			37E0102				
	QUANTITIES	BY Rosa Candiotti	CHECKED Isaias Yalan			POST MILE 6.70				
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS						UNIT: 3594 PROJECT NUMBER & PHASE: 04000008221	CONTRACT No.: 04-2A4304	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 11 OF 14

USERNAME => s124486 DATE PLOTTED => 11-JUN-2013 TIME PLOTTED => 12:40

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	9	2.5/7.0	122	124

06-15-12
 REGISTERED CIVIL ENGINEER DATE

6-10-13
 PLANS APPROVAL DATE

Samuel Awad
 No. 64589
 Exp. 6-30-13
 CIVIL
 STATE OF CALIFORNIA

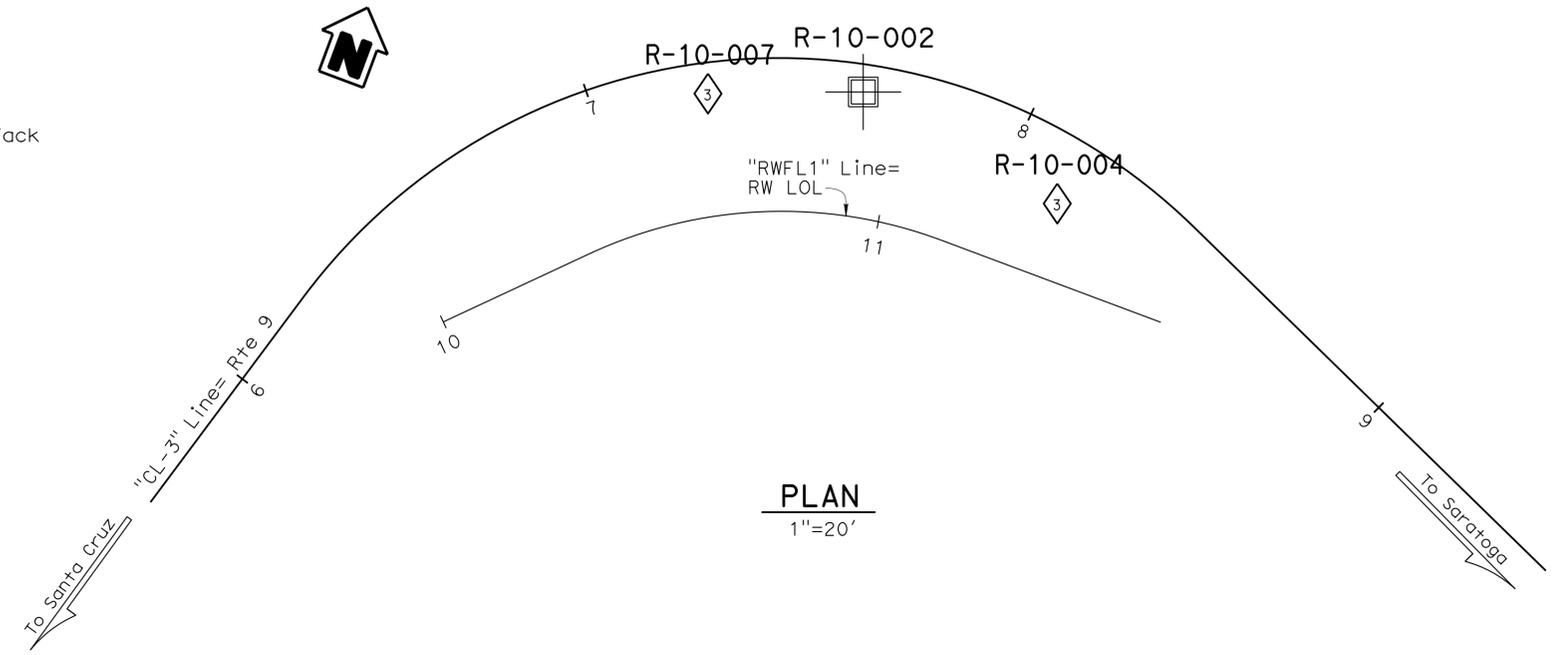
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This LOTB sheet was prepared in accordance with the Caltrans Soil & Rock Logging, Classification, & Presentation Manual (2010 Edition). See 2010 Standard Plans A10F and A10G for Soil Legend, and A10H for Rock Legend.

