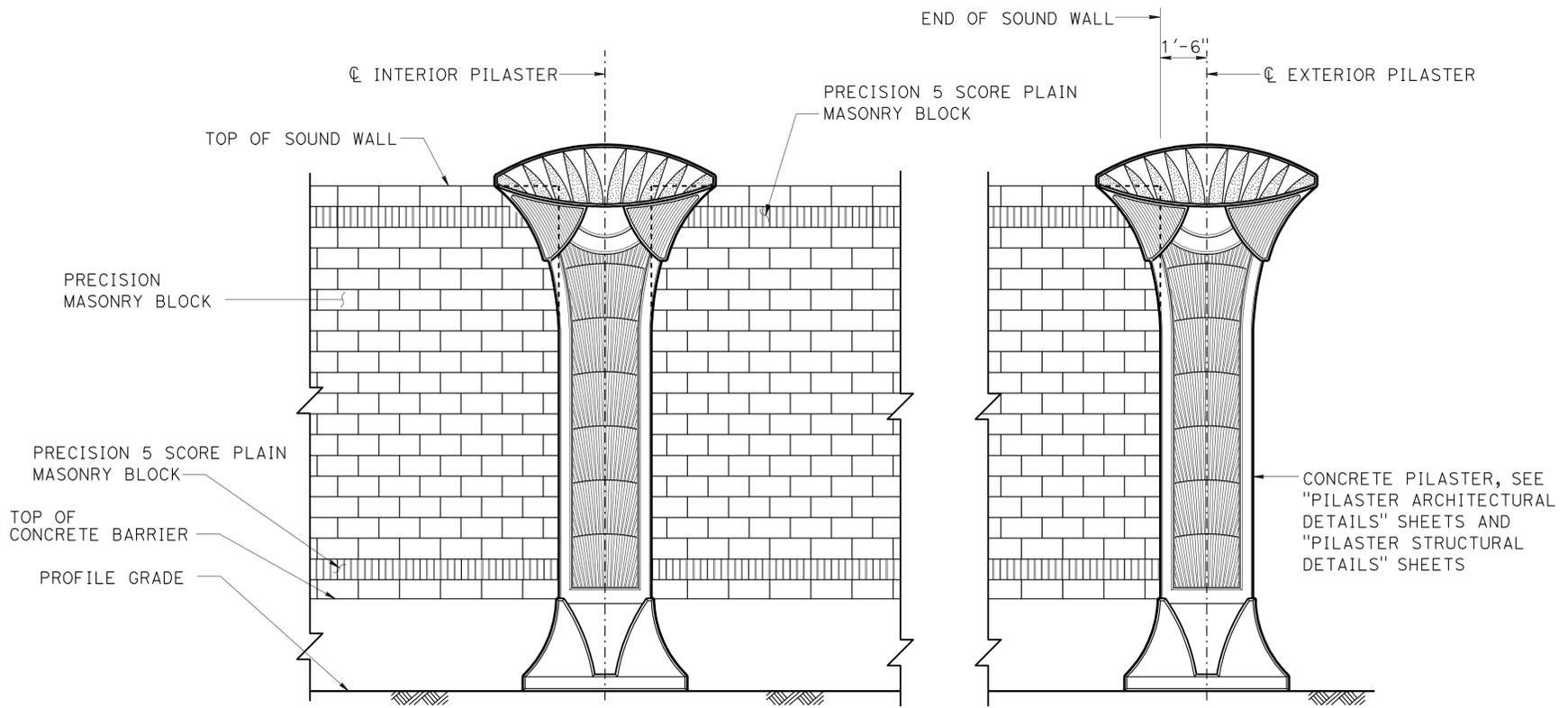
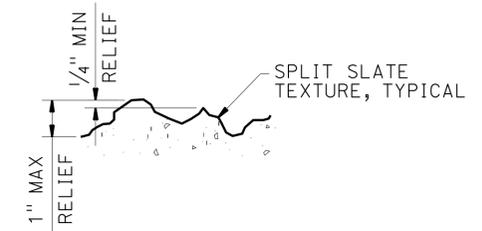


DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1501	1597
Frank H. Wei REGISTERED CIVIL ENGINEER DATE 12/12/11					
4-9-12 PLANS APPROVAL DATE					
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.					

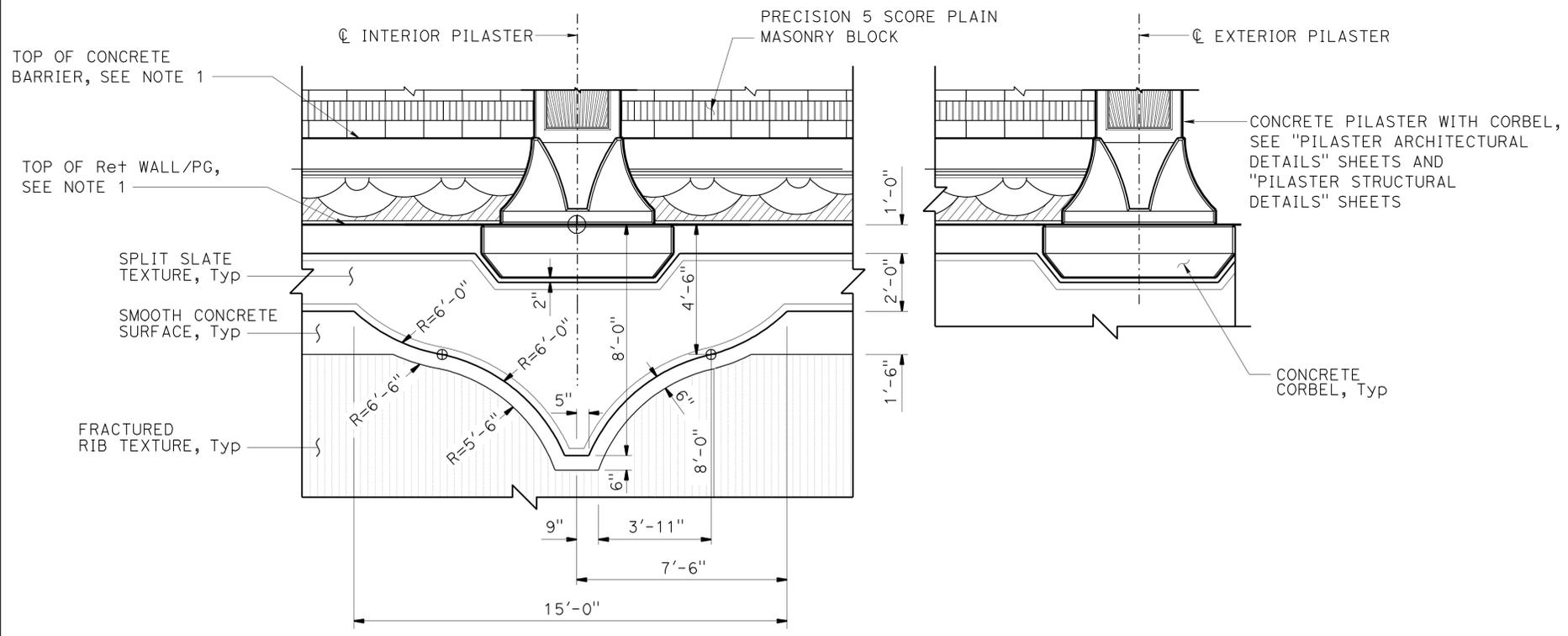
NOTE:
1. See "RETAINING WALL AND BARRIER ARCHITECTURAL DETAILS" sheet.



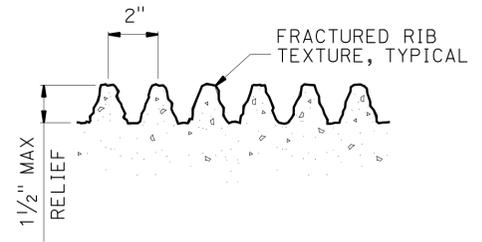
PART SOUND WALL ELEVATION - FREEWAY SIDE
NO SCALE



SPLIT SLATE TEXTURE DETAIL
NO SCALE



PART SOUND WALL ELEVATION - BACK SIDE
NO SCALE



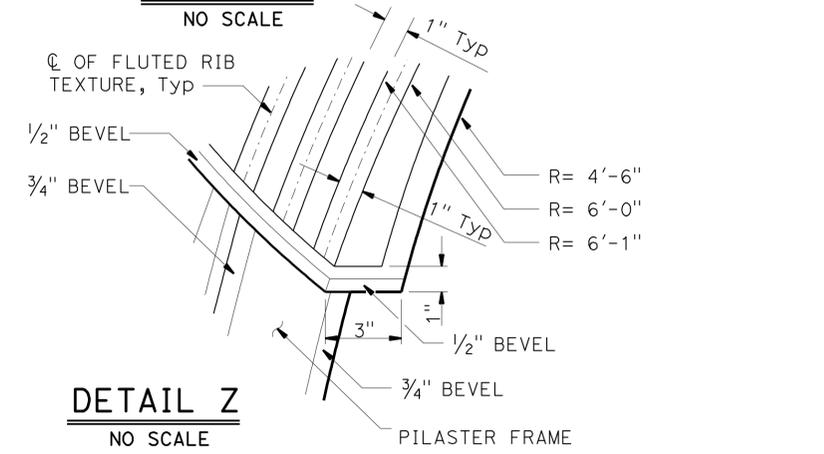
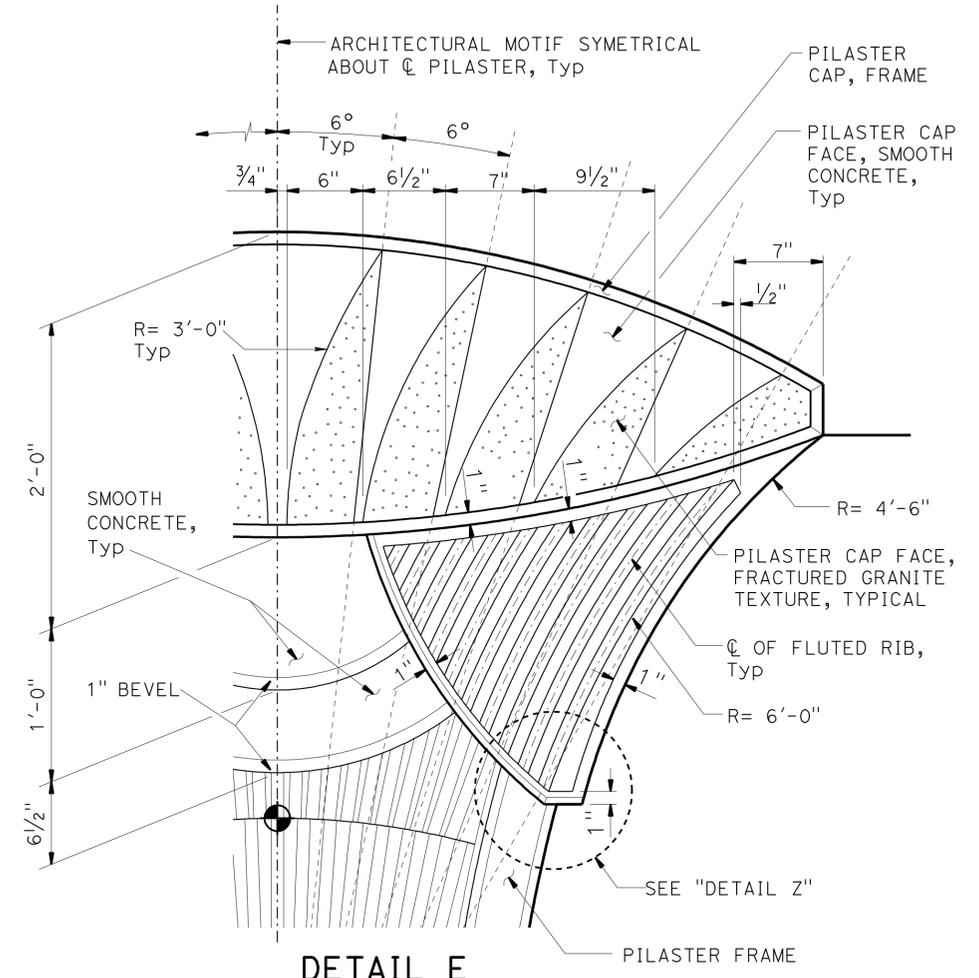
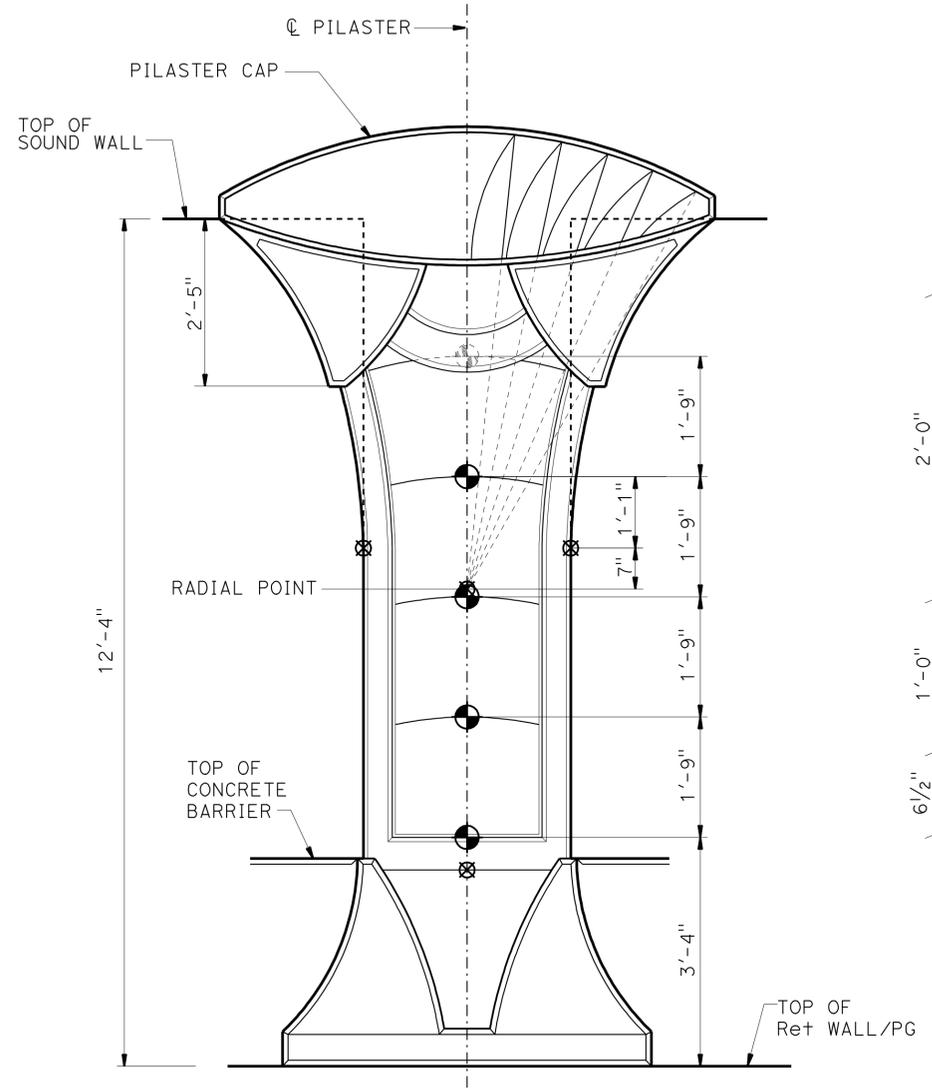
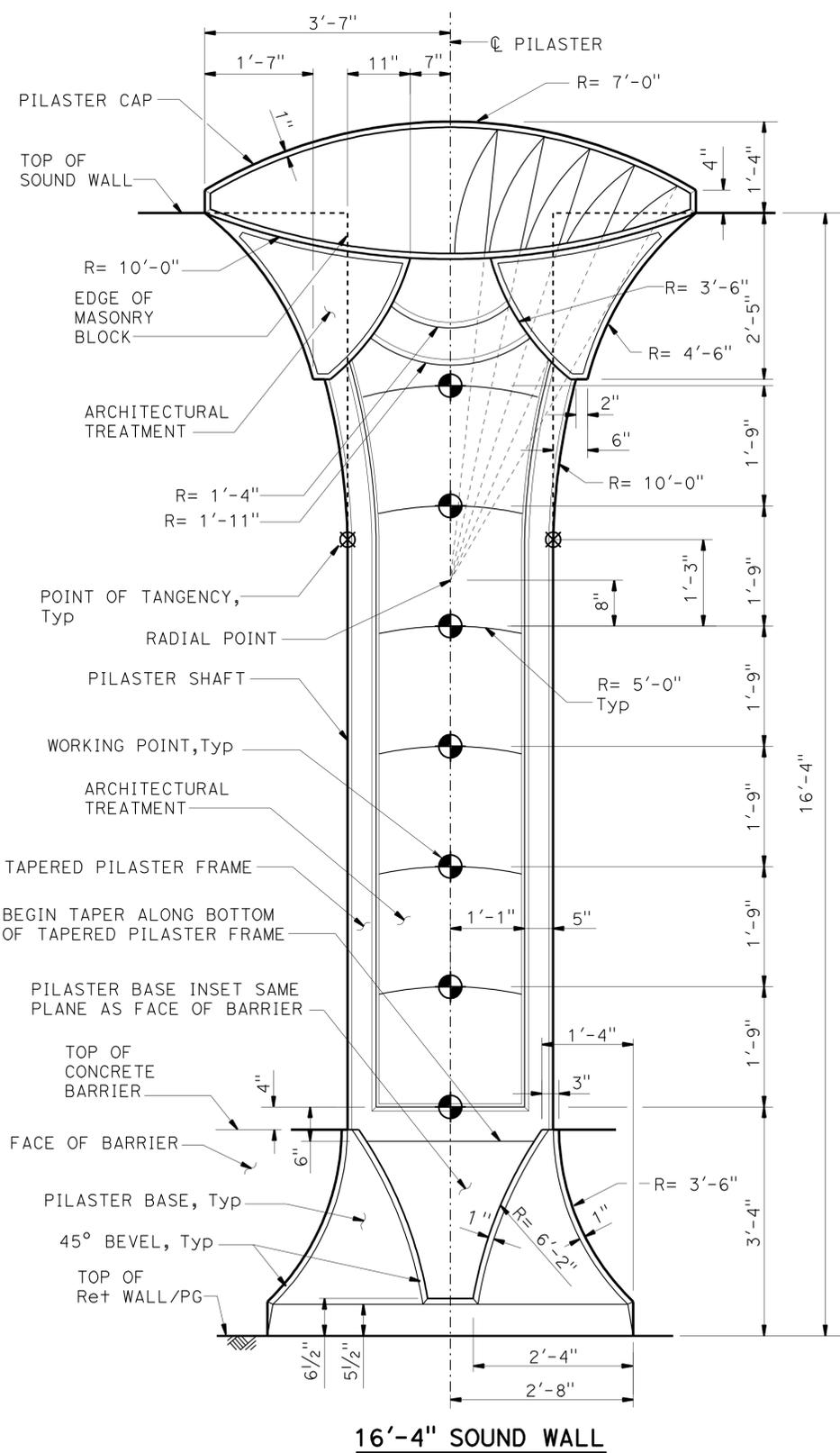
FRACTURED RIB TEXTURE DETAIL
NO SCALE

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

DESIGN BY H. CHAVEZ CHECKED I. TASABIA DETAILS BY J. VALENCIA CHECKED F. WEI/I. TASABIA QUANTITIES BY K. KIM CHECKED S. YEH	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 21	BRIDGE NO. 53E0192	SOUND WALL NO. 290
			POST MILE 5.2	
UNIT: 3623 PROJECT NUMBER & PHASE: 0700001834 & 1 CONTRACT NO.: 07-215941			REVISION DATES 09/20/11 11/25/11 12/27/11 03/22/12	SHEET OF 45 70

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1502	1597
Frank H. Wei REGISTERED CIVIL ENGINEER DATE 12/12/11					
4-9-12 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:
- All dimensions symetrical about C Pilaster.
 - For location of "DETAIL E", see "PILASTER ARCHITECTURAL DETAILS NO. 2" sheet.
 - Beveled edges are 45° unless otherwise noted
 - All vertical dimensions are measured along the C Pilaster (Pilaster shall be vertical).

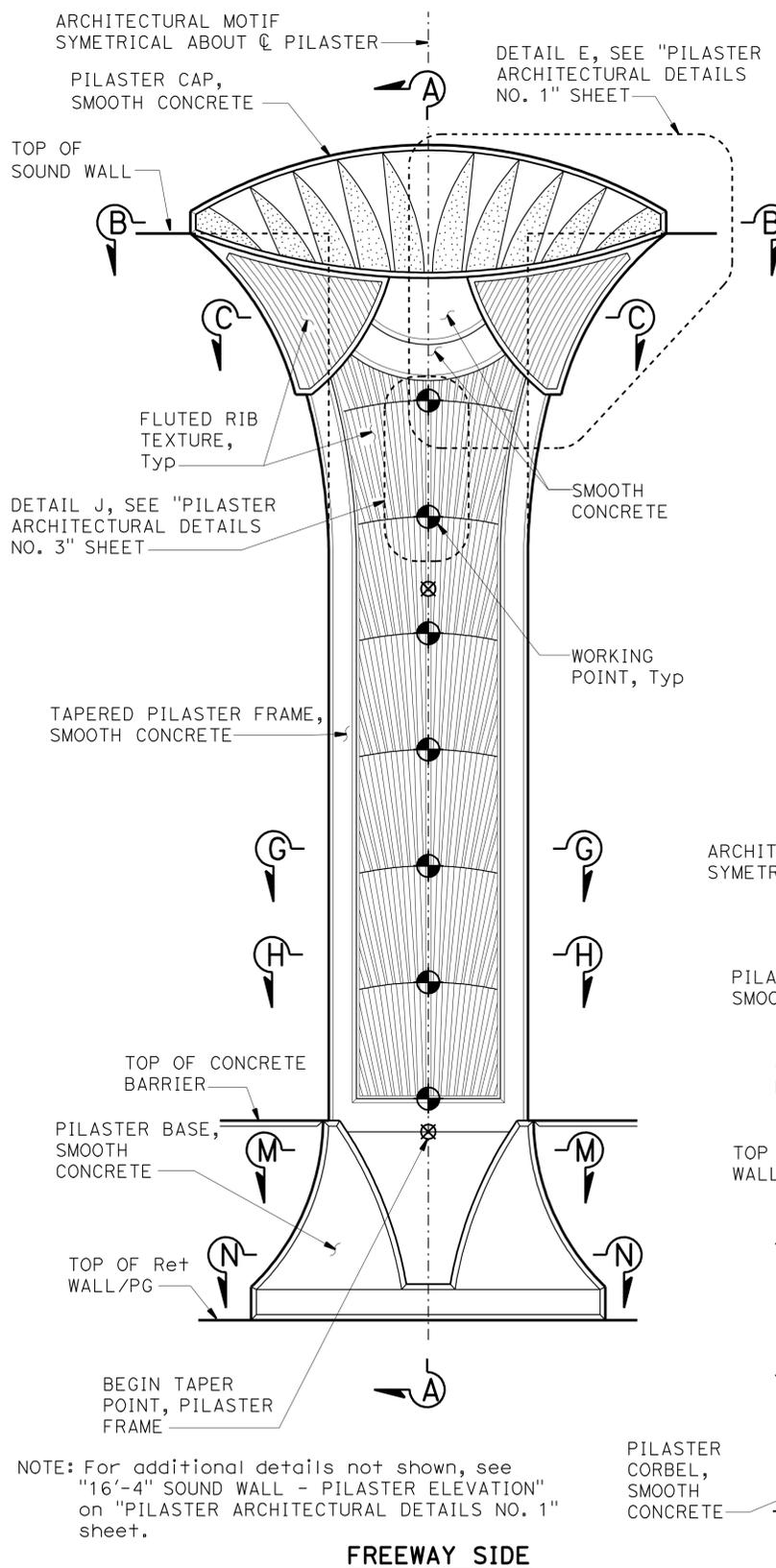


PILASTER ELEVATION - FREEWAY SIDE
NO SCALE

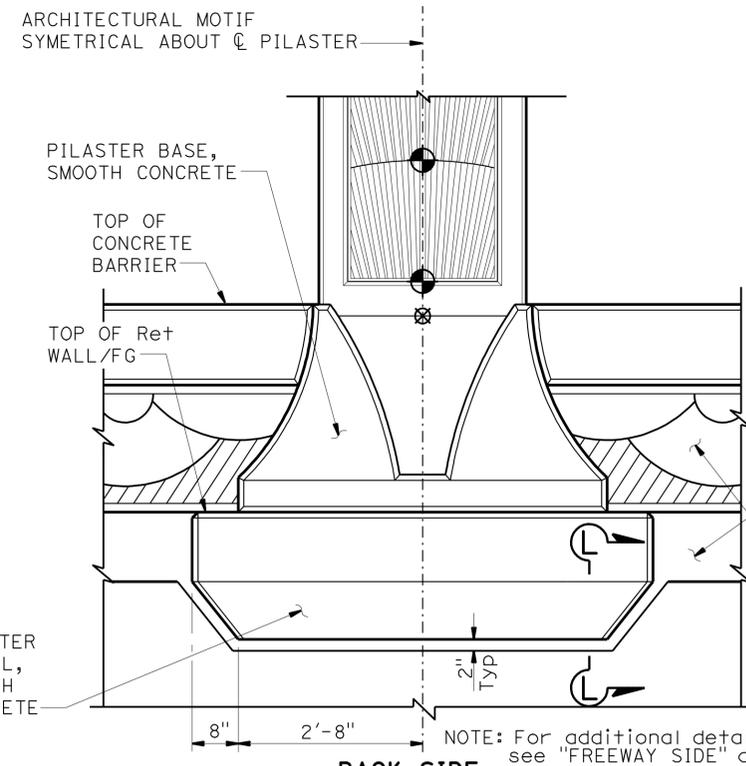
NOTE: For dimensions and details not shown, see "16'-4" SOUND WALL" details

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

DESIGN BY H. CHAVEZ CHECKED I. TASABIA DETAILS BY J. VALENCIA CHECKED F. WEI QUANTITIES BY K. KIM CHECKED S. YEH	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 21	BRIDGE NO. 53E0192	SOUND WALL NO. 290 PILASTER ARCHITECTURAL DETAILS NO. 1
			POST MILE 5.2	
			UNIT: 3623 PROJECT NUMBER & PHASE: 0700001834 & 1 CONTRACT NO.: 07-215941	
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)				



FREEWAY SIDE



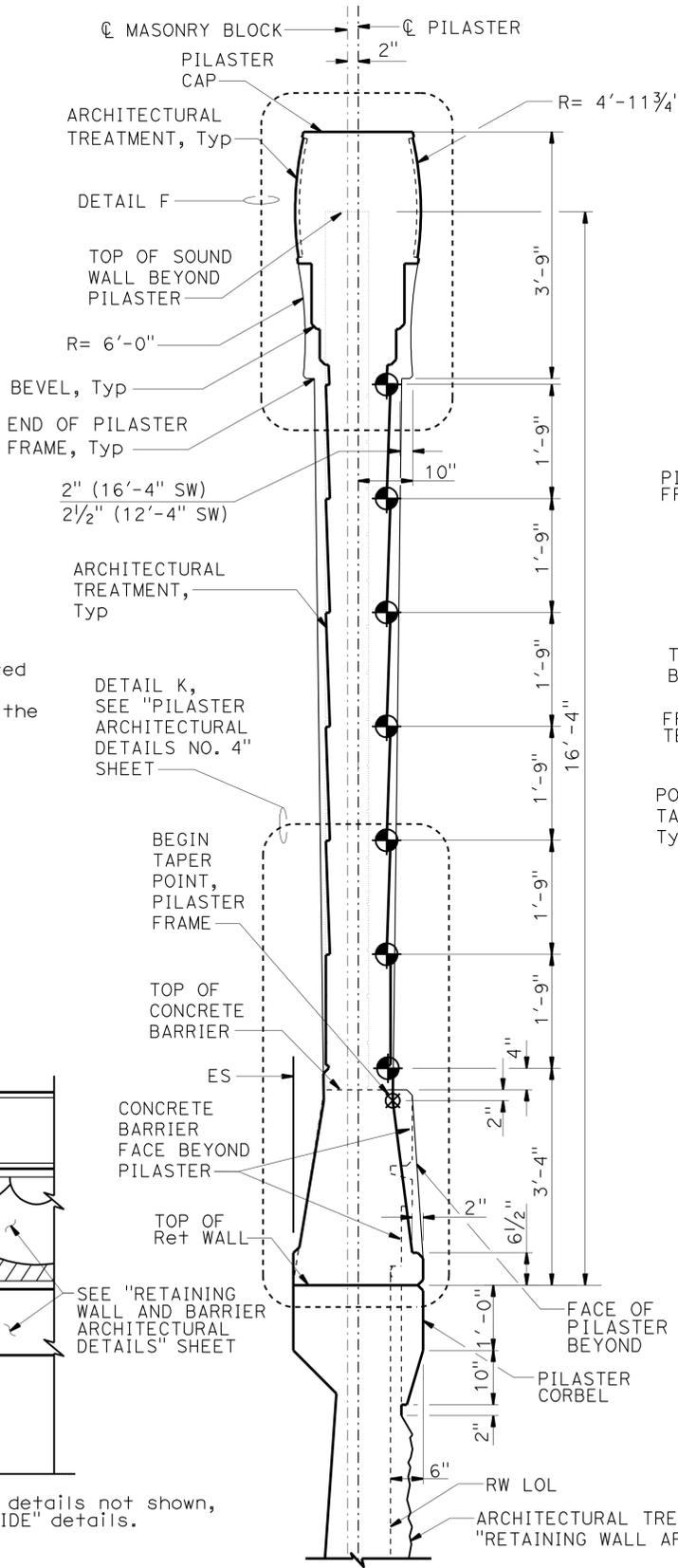
BACK SIDE

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

- NOTES:
1. For "SECTION B-B", "SECTION C-C", "SECTION G-G", "SECTION H-H" and "SECTION L-L", see "PILASTER ARCHITECTURAL DETAILS NO. 3" sheet.
 2. For "SECTION M-M" and "SECTION N-N" see "PILASTER ARCHITECTURAL DETAIL NO. 4" sheet.
 3. Pilaster Sections on Retaining Wall shown, for Pilaster on Barrier Type 736SV (Mod), see "PILASTER SECTION ON TYPE 736SV (Mod) BARRIER" on "PILASTER ARCHITECTURAL DETAILS NO. 4" sheet.
 4. All dimensions symetrical about C pilaster.
 5. Beveled edges are 45° unless otherwise noted
 6. All vertical dimensions are measured along the C pilaster (Pilaster shall be vertical).

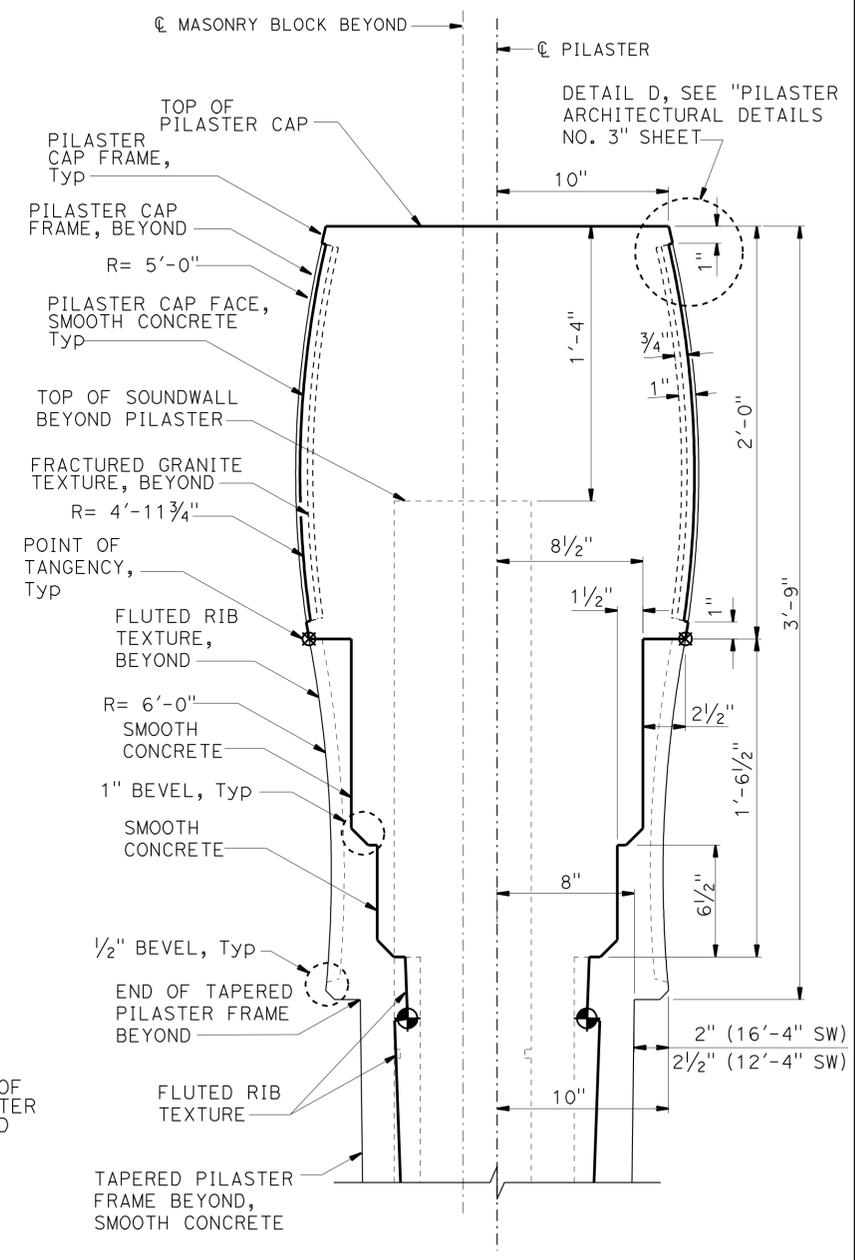
NOTE: For additional details not shown, see "16'-4" SOUND WALL - PILASTER ELEVATION" on "PILASTER ARCHITECTURAL DETAILS NO. 1" sheet.

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



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

NOTE: Pilaster for 16'-4" Sound Wall shown, Pilaster at 12'-4" Sound Wall similar.



DETAIL F
 NO SCALE

DESIGN	BY H. CHAVEZ	CHECKED I. TASABIA
DETAILS	BY J. VALENCIA	CHECKED F. WEI
QUANTITIES	BY K. KIM	CHECKED S. YEH

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 21

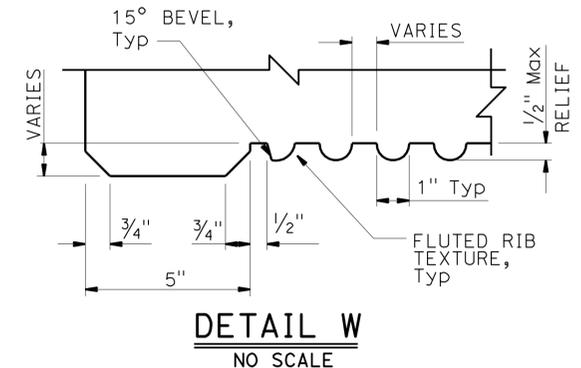
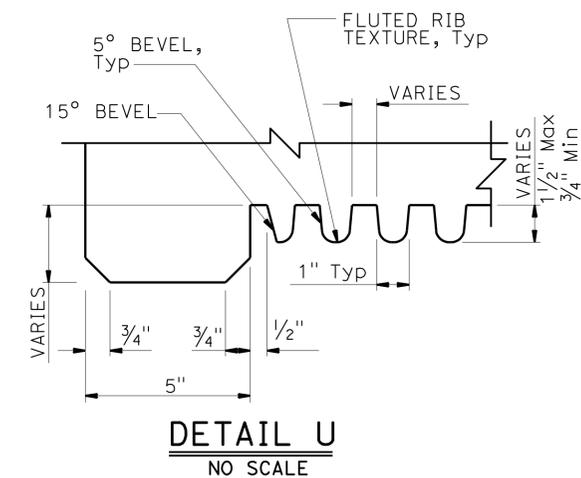
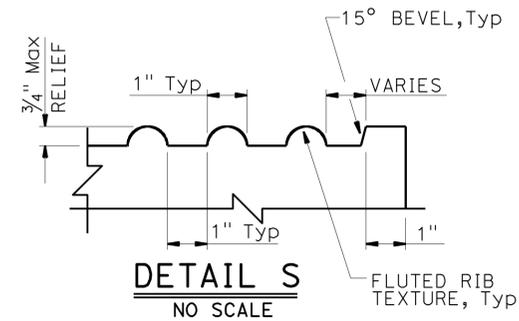
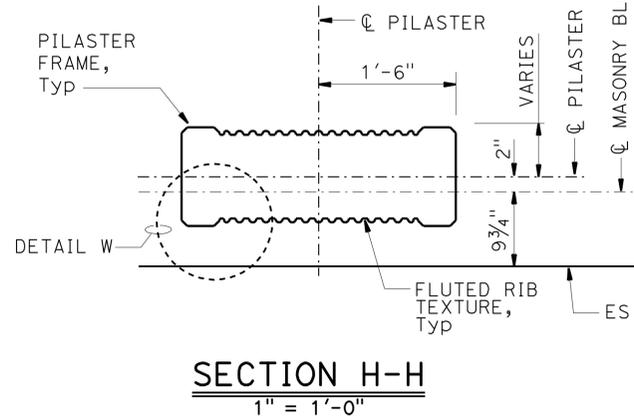
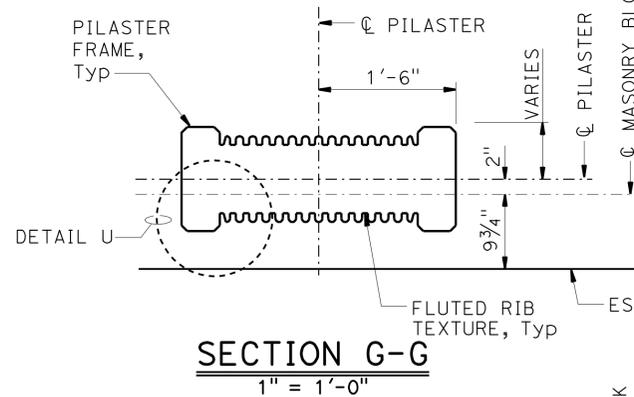
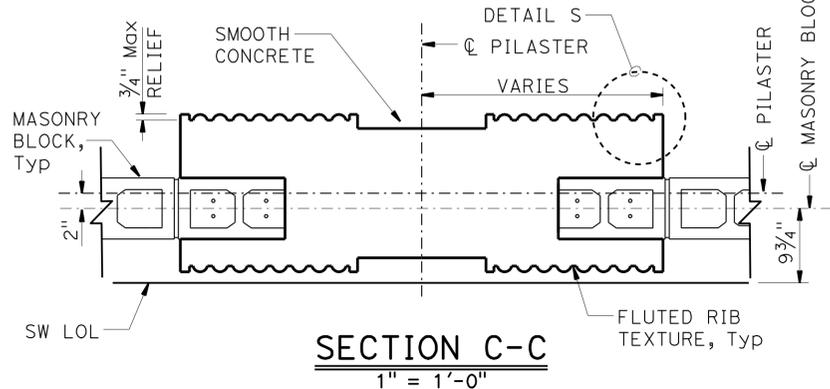
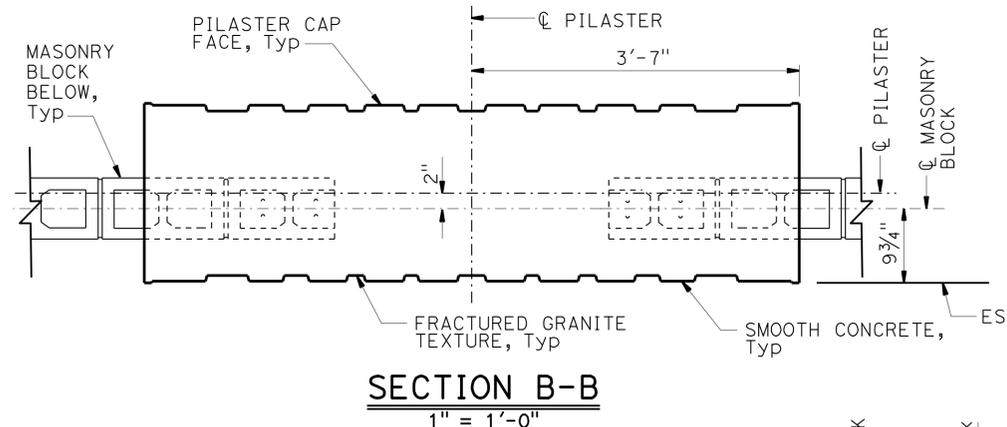
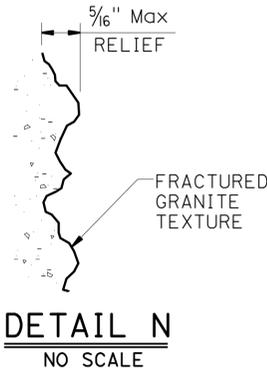
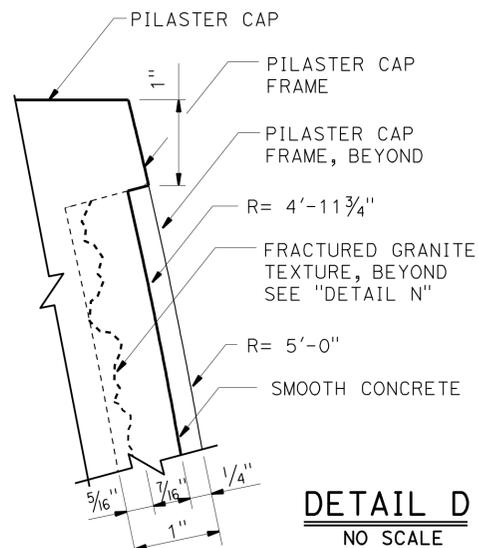
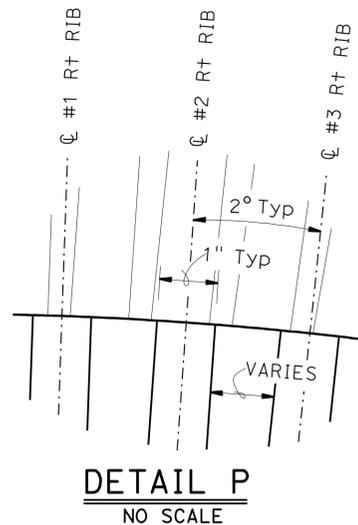
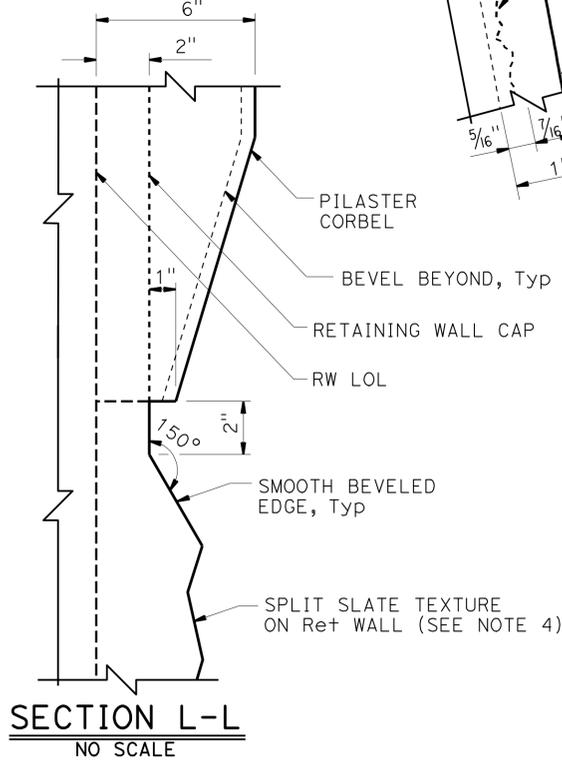
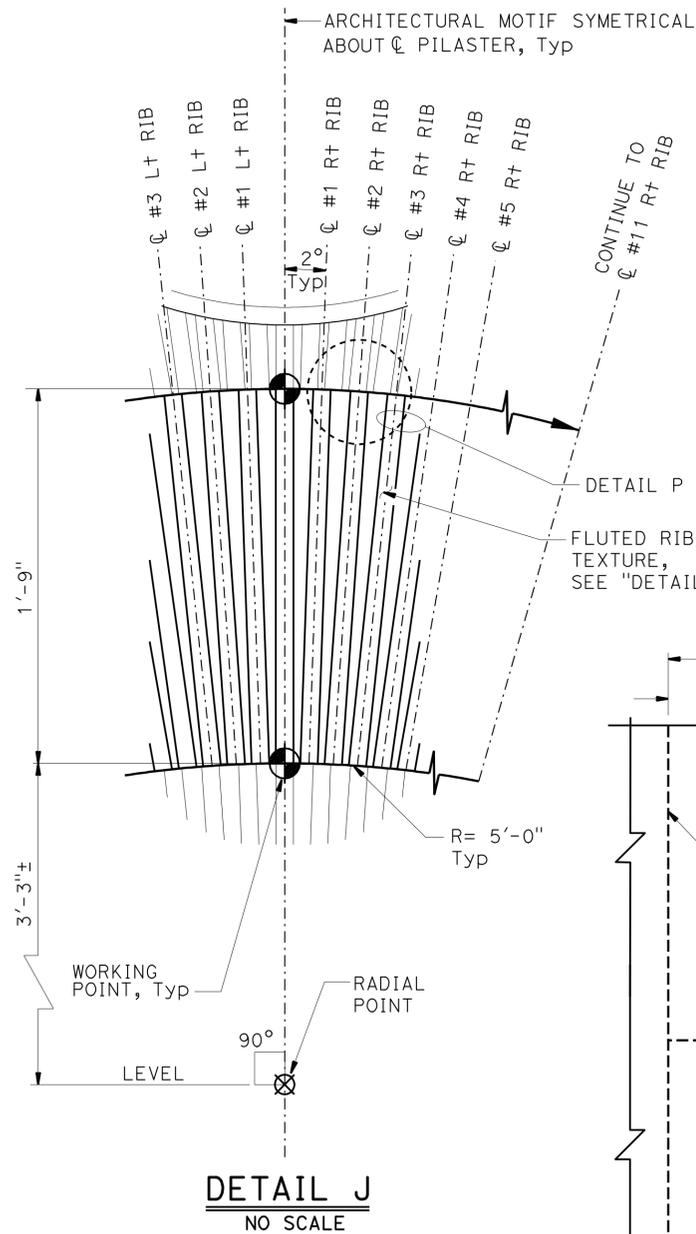
BRIDGE NO.	53E0192
POST MILE	5.2

SOUND WALL NO. 290
PILASTER ARCHITECTURAL DETAILS NO. 2

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1504	1597
<i>Frank H. Wei</i> REGISTERED CIVIL ENGINEER DATE 12/12/11				No. C 52918 Exp. 12-31-12 CIVIL STATE OF CALIFORNIA	
4-9-12 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.					

NOTES:

- All notes and dimensions symmetrical about C pilaster.
- Beveled edges are 45° unless otherwise noted.
- For location of "DETAIL J", "DETAIL D" and "SECTION B-B", "SECTION C-C", "SECTION G-G", "SECTION H-H" and "SECTION L-L", see "PILASTER ARCHITECTURAL DETAILS NO. 2" sheet.
- For Retaining Wall split slate texture, see "RETAINING WALL AND BARRIER ARCHITECTURAL DETAILS" sheet.



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

DESIGN	BY H. CHAVEZ	CHECKED I. TASABIA
DETAILS	BY J. VALENCIA	CHECKED F. WEI
QUANTITIES	BY K. KIM	CHECKED S. YEH

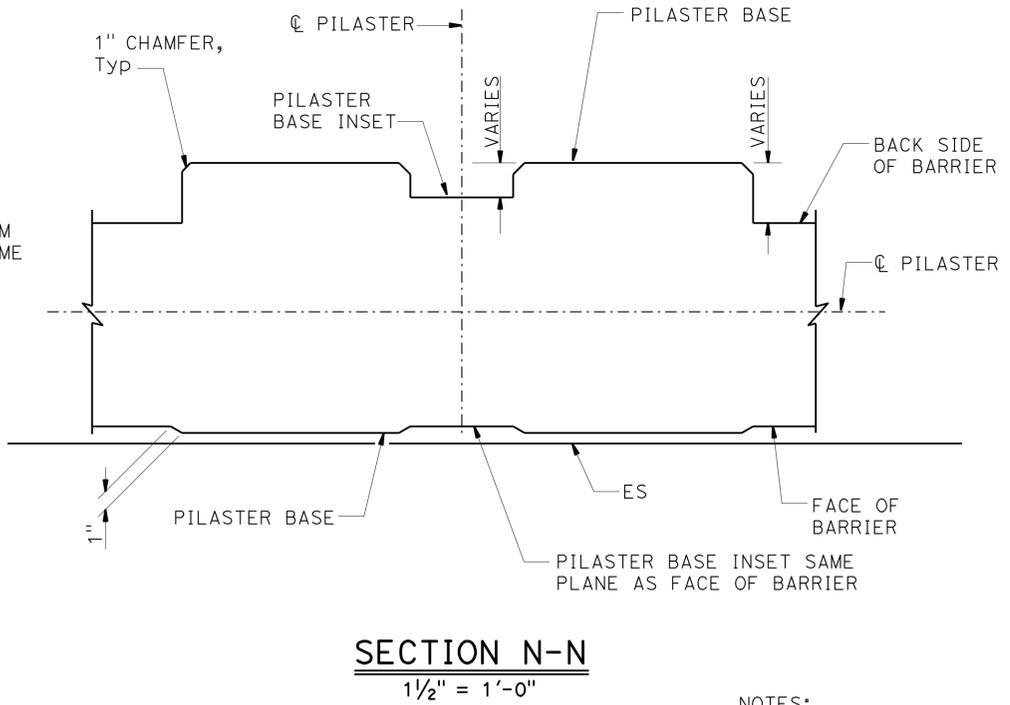
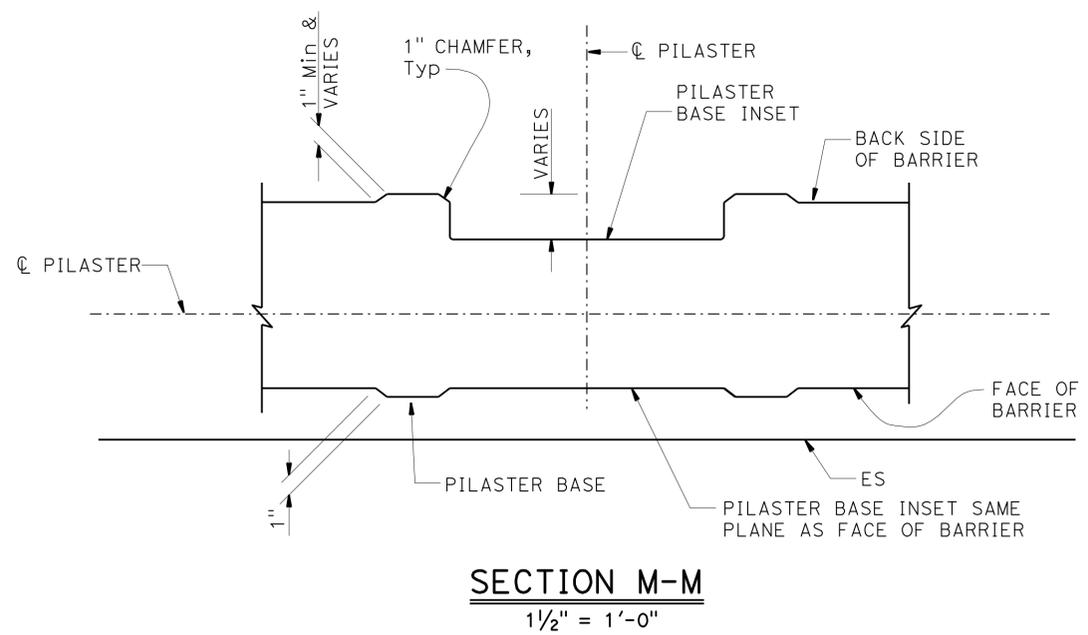
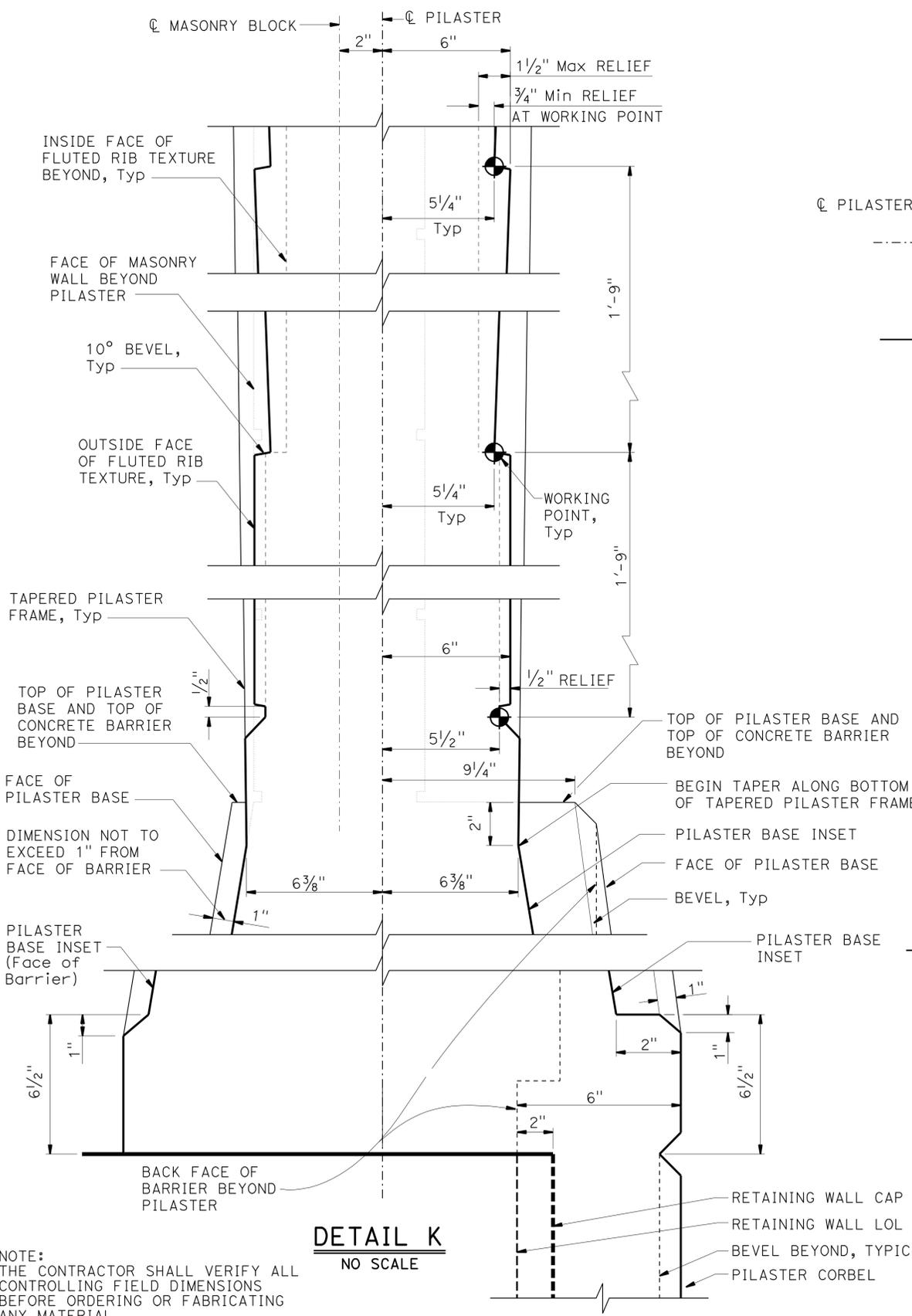
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 21

BRIDGE NO.	53E0192
POST MILE	5.2

SOUND WALL NO. 290
PILASTER ARCHITECTURAL DETAILS NO. 3

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1505	1597
Frank H. Wei REGISTERED CIVIL ENGINEER DATE 12/12/11					
4-9-12 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.					



- NOTES:
1. For location of "SECTION M-M", "SECTION N-N" and "DETAIL K", see "PILASTER ARCHITECTURAL DETAILS NO. 2" sheet.
 2. All dimensions symmetrical about \O Pilaster.
 3. All vertical dimensions are measured along the \O Pilaster (Pilaster shall be vertical).

DESIGN	BY H. CHAVEZ	CHECKED I. TASABIA
DETAILS	BY J. VALENCIA	CHECKED F. WEI
QUANTITIES	BY K. KIM	CHECKED S. YEH

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 21

BRIDGE NO.	53E0192
POST MILE	5.2

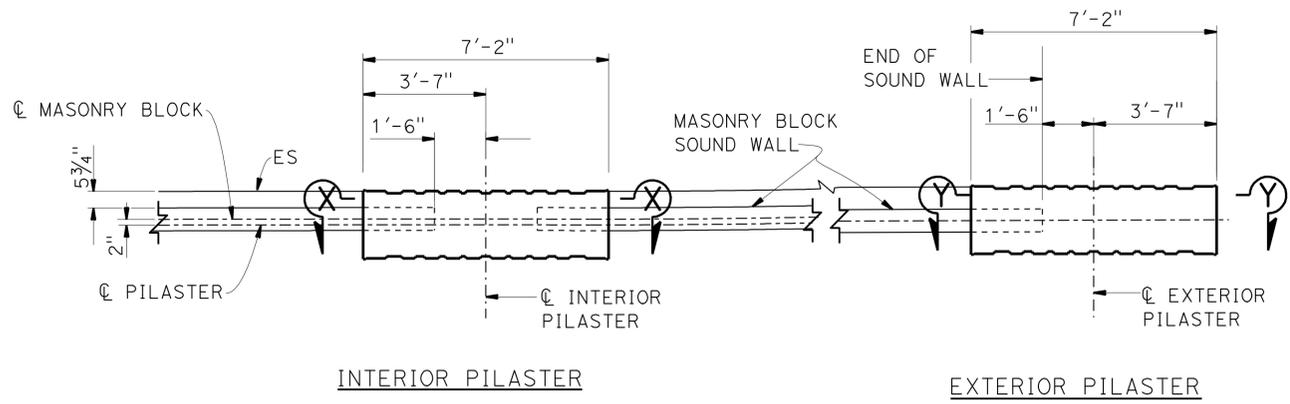
SOUND WALL NO. 290
PILASTER ARCHITECTURAL DETAILS NO. 4

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1506	1597
			DATE		
			2/12/11		
			REGISTERED CIVIL ENGINEER		
			PLANS APPROVAL DATE		
			4-9-12		
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.					

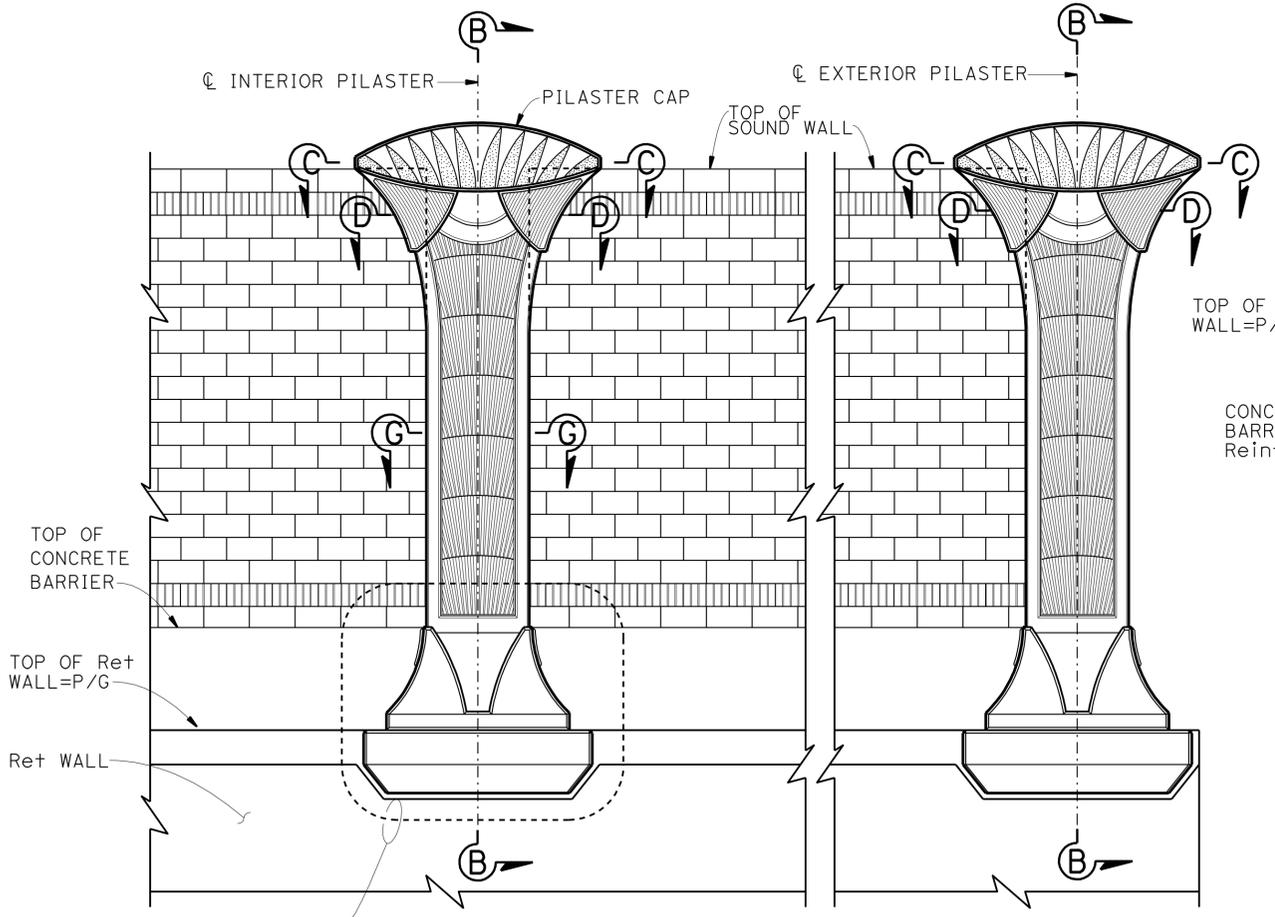


NOTES:

1. For "SECTION B-B", "SECTION C-C", "SECTION D-D" and "SECTION G-G", see "PILASTER STRUCTURAL DETAILS NO. 2" sheet.
2. 16'-4" height Pilaster shown. 12'-4" and 14'-4" height Pilaster similar.



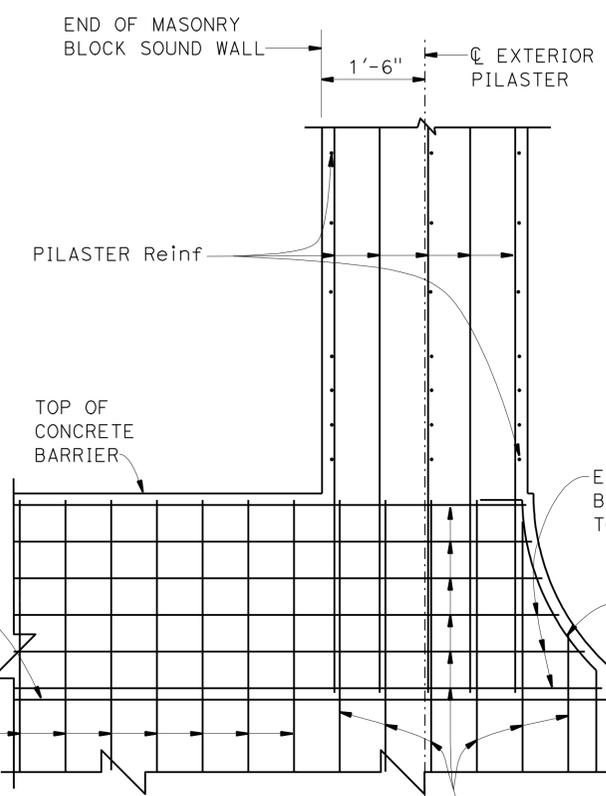
PART SOUND WALL PLAN
3/8" = 1'-0"



PART SOUND WALL ELEVATION
3/8" = 1'-0"

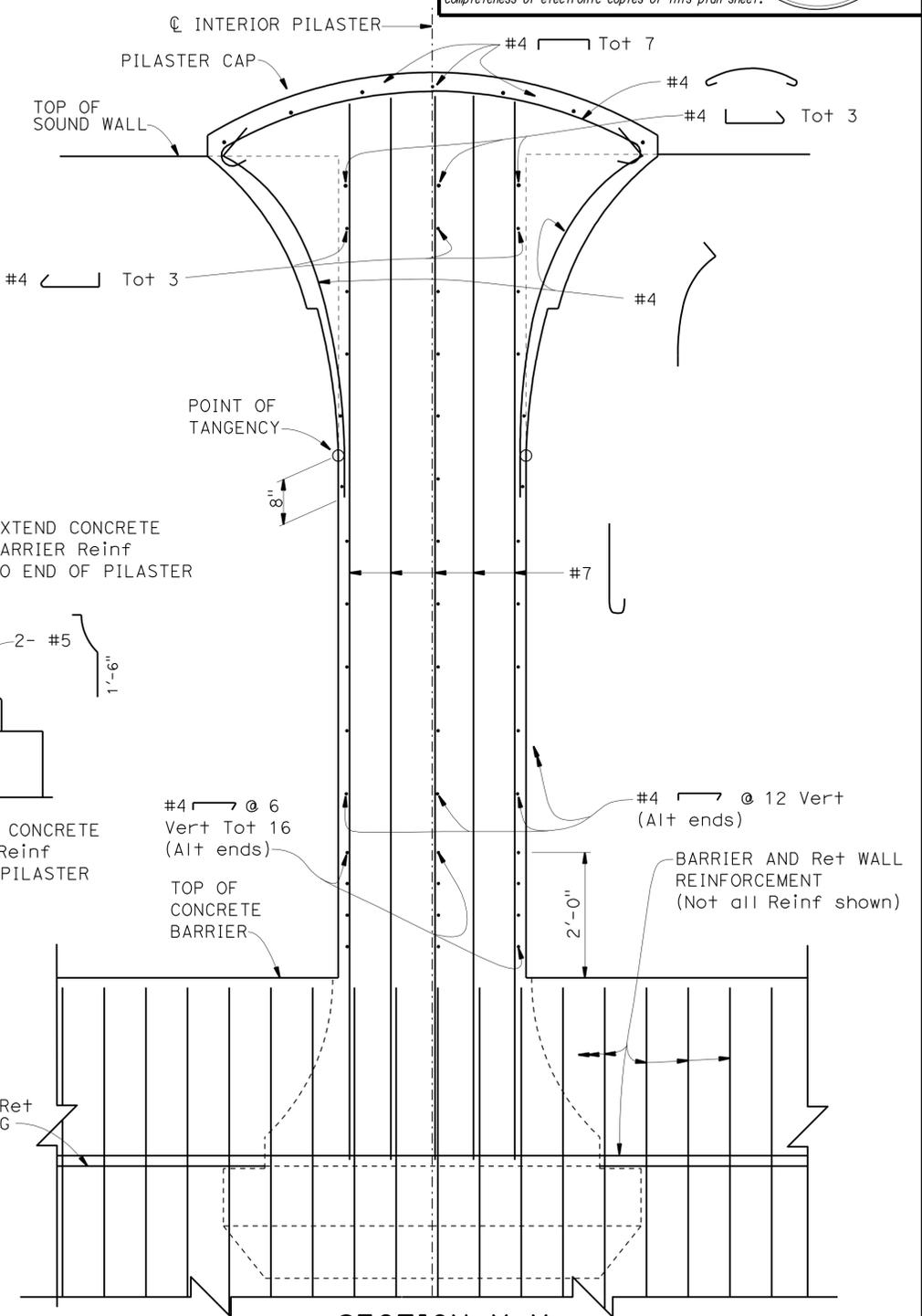
SEE "DETAIL A" ON "PILASTER STRUCTURAL DETAILS NO. 3" SHEET FOR PILASTER CORBEL ON RETAINING WALL.

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



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

NOTE: For details not shown, see "SECTION X-X"



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

NOTE: Pilaster corbel reinf not shown.

DESIGN	BY H. CHAVEZ	CHECKED I. TASABIA
DETAILS	BY J. VALENCIA	CHECKED F. WEI
QUANTITIES	BY K. KIM	CHECKED S. YEH

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 21

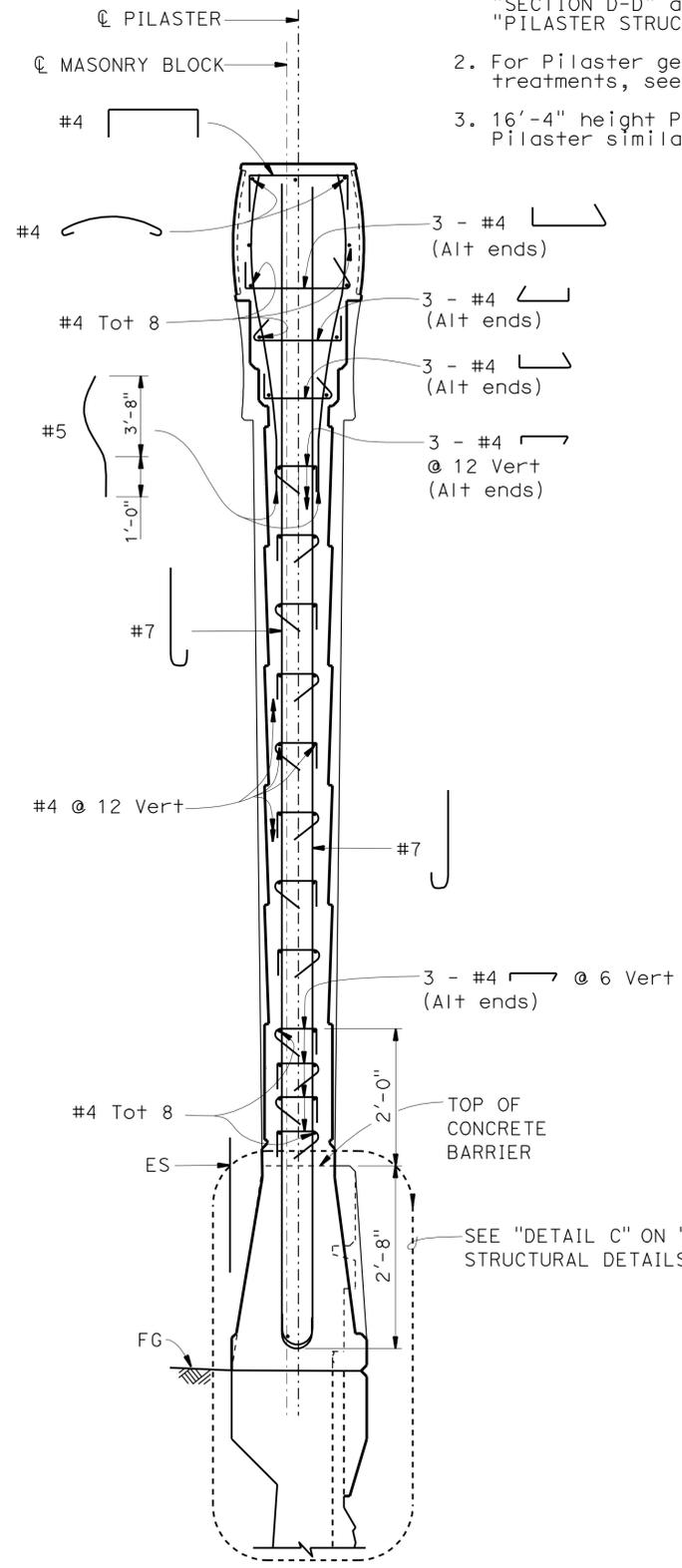
BRIDGE NO.	53E0192
POST MILE	5.2

SOUND WALL NO. 290
PILASTER STRUCTURAL DETAILS NO. 1

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1507	1597
Frank H. Wei REGISTERED CIVIL ENGINEER DATE 12/12/11					
4-9-12				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.					

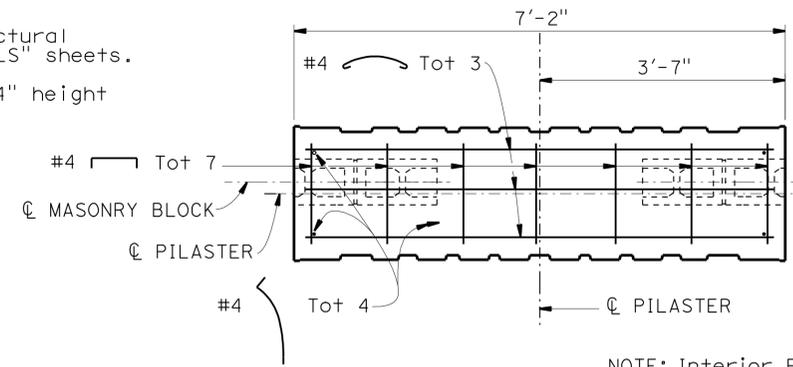
NOTES:

1. For location of "SECTION B-B", "SECTION C-C", "SECTION D-D" and "SECTION G-G", see "PILASTER STRUCTURAL DETAILS NO. 1" sheet.
2. For Pilaster geometry, dimensions and architectural treatments, see "PILASTER ARCHITECTURAL DETAILS" sheets.
3. 16'-4" height Pilaster shown, 12'-4" and 14'-4" height Pilaster similar.