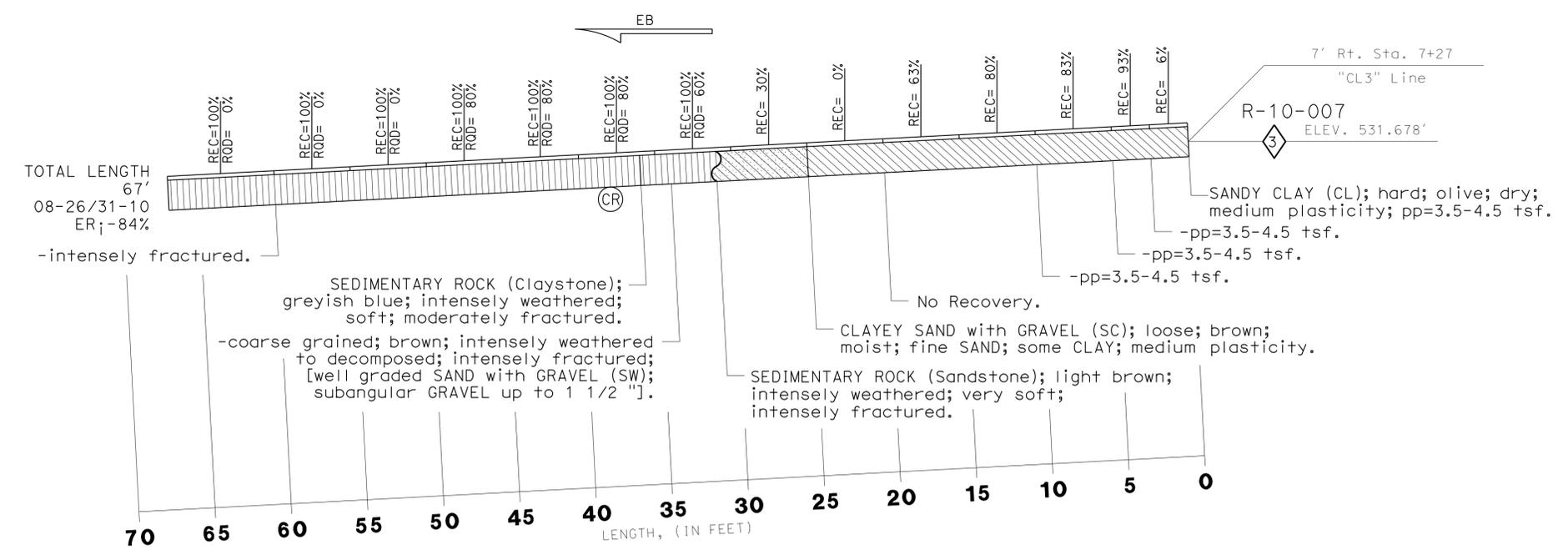
BENCH MARK

PRHV161 (Not Shown)
 Fnd 1" I.P. w/Red CT Plastic plug & Tack
 354.62' Rt "CL1" Line, C Rte 9
 Sta. 9+95.44
 N 1,921,148.53
 E 6,096,239.94
 EL. 1,801.47

SUHV203
 Fnd 1" I.P. w/Red CT Plastic Plug & Tack
 37.59' Lt "CL1" Line, C Ret 9
 Sta. 5+44.04
 N 1,921,610.36
 E 6,095,951.78
 EL. 1,667.32



PLAN
 1"=20'



PROFILE
 HOR. 1"= 5'
 VER. 1"=10'

ENGINEERING SERVICES		MATERIALS AND GEOTECHNICAL SERVICES		STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION		DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 9		BRIDGE No. 37E0102 POST MILE 6.70	SOIL NAIL WALL AT PM 6.70 LOG OF TEST BORINGS 1 OF 3	
FUNCTIONAL SUPERVISOR NAME: Hooshmand Nikou	DRAWN BY: M. Reynolds 11/10 CHECKED BY: E. Kretschmer	FIELD INVESTIGATION BY: S. Awad V. Khotan		PROJECT NUMBER & PHASE: 04000008221		CONTRACT No.: 04-2A4304		REVISION DATES 03-08-11 7-18-12		SHEET OF 12 14