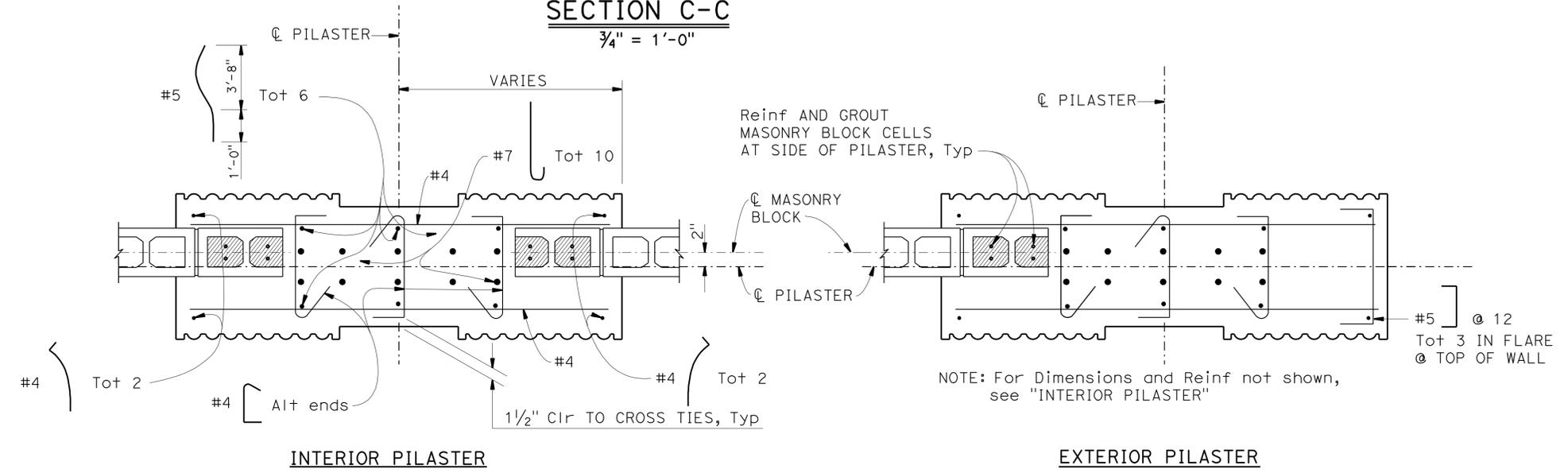
SECTION B-B
3/4" = 1'-0"

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



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

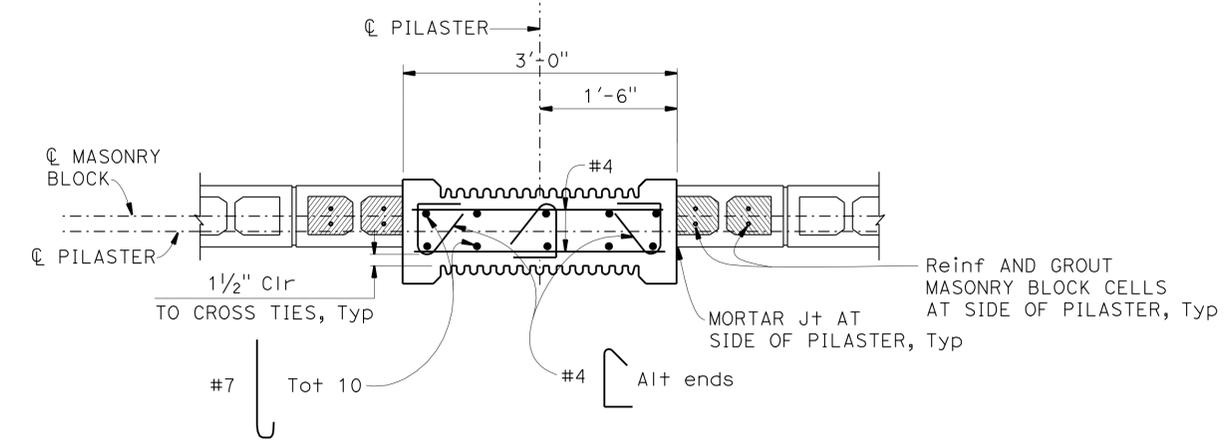
NOTE: Interior Pilaster shown, Exterior Pilaster similar.



INTERIOR PILASTER

EXTERIOR PILASTER

SECTION D-D
1" = 1'-0"



SECTION G-G
1" = 1'-0"

DESIGN	BY H. CHAVEZ	CHECKED I. TASABIA
DETAILS	BY J. VALENCIA	CHECKED F. WEI
QUANTITIES	BY K. KIM	CHECKED S. YEH

STATE OF CALIFORNIA		DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN	BRIDGE NO.	SOUND WALL NO. 290
DEPARTMENT OF TRANSPORTATION			53E0192	
		DESIGN BRANCH 21	POST MILE	PILASTER STRUCTURAL DETAILS NO. 2
			5.2	

UNIT: 3623	PROJECT NUMBER & PHASE: 0700001834 & 1	CONTRACT NO.: 07-215941
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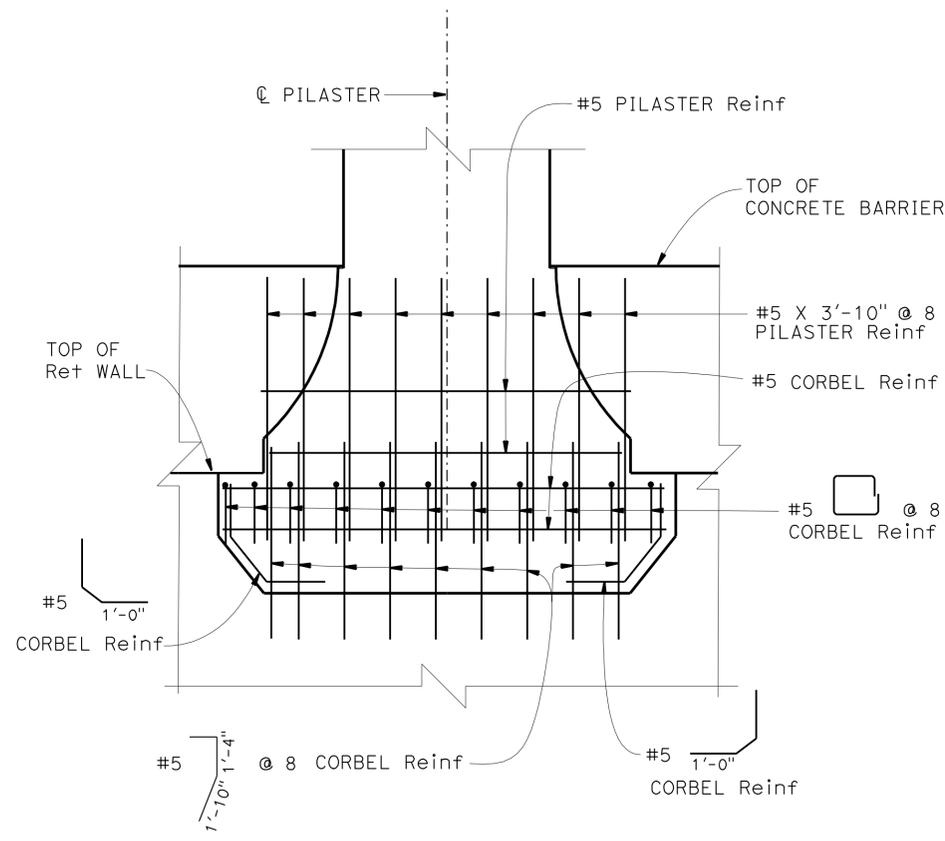
REVISION DATES	SHEET	OF
03/22/12	51	70

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1508	1597
			DATE		
			REGISTERED CIVIL ENGINEER		
			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.					

Frank H. Wei 12/12/11
 REGISTERED CIVIL ENGINEER DATE
 4-9-12
 PLANS APPROVAL DATE
 No. C 52918
 Exp. 12-31-12
 CIVIL
 STATE OF CALIFORNIA

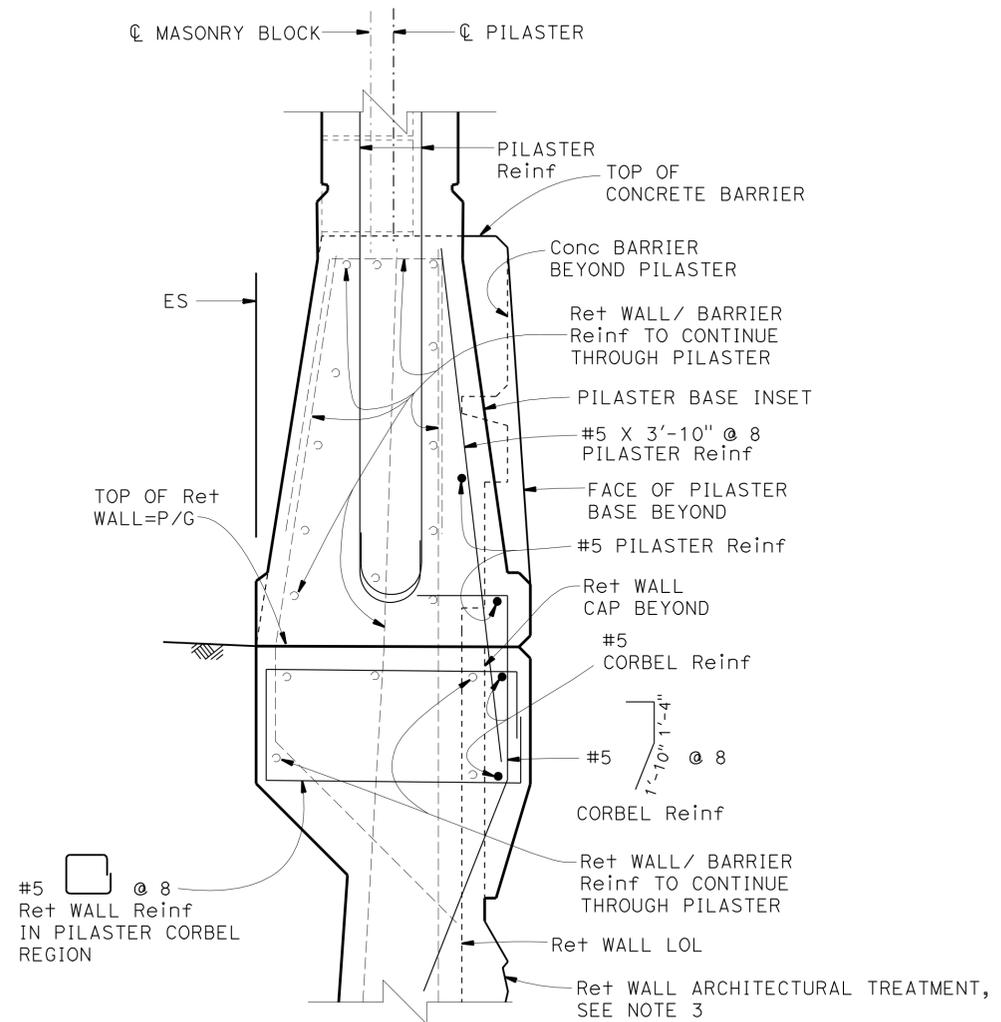
NOTES:

1. For location of "DETAIL A", see "PILASTER STRUCTURAL DETAILS NO. 1" sheet.
2. For location of "DETAIL C", see "PILASTER STRUCTURAL DETAILS NO. 2" sheet.
3. See "RETAINING WALL AND BARRIER ARCHITECTURAL DETAILS" sheet.



NOTE: Concrete Barrier/Ret Wall reinf not shown.

DETAIL A
3/4" = 1'-0"



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

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

DESIGN	BY	H. CHAVEZ	CHECKED	I. TASABIA	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 21	BRIDGE NO.	SOUND WALL NO. 290		
	DETAILS	BY	J. VALENCIA	CHECKED			F. WEI	53E0192	PILASTER STRUCTURAL DETAILS NO. 3	
QUANTITIES	BY	K. KIM	CHECKED	S. YEH	PROJECT NUMBER & PHASE: 0700001834 & 1	POST MILE	5.2	CONTRACT NO.: 07-215941	REVISION DATES	
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)						UNIT: 3623	DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES	
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS						0	1	2	3	REVISION DATES
						FILE => 53-E0192-1-pil_str_dt03.dgn	07/20/11	11/25/11	12/27/11	03/22/12
						52	70			

TABLE 1: TABLE OF REINFORCING STEEL DIMENSIONS AND DATA

DESIGN H	6'	8'	10'	12'	14'	16'	18'	20'	22'	24'	26'	28'	30'	32'
W	8'- 3"	8'- 6"	9'- 0"	9'- 6"	10'- 0"	10'- 9"	11'- 3"	12'- 0"	13'- 3"	14'- 3"	15'- 9"	16'- 9"	18'- 0"	19'- 9"
C	2'- 9"	2'- 9"	3'- 0"	3'- 3"	3'- 4"	3'- 6"	3'- 9"	4'- 0"	4'- 3"	4'- 9"	5'- 3"	5'- 6"	5'- 9"	6'- 7"
B	5'- 6"	5'- 9"	6'- 0"	6'- 3"	6'- 8"	7'- 3"	7'- 6"	8'- 0"	9'- 0"	9'- 6"	10'- 6"	11'- 3"	12'- 3"	13'- 2"
F PILE FOOTING	1'- 6"	1'- 6"	1'- 6"	1'- 6"	1'- 9"	2'- 0"	2'- 0"	2'- 6"	2'- 9"	2'- 9"	3'- 0"	3'- 3"	3'- 9"	4'- 0"
M	1'- 3"	1'- 6"	1'- 6"	1'- 9"	1'- 10"	2'- 0"	2'- 3"	2'- 6"	2'- 9"	3'- 3"	3'- 9"	4'- 0"	4'- 3"	5'- 1"
N	4'- 0"	4'- 3"	4'- 6"	4'- 9"	5'- 2"	5'- 9"	6'- 0"	6'- 6"	7'- 6"	8'- 0"	9'- 0"	9'- 9"	10'- 9"	11'- 9"
ROW 1 SPACING	12'- 3"	10'- 3"	8'- 9"	7'- 6"	6'- 3"	5'- 3"	4'- 9"	4'- 0"	3'- 9"	3'- 9"	4'- 0"	3'- 9"	3'- 9"	3'- 9"
ROW 2 SPACING	14'- 0"	12'- 9"	11'- 6"	10'- 3"	9'- 3"	8'- 3"	7'- 9"	6'- 6"	7'- 6"	6'- 0"	4'- 0"	4'- 0"	3'- 9"	3'- 9"
ROW 3 SPACING									6'- 0"	5'- 3"	5'- 0"	4'- 0"	6'- 0"	4'- 0"
ROW 4 SPACING													3'- 9"	3'- 9"
STEM WITH HAUNCH, BATTER	0	1/2:12	1/2:12	1/2:12	1/2:12	1/2:12	1/2:12	1/2:12	1/2:12	5/8:12	3/4:12	7/8:12	1:12	1:12
STEM WITHOUT HAUNCH, BATTER	0	0	0	0	0	0	0	0	1/4:12	1/4:12	1/2:12	3/4:12	3/4:12	3/4:12
⊙ BARS						#7 @ 15	#7 @ 12	#7 @ 12	#8 @ 12	#6 @ 6	#6 @ 6	#6 @ 6	#8 @ 9	#9 @ 9
⊕ BARS	#8 @ 12	#7 @ 9	#7 @ 6	#7 @ 6	#7 @ 6	#9 @ 7.5	#9 @ 6	#10 @ 6	#10 @ 6	#8 @ 6	#8 @ 6	#8 @ 6	#10 @ 9	#11 @ 9
ha			5'- 0"	6'- 0"	7'- 0"	7'- 0"	6'- 0"	7'- 0"	7'- 0"	7'- 6"	8'- 6"	9'- 3"	15'- 0"	11'- 3"
hb						11'- 6"	12'- 0"	13'- 3"	16'- 0"	15'- 6"	17'- 6"	18'- 9"	21'- 0"	20'- 9"
⊙ BARS	#6 @ 12	#6 @ 9	#6 @ 6	#6 @ 6	#6 @ 6	#8 @ 7.5	#8 @ 6	#9 @ 6	#9 @ 6	#10 @ 6	#10 @ 6	#11 @ 6	#10 @ 9	#10 @ 9
⊕ BARS	#5 @ 12	#5 @ 9	#5 @ 12	#5 @ 12	#5 @ 12	#6 @ 15	#5 @ 12	#5 @ 12	#6 @ 12	#6 @ 12	#6 @ 12	#7 @ 12	#6 @ 9	#9 @ 9
⊖ BARS	10-#7 @ 6	8-#7 @ 7	10-#6 @ 6	8-#6 @ 6	6-#6 @ 12	6-#5 @ 12	6-#5 @ 12	6-#5 @ 15	#5 @ 18	#5 @ 18	#5 @ 18	#5 @ 18	#5 @ 18	#5 @ 18
⊗ BARS	10-#8 @ 7	10-#8 @ 6	10-#7 @ 8	12-#6 @ 7	8-#7 @ 11	7-#6 @ 13	8-#6 @ 12	8-#5 @ 15	#5 @ 18	#5 @ 18	#5 @ 18	#5 @ 18	#5 @ 18	#5 @ 18

Symbol:

⊗ : 2 bar bundle

Note: Total ⊗ bars shown are total number of top and bottom bars combined.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1509	1597

12/12/11
 REGISTERED CIVIL ENGINEER DATE
 4-9-12
 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.

FRANK H. HSIANG
 REGISTERED PROFESSIONAL ENGINEER
 No. C 52918
 Exp. 12-31-12
 CIVIL
 STATE OF CALIFORNIA

DESIGN DATA

Design: AASHTO LRFD Bridge Design Specifications 4th edition with California Amendments

WS: 33 psf on Soundwall and Barrier

LS: Varied surcharge on level ground surface

CT: 54 kip maximum traffic impact loading evenly distributed over 10 feet at top of the barrier and 1:1 distribution down and outward

EQE: Mononobe-Okabe Method
 K_h = 0.3
 K_v = 0.0

Soil: φ = 34°
 γ = 120 pcf

Reinforced Concrete: f'_c = 3600 psi
 f_y = 60,000 psi

Load Combinations and Limit States

Service I Q=1.00DC+1.00EV+1.00EH+1.00LS+0.30WS

Service II Q=1.00DC+1.00EV+1.00EH+1.00WS

Strength I Q=aDC+BEV+1.50EH+1.75LS
 Q=1.25DC + 1.35EV + 0.90EH + 1.75LS (for piles at heel)

Strength III Q=aDC+BEV+1.50EH+1.40WS

Strength V Q=aDC+BEV+1.50EH+1.35LS+0.40WS

Extreme I Q=1.00DC+1.00EV+1.00EH+1.00EQD+1.00EQE

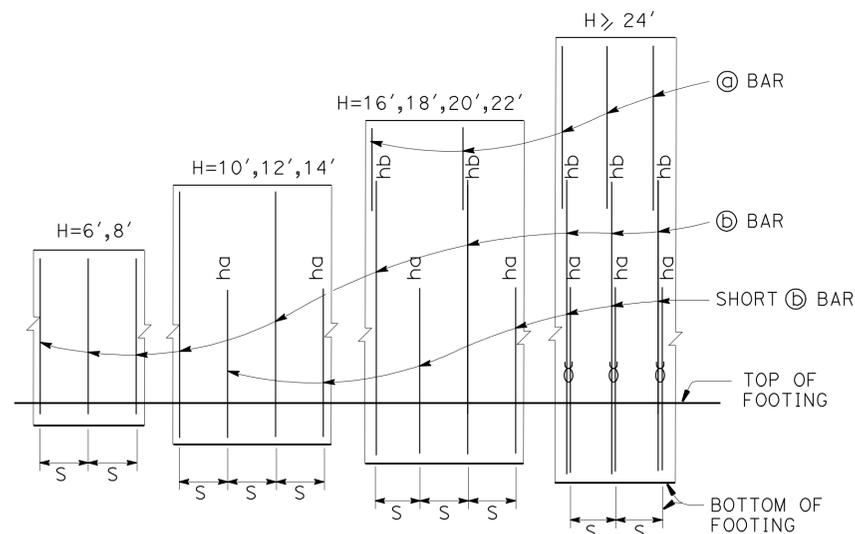
Extreme II Q=1.00DC+1.00EV+1.00EH+1.00CT

Where:

- Q: Force Effects
- a: 1.25 or 0.90, Which ever Controls Design
- B: 1.35 or 1.00, which ever Controls Design
- DC: Dead Load of Structure Components
- EV: Vertical Earth Fill Pressure
- LS: Live Load Surcharge
- EQE: Seismic Earth Pressure
- EQD: Soil and Structure Components Inertia. Soil inertia ignored for stem design
- WS: Wind Load on Soundwall and Barrier
- CT: Vehicular Collision Force

Note:

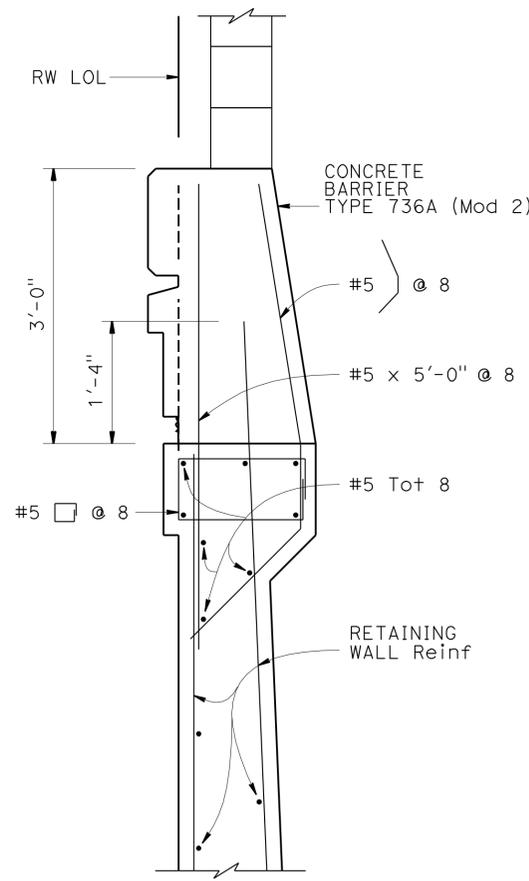
1. For location of Detail A, see "RETAINING WALL TYPE 1SWBP - DETAILS NO. 2" sheet.



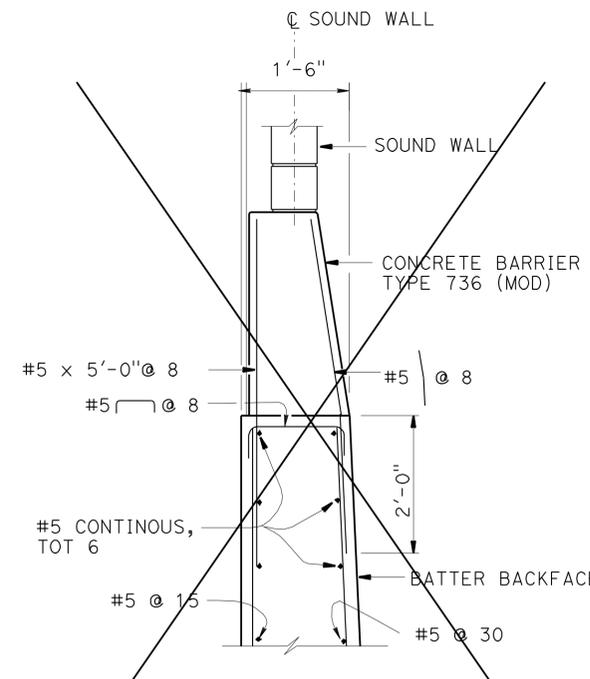
ELEVATION

Note:

"ha" and "hb" above ⊕ bars indicate distance from top of footing to upper end of ⊕ bars, see table.
 "s" is ⊕ bar spacing, see table.
 ⊗ : 2 bar bundle



DETAIL A
 1" = 1'-0"



OPTIONAL DETAIL A
 No Scale

For Details not shown, see "Detail A"

SPECIAL DETAILS

- ⊠ Modified Table
- ⊡ Revised Detail
- ⊢ Revised Note
- ⊣ Deleted Detail

REVISED STANDARD DRAWING

FILE NO. xs14-320-1

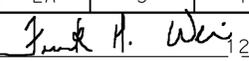
APPROVAL DATE July 2011

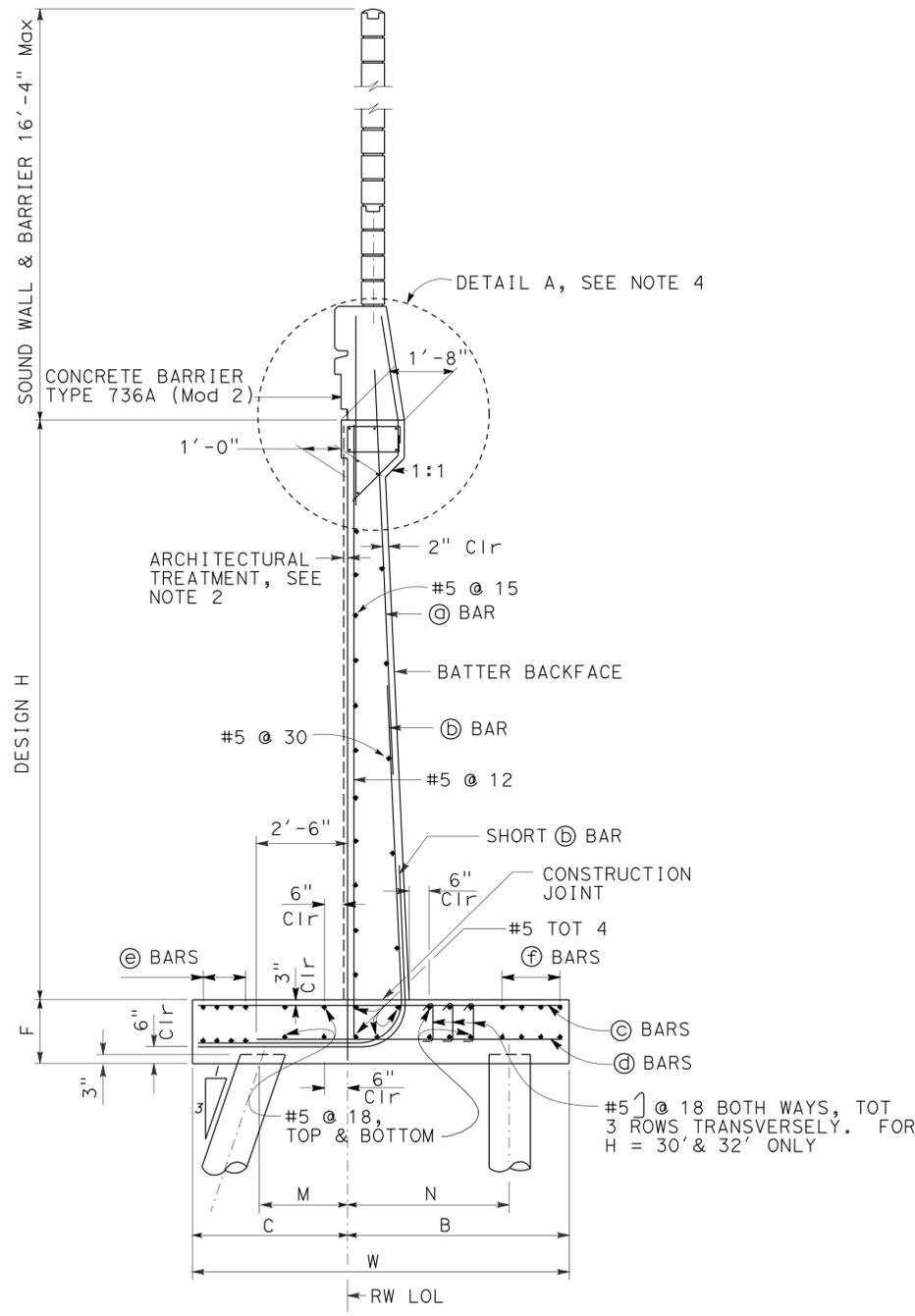
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

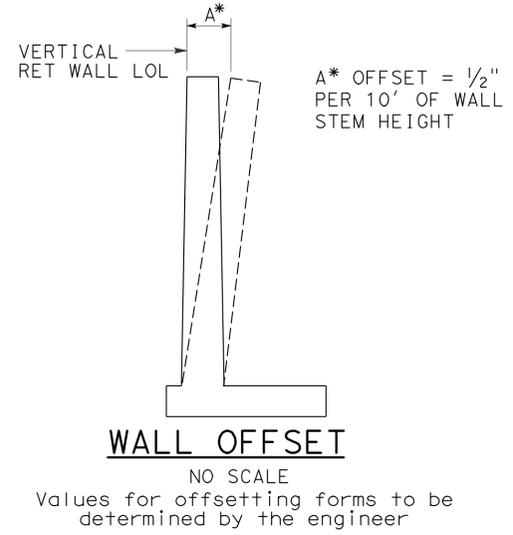
BRIDGE NO. 53E0192
 POST MILE 5.2

SOUND WALL NO. 290
 RETAINING WALL TYPE 1SWBP - DETAIL NO. 1

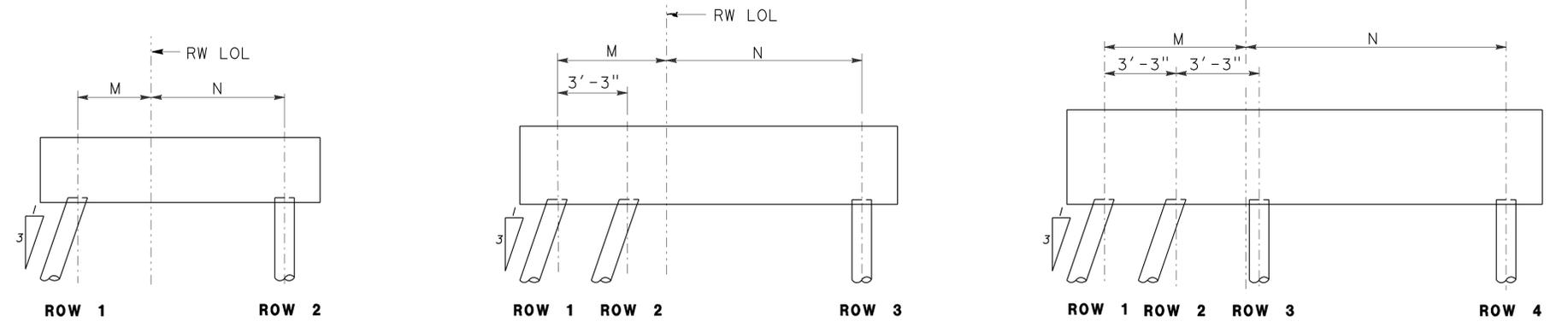
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1510	1597
 REGISTERED CIVIL ENGINEER DATE 12/12/11					
PLANS APPROVAL DATE 4-9-12					
<small>The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.</small>					



◆ PILE FOOTING SECTION
NO SCALE
All piles not shown



NO SCALE
Values for offsetting forms to be determined by the engineer



H = 6' through 20' H = 22' through 28' H = 30' and 32'

PILE PATTERN
NO SCALE

- ◆ Notes:
- For pile spacing, see "STRUCTURE PLAN NO. 1" and "STRUCTURE PLAN NO. 2" sheets.
 - For architectural treatment, see "RETAINING WALL AND BARRIER ARCHITECTURAL DETAILS" sheet.
 - For details not shown and drainage notes, see (B3-8)
 - For "Detail A", see "RETAINING WALL TYPE 1 SWBP - DETAILS NO. 1" sheet.
 - For sound wall and barrier reinforcement, see "SOUND WALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO.1" and "SOUND WALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO.2" sheets.
 - For H=6' through 14', extend (b) bars into barrier.
 - For H≥16', extend (a) bars into barrier.
 - For table of reinforcing steel dimensions and data, see "RETAINING WALL TYPE 1 SWBP - DETAILS NO. 1" sheet.

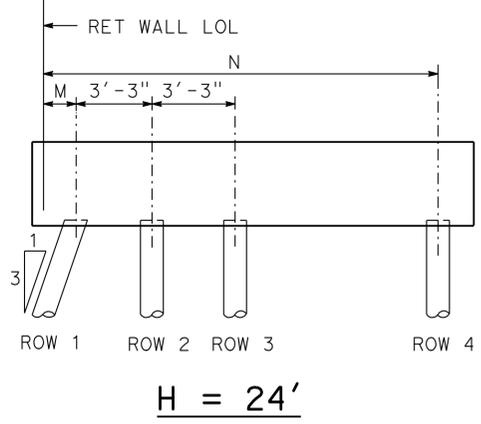
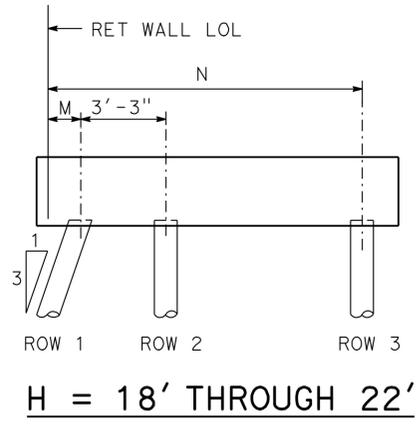
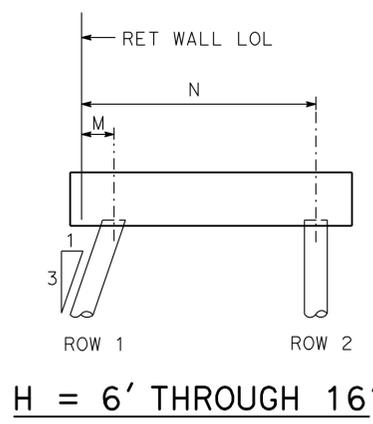
SPECIAL DETAILS

REVISED STANDARD DRAWING	
FILE NO. xs14-320-2	APPROVAL DATE July 2011

- ◆ Added Notes
- ◆ Modified Detail

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES
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BRIDGE NO. 53E0192	SOUND WALL NO. 290
POST MILE 5.2	
RETAINING WALL TYPE 1SWBP - DETAIL NO. 2	



PILE PATTERN
No scale

NOTES:

- For pile spacing, see "STRUCTURE PLAN" sheets.
- For architectural treatment, see "RETAINING WALL AND BARRIER ARCHITECTURAL DETAILS" sheet.
- For details not shown and drainage notes, see B3-8
- For "DETAIL A", see "RETAINING WALL TYPE 5SWBP - DETAILS NO. 2" sheet.
- For sound wall and Barrier reinforcements see "SOUND WALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL" sheets.
- For H=6' through 14', extend Ⓞ bars into Barrier for stem with haunch.
- For H≥16', extend Ⓞ bars into Barrier for stem with haunch.

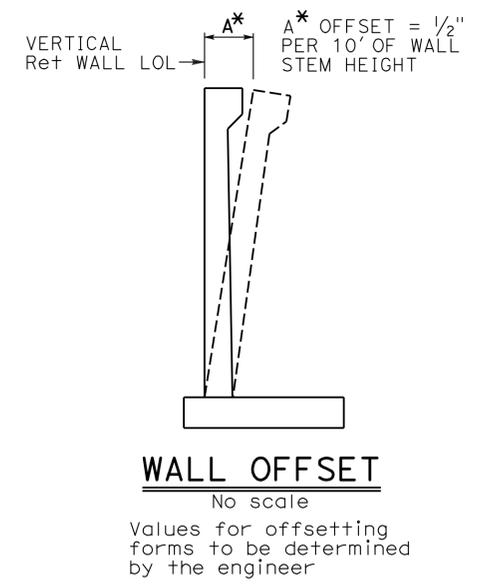
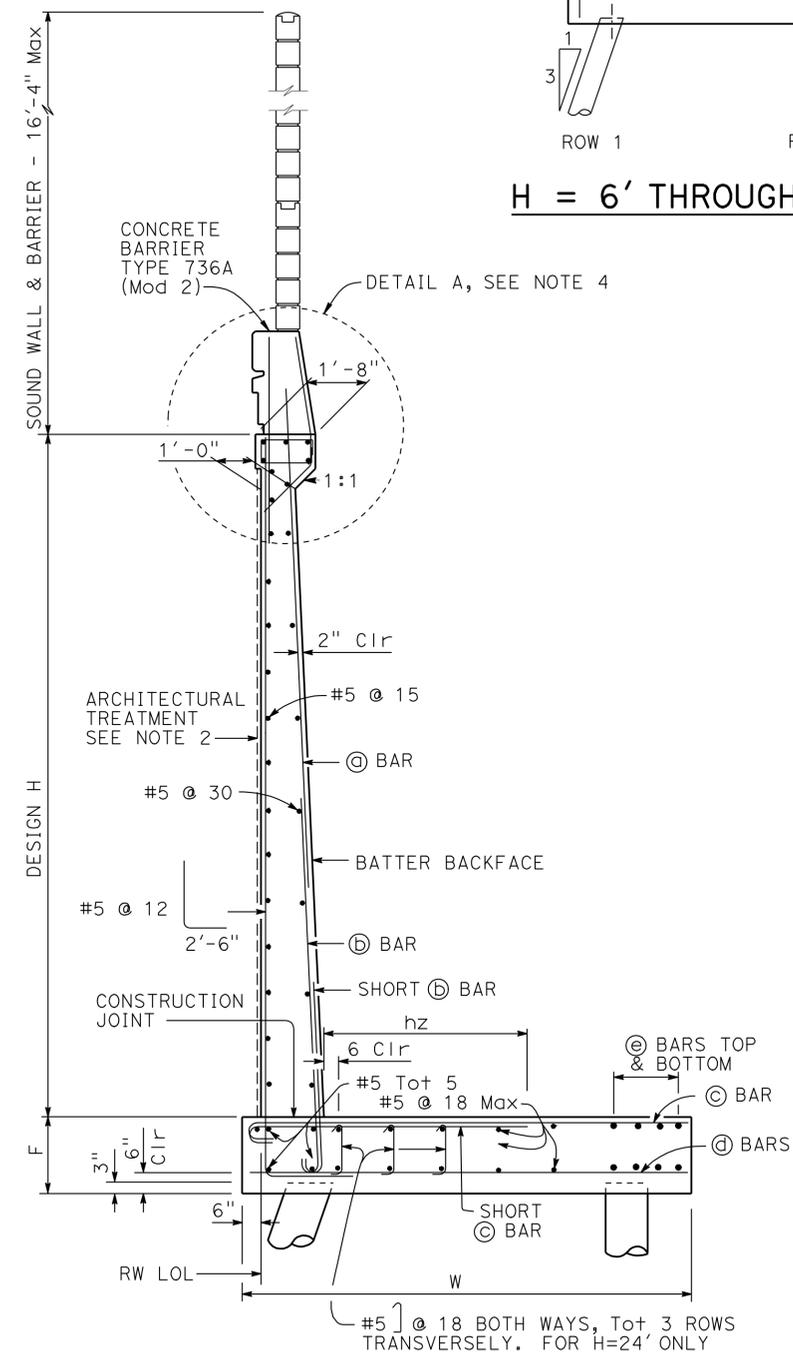


TABLE OF WALL DIMENSIONS, PILE SPACINGS AND REINFORCING STEEL

DESIGN H	6'	8'	10'	12'	14'	16'	18'	20'	22'	24'
W	8'-9"	9'-0"	9'-3"	9'-9"	10'-3"	10'-9"	12'-0"	13'-0"	14'-6"	16'-0"
F PILE FOOTING	1'-6"	1'-6"	1'-6"	1'-6"	1'-9"	2'-0"	2'-0"	2'-6"	2'-9"	2'-9"
M	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"
N	6'-9"	7'-0"	7'-3"	7'-9"	8'-3"	8'-9"	10'-0"	11'-0"	12'-6"	14'-0"
-ROW 1 SPACING	8'-6"	7'-3"	6'-3"	5'-3"	4'-6"	3'-9"	3'-9"	3'-9"	3'-9"	3'-9"
-ROW 2 SPACING	13'-6"	12'-0"	11'-6"	10'-3"	9'-3"	6'-6"	7'-0"	6'-0"	4'-0"	3'-9"
-ROW 3 SPACING							7'-6"	6'-0"	5'-6"	5'-6"
-ROW 4 SPACING										4'-6"
STEM WITH HUNCH, BATTER	0	1/2:12	1/2:12	1/2:12	1/2:12	1/2:12	1/2:12	1/2:12	1/2:12	5/8:12
STEM WITHOUT HUNCH, BATTER	0	0	0	0	0	0	0	0	1/4:12	1/4:12
Ⓞ BARS						#7@15	#7@12	#7@12	#8@12	#6@6
Ⓟ BARS	#8@12	#8@12	#7@6	#7@6	#7@6	#9@7.5	#9@6	#10@6	#10@6	#8@6
ha			5'-0"	6'-0"	7'-0"	7'-0"	6'-0"	7'-0"	7'-0"	7'-6"
hb						11'-6"	12'-0"	13'-3"	16'-0"	15'-6"
Ⓞ BARS	#6@6	#6@6	#7@6	#8@6	#9@6	#10@7.5	#8@6	#9@6	#9@6	#10@6
hz	3'-6"	3'-6"	3'-6"	4'-0"	4'-3"	7'-0"	4'-9"	5'-6"	6'-3"	7'-6"
Ⓞ BARS	#6@12	#5@12	#5@12	#5@12	#5@12	#5@15	#5@12	#5@12	#6@12	#5@12
Ⓞ BARS	8-#8@11	8-#7@11	8-#7@11	8-#7@13	8-#7@16	10-#5@15	8-#5@12	#5@18	#5@18	#5@18

- NOTES:
- ⌘ indicates 2 bar bundle.
 - Total Ⓞ bars are top and bottom combined.

SPECIAL DETAILS

SOUND WALL NO. 290
RETAINING WALL TYPE 5SWBP - DETAIL NO. 1

REVISED STANDARD DRAWING
FILE NO. **xs14-370-1**
APPROVAL DATE July 2011

- 1 Add Notes
- 2 Modified Detail
- 3 Modified Table

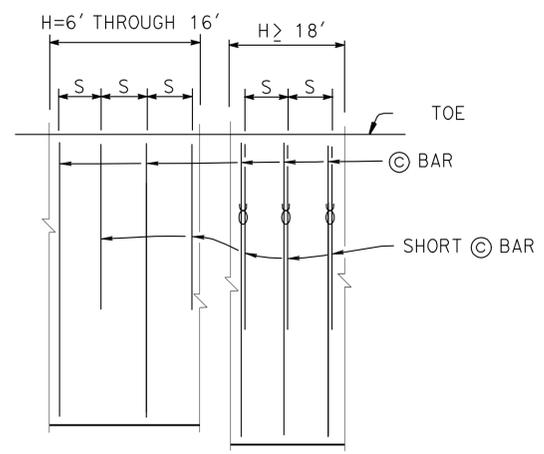
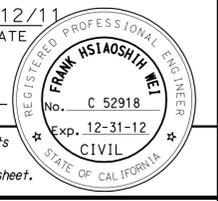
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES

BRIDGE NO. 53E0192
POST MILE 5.2

UNIT: 3623
PROJECT NUMBER & PHASE: 0700001834 & 1
CONTRACT NO.: 07-215941

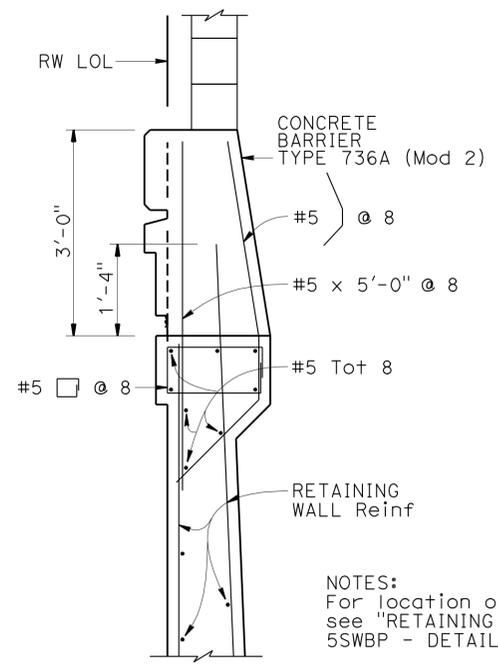
DISREGARD PRINTS BEARING EARLIER REVISION DATES
REVISION DATES: 09/20/11, 11/25/11, 12/22/11, 03/22/12
SHEET 55 OF 70

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1512	1597
			DATE		
			2/12/11		
			REGISTERED CIVIL ENGINEER		
			4-9-12		
			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.		



PLAN
NO SCALE

NOTES:
Only © bars shown
"S" is © bar spacing, see table
⊘ indicates 2 bar bundle.



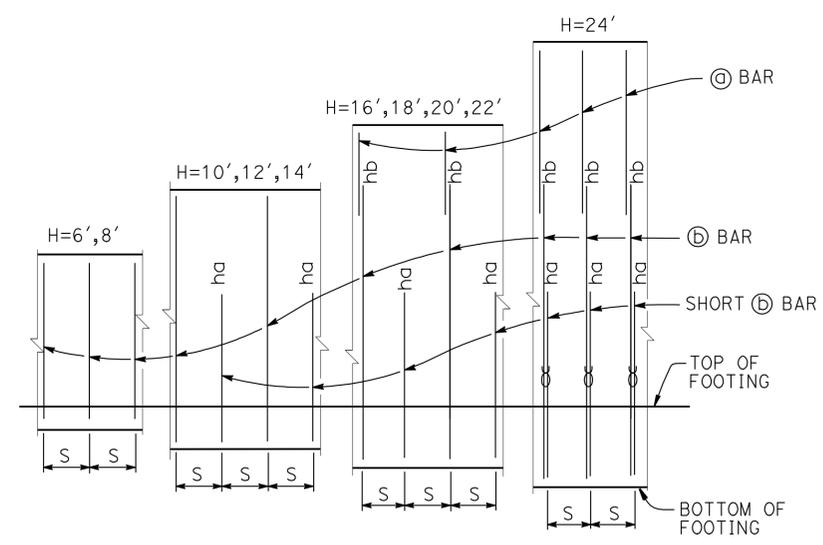
DETAIL A
3/4" = 1'-0"

NOTES:
For location of Detail A, see "RETAINING WALL TYPE 5SWBP - DETAIL NO. 1" sheet

DESIGN DATA

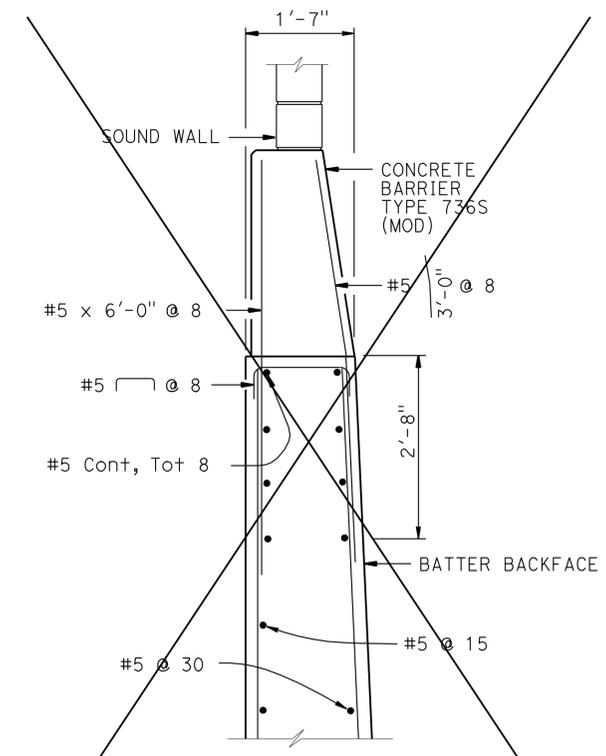
Design: AASHTO LRFD Bridge Design Specifications 4th edition with California Amendments
 WS: 33 psf on sound wall and barrier
 LS: Varied surcharge on level ground surface
 CT: 54 kip maximum traffic impact loading evenly distributed over 10 feet at top of the barrier and 1:1 distribution down and outward
 EQE: Mononobe-Okabe Method
 $K_h = 0.3$
 $K_v = 0.0$
 Soil: $\phi = 34^\circ$
 $\gamma = 120$ pcf
 Reinforced Concrete: $f'_c = 3600$ psi
 $f_y = 60,000$ psi
 Load Combinations and Limit States
 Service I $Q=1.00DC+1.00EV+1.00EH+1.00LS+0.30WS$
 Service II $Q=1.00DC+1.00EV+1.00EH+1.00WS$
 Strength I $Q=aDC+BEV+1.50EH+1.75LS$
 $Q=1.25DC+1.35EV+0.90EH+1.75LS$ (for piles at heel)
 Strength III $Q=aDC+BEV+1.50EH+1.40WS$
 Strength V $Q=aDC+BEV+1.50EH+1.35LS+0.40WS$
 Extreme I $Q=1.00DC+1.00EV+1.00EH+1.00EQD+1.00EQE$
 Extreme II $Q=1.00DC+1.00EV+1.00EH+1.00CT$

Where:
 Q: Force Effects
 a: 1.25 or 0.90, Which ever Controls Design
 B: 1.35 or 1.00, which ever Controls Design
 DC: Dead Load of Structure Components
 EV: Vertical Earth Fill Pressure
 LS: Live Load Surcharge
 EQE: Seismic Earth Pressure
 EQD: Soil and Structure Components Inertia. Soil inertia ignored for stem design
 WS: Wind Load on Sound Wall and Barrier
 CT: Vehicular Collision Force



ELEVATION
No scale

NOTES:
"ha" and "hb" above © bars indicate distance from top of footing to upper end of © bars, see table.
"S" is © bar spacing, see table.
⊘ indicates 2 bar bundle.



OPTIONAL DETAIL A
3/4" = 1'-0"

For details not shown, see "DETAIL A"

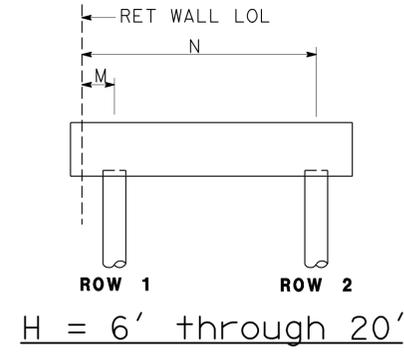
SPECIAL DETAILS

REVISED STANDARD DRAWING	
FILE NO. xs14-370-2	APPROVAL DATE July 2011

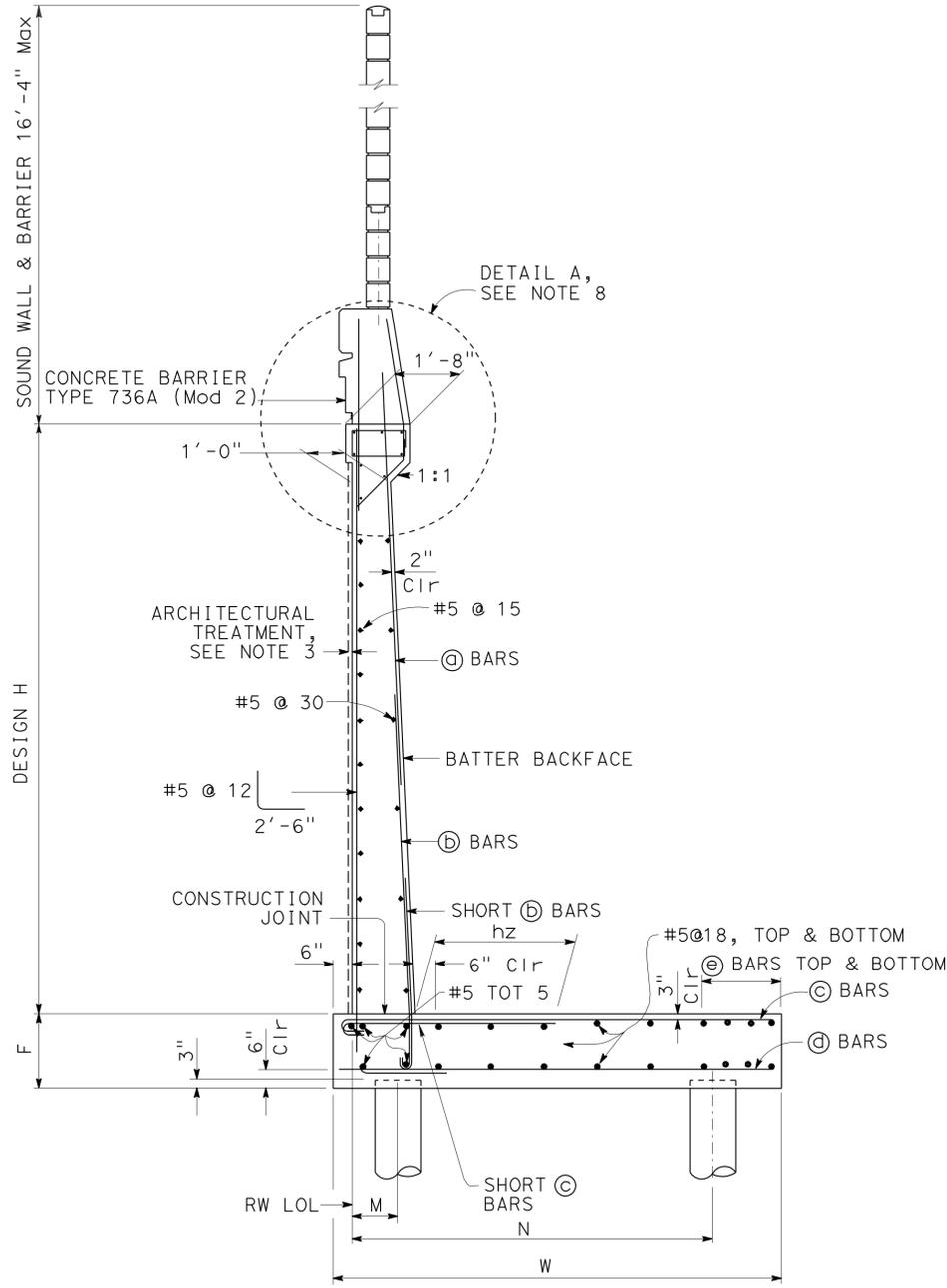
- ① Revised Detail
- ② Deleted Detail

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF ENGINEERING SERVICES

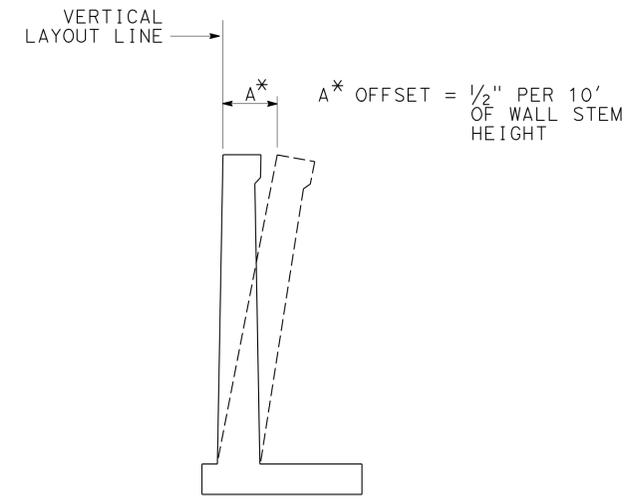
BRIDGE NO. 53E0192	SOUND WALL NO. 290
POST MILE 5.2	
RETAINING WALL TYPE 5SWBP - DETAIL NO. 2	



PILE PATTERN
NO SCALE



PILE FOOTING SECTION
NO SCALE
All piles are not shown



WALL OFFSET
NO SCALE
Values for offsetting forms to be determined by the engineer

General Notes:

- All piles are 90 kip 16" CIDH concrete piles, except for H = 18' through 20', piles are 200 kip 24" CIDH concrete piles.
- For pile spacing, see STRUCTURE PLAN sheets.
- For Architectural Treatment, see "RETAINING WALL AND BARRIER ARCHITECTURAL DETAILS" sheet.
- For details not shown and drainage notes, see (B3-8)
- For soundwall and Barrier reinforcements see "Soundwall with Barrier on Retaining wall-Masonry Block" sheets.
- For H=6' through 14', extend @ bars into Barrier for stem with haunch.
- For H ≥ 16', extend @ bars into Barrier for stem with haunch.
- For Detail A, see "RETAINING WALL TYPE 5SWBP WITH CIDH - DETAIL 2" sheet.

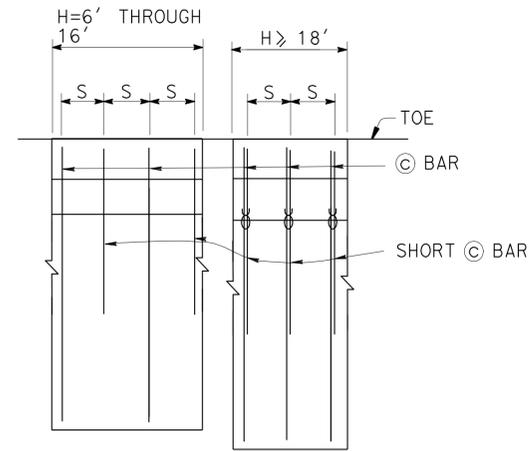
DESIGN H	6'	8'	10'	12'	14'	16'	18'	20'
W	8'-9"	9'-0"	9'-3"	9'-9"	10'-3"	10'-9"	12'-0"	14'-6"
F PILE FOOTING	1'-6"	1'-6"	1'-6"	1'-6"	1'-9"	2'-0"	2'-6"	2'-9"
M	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-3"	1'-3"
N	6'-9"	7'-0"	7'-3"	7'-9"	8'-3"	8'-9"	9'-9"	12'-3"
STEM WITH HUNCH, BATTER	0	1/2:12	1/2:12	1/2:12	1/2:12	1/2:12	1/2:12	1/2:12
@ BARS						#7@15	#7@12	#7@12
@ BARS	#8@12	#8@12	#7@6	#7@6	#7@6	#9@7.5	#9@6	#10@6
ha			5'-0"	6'-0"	7'-0"	7'-0"	6'-0"	7'-0"
hb						11'-6"	12'-0"	13'-3"
@ BARS	#6@6	#6@6	#7@6	#8@6	#9@6	#10@7.5	#8@6 ♂	#9@6 ♂
hz	3'-6"	3'-6"	3'-6"	4'-0"	4'-3"	7'-0"	4'-9"	5'-6"
@ BARS	#6@12	#5@12	#5@12	#5@12	#5@12	#5@15	#5@12	#5@12
@ BARS	8-#8@11	8-#7@11	8-#7@11	8-#7@13	8-#7@16	10-#5@15	8-#5@12	#5@18

- Notes:
- ♂ indicates 2 bar bundle.
 - Total @ bars are top and bottom combined.

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

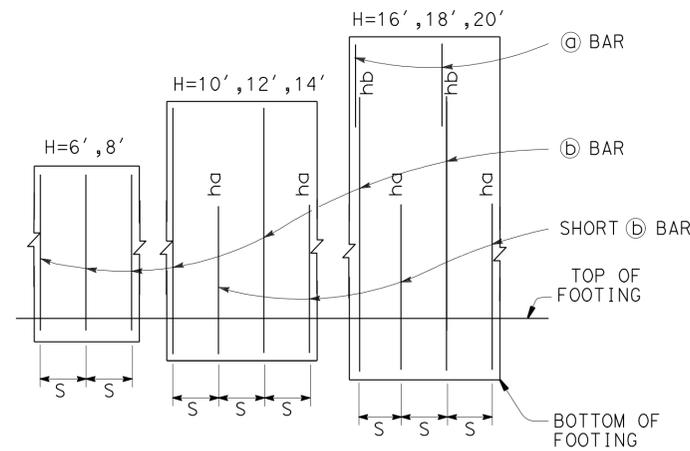
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY L. SANCHEZ-MANZO	CHECKED F. WEI	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 21	BRIDGE NO.	SOUND WALL NO. 290		
	DETAILS	BY J. VALENCIA	CHECKED L. SANCHEZ-MANZO			53E0192	RETAINING WALL TYPE 5SWBP WITH CIDH - DETAIL NO. 1		
	QUANTITIES	BY K. KIM	CHECKED S. YEH			POST MILE	5.2		
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS					UNIT: 3623	CONTRACT NO.: 07-215941		REVISION DATES	SHEET 57 OF 70

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1514	1597
			DATE		
			2/12/11		
			REGISTERED CIVIL ENGINEER		
			FRANK H. WEI		
			No. C 52918		
			Exp. 12-31-12		
			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.					



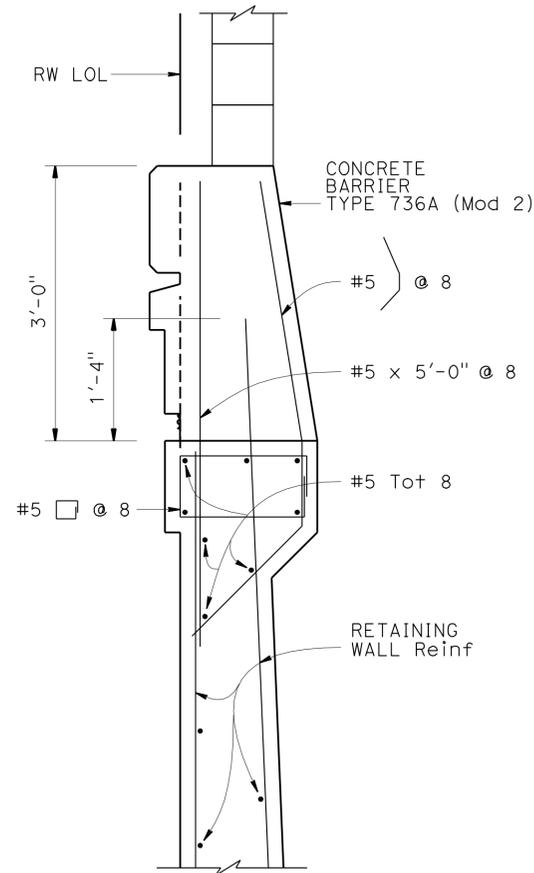
PLAN

Note:
 © bars shown only.
 All © bars end with standard 180° hooks on toe side,
 "s" is © bar spacing, see table.
 ⌘ indicates 2 bar bundle.



ELEVATION

Note:
 "ha", "hb" above © bars indicate distance from top
 of footing to upper end of © bars, see table.
 "s" is © bar spacing, see table.
 ⌘ indicates 2 bar bundle.



DETAIL A

1" = 1'-0"

Note:
 For location of Detail A, see "RETAINING
 WALL TYPE 5SWBP WITH CIDH - DETAIL NO. 1" sheet

DESIGN DATA

Design: AASHTO LRFD Bridge Design Specifications
 4th edition with California Amendments

WS: 33 psf on soundwall and barrier
 LS: Varied surcharge on level ground surface
 CT: 54 kip maximum traffic impact loading evenly
 distributed over 10 feet at top of the barrier
 and 1:1 distribution down and outward

EQE: Mononobe-Okabe Method
 $K_h = 0.3$
 $K_v = 0.0$

Soil: $\phi = 34^\circ$
 $\gamma = 120$ pcf

Reinforced
 Concrete: $f'_c = 3600$ psi
 $f_y = 60,000$ psi

Load Combinations and Limit States

Service I $Q=1.00DC+1.00EV+1.00EH+1.00LS+0.30WS$
 Service II $Q=1.00DC+1.00EV+1.00EH+1.00WS$
 Strength I $Q=aDC+BEV+1.50EH+1.75LS$
 $Q=1.25DC+1.35EV+0.90EH+1.75LS$ (for piles at heel)
 Strength III $Q=aDC+BEV+1.50EH+1.40WS$
 Strength V $Q=aDC+BEV+1.50EH+1.35LS+0.40WS$
 Extreme I $Q=1.00DC+1.00EV+1.00EH+1.00EQD+1.00EQE$
 Extreme II $Q=1.00DC+1.00EV+1.00EH+1.00CT$

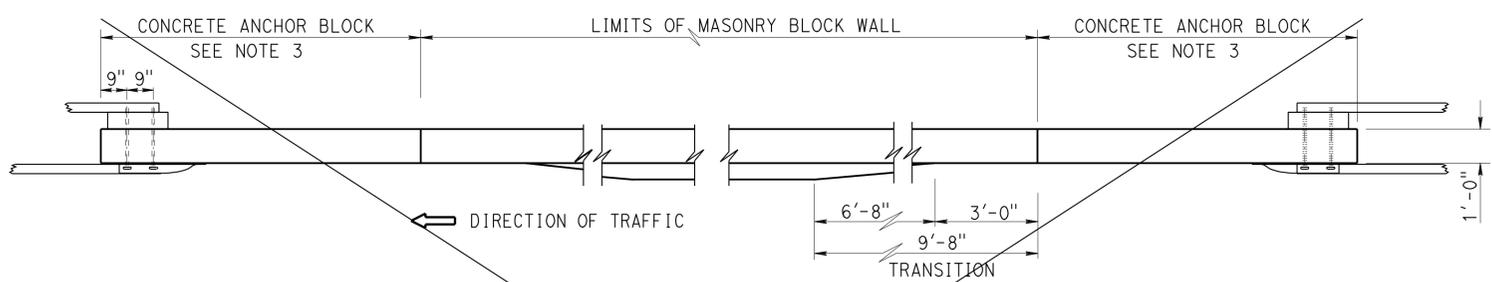
Where:

Q: Force Effects
 a: 1.25 or 0.90, Which ever Controls Design
 B: 1.35 or 1.00, which ever Controls Design
 DC: Dead Load of Structure Components
 EV: Vertical Earth Fill Pressure
 LS: Live Load Surcharge
 EQE: Seismic Earth Pressure
 EQD: Soil and Structure Components Inertia.
 Soil inertia ignored for stem design
 WS: Wind Load on Soundwall and Barrier
 CT: Vehicular Collision Force

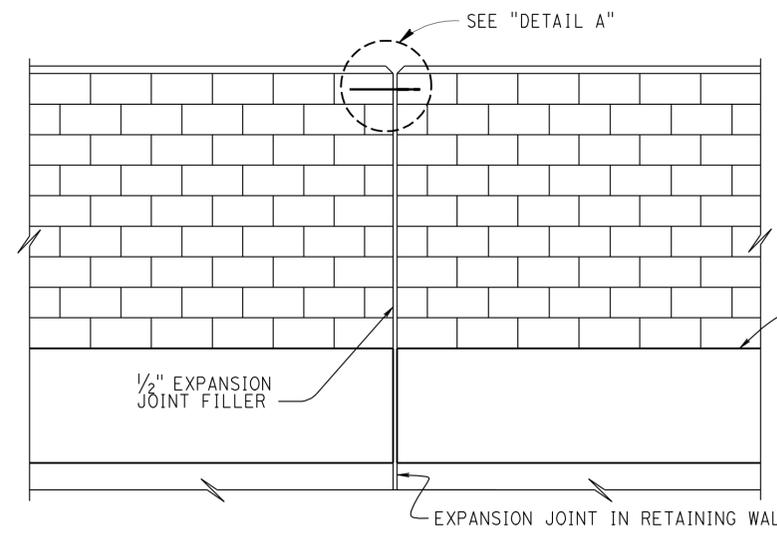
NOTE:
 THE CONTRACTOR SHALL VERIFY ALL
 CONTROLLING FIELD DIMENSIONS
 BEFORE ORDERING OR FABRICATING
 ANY MATERIAL.

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY L. SANCHEZ-MANZO	CHECKED F. WEI	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 21	BRIDGE NO.	SOUND WALL NO. 290					
	DETAILS	BY J. VALENCIA	CHECKED L. SANCHEZ-MANZO			53E0192						
	QUANTITIES	BY K. KIM	CHECKED S. YEH			POST MILE 5.2						
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS						UNIT: 3623	REVISION DATES	SHEET	OF			
PROJECT NUMBER & PHASE: 0700001834 & 1						CONTRACT NO.: 07-215941	09/20/11	11/25/11	12/27/11	03/22/12	58	70

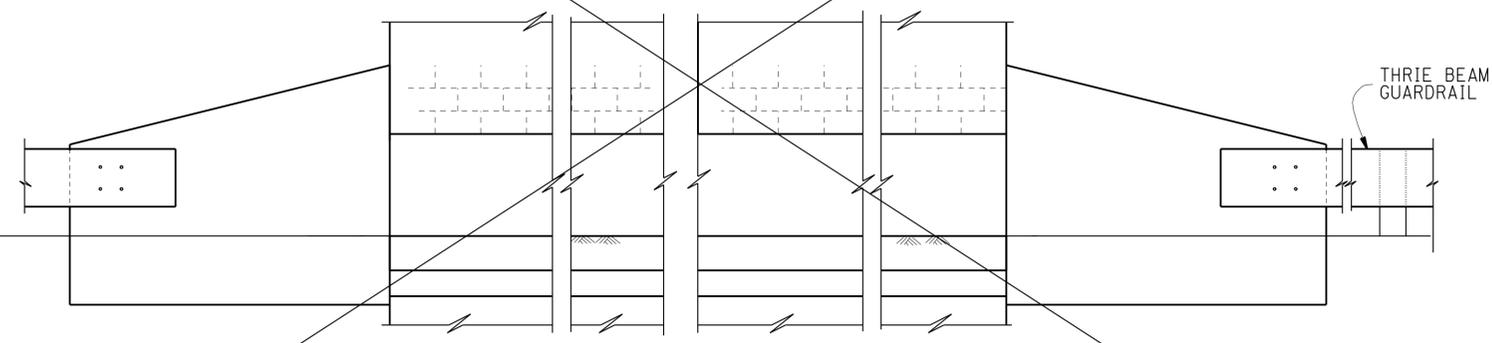
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1516	1597
			DATE		
			12/12/11		
			REGISTERED CIVIL ENGINEER		
			FRANK H. WEI		
			No. C 52918		
			Exp. 12-31-12		
			CIVIL		
			STATE OF CALIFORNIA		



PLAN

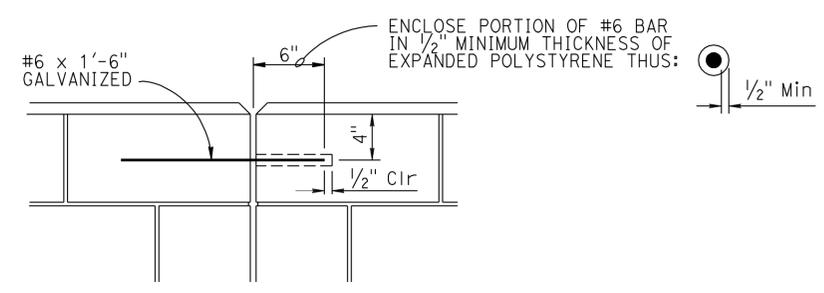


ALIGNMENT KEY DETAIL



ELEVATION

3 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

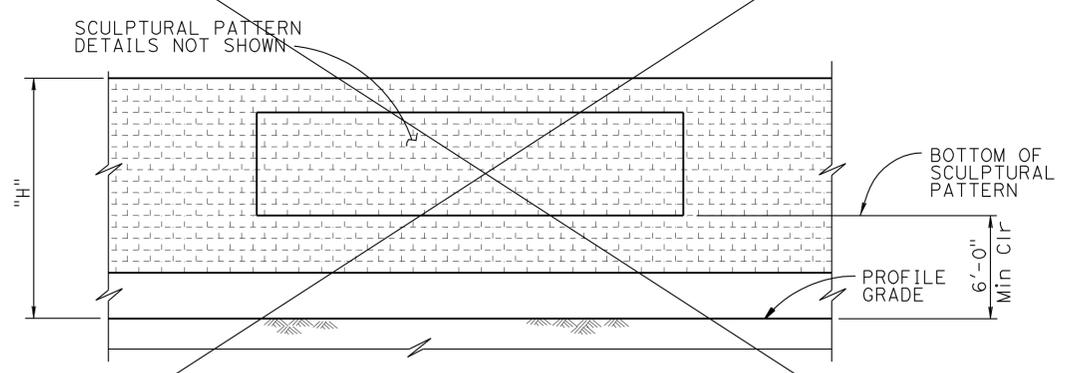
DESIGN WIND LOAD
33 psf

DESIGN SEISMIC LOAD
0.57 Dead load

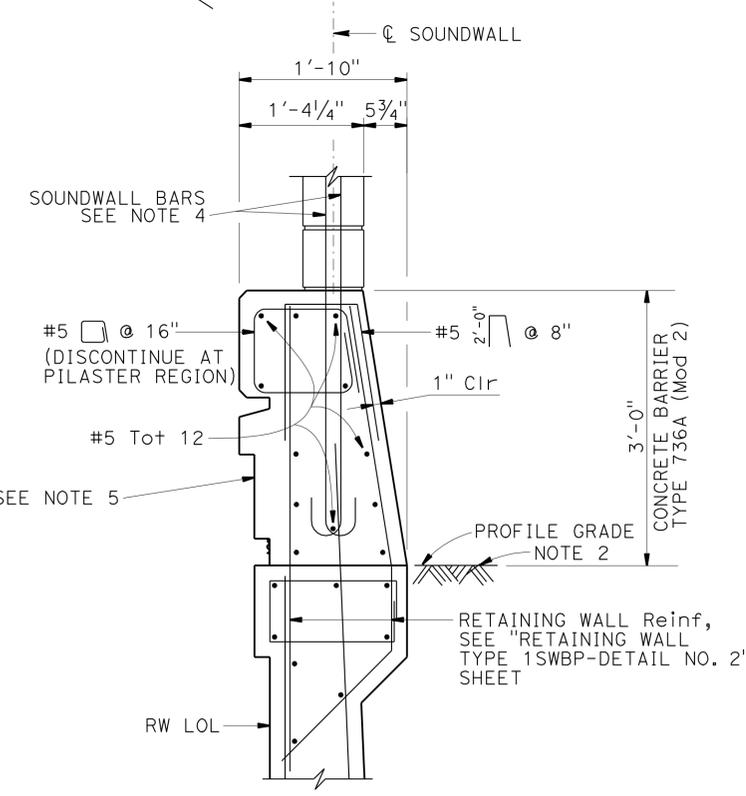
CONCRETE MASONRY

REGULAR STRENGTH	HIGH STRENGTH	
f'm = 1500 psi	f'm = 2000 psi	f'm = 2500 psi
f_b = 495 psi	f_b = 660 psi	f_b = 830 psi
f_s = 24,000 psi	f_s = 24,000 psi	f_s = 24,000 psi
n = 25.8	n = 19.3	n = 15.5

- 2** NOTES:
- For details not shown, see REVISED STANDARD PLAN B15-6.
 - Slope ground at traffic side of barrier to drain. Maximum slope ±10%. See STANDARD PLAN B11-56, Note D.
 - For concrete anchor block and connection details, see "CONNECTION DETAIL DD" on STANDARD PLAN A77J3.
 - See "TYPICAL SECTIONS" on "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 1" sheet.
 - For barrier architectural details, see "RETAINING WALL AND BARRIER ARCHITECTURAL DETAILS" sheet.



3 CLEARANCE DETAIL



1 BARRIER SECTION

SPECIAL DETAILS

- Modified Detail
- Deleted Detail
- Revised Notes

REVISED STANDARD DRAWING

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

APPROVAL DATE 10-22-09

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

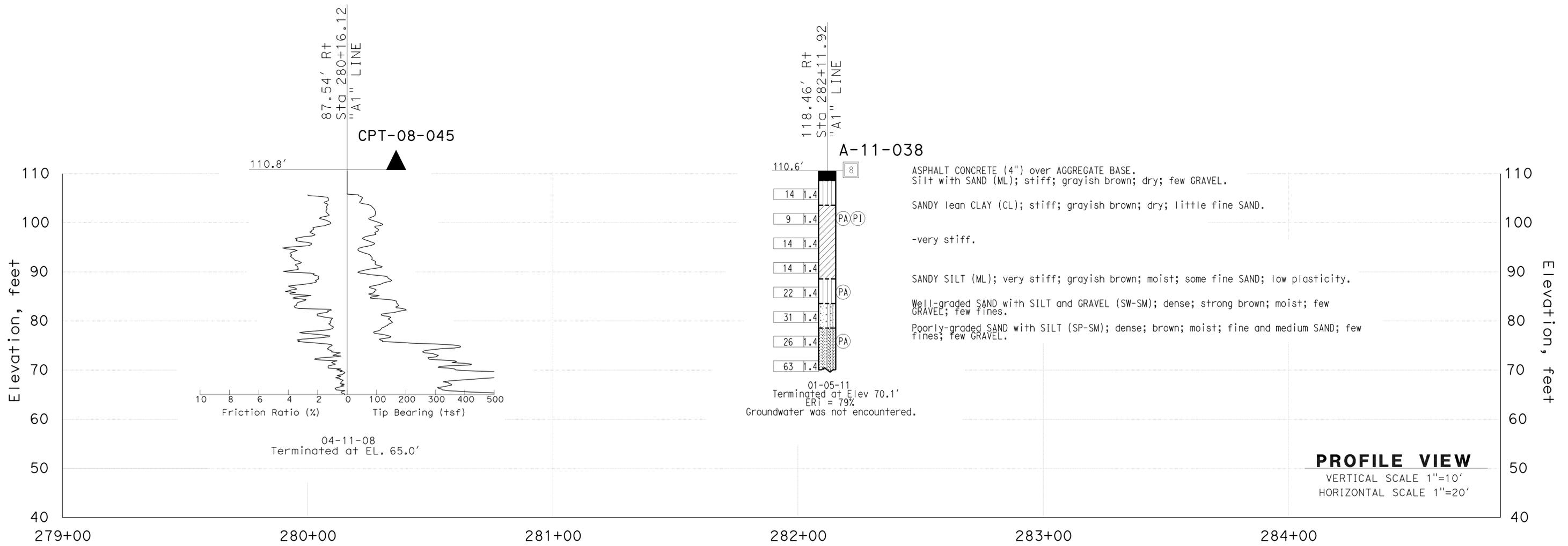
DIVISION OF ENGINEERING SERVICES

BRIDGE NO. 53E0192	SOUND WALL NO. 290
POST MILE 5.2	
SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 2	

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1518	1597

REGISTERED CIVIL ENGINEER *Amare* DATE _____
 PLANS APPROVAL DATE 4-9-12
 No. C67529
 Exp. 6-30-13
 CIVIL
 STATE OF CALIFORNIA
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FOR PLAN VIEW, SEE
"LOG OF TEST BORINGS" 1 OF 10



ENGINEERING SERVICES		MATERIALS AND GEOTECHNICAL SERVICES		STATE OF CALIFORNIA		DIVISION OF ENGINEERING SERVICES		BRIDGE NO.		SOUND WALL NO. 290	
FUNCTIONAL SUPERVISOR		DRAWN BY: P.QUACH / T.Pandh (URS CORP)		FIELD INVESTIGATION BY:		STRUCTURE DESIGN		53E0192		LOG OF TEST BORINGS SHEET 2 OF 10	
NAME: CHI-TSENG LIU		CHECKED BY: F.GERAMI		A.TSEGIE/M.ISLAM/P.MCDONALD		DESIGN BRANCH 21		POST MILE			
065 CIVIL LOG OF TEST BORINGS SHEET		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		0 1 2 3		UNIT: 3658		5.2		REVISION DATES	
						PROJECT NUMBER & PHASE: 07 00001834 1		CONTRACT NO.: 07-215941		SHEET OF	
						DISREGARD PRINTS BEARING EARLIER REVISION DATES		12/14/11		62 70	

FILE => 53-E0192-z-1otb_02.dgn

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
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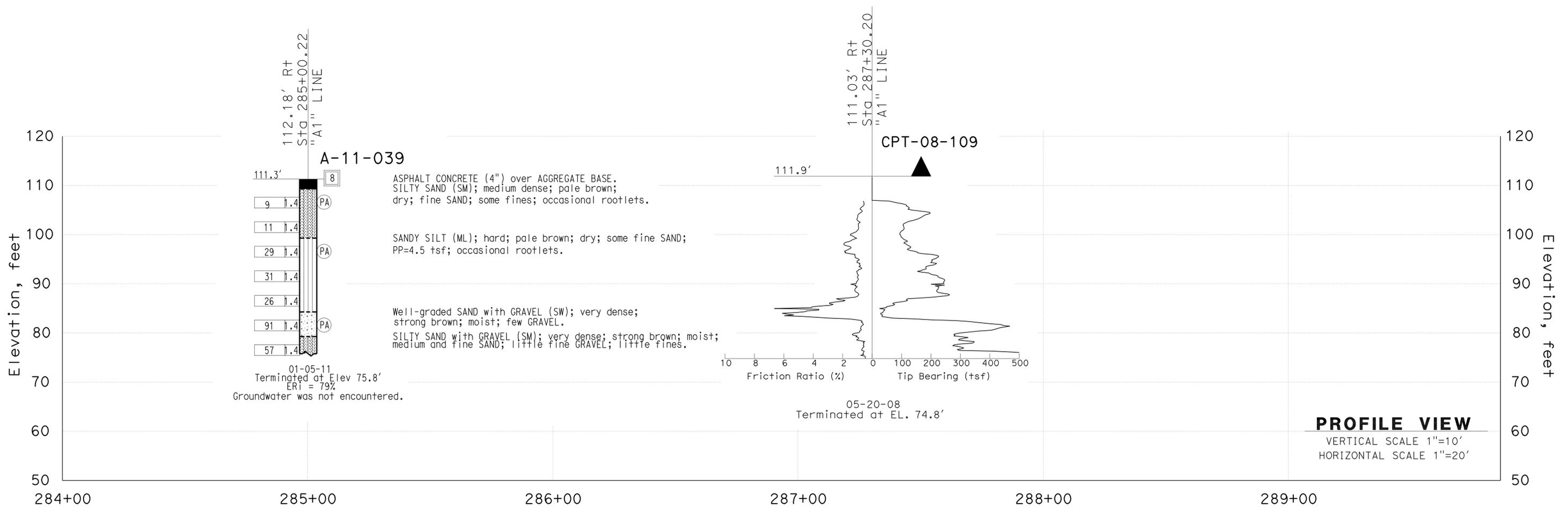
FOR PLAN VIEW, SEE
"LOG OF TEST BORINGS" 1 OF 10

Amare Tsegie
REGISTERED CIVIL ENGINEER DATE
4-9-12
PLANS APPROVAL DATE

Amare Tsegie
No. C67529
Exp. 6-30-13
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STATE OF CALIFORNIA

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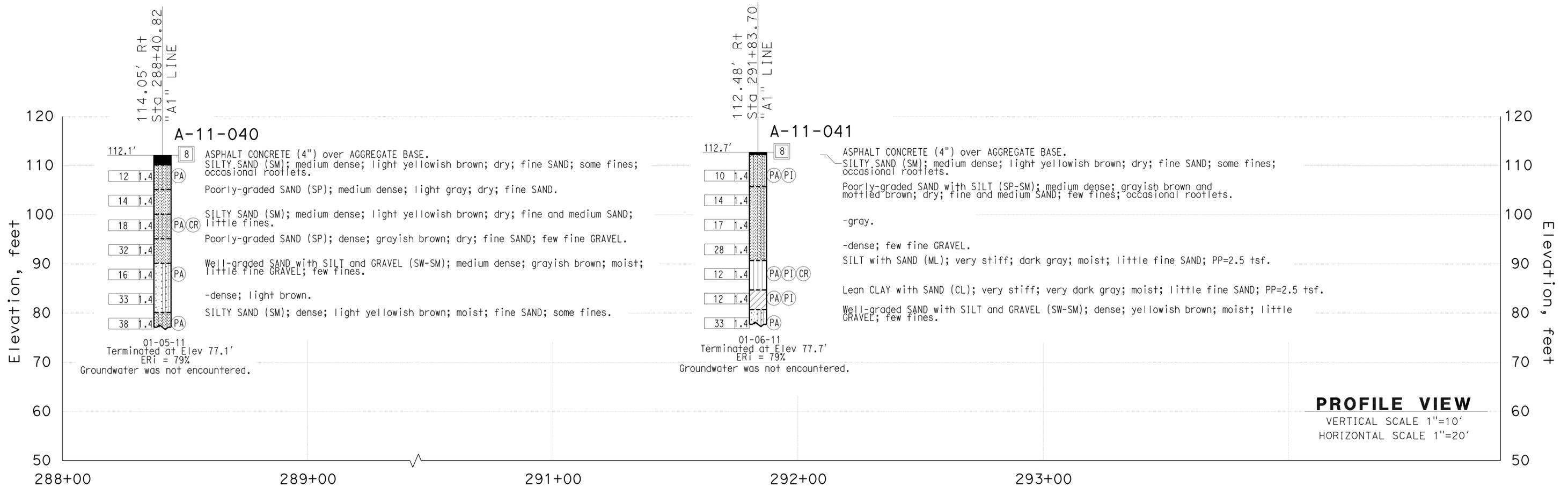
ENGINEERING SERVICES		MATERIALS AND GEOTECHNICAL SERVICES		STATE OF CALIFORNIA		DIVISION OF ENGINEERING SERVICES		BRIDGE NO.		SOUND WALL NO. 290	
FUNCTIONAL SUPERVISOR		DRAWN BY: P.QUACH / T.Pandh (URS CORP)		FIELD INVESTIGATION BY:		STRUCTURE DESIGN		53E0192		LOG OF TEST BORINGS SHEET 3 OF 10	
NAME: CHI-TSENG LIU		CHECKED BY: F.GERAMI		A.TSEGIE/M.ISLAM/P.MCDONALD		DESIGN BRANCH 21		POST MILE			
065 CIVIL LOG OF TEST BORINGS SHEET		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		0 1 2 3		UNIT: 3658		5.2		CONTRACT NO.: 07-215941	
						PROJECT NUMBER & PHASE: 07 00001834 1		REVISION DATES		SHEET OF	
						DISREGARD PRINTS BEARING EARLIER REVISION DATES		12/14/11		63 70	

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FOR PLAN VIEW, SEE
"LOG OF TEST BORINGS" 1 OF 10

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1520	1597

REGISTERED CIVIL ENGINEER *Amare* DATE _____
 PLANS APPROVAL DATE 4-9-12
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ENGINEERING SERVICES		MATERIALS AND GEOTECHNICAL SERVICES		STATE OF CALIFORNIA		DIVISION OF ENGINEERING SERVICES		BRIDGE NO.		SOUND WALL NO. 290	
FUNCTIONAL SUPERVISOR		DRAWN BY: P.QUACH / T.Pandh (URS CORP)		FIELD INVESTIGATION BY:		STRUCTURE DESIGN		53E0192		LOG OF TEST BORINGS SHEET 4 OF 10	
NAME: CHI-TSENG LIU		CHECKED BY: F.GERAMI		A.TSEGIE/M.ISLAM		DESIGN BRANCH 21		POST MILE			
065 CIVIL LOG OF TEST BORINGS SHEET		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		0 1 2 3		UNIT: 3658		5.2		CONTRACT NO.: 07-215941	
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						FILE => 53-E0192-z-1otb_04.dgn				SHEET 64 OF 70	

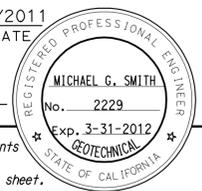
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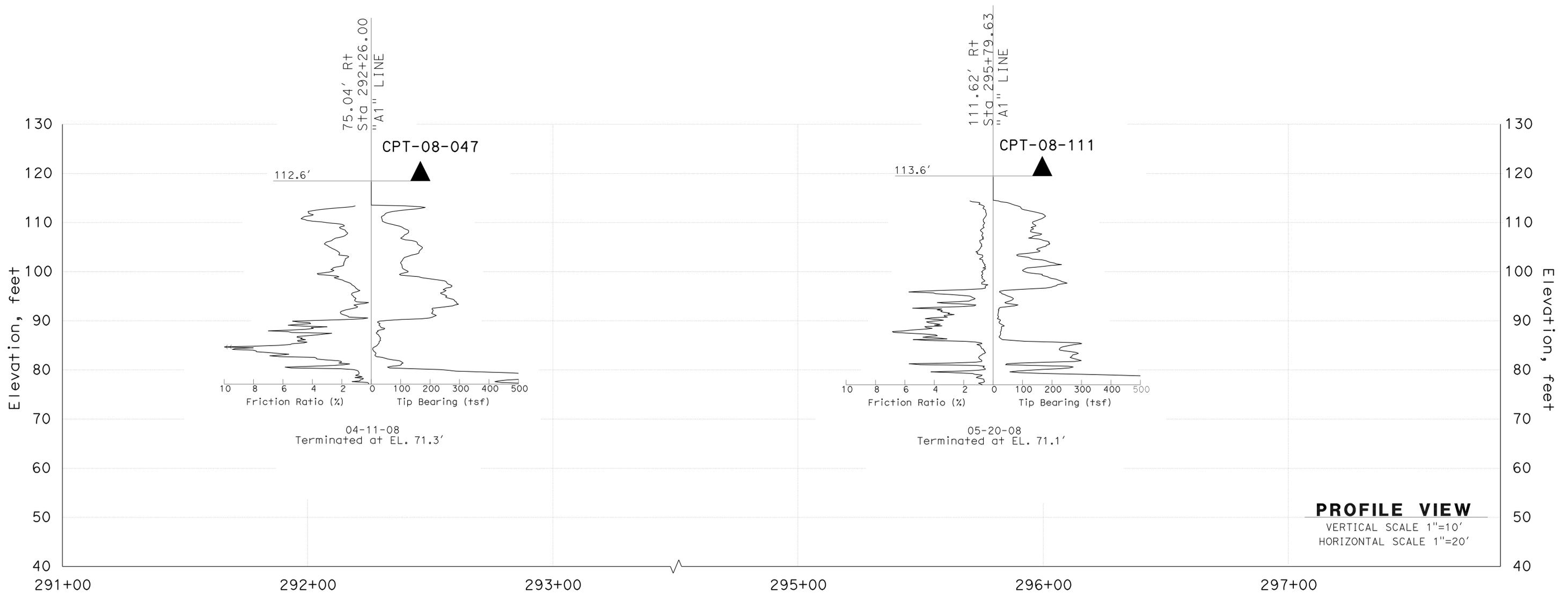

 09/2011
 REGISTERED CIVIL ENGINEER DATE

4-9-12
 PLANS APPROVAL DATE

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FOR PLAN VIEW, SEE
"LOG OF TEST BORINGS" 1 OF 10



ENGINEERING SERVICES		MATERIALS AND GEOTECHNICAL SERVICES		STATE OF CALIFORNIA		DIVISION OF ENGINEERING SERVICES		BRIDGE NO.		SOUND WALL NO. 290	
FUNCTIONAL SUPERVISOR		DRAWN BY: P.QUACH / T.Pandh (URS CORP)		FIELD INVESTIGATION BY:		STRUCTURE DESIGN		53E0192		LOG OF TEST BORINGS SHEET 5 OF 10	
NAME: M.SMITH		CHECKED BY: F.GERAMI		P.MCDONALD		DESIGN BRANCH 21		POST MILE			
065 CIVIL LOG OF TEST BORINGS SHEET		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		0 1 2 3		UNIT: 3658		5.2		SHEET OF	
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										12/14/11	
										65 70	

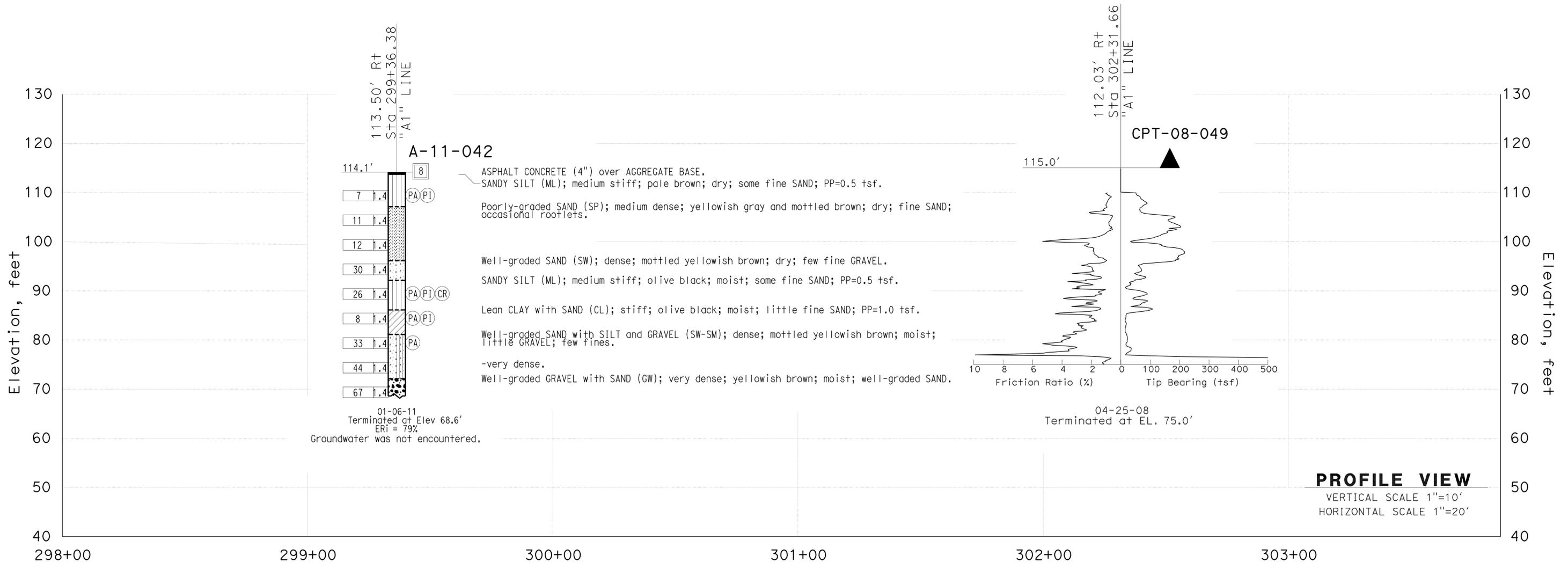
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FOR PLAN VIEW, SEE
"LOG OF TEST BORINGS" 1 OF 10

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1522	1597

Amare
 REGISTERED CIVIL ENGINEER DATE _____
 4-9-12
 PLANS APPROVAL DATE _____
 Amare Tsegie
 No. C67529
 Exp. 6-30-13
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 STATE OF CALIFORNIA
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ENGINEERING SERVICES		MATERIALS AND GEOTECHNICAL SERVICES		STATE OF CALIFORNIA		DIVISION OF ENGINEERING SERVICES		BRIDGE NO.		SOUND WALL NO. 290	
FUNCTIONAL SUPERVISOR		DRAWN BY: P.QUACH / T.Pandh (URS CORP)		FIELD INVESTIGATION BY:		STRUCTURE DESIGN		53E0192		LOG OF TEST BORINGS SHEET 6 OF 10	
NAME: CHI-TSENG LIU		CHECKED BY: F.GERAMI		A.TSEGIE/M.ISLAM/P.MCDONALD		DESIGN BRANCH 21		POST MILE			
065 CIVIL LOG OF TEST BORINGS SHEET		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		0 1 2 3		UNIT: 3658		5.2		REVISION DATES	
						PROJECT NUMBER & PHASE: 07 00001834 1		CONTRACT NO.: 07-215941		SHEET OF	
						DISREGARD PRINTS BEARING EARLIER REVISION DATES		12/14/11		66 70	

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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
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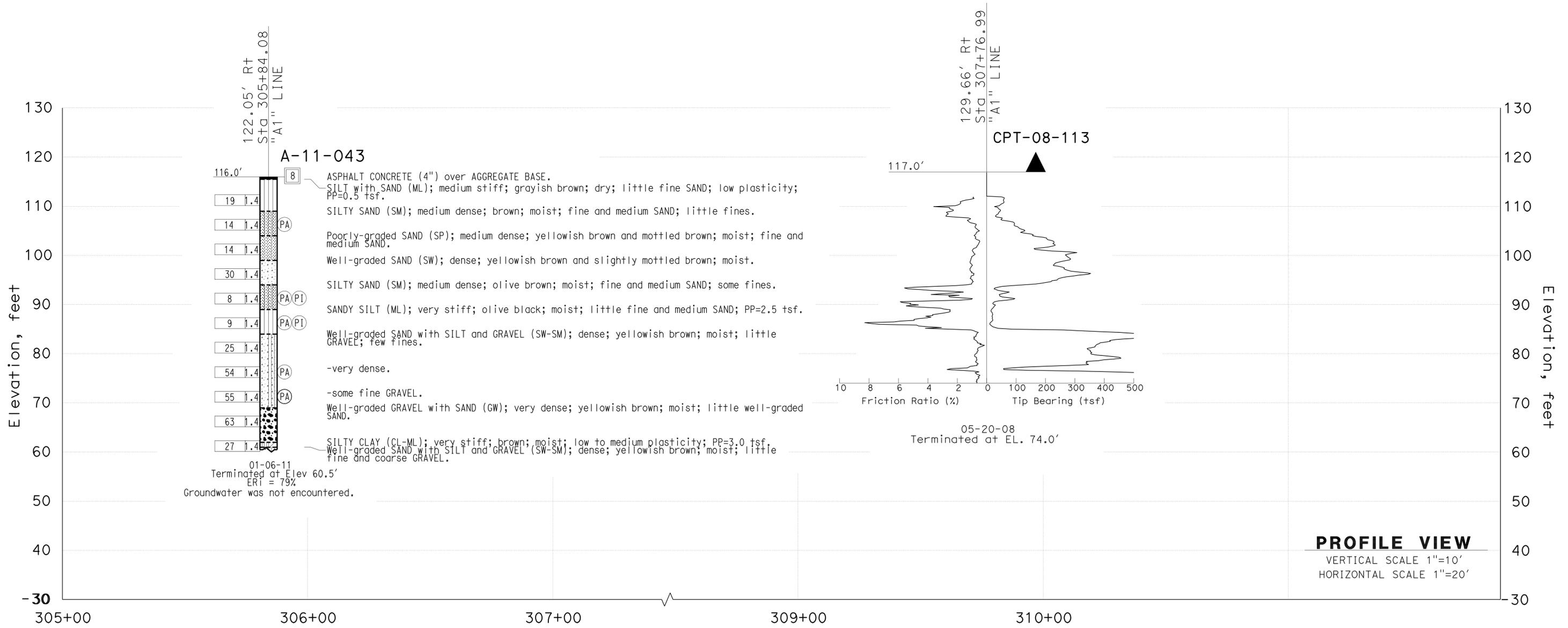
FOR PLAN VIEW, SEE
"LOG OF TEST BORINGS" 1 OF 10

Amare Tsegie
REGISTERED CIVIL ENGINEER DATE
4-9-12
PLANS APPROVAL DATE

Amare Tsegie
No. C67529
Exp. 6-30-13
CIVIL
STATE OF CALIFORNIA

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ENGINEERING SERVICES		MATERIALS AND GEOTECHNICAL SERVICES		STATE OF CALIFORNIA		DIVISION OF ENGINEERING SERVICES		SOUND WALL NO. 290	
FUNCTIONAL SUPERVISOR		DRAWN BY: P.QUACH / T.Pandh (URS CORP)		FIELD INVESTIGATION BY:		BRIDGE NO.		LOG OF TEST BORINGS SHEET 7 OF 10	
NAME: CHI-TSENG LIU		CHECKED BY: F.GERAMI		A.TSEGIE/M.ISLAM/P.MCDONALD		53E0192			
				DEPARTMENT OF TRANSPORTATION		POST MILE			
						5.2			
065 CIVIL LOG OF TEST BORINGS SHEET		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		UNIT: 3658		PROJECT NUMBER & PHASE: 07 00001834 1		CONTRACT NO.: 07-215941	
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						12/14/11		SHEET 67 OF 70	

FILE => 53-E0192-z-1otb_07.dgn
USERNAME => s128843 DATE PLOTTED => 14-APR-2012 TIME PLOTTED => 06:34

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
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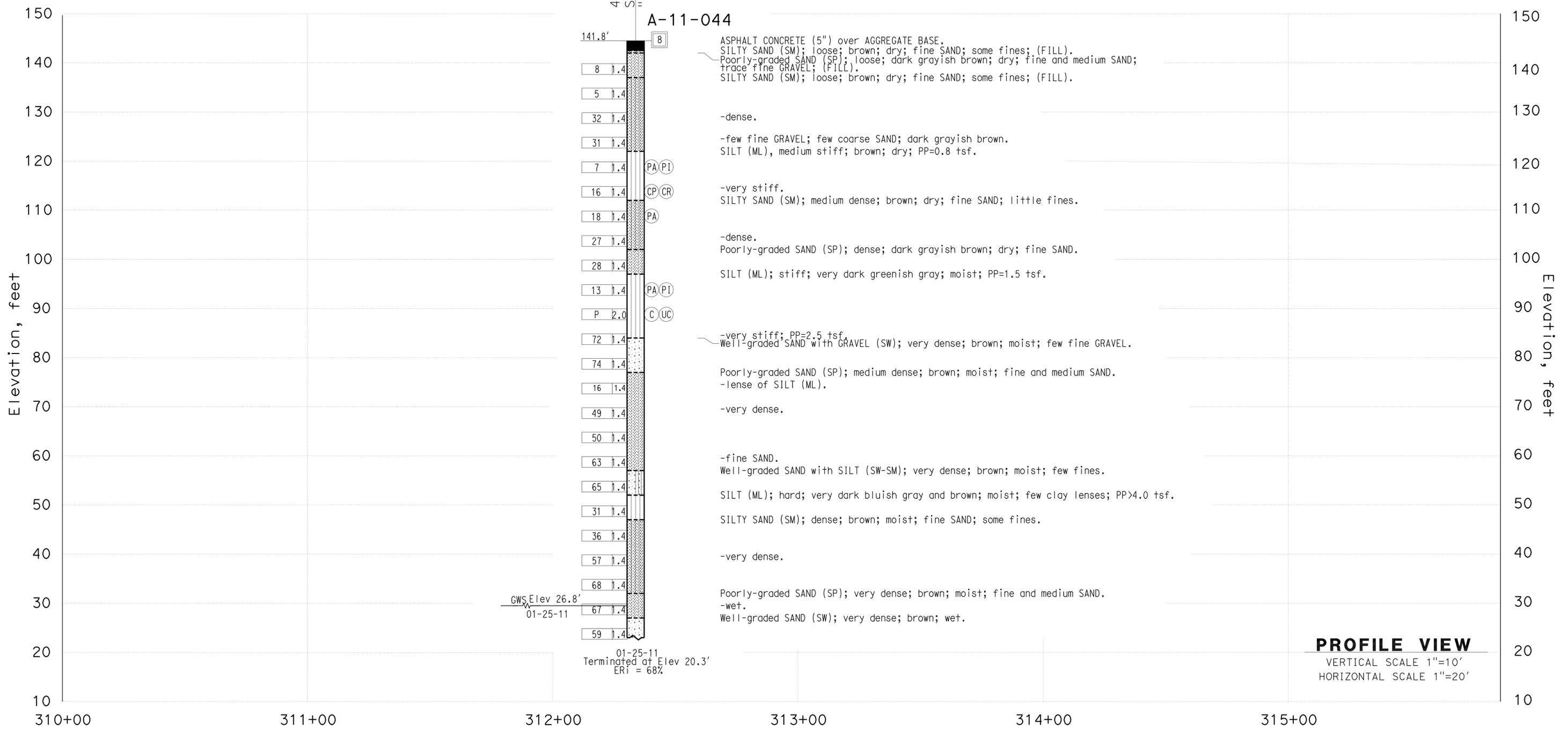
FOR PLAN VIEW, SEE
"LOG OF TEST BORINGS" 1 OF 10

Amare Tsegie
REGISTERED CIVIL ENGINEER DATE
4-9-12
PLANS APPROVAL DATE

Amare Tsegie
No. C67529
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CIVIL
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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.		SOUND WALL NO. 290	
FUNCTIONAL SUPERVISOR		DRAWN BY: P.QUACH / T.Pandh (URS CORP)		DEPARTMENT OF TRANSPORTATION		STRUCTURE DESIGN		53E0192		LOG OF TEST BORINGS SHEET 8 OF 10	
NAME: CHI-TSENG LIU		CHECKED BY: F.GERAMI		FIELD INVESTIGATION BY: K.BARKER		DESIGN BRANCH 21		POST MILE			
06S CIVIL LOG OF TEST BORINGS SHEET		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		UNIT: 3658		PROJECT NUMBER & PHASE: 07 00001834 1		CONTRACT NO.: 07-215941		REVISION DATES	
		0 1 2 3		DISREGARD PRINTS BEARING EARLIER REVISION DATES		12/14/11		SHEET 68		OF 70	

USERNAME => s128843 DATE PLOTTED => 14-APR-2012 TIME PLOTTED => 06:34

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1525	1597

REGISTERED CIVIL ENGINEER DATE
 4-9-12
 PLANS APPROVAL DATE

Amare Tsegie
 No. C67529
 Exp. 6-30-13
 CIVIL

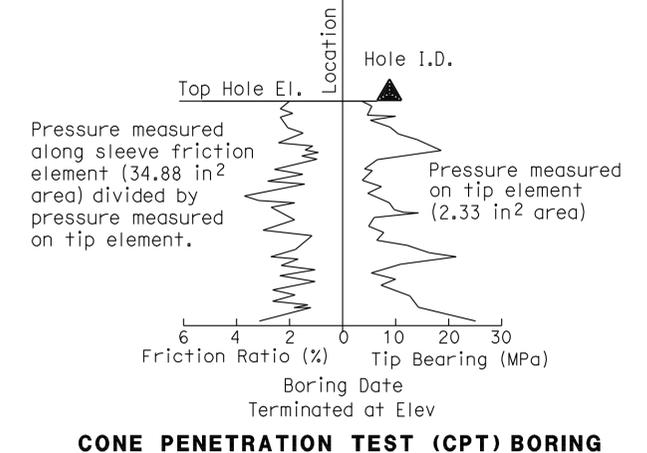
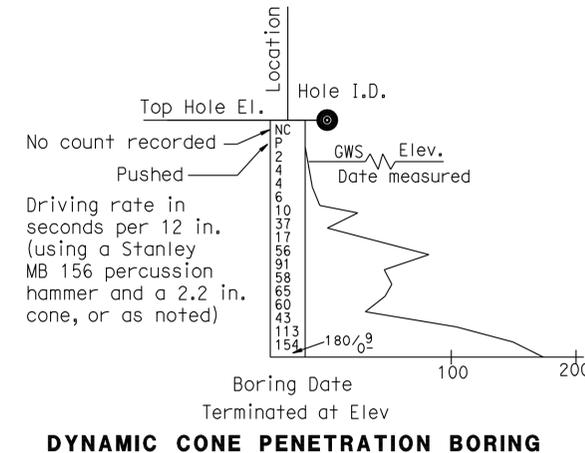
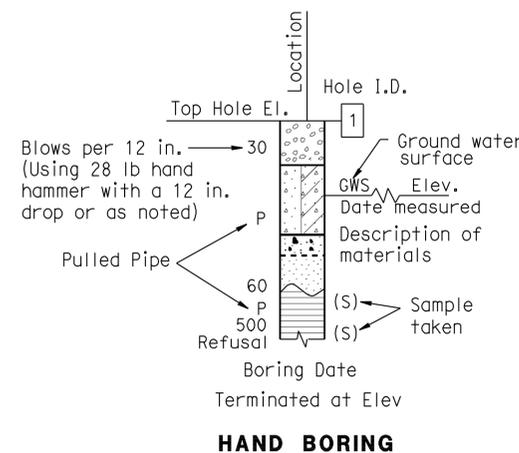
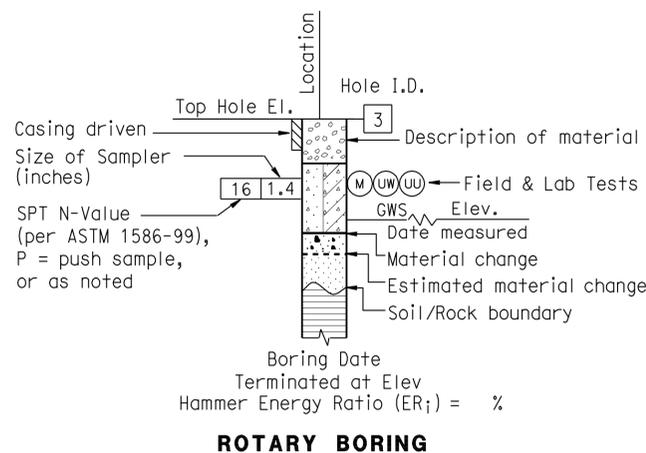
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CEMENTATION	
Description	Criteria
Weak	Crumbles or breaks with handling or little finger pressure.
Moderate	Crumbles or breaks with considerable finger pressure.
Strong	Will not crumble or break with finger pressure.

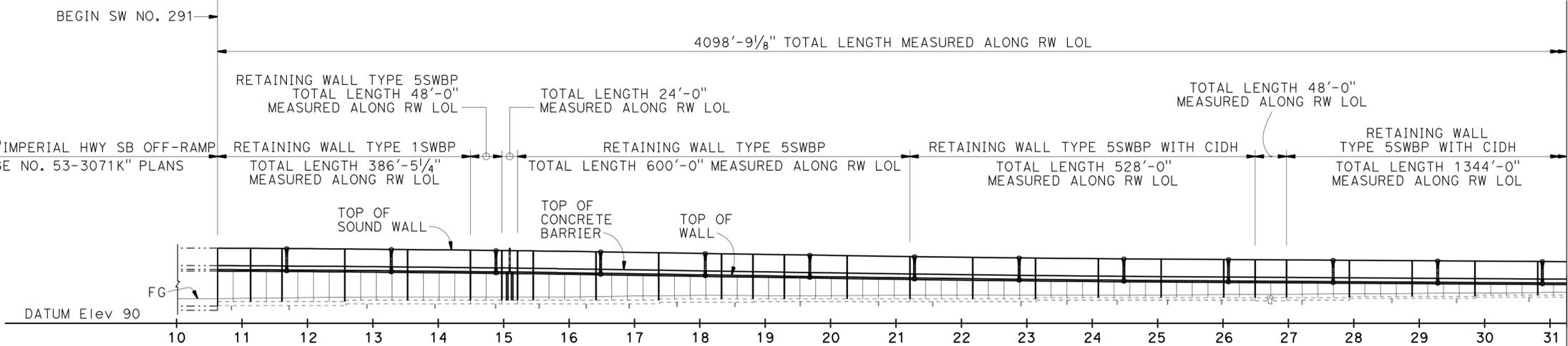
BOREHOLE IDENTIFICATION		
Symbol	Hole Type	Description
	A	Auger Boring (hollow or solid stem bucket)
	R	Rotary drilled boring (conventional)
	RW	Rotary drilled with self-casing wire-line
	RC	Rotary core with continuously-sampled, self-casing wire-line
	P	Rotary percussion boring (air)
	R	Rotary drilled diamond core
	HD	Hand driven (1-inch soil tube)
	HA	Hand Auger
	D	Dynamic Cone Penetration Boring
	CPT	Cone Penetration Test (ASTM D 5778)
	O	Other (note on LOTB)

Note: Size in inches.

CONSISTENCY OF COHESIVE SOILS				
Description	Shear Strength (tsf)	Pocket Penetrometer Measurement, PP, (tsf)	Torvane Measurement, TV, (tsf)	Vane Shear Measurement, VS, (tsf)
Very Soft	Less than 0.12	Less than 0.25	Less than 0.12	Less than 0.12
Soft	0.12 - 0.25	0.25 - 0.5	0.12 - 0.25	0.12 - 0.25
Medium Stiff	0.25 - 0.5	0.5 - 1	0.25 - 0.5	0.25 - 0.5
Stiff	0.5 - 1	1 - 2	0.5 - 1	0.5 - 1
Very Stiff	1 - 2	2 - 4	1 - 2	1 - 2
Hard	Greater than 2	Greater than 4	Greater than 2	Greater than 2



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1527	1597
			DATE		
			12/12/11		
			REGISTERED CIVIL ENGINEER		
			FRANK H. WEI		
			No. C 52918		
			Exp. 12-31-12		
			CIVIL		
			STATE OF CALIFORNIA		

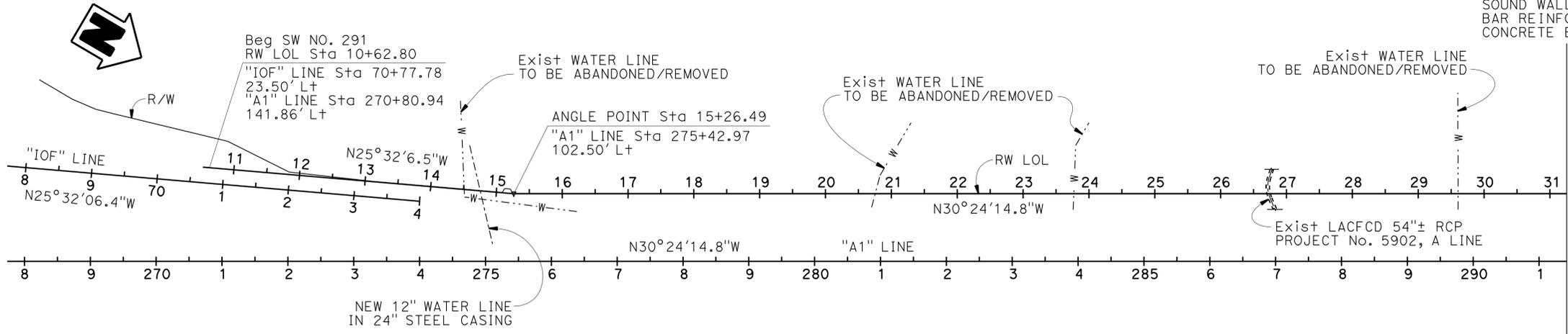


DEVELOPED ELEVATION
 HORIZ SCALE: 1" = 100'
 VERT SCALE: 1" = 50'

- NOTES:
1. For Retaining Wall Pile Layout, see Structure Plans sheets.
 2. For design notes, see "RETAINING WALL TYPE 1SWBP", "RETAINING WALL TYPE 5SWBP" and "RETAINING WALL TYPE 5SWBP WITH CIDH" details sheets, and "SOUNDWALL-MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 2" sheet.
 3. Architectural Treatment on concrete barrier face and retaining wall face not shown in Developed Elevation for clarity. Not all piles shown in Developed Elevation.
 4. For Pile Data Table, see "INDEX TO PLANS" sheet.
 5. For Retaining Wall cross sections, see "WALL TYPICAL SECTION" sheet.

QUANTITIES

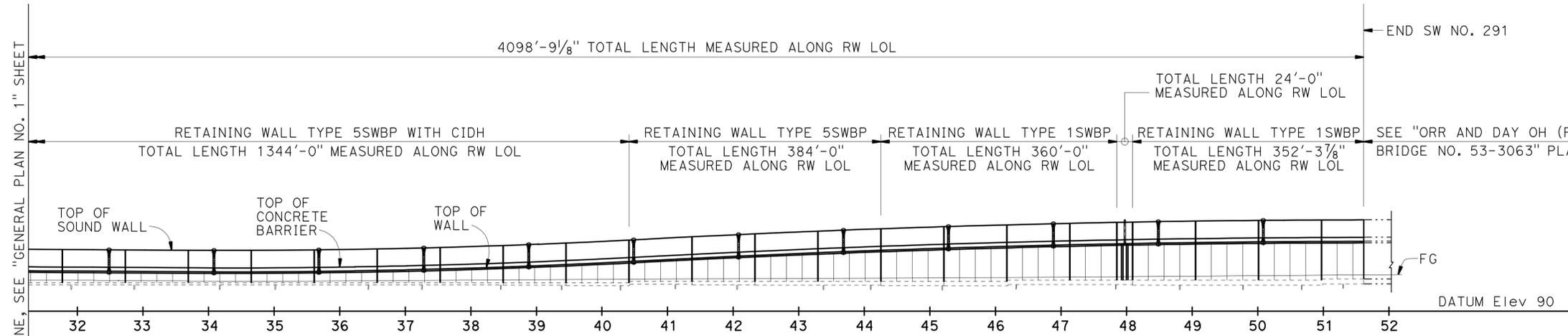
STRUCTURE EXCAVATION (RETAINING WALL)	5,060	CY
STRUCTURE EXCAVATION (TYPE Y-1) (AERIALY DEPOSITED LEAD)	6,600	CY
STRUCTURE BACKFILL (RETAINING WALL)	24,500	CY
PERVIOUS BACKFILL MATERIAL (RETAINING WALL)	1,840	CY
16" CAST-IN-DRILLED-HOLE CONCRETE PILING	30,466	LF
FURNISH PILING (CLASS 90)(ALTERNATIVE X)	56,377	LF
DRIVE PILE (CLASS 90)(ALTERNATIVE X)	1,613	EA
FURNISH PILING (CLASS 140) (ALTERNATIVE X)	1,444	LF
DRIVE PILE (CLASS 140) (ALTERNATIVE X)	39	EA
STRUCTURAL CONCRETE, RETAINING WALL	9,000	CY
PILASTER, SOUND WALL	60	CY
ARCHITECTURAL TEXTURE (SPLIT SLATE - FRACTURED RIB)	68,500	SQFT
SOUND WALL (MASONRY BLOCK)	53,600	SQFT
BAR REINFORCING STEEL (RETAINING WALL)	1,600,000	LB
CONCRETE BARRIER (TYPE 736A MODIFIED 2)	4,024	LF



PLAN
 1" = 100'

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

CHUNG-YUAN WEN DESIGN ENGINEER	DESIGN	BY C. VILLALOBOS	CHECKED F. WEI	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 21	BRIDGE NO.	SOUND WALL NO. 291 GENERAL PLAN NO. 1			
	DETAILS	BY J. VALENCIA	CHECKED F. WEI	LAYOUT	BY C. VILLALOBOS			CHECKED F. WEI		POST MILE		
	QUANTITIES	BY C. VILLALOBOS	CHECKED K. KIM	SPECIFICATIONS	BY J. JIANG			PLANS AND SPECS COMPARED		BY J. JIANG	5.13	
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS						UNIT: 3623	PROJECT NUMBER & PHASE: 0700001834 & 1	CONTRACT NO.: 07-215941	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 1	OF 71

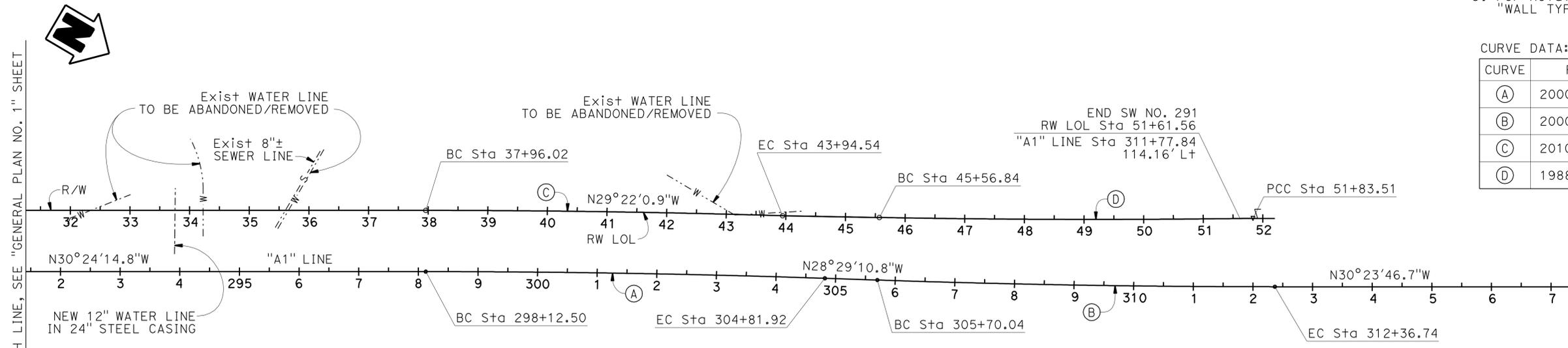


DEVELOPED ELEVATION
 HORIZ SCALE: 1" = 100'
 VERT SCALE: 1" = 50'

- NOTES:
- For Retaining Wall Pile Layout, see Structure Plans sheets.
 - For design notes, see "RETAINING WALL TYPE 1SWBP", "RETAINING WALL TYPE 5SWBP" and "RETAINING WALL TYPE 5SWBP WITH CIDH" details sheets, and "SOUNDWALL-MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 2" sheet.
 - Architectural Treatment on concrete barrier face and retaining wall face not shown in Developed Elevation for clarity. Not all piles shown in Developed Elevation.
 - For Pile Data Table, see "INDEX TO PLANS" sheet.
 - For Retaining Wall cross sections, see "WALL TYPICAL SECTION" sheet.

CURVE DATA:

CURVE	R	Δ	T	L
(A)	20000'	1°55'04"	334.75'	669.43'
(B)	20000'	-1°54'35.8"	333.38'	669.70'
(C)	20102.5'	1°42'21.2"	229.28'	598.52'
(D)	19885.5'	-1°48'20.2"	313.36'	626.67'



PLAN
 1" = 100'

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

CHUNG-YUAN WEN DESIGN ENGINEER	DESIGN	BY C. VILLALOBOS	CHECKED F. WEI	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 21	BRIDGE NO.	SOUND WALL NO. 291 GENERAL PLAN NO. 2	
	DETAILS	BY J. VALENCIA	CHECKED F. WEI	LAYOUT	BY C. VILLALOBOS			CHECKED F. WEI		POST MILE
	QUANTITIES	BY C. VILLALOBOS	CHECKED K. KIM	SPECIFICATIONS	BY J. JIANG			PLANS AND SPECS COMPARED		BY J. JIANG
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS						UNIT: 3623 PROJECT NUMBER & PHASE: 0700001834 & 1 CONTRACT NO.: 07-215941	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES 09/20/11 11/25/11 12/27/11 03/22/12	SHEET 2 OF 71	

INDEX TO PLANS

Sheet No. Title

1. GENERAL PLAN NO. 1
2. GENERAL PLAN NO. 2
3. INDEX TO PLANS
4. WALL TYPICAL SECTION
5. STRUCTURE PLAN NO. 1
6. STRUCTURE PLAN NO. 2
7. STRUCTURE PLAN NO. 3
8. STRUCTURE PLAN NO. 4
9. STRUCTURE PLAN NO. 5
10. STRUCTURE PLAN NO. 6
11. STRUCTURE PLAN NO. 7
12. STRUCTURE PLAN NO. 8
13. STRUCTURE PLAN NO. 9
14. STRUCTURE PLAN NO. 10
15. STRUCTURE PLAN NO. 11
16. STRUCTURE PLAN NO. 12
17. STRUCTURE PLAN NO. 13
18. STRUCTURE PLAN NO. 14
19. STRUCTURE PLAN NO. 15
20. STRUCTURE PLAN NO. 16
21. STRUCTURE PLAN NO. 17
22. STRUCTURE PLAN NO. 18
23. STRUCTURE PLAN NO. 19
24. FOUNDATION PLAN NO. 1
25. FOUNDATION PLAN NO. 2
26. FOUNDATION PLAN NO. 3
27. FOUNDATION PLAN NO. 4
28. FOUNDATION PLAN NO. 5
29. FOUNDATION PLAN NO. 6
30. FOUNDATION PLAN NO. 7
31. FOUNDATION PLAN NO. 8
32. RETAINING WALL DETAILS NO. 1
33. RETAINING WALL DETAILS NO. 2
34. RETAINING WALL DETAILS AT SIGN 10A
35. RETAINING WALL DETAILS AT SIGN 12A
36. GENERAL NOTES AT SIGN STRUCTURES
37. ARCHITECTURAL TREATMENT ELEVATION NO. 1
38. ARCHITECTURAL TREATMENT ELEVATION NO. 2
39. ARCHITECTURAL TREATMENT ELEVATION NO. 3
40. ARCHITECTURAL TREATMENT ELEVATION NO. 4
41. ARCHITECTURAL TREATMENT ELEVATION NO. 5
42. ARCHITECTURAL TREATMENT ELEVATION NO. 6
43. ARCHITECTURAL TREATMENT ELEVATION NO. 7
44. ARCHITECTURAL TREATMENT ELEVATION NO. 8
45. ARCHITECTURAL TREATMENT ELEVATION NO. 9
46. RETAINING WALL AND BARRIER ARCHITECTURAL DETAILS
47. SOUND WALL ARCHITECTURAL DETAILS
48. PILASTER ARCHITECTURAL DETAILS NO. 1
49. PILASTER ARCHITECTURAL DETAILS NO. 2
50. PILASTER ARCHITECTURAL DETAILS NO. 3
51. PILASTER ARCHITECTURAL DETAILS NO. 4
52. PILASTER STRUCTURAL DETAILS NO. 1
53. PILASTER STRUCTURAL DETAILS NO. 2
54. PILASTER STRUCTURAL DETAILS NO. 3
55. RETAINING WALL TYPE 1SWBP - DETAIL NO. 1
56. RETAINING WALL TYPE 1SWBP - DETAIL NO. 2
57. RETAINING WALL TYPE 5SWBP - DETAIL NO. 1
58. RETAINING WALL TYPE 5SWBP - DETAIL NO. 2
59. RETAINING WALL TYPE 5SWBP WITH CIDH - DETAIL NO. 1
60. RETAINING WALL TYPE 5SWBP WITH CIDH - DETAIL NO. 2
61. SOUND WALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 1
62. SOUND WALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 2
63. LOG OF TEST BORINGS 1 OF 9
64. LOG OF TEST BORINGS 2 OF 9
65. LOG OF TEST BORINGS 3 OF 9
66. LOG OF TEST BORINGS 4 OF 9
67. LOG OF TEST BORINGS 5 OF 9
68. LOG OF TEST BORINGS 6 OF 9
69. LOG OF TEST BORINGS 7 OF 9
70. LOG OF TEST BORINGS 8 OF 9
71. LOG OF TEST BORINGS 9 OF 9

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

PILE DATA TABLE

RW DESIGN HEIGHT/ LOCATION	PILE * TYPE	BOTTOM OF FOOTING ELEVATION (FT)	DESIGN LOADING (Kips)	NOMINAL RESISTANCE (Kips)		SPECIFIED TIP ELEVATION (ft)
				COMPRESSION	TENSION	
H=26	CLASS 90, ALT. "X", T=14"	103.50	90	180	90	70
H=24,22	CLASS 90, ALT. "X", T=14"	104.75	90	180	90	70
H=20	CLASS 90, ALT. "X", T=14"	106.00	90	180	90	73
H=18	CLASS 90, ALT. "X", T=14"	106.50	90	180	90	73
H=16	16" CIDH	106.50	90	180	90	73
H=14	16" CIDH	107.75	90	180	90	73
OVER LACFCD 54" RCP	16" CIDH	107.25	90	180	90	73
H=12	16" CIDH	109.00	90	180	90	76
H=10,12	16" CIDH	110.00	90	180	90	76
H=14	16" CIDH	109.75	90	180	90	76
H=16	16" CIDH	109.50	90	180	90	76
H=18	CLASS 90, ALT. "X", T=14"	110.50	90	180	90	77
H=20	CLASS 90, ALT. "X", T=14"	110.00	90	180	90	77
H=24,30	CLASS 90, ALT. "X", T=14"	109.75	90	180	90	76
H=26	CLASS 90, ALT. "X", T=14"	109.50	90	180	90	76
H=28	CLASS 90, ALT. "X", T=14"	109.25	90	180	90	76
H=28	CLASS 90, ALT. "X", T=14"	110.25	90	180	90	77
H=30	CLASS 90, ALT. "X", T=14"	110.75	90	180	90	77
AT SIGN 10A	CLASS 140, ALT. "X", T=14"	104.75	100	200	NA	70
AT SIGN 12A	CLASS 140, ALT. "X", T=14"	110.00	135	270	NA	74

* For Class 90 pile, Alt. X pile, the "T" value in Standard Plan B2-5 is modified to 1'-2". P also needs to be modified in accordance with B2-5 Design Notes. T=14" is required to provide the needed pile lateral capacity. No pile substitution for other standard piles types is allowed.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1529	1597

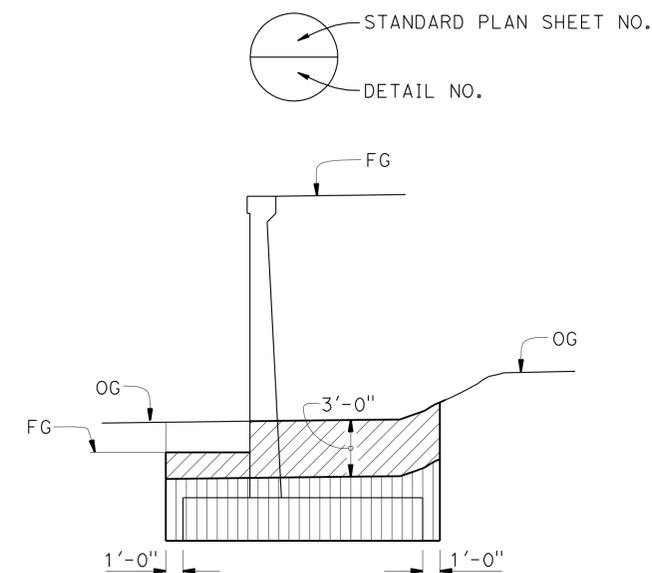
2/12/11
 REGISTERED CIVIL ENGINEER DATE
 4-9-12
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 FRANK H. WEI
 No. C 52918
 Exp. 12-31-12
 CIVIL
 STATE OF CALIFORNIA

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STANDARD PLANS DATED MAY 2006

- A10A ACRONYMS AND ABBREVIATIONS (SHEET 1 OF 2)
- A10B ACRONYMS AND ABBREVIATIONS (SHEET 2 OF 2)
- A62B LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL BRIDGE SURCHARGE AND WALL
- BO-1 BRIDGE DETAILS
- BO-3 BRIDGE DETAILS
- B2-3 16" AND 24" CAST-IN-DRILLED-HOLE CONCRETE PILE
- B2-5 PILE DETAILS CLASS 90 AND CLASS 140
- B3-8 RETAINING WALL DETAILS NO. 1
- B3-9 RETAINING WALL DETAILS NO. 2
- B11-56 CONCRETE BARRIER TYPE 736
- B15-6 SOUND WALL MASONRY BLOCK ON TYPE 736S/SV BARRIER DETAILS (1)
- B15-9 SOUND WALL MASONRY BLOCK MISCELLANEOUS DETAILS



LIMITS OF EXCAVATION

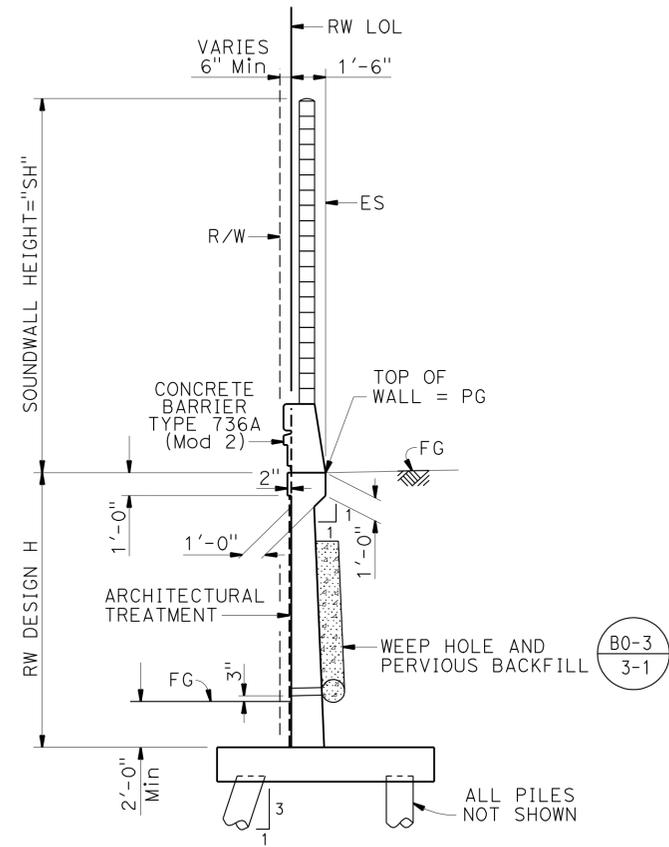
NO SCALE

LEGEND:

- STRUCTURE EXCAVATION (TYPE Y-1, AERIALY DEPOSITED LEAD)
- STRUCTURE EXCAVATION (RETAINING WALL)

DESIGN BY C. VILLALOBOS CHECKED F. WEI DETAILS BY J. VALENCIA CHECKED F. WEI QUANTITIES BY C. VILLALOBOS CHECKED K. KIM	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 21	BRIDGE NO. 53E0193 POST MILE 5.13	SOUND WALL NO. 291 INDEX TO PLANS
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	UNIT: 3623 PROJECT NUMBER & PHASE: 0700001834 & 1 CONTRACT NO.: 07-215941	DISREGARD PRINTS BEARING EARLIER REVISION DATES
			REVISION DATES: 09/20/11, 11/25/11, 12/27/11, 03/22/12	SHEET 3 OF 71

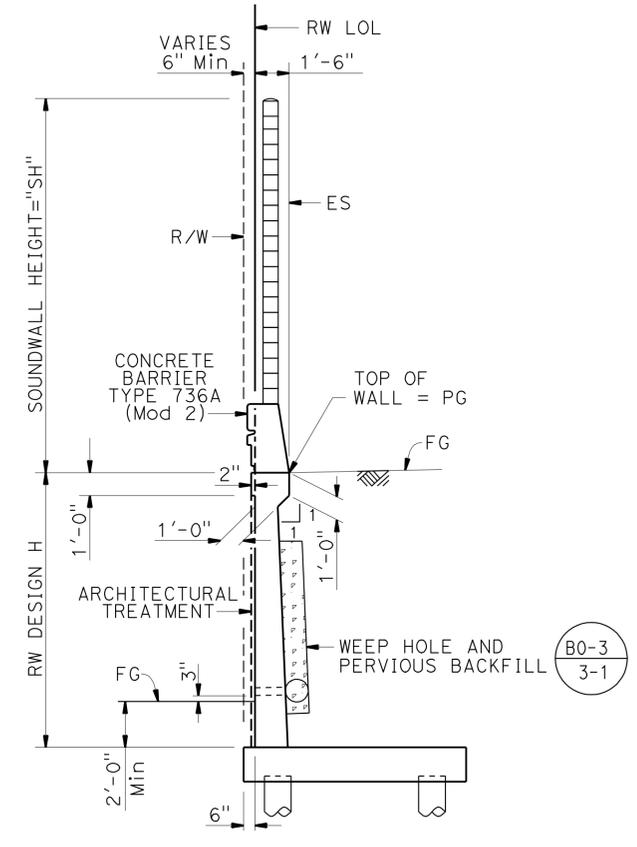
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1530	1597
<i>Frank H. Wei</i> 12/12/11 REGISTERED CIVIL ENGINEER DATE					
4-9-12				PLANS APPROVAL DATE	
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**RETAINING WALL TYPE 1SWBP
TYPICAL SECTION**

1/4" = 1'-0"

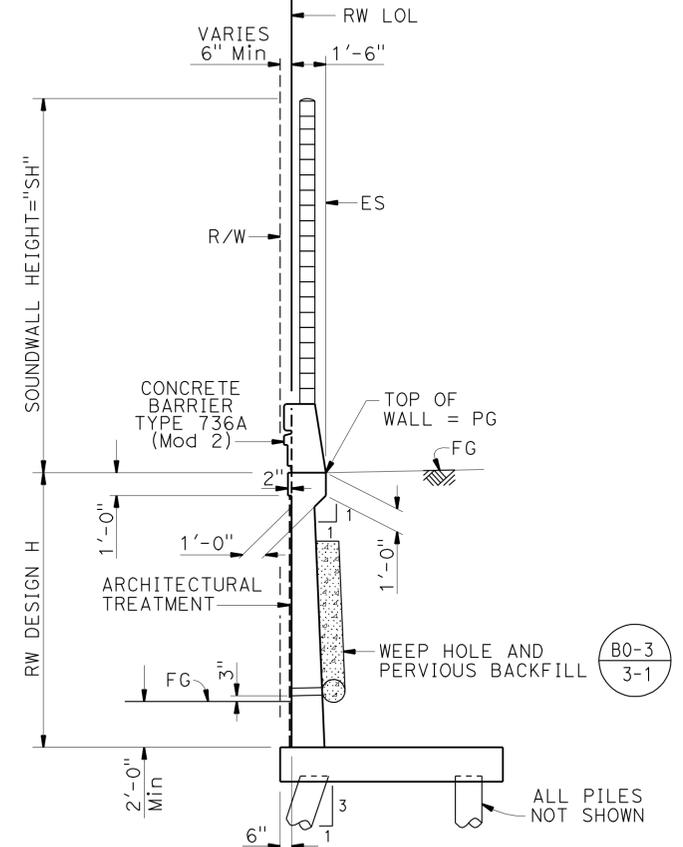
(RW LOL Sta 10+62.80 to 14+49.24
 RW LOL Sta 44+25.24 to 47+85.24
 RW LOL Sta 48+09.24 to 51+61.56)



**RETAINING WALL TYPE 5SWBP
WITH CIDH TYPICAL SECTION**

1/4" = 1'-0"

(RW LOL Sta 21+21.24 to 26+49.24
 RW LOL Sta 26+97.24 to 40+41.24)



**RETAINING WALL TYPE 5SWBP
TYPICAL SECTION**

1/4" = 1'-0"

(RW LOL Sta 14+49.24 to 14+97.24
 RW LOL Sta 15+21.24 to 21+21.24
 RW LOL Sta 40+41.24 to 44+25.24)

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

DESIGN	BY C. VILLALOBOS	CHECKED F. WEI
DETAILS	BY J. VALENCIA	CHECKED F. WEI
QUANTITIES	BY C. VILLALOBOS	CHECKED K. KIM

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 21

BRIDGE NO.	53E0193
POST MILE	5.13

SOUND WALL NO. 291
WALL TYPICAL SECTION

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

ORIGINAL SCALE IN INCHES
 FOR REDUCED PLANS

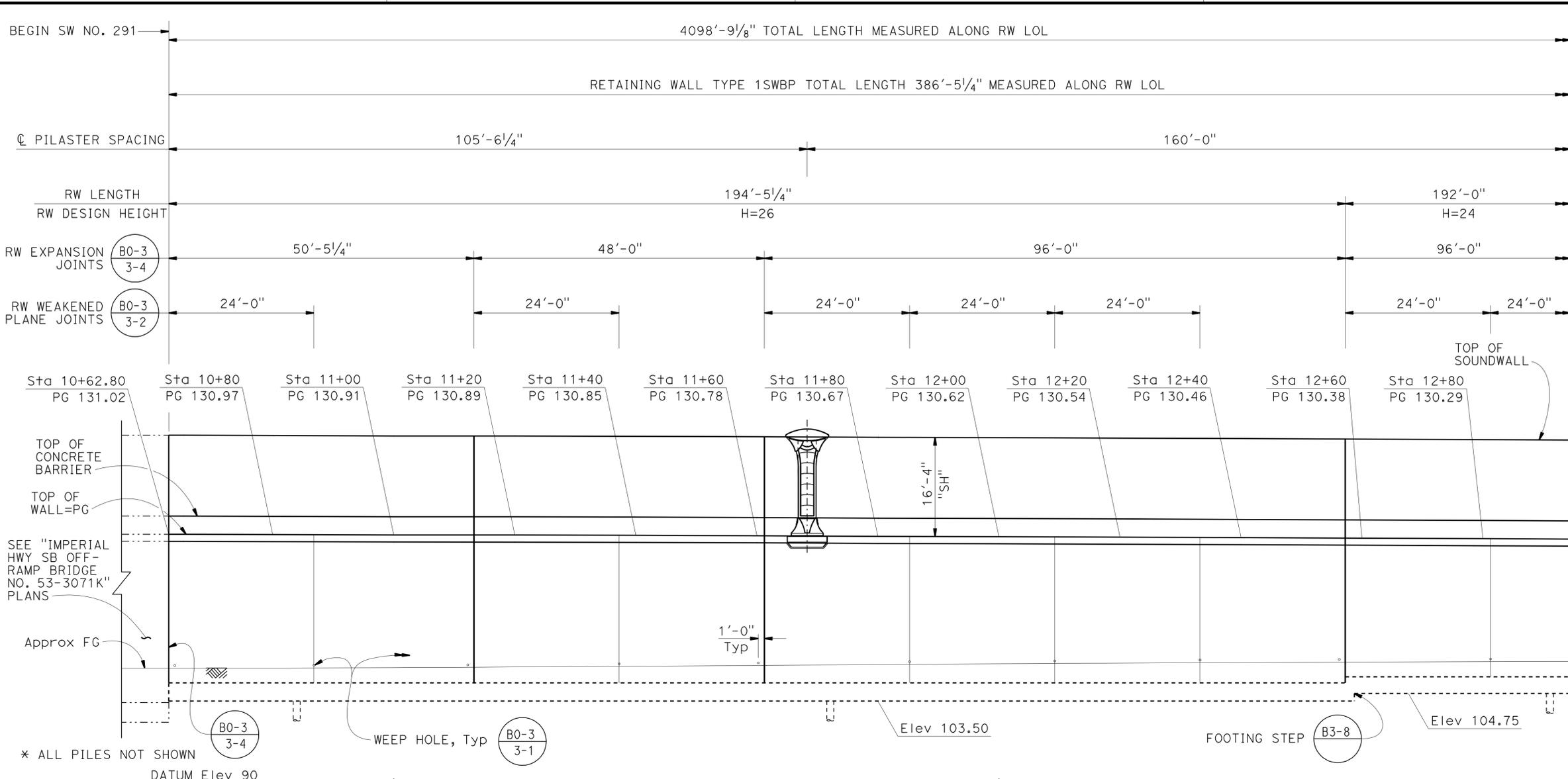


UNIT: 3623
 PROJECT NUMBER & PHASE: 0700001834 & 1 CONTRACT NO.: 07-215941

DISREGARD PRINTS BEARING
 EARLIER REVISION DATES

REVISION DATES	SHEET	OF
09/20/11 11/25/11 12/27/11 03/22/12	4	71

USERNAME => s128843 DATE PLOTTED => 14-APR-2012 TIME PLOTTED => 06:35



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1531	1597

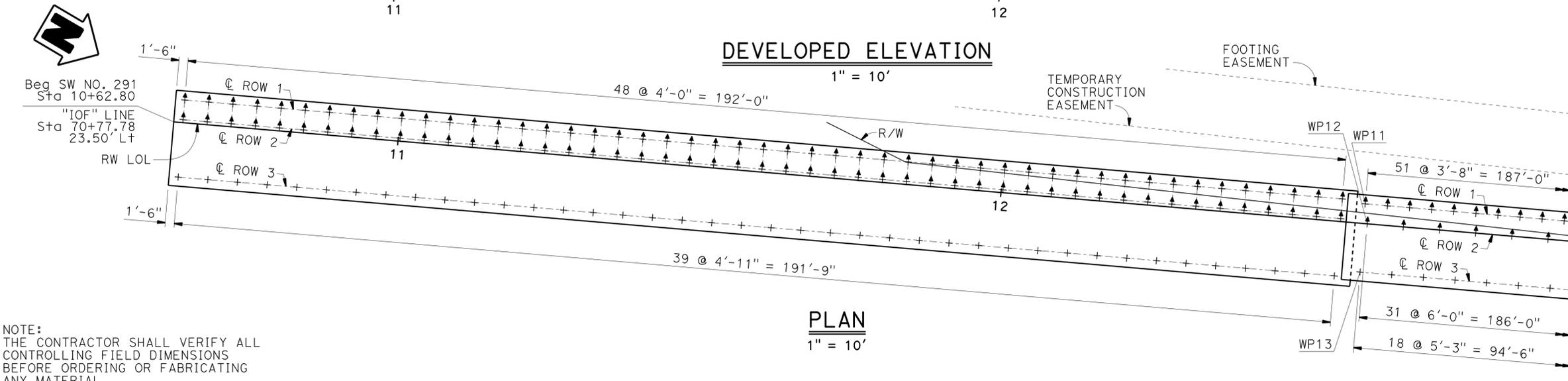
REGISTERED CIVIL ENGINEER: **Frank H. Wei**
 DATE: 12/12/11
 PLANS APPROVAL DATE: 4-9-12
 No. C 52918
 Exp. 12-31-12
 CIVIL
 STATE OF CALIFORNIA

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WORKING POINT	RW LOL STATION AND OFFSET
WP11	12+60.15, 3.25' Lt
WP12	12+60.74, 0.00'
WP13	12+60.24, 8.00' Rt

- NOTES:
- For Sound Wall and Barrier Details, see "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 1" and "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 2" sheets.
 - For retaining wall details, see "RETAINING WALL TYPE 1SBWP - DETAILS NO. 1" and "RETAINING WALL TYPE 1SBWP - DETAILS NO. 2" sheets.
 - For Expansion Joint details in the Masonry Block Soundwall, see "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 1" and "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 2" sheets.
 - See "GENERAL PLAN" for RW LOL alignment information.
 - See "INDEX TO PLANS" sheet for Pile Data Table.

- LEGEND:
- + Denotes Vertical Pile
 - ‡ Denotes 1:3 Battered Pile



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

DESIGN	BY C. VILLALOBOS	CHECKED F. WEI	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 21	BRIDGE NO.	53E0193	SOUND WALL NO. 291 STRUCTURE PLAN NO. 1
DETAILS	BY J. VALENCIA	CHECKED F. WEI			POST MILE	5.13	
QUANTITIES	BY C. VILLALOBOS	CHECKED K. KIM					

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS: 0 1 2 3
 UNIT: 3623 PROJECT NUMBER & PHASE: 0700001834 & 1 CONTRACT NO.: 07-215941
 DISREGARD PRINTS BEARING EARLIER REVISION DATES
 REVISION DATES: 09/20/11, 11/25/11, 12/27/11, 03/22/12
 SHEET 5 OF 71

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1532	1597

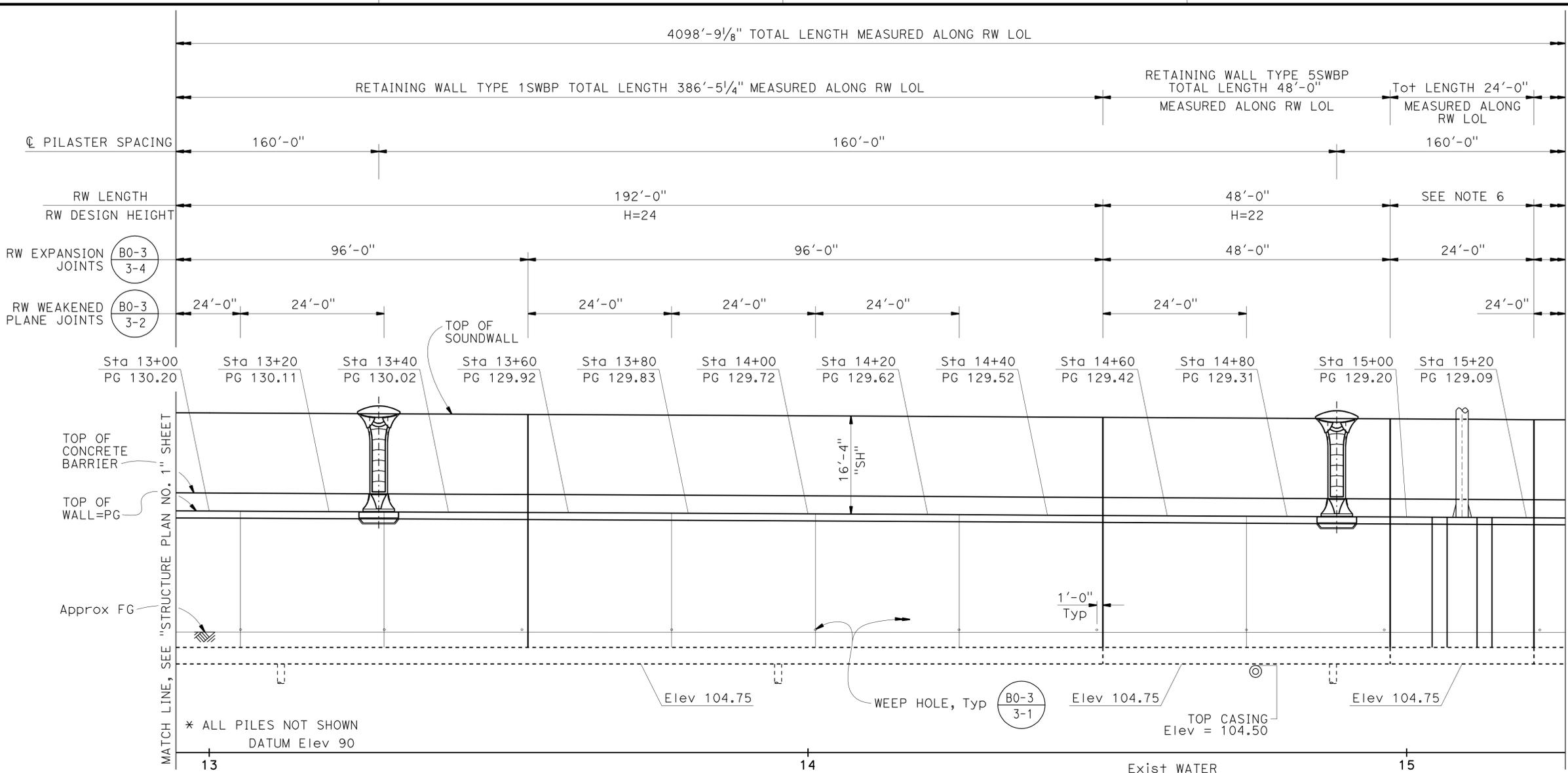
REGISTERED CIVIL ENGINEER DATE 12/12/11
 FRANK H. WEI
 No. C 52918
 Exp. 12-31-12
 CIVIL
 STATE OF CALIFORNIA

4-9-12
PLANS APPROVAL DATE

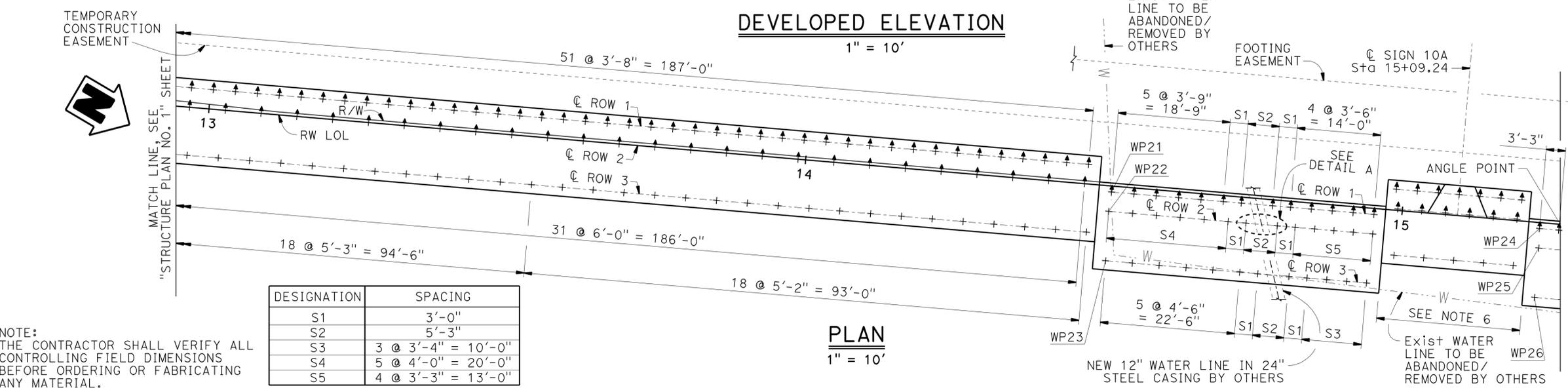
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

WORKING POINT	RW LOL STATION AND OFFSET
WP21	14+51.36, 1.00' Rt
WP22	14+51.16, 4.25' Rt
WP23	14+51.32, 12.50' Rt
WP24	15+23.07, 1.00' Rt
WP25	15+23.24, 4.25' Rt
WP26	15+23.24, 12.50' Rt

- NOTES:
- For Sound Wall and Barrier Details, see "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 1" and "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 2" sheets.
 - For retaining wall details, see "RETAINING WALL TYPE 1SBWP - DETAILS NO. 1" and "RETAINING WALL TYPE 1SBWP - DETAILS NO. 2" sheets.
 - For Expansion Joint details in the Masonry Block Soundwall, see "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 1" and "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 2" sheets.
 - See "GENERAL PLAN" for RW LOL alignment information.
 - See "INDEX TO PLANS" sheet for Pile Data Table.
 - See "RETAINING WALL DETAILS AT SIGN 10A" sheet.



DEVELOPED ELEVATION
1" = 10'



DESIGNATION	SPACING
S1	3'-0"
S2	5'-3"
S3	3 @ 3'-4" = 10'-0"
S4	5 @ 4'-0" = 20'-0"
S5	4 @ 3'-3" = 13'-0"

NOTE:
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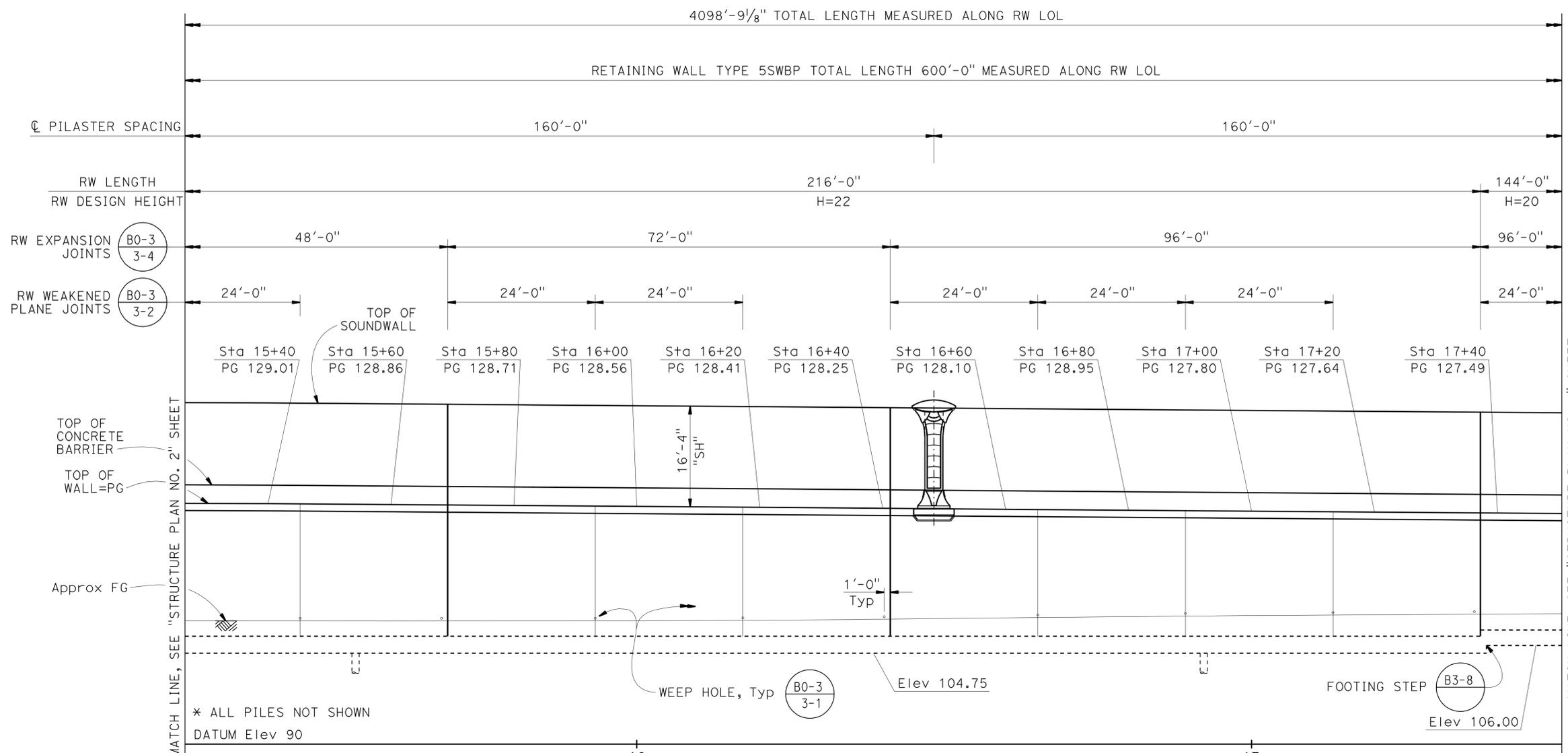
DESIGN BY C. VILLALOBOS	CHECKED F. WEI	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION DESIGN BRANCH 21	BRIDGE NO. 53E0193	SOUND WALL NO. 291 STRUCTURE PLAN NO. 2
DETAILS BY J. VALENCIA	CHECKED F. WEI		POST MILE 5.13	
QUANTITIES BY C. VILLALOBOS	CHECKED K. KIM			

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS UNIT: 3623 PROJECT NUMBER & PHASE: 0700001834 & 1 CONTRACT NO.: 07-215941 DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
09/20/11 11/25/11 12/27/11 03/22/12	6	71

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1533	1597

Frank H. Wei 12/12/11
 REGISTERED CIVIL ENGINEER DATE
 4-9-12
 PLANS APPROVAL DATE
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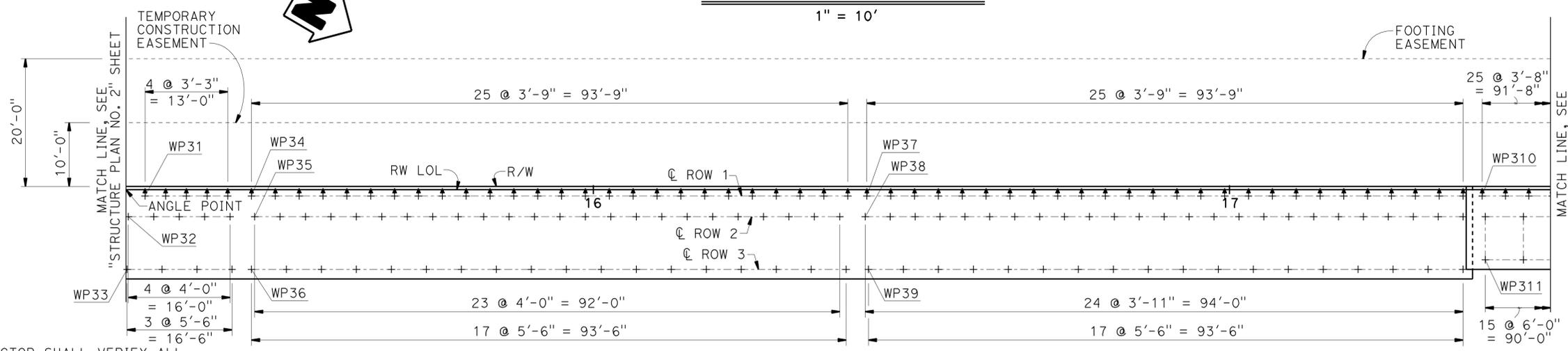


WORKING POINT	RW LOL STATION AND OFFSET
WP31	15+29.49, 1.00' R+
WP32	15+26.87, 4.25' R+
WP33	15+26.67, 12.50' R+
WP34	15+46.24, 1.00' R+
WP35	15+46.74, 4.25' R+
WP36	15+46.24, 12.50' R+
WP37	16+42.99, 1.00' R+
WP38	16+42.74, 4.25' R+
WP39	16+43.24, 12.50' R+
WP310	17+39.74, 1.00' R+
WP311	17+40.24, 11.00' R+

- NOTES:
- For Sound Wall and Barrier Details, see "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 1" and "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 2" sheets.
 - For retaining wall details, see "RETAINING WALL TYPE 1SBWP - DETAILS NO. 1" and "RETAINING WALL TYPE 1SBWP - DETAILS NO. 2" sheets.
 - For Expansion Joint details in the Masonry Block Soundwall, see "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 1" and "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 2" sheets.
 - See "GENERAL PLAN" for RW LOL alignment information.
 - See "INDEX TO PLANS" sheet for Pile Data Table.

- LEGEND:
- + Denotes Vertical Pile
 - ‡ Denotes 1:3 Battered Pile

DEVELOPED ELEVATION
1" = 10'



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

DESIGN	BY C. VILLALOBOS	CHECKED F. WEI	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION DESIGN BRANCH 21	BRIDGE NO.	53E0193
DETAILS	BY J. VALENCIA	CHECKED F. WEI		POST MILE	5.13
QUANTITIES	BY C. VILLALOBOS	CHECKED K. KIM			

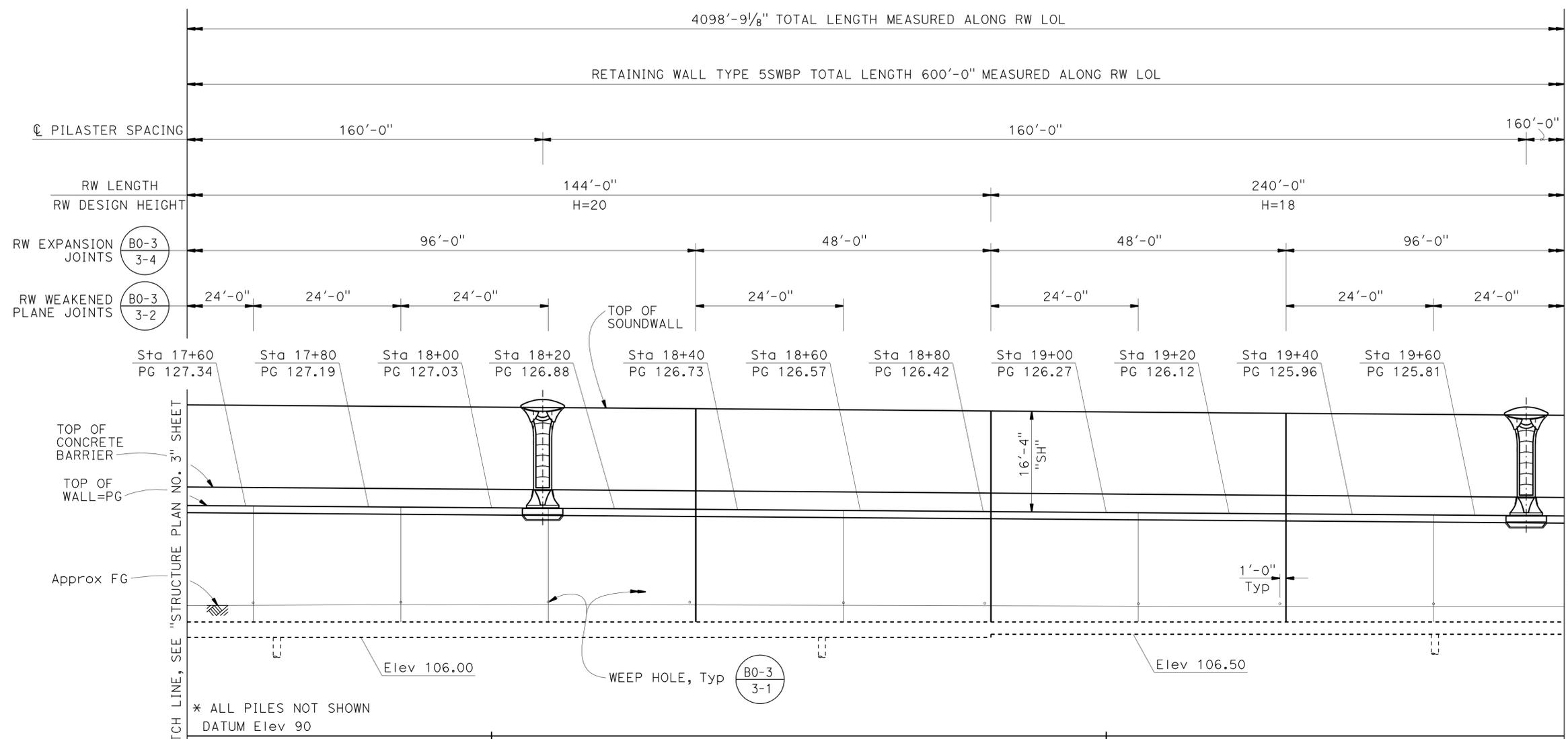
SOUND WALL NO. 291
STRUCTURE PLAN NO. 3

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1534	1597

REGISTERED CIVIL ENGINEER DATE 2/12/11
 FRANK H. WEI
 No. C 52918
 Exp. 12-31-12
 CIVIL
 STATE OF CALIFORNIA

4-9-12
 PLANS APPROVAL DATE

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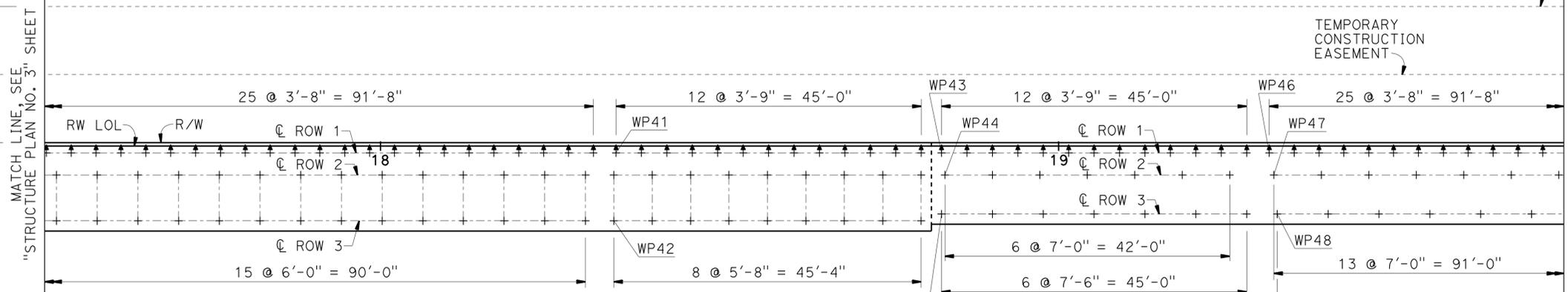
WORKING POINT	RW LOL STATION AND OFFSET
WP41	18+34.74, 1.00' Rt
WP42	18+34.40, 11.00' Rt
WP43	18+82.74, 1.00' Rt
WP44	18+83.24, 4.25' Rt
WP45	18+82.74, 10.00' Rt
WP46	19+31.07, 1.00' Rt
WP47	19+31.74, 4.25' Rt
WP48	19+32.24, 10.00' Rt

- NOTES:
- For Sound Wall and Barrier Details, see "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 1" and "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 2" sheets.
 - For retaining wall details, see "RETAINING WALL TYPE 1SBWP - DETAILS NO. 1" and "RETAINING WALL TYPE 1SBWP - DETAILS NO. 2" sheets.
 - For Expansion Joint details in the Masonry Block Soundwall, see "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 1" and "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 2" sheets.
 - See "GENERAL PLAN" for RW LOL alignment information.
 - See "INDEX TO PLANS" sheet for Pile Data Table.

- LEGEND:
- + Denotes Vertical Pile
 - ‡ Denotes 1:3 Battered Pile

DEVELOPED ELEVATION

1" = 10'



PLAN

1" = 10'

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

DESIGN	BY C. VILLALOBOS	CHECKED F. WEI
DETAILS	BY J. VALENCIA	CHECKED F. WEI
QUANTITIES	BY C. VILLALOBOS	CHECKED K. KIM

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 21

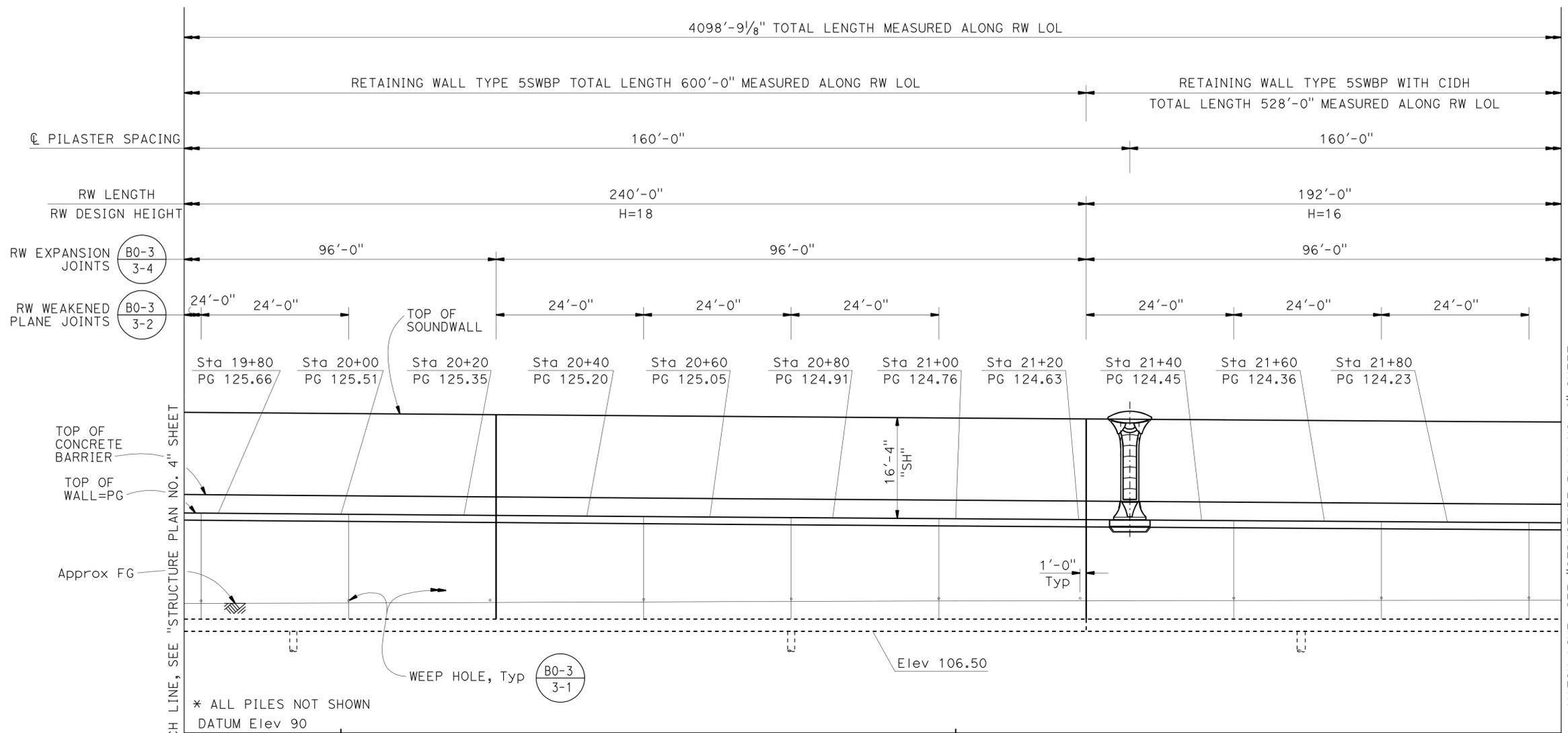
BRIDGE NO.	53E0193
POST MILE	5.13

SOUND WALL NO. 291
STRUCTURE PLAN NO. 4

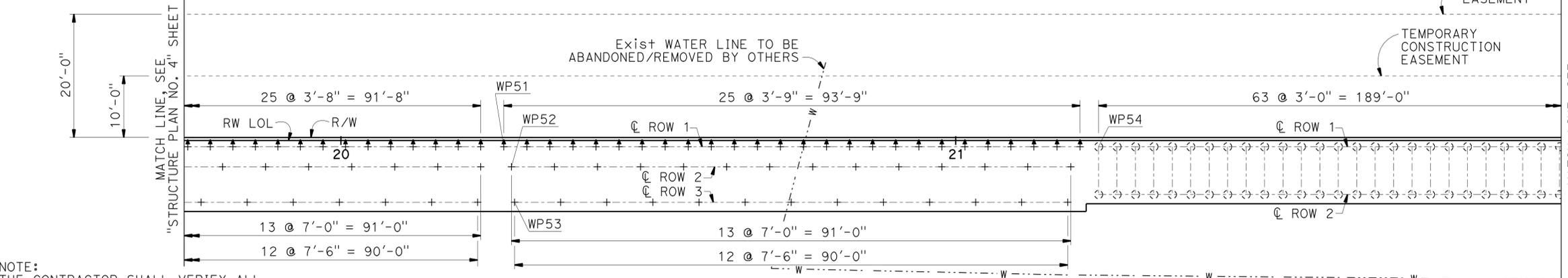
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1535	1597

REGISTERED CIVIL ENGINEER **FRANK H. WEI** DATE 12/12/11
 PLANS APPROVAL DATE 4-9-12
 No. C 52918
 Exp. 12-31-12
 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.

WORKING POINT	RW LOL STATION AND OFFSET
WP51	20+26.49, 1.00' Rt
WP52	20+27.74, 4.25' Rt
WP53	20+28.24, 10.00' Rt
WP54	21+23.24, 1.00' Rt



DEVELOPED ELEVATION
1" = 10'



PLAN
1" = 10'

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

- NOTES:
- For Sound Wall and Barrier Details, see "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 1" and "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 2" sheets.
 - For retaining wall details, see "RETAINING WALL TYPE 1SBWP - DETAILS NO. 1", "RETAINING WALL TYPE 1SBWP - DETAILS NO. 2", "RETAINING WALL TYPE 5SBWP - DETAILS NO. 1", "RETAINING WALL TYPE 5SBWP - DETAILS NO. 2", "RETAINING WALL TYPE 5SBWP WITH CIDH - DETAILS NO. 1" and "RETAINING WALL TYPE 5SBWP WITH CIDH - DETAILS NO. 2" sheets.
 - For Expansion Joint details in the Masonry Block Soundwall, see "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 1" and "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 2" sheets.
 - See "GENERAL PLAN" for RW LOL alignment information.
 - See "INDEX TO PLANS" sheet for Pile Data Table.

- LEGEND:
- + Denotes Vertical Pile
 - ⚡ Denotes 1:3 Battered Pile
 - ⊂ Denotes 16" CIDH

DESIGN	BY C. VILLALOBOS	CHECKED F. WEI
DETAILS	BY J. VALENCIA	CHECKED F. WEI
QUANTITIES	BY C. VILLALOBOS	CHECKED K. KIM

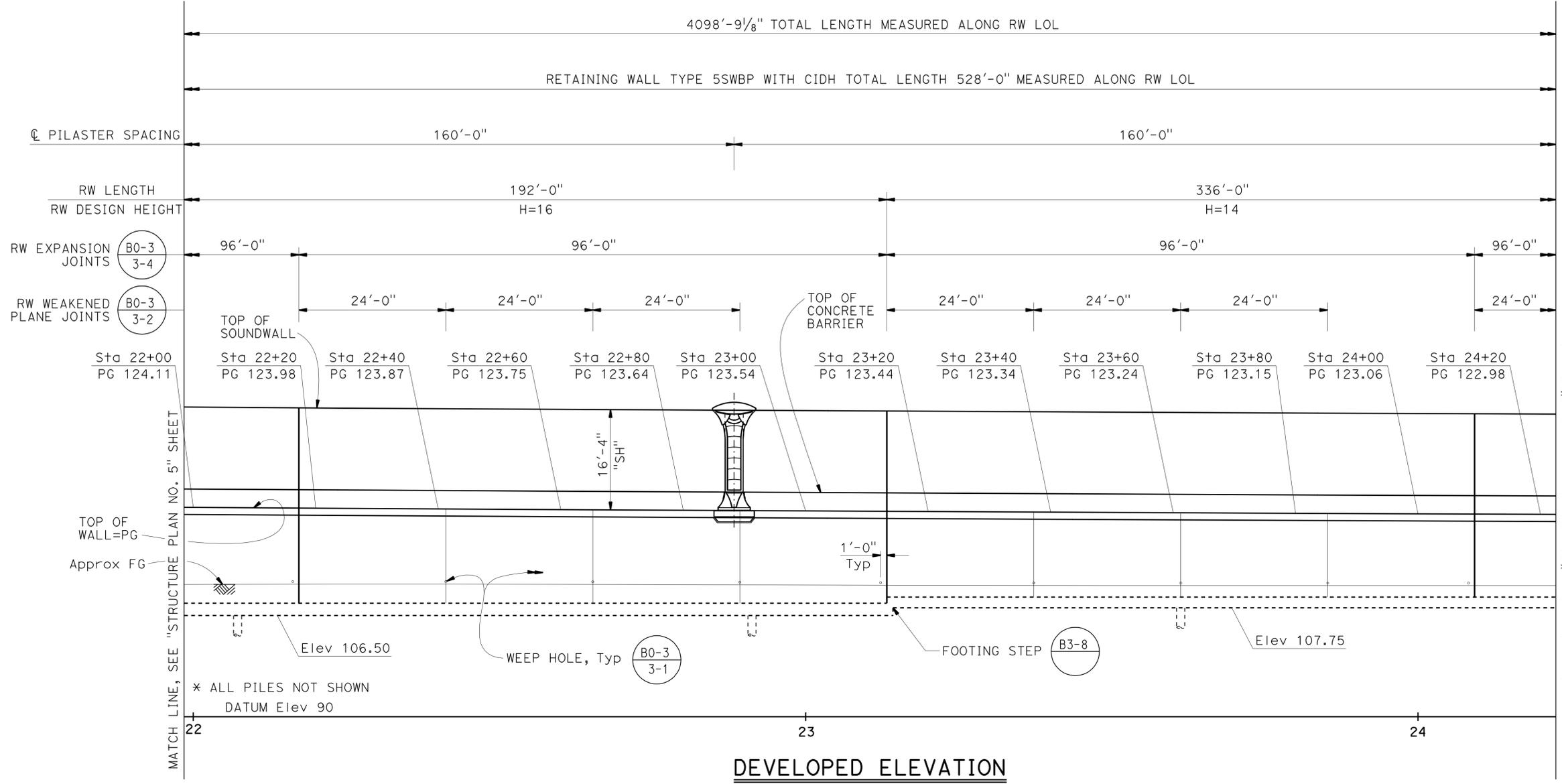
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
DESIGN BRANCH 21

BRIDGE NO.	53E0193
POST MILE	5.13

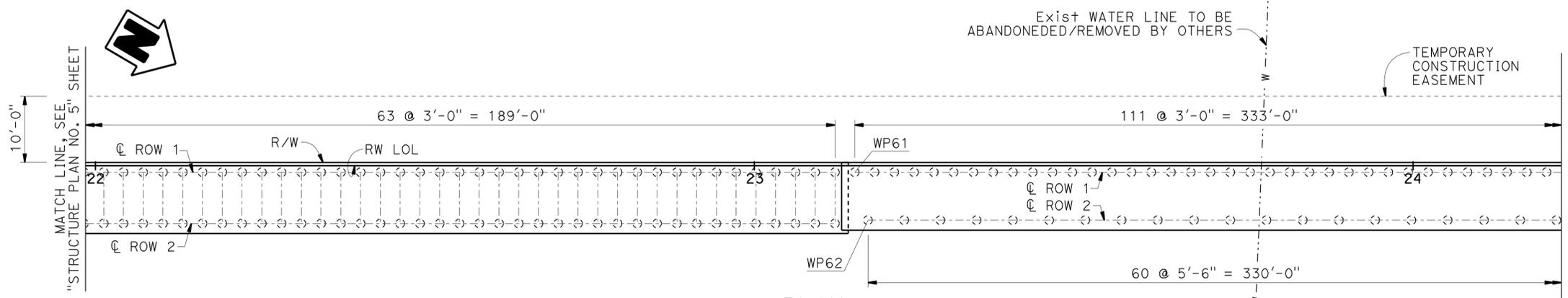
SOUND WALL NO. 291
STRUCTURE PLAN NO. 5

USERNAME => s128843 DATE PLOTTED => 14-APR-2012 TIME PLOTTED => 06:36

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1536	1597
			DATE		
			2/12/11		
			REGISTERED CIVIL ENGINEER		
			PLANS APPROVAL DATE		
			4-9-12		
			REGISTERED PROFESSIONAL ENGINEER		
			No. C 52918		
			Exp. 12-31-12		
			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.					



DEVELOPED ELEVATION
1" = 10'



PLAN
1" = 10'

NOTES:

- For Sound Wall and Barrier Details, see "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 1" and "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 2" sheets.
- For retaining wall details, see "RETAINING WALL TYPE 5SBWP WITH CIDH - DETAILS NO. 1" and "RETAINING WALL TYPE 5SBWP WITH CIDH - DETAILS NO. 2" sheets.
- For Expansion Joint details in the Masonry Block Soundwall, see "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 1" and "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 2" sheets.
- See "GENERAL PLAN" for RW LOL alignment information.
- See "INDEX TO PLANS" sheet for Pile Data Table.

LEGEND:

⊙ Denotes 16" CIDH

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

DESIGN	BY C. VILLALOBOS	CHECKED F. WEI
DETAILS	BY J. VALENCIA	CHECKED F. WEI
QUANTITIES	BY C. VILLALOBOS	CHECKED K. KIM

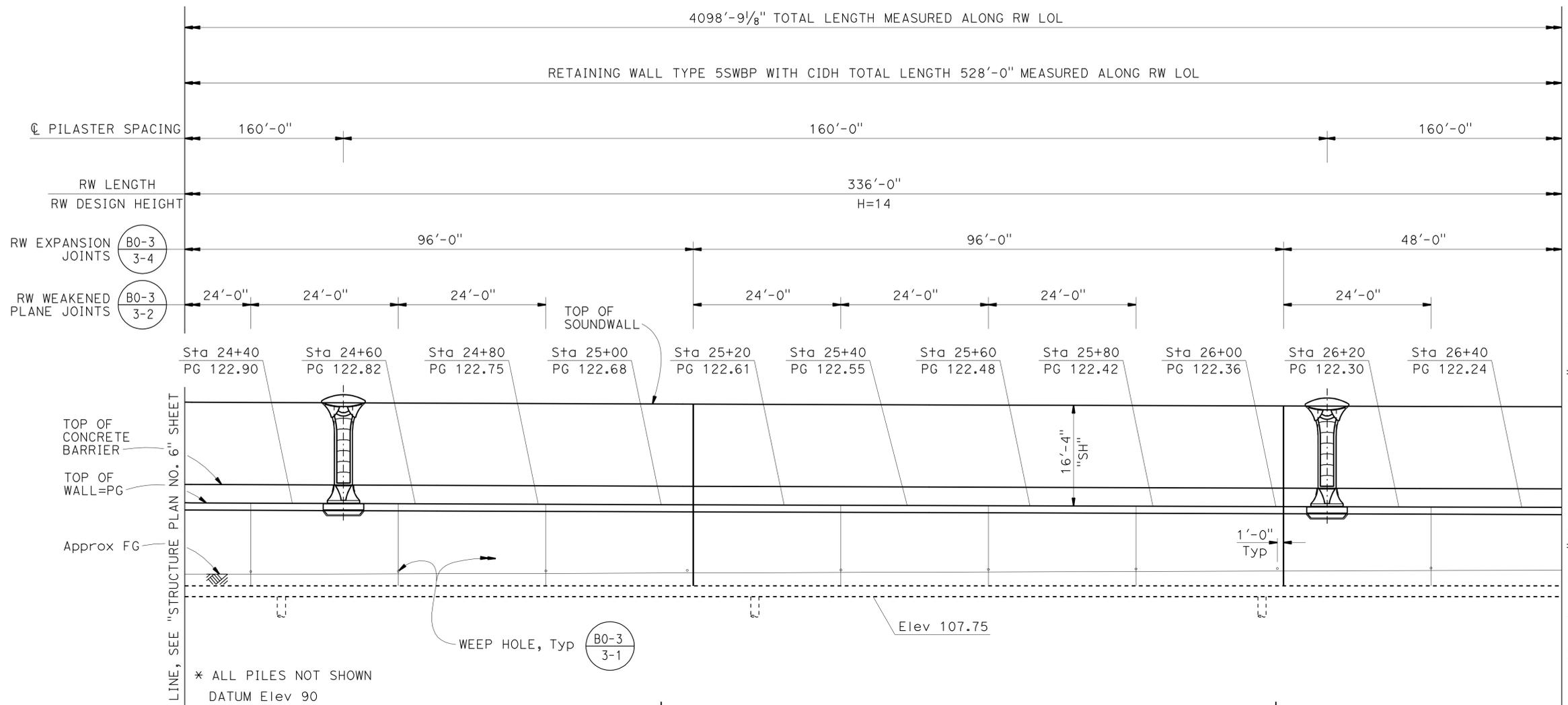
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 21

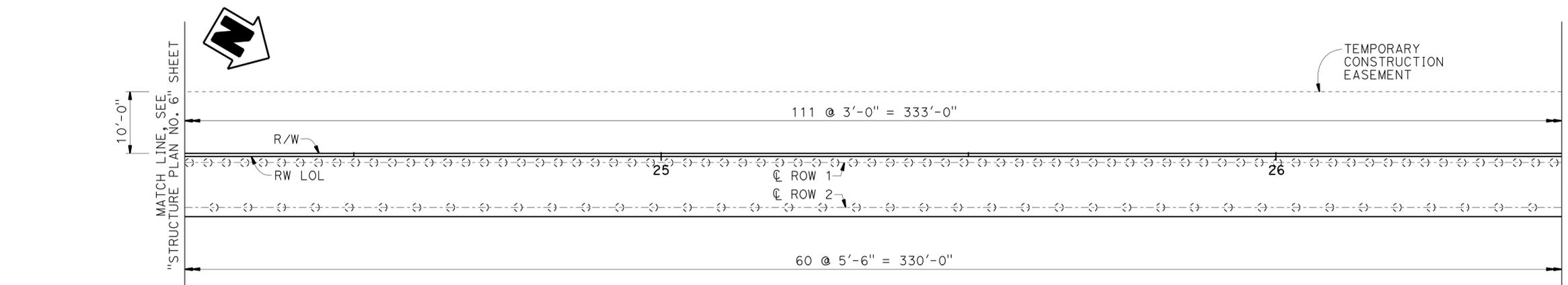
BRIDGE NO.	53E0193
POST MILE	5.13

SOUND WALL NO. 291
STRUCTURE PLAN NO. 6

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1537	1597
 REGISTERED CIVIL ENGINEER DATE 12/12/11					
4-9-12 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>					



DEVELOPED ELEVATION
1" = 10'



PLAN
1" = 10'

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

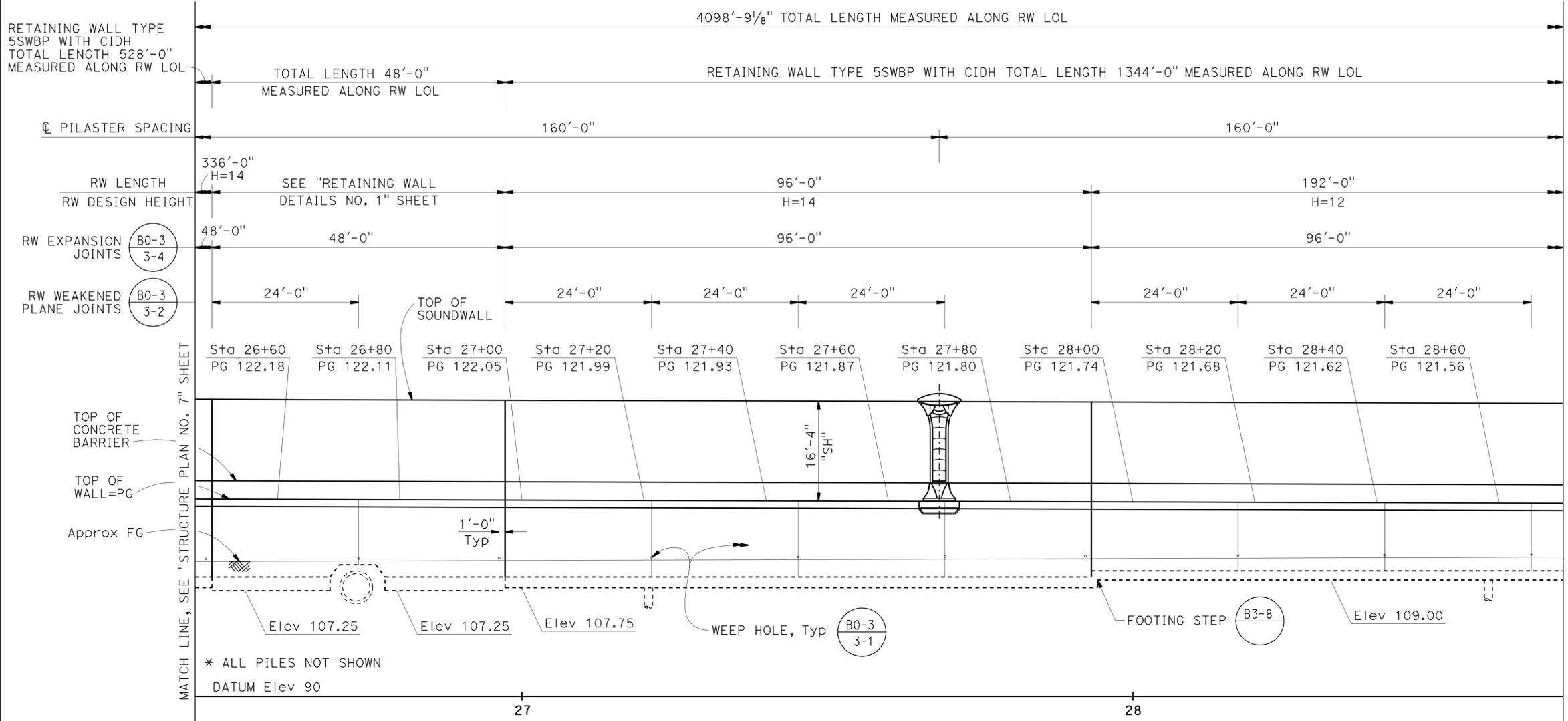
- NOTES:
- For Sound Wall and Barrier Details, see "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 1" and "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 2" sheets.
 - For retaining wall details, see "RETAINING WALL TYPE 5SBWP WITH CIDH - DETAILS NO. 1" and "RETAINING WALL TYPE 5SBWP WITH CIDH - DETAILS NO. 2" sheets.
 - For Expansion Joint details in the Masonry Block Soundwall, see "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 1" and "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 2" sheets.
 - See "GENERAL PLAN" for RW LOL alignment information.
 - See "INDEX TO PLANS" sheet for Pile Data Table.
- LEGEND:
⊙ Denotes 16" CIDH

DESIGN BY C. VILLALOBOS CHECKED F. WEI DETAILS BY J. VALENCIA CHECKED F. WEI QUANTITIES BY C. VILLALOBOS CHECKED K. KIM	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION		DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 21		BRIDGE NO. 53E0193 POST MILE 5.13	SOUND WALL NO. 291 STRUCTURE PLAN NO. 7	
	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3			UNIT: 3623 PROJECT NUMBER & PHASE: 0700001834 & 1 CONTRACT NO.: 07-215941	DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES 09/20/11 11/25/11 12/27/11 03/22/12 SHEET 11 OF 71
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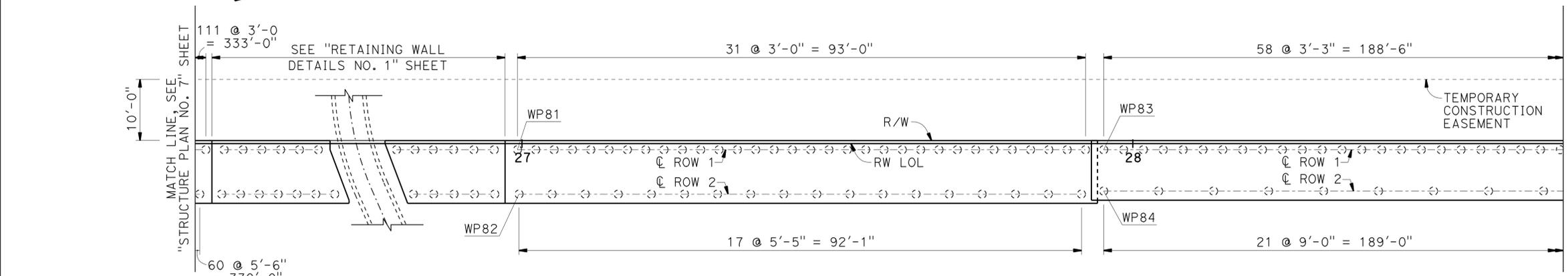
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1538	1597

REGISTERED CIVIL ENGINEER **Frank H. Wei** DATE 12/12/11
 PLANS APPROVAL DATE 4-9-12
 No. C 52918 Exp. 12-31-12
 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.

WORKING POINT	RW LOL STATION AND OFFSET
WP81	26+99.26, 1.00' Rt
WP82	26+99.51, 8.25' Rt
WP83	27+95.24, 1.00' Rt
WP84	27+95.24, 7.75' Rt



DEVELOPED ELEVATION
1" = 10'



PLAN
1" = 10'

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

- NOTES:
- For Sound Wall and Barrier Details, see "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 1" and "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 2" sheets.
 - For retaining wall details, see "RETAINING WALL TYPE 5SBWP WITH CIDH - DETAILS NO. 1" and "RETAINING WALL TYPE 5SBWP WITH CIDH - DETAILS NO. 2" sheets.
 - For Expansion Joint details in the Masonry Block Soundwall, see "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 1" and "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 2" sheets.
 - See "GENERAL PLAN" for RW LOL alignment information.
 - See "INDEX TO PLANS" sheet for Pile Data Table.

LEGEND:
⊃ Denotes 16" CIDH

DESIGN	BY C. VILLALOBOS	CHECKED F. WEI	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 21	BRIDGE NO.	SOUND WALL NO. 291 STRUCTURE PLAN NO. 8
DETAILS	BY J. VALENCIA	CHECKED F. WEI			53E0193	
QUANTITIES	BY C. VILLALOBOS	CHECKED K. KIM			POST MILE 5.13	

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS UNIT: 3623 PROJECT NUMBER & PHASE: 0700001834 & 1 CONTRACT NO.: 07-215941 DISREGARD PRINTS BEARING EARLIER REVISION DATES

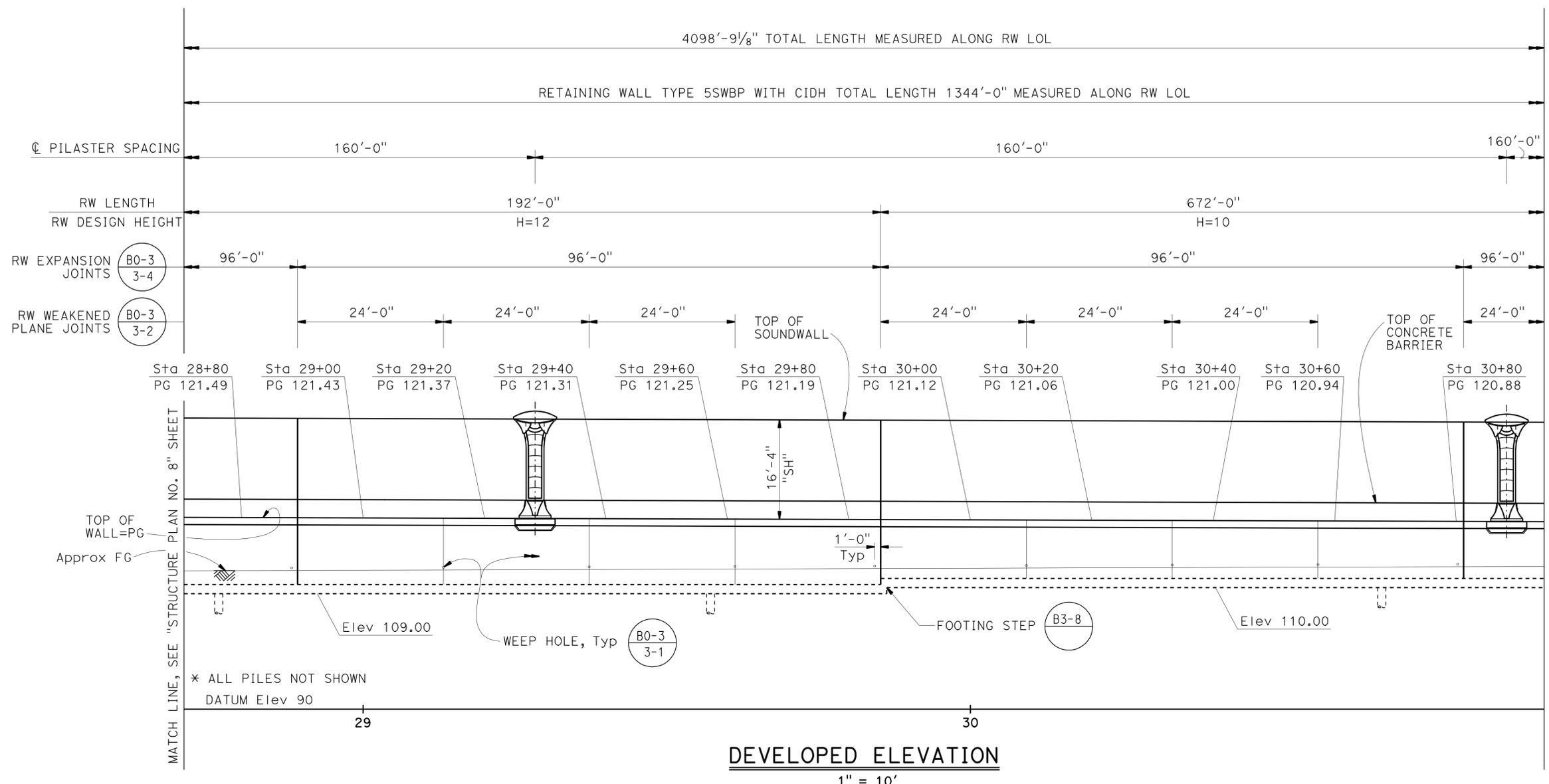
REVISION DATES	SHEET	OF
09/20/11 11/25/11 12/27/11 03/22/12	12	71

FILE => 53-E0193-c-sp08.dgn

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1539	1597

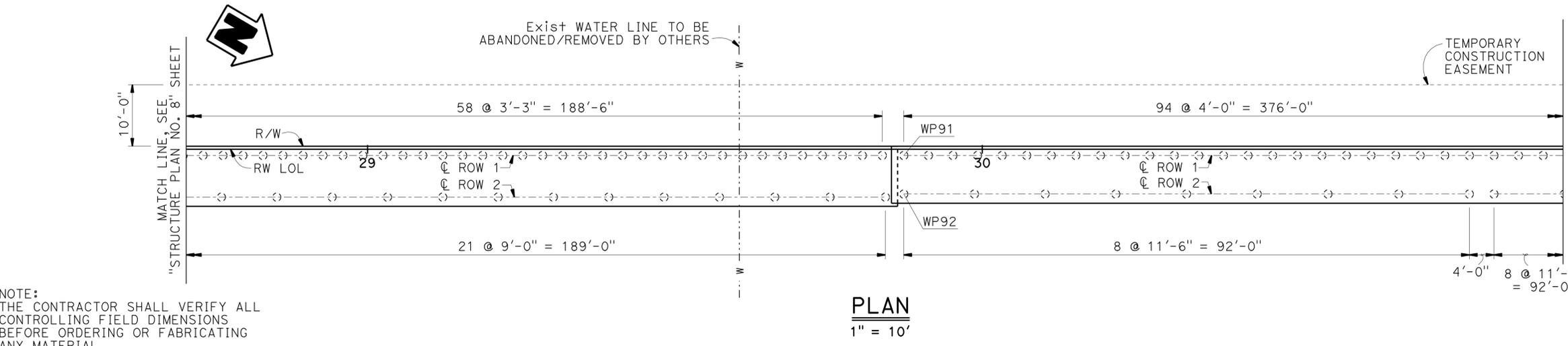
Frank H. Wei 12/12/11
 REGISTERED CIVIL ENGINEER DATE
 4-9-12
 PLANS APPROVAL DATE
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

WORKING POINT	RW LOL STATION AND OFFSET
WP91	29+87.24, 1.00' R+
WP92	29+87.24, 7.25' R+



- NOTES:
- For Sound Wall and Barrier Details, see "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 1" and "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 2" sheets.
 - For retaining wall details, see "RETAINING WALL TYPE 5SBWP WITH CIDH - DETAILS NO. 1" and "RETAINING WALL TYPE 5SBWP WITH CIDH - DETAILS NO. 2" sheets.
 - For Expansion Joint details in the Masonry Block Soundwall, see "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 1" and "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 2" sheets.
 - See "GENERAL PLAN" for RW LOL alignment information.
 - See "INDEX TO PLANS" sheet for Pile Data Table.

LEGEND:
 ◊ Denotes 16" CIDH

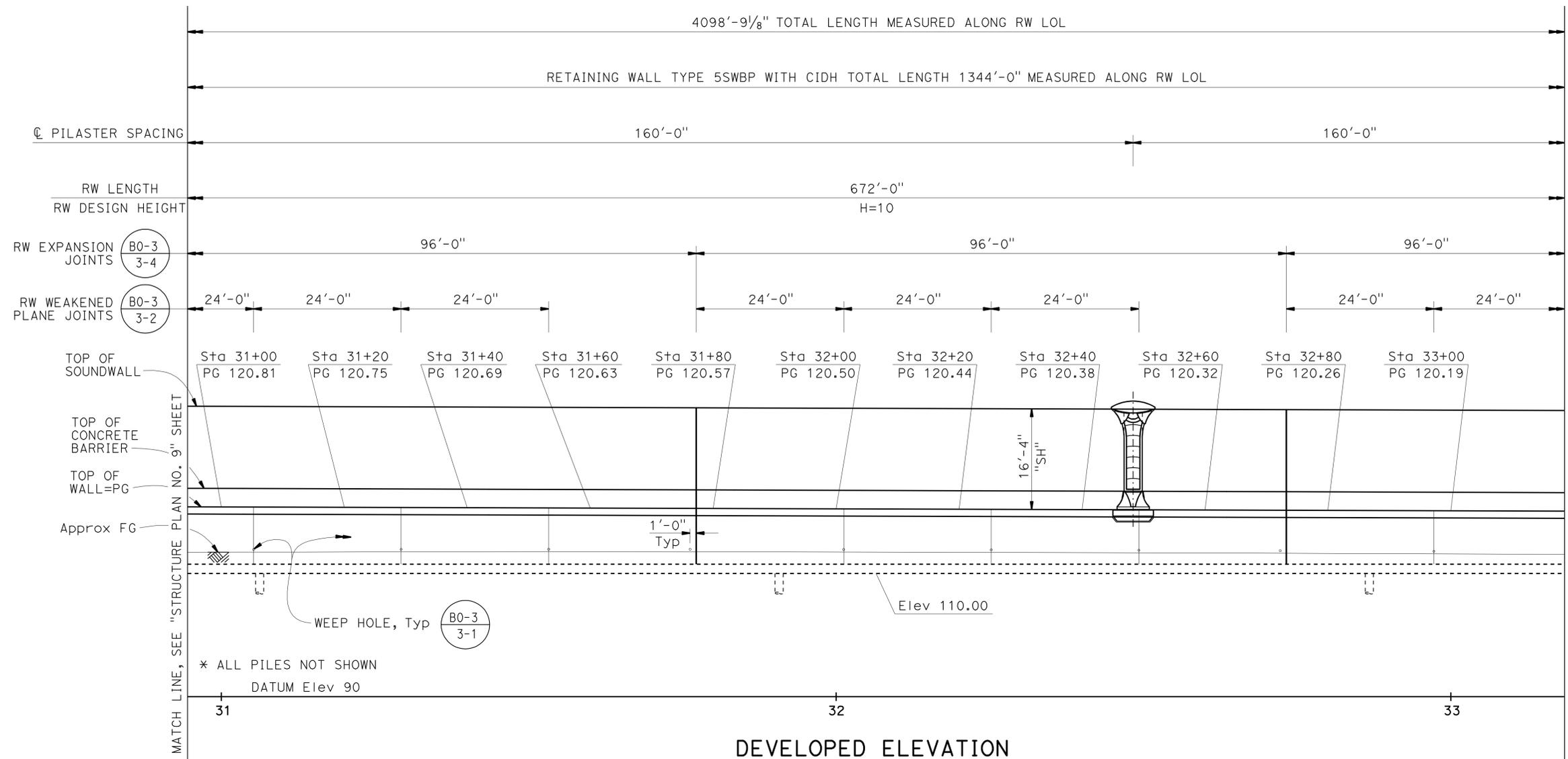


NOTE:
 THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

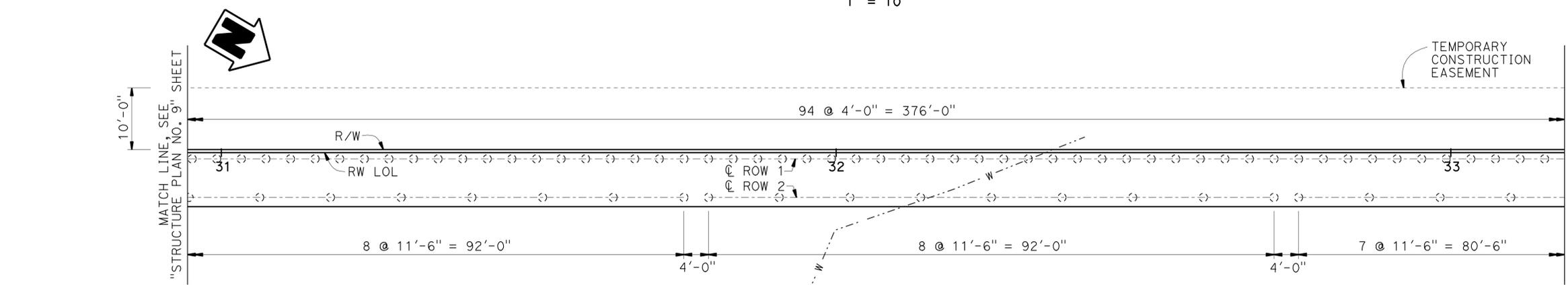
DESIGN	BY C. VILLALOBOS	CHECKED F. WEI	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 21	BRIDGE NO.	53E0193
DETAILS	BY J. VALENCIA	CHECKED F. WEI			POST MILE	5.13
QUANTITIES	BY C. VILLALOBOS	CHECKED K. KIM				

SOUND WALL NO. 291
STRUCTURE PLAN NO. 9

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1540	1597
			DATE		
			2/12/11		
			REGISTERED CIVIL ENGINEER		
			PLANS APPROVAL DATE		
			4-9-12		
			REGISTERED PROFESSIONAL ENGINEER		
			FRANK H. WEI		
			No. C 52918		
			Exp. 12-31-12		
			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.					



- NOTES:
- For Sound Wall and Barrier Details, see "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 1" and "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 2" sheets.
 - For retaining wall details, see "RETAINING WALL TYPE 5SWBP WITH CIDH - DETAILS NO. 1" and "RETAINING WALL TYPE 5SWBP WITH CIDH - DETAILS NO. 2" sheets.
 - For Expansion Joint details in the Masonry Block Soundwall, see "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 1" and "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 2" sheets.
 - See "GENERAL PLAN" for RW LOL alignment information.
 - See "INDEX TO PLANS" sheet for Pile Data Table.
- LEGEND:
- Denotes 16" CIDH



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

DESIGN	BY C. VILLALOBOS	CHECKED F. WEI
DETAILS	BY J. VALENCIA	CHECKED F. WEI
QUANTITIES	BY C. VILLALOBOS	CHECKED K. KIM

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

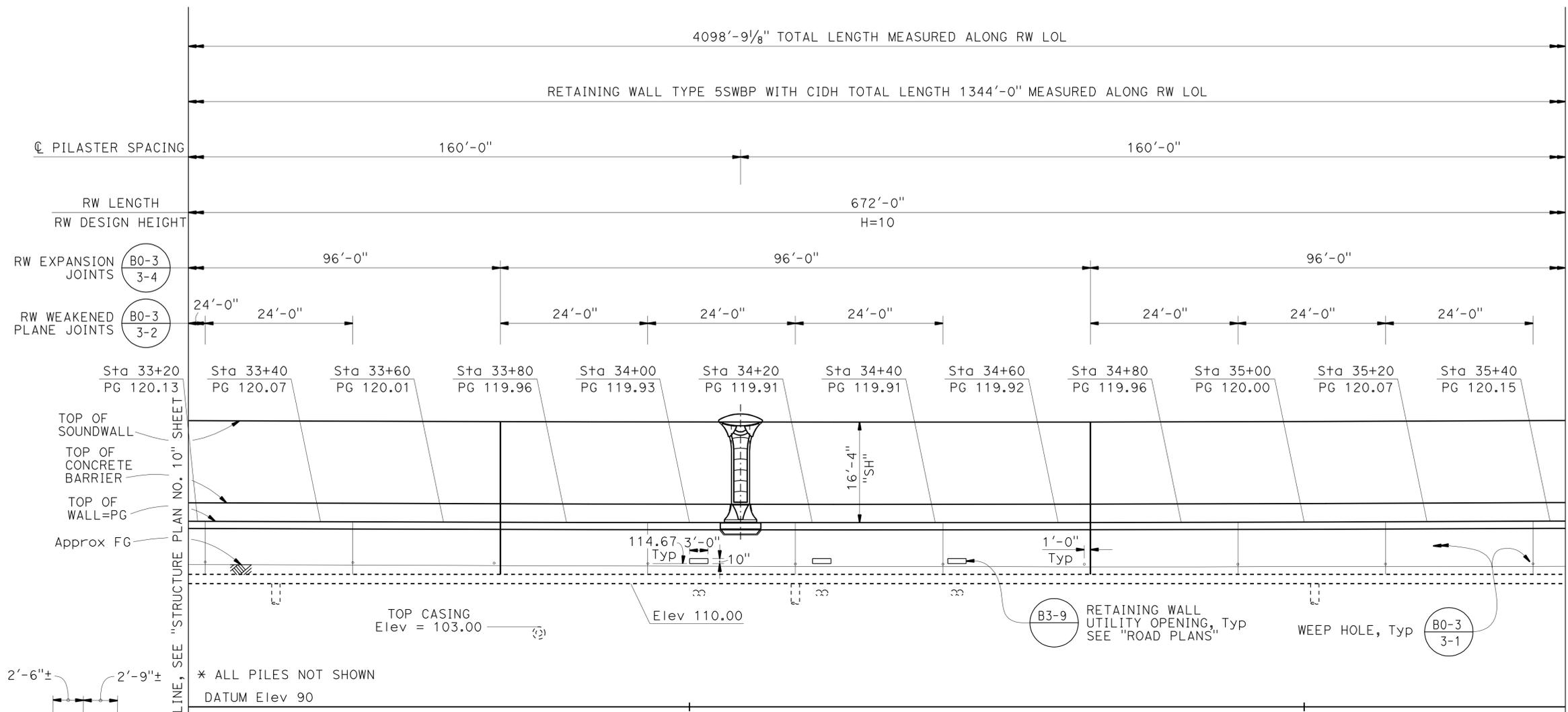
DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 21

BRIDGE NO.	53E0193
POST MILE	5.13

SOUND WALL NO. 291
STRUCTURE PLAN NO. 10

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1541	1597

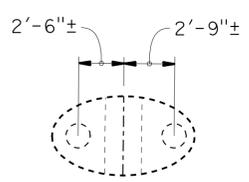
Frank H. Wei 12/12/11
 REGISTERED CIVIL ENGINEER DATE
 4-9-12
 PLANS APPROVAL DATE
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



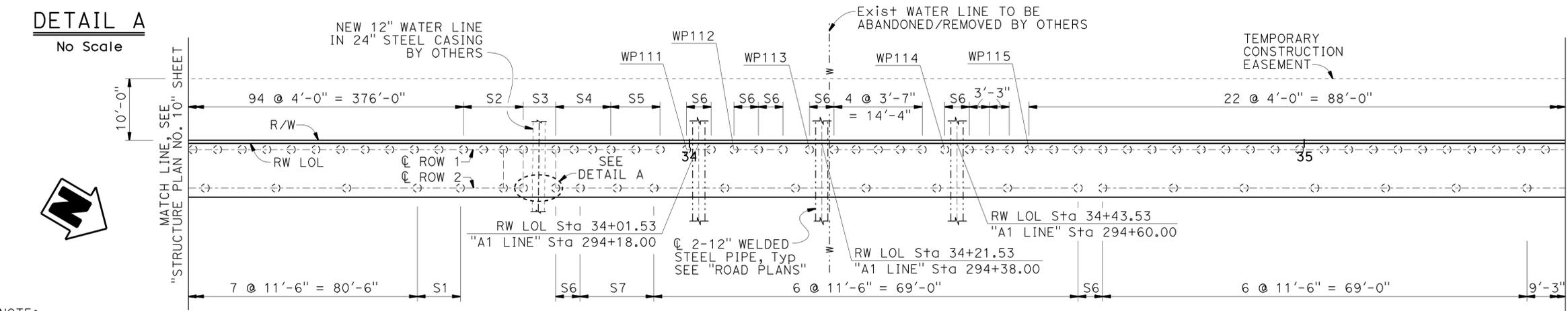
- NOTES:
- For Sound Wall and Barrier Details, see "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 1" and "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 2" sheets.
 - For retaining wall details, see "RETAINING WALL TYPE 5SWBP WITH CIDH - DETAILS NO. 1" and "RETAINING WALL TYPE 5SWBP WITH CIDH - DETAILS NO. 2" sheets.
 - For Expansion Joint details in the Masonry Block Soundwall, see "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 1" and "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 2" sheets.
 - See "GENERAL PLAN" for RW LOL alignment information.
 - See "INDEX TO PLANS" sheet for Pile Data Table.

LEGEND:
 () Denotes 16" CIDH

WORKING POINT	RW LOL STATION AND OFFSET
WP111	33+99.53, 1.00' Rt
WP112	34+07.24, 1.00' Rt
WP113	34+19.53, 1.00' Rt
WP114	34+41.53, 1.00' Rt
WP115	34+55.24, 1.00' Rt



DEVELOPED ELEVATION
 1" = 10'



PLAN
 1" = 10'

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

DESIGN	BY C. VILLALOBOS	CHECKED F. WEI	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 21	BRIDGE NO.	SOUND WALL NO. 291 STRUCTURE PLAN NO. 11
DETAILS	BY J. VALENCIA	CHECKED F. WEI			53E0193	
QUANTITIES	BY C. VILLALOBOS	CHECKED K. KIM			POST MILE 5.13	

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

0 1 2 3

UNIT: 3623
 PROJECT NUMBER & PHASE: 0700001834 & 1 CONTRACT NO.: 07-215941

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
09/20/11 11/25/11 12/27/11 03/22/12	15	71

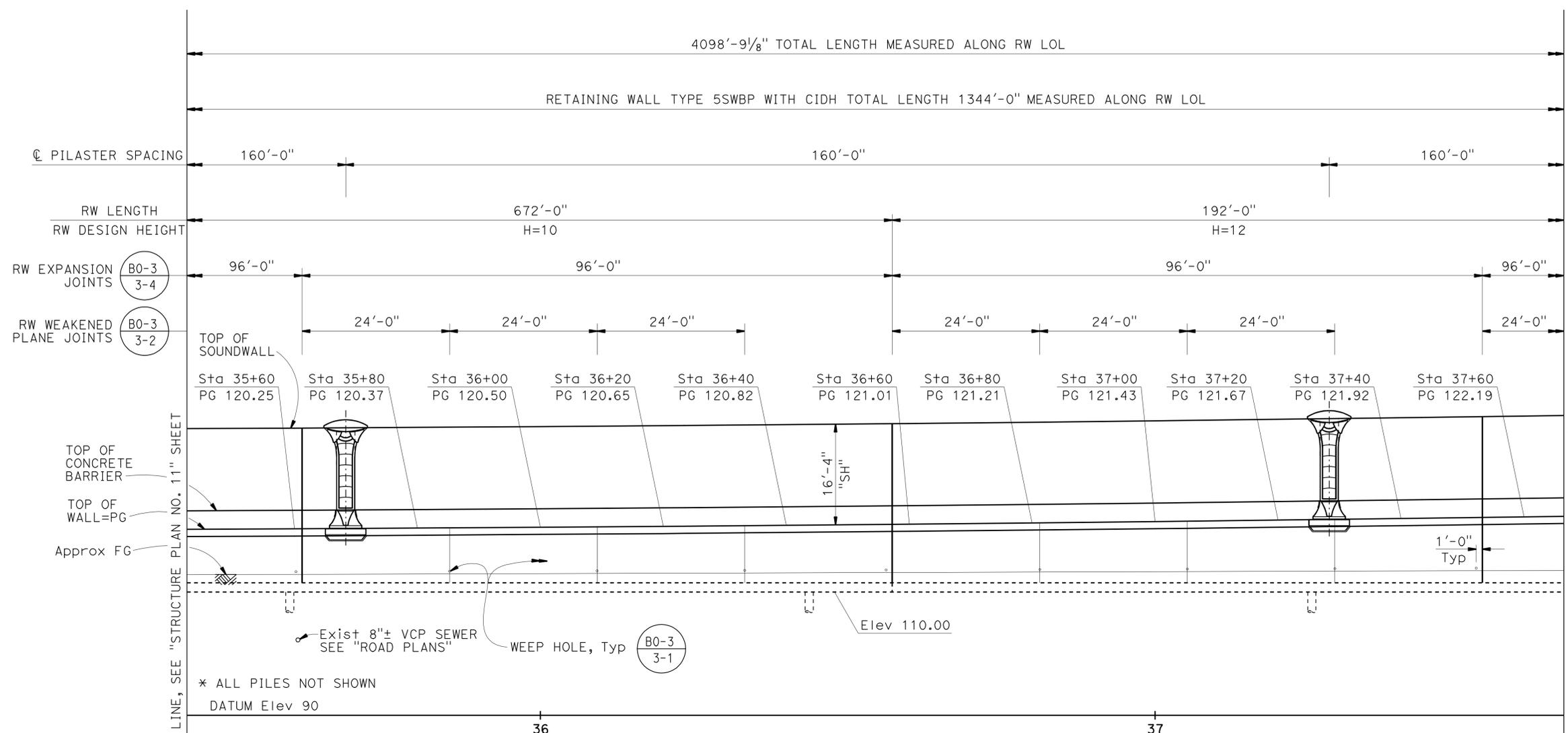
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1542	1597

Frank H. Wei 12/12/11
 REGISTERED CIVIL ENGINEER DATE
 4-9-12
 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.

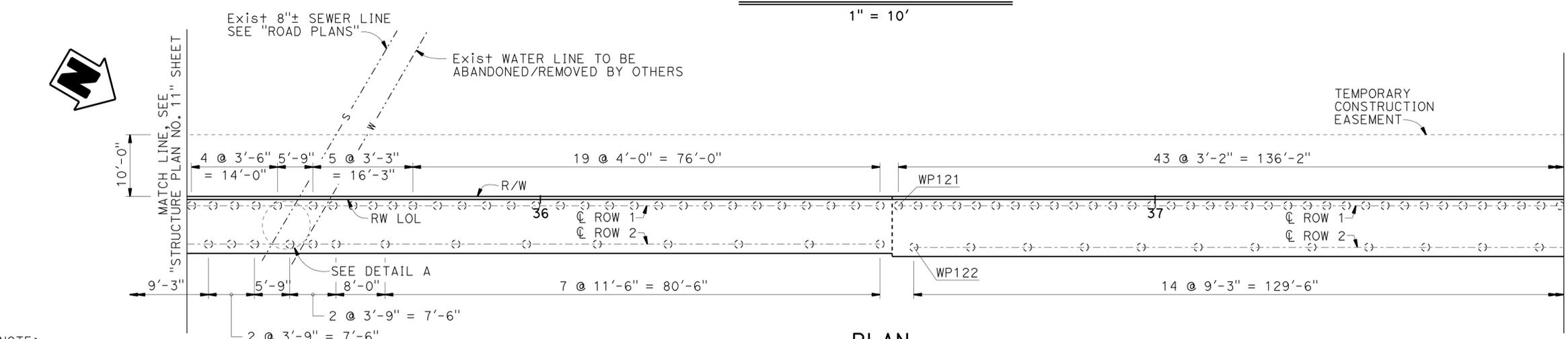
WORKING POINT	RW LOL STATION AND OFFSET
WP121	36+58.24, 1.00' R+
WP122	36+60.74, 7.75' R+

- NOTES:
- For Sound Wall and Barrier Details, see "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 1" and "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 2" sheets.
 - For retaining wall details, see "RETAINING WALL TYPE 5SBWP WITH CIDH - DETAILS NO. 1" and "RETAINING WALL TYPE 5SBWP WITH CIDH - DETAILS NO. 2" sheets.
 - For Expansion Joint details in the Masonry Block Soundwall, see "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 1" and "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 2" sheets.
 - See "GENERAL PLAN" for RW LOL alignment information.
 - See "INDEX TO PLANS" sheet for Pile Data Table.

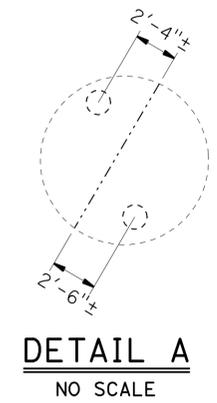
LEGEND:
 ⦶ Denotes 16" CIDH



DEVELOPED ELEVATION
 1" = 10'



PLAN
 1" = 10'



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

DESIGN	BY C. VILLALOBOS	CHECKED F. WEI
DETAILS	BY J. VALENCIA	CHECKED F. WEI
QUANTITIES	BY C. VILLALOBOS	CHECKED K. KIM

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

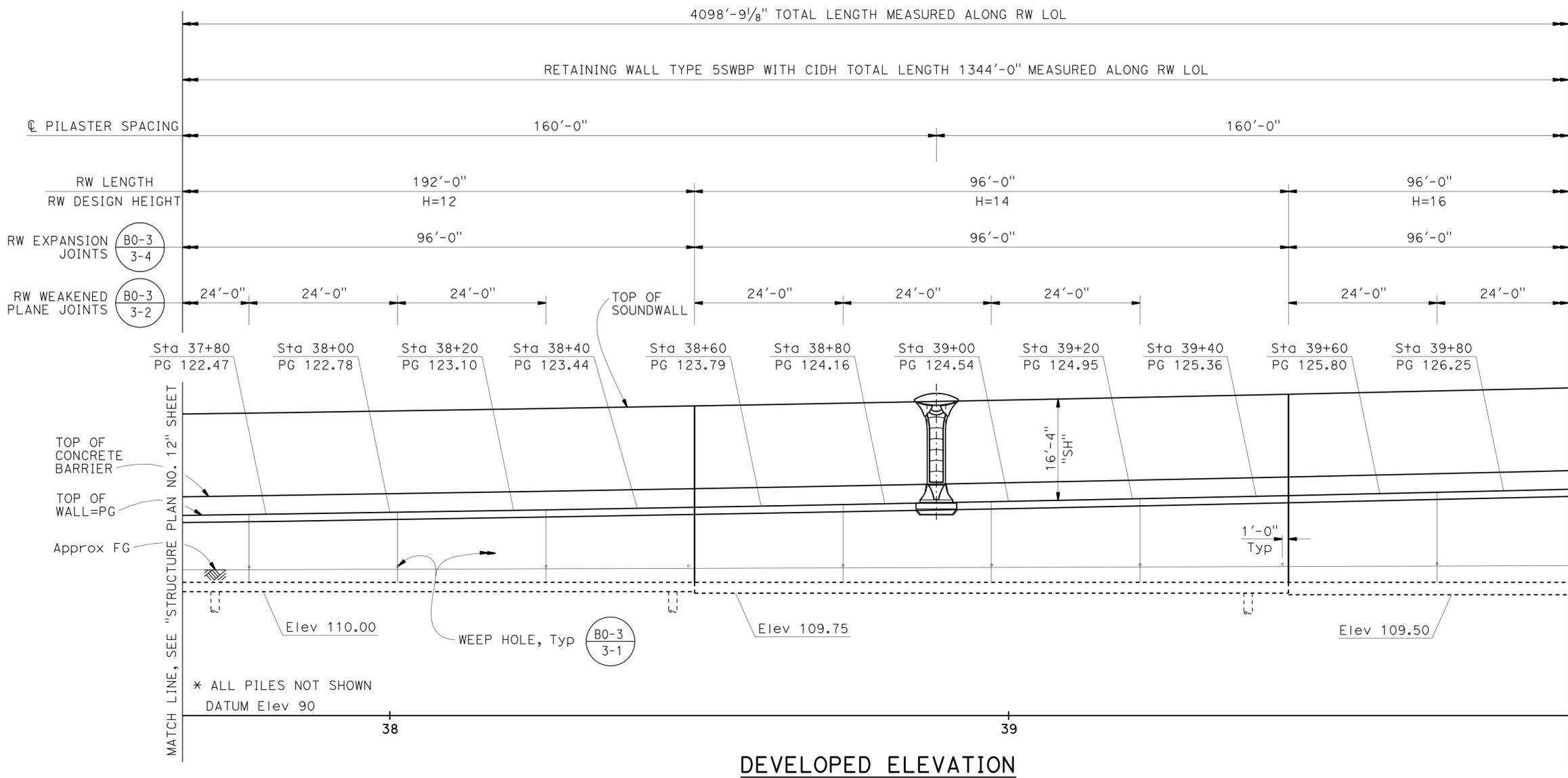
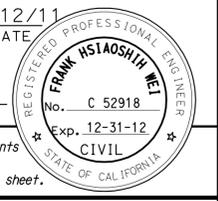
DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 21

BRIDGE NO.	53E0193
POST MILE	5.13

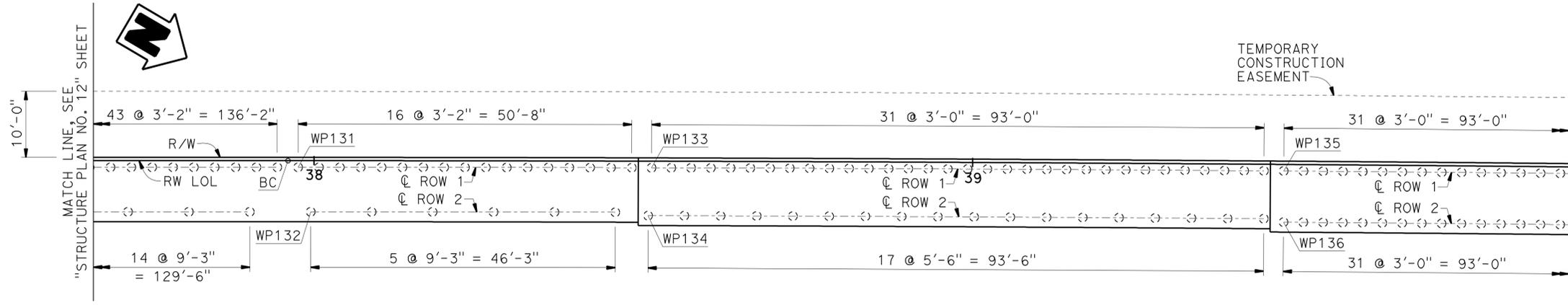
SOUND WALL NO. 291
STRUCTURE PLAN NO. 12

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1543	1597

Frank H. Wei 12/12/11
 REGISTERED CIVIL ENGINEER DATE
 4-9-12
 PLANS APPROVAL DATE
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DEVELOPED ELEVATION
1" = 10'



PLAN
1" = 10'

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

WORKING POINT	RW LOL STATION AND OFFSET
WP131	37+97.57, 1.00' Rt
WP132	37+99.49, 7.75' Rt
WP133	38+51.24, 1.00' Rt
WP134	38+50.74, 8.25' Rt
WP135	39+47.25, 1.00' Rt
WP136	39+47.28, 8.75' Rt

- NOTES:
- For Sound Wall and Barrier Details, see "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 1" and "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 2" sheets.
 - For retaining wall details, see "RETAINING WALL TYPE 5SBWP WITH CIDH - DETAILS NO. 1" and "RETAINING WALL TYPE 5SBWP WITH CIDH - DETAILS NO. 2" sheets.
 - For Expansion Joint details in the Masonry Block Soundwall, see "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 1" and "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 2" sheets.
 - See "GENERAL PLAN" for RW LOL alignment information.
 - See "INDEX TO PLANS" sheet for Pile Data Table.

LEGEND:
⊙ Denotes 16" CIDH

DESIGN	BY C. VILLALOBOS	CHECKED F. WEI	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 21	BRIDGE NO.	53E0193	SOUND WALL NO. 291 STRUCTURE PLAN NO. 13
DETAILS	BY J. VALENCIA	CHECKED F. WEI			POST MILE	5.13	
QUANTITIES	BY C. VILLALOBOS	CHECKED K. KIM					

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3 UNIT: 3623 PROJECT NUMBER & PHASE: 0700001834 & 1 CONTRACT NO.: 07-215941 DISREGARD PRINTS BEARING EARLIER REVISION DATES

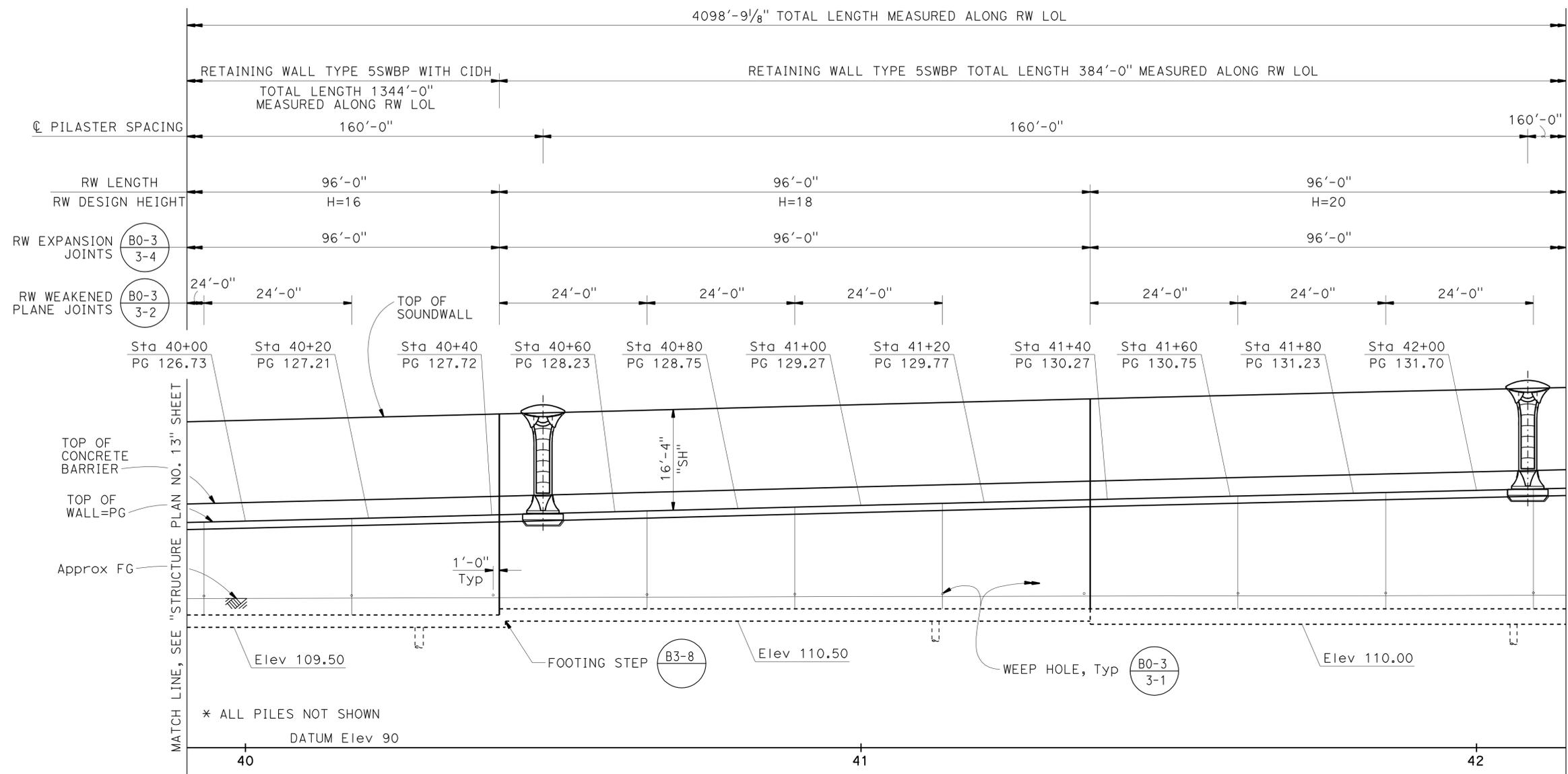
REVISION DATES	SHEET	OF
09/26/11 11/25/11 12/27/11 03/22/12	17	71

FILE => 53-E0193-c-sp13.dgn

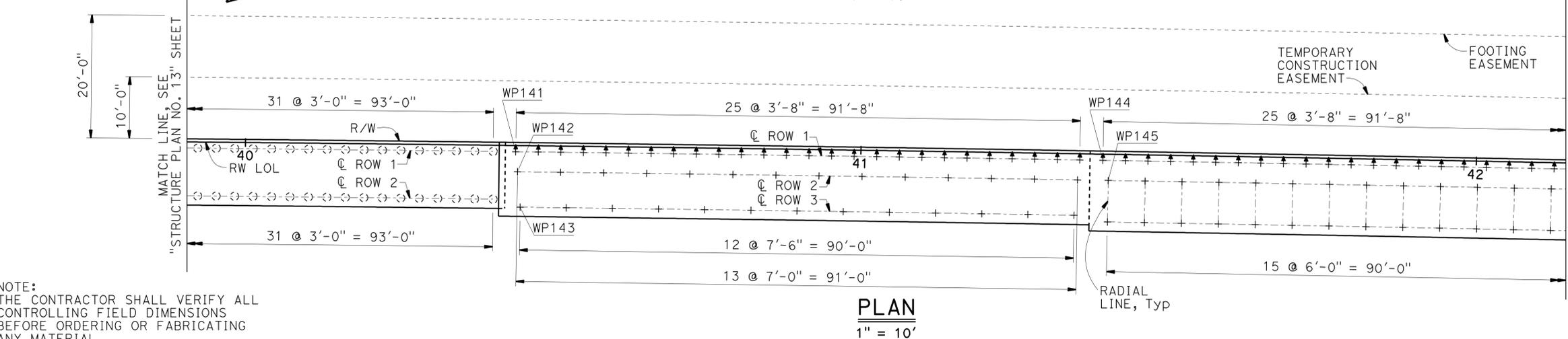
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1544	1597

REGISTERED CIVIL ENGINEER **Frank H. Wei** DATE 12/12/11
 PLANS APPROVAL DATE 4-9-12
 No. C 52918
 Exp. 12-31-12
 CIVIL
 STATE OF CALIFORNIA

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DEVELOPED ELEVATION
1" = 10'



PLAN
1" = 10'

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

WORKING POINT	RW LOL STATION AND OFFSET
WP141	40+43.91, 1.00' Rt
WP142	40+44.24, 4.25' Rt
WP143	40+44.74, 10.00' Rt
WP144	41+39.33, 1.00' Rt
WP145	41+40.24, 4.25' Rt

- NOTES:
- For Sound Wall and Barrier Details, see "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 1" and "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 2" sheets.
 - For retaining wall details, see "RETAINING WALL TYPE 5SBWP WITH CIDH - DETAILS NO. 1", "RETAINING WALL TYPE 5SBWP WITH CIDH - DETAILS NO. 2", "RETAINING WALL TYPE 5SBWP - DETAILS NO. 1" and "RETAINING WALL TYPE 5SBWP - DETAILS NO. 2" sheets.
 - For Expansion Joint details in the Masonry Block Soundwall, see "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 1" and "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 2" sheets.
 - See "GENERAL PLAN" for RW LOL alignment information.
 - See "INDEX TO PLANS" sheet for Pile Data Table.

- LEGEND:
- ⊙ Denotes 16" CIDH
 - + Denotes Vertical Pile
 - ⚡ Denotes 1:3 Battered Pile

DESIGN	BY C. VILLALOBOS	CHECKED F. WEI
DETAILS	BY J. VALENCIA	CHECKED F. WEI
QUANTITIES	BY C. VILLALOBOS	CHECKED K. KIM

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 21

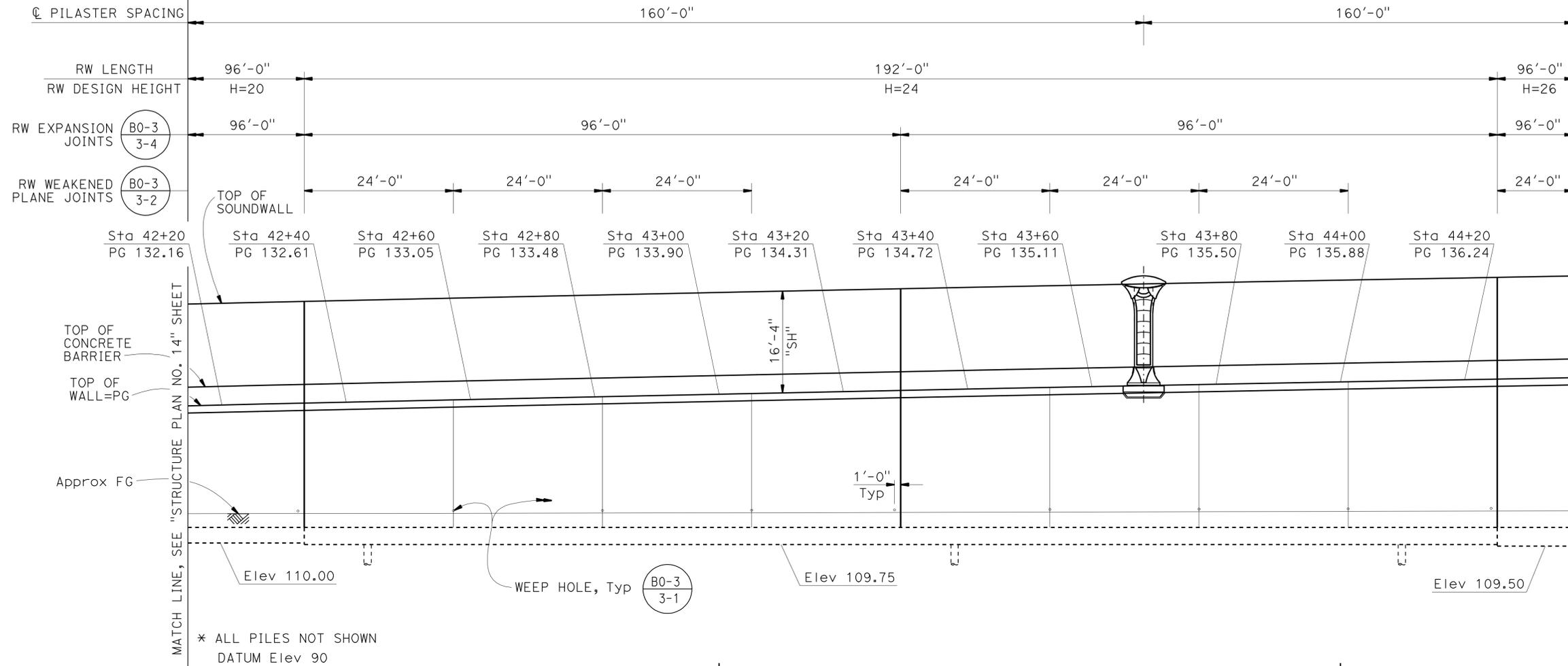
BRIDGE NO.	53E0193
POST MILE	5.13

SOUND WALL NO. 291
STRUCTURE PLAN NO. 14

4098'-9¹/₈" TOTAL LENGTH MEASURED ALONG RW LOL

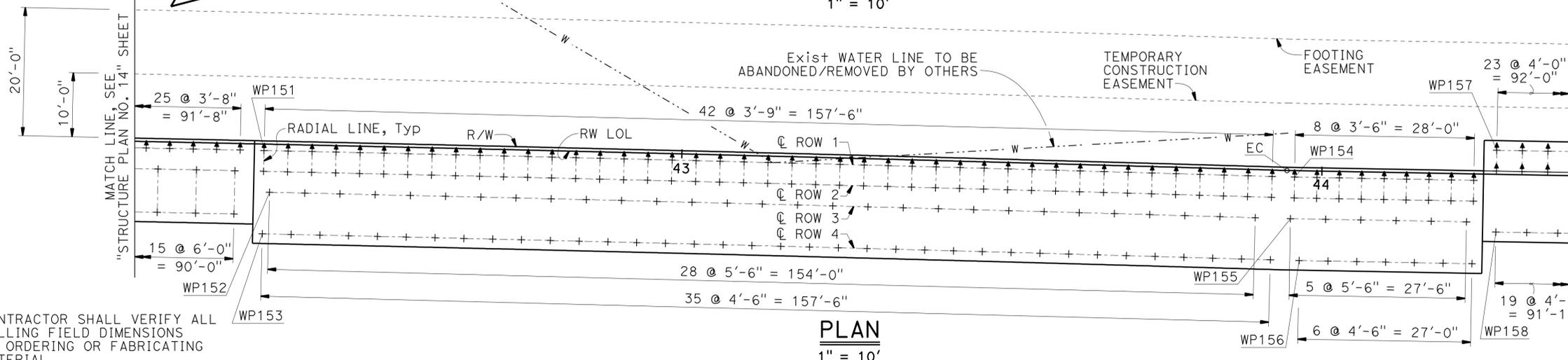
RETAINING WALL TYPE 5SWBP TOTAL LENGTH 384'-0" MEASURED ALONG RW LOL

RETAINING WALL TYPE 1SWBP
TOTAL LENGTH 360'-0"
MEASURED ALONG RW LOL



DEVELOPED ELEVATION

1" = 10'



PLAN

1" = 10'

NOTE:
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CONTROLLING FIELD DIMENSIONS
BEFORE ORDERING OR FABRICATING
ANY MATERIAL.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1545	1597

REGISTERED CIVIL ENGINEER DATE 2/12/11
 FRANK H. WEI
 No. C 52918
 Exp. 12-31-12
 CIVIL
 STATE OF CALIFORNIA

4-9-12
 PLANS APPROVAL DATE

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WORKING POINT	RW LOL STATION AND OFFSET
WP151	42+34.74, 1.00' Rt
WP152	42+35.74, 7.50' Rt
WP153	42+34.74, 14.00' Rt
WP154	43+95.73, 1.00' Rt
WP155	43+95.21, 7.50' Rt
WP156	43+96.68, 14.00' Rt
WP157	44+27.24, 3.75' Lt
WP158	44+27.32, 9.00' Rt

NOTES:

- For Sound Wall and Barrier Details, see "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 1" and "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 2" sheets.
- For retaining wall details, see "RETAINING WALL TYPE 5SWBP - DETAILS NO. 1", "RETAINING WALL TYPE 5SWBP - DETAILS NO. 2", "RETAINING WALL TYPE 1SWBP - DETAILS NO. 1" and "RETAINING WALL TYPE 1SWBP - DETAILS NO. 2" sheets.
- For Expansion Joint details in the Masonry Block Soundwall, see "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 1" and "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 2" sheets.
- See "GENERAL PLAN" for RW LOL alignment information.
- See "INDEX TO PLANS" sheet for Pile Data Table.

LEGEND:

- + Denotes Vertical Pile
- ↑ Denotes 1:3 Battered Pile

DESIGN	BY C. VILLALOBOS	CHECKED F. WEI
DETAILS	BY J. VALENCIA	CHECKED F. WEI
QUANTITIES	BY C. VILLALOBOS	CHECKED K. KIM

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 21

BRIDGE NO.	53E0193
POST MILE	5.13

SOUND WALL NO. 291
STRUCTURE PLAN NO. 15

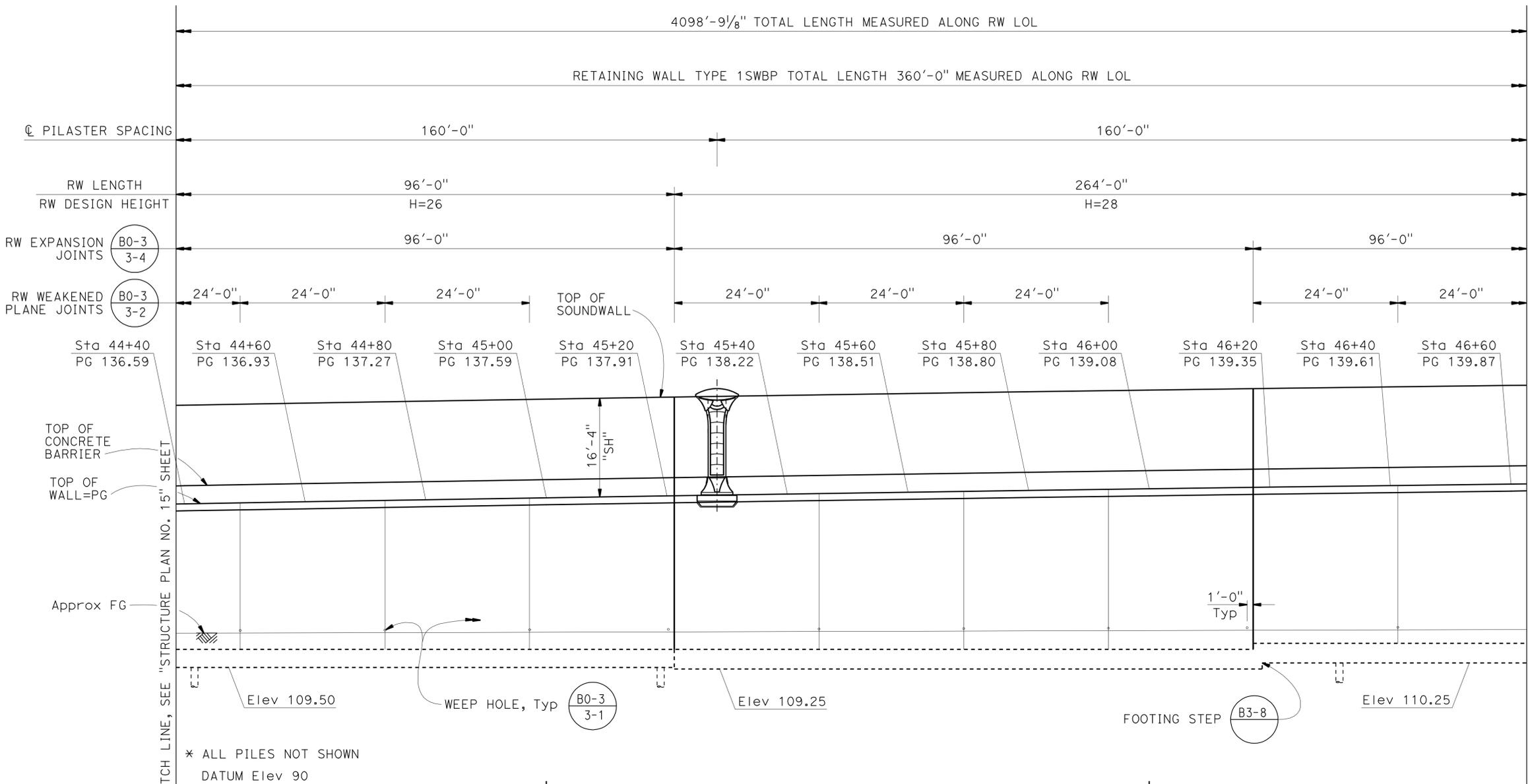
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1546	1597

REGISTERED CIVIL ENGINEER DATE 12/12/11
 FRANK H. WEI
 No. C 52918
 Exp. 12-31-12
 CIVIL
 STATE OF CALIFORNIA

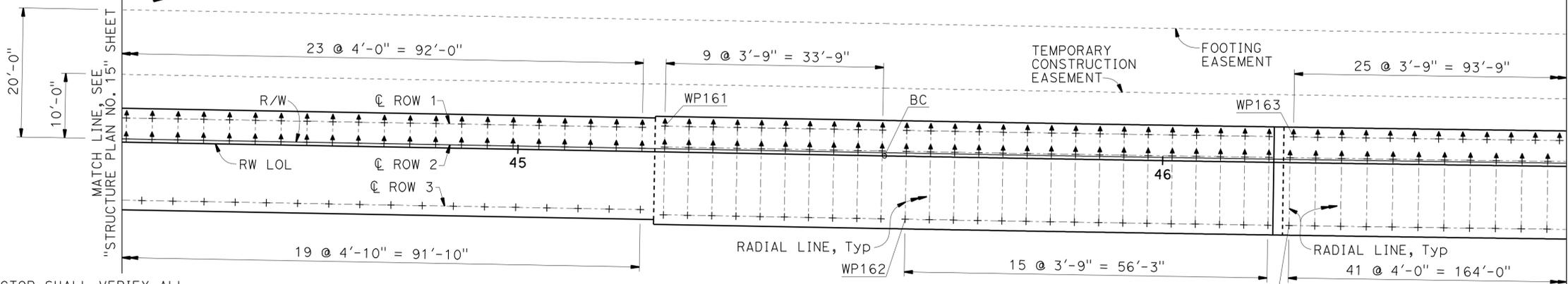
4-9-12
PLANS APPROVAL DATE

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.

WORKING POINT	RW LOL STATION AND OFFSET
WP161	45+22.74, 4.00' Lt
WP162	45+60.23, 9.75' Rt
WP163	46+20.24, 4.00' Lt
WP164	46+19.73, 9.75' Rt



DEVELOPED ELEVATION
1" = 10'



PLAN
1" = 10'

- NOTES:
- For Sound Wall and Barrier Details, see "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 1" and "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 2" sheets.
 - For retaining wall details, see "RETAINING WALL TYPE 1SWBP - DETAILS NO. 1" and "RETAINING WALL TYPE 1SWBP - DETAILS NO. 2" sheets.
 - For Expansion Joint details in the Masonry Block Soundwall, see "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 1" and "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 2" sheets.
 - See "GENERAL PLAN" for RW LOL alignment information.
 - See "INDEX TO PLANS" sheet for Pile Data Table.
- LEGEND:
- + Denotes Vertical Pile
 - ↑ Denotes 1:3 Battered Pile

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

DESIGN	BY C. VILLALOBOS	CHECKED F. WEI	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 21	BRIDGE NO.	SOUND WALL NO. 291 STRUCTURE PLAN NO. 16
DETAILS	BY J. VALENCIA	CHECKED F. WEI			53E0193	
QUANTITIES	BY C. VILLALOBOS	CHECKED K. KIM			POST MILE 5.13	

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS UNIT: 3623 PROJECT NUMBER & PHASE: 0700001834 & 1 CONTRACT NO.: 07-215941 DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
09/20/11 11/25/11 12/27/11 03/22/12	20	71

FILE => 53-E0193-c-sp16.dgn

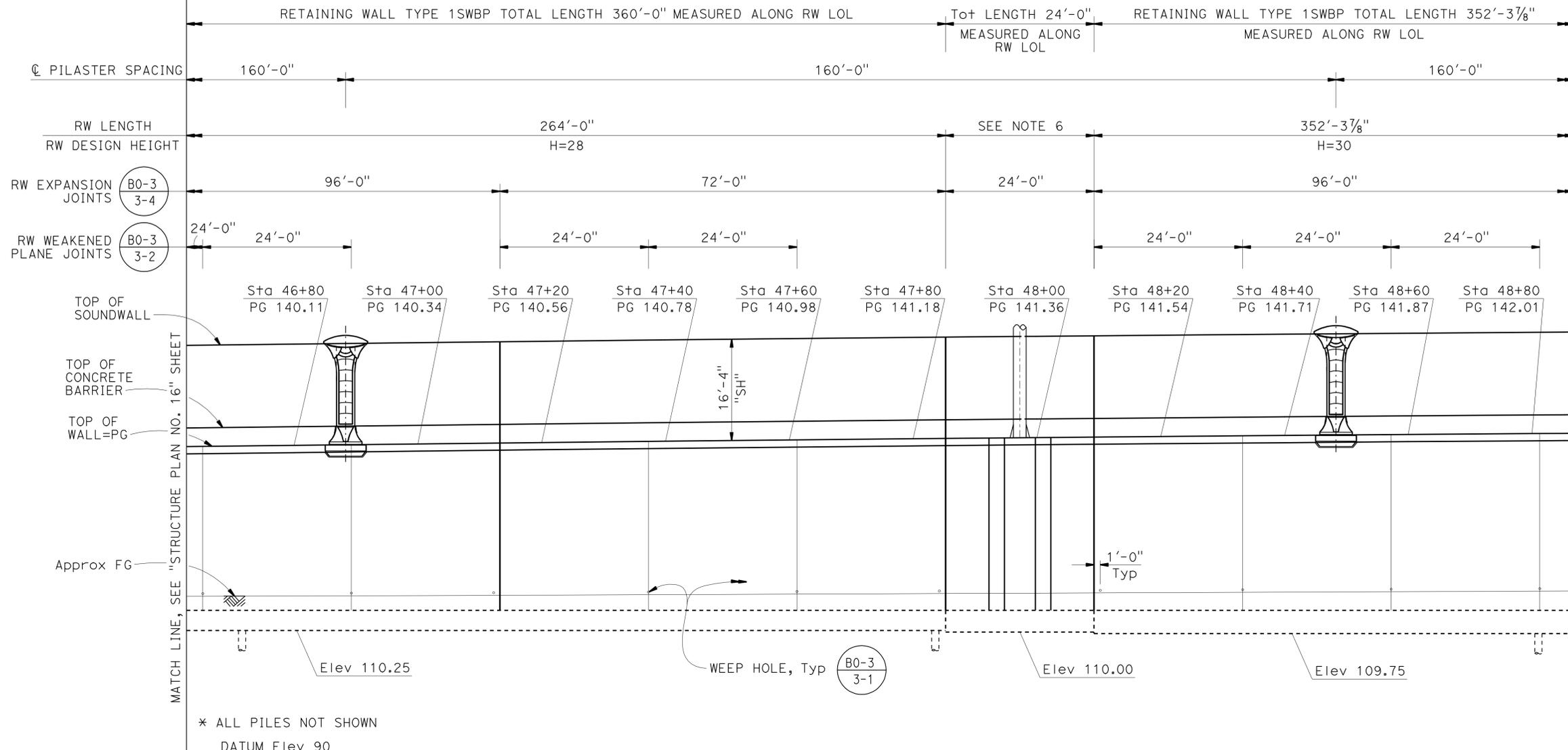
4098'-9 1/8" TOTAL LENGTH MEASURED ALONG RW LOL

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1547	1597

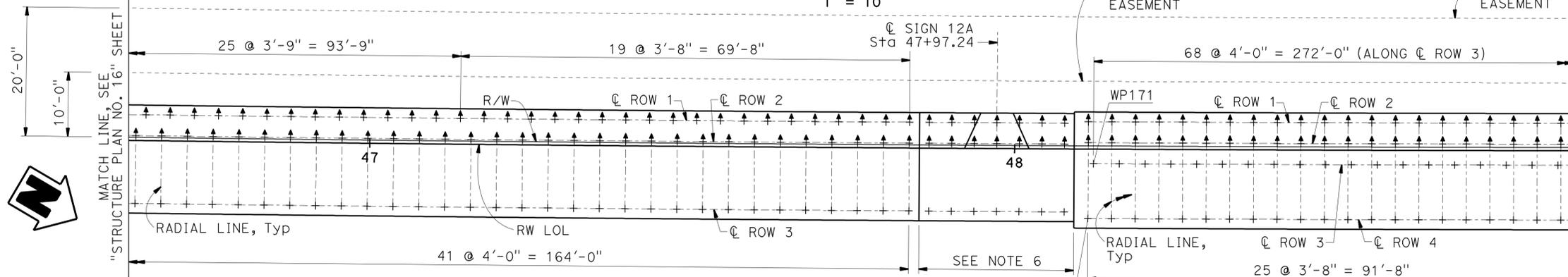
Frank H. Wei
 REGISTERED CIVIL ENGINEER DATE 12/12/11
 No. C 52918
 Exp. 12-31-12
 CIVIL
 STATE OF CALIFORNIA

4-9-12
PLANS APPROVAL DATE

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DEVELOPED ELEVATION
1" = 10'



PLAN
1" = 10'

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

- NOTES:
- For Sound Wall and Barrier Details, see "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 1" and "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 2" sheets.
 - For retaining wall details, see "RETAINING WALL TYPE 1SBWP - DETAILS NO. 1" and "RETAINING WALL TYPE 1SBWP - DETAILS NO. 2" sheets.
 - For Expansion Joint details in the Masonry Block Soundwall, see "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 1" and "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 2" sheets.
 - See "GENERAL PLAN" for RW LOL alignment information.
 - See "INDEX TO PLANS" sheet for Pile Data Table.
 - See "RETAINING WALL DETAILS AT SIGN 12A" sheet.
- LEGEND:
- + Denotes Vertical Pile
 - ‡ Denotes 1:3 Battered Pile

WORKING POINT	RW LOL STATION AND OFFSET
WP171	48+12.24, 2.25' Rt
WP172	48+11.40, 10.75' Rt

DESIGN BY C. VILLALOBOS CHECKED F. WEI DETAILS BY J. VALENCIA CHECKED F. WEI QUANTITIES BY C. VILLALOBOS CHECKED K. KIM	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 21	BRIDGE NO. 53E0193	SOUND WALL NO. 291 STRUCTURE PLAN NO. 17
			POST MILE 5.13	
			UNIT: 3623 PROJECT NUMBER & PHASE: 0700001834 & 1 CONTRACT NO.: 07-215941	
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS			REVISION DATES 09/26/11 11/25/11 12/27/11 03/22/12	SHEET 21 OF 71

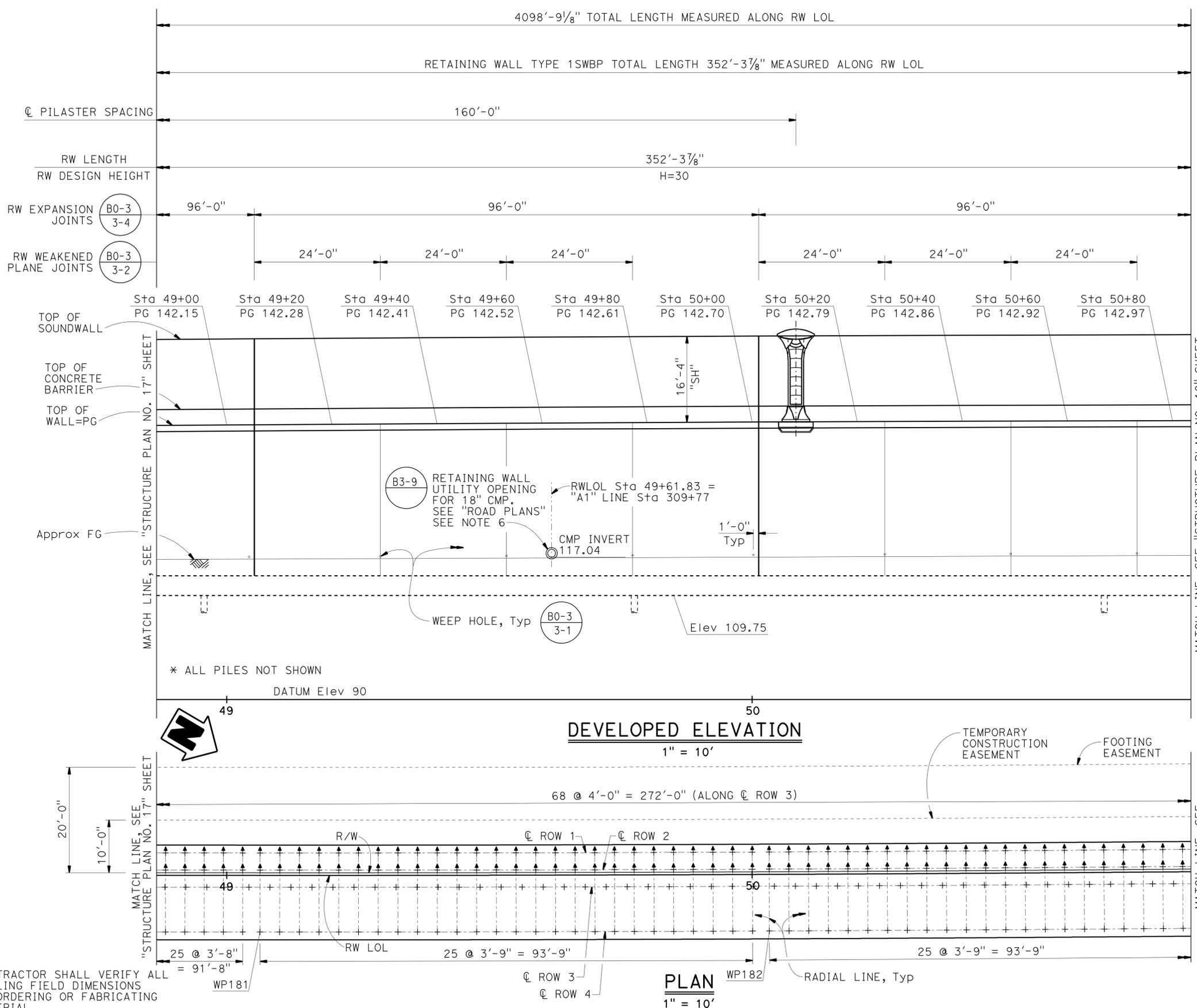
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1548	1597

REGISTERED CIVIL ENGINEER DATE 12/12/11
 FRANK H. WEI
 No. C 52918
 Exp. 12-31-12
 CIVIL
 STATE OF CALIFORNIA

4-9-12
 PLANS APPROVAL DATE

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WORKING POINT	RW LOL STATION AND OFFSET
WP181	49+06.34, 10.75' R+
WP182	50+03.23, 10.75' R+



- NOTES:
- For Sound Wall and Barrier Details, see "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 1" and "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 2" sheets.
 - For retaining wall details, see "RETAINING WALL TYPE 1SWBP - DETAILS NO. 1" and "RETAINING WALL TYPE 1SWBP - DETAILS NO. 2" sheets.
 - For Expansion Joint details in the Masonry Block Soundwall, see "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 1" and "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 2" sheets.
 - See "GENERAL PLAN" for RW LOL alignment information.
 - See "INDEX TO PLANS" sheet for Pile Data Table.
 - Seal utility with concrete or mortar after lightly wrapping with 2 layers of 15 LBS Building paper.

- LEGEND:
- + Denotes Vertical Pile
 - ⚡ Denotes 1:3 Battered Pile

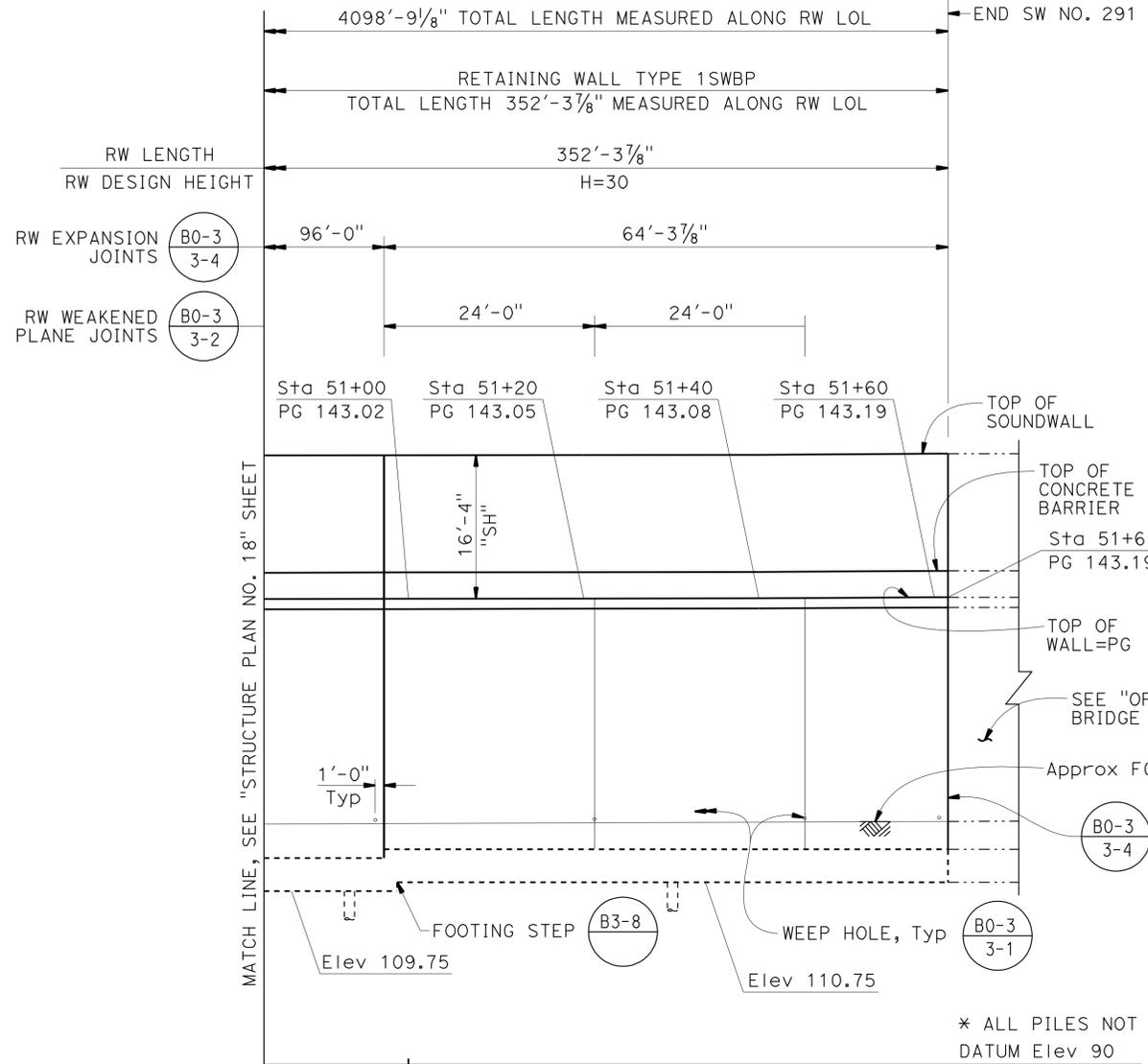
NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

DESIGN BY C. VILLALOBOS CHECKED F. WEI DETAILS BY J. VALENCIA CHECKED F. WEI QUANTITIES BY C. VILLALOBOS CHECKED K. KIM	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 21	BRIDGE NO. 53E0193	SOUND WALL NO. 291 STRUCTURE PLAN NO. 18
			POST MILE 5.13	
			UNIT: 3623 PROJECT NUMBER & PHASE: 0700001834 & 1 CONTRACT NO.: 07-215941	
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS			REVISION DATES 09/26/11 11/25/11 12/27/11 03/22/12	SHEET OF 22 71

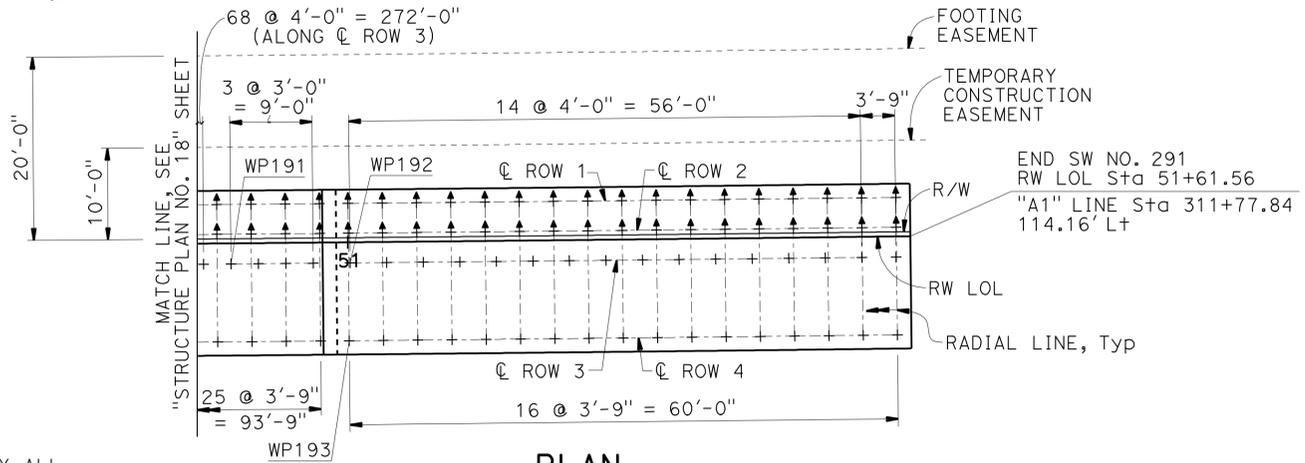
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)

FILE => 53-E0193-c-sp18.dgn

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1549	1597
REGISTERED CIVIL ENGINEER <i>Frank H. Wei</i> DATE 12/12/11			REGISTERED PROFESSIONAL ENGINEER No. C 52918 Exp. 12-31-12 CIVIL STATE OF CALIFORNIA		
PLANS APPROVAL DATE			4-9-12		
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DEVELOPED ELEVATION
1" = 10'



PLAN
1" = 10'

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

NOTES:

- For Sound Wall and Barrier Details, see "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 1" and "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 2" sheets.
- For retaining wall details, see "RETAINING WALL TYPE 1SBWP - DETAILS NO. 1" and "RETAINING WALL TYPE 1SBWP - DETAILS NO. 2" sheets.
- For Expansion Joint details in the Masonry Block Soundwall, see "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 1" and "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 2" sheets.
- See "GENERAL PLAN" for RW LOL alignment information.
- See "INDEX TO PLANS" sheet for Pile Data Table.

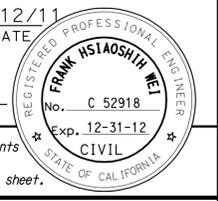
LEGEND:

- + Denotes Vertical Pile
- ‡ Denotes 1:3 Battered Pile

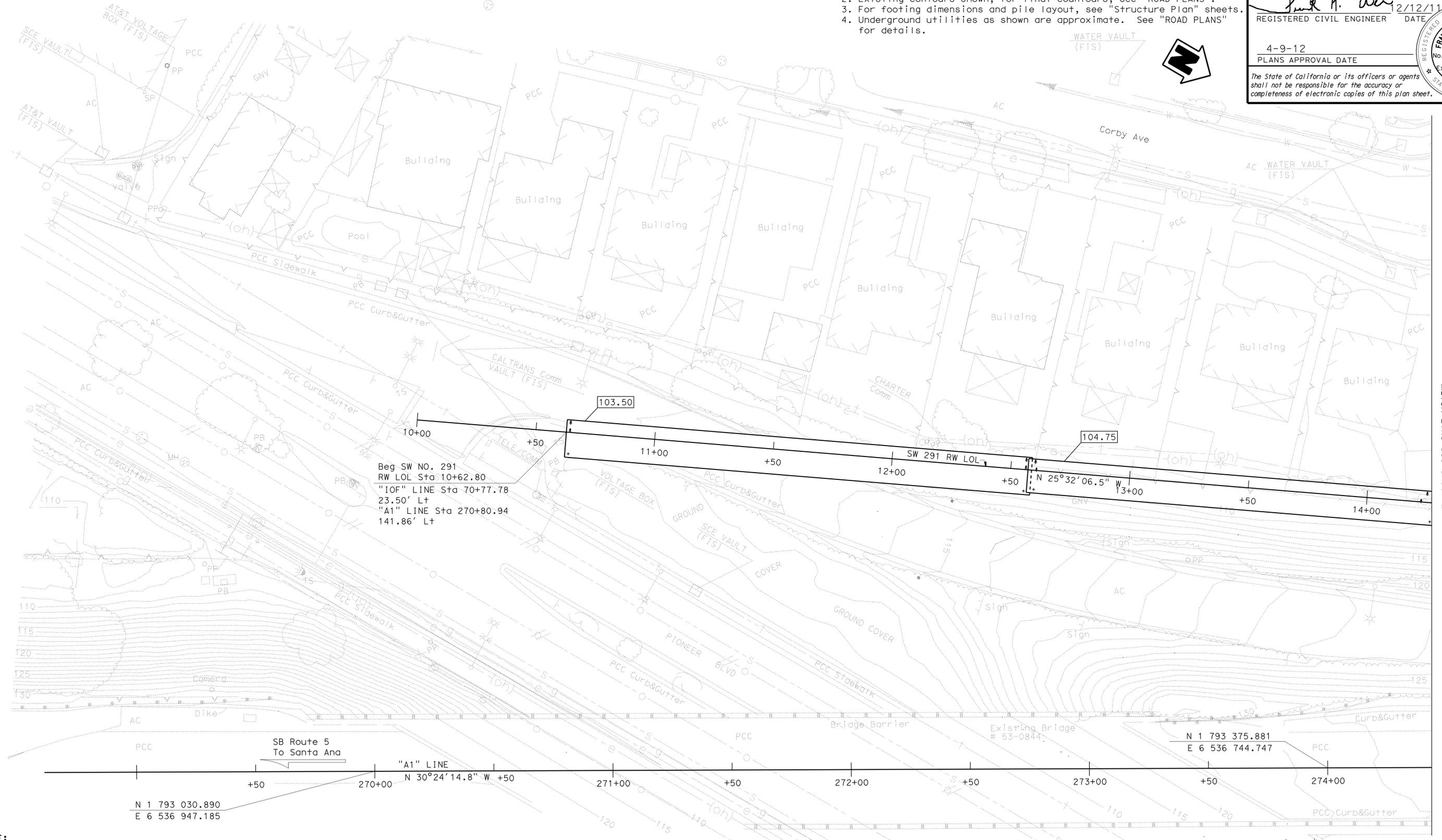
WORKING POINT	RW LOL STATION AND OFFSET
WP191	50+87.20, 2.25' Rt
WP192	51+00.24, 2.25' Rt
WP193	51+00.06, 10.75' Rt

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY C. VILLALOBOS	CHECKED F. WEI	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 21	BRIDGE NO.	53E0193	SOUND WALL NO. 291 STRUCTURE PLAN NO. 19	
	DETAILS	BY J. VALENCIA	CHECKED F. WEI			POST MILE	5.13		
	QUANTITIES	BY C. VILLALOBOS	CHECKED K. KIM						
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS					UNIT: 3623 PROJECT NUMBER & PHASE: 0700001834 & 1 CONTRACT NO.: 07-215941	DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES 09/20/11 11/25/11 12/22/11 03/22/12	SHEET 23 OF 71

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1550	1597
			12/12/11 REGISTERED CIVIL ENGINEER DATE		
			4-9-12 PLANS APPROVAL DATE		
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- NOTES:
1. Indicates Bottom of footing elevation.
 2. Existing contours shown, for final contours, see "ROAD PLANS".
 3. For footing dimensions and pile layout, see "Structure Plan" sheets.
 4. Underground utilities as shown are approximate. See "ROAD PLANS" for details.



Beg SW NO. 291
 RW LOL Sta 10+62.80
 "IOF" LINE Sta 70+77.78
 23.50' Lt
 "A1" LINE Sta 270+80.94
 141.86' Lt

N 1 793 030.890
 E 6 536 947.185

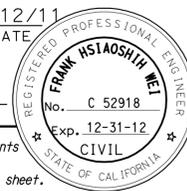
N 1 793 375.881
 E 6 536 744.747

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

PRELIMINARY INVESTIGATION SECTION				DESIGN BY C. VILLALOBOS	CHECKED F. WEI	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 21	BRIDGE NO. 53E0193	SOUND WALL NO. 291 FOUNDATION PLAN NO. 1		
SCALE 1"=20'	VERT. DATUM NAVD 88	PHOTOGRAMMETRY AS OF: X	DETAILS BY J. VALENCIA	CHECKED F. WEI	POST MILE 5.13						
ALIGNMENT TIES Dist. Traverse Sheet	DRAFTED BY M. Sadaghiani 7-11	CHECKED BY E. Viagar 7-11	QUANTITIES BY C. VILLALOBOS	CHECKED K. KIM	UNIT: 3647						
STRUCTURES FOUNDATION PLAN SHEET (ENGLISH) (REV. 09-01-10)						ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	PROJECT NUMBER & PHASE: 0700001834 & 1	CONTRACT NO.: 07-215941	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES 09/26/11 11/25/11 12/12/11 03/22/12	SHEET 24 OF 71

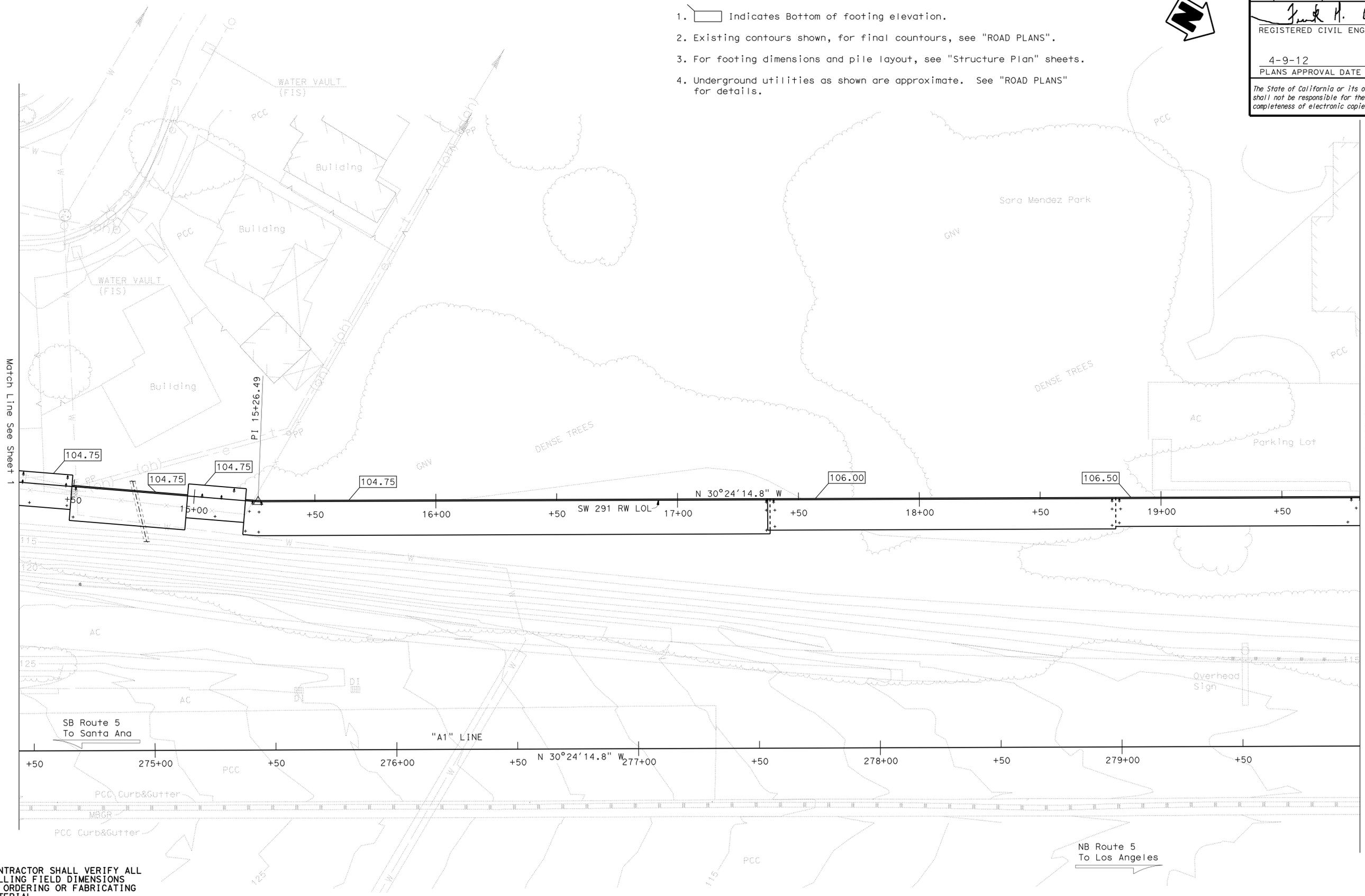
Match Line See Sheet 2

USERNAME => s128843 DATE PLOTTED => 14-APR-2012 TIME PLOTTED => 06:50

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1551	1597
			12/12/11 REGISTERED CIVIL ENGINEER DATE		
4-9-12 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.  Indicates Bottom of footing elevation.
2. Existing contours shown, for final countours, see "ROAD PLANS".
3. For footing dimensions and pile layout, see "Structure Plan" sheets.
4. Underground utilities as shown are approximate. See "ROAD PLANS" for details.



Match Line See Sheet 1

Match Line See Sheet 3

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

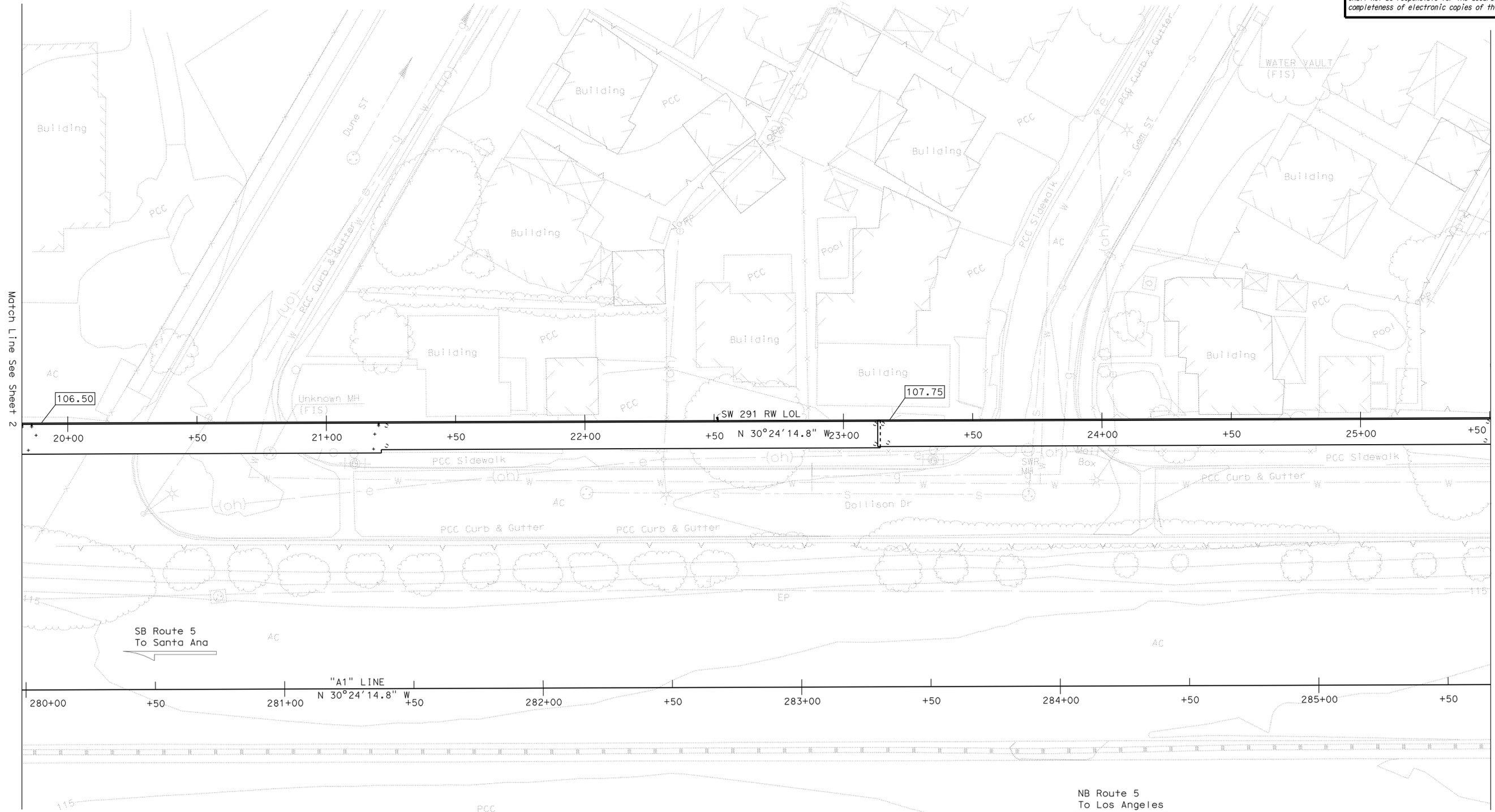
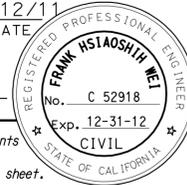
PRELIMINARY INVESTIGATION SECTION				DESIGN BY C. VILLALOBOS CHECKED F. WEI	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 21	BRIDGE NO. 53E0193	SOUND WALL NO. 291 FOUNDATION PLAN NO. 2
SCALE 1"=20' VERT. DATUM NAVD 88 PHOTOGAMMETRY AS OF: X	SURVEYED BY District CHECKED BY C. Stewart	DETAILS BY J. VALENCIA CHECKED F. WEI	POST MILE 5.13					
ALIGNMENT TIES Dist. Traverse Sheet DRAFTED BY M. Sadaghiani 7-11 CHECKED BY E. Viagar 7-11	QUANTITIES BY C. VILLALOBOS CHECKED K. KIM	UNIT: 3647 PROJECT NUMBER & PHASE: 0700001834 & 1 CONTRACT NO.: 07-215941	DISREGARD PRINTS BEARING EARLIER REVISION DATES					
<small>STRUCTURES FOUNDATION PLAN SHEET (ENGLISH) (REV. 09-01-10)</small>				<small>ORIGINAL SCALE IN INCHES FOR REDUCED PLANS</small>	<small>0 1 2 3</small>	<small>REVISION DATES</small>	<small>SHEET 25 OF 71</small>	

NOTES:

1.  Indicates Bottom of footing elevation.
2. Existing contours shown, for final contours, see "ROAD PLANS".
3. For footing dimensions and pile layout, see "Structure Plan" sheets.
4. Underground utilities as shown are approximate. See "ROAD PLANS" for details.



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1552	1597
			2/12/11 REGISTERED CIVIL ENGINEER DATE		
			4-9-12 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.					



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

PRELIMINARY INVESTIGATION SECTION			
SCALE	VERT. DATUM	PHOTOGRAMMETRY AS OF: X	
1"=20'	HORIZ. DATUM	SURVEYED	BY District
ALIGNMENT TIES	Dist. Traverse Sheet	DRAFTED	BY M. Sadaghiani 7-11
		CHECKED	BY C. Stewart
		CHECKED	BY E. Viagar 7-11

DESIGN	BY C. VILLALOBOS	CHECKED F. WEI
DETAILS	BY J. VALENCIA	CHECKED F. WEI
QUANTITIES	BY C. VILLALOBOS	CHECKED K. KIM

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 21

BRIDGE NO.	53E0193
POST MILE	5.13

SOUND WALL NO. 291
FOUNDATION PLAN NO. 3

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS



UNIT: 3647
 PROJECT NUMBER & PHASE: 0700001834 & 1 CONTRACT NO.: 07-215941

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
09/26/11 11/25/11 12/27/11 03/22/12	26	71

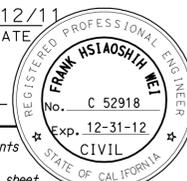
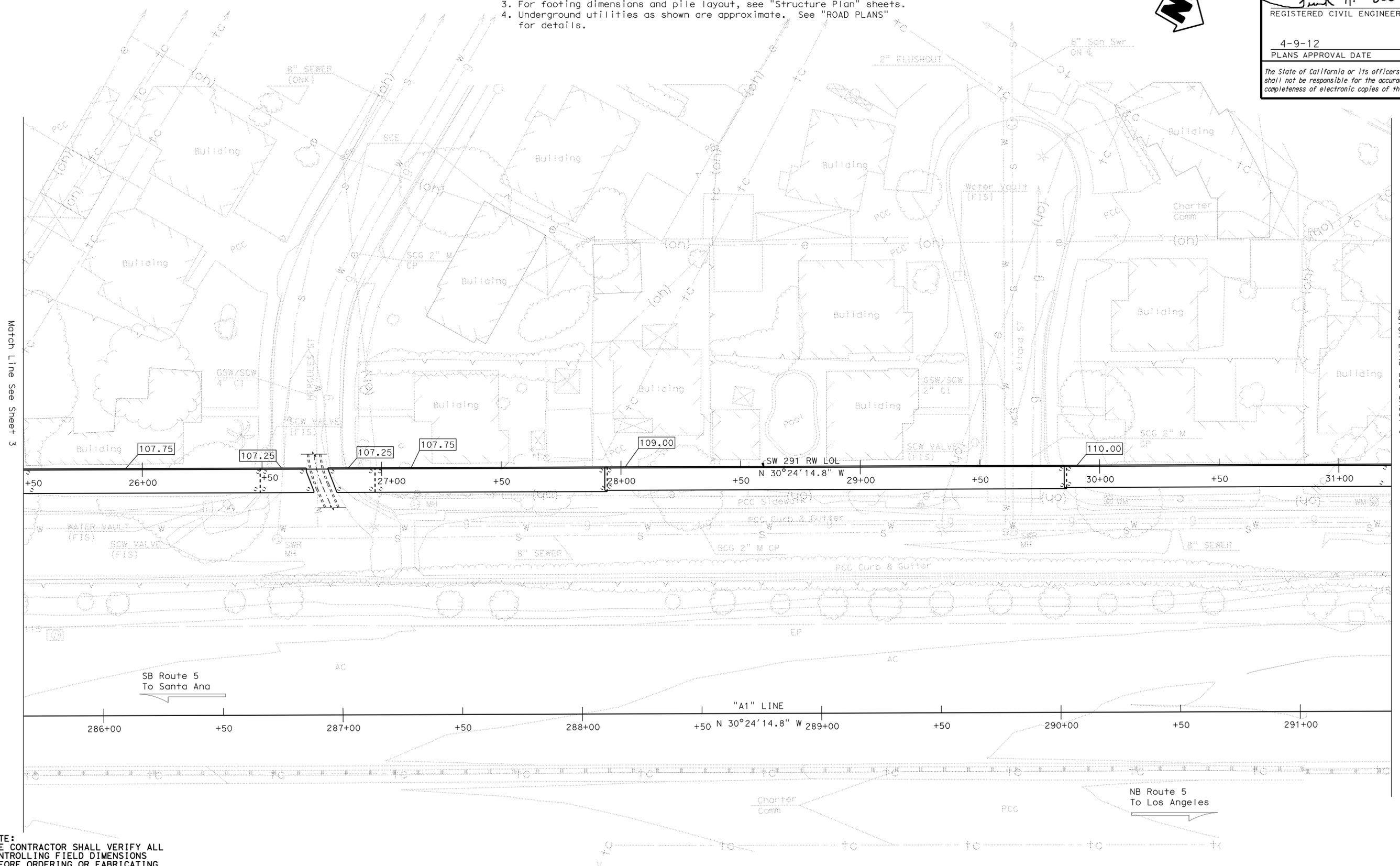
NOTES:

1.  Indicates Bottom of footing elevation.
2. Existing contours shown, for final countours, see "ROAD PLANS".
3. For footing dimensions and pile layout, see "Structure Plan" sheets.
4. Underground utilities as shown are approximate. See "ROAD PLANS" for details.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1553	1597



Frank H. Wei 12/12/11
 REGISTERED CIVIL ENGINEER DATE
 4-9-12
 PLANS APPROVAL DATE
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NOTE:
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PRELIMINARY INVESTIGATION SECTION				DESIGN BY C. VILLALOBOS	CHECKED F. WEI	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 21	BRIDGE NO. 53E0193	SOUND WALL NO. 291 FOUNDATION PLAN NO. 4
SCALE 1"=20'	VERT. DATUM NAVD 88	PHOTOGRAMMETRY AS OF: X	DETAILS BY J. VALENCIA	CHECKED F. WEI	POST MILE 5.13				
ALIGNMENT TIES Dist. Traverse Sheet	DRAFTED BY M. Sadaghiani 7-11	CHECKED BY E. Viagar 7-11	QUANTITIES BY C. VILLALOBOS	CHECKED K. KIM					

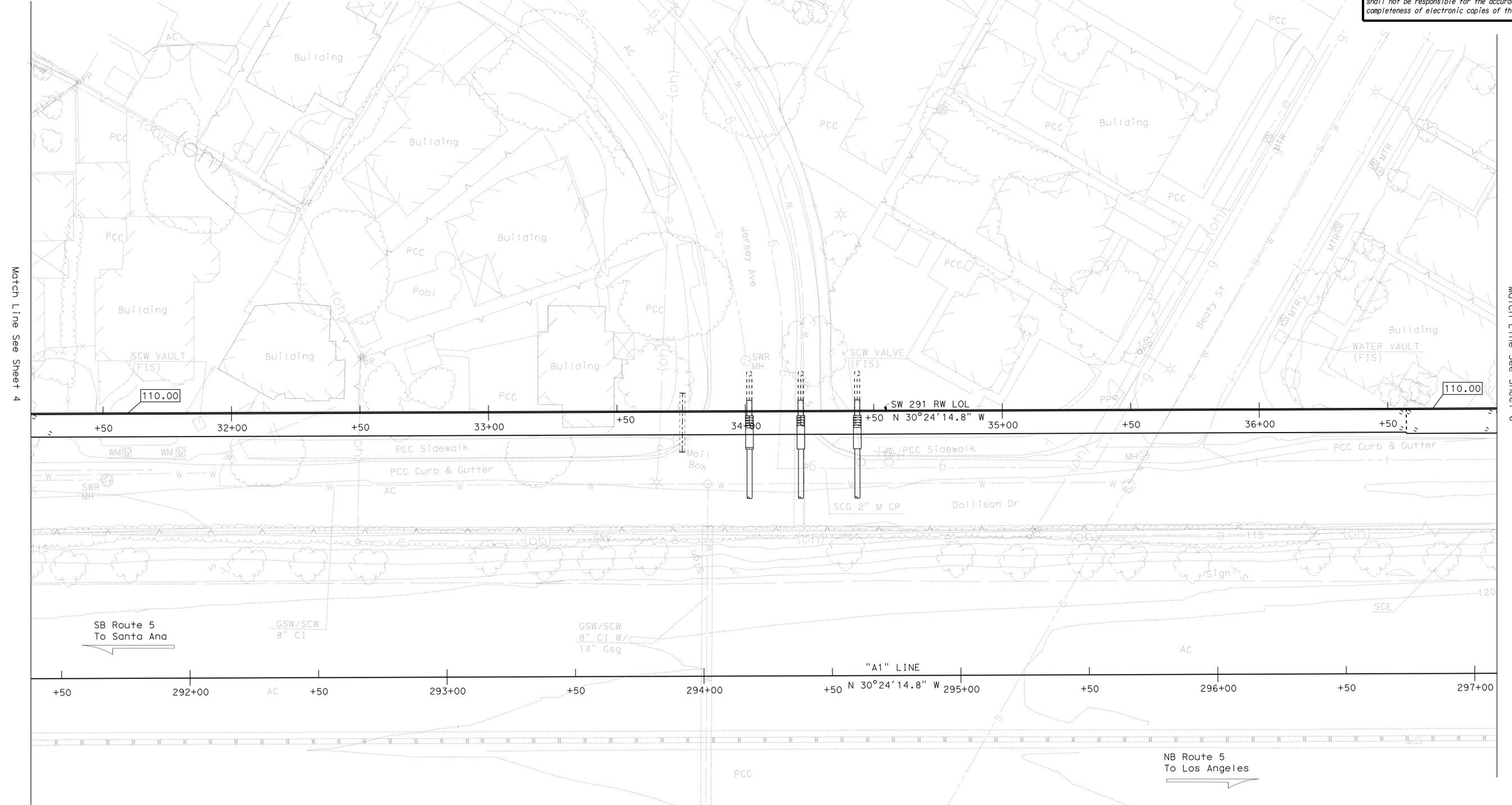
NOTES:

1.  Indicates Bottom of footing elevation.
2. Existing contours shown, for final contours, see "ROAD PLANS".
3. For footing dimensions and pile layout, see "Structure Plan" sheets.
4. Underground utilities as shown are approximate. See "ROAD PLANS" for details.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1554	1597

REGISTERED CIVIL ENGINEER *Frank H. Wei* DATE 12/12/11
 PLANS APPROVAL DATE 4-9-12
 No. C 52918
 Exp. 12-31-12
 CIVIL
 STATE OF CALIFORNIA

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NOTE:
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PRELIMINARY INVESTIGATION SECTION				DESIGN BY C. VILLALOBOS	CHECKED F. WEI	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 21	BRIDGE NO. 53E0193	SOUND WALL NO. 291 FOUNDATION PLAN NO. 5
SCALE VERT. DATUM NAVD 88	PHOTOGRAMMETRY AS OF: X	DRAFTED BY M. Sadaghiani 7-11	CHECKED BY E. Viagar 7-11	DETAILS BY J. VALENCIA	CHECKED F. WEI			POST MILE 5.13	
ALIGNMENT TIES Dist. Traverse Sheet	DRAFTED BY M. Sadaghiani 7-11	CHECKED BY E. Viagar 7-11	QUANTITIES BY C. VILLALOBOS	CHECKED K. KIM					

STRUCTURES FOUNDATION PLAN SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3
 UNIT: 3647 PROJECT NUMBER & PHASE: 0700001834 & 1 CONTRACT NO.: 07-215941
 DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET 28	OF 71
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USERNAME => s128843 DATE PLOTTED => 14-APR-2012 TIME PLOTTED => 07:12

NOTES:

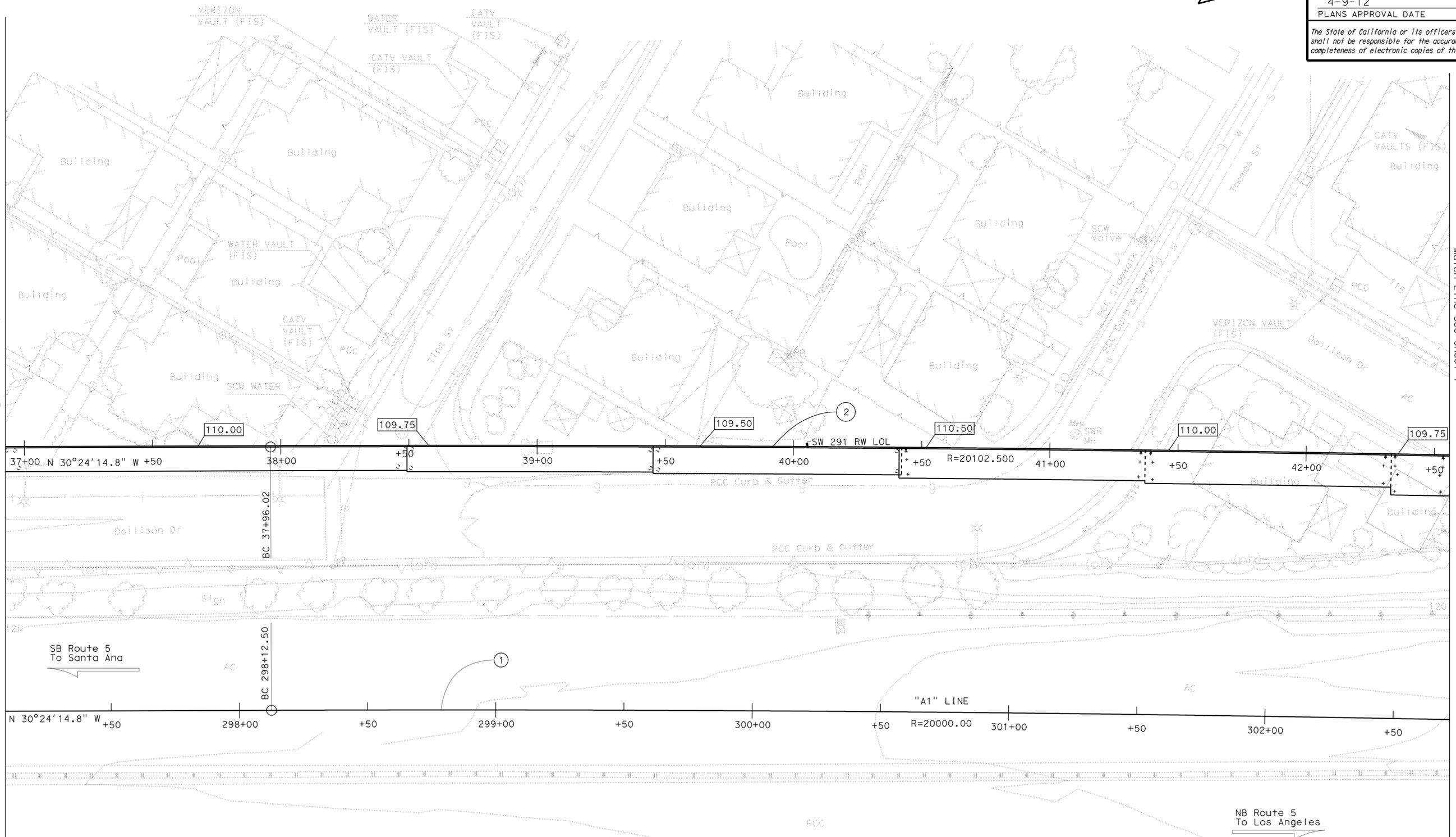
1. Indicates Bottom of footing elevation.
2. Existing contours shown, for final contours, see "ROAD PLANS".
3. For footing dimensions and pile layout, see "Structure Plan" sheets.
4. Underground utilities as shown are approximate. See "ROAD PLANS" for details.

CURVE DATA

No.	R	Δ	T	L
①	20000.00'	-01°55'04"	334.75'	669.43'
②	20102.50'	01°42'21.2"	299.28'	598.52'

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1555	1597

REGISTERED CIVIL ENGINEER *Frank H. Wei* DATE 12/12/11
 PLANS APPROVAL DATE 4-9-12
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NOTE:
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PRELIMINARY INVESTIGATION SECTION				DESIGN BY C. VILLALOBOS	CHECKED F. WEI	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 21	BRIDGE NO. 53E0193	SOUND WALL NO. 291 FOUNDATION PLAN NO. 6
SCALE VERT. DATUM NAVD 88	PHOTOGRAMMETRY AS OF: X	DRAFTED BY M. Sadaghiani 7-11	CHECKED BY E. Viagar 7-11	DETAILS BY J. VALENCIA	CHECKED F. WEI			POST MILE 5.13	
1"=20'	HORIZ. DATUM NAD 83	SURVEYED BY District	CHECKED BY C. Stewart	QUANTITIES BY C. VILLALOBOS	CHECKED K. KIM				

STRUCTURES FOUNDATION PLAN SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS
 UNIT: 3647 PROJECT NUMBER & PHASE: 0700001834 & 1 CONTRACT NO.: 07-215941
 DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
09/26/11 11/25/11 12/12/11 03/22/12	29	71

USERNAME => s128843 DATE PLOTTED => 14-APR-2012 TIME PLOTTED => 07:12

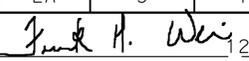
NOTES:

1.  Indicates Bottom of footing elevation.
2. Existing contours shown, for final contours, see "ROAD PLANS".
3. For footing dimensions and pile layout, see "Structure Plan" sheets.
4. Underground utilities as shown are approximate. See "ROAD PLANS" for details.

CURVE DATA

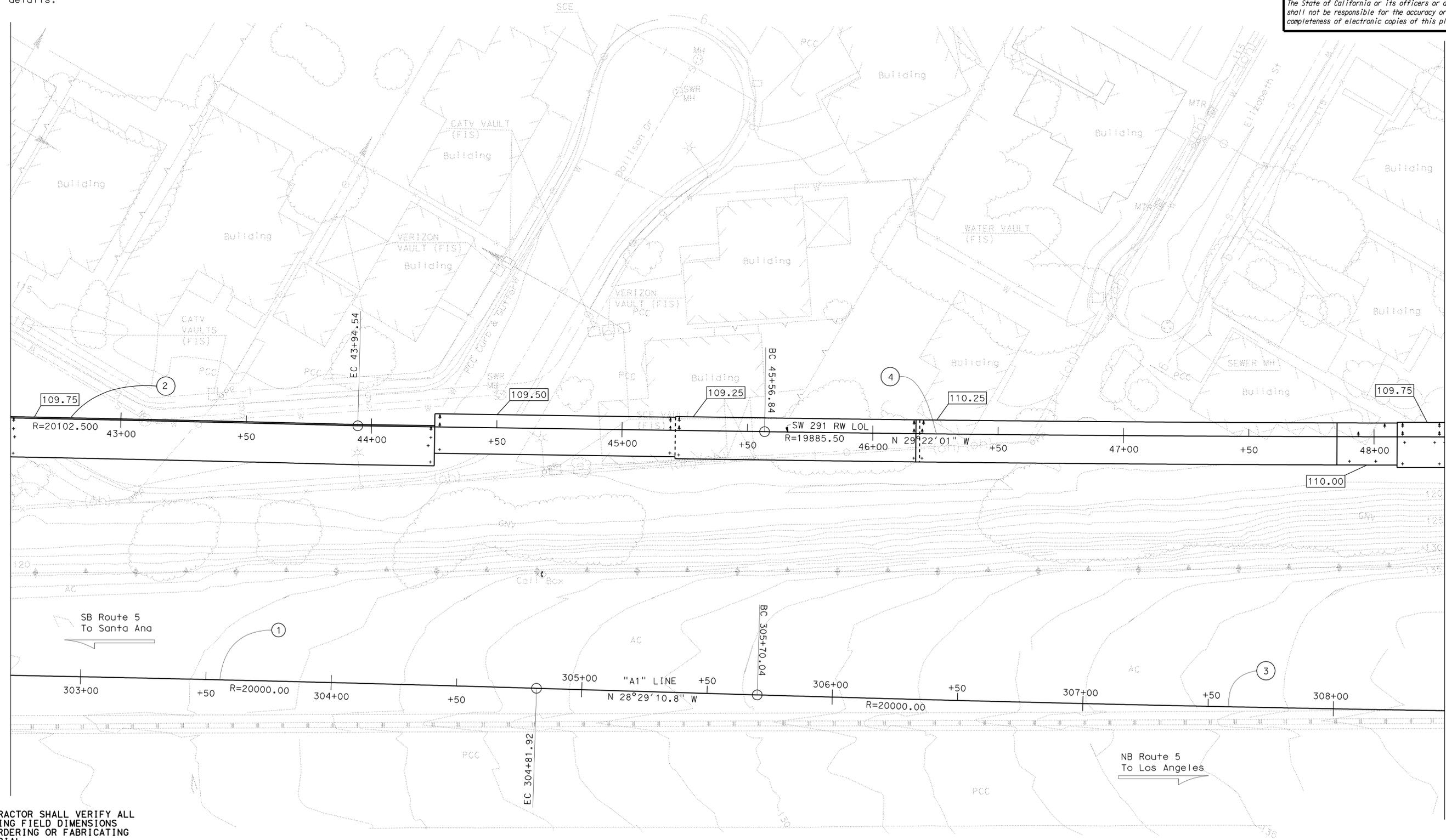
No.	R	Δ	T	L
①	20000.00'	-01°55'04"	334.75'	669.43'
②	20102.50'	01°42'21.2"	299.28'	598.52'
③	20000.00'	-01°54'35.8"	333.38'	666.70'
④	19885.50'	-01°48'20.2"	313.36'	626.67'

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1556	1597

 2/12/11
 REGISTERED CIVIL ENGINEER DATE

4-9-12
 PLANS APPROVAL DATE

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

PRELIMINARY INVESTIGATION SECTION				DESIGN BY C. VILLALOBOS	CHECKED F. WEI	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 21	BRIDGE NO. 53E0193	SOUND WALL NO. 291 FOUNDATION PLAN NO. 7
SCALE VERT. DATUM NAVD 88	PHOTOGRAMMETRY AS OF: X	DETAILS BY J. VALENCIA	CHECKED F. WEI	POST MILE 5.13					
1"=20'	HORIZ. DATUM NAD 83	QUANTITIES BY C. VILLALOBOS	CHECKED K. KIM						

STRUCTURES FOUNDATION PLAN SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3 UNIT: 3647 PROJECT NUMBER & PHASE: 0700001834 & 1 CONTRACT NO.: 07-215941 DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
09/20/11 11/25/11 12/27/11 03/22/12	30	71

USERNAME => s128843 DATE PLOTTED => 14-APR-2012 TIME PLOTTED => 07:12 FILE => 53-E0193-e-Fdp107.dgn

NOTES:

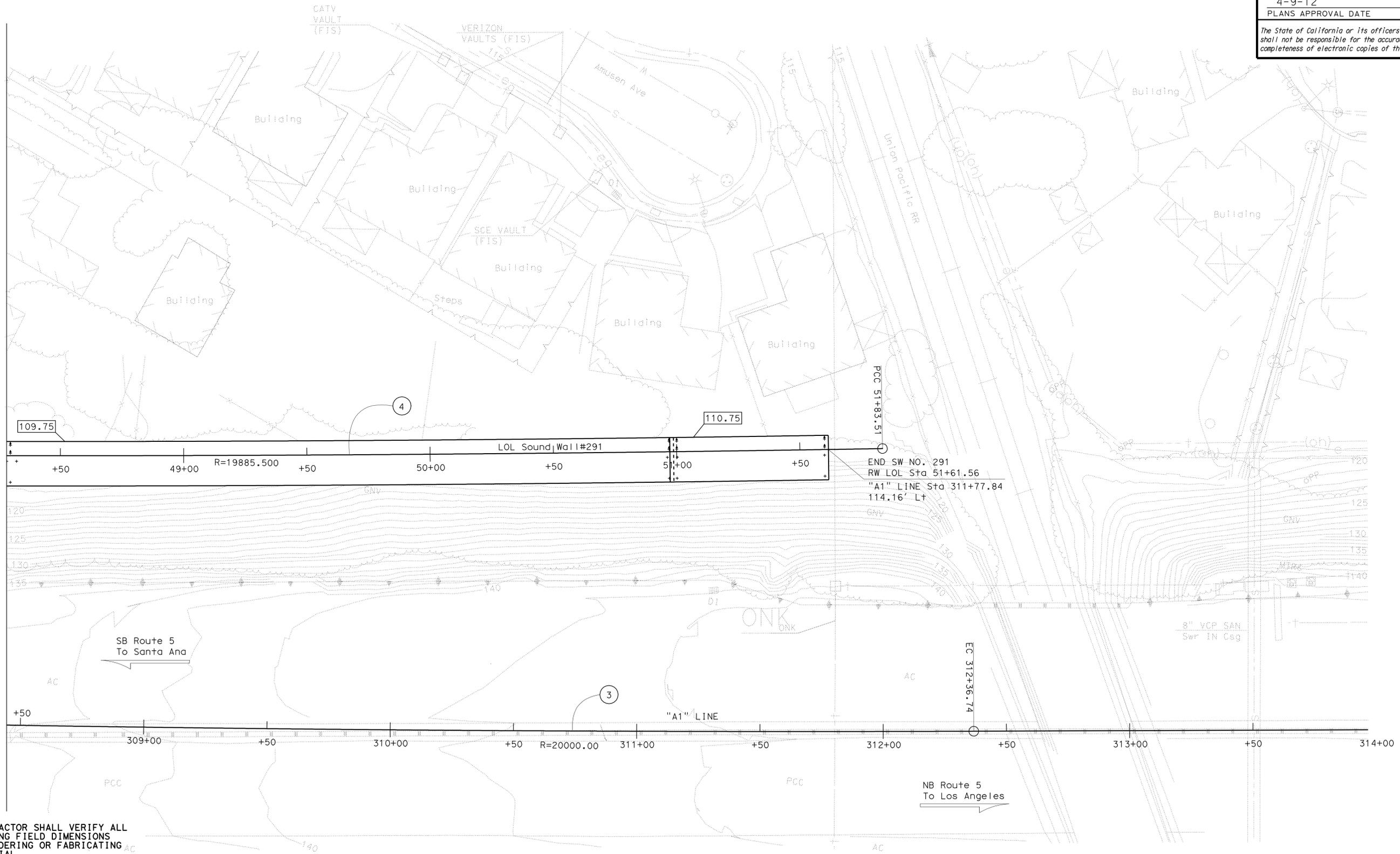
1. Indicates Bottom of footing elevation.
2. Existing contours shown, for final contours, see "ROAD PLANS".
3. For footing dimensions and pile layout, see "Structure Plan" sheets.
4. Underground utilities as shown are approximate. See "ROAD PLANS" for details.

CURVE DATA

No.	R	Δ	T	L
③	20000.00'	-01°54'35.8"	333.38'	666.70'
④	19885.50'	-01°48'20.2"	313.36'	626.67'

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1557	1597

Frank H. Wei 12/12/11
 REGISTERED CIVIL ENGINEER DATE
 4-9-12
 PLANS APPROVAL DATE
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NOTE:
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PRELIMINARY INVESTIGATION SECTION				DESIGN BY C. VILLALOBOS	CHECKED F. WEI	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 21	BRIDGE NO. 53E0193	SOUND WALL NO. 291 FOUNDATION PLAN NO. 8	
SCALE 1"=20'	VERT. DATUM NAVD 88	PHOTOGRAMMETRY AS OF: X	DETAILS BY J. VALENCIA	CHECKED F. WEI	POST MILE 5.13					
ALIGNMENT TIES Dist. Traverse Sheet	DRAFTED BY M. Sadaghiani 7-11	CHECKED BY E. Viagar 7-11	QUANTITIES BY C. VILLALOBOS	CHECKED K. KIM	UNIT: 3647					
STRUCTURES FOUNDATION PLAN SHEET (ENGLISH) (REV. 09-01-10)						ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	PROJECT NUMBER & PHASE: 0700001834 & 1	CONTRACT NO.: 07-215941	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES: 09/20/11, 11/25/11, 12/12/11, 03/22/12 SHEET 31 OF 71

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1558	1597

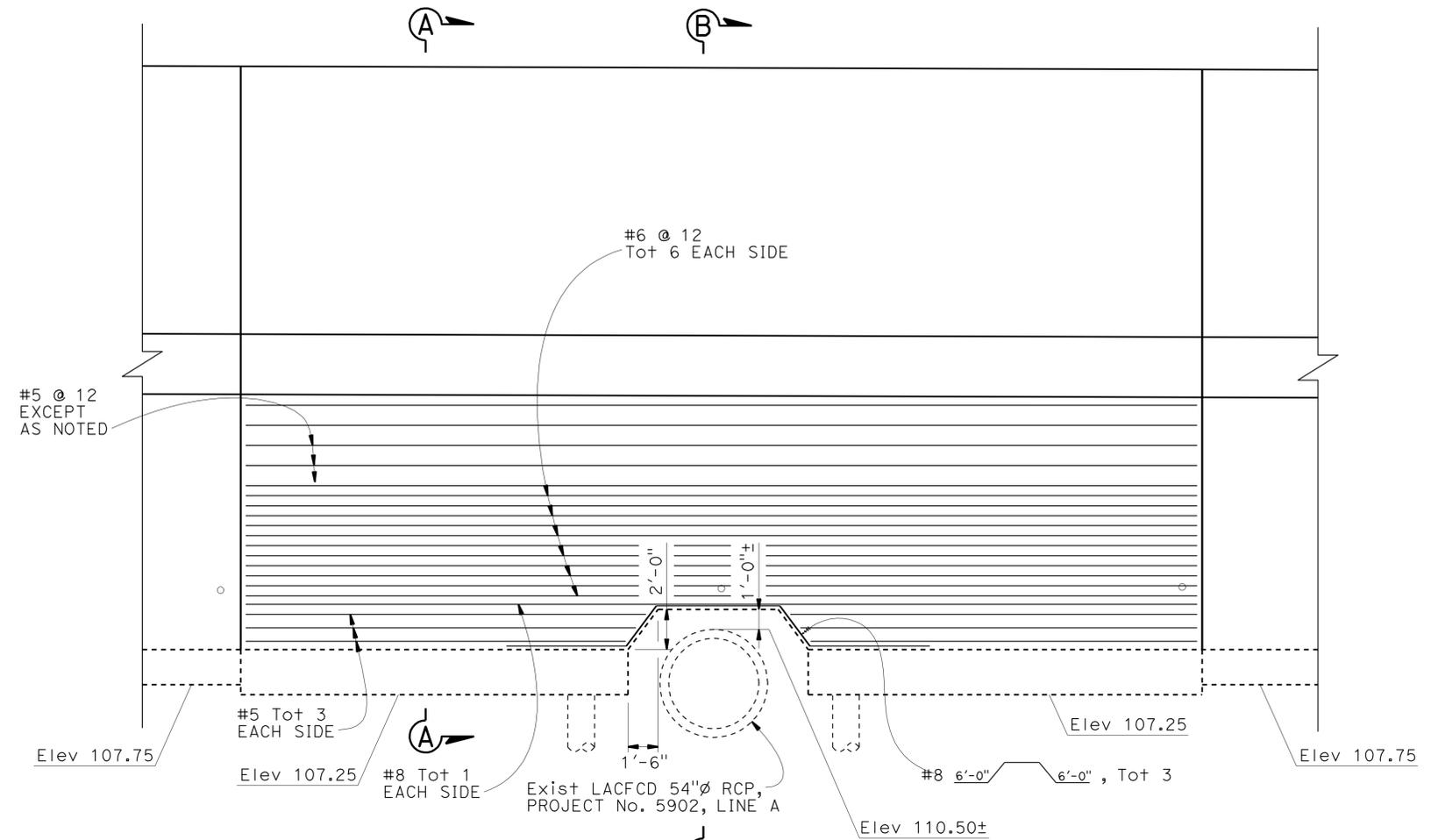
12/12/11
 REGISTERED CIVIL ENGINEER DATE
 4-9-12
 PLANS APPROVAL DATE
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NOTES:

- For Section A-A and Section B-B, see "RETAINING WALL DETAILS NO. 2" sheet.
- The Contractor shall be extra cautious working in the vicinity of the existing storm drain. For the purpose of soil compaction, the Contractor shall use hand held equipment when working adjacent to or over the existing storm drain in order not to cause any structural damage to the existing storm drain.
- Over-size hole and temporary casing will be required for the eight piles adjacent to the existing 54" RCP. See "CIDH With Over-Size Hole & Temporary Casing" detail.

LEGEND:

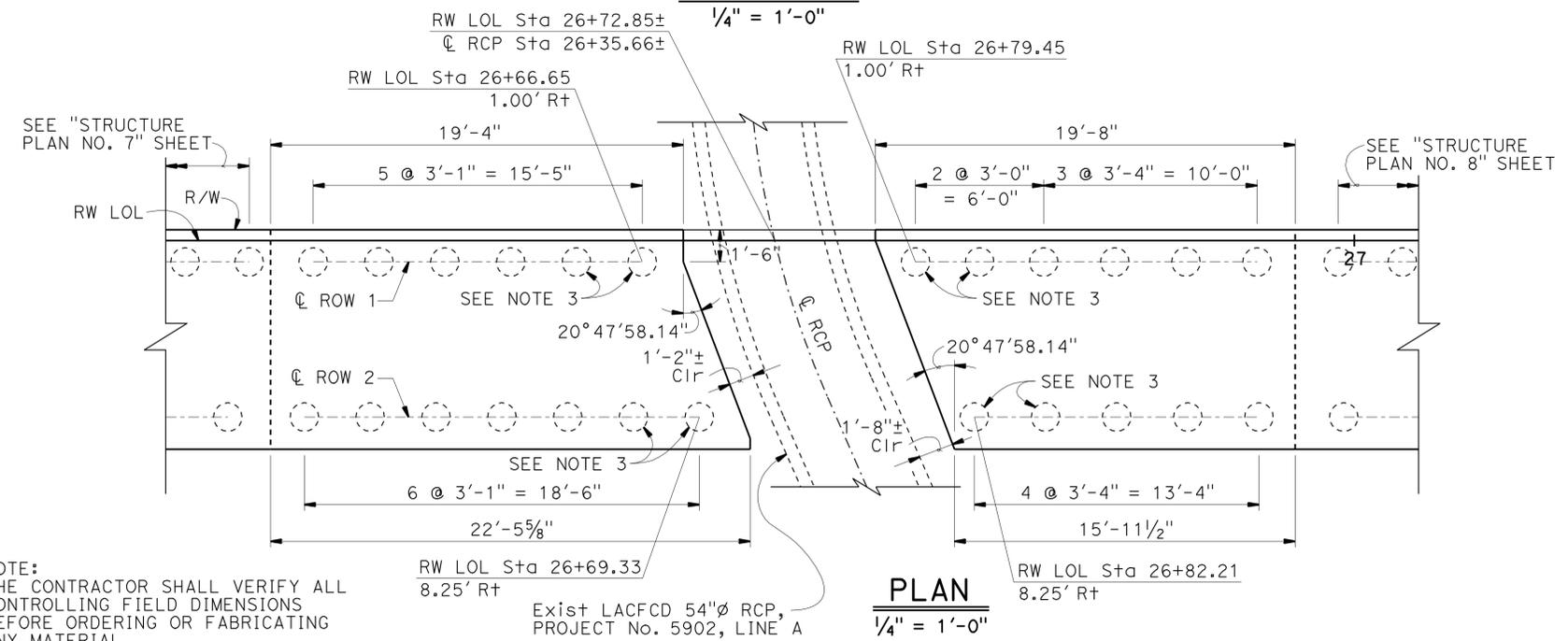
○ Denotes 16" CIDH



* ALL PILES NOT SHOWN

ELEVATION

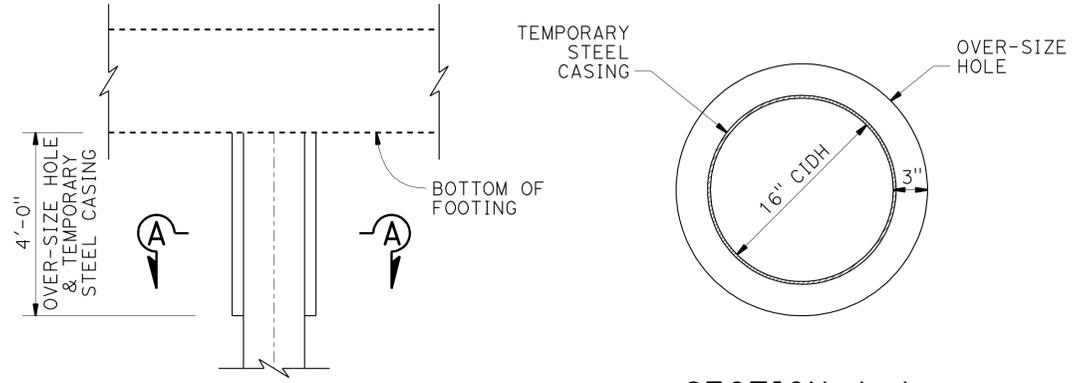
1/4" = 1'-0"



PLAN

1/4" = 1'-0"

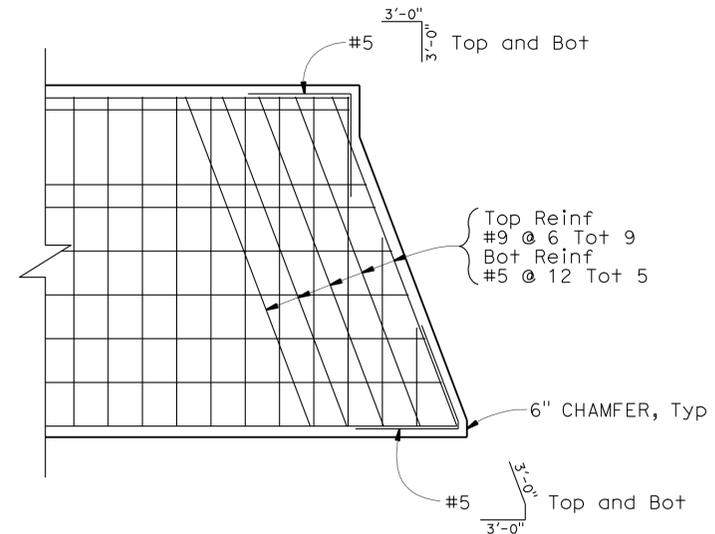
NOTE: THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.



SECTION A-A

CIDH WITH OVER-SIZE HOLE & TEMPORARY CASING

No Scale



FOOTING CORNER REINFORCEMENT DETAIL

3/8" = 1'-0" (Bottom reinf shown, top reinf similar)

DESIGN	BY C. VILLALOBOS	CHECKED F. WEI
DETAILS	BY J. VALENCIA	CHECKED F. WEI
QUANTITIES	BY C. VILLALOBOS	CHECKED K. KIM

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 21

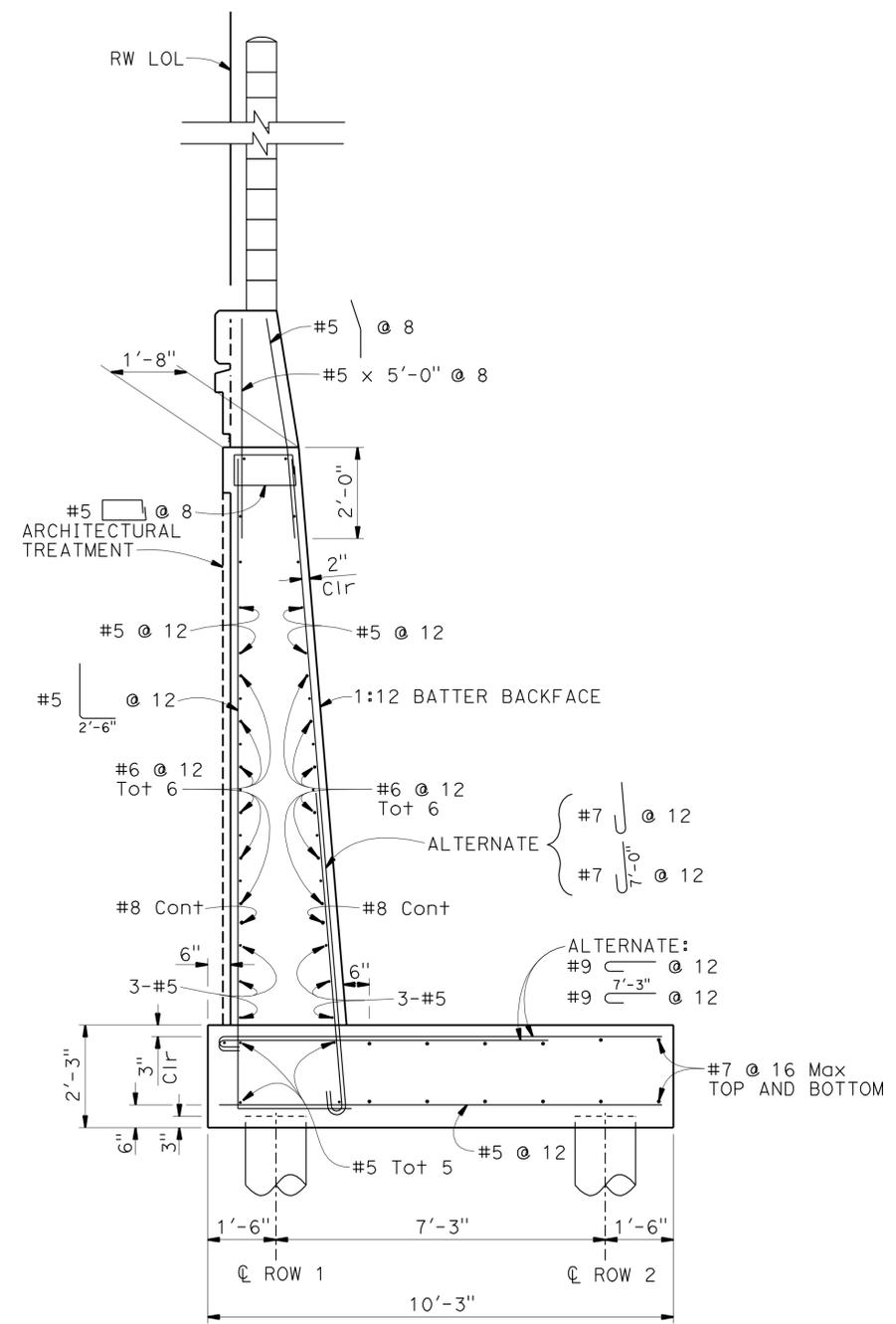
BRIDGE NO.	53E0193
POST MILE	5.13

SOUND WALL NO. 291
RETAINING WALL DETAILS NO. 1

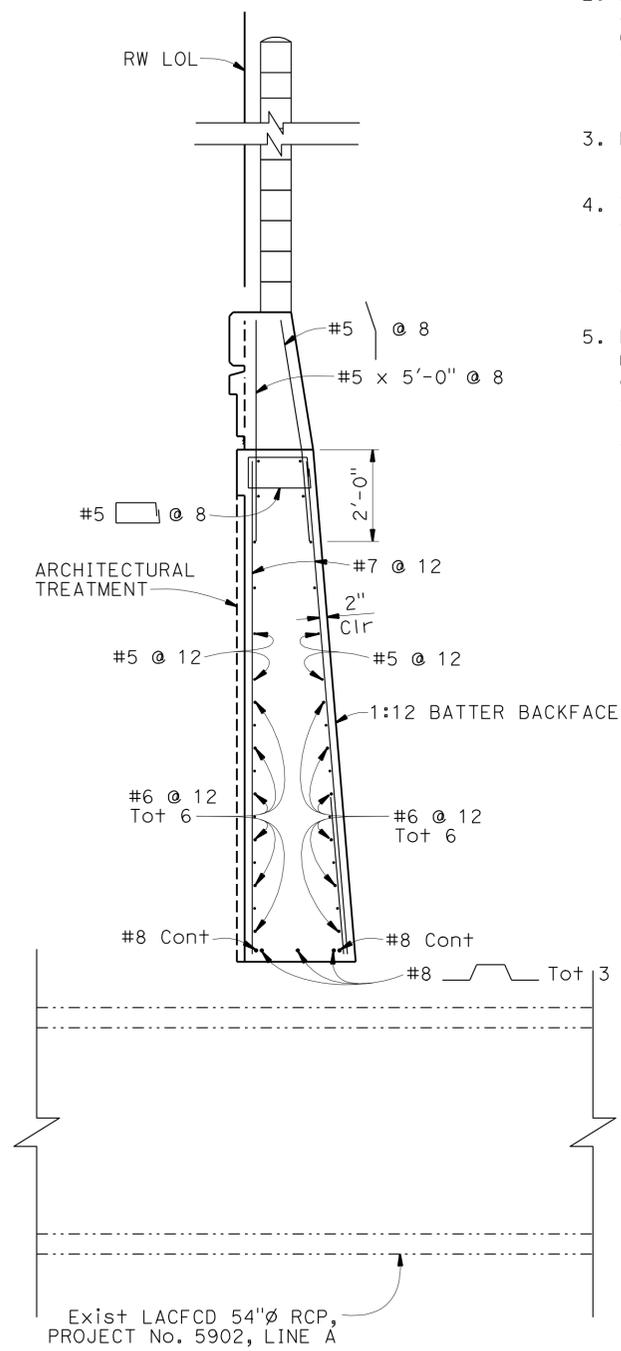
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1559	1597
<i>Frank H. Wei</i> 12/12/11 REGISTERED CIVIL ENGINEER DATE					
4-9-12				PLANS APPROVAL DATE	
<small>The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.</small>					

NOTES:

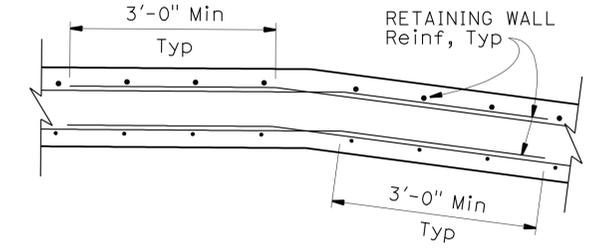
- For location of Section A-A and Section B-B, see "RETAINING WALL DETAILS NO. 1" sheet.
- For sound wall and barrier reinforcement, see "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 1" and "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 2" sheets.
- For drainage notes and details, see (B3-8)
- The rebar size will match the size of top mat and bottom mat reinforcement respectively. The length of the rebar shall provide minimum lap splice length to the footing reinforcement.
- Provide additional top mat and bottom mat corner reinforcement. The number of rebars needed will depend upon the footing corner distance. The size of the rebar will match top mat and bottom mat footing reinforcement respectively.



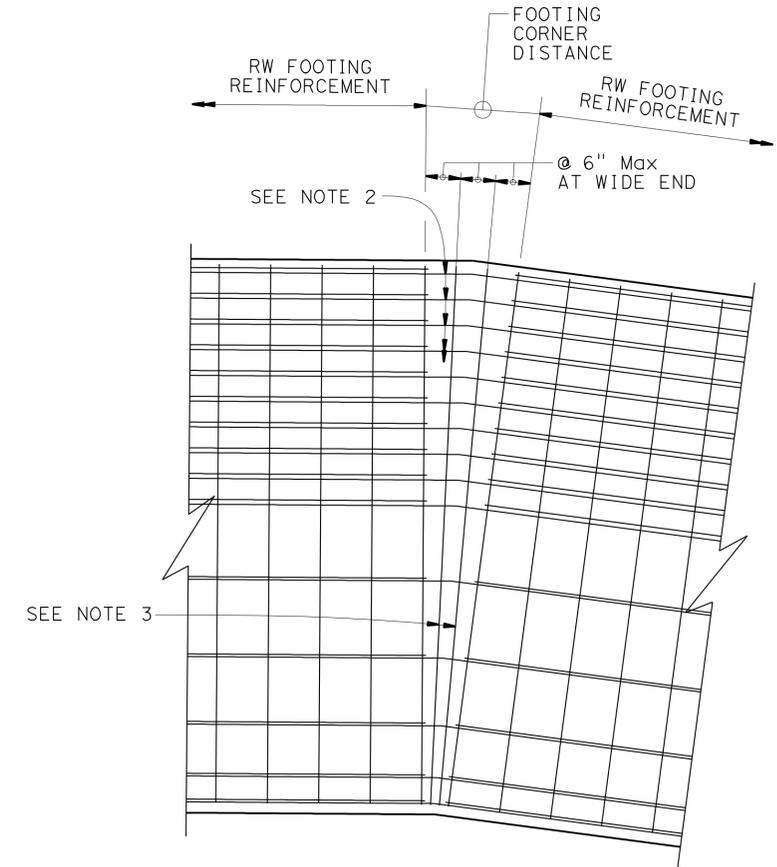
SECTION A-A
1/2" = 1'-0"



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



RETAINING WALL CORNER DETAIL
No Scale



RETAINING WALL FOOTING CORNER DETAIL
No Scale

NOTE:
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DESIGN	BY C. VILLALOBOS	CHECKED F. WEI
DETAILS	BY J. VALENCIA	CHECKED F. WEI
QUANTITIES	BY C. VILLALOBOS	CHECKED K. KIM

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 21

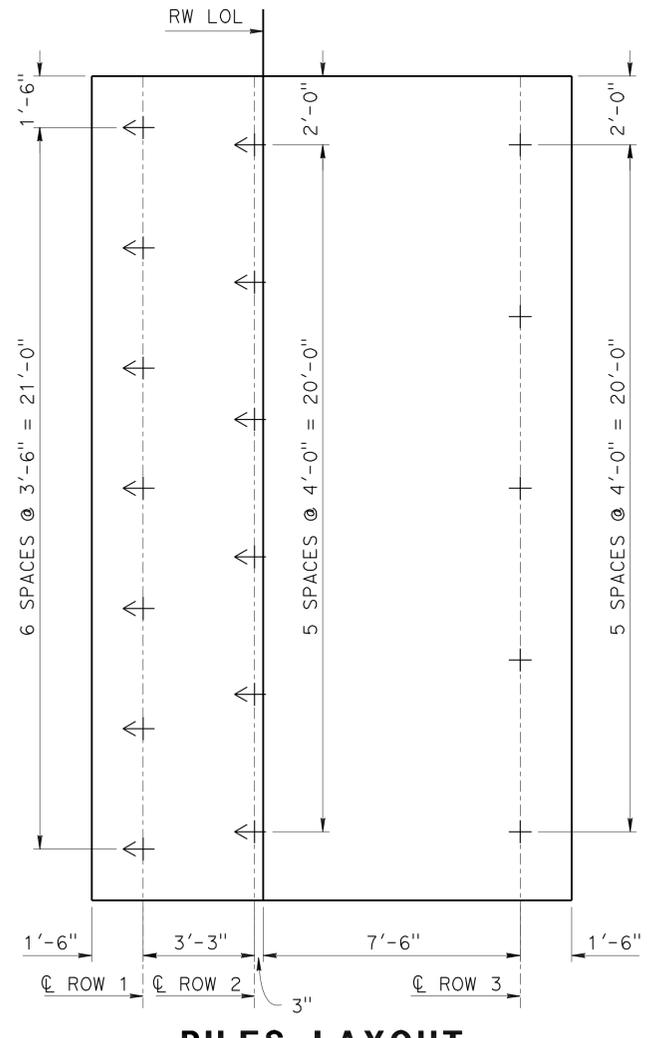
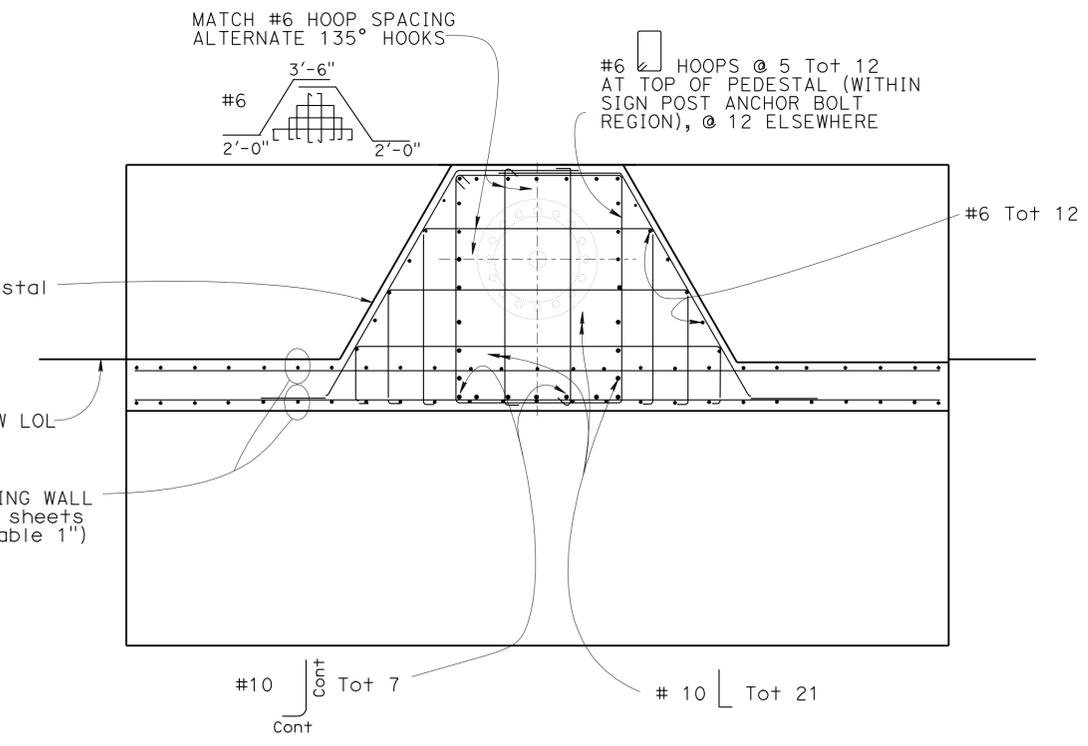
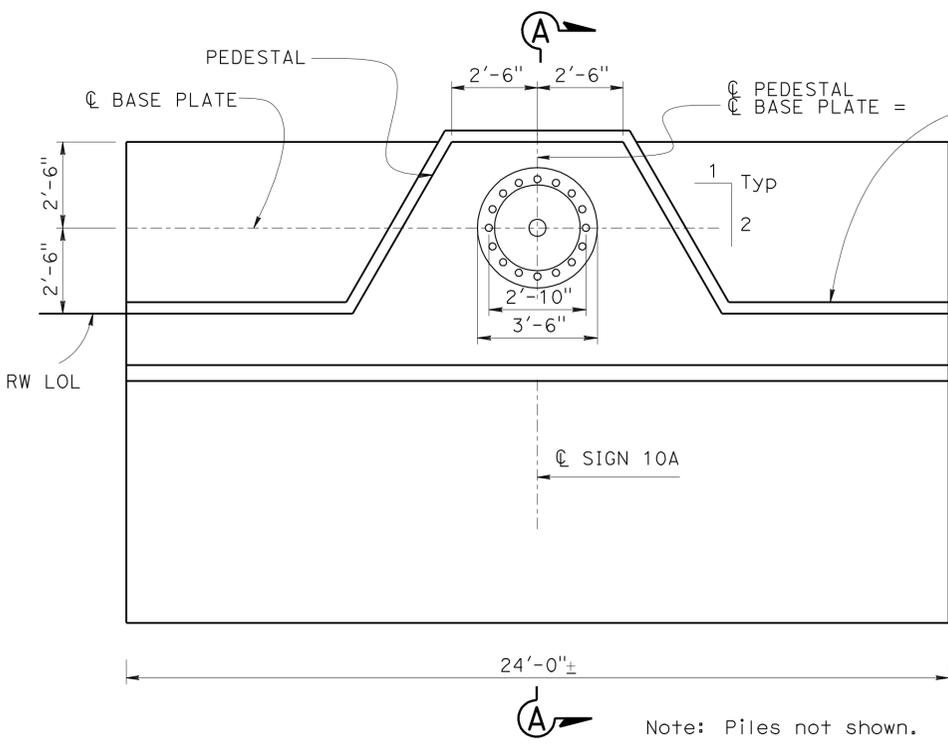
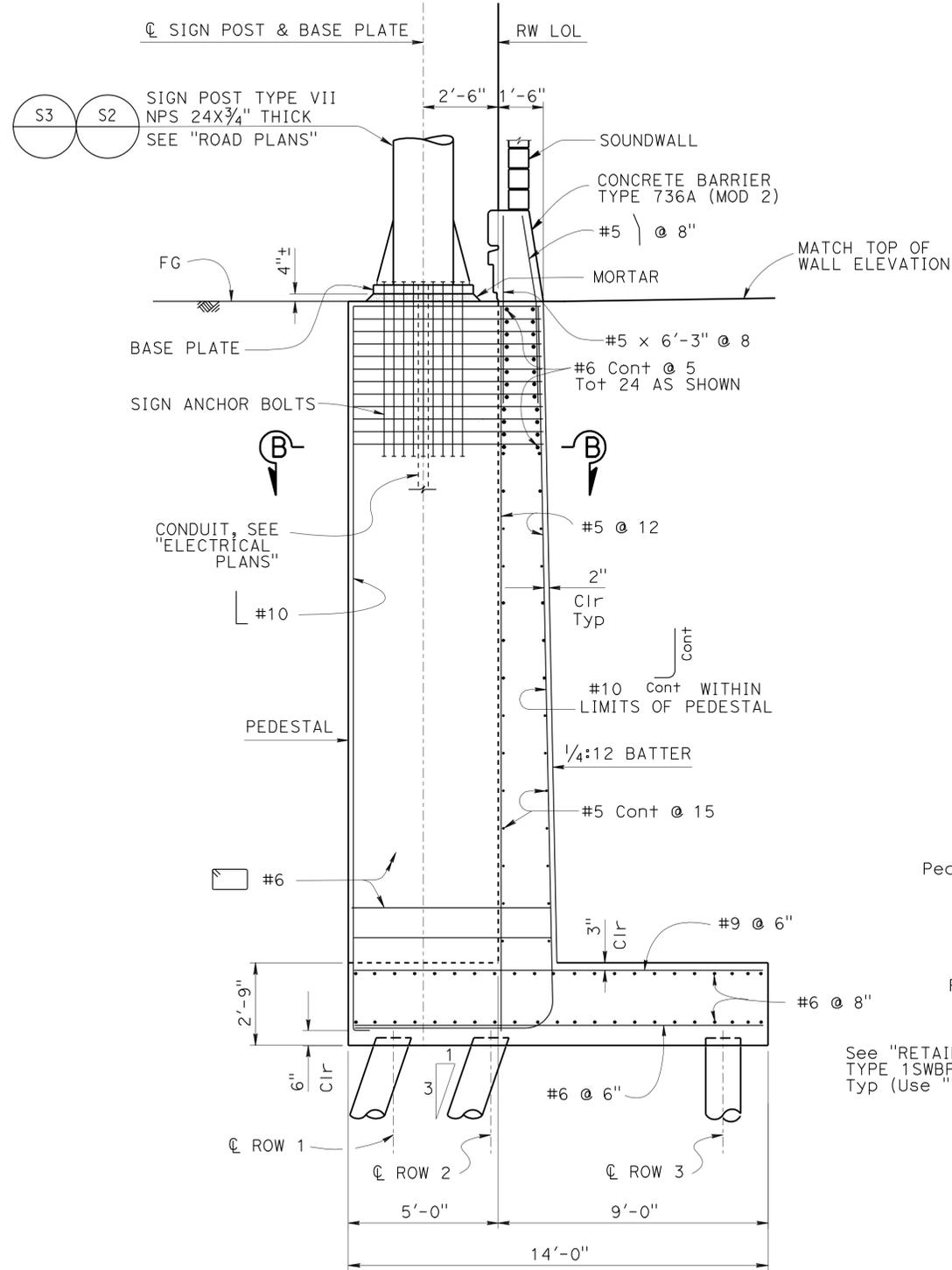
BRIDGE NO.	53E0193
POST MILE	5.13

SOUND WALL NO. 291
RETAINING WALL DETAILS NO. 2

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1560	1597

Mostafa Kattaa
 REGISTERED CIVIL ENGINEER DATE 2/7/2012
 4-9-12
 PLANS APPROVAL DATE
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REGISTERED PROFESSIONAL ENGINEER
 Mostafa Kattaa
 No. 58044
 Exp. 6/30/12
 CIVIL
 STATE OF CALIFORNIA

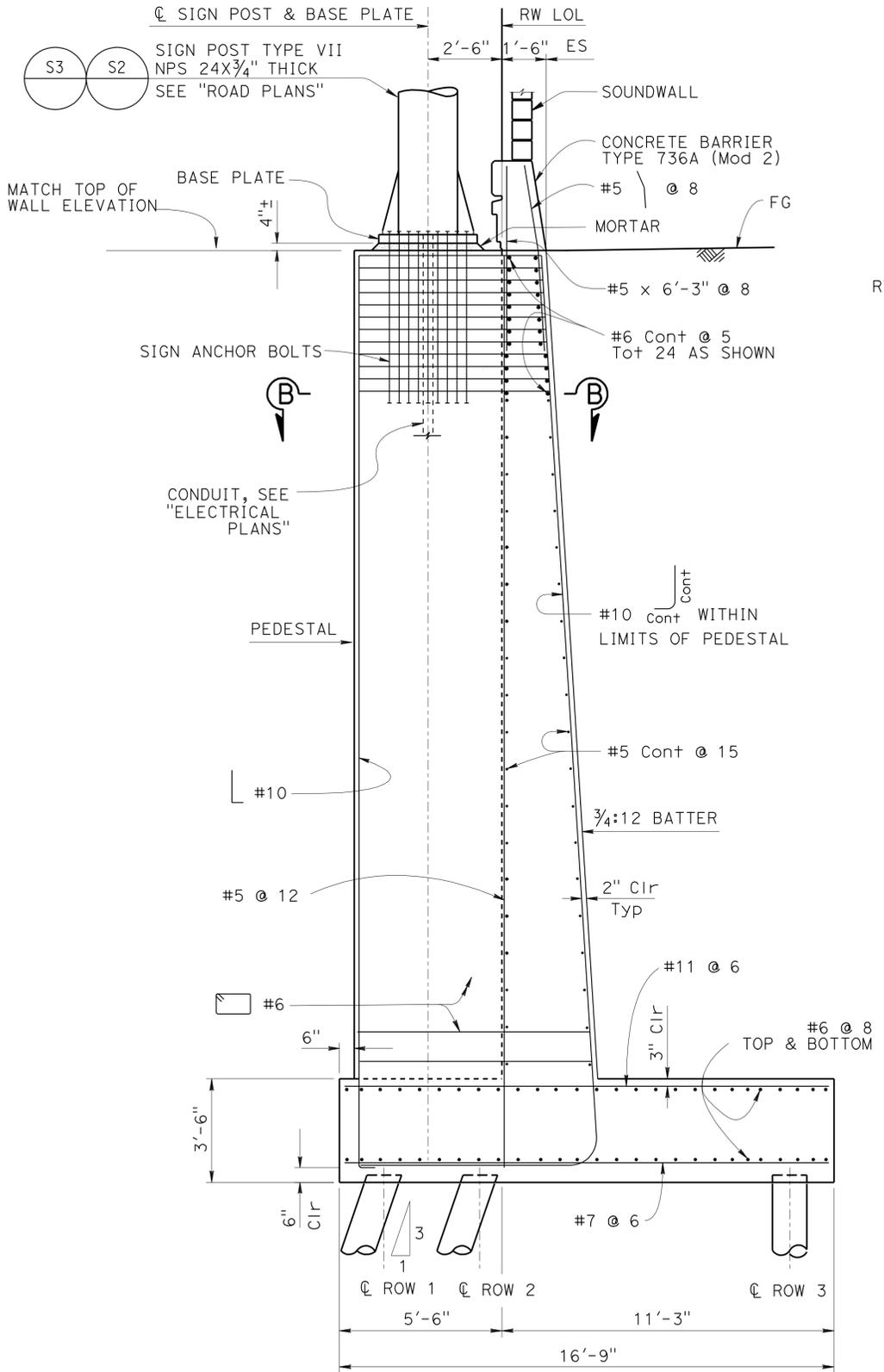


- NOTES
- For soundwall and barrier details not shown, see "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL" sheets.
 - For sign details not shown, see "Road Plans."
 - For Architectural Treatment on Sign Pedestal, see "ARCHITECTURAL TREATMENT ELEVATION" sheets.
- + Denotes Vertical Pile
 ← Denotes 1:3 Battered Pile

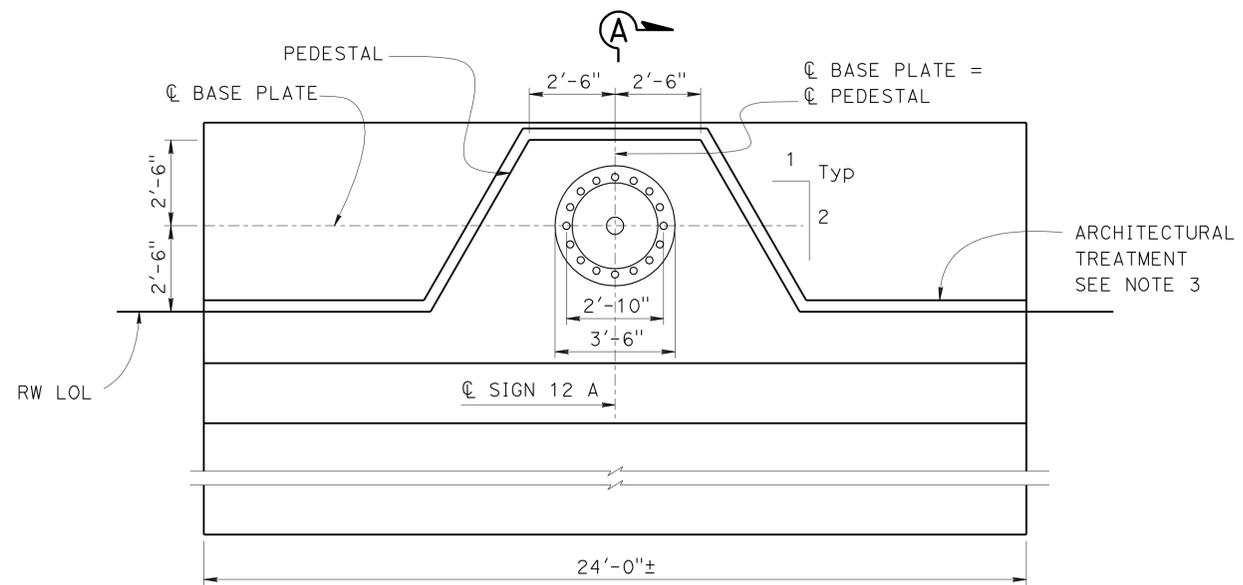
DESIGN BY M. Kattaa CHECKED F. Tannous DETAILS BY L. Goldthwait CHECKED M. Kattaa/F. Wei QUANTITIES BY M. Kattaa CHECKED F. Tannous	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO. 53E0193	SOUND WALL NO. 291 RETAINING WALL DETAILS AT SIGN 10A
			POST MILE 5.13	
			UNIT: 3606 PROJECT NUMBER & PHASE: 0700001834 & 1 CONTRACT NO.: 07-215941	
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS			REVISION DATES 12-11 2-07-12 03-22-12	SHEET OF 34 71

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1561	1597

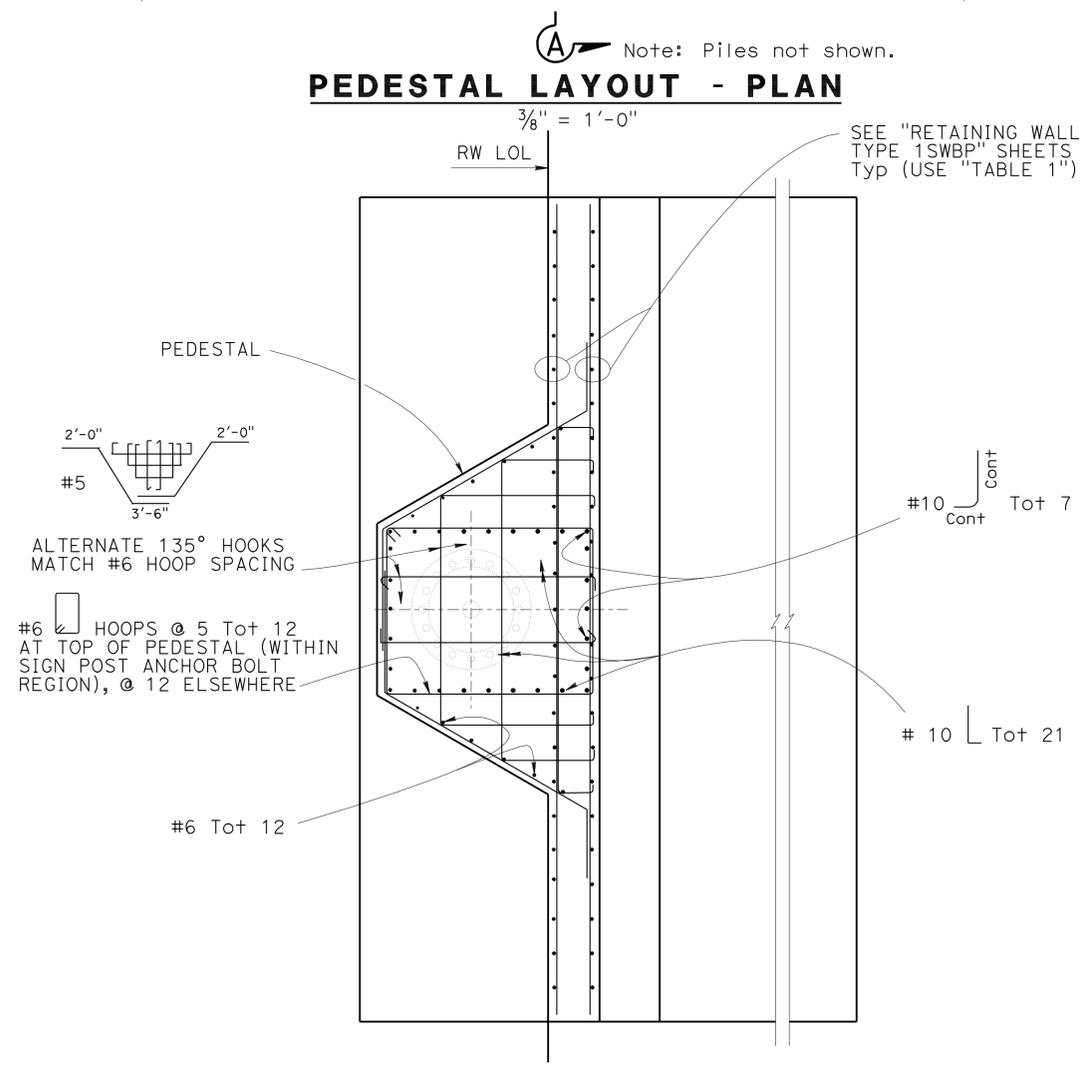
FAYEK TANNOUS 2-08-12
 REGISTERED CIVIL ENGINEER DATE
 4-9-12
 PLANS APPROVAL DATE
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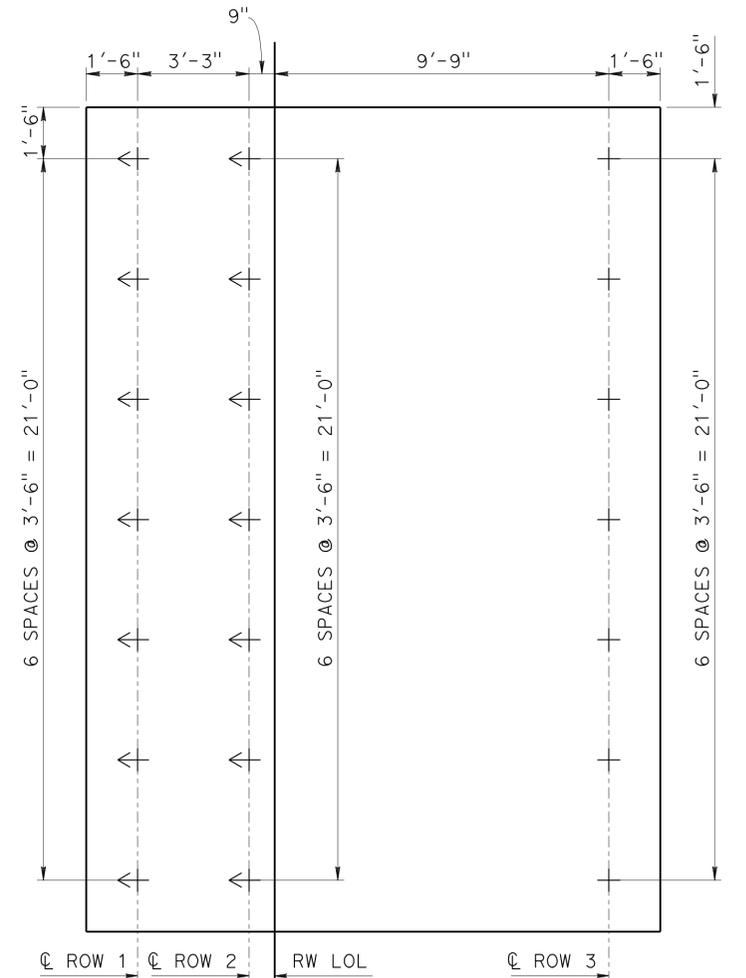
SECTION A-A
3/8" = 1'-0"



PEDESTAL LAYOUT - PLAN



SECTION B-B
3/8" = 1'-0"



PILES LAYOUT
3/8" = 1'-0"

- NOTES**
1. For soundwall and barrier details not shown, see "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL" sheets.
 2. For sign details not shown, see "Road Plans."
 3. For Architectural Treatment on Sign Pedestal see "ARCHITECTURAL TREATMENT ELEVATION" sheets
 4. + Denotes Vertical Pile
 5. <+ Denotes 1:3 Battered Pile

DESIGN	BY Fayek Tannous	CHECKED Mostafa Kattaa
DETAILS	BY Loren Goldthwait	CHECKED Fayek Tannous
QUANTITIES	BY Fayek Tannous	CHECKED Mostafa Kattaa

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 12

BRIDGE NO.	53E-0193
POST MILE	5.13

SOUND WALL NO. 291
RETAINING WALL DETAILS AT SIGN 12A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1562	1597

 2/7/2012
 REGISTERED CIVIL ENGINEER DATE
 4-9-12
 PLANS APPROVAL DATE


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DESIGN DATA FOR RETAINING WALL AT SIGN STRUCTURE

DESIGN: LOAD FACTOR DESIGN (LFD)
CONCRETE: REINFORCED CONCRETE, $f'_c = 3,600 \text{ psi}$
 $f_y = 60,000 \text{ psi}$

LOADING CASE:

LEVEL GROUND WITH 240 psf LIVE LOAD SURCHARGE
 AND 16'- 4" SOUNDWALL & BARRIER.
 SEISMIC LOAD DEAD LOAD = 0.5 DEAD LOAD
 WIND LOAD = 30 psf
 DEAD LOAD OF SOUNDWALL = 1437 lb/lf

SEISMIC LOAD: SOIL

$K_h = 0.5g$
 $K_v = 0.0$
 K_{ae} : MONONOBE-OKABE METHOD

SOIL: $\phi = 34^\circ \gamma = 120 \text{ pcf}$

EXTERNAL STABILITY:

GROUP A : D + E + SC
 GROUP B : D + E + SC + W
 GROUP C : D + EQD/1.4 + E

WALL DESIGN

LOAD COMBINATIONS:

GROUP A : BD+1.7 E+1.7 SC
 GROUP B : BD+1.7 E+1.3 W
 GROUP C : BD+1.3 E+1.0 EQE
 GROUP D : BD+1.3 E+1.0 EQD
 GROUP E : BD+1.1 E+0.85(EQE+EQD)

WHERE : B = 0.9 OR 1.2 WHICHEVER CONTROLS DESIGN

D = DEAD LOAD
 E = LATERAL EARTH PRESSURE
 SC = LIVE LOAD SURCHARGE
 W = WIND LOAD
 EQD = SEISMIC DEAD LOAD
 EQE = SEISMIC LATERAL EARTH PRESSURE

GENERAL NOTES:

1. REDUCTION FACTORS:

GROUPS A & B : $\phi = 0.75$
 GROUP C, D & E : $\phi = 1.0$

LATERAL RESISTANCE OF EACH PILE:

SERVICE = 13 kip
 FACTORED = 30 kip
 SEISMIC/EXTREME = 40 kip

2. LIMIT OF NO SPLICING FOR REBARS = 3 TIMES OF THE BOTTOM THICKNESS OF THE STEM.

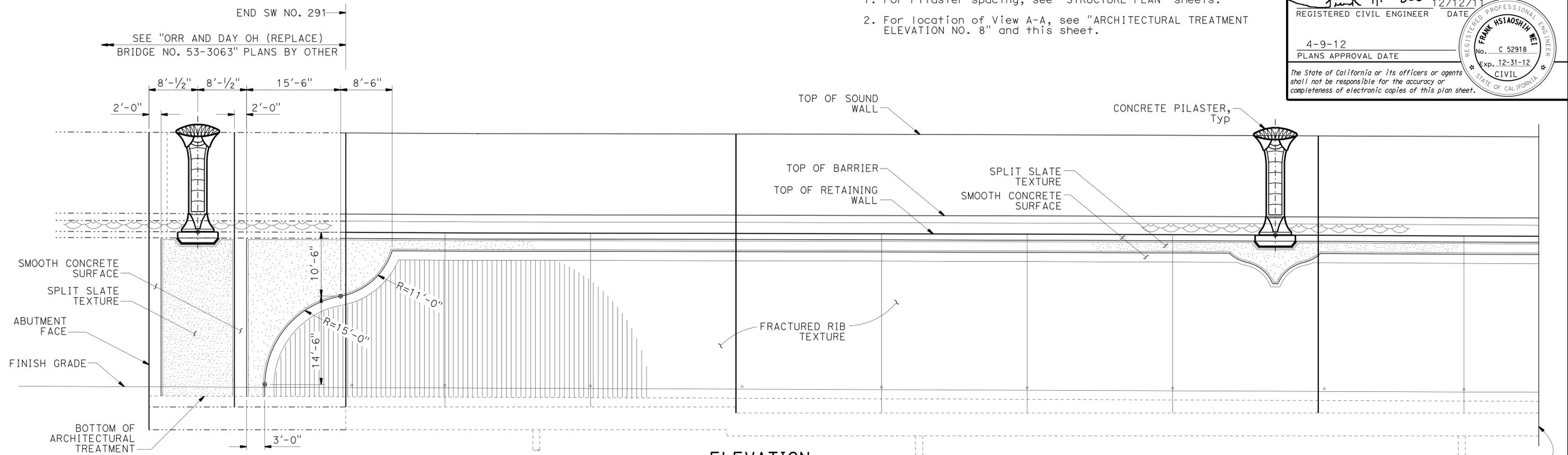
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES	BRIDGE NO.	SOUND WALL NO. 291
			530193	
			POST MILE	GENERAL NOTES AT SIGN STRUCTURES
			5.13	
			UNIT: 3606	REVISION DATES
			PROJECT NUMBER & PHASE: 0700001834 & 1 CONTRACT NO.: 07-215941	01-27-12 03-22-12
			DISREGARD PRINTS BEARING EARLIER REVISION DATES	SHEET 36 OF 71

FILE => 53-E0193-f-rwgen_notes_sign.dgn

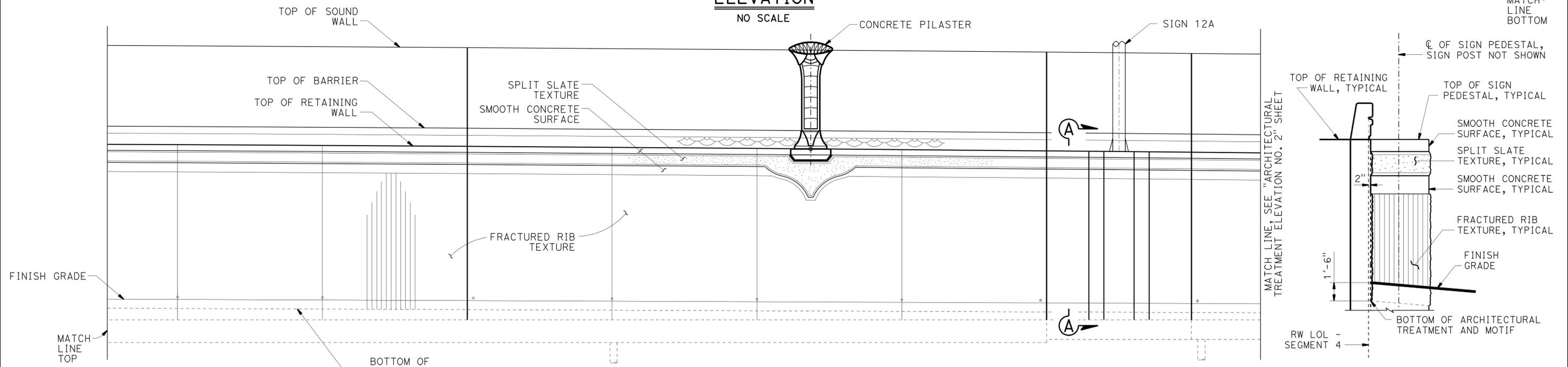
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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1563	1597
REGISTERED CIVIL ENGINEER <i>Frank H. Wei</i> DATE 12/12/11				REGISTERED PROFESSIONAL ENGINEER FRANK H. SHIAOSHU WEI No. C 52918 Exp. 12-31-12 CIVIL STATE OF CALIFORNIA	
PLANS APPROVAL DATE 4-9-12					
<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. For Pilaster spacing, see "STRUCTURE PLAN" sheets.
 2. For location of View A-A, see "ARCHITECTURAL TREATMENT ELEVATION NO. 8" and this sheet.



ELEVATION
NO SCALE



ELEVATION
NO SCALE

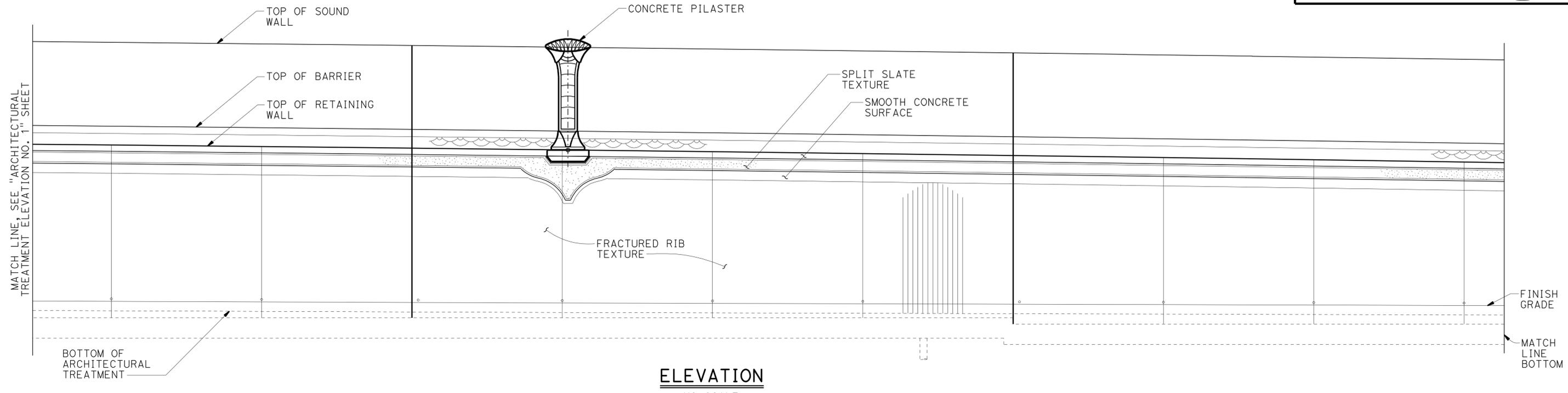
VIEW A-A
No Scale

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

DESIGN	BY C. VILLALOBOS	CHECKED F. WEI	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 21	BRIDGE NO.	SOUND WALL NO. 291 ARCHITECTURAL TREATMENT ELEVATION NO. 1
DETAILS	BY J. VALENCIA	CHECKED F. WEI			53E0193	
QUANTITIES	BY C. VILLALOBOS	CHECKED K. KIM			POST MILE 5.13	
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)				UNIT: 3623	PROJECT NUMBER & PHASE: 0700001834 & 1	CONTRACT NO.: 07-215941
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 37 OF 71

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1564	1597
<i>Frank H. Wei</i> 12/12/11 REGISTERED CIVIL ENGINEER DATE					
4-9-12 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>					

NOTE:
1. For Pilaster spacing, see "STRUCTURE PLAN" sheets.



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

DESIGN	BY C. VILLALOBOS	CHECKED F. WEI
DETAILS	BY J. VALENCIA	CHECKED F. WEI
QUANTITIES	BY C. VILLALOBOS	CHECKED K. KIM

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

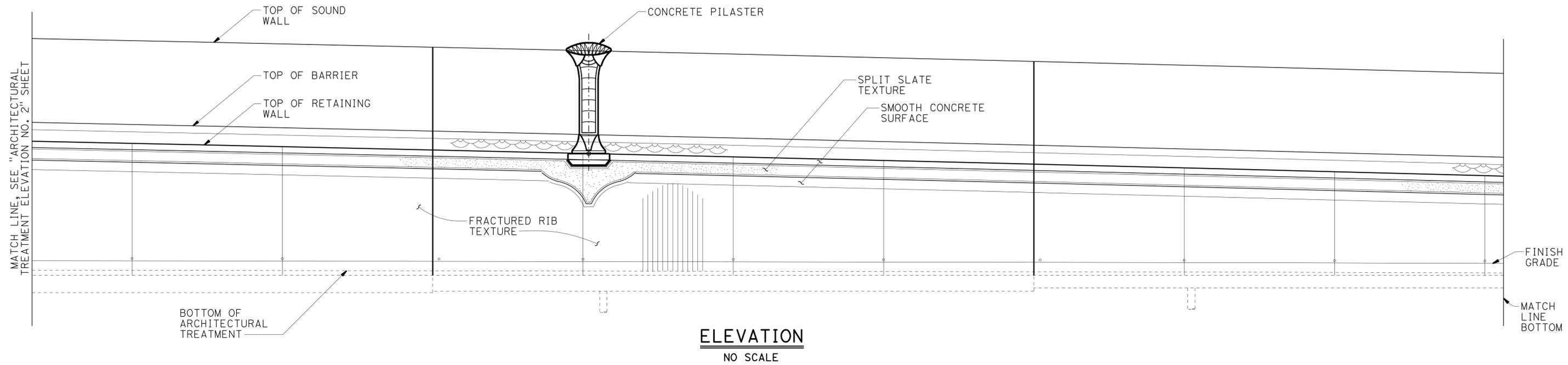
DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 21

BRIDGE NO.	53E0193
POST MILE	5.13

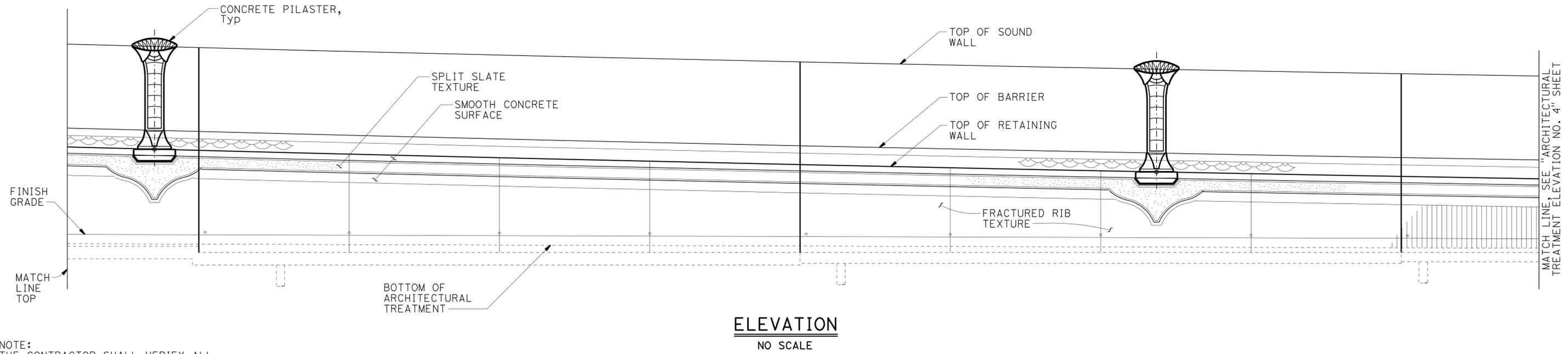
SOUND WALL NO. 291
ARCHITECTURAL TREATMENT ELEVATION NO. 2

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1565	1597
			REGISTERED CIVIL ENGINEER	DATE	
			FRANK H. WEI	12/12/11	
			PLANS APPROVAL DATE		
			4-9-12		
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.					

NOTE:
1. For Pilaster spacing, see "STRUCTURE PLAN" sheets.



ELEVATION
NO SCALE



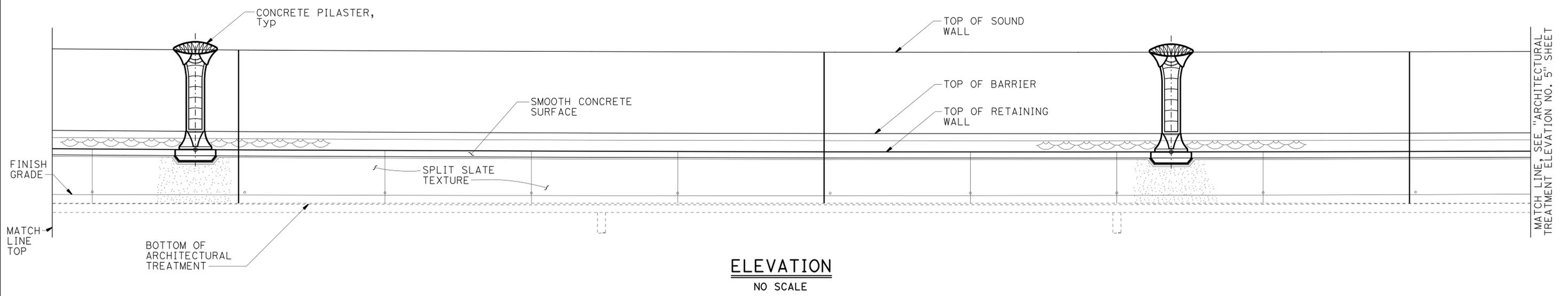
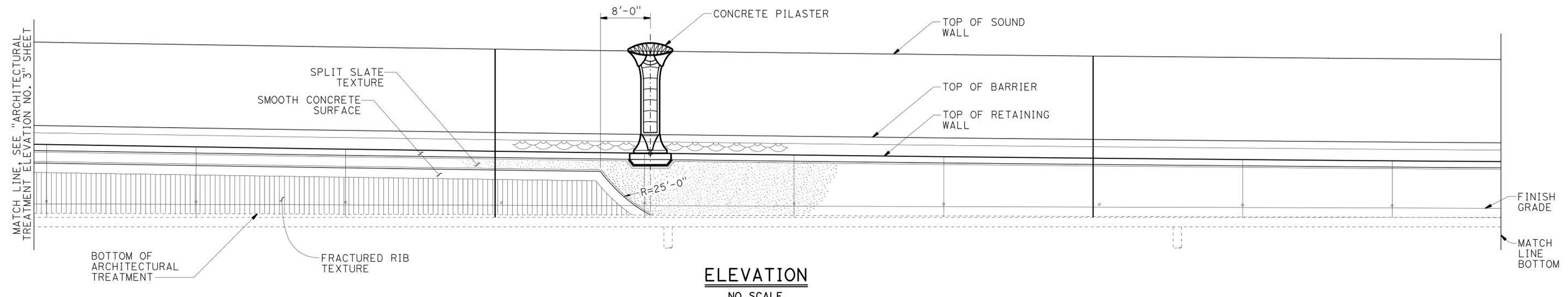
ELEVATION
NO SCALE

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

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY C. VILLALOBOS	CHECKED F. WEI	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 21	BRIDGE NO.	SOUND WALL NO. 291	
	DETAILS	BY J. VALENCIA	CHECKED F. WEI			53E0193	ARCHITECTURAL TREATMENT ELEVATION NO. 3	
	QUANTITIES	BY C. VILLALOBOS	CHECKED K. KIM			POST MILE 5.13		
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS					UNIT: 3623	PROJECT NUMBER & PHASE: 0700001834 & 1		CONTRACT NO.: 07-215941
DISREGARD PRINTS BEARING EARLIER REVISION DATES						REVISION DATES		SHEET 39 OF 71

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1566	1597
<i>Frank H. Wei</i> REGISTERED CIVIL ENGINEER DATE 12/12/11					
4-9-12 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>					

NOTE:
1. For Pilaster spacing, see "STRUCTURE PLAN" sheets.



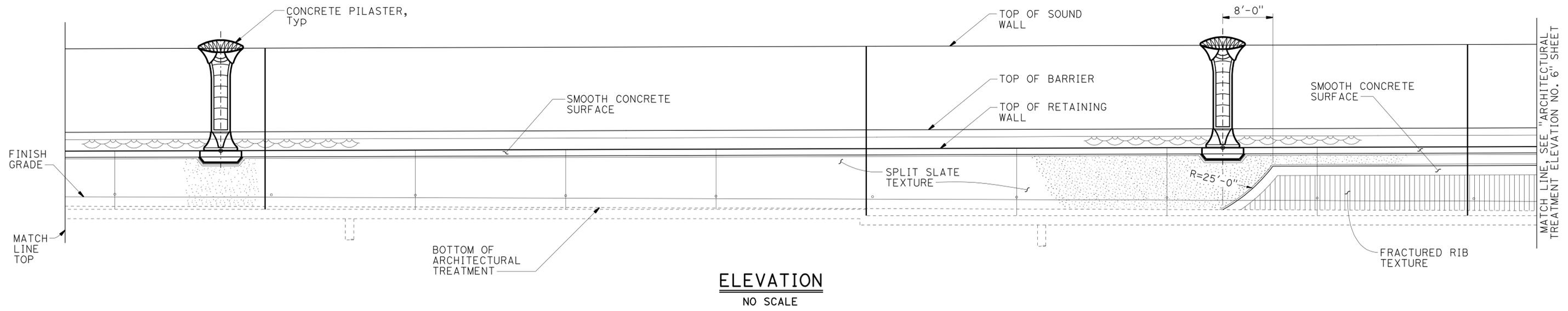
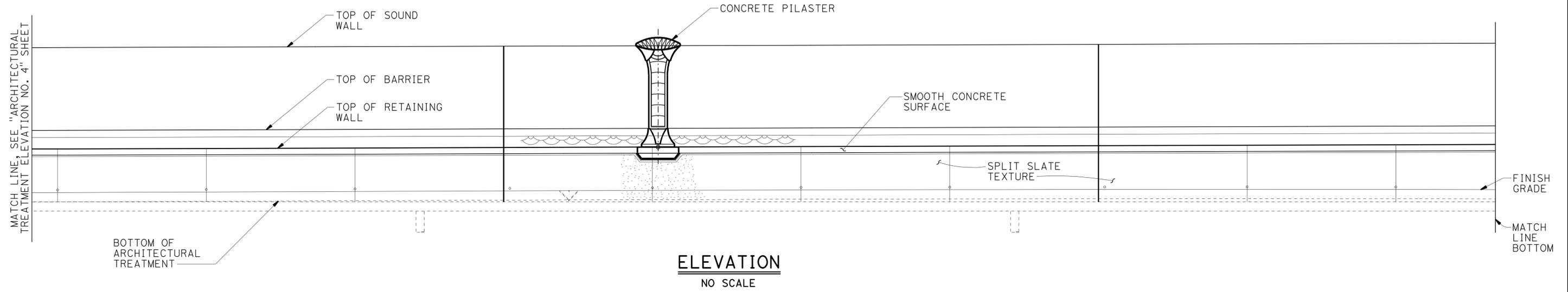
NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

DESIGN BY C. VILLALOBOS CHECKED F. WEI DETAILS BY J. VALENCIA CHECKED F. WEI QUANTITIES BY C. VILLALOBOS CHECKED K. KIM	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 21	BRIDGE NO. 53E0193	SOUND WALL NO. 291 ARCHITECTURAL TREATMENT ELEVATION NO. 4
			POST MILE 5.13	
			UNIT: 3623 PROJECT NUMBER & PHASE: 0700001834 & 1 CONTRACT NO.: 07-215941	
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 11/23/11 12/12/11 03/22/12 SHEET 40 OF 71

USERNAME => s128843 DATE PLOTTED => 14-APR-2012 TIME PLOTTED => 07:33

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1567	1597
			REGISTERED CIVIL ENGINEER DATE 12/12/11 FRANK H. WEI No. C 52918 Exp. 12-31-12 CIVIL STATE OF CALIFORNIA		
4-9-12 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.					

NOTE:
1. For Pilaster spacing, see "STRUCTURE PLAN" sheets.



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

DESIGN	BY C. VILLALOBOS	CHECKED F. WEI
DETAILS	BY J. VALENCIA	CHECKED F. WEI
QUANTITIES	BY C. VILLALOBOS	CHECKED K. KIM

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 21

BRIDGE NO.	53E0193
POST MILE	5.13

SOUND WALL NO. 291
ARCHITECTURAL TREATMENT ELEVATION NO. 5

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

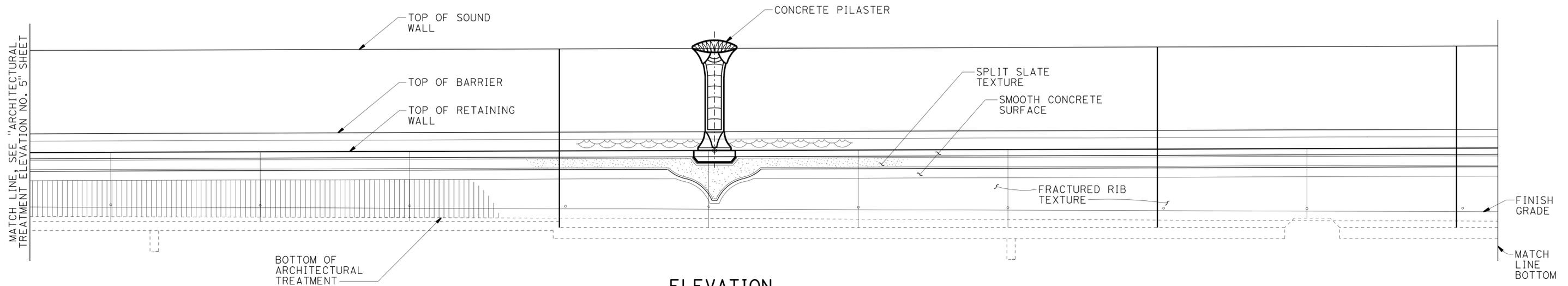
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

UNIT: 3623
PROJECT NUMBER & PHASE: 0700001834 & 1 CONTRACT NO.: 07-215941

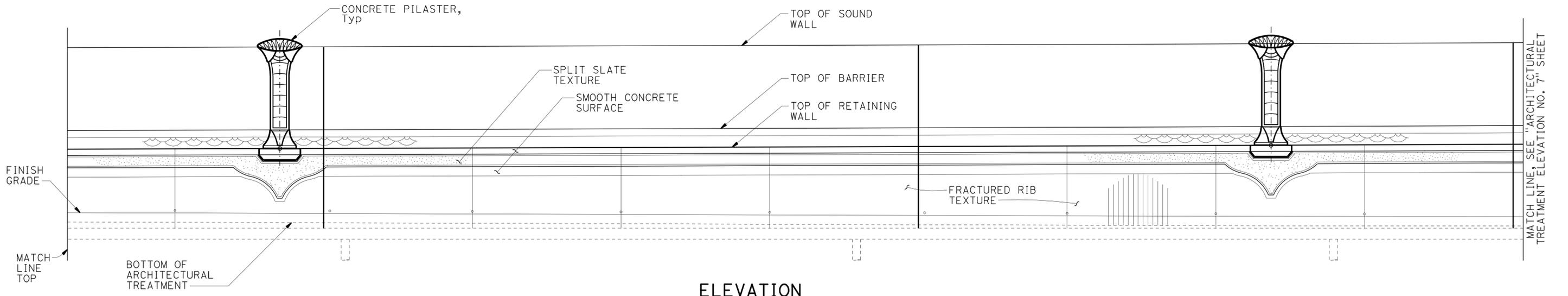
DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET	OF
	11/23/11 12/12/11 03/22/12	41	71

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1568	1597
REGISTERED CIVIL ENGINEER <i>Frank H. Wei</i> DATE 12/12/11					
PLANS APPROVAL DATE 4-9-12					
<i>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.</i>					

NOTE:
1. For Pilaster spacing, see "STRUCTURE PLAN" sheets.



ELEVATION
NO SCALE



ELEVATION
NO SCALE

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

DESIGN	BY C. VILLALOBOS	CHECKED F. WEI
DETAILS	BY J. VALENCIA	CHECKED F. WEI
QUANTITIES	BY C. VILLALOBOS	CHECKED K. KIM

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

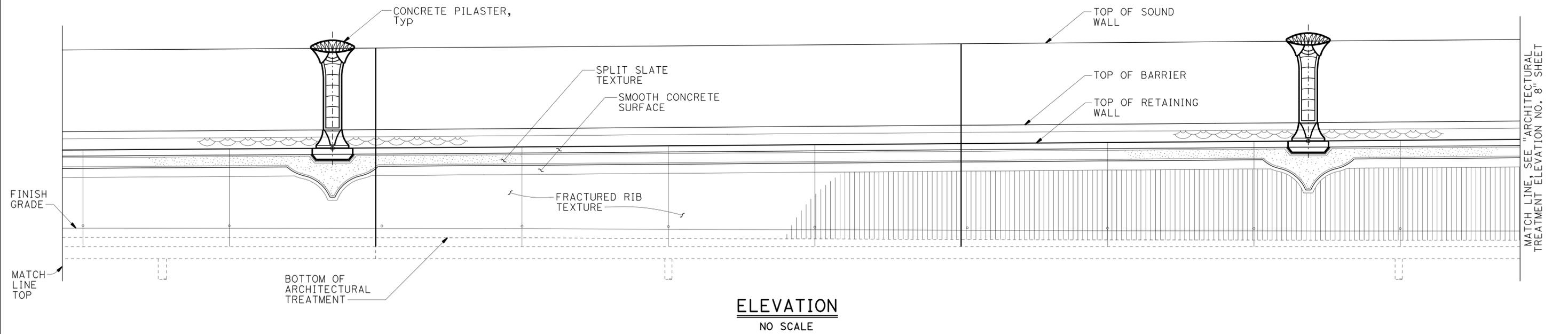
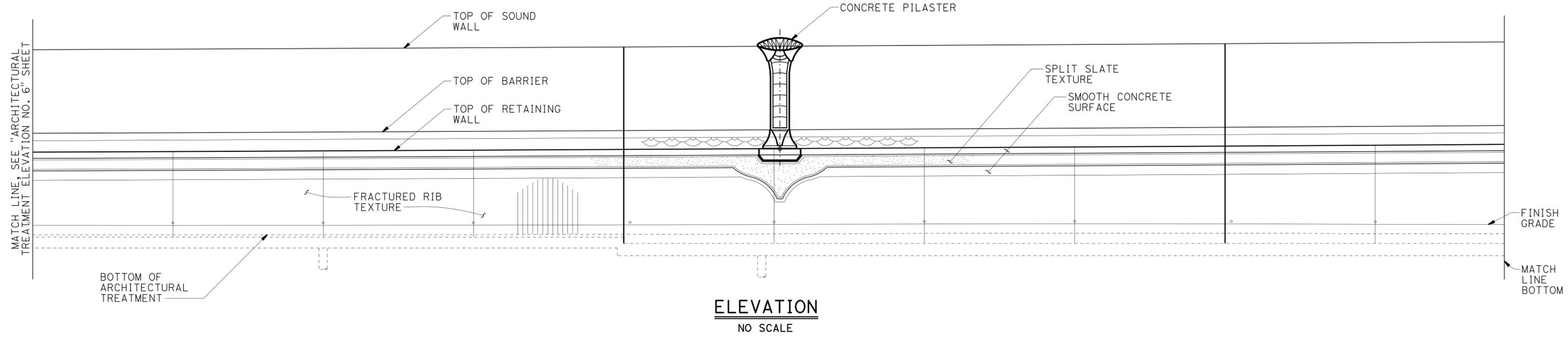
DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 21

BRIDGE NO.	53E0193
POST MILE	5.13

SOUND WALL NO. 291
ARCHITECTURAL TREATMENT ELEVATION NO. 6

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1569	1597
<i>Frank H. Wei</i> 12/12/11 REGISTERED CIVIL ENGINEER DATE					
4-9-12 PLANS APPROVAL DATE					
<i>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.</i>					

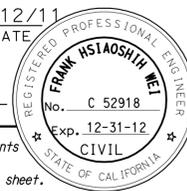
NOTE:
1. For Pilaster spacing, see "STRUCTURE PLAN" sheets.



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

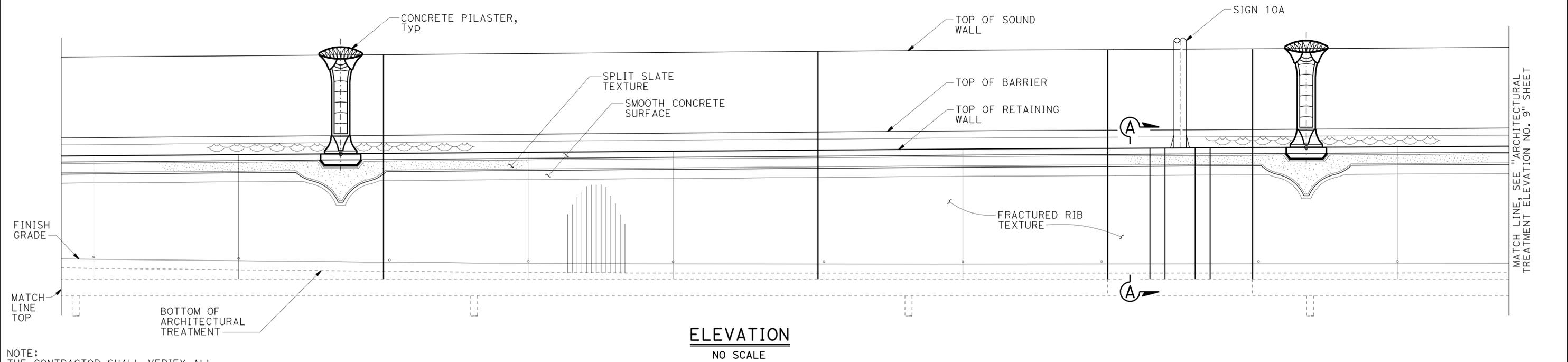
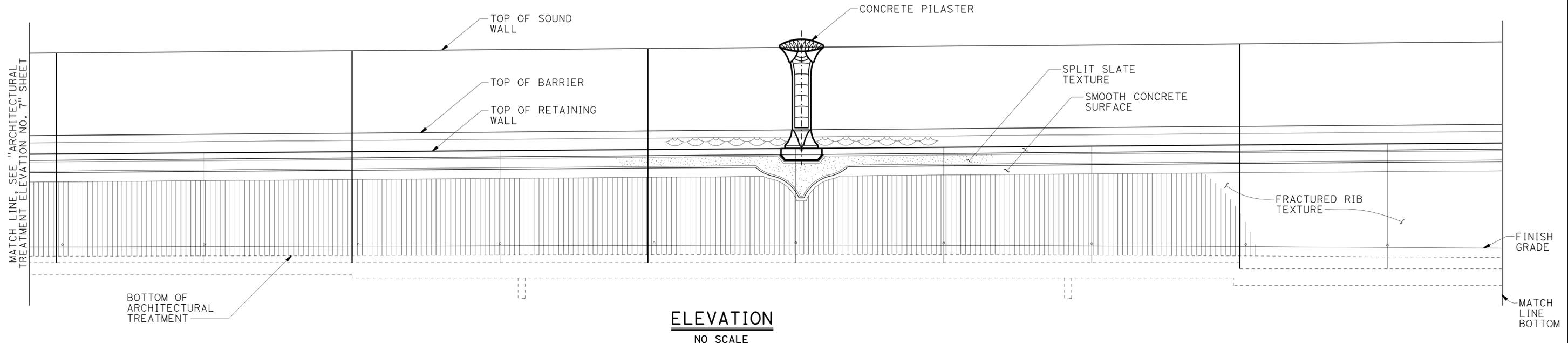
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY C. VILLALOBOS	CHECKED F. WEI	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 21	BRIDGE NO.	SOUND WALL NO. 291		
	DETAILS	BY J. VALENCIA	CHECKED F. WEI			53E0193	ARCHITECTURAL TREATMENT ELEVATION NO. 7		
	QUANTITIES	BY C. VILLALOBOS	CHECKED K. KIM			POST MILE 5.13			
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS					UNIT: 3623 PROJECT NUMBER & PHASE: 0700001834 & 1 CONTRACT NO.: 07-215941	DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES 11/23/11 12/12/11 03/22/12	SHEET 43 OF 71

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1570	1597
Frank H. Wei REGISTERED CIVIL ENGINEER				DATE	
4-9-12 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.					



NOTES:

1. For Pilaster spacing, see "STRUCTURE PLAN" sheets.
2. For View A-A, see "ARCHITECTURAL TREATMENT ELEVATION NO. 1" sheet.



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

DESIGN BY C. VILLALOBOS CHECKED F. WEI	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 21	BRIDGE NO.	SOUND WALL NO. 291 ARCHITECTURAL TREATMENT ELEVATION NO. 8
			53E0193	
			POST MILE	
DETAILS BY J. VALENCIA CHECKED F. WEI			5.13	
QUANTITIES BY C. VILLALOBOS CHECKED K. KIM				

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

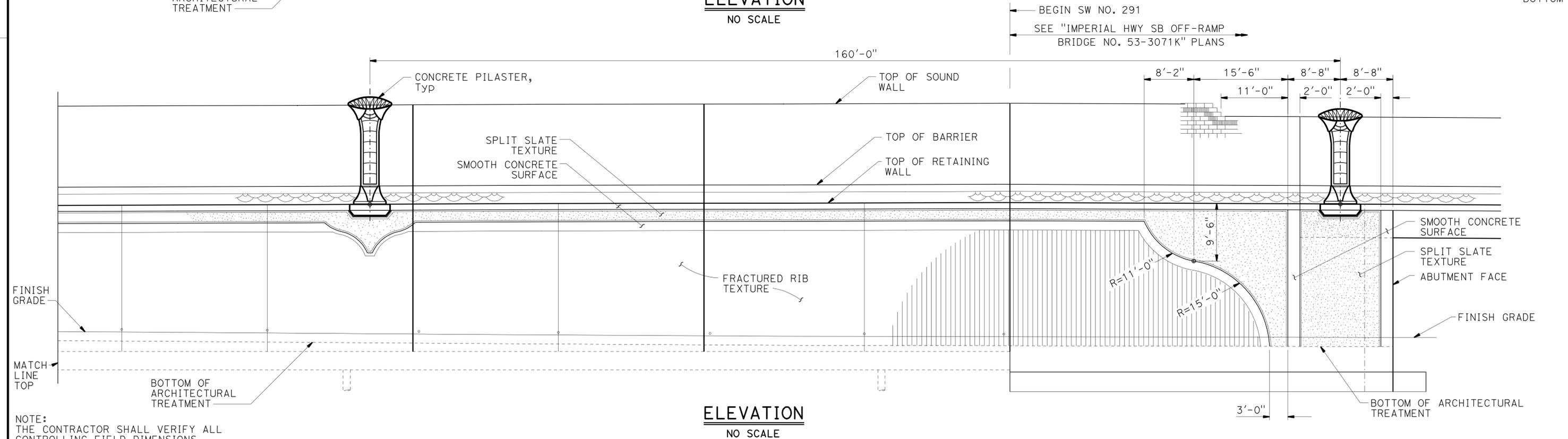
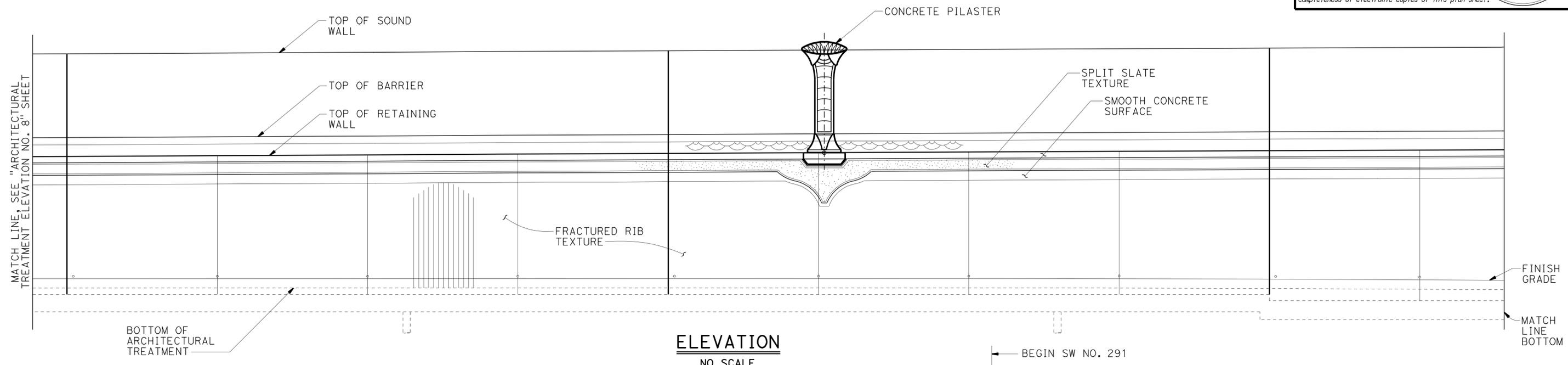
UNIT: 3623
PROJECT NUMBER & PHASE: 0700001834 & 1 CONTRACT NO.: 07-215941

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
11/23/11 12/12/11 03/22/12	44	71

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1571	1597
			DATE		
			12/12/11		
			REGISTERED CIVIL ENGINEER		
			FRANK H. WEI		
			No. C 52918		
			EXP. 12-31-12		
			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.					

NOTE:
1. For Pilaster spacing, see "STRUCTURE PLAN" sheets.



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

DESIGN	BY C. VILLALOBOS	CHECKED F. WEI
DETAILS	BY J. VALENCIA	CHECKED F. WEI
QUANTITIES	BY C. VILLALOBOS	CHECKED K. KIM

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 21

BRIDGE NO.	53E0193
POST MILE	5.13

SOUND WALL NO. 291
ARCHITECTURAL TREATMENT ELEVATION NO. 9

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

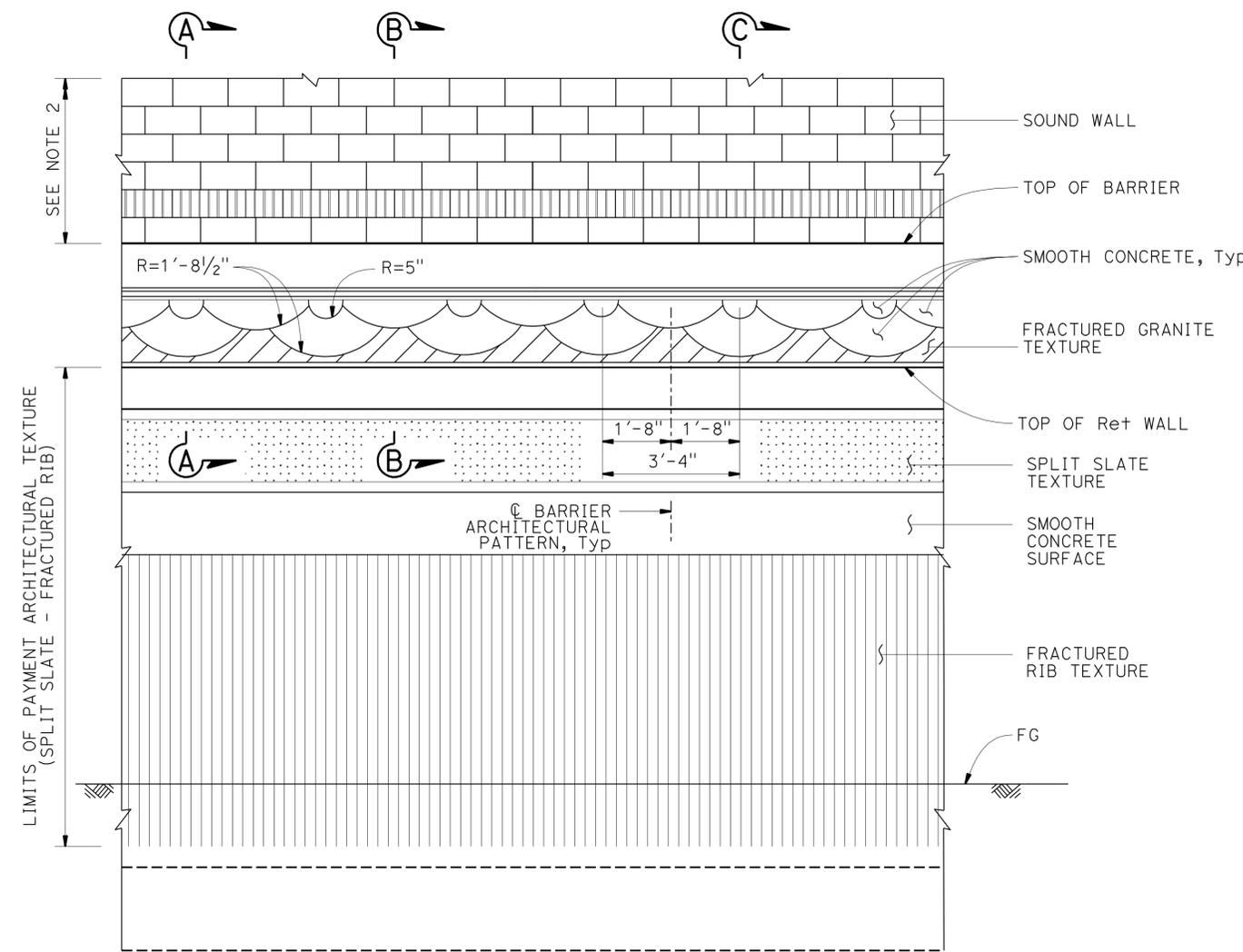
UNIT: 3623
PROJECT NUMBER & PHASE: 0700001834 & 1 CONTRACT NO.: 07-215941

DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET	OF
	11/23/11 12/12/11 03/22/12	45	71

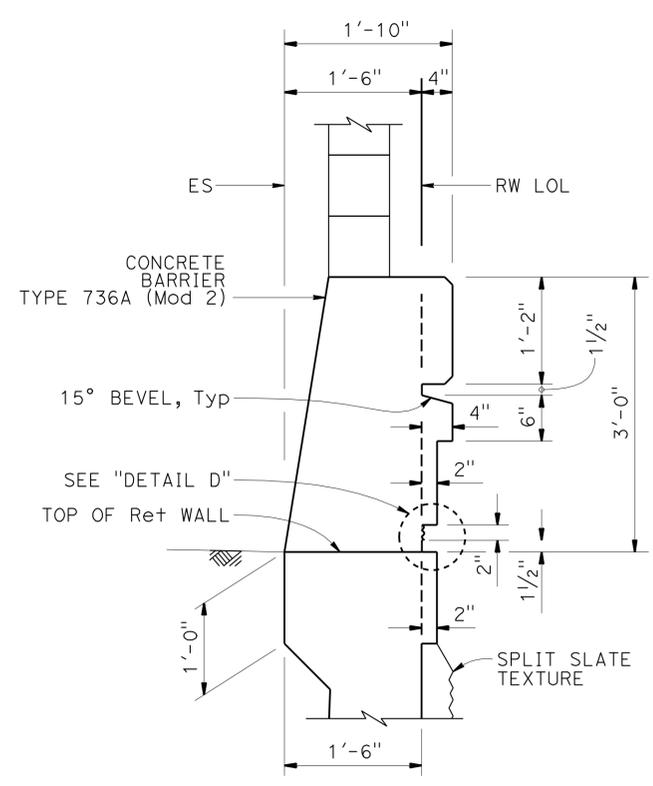
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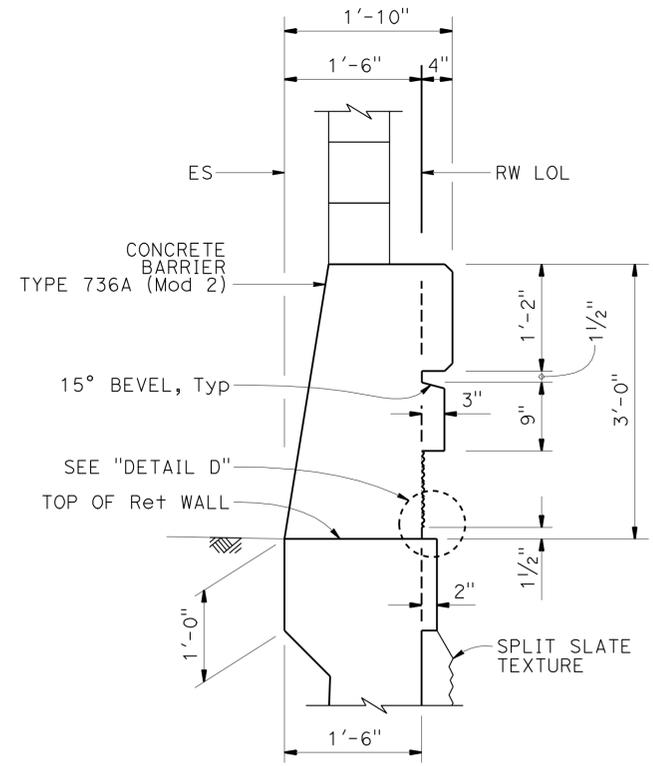
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1572	1597
Frank H. Wei REGISTERED CIVIL ENGINEER DATE 2/12/11					
4-9-12 PLANS APPROVAL DATE					
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.					



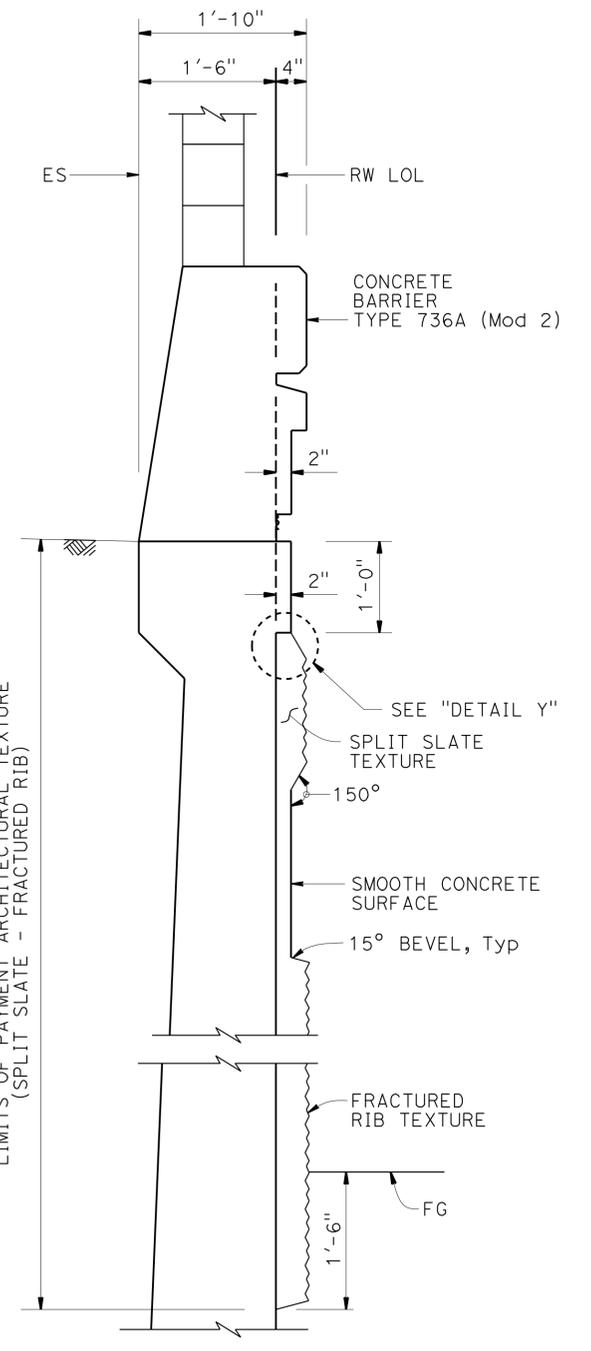
PART ELEVATION
1/2" = 1'-0"



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

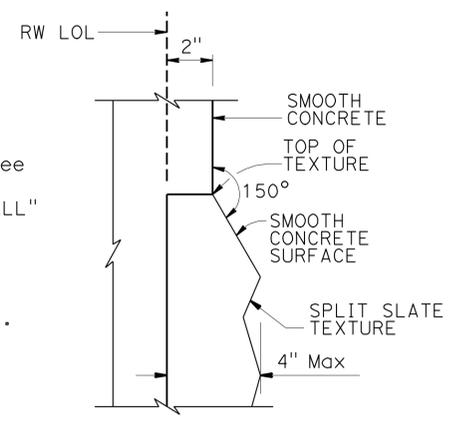


SECTION B-B
1" = 1'-0"

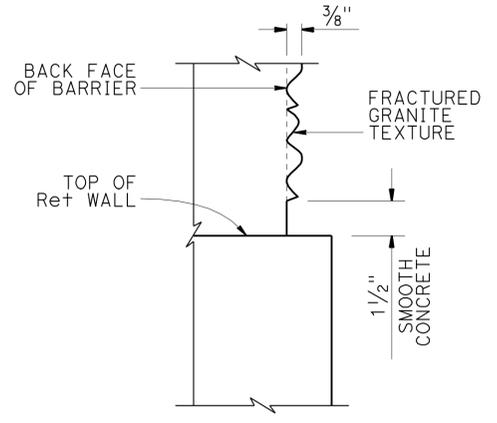


SECTION C-C
1" = 1'-0"

- NOTES:
1. For Barrier Reinforcement, see "SOUND WALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL" sheet.
 2. For sound wall architectural treatment, see "SOUND WALL ARCHITECTURAL DETAILS" sheet.



DETAIL Y
NO SCALE



DETAIL D
NO SCALE

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

DESIGN	BY C. VILLALOBOS	CHECKED F. WEI
DETAILS	BY J. VALENCIA	CHECKED F. WEI
QUANTITIES	BY C. VILLALOBOS	CHECKED K. KIM

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 21

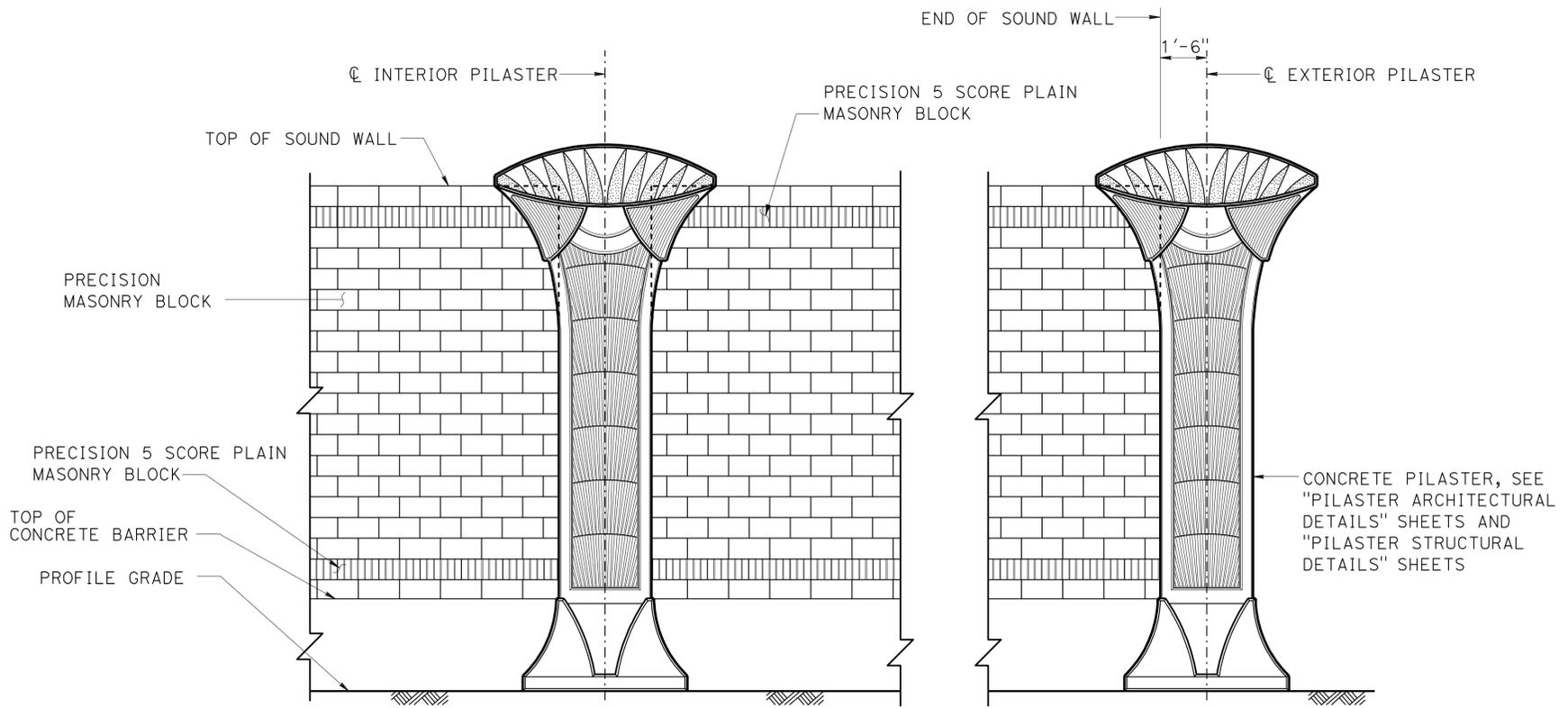
BRIDGE NO.	53E0193
POST MILE	5.13

SOUND WALL NO. 291
RETAINING WALL AND BARRIER ARCHITECTURAL DETAILS

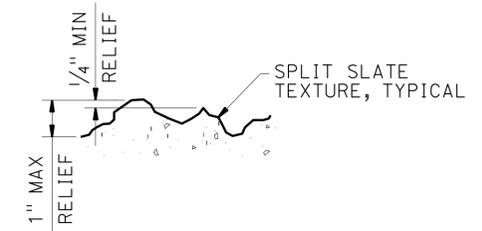
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1573	1597
Frank H. Wei REGISTERED CIVIL ENGINEER			DATE		
4-9-12 PLANS APPROVAL DATE					
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.					



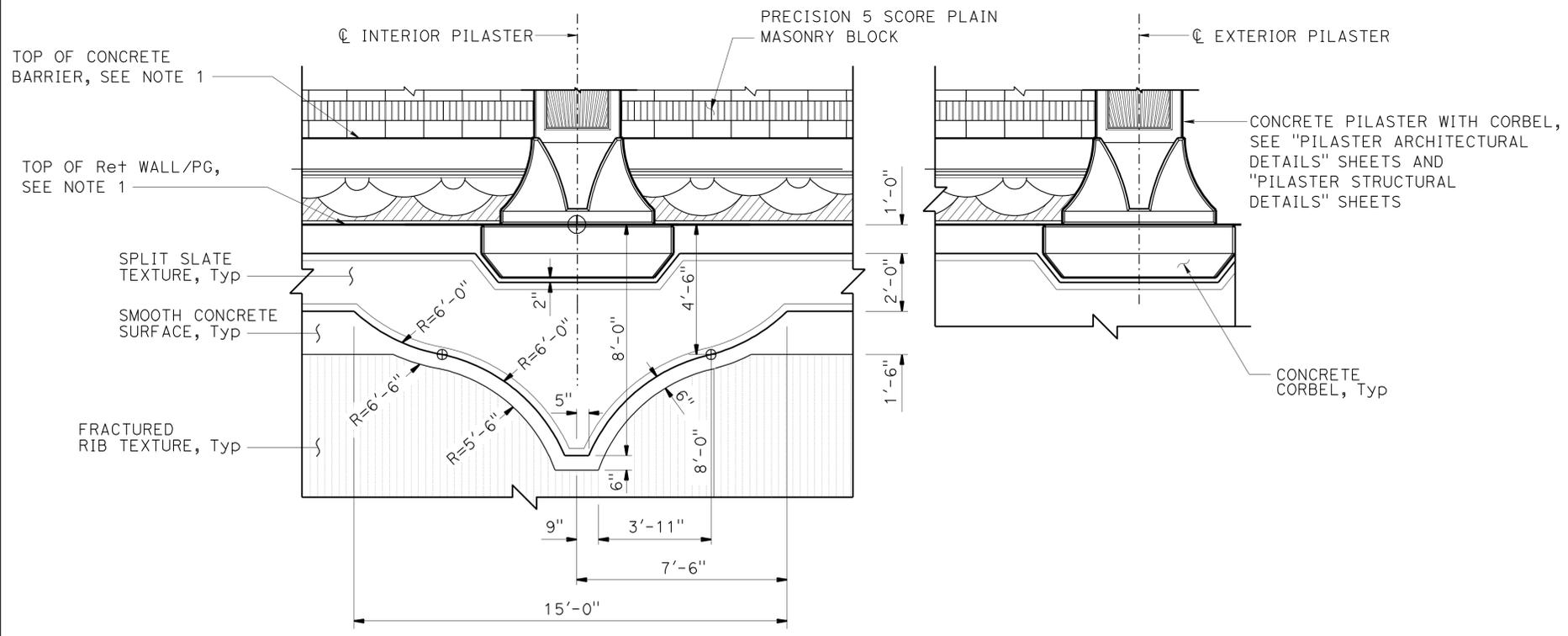
NOTE:
1. See "RETAINING WALL AND BARRIER ARCHITECTURAL DETAILS" sheet.



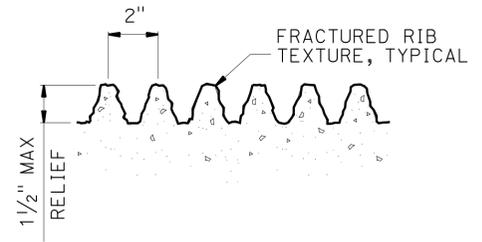
PART SOUND WALL ELEVATION - FREEWAY SIDE
NO SCALE



SPLIT SLATE TEXTURE DETAIL
NO SCALE



PART SOUND WALL ELEVATION - BACK SIDE
NO SCALE

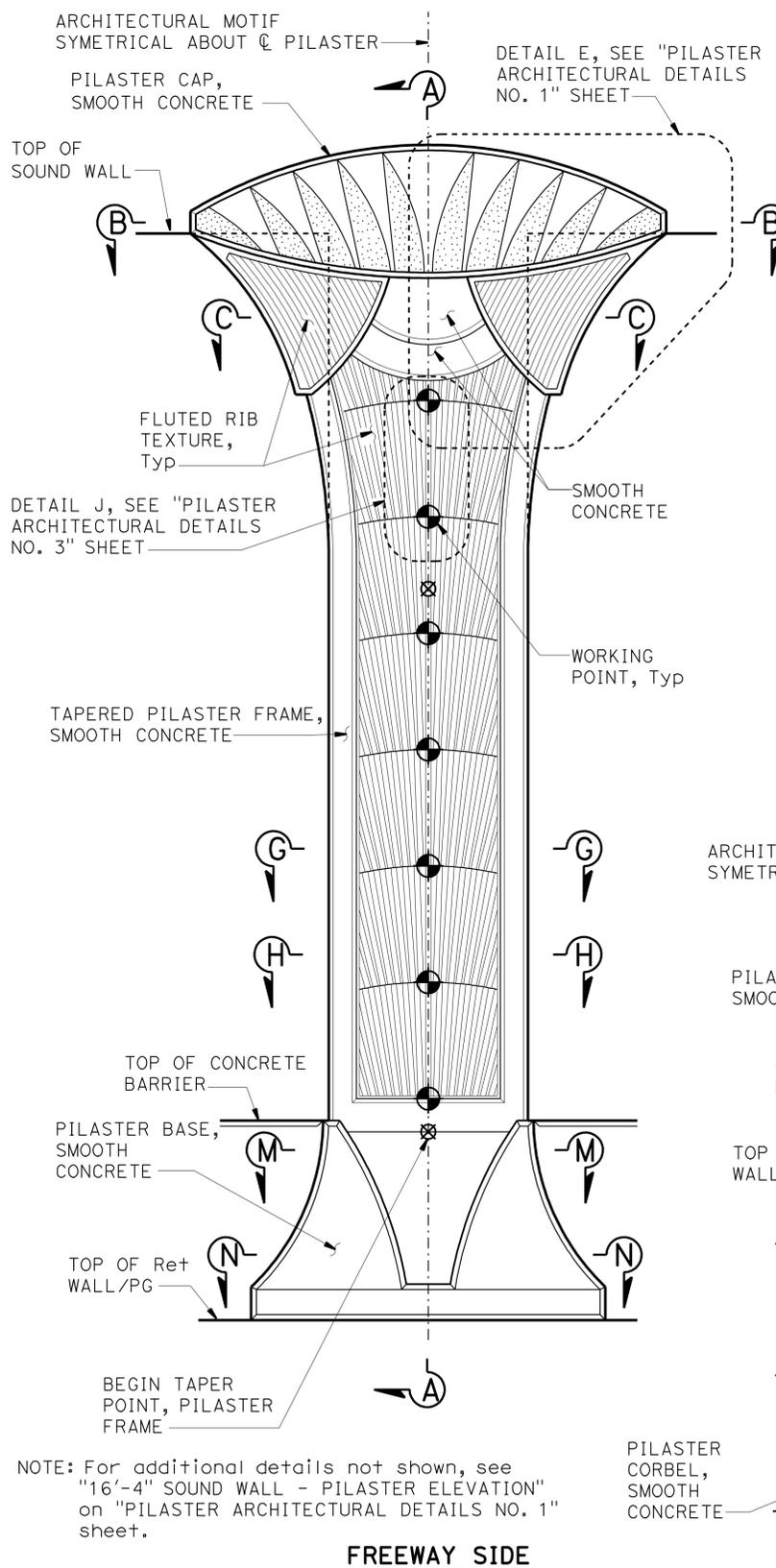


FRACTURED RIB TEXTURE DETAIL
NO SCALE

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

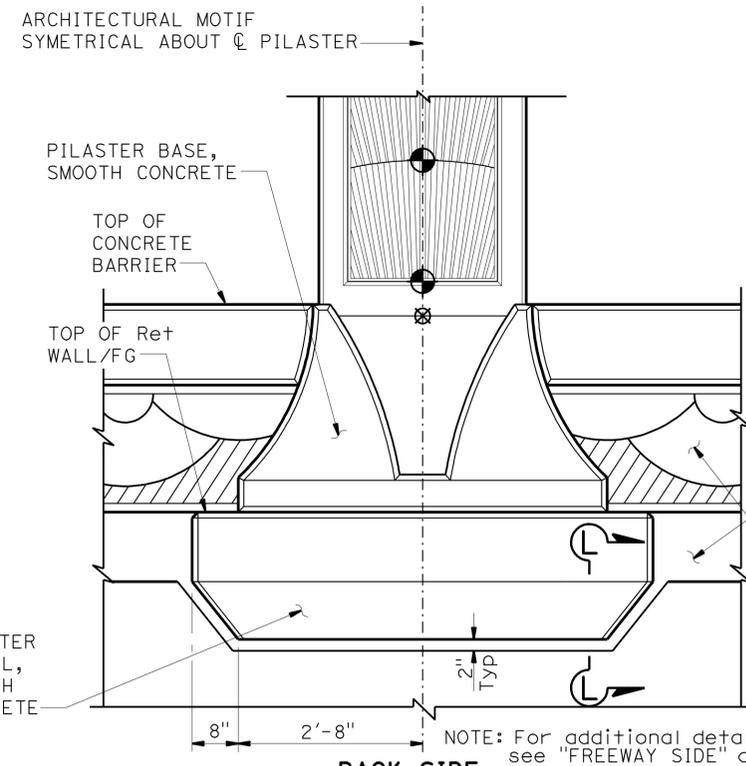
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY H. CHAVEZ	CHECKED I. TASABIA	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 21	BRIDGE NO.	53E0193	SOUND WALL NO. 291 SOUND WALL ARCHITECTURAL DETAILS		
	DETAILS	BY J. VALENCIA	CHECKED F. WEI/I. TASABIA			POST MILE	5.13			
	QUANTITIES	BY C. VILLALOBOS	CHECKED K. KIM			UNIT: 3623	PROJECT NUMBER & PHASE: 0700001834 & 1		CONTRACT NO.: 07-215941	
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				0	1	2	3	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES 09/20/11 11/25/11 12/27/11 03/22/12	SHEET 47 OF 71

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1575	1597
			DATE		
			2/12/11		
			REGISTERED CIVIL ENGINEER		
			4-9-12		
			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.					



FREEWAY SIDE

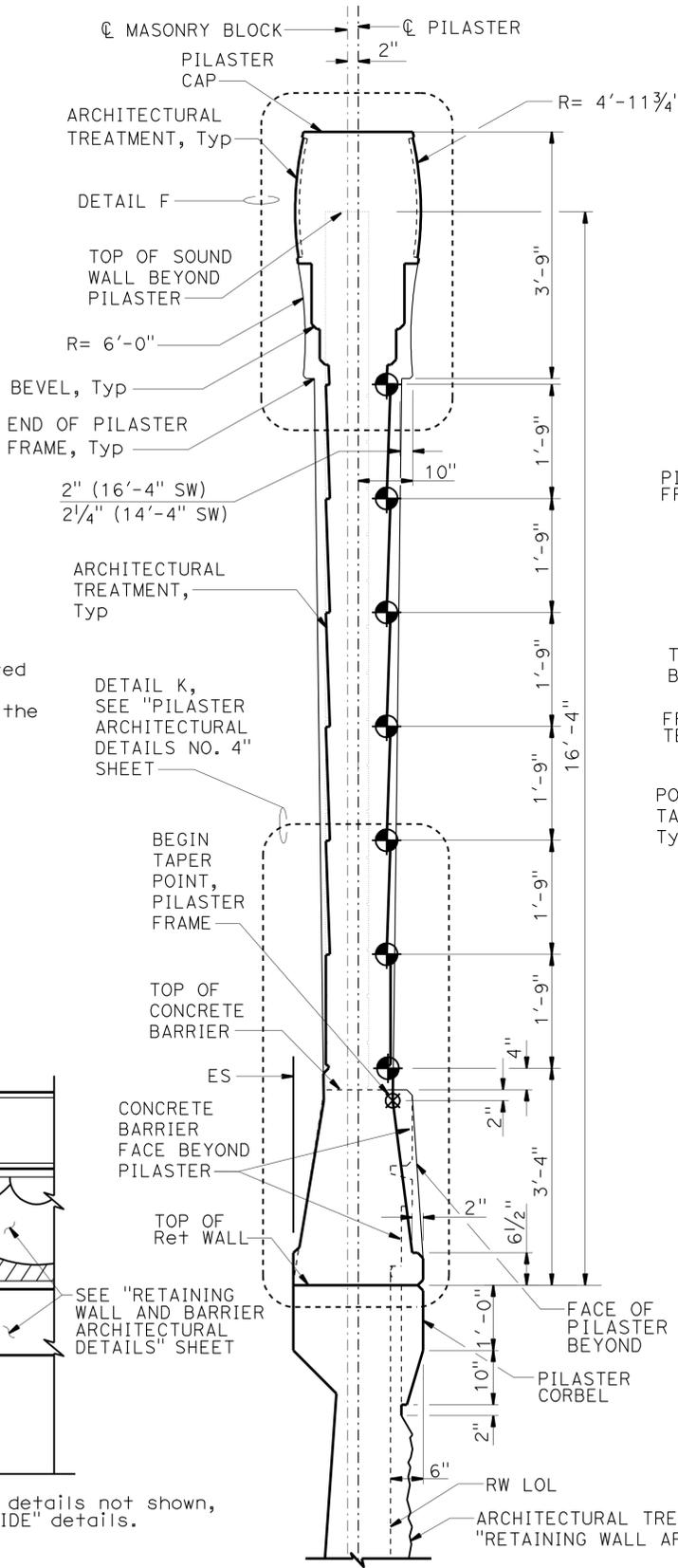
- NOTES:
1. For "SECTION B-B", "SECTION C-C", "SECTION G-G", "SECTION H-H" and "SECTION L-L", see "PILASTER ARCHITECTURAL DETAILS NO. 3" sheet.
 2. For "SECTION M-M" and "SECTION N-N" see "PILASTER ARCHITECTURAL DETAIL NO. 4" sheet.
 3. Pilaster Sections on Retaining Wall shown, for Pilaster on Barrier Type 736SV (Mod), see "PILASTER SECTION ON TYPE 736SV (Mod) BARRIER" on "PILASTER ARCHITECTURAL DETAILS NO. 4" sheet.
 4. All dimensions symmetrical about \O pilaster.
 5. Beveled edges are 45° unless otherwise noted
 6. All vertical dimensions are measured along the \O Pilaster (Pilaster shall be vertical).



BACK SIDE

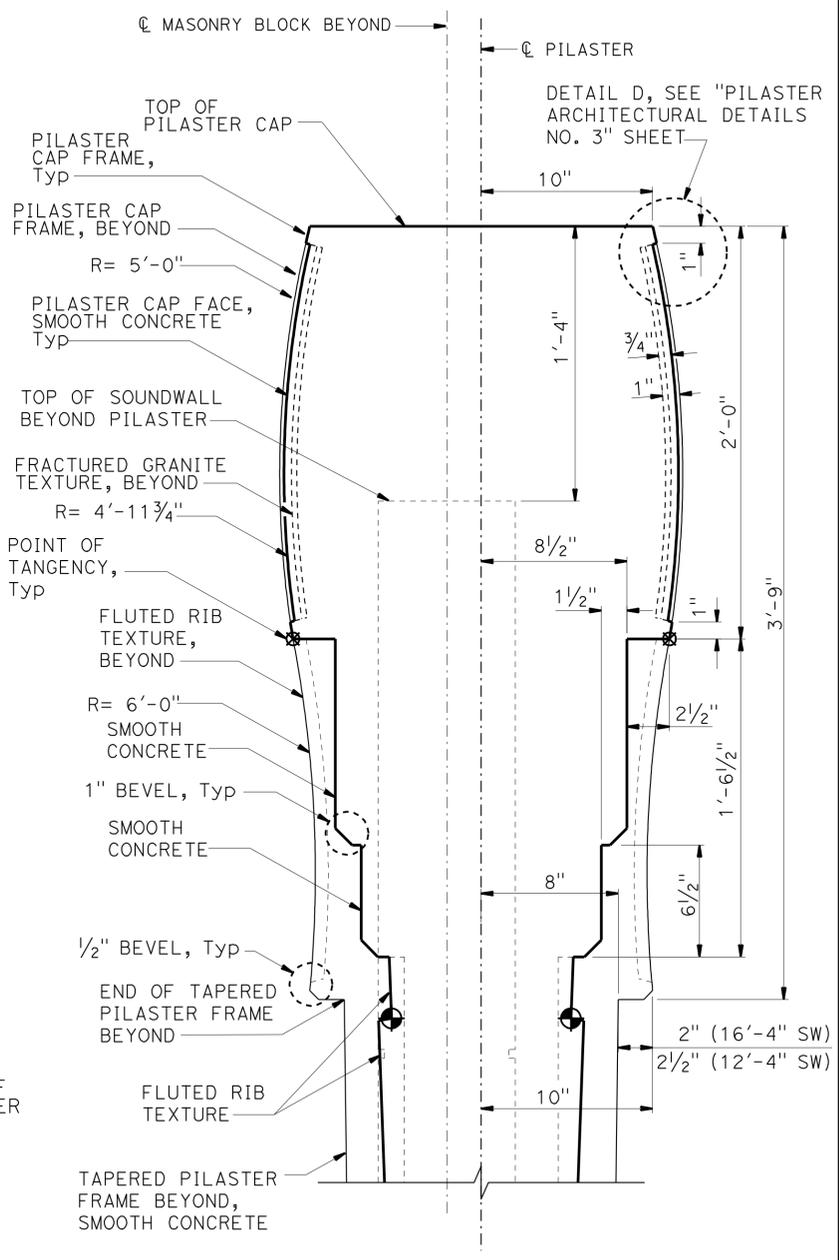
PILASTER ARCHITECTURAL MOTIF

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



SECTION A-A

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



DETAIL F
NO SCALE

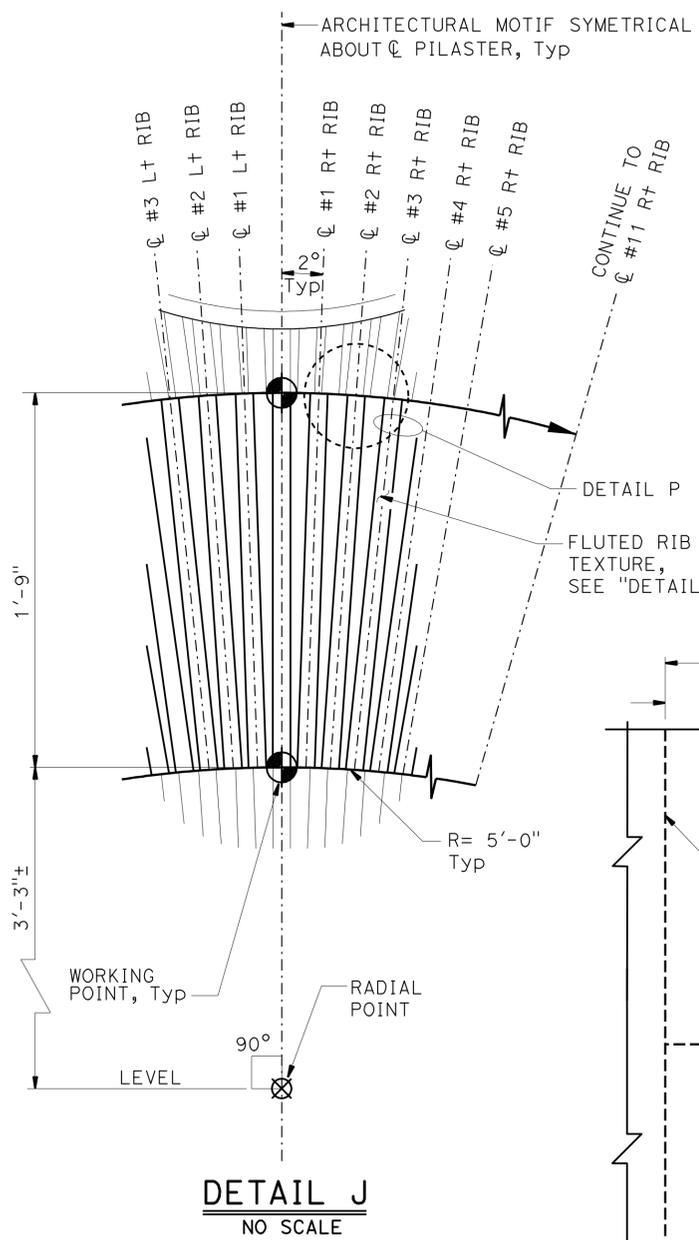
NOTE: THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

NOTE: Pilaster for 16'-4" Sound Wall shown, Pilaster at 12'-4" Sound Wall similar.

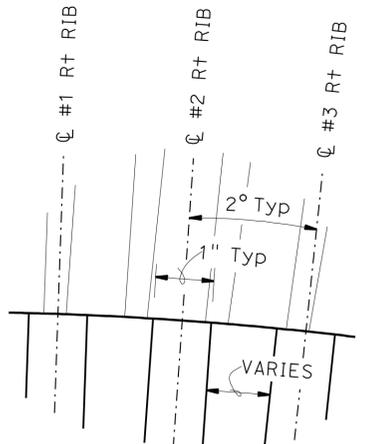
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY H. CHAVEZ	CHECKED I. TASABIA	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 21	BRIDGE NO.	53E0193	SOUND WALL NO. 291 PILASTER ARCHITECTURAL DETAILS NO. 2		
	DETAILS	BY J. VALENCIA	CHECKED F. WEI			POST MILE	5.13			
	QUANTITIES	BY C. VILLALOBOS	CHECKED K. KIM			CONTRACT NO.	07-215941			
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				UNIT: 3623 PROJECT NUMBER & PHASE: 0700001834 & 1		CONTRACT NO.: 07-215941		DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES 09/20/11 11/25/11 12/27/11 03/22/12	SHEET 49 OF 71

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1576	1597
Frank H. Wei REGISTERED CIVIL ENGINEER DATE 12/12/11				FRANK H. HSIANGSHIH WEI REGISTERED PROFESSIONAL ENGINEER No. C 52918 Exp. 12-31-12 CIVIL STATE OF CALIFORNIA	
4-9-12 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.					

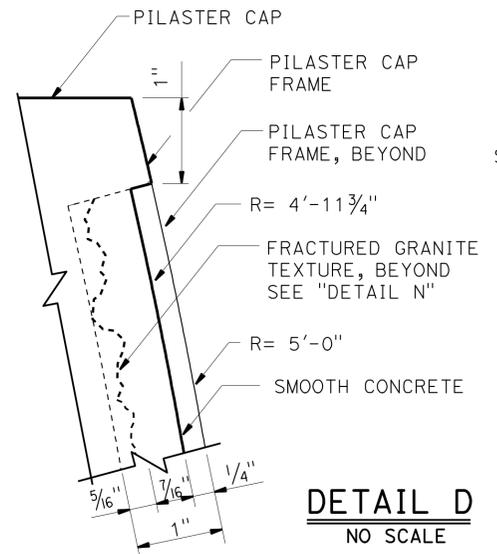
- NOTES:
- All notes and dimensions symmetrical about C pilaster.
 - Beveled edges are 45° unless otherwise noted.
 - For location of "DETAIL J", "DETAIL D" and "SECTION B-B", "SECTION C-C", "SECTION G-G", "SECTION H-H" and "SECTION L-L", see "PILASTER ARCHITECTURAL DETAILS NO. 2" sheet.
 - For Retaining Wall split slate texture, see "RETAINING WALL AND BARRIER ARCHITECTURAL DETAILS" sheet.



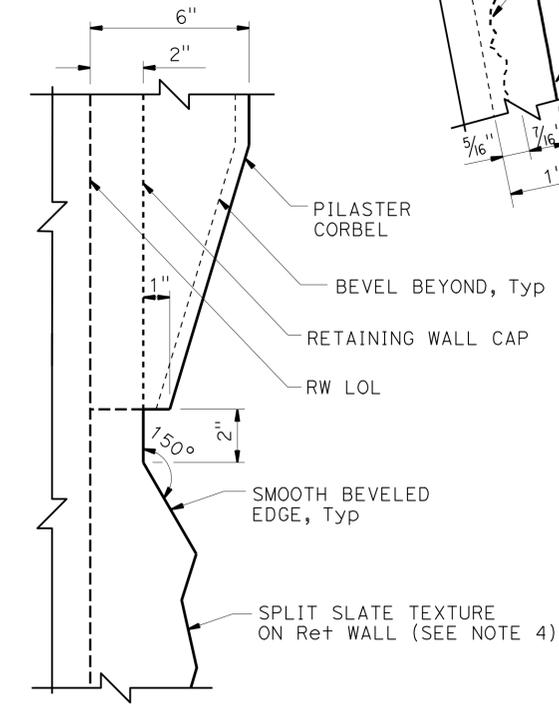
DETAIL J
NO SCALE



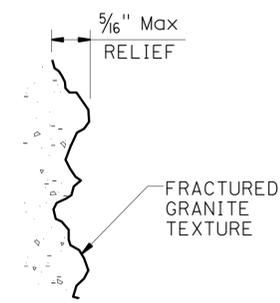
DETAIL P
NO SCALE



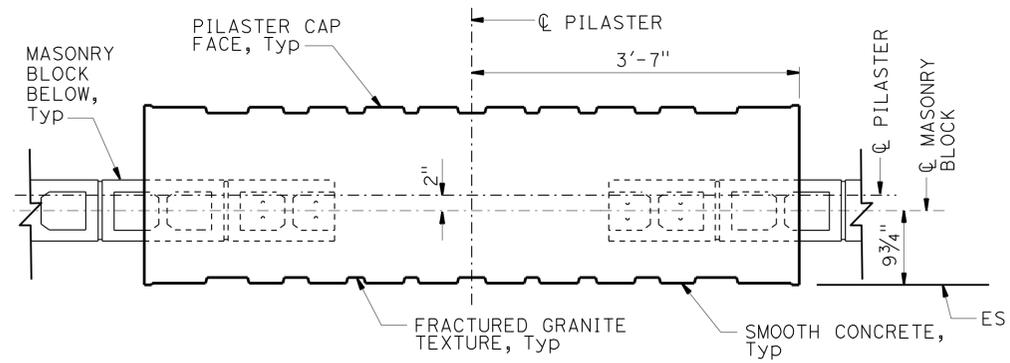
DETAIL D
NO SCALE



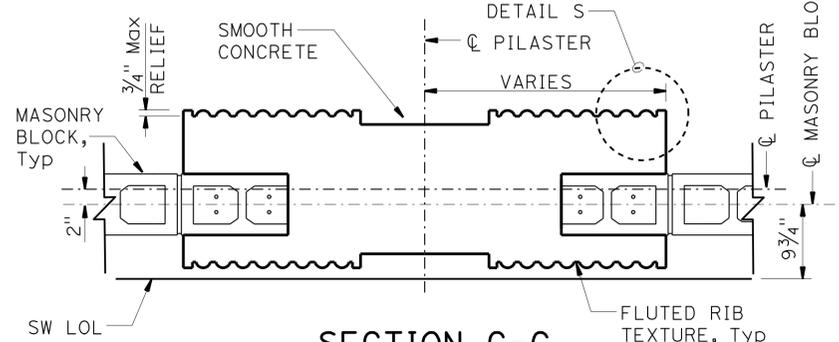
SECTION L-L
NO SCALE



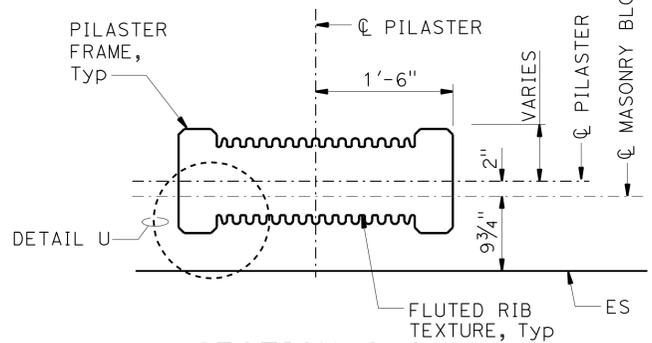
DETAIL N
NO SCALE



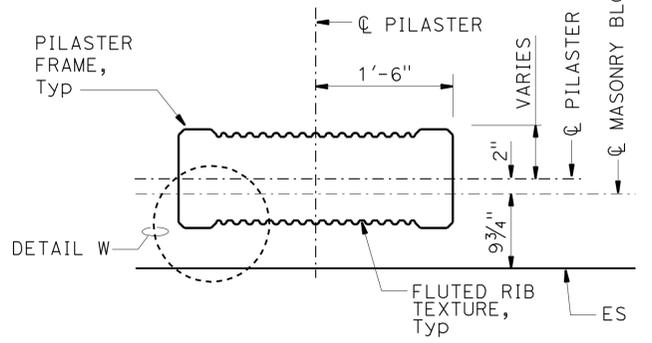
SECTION B-B
1" = 1'-0"



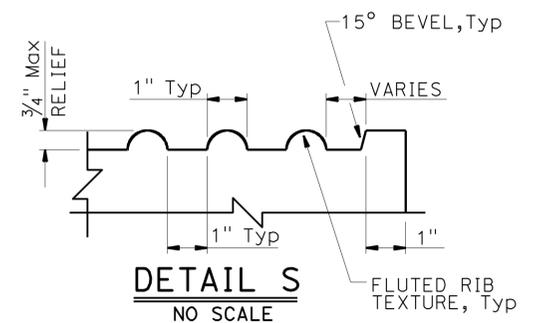
SECTION C-C
1" = 1'-0"



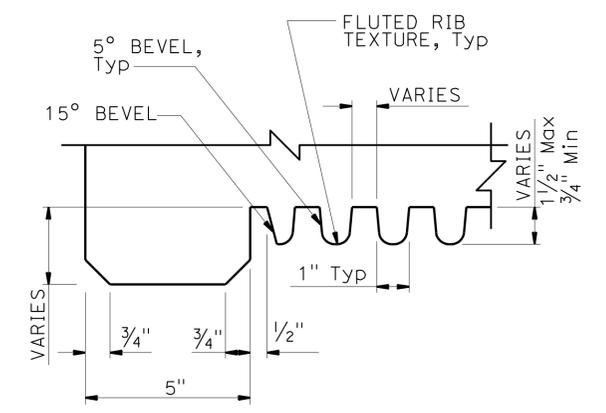
SECTION G-G
1" = 1'-0"



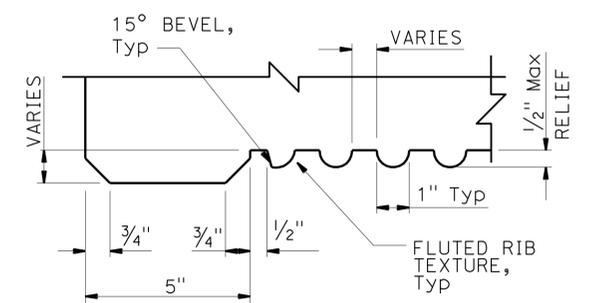
SECTION H-H
1" = 1'-0"



DETAIL S
NO SCALE



DETAIL U
NO SCALE

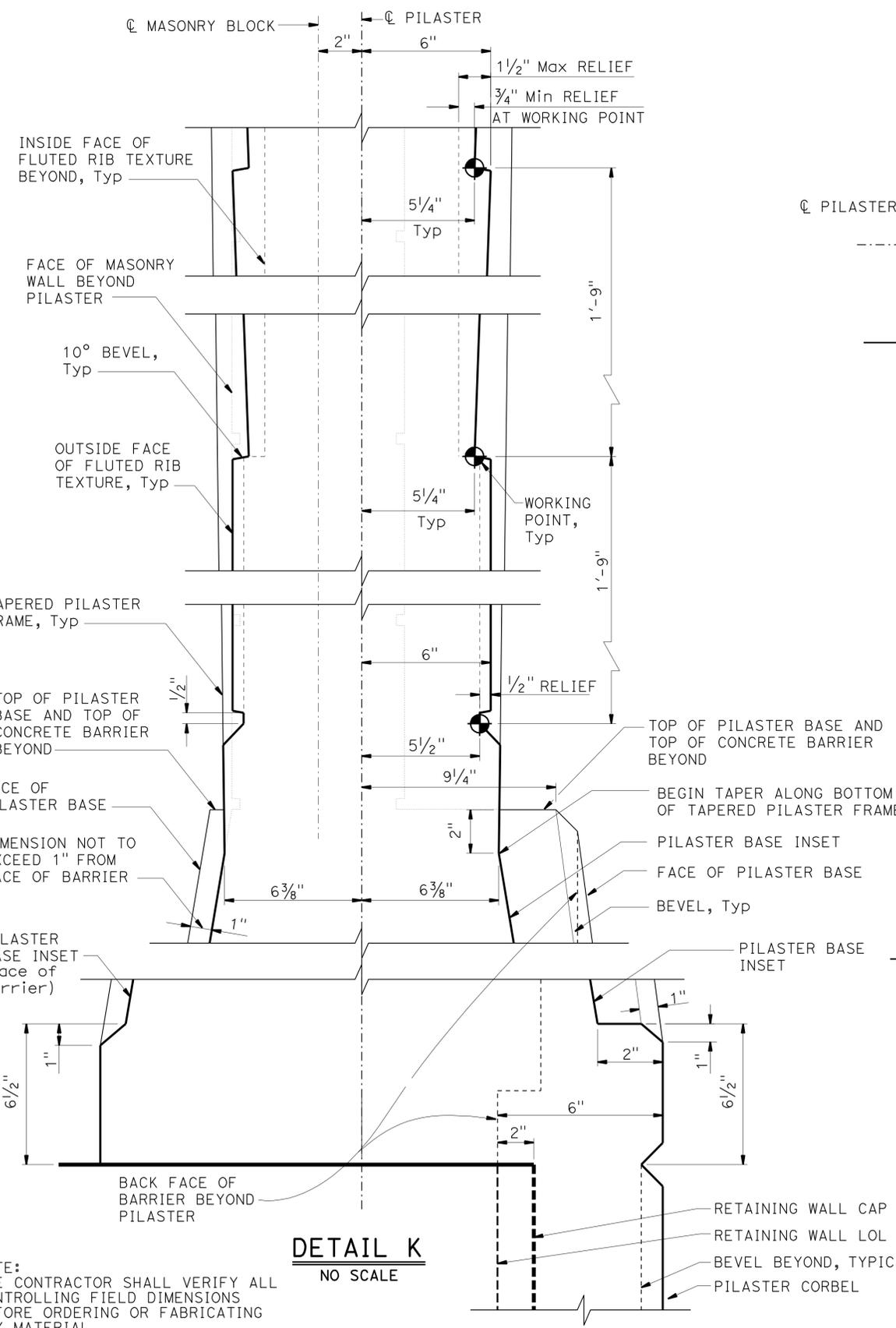


DETAIL W
NO SCALE

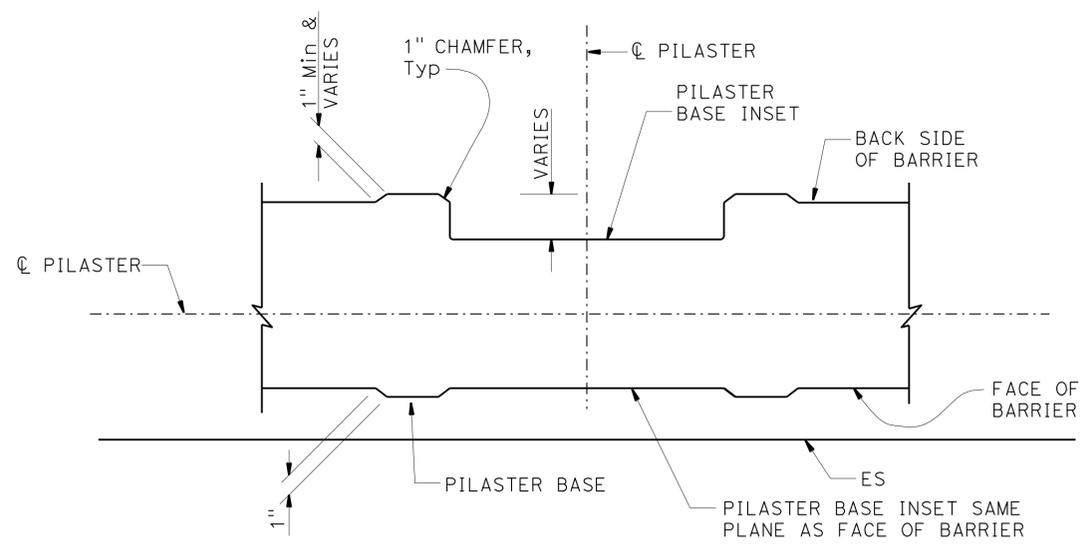
NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

DESIGN	BY	H. CHAVEZ	CHECKED	I. TASABIA	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 21	BRIDGE NO.	53E0193	SOUND WALL NO. 291				
	DETAILS	BY	J. VALENCIA	CHECKED			F. WEI	POST MILE		5.13	PILASTER ARCHITECTURAL DETAILS NO. 3		
QUANTITIES	BY	C. VILLALOBOS	CHECKED	K. KIM	UNIT: 3623	PROJECT NUMBER & PHASE: 0700001834 & 1	CONTRACT NO.: 07-215941	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET	OF		
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)										07434	14-APR-2012	50	71

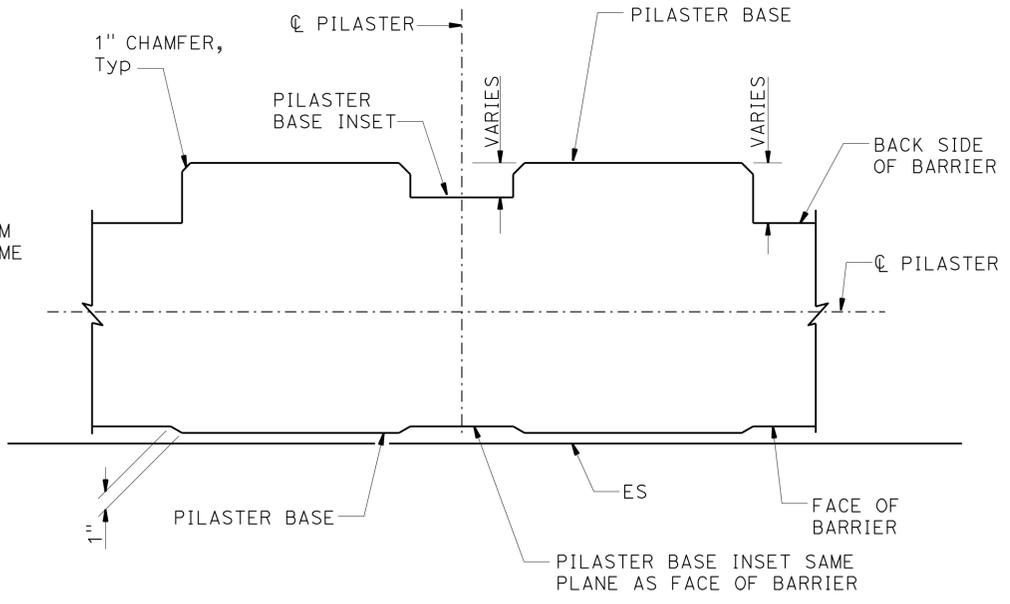
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1577	1597
Frank H. Wei REGISTERED CIVIL ENGINEER DATE 12/12/11					
4-9-12 PLANS APPROVAL DATE					
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DETAIL K
NO SCALE



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



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

- NOTES:
1. For location of "SECTION M-M", "SECTION N-N" and "DETAIL K", see "PILASTER ARCHITECTURAL DETAILS NO. 2" sheet.
 2. All dimensions symmetrical about \O Pilaster.
 3. All vertical dimensions are measured along the \O Pilaster (Pilaster shall be vertical).

DESIGN	BY H. CHAVEZ	CHECKED I. TASABIA
DETAILS	BY J. VALENCIA	CHECKED F. WEI
QUANTITIES	BY C. VILLALOBOS	CHECKED K. KIM

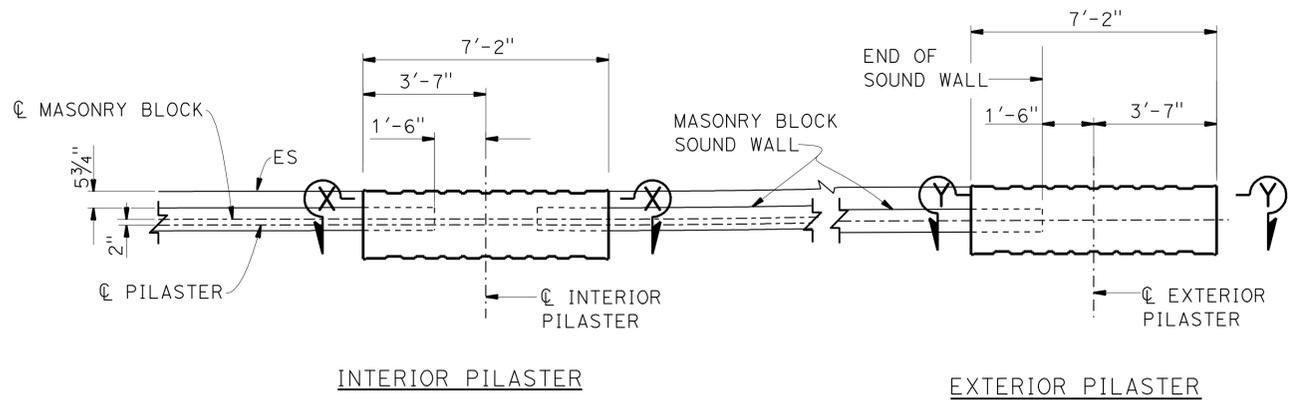
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 21

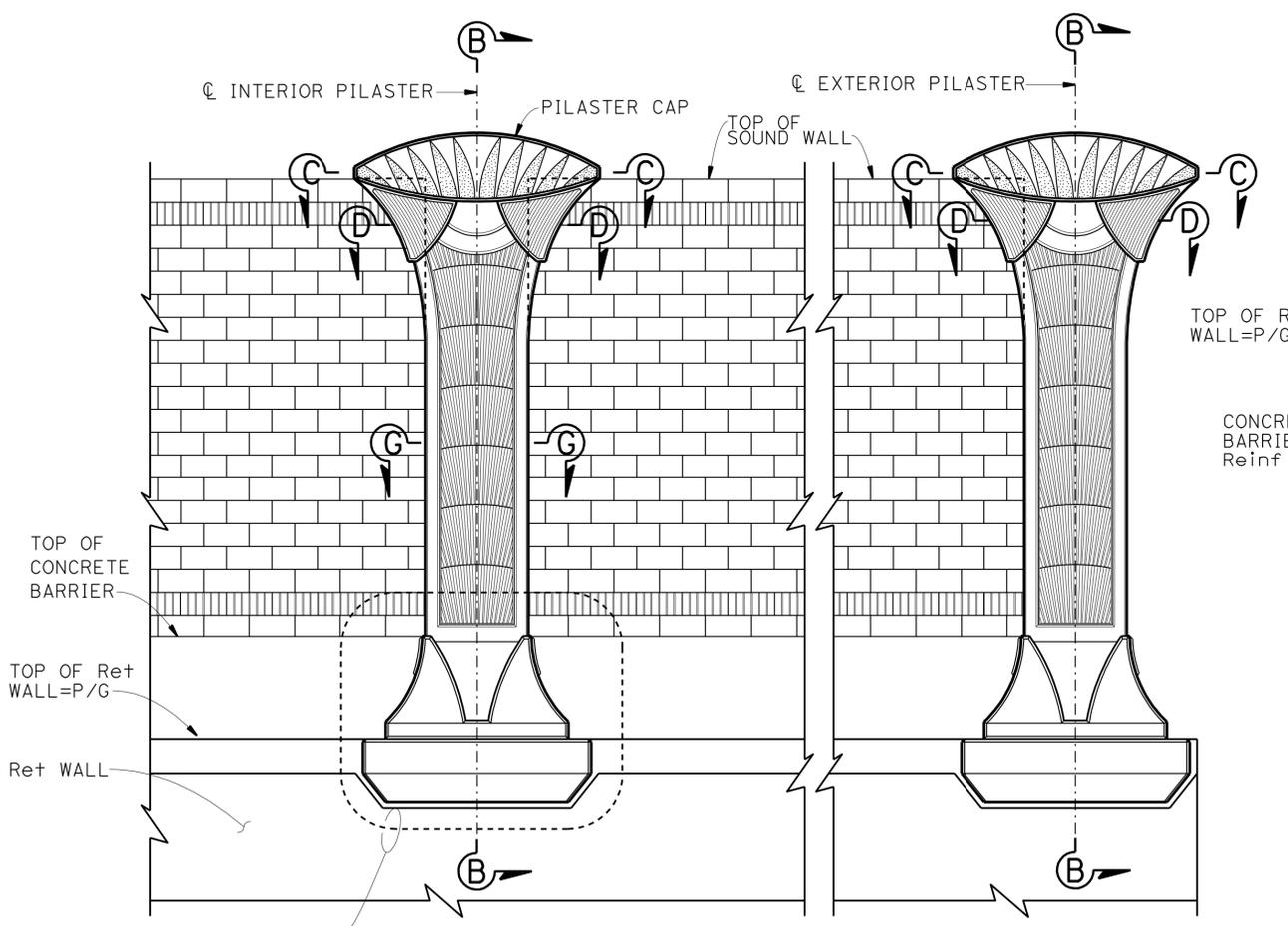
BRIDGE NO.	53E0193
POST MILE	5.13

SOUND WALL NO. 291
PILASTER ARCHITECTURAL DETAILS NO. 4

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1578	1597
Frank H. Wei REGISTERED CIVIL ENGINEER DATE 12/12/11					
4-9-12 PLANS APPROVAL DATE					
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PART SOUND WALL PLAN
3/8" = 1'-0"



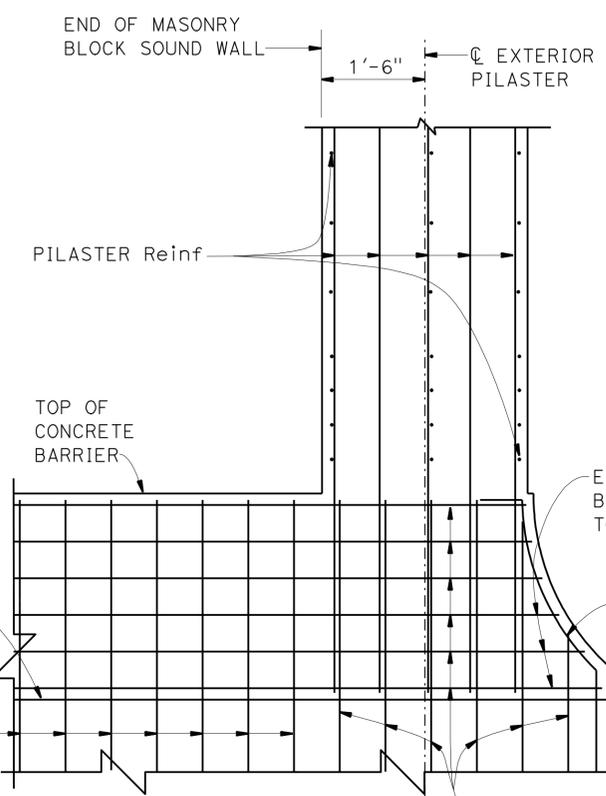
PART SOUND WALL ELEVATION
3/8" = 1'-0"

SEE "DETAIL A" ON "PILASTER STRUCTURAL DETAILS NO. 3" SHEET FOR PILASTER CORBEL ON RETAINING WALL.

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

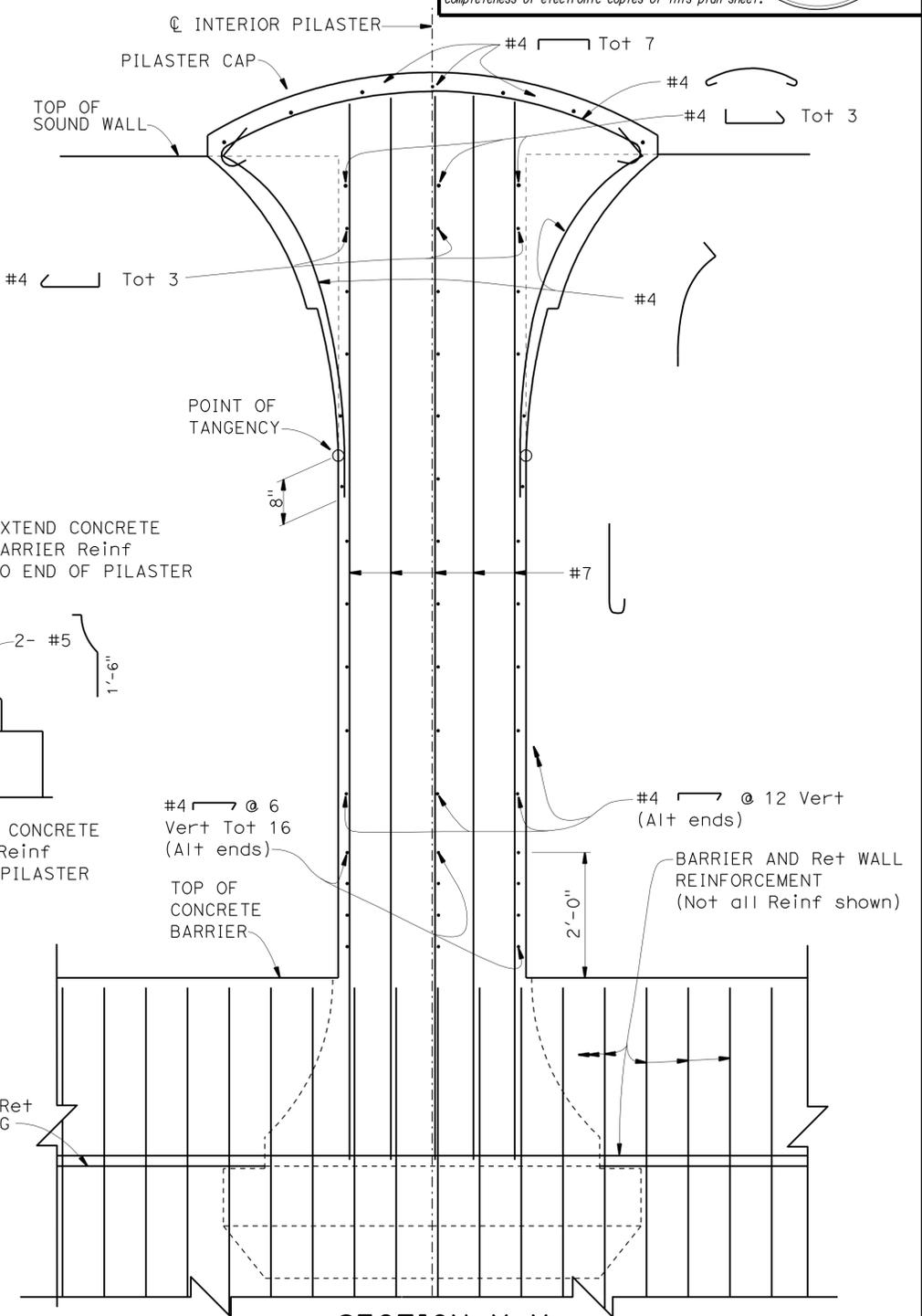
NOTES:

1. For "SECTION B-B", "SECTION C-C", "SECTION D-D" and "SECTION G-G", see "PILASTER STRUCTURAL DETAILS NO. 2" sheet.
2. 16'-4" height Pilaster shown. 12'-4" and 14'-4" height Pilaster similar.



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

NOTE: For details not shown, see "SECTION X-X"



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

NOTE: Pilaster corbel reinf not shown.

DESIGN	BY H. CHAVEZ	CHECKED I. TASABIA
DETAILS	BY J. VALENCIA	CHECKED F. WEI
QUANTITIES	BY C. VILLALOBOS	CHECKED K. KIM

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 21

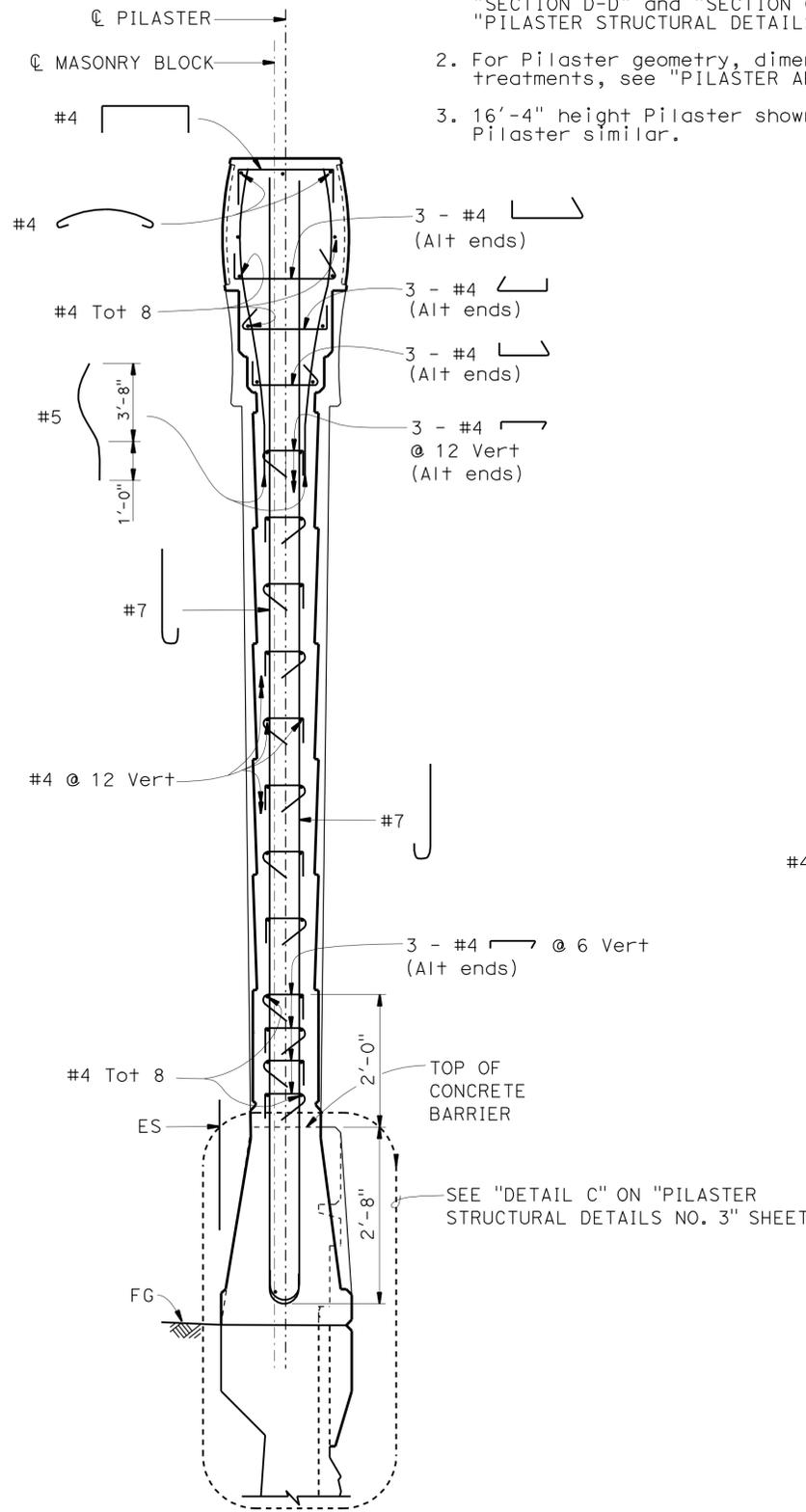
BRIDGE NO.	53E0193
POST MILE	5.13

SOUND WALL NO. 291
PILASTER STRUCTURAL DETAILS NO. 1

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1579	1597
Frank H. Wei REGISTERED CIVIL ENGINEER DATE 12/12/11					
4-9-12				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.					

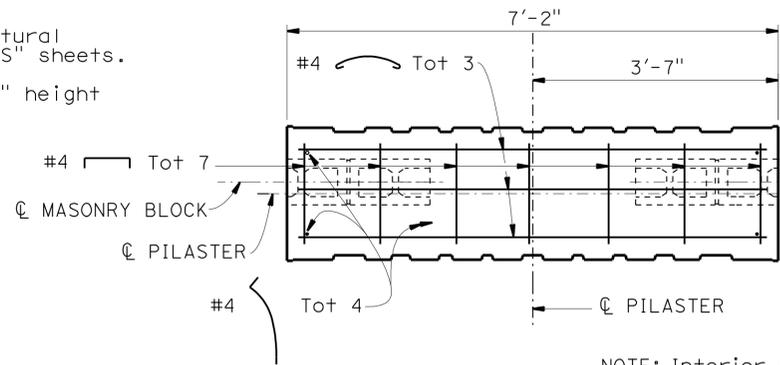
NOTES:

1. For location of "SECTION B-B", "SECTION C-C", "SECTION D-D" and "SECTION G-G", see "PILASTER STRUCTURAL DETAILS NO. 1" sheet.
2. For Pilaster geometry, dimensions and architectural treatments, see "PILASTER ARCHITECTURAL DETAILS" sheets.
3. 16'-4" height Pilaster shown, 12'-4" and 14'-4" height Pilaster similar.



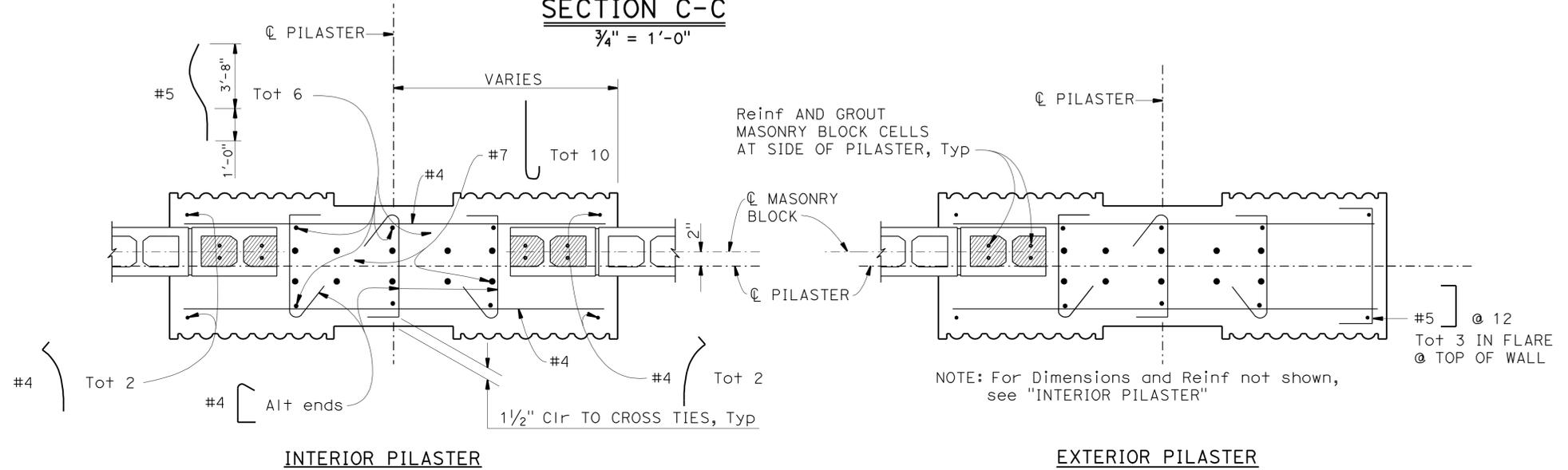
SECTION B-B
3/4" = 1'-0"

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



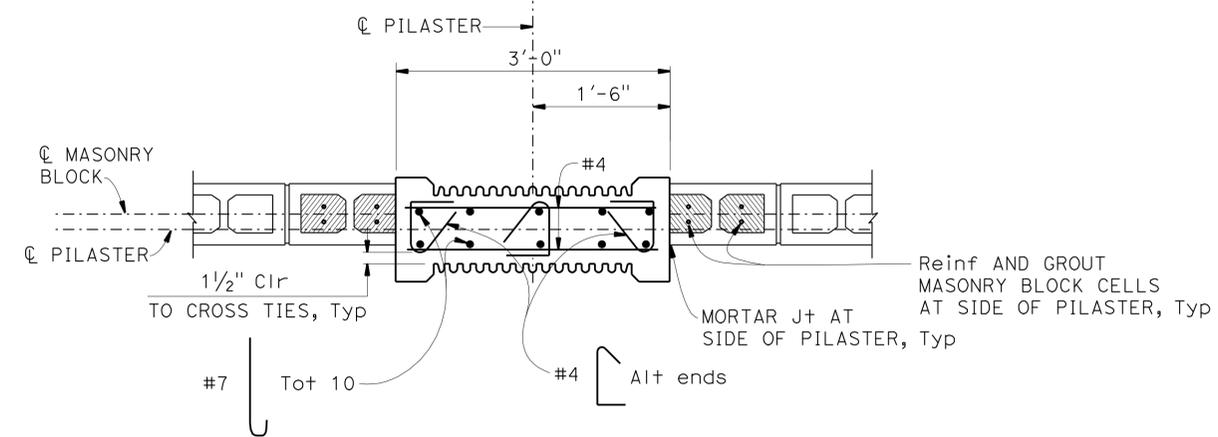
SECTION C-C
3/4" = 1'-0"

NOTE: Interior Pilaster shown, Exterior Pilaster similar.



SECTION D-D
1" = 1'-0"

NOTE: For Dimensions and Reinf not shown, see "INTERIOR PILASTER"



SECTION G-G
1" = 1'-0"

DESIGN	BY H. CHAVEZ	CHECKED I. TASABIA
DETAILS	BY J. VALENCIA	CHECKED F. WEI
QUANTITIES	BY C. VILLALOBOS	CHECKED K. KIM

STATE OF CALIFORNIA	
DEPARTMENT OF TRANSPORTATION	

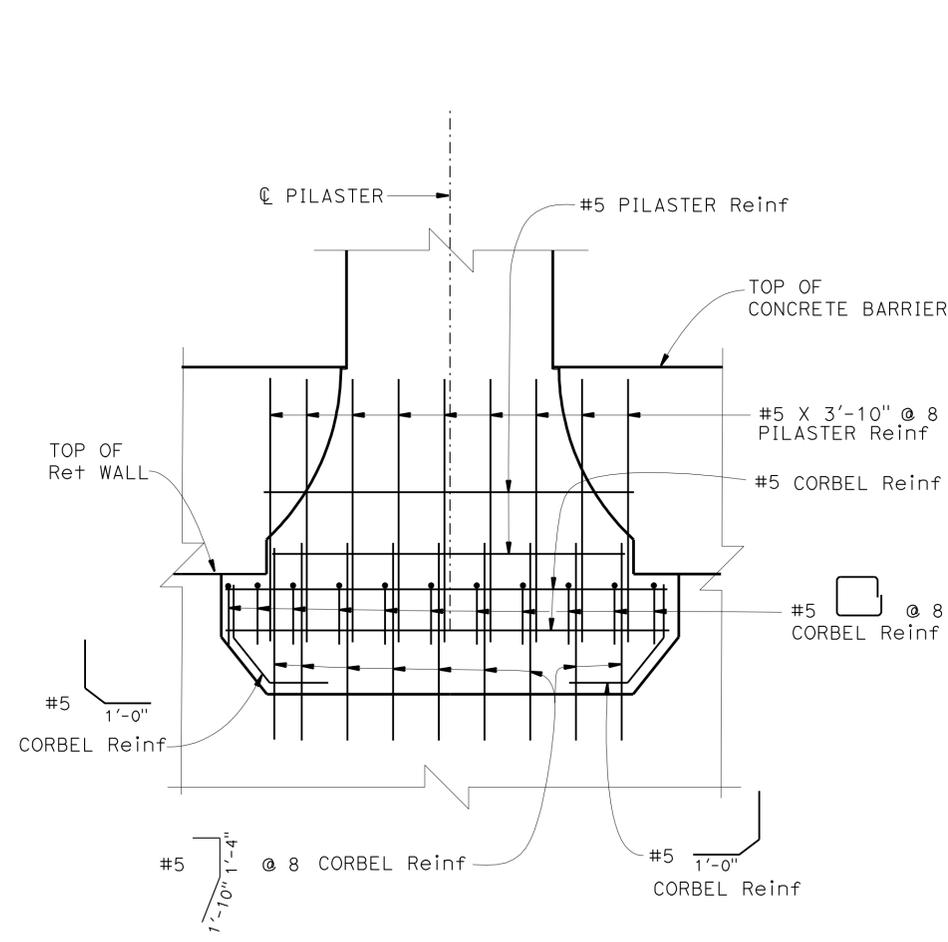
DIVISION OF ENGINEERING SERVICES	
STRUCTURE DESIGN	
DESIGN BRANCH 21	

BRIDGE NO.	53E0193	SOUND WALL NO. 291
POST MILE	5.13	
PILASTER STRUCTURAL DETAILS NO. 2		

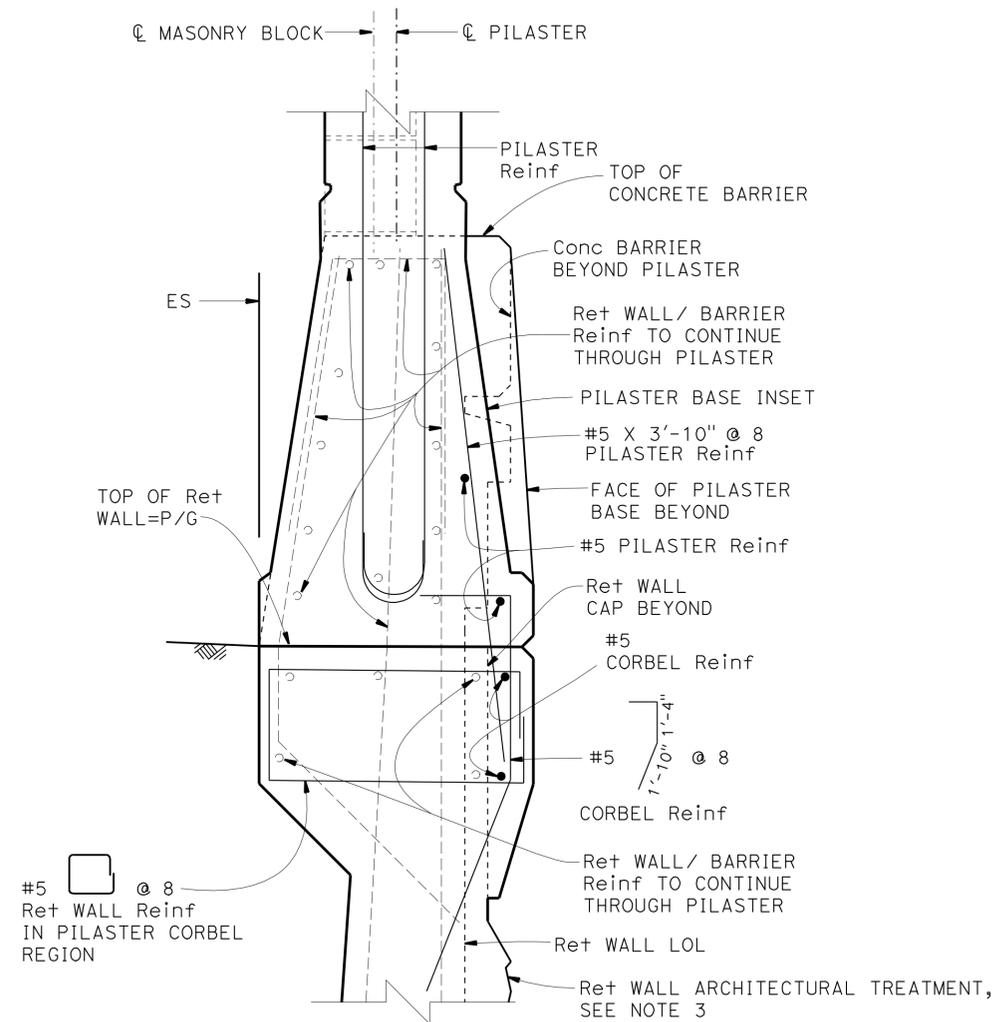
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1580	1597
			REGISTERED CIVIL ENGINEER DATE	12/12/11	
			PLANS APPROVAL DATE	4-9-12	
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NOTES:

1. For location of "DETAIL A", see "PILASTER STRUCTURAL DETAILS NO. 1" sheet.
2. For location of "DETAIL C", see "PILASTER STRUCTURAL DETAILS NO. 2" sheet.
3. See "RETAINING WALL AND BARRIER ARCHITECTURAL DETAILS" sheet.



DETAIL A
3/4" = 1'-0"



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

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

DESIGN	BY	H. CHAVEZ	CHECKED	I. TASABIA	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 21	BRIDGE NO.	SOUND WALL NO. 291	
	DETAILS	BY	J. VALENCIA	CHECKED			F. WEI	53E0193	PILASTER STRUCTURAL DETAILS NO. 3
QUANTITIES	BY	C. VILLALOBOS	CHECKED	K. KIM	PROJECT NUMBER & PHASE: 0700001834 & 1	POST MILE	5.13	REVISION DATES	SHEET 54 OF 71

TABLE 1: TABLE OF REINFORCING STEEL DIMENSIONS AND DATA

DESIGN H	6'	8'	10'	12'	14'	16'	18'	20'	22'	24'	26'	28'	30'	32'
W	8'- 3"	8'- 6"	9'- 0"	9'- 6"	10'- 0"	10'- 9"	11'- 3"	12'- 0"	13'- 3"	14'- 3"	15'- 9"	16'- 9"	18'- 0"	19'- 9"
C	2'- 9"	2'- 9"	3'- 0"	3'- 3"	3'- 4"	3'- 6"	3'- 9"	4'- 0"	4'- 3"	4'- 9"	5'- 3"	5'- 6"	5'- 9"	6'- 7"
B	5'- 6"	5'- 9"	6'- 0"	6'- 3"	6'- 8"	7'- 3"	7'- 6"	8'- 0"	9'- 0"	9'- 6"	10'- 6"	11'- 3"	12'- 3"	13'- 2"
F PILE FOOTING	1'- 6"	1'- 6"	1'- 6"	1'- 6"	1'- 9"	2'- 0"	2'- 0"	2'- 6"	2'- 9"	2'- 9"	3'- 0"	3'- 3"	3'- 9"	4'- 0"
M	1'- 3"	1'- 6"	1'- 6"	1'- 9"	1'- 10"	2'- 0"	2'- 3"	2'- 6"	2'- 9"	3'- 3"	3'- 9"	4'- 0"	4'- 3"	5'- 1"
N	4'- 0"	4'- 3"	4'- 6"	4'- 9"	5'- 2"	5'- 9"	6'- 0"	6'- 6"	7'- 6"	8'- 0"	9'- 0"	9'- 9"	10'- 9"	11'- 9"
ROW 1 SPACING	12'- 3"	10'- 3"	8'- 9"	7'- 6"	6'- 3"	5'- 3"	4'- 9"	4'- 0"	3'- 9"	3'- 9"	4'- 0"	3'- 9"	3'- 9"	3'- 9"
ROW 2 SPACING	14'- 0"	12'- 9"	11'- 6"	10'- 3"	9'- 3"	8'- 3"	7'- 9"	6'- 6"	7'- 6"	6'- 0"	4'- 0"	4'- 0"	3'- 9"	3'- 9"
ROW 3 SPACING									6'- 0"	5'- 3"	5'- 0"	4'- 0"	6'- 0"	4'- 0"
ROW 4 SPACING													3'- 9"	3'- 9"
STEM WITH HAUNCH, BATTER	0	1/2:12	1/2:12	1/2:12	1/2:12	1/2:12	1/2:12	1/2:12	1/2:12	5/8:12	3/4:12	7/8:12	1:12	1:12
STEM WITHOUT HAUNCH, BATTER	0	0	0	0	0	0	0	0	1/4:12	1/4:12	1/2:12	3/4:12	3/4:12	3/4:12
⊙ BARS						#7 @ 15	#7 @ 12	#7 @ 12	#8 @ 12	#6 @ 6	#6 @ 6	#6 @ 6	#8 @ 9	#9 @ 9
⊕ BARS	#8 @ 12	#7 @ 9	#7 @ 6	#7 @ 6	#7 @ 6	#9 @ 7.5	#9 @ 6	#10 @ 6	#10 @ 6	#8 @ 6	#8 @ 6	#8 @ 6	#10 @ 9	#11 @ 9
ha			5'- 0"	6'- 0"	7'- 0"	7'- 0"	6'- 0"	7'- 0"	7'- 0"	7'- 6"	8'- 6"	9'- 3"	15'- 0"	11'- 3"
hb						11'- 6"	12'- 0"	13'- 3"	16'- 0"	15'- 6"	17'- 6"	18'- 9"	21'- 0"	20'- 9"
⊙ BARS	#6 @ 12	#6 @ 9	#6 @ 6	#6 @ 6	#6 @ 6	#8 @ 7.5	#8 @ 6	#9 @ 6	#9 @ 6	#10 @ 6	#10 @ 6	#11 @ 6	#10 @ 9	#10 @ 9
⊕ BARS	#5 @ 12	#5 @ 9	#5 @ 12	#5 @ 12	#5 @ 12	#6 @ 15	#5 @ 12	#5 @ 12	#6 @ 12	#6 @ 12	#6 @ 12	#7 @ 12	#6 @ 9	#9 @ 9
⊖ BARS	10-#7 @ 6	8-#7 @ 7	10-#6 @ 6	8-#6 @ 6	6-#6 @ 12	6-#5 @ 12	6-#5 @ 12	6-#5 @ 15	#5 @ 18	#5 @ 18	#5 @ 18	#5 @ 18	#5 @ 18	#5 @ 18
⊗ BARS	10-#8 @ 7	10-#8 @ 6	10-#7 @ 8	12-#6 @ 7	8-#7 @ 11	7-#6 @ 13	8-#6 @ 12	8-#5 @ 15	#5 @ 18	#5 @ 18	#5 @ 18	#5 @ 18	#5 @ 18	#5 @ 18

Symbol:
 Ø : 2 bar bundle
 Note: Total @ bars shown are total number of top and bottom bars combined.

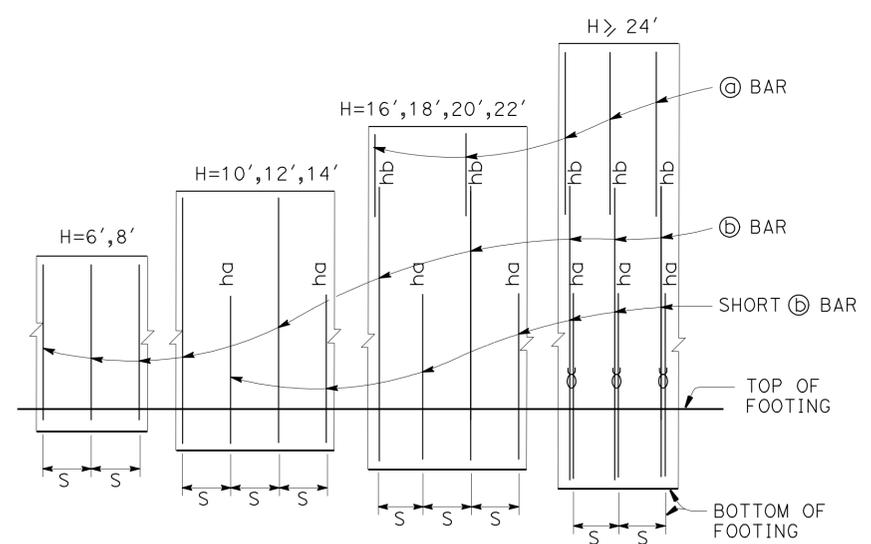
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1581	1597

12/12/11
 REGISTERED CIVIL ENGINEER DATE
 4-9-12
 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.

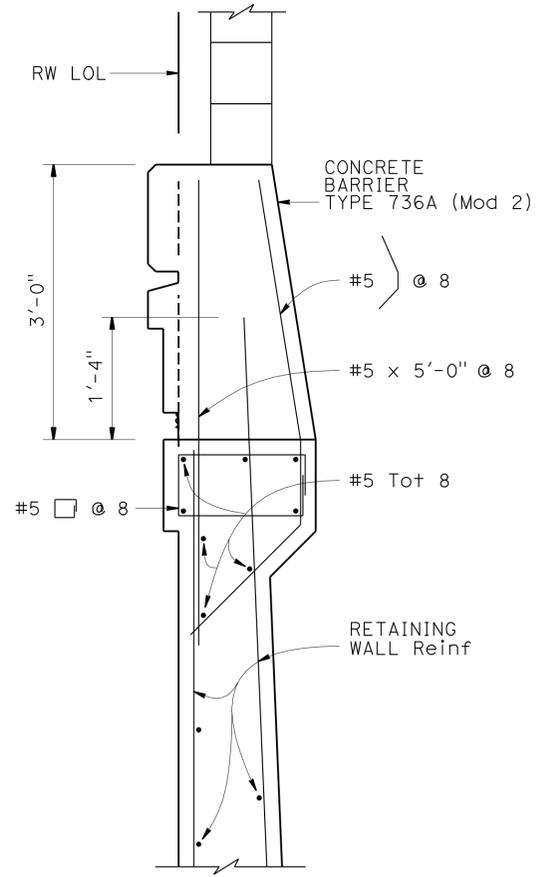
DESIGN DATA

Design: AASHTO LRFD Bridge Design Specifications 4th edition with California Amendments
 WS: 33 psf on Soundwall and Barrier
 LS: Varied surcharge on level ground surface
 CT: 54 kip maximum traffic impact loading evenly distributed over 10 feet at top of the barrier and 1:1 distribution down and outward
 EQE: Mononobe-Okabe Method
 Kh = 0.3
 Kv = 0.0
 Soil: φ = 34°
 γ = 120 pcf
 Reinforced Concrete: f'c = 3600 psi
 fy = 60,000 psi
 Load Combinations and Limit States
 Service I Q=1.00DC+1.00EV+1.00EH+1.00LS+0.30WS
 Service II Q=1.00DC+1.00EV+1.00EH+1.00WS
 Strength I Q=aDC+BEV+1.50EH+1.75LS
 Q=1.25DC + 1.35EV + 0.90EH + 1.75LS (for piles at heel)
 Strength III Q=aDC+BEV+1.50EH+1.40WS
 Strength V Q=aDC+BEV+1.50EH+1.35LS+0.40WS
 Extreme I Q=1.00DC+1.00EV+1.00EH+1.00EQD+1.00EQE
 Extreme II Q=1.00DC+1.00EV+1.00EH+1.00CT

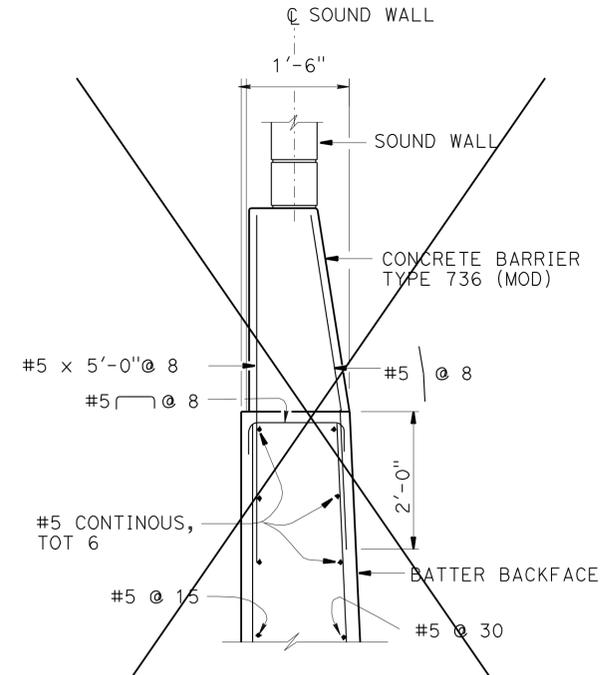
Note:
 1. For location of Detail A, see "RETAINING WALL TYPE 1SWBP - DETAILS NO. 2" sheet.



ELEVATION



DETAIL A
 1" = 1'-0"



OPTIONAL DETAIL A
 No Scale
 For Details not shown, see "Detail A"

Where:
 Q: Force Effects
 a: 1.25 or 0.90, Which ever Controls Design
 B: 1.35 or 1.00, which ever Controls Design
 DC: Dead Load of Structure Components
 EV: Vertical Earth Fill Pressure
 LS: Live Load Surcharge
 EQE: Seismic Earth Pressure
 EQD: Soil and Structure Components Inertia. Soil inertia ignored for stem design
 WS: Wind Load on Soundwall and Barrier
 CT: Vehicular Collision Force

SPECIAL DETAILS

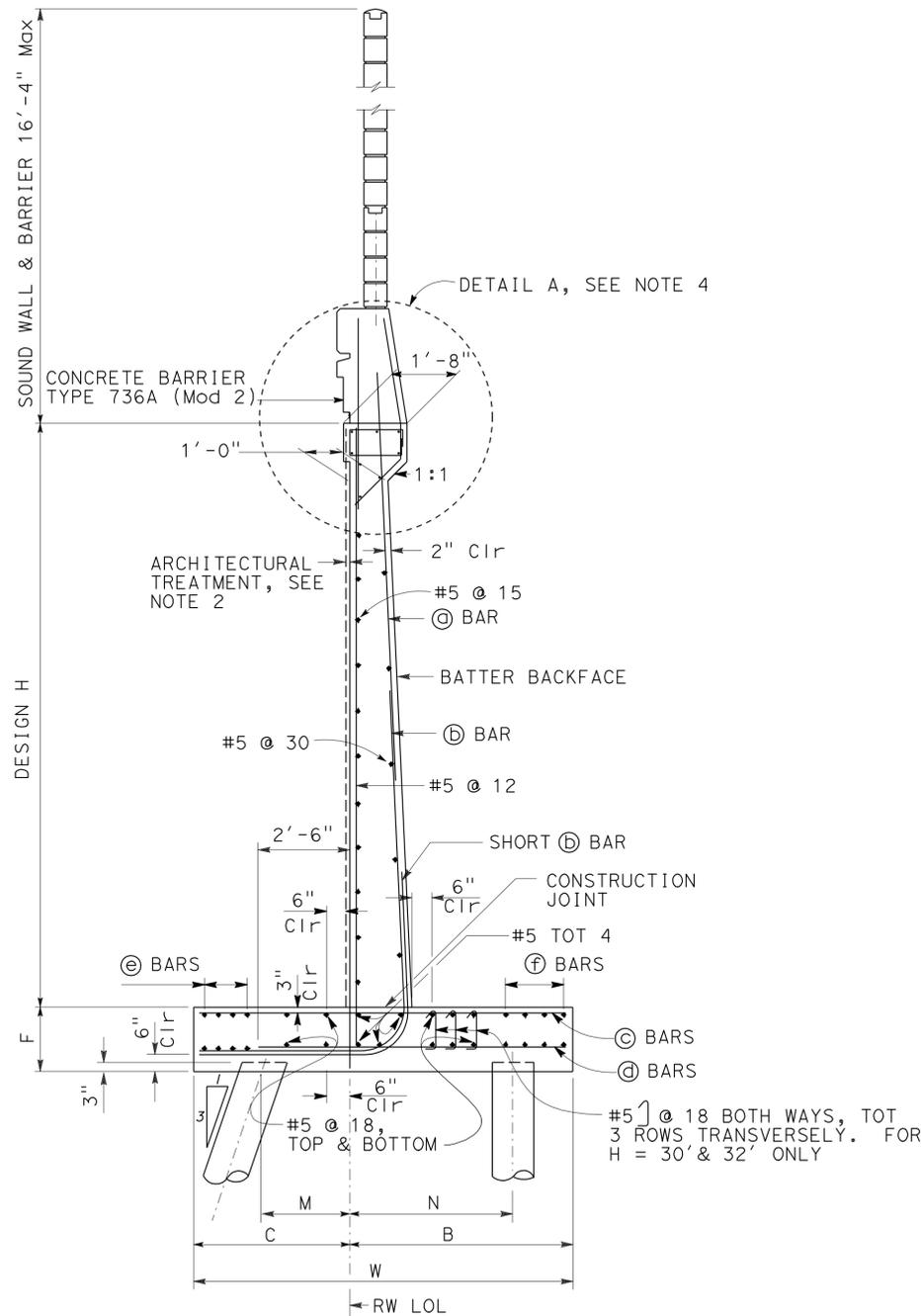
- ◇ Modified Table
- ◇ Revised Detail
- ◇ Revised Note
- ◇ Deleted Detail

REVISED STANDARD DRAWING
 FILE NO. **xs14-320-1**
 APPROVAL DATE July 2011

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF ENGINEERING SERVICES

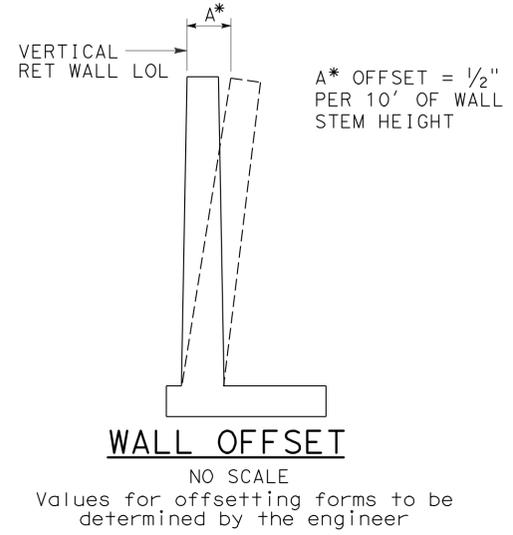
BRIDGE NO. 53E0193
 POST MILE 5.13
SOUND WALL NO. 291
RETAINING WALL TYPE 1SWBP - DETAIL NO. 1

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1582	1597
			REGISTERED CIVIL ENGINEER	DATE	
			FRANK H. WEI	12/12/11	
			PLANS APPROVAL DATE		
			4-9-12		
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◆ PILE FOOTING SECTION

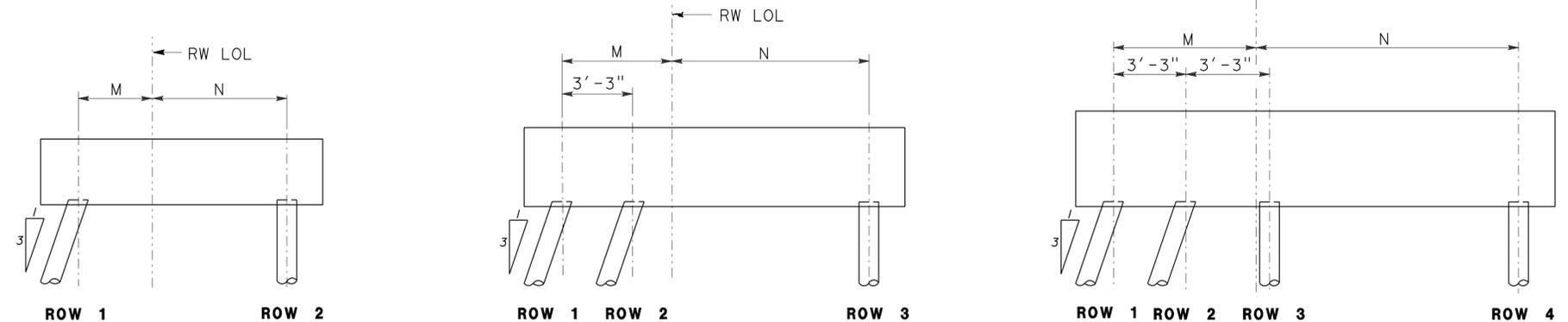
NO SCALE
All piles not shown



WALL OFFSET

NO SCALE
Values for offsetting forms to be determined by the engineer

A* OFFSET = 1/2" PER 10' OF WALL STEM HEIGHT



H = 6' through 20'

H = 22' through 28'

H = 30' and 32'

PILE PATTERN

NO SCALE

- ◆ Notes:
- For pile spacing, see "STRUCTURE PLAN NO. 1" and "STRUCTURE PLAN NO. 2" sheets.
 - For architectural treatment, see "RETAINING WALL AND BARRIER ARCHITECTURAL DETAILS" sheet.
 - For details not shown and drainage notes, see (B3-8)
 - For "Detail A", see "RETAINING WALL TYPE 1 SWBP - DETAILS NO. 1" sheet.
 - For sound wall and barrier reinforcement, see "SOUND WALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO.1" and "SOUND WALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO.2" sheets.
 - For H=6' through 14', extend (b) bars into barrier.
 - For H≥16', extend (a) bars into barrier.
 - For table of reinforcing steel dimensions and data, see "RETAINING WALL TYPE 1 SWBP - DETAILS NO. 1" sheet.

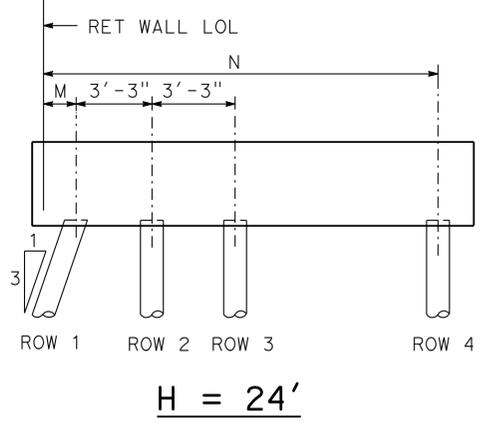
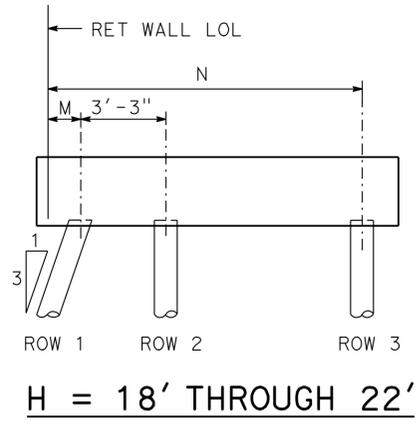
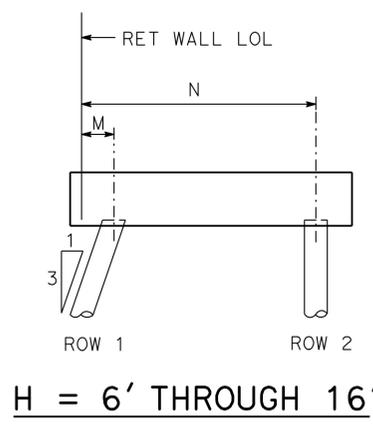
SPECIAL DETAILS

REVISED STANDARD DRAWING	
FILE NO. xs14-320-2	APPROVAL DATE July 2011

- ◆ Added Notes
- ◆ Modified Detail

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES
---	----------------------------------

BRIDGE NO. 53E0193	SOUND WALL NO. 291
POST MILE 5.13	
RETAINING WALL TYPE 1SWBP - DETAIL NO. 2	



PILE PATTERN
No scale

NOTES:

- For pile spacing, see "STRUCTURE PLAN" sheets.
- For architectural treatment, see "RETAINING WALL AND BARRIER ARCHITECTURAL DETAILS" sheet.
- For details not shown and drainage notes, see B3-8
- For "DETAIL A", see "RETAINING WALL TYPE 5SWBP - DETAILS NO. 2" sheet.
- For sound wall and Barrier reinforcements see "SOUND WALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL" sheets.
- For H=6' through 14', extend Ⓞ bars into Barrier for stem with haunch.
- For H≥16', extend Ⓞ bars into Barrier for stem with haunch.

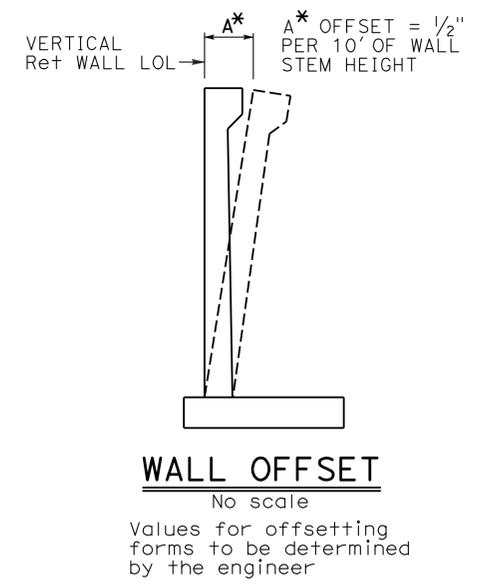
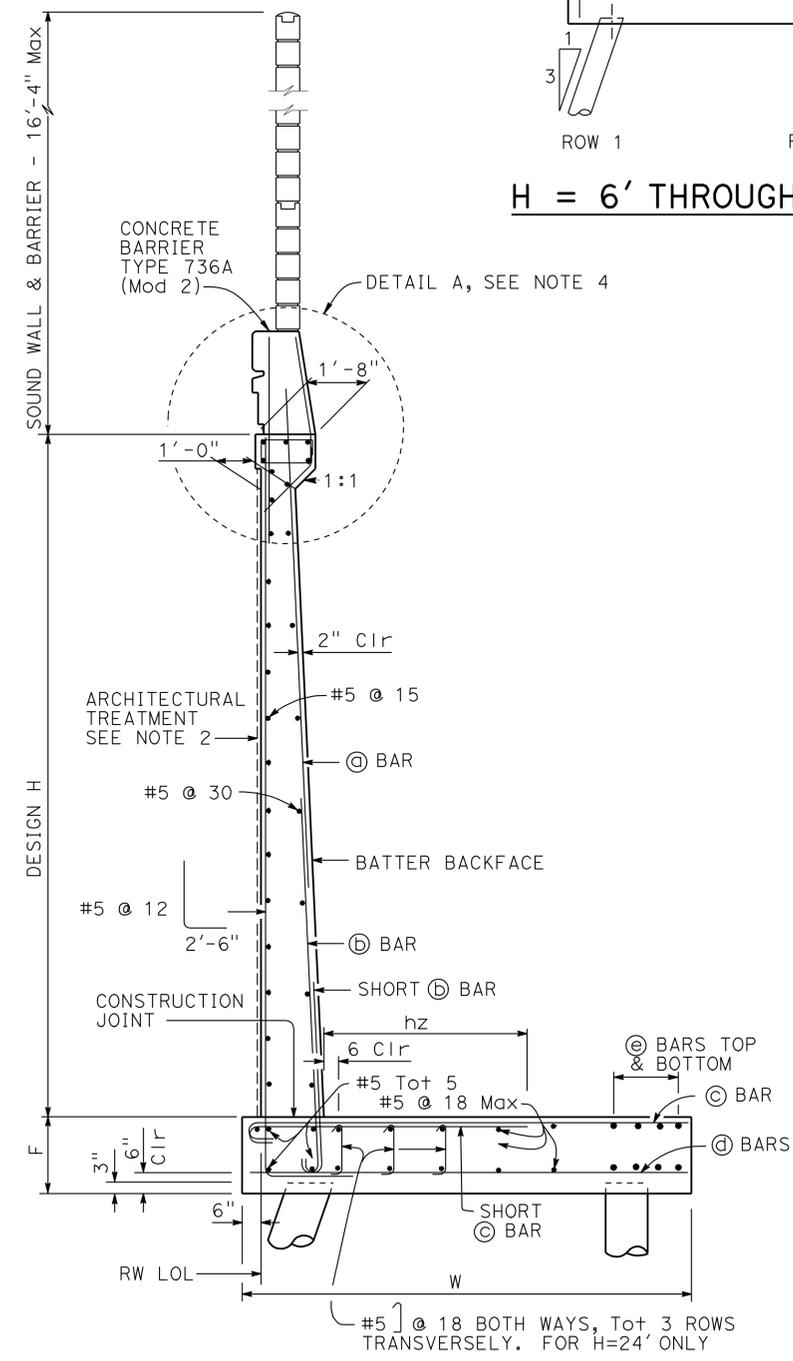


TABLE OF WALL DIMENSIONS, PILE SPACINGS AND REINFORCING STEEL

DESIGN H	6'	8'	10'	12'	14'	16'	18'	20'	22'	24'
W	8'-9"	9'-0"	9'-3"	9'-9"	10'-3"	10'-9"	12'-0"	13'-0"	14'-6"	16'-0"
F PILE FOOTING	1'-6"	1'-6"	1'-6"	1'-6"	1'-9"	2'-0"	2'-0"	2'-6"	2'-9"	2'-9"
M	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"
N	6'-9"	7'-0"	7'-3"	7'-9"	8'-3"	8'-9"	10'-0"	11'-0"	12'-6"	14'-0"
-ROW 1 SPACING	8'-6"	7'-3"	6'-3"	5'-3"	4'-6"	3'-9"	3'-9"	3'-9"	3'-9"	3'-9"
-ROW 2 SPACING	13'-6"	12'-0"	11'-6"	10'-3"	9'-3"	6'-6"	7'-0"	6'-0"	4'-0"	3'-9"
-ROW 3 SPACING							7'-6"	6'-0"	5'-6"	5'-6"
-ROW 4 SPACING										4'-6"
STEM WITH HUNCH, BATTER	0	1/2:12	1/2:12	1/2:12	1/2:12	1/2:12	1/2:12	1/2:12	1/2:12	5/8:12
STEM WITHOUT HUNCH, BATTER	0	0	0	0	0	0	0	0	1/4:12	1/4:12
Ⓞ BARS						#7@15	#7@12	#7@12	#8@12	#6@6
Ⓜ BARS	#8@12	#8@12	#7@6	#7@6	#7@6	#9@7.5	#9@6	#10@6	#10@6	#8@6
ha			5'-0"	6'-0"	7'-0"	7'-0"	6'-0"	7'-0"	7'-0"	7'-6"
hb						11'-6"	12'-0"	13'-3"	16'-0"	15'-6"
Ⓞ BARS	#6@6	#6@6	#7@6	#8@6	#9@6	#10@7.5	#8@6	#9@6	#9@6	#10@6
hz	3'-6"	3'-6"	3'-6"	4'-0"	4'-3"	7'-0"	4'-9"	5'-6"	6'-3"	7'-6"
Ⓞ BARS	#6@12	#5@12	#5@12	#5@12	#5@12	#5@15	#5@12	#5@12	#6@12	#5@12
Ⓞ BARS	8-#8@11	8-#7@11	8-#7@11	8-#7@13	8-#7@16	10-#5@15	8-#5@12	#5@18	#5@18	#5@18

- NOTES:
- ⌘ indicates 2 bar bundle.
 - Total Ⓞ bars are top and bottom combined.

SPECIAL DETAILS

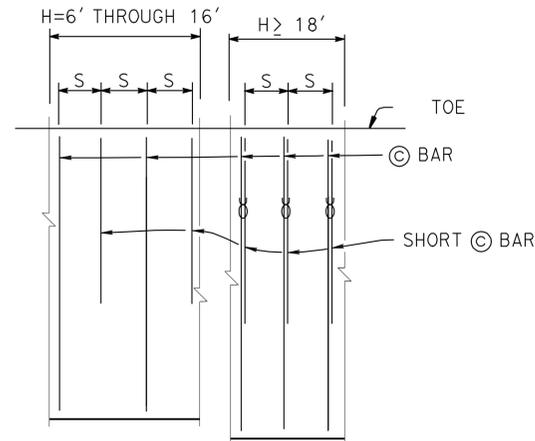
REVISED STANDARD DRAWING
 FILE NO. **xs14-370-1**
 APPROVAL DATE July 2011

- 1 Add Notes
- 2 Modified Detail
- 3 Modified Table

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF ENGINEERING SERVICES

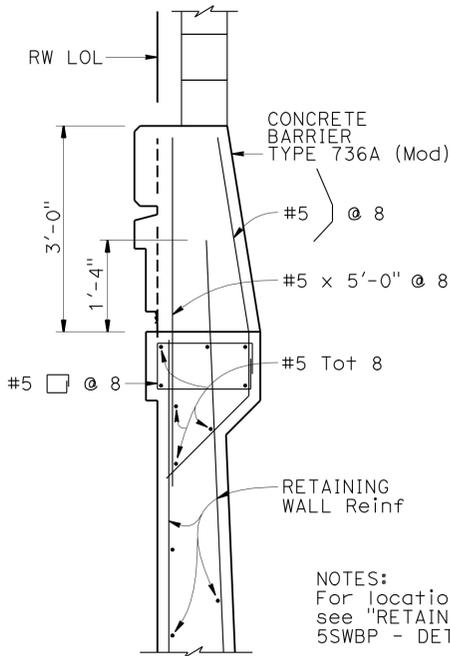
BRIDGE NO. 53E0193
 POST MILE 5.13
SOUND WALL NO. 291
RETAINING WALL TYPE 5SWBP - DETAIL NO. 1

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1584	1597
			DATE		
			2/12/11		
			REGISTERED CIVIL ENGINEER		
			FRANK H. WEI		
			PLANS APPROVAL DATE		
			4-9-12		
			REGISTERED PROFESSIONAL ENGINEER		
			FRANK H. WEI		
			No. C 52918		
			Exp. 12-31-12		
			CIVIL		
			STATE OF CALIFORNIA		



PLAN
NO SCALE

NOTES:
Only © bars shown
"S" is © bar spacing, see table
⊘ indicates 2 bar bundle.



DETAIL A
3/4" = 1'-0"

NOTES:
For location of Detail A,
see "RETAINING WALL TYPE
5SWBP - DETAIL NO. 1" sheet

DESIGN DATA

Design: AASHTO LRFD Bridge Design Specifications
4th edition with California Amendments

WS: 33 psf on sound wall and barrier
LS: Varied surcharge on level ground surface
CT: 54 kip maximum traffic impact loading evenly distributed over 10 feet at top of the barrier and 1:1 distribution down and outward

EQE: Mononobe-Okabe Method
K_h = 0.3
K_v = 0.0

Soil: φ = 34°
γ = 120 pcf

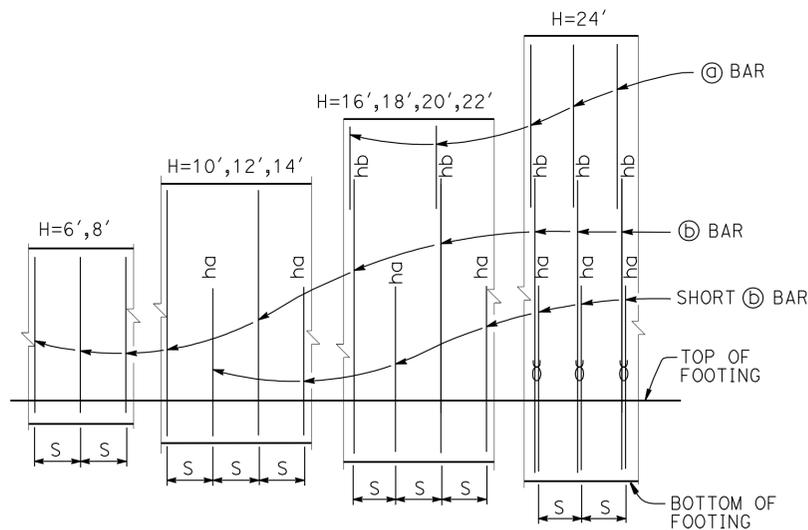
Reinforced Concrete: f'c = 3600 psi
fy = 60,000 psi

Load