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
04	SCI	9	2.5/7.0	123	124

06-15-12
REGISTERED CIVIL ENGINEER

6-10-13
PLANS APPROVAL DATE

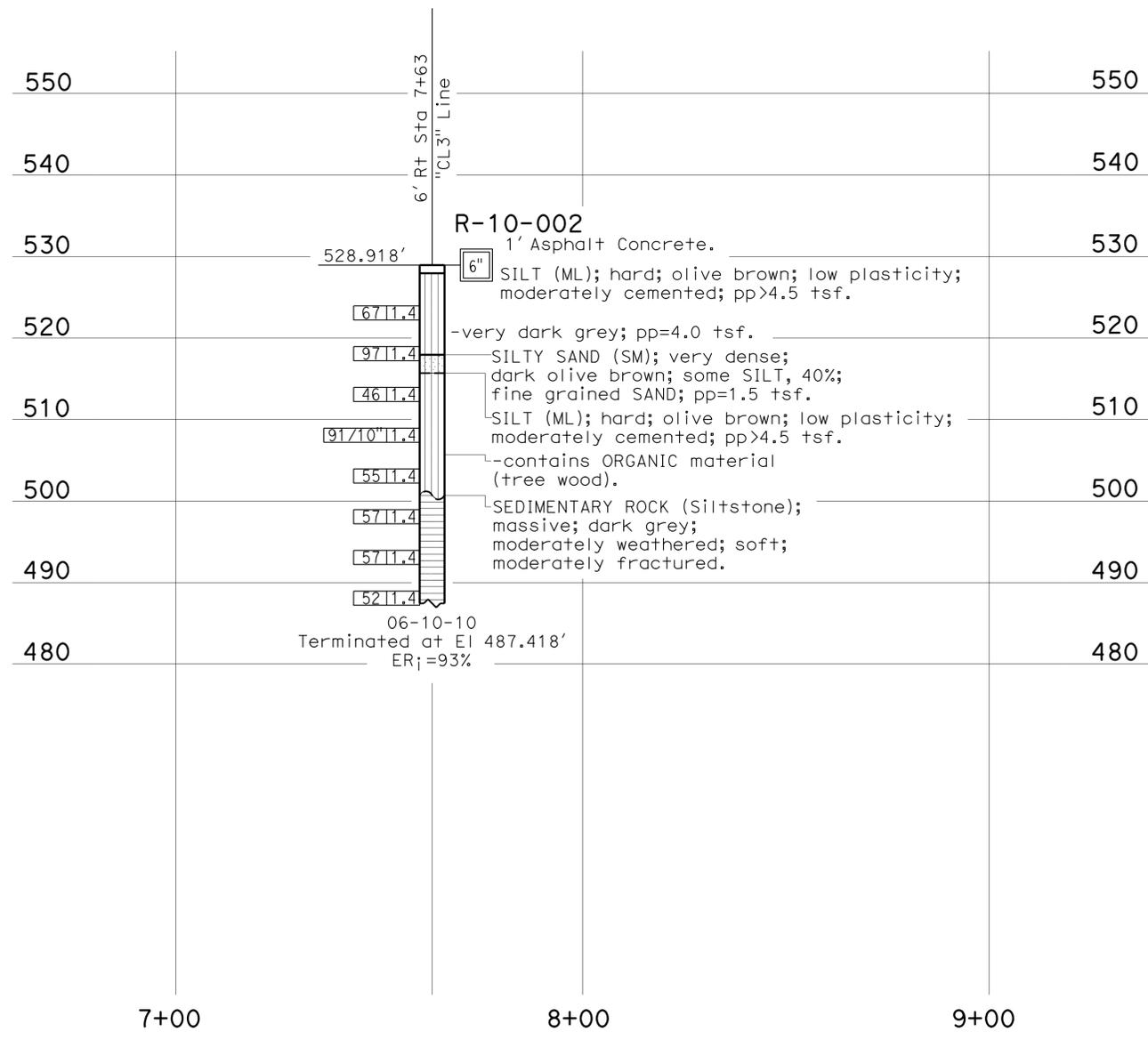
Samuel Awad
No. 64589
Exp. 6-30-13
CIVIL
STATE OF CALIFORNIA

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(For Boring Location See Plan, LOTB Sheet 1 of 3)

NOTE: pp=unconfined compressive strength (tsf) as measured by pocket penetrometer.



PROFILE
HOR. 1"=20'
VER. 1"=10'

ENGINEERING SERVICES		GEOTECHNICAL SERVICES		STATE OF CALIFORNIA		DIVISION OF ENGINEERING SERVICES		BRIDGE No.		SOIL NAIL WALL AT PM 6.70	
FUNCTIONAL SUPERVISOR		DRAWN BY: M. Reynolds 11/10		FIELD INVESTIGATION BY: S. Awad		DEPARTMENT OF TRANSPORTATION		37E0102		LOG OF TEST BORINGS 2 of 3	
NAME: Hooshmand Nikou'i		CHECKED BY: E. Kretschmer				DESIGN BRANCH 9		POST MILES			
065 CIVIL LOG OF TEST BORINGS SHEET		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		0 1 2 3		CU EA 04 2A4301		6.70		REVISION DATES	
						DISREGARD PRINTS BEARING EARLIER REVISION DATES		03-08-11 7-16-12		SHEET 13 OF 14	

FILE => 37e0102-z-1+02.dgn
DATE PLOTTED => 11-JUN-2013
TIME PLOTTED => 12:40
USERNAME => s124496

BENCH MARK

Boring: R-10-004
 Northing: 1,918,577.5
 Easting: 6,112,820.5

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
04	SCI	9	2.5/7.0	124	124

06-15-12
 REGISTERED CIVIL ENGINEER

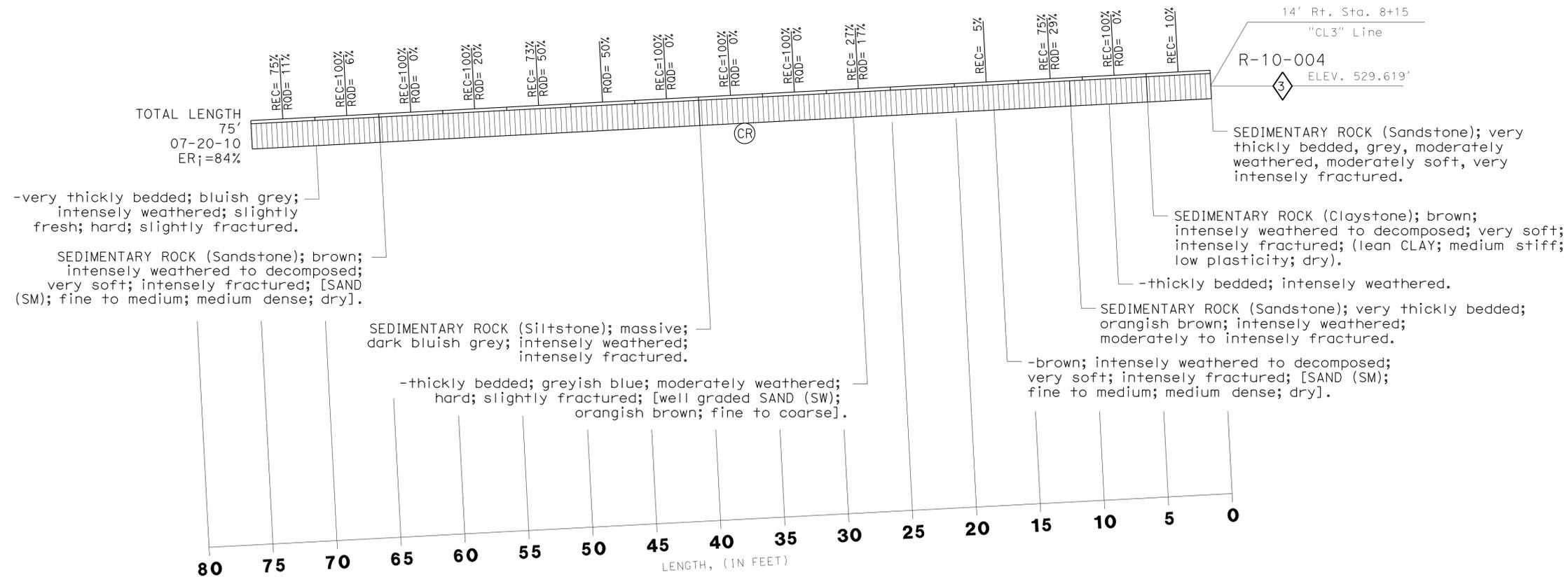
6-10-13
 PLANS APPROVAL DATE

Samuel Awad
 No. 64589
 Exp. 6-30-13
 CIVIL
 STATE OF CALIFORNIA

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This LOTB sheet was prepared in accordance with the Caltrans Soil & Rock Logging, Classification, & Presentation Manual (2010 Edition).

(For Boring Location See Plan, LOTB Sheet 1 of 3)



PROFILE

HOR. 1" = 5'
 VER. 1" = 10'

ENGINEERING SERVICES		GEOTECHNICAL SERVICES		STATE OF CALIFORNIA		DIVISION OF ENGINEERING SERVICES		BRIDGE No.		SOIL NAIL WALL AT PM 6.70	
FUNCTIONAL SUPERVISOR		DRAWN BY: M. Reynolds 11/10		FIELD INVESTIGATION BY:		STRUCTURE DESIGN		37E0102		LOG OF TEST BORINGS 3 of 3	
NAME: Hooshmand Nikou		CHECKED BY: E. Kretschmer		V. Khataakhotar		DESIGN BRANCH 9		POST MILES			
065 CIVIL LOG OF TEST BORINGS SHEET		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		0 1 2 3		CU EA		04 2A4301		REVISION DATES	
						DISREGARD PRINTS BEARING EARLIER REVISION DATES		03-08-11 7-16-12		SHEET 14 OF 14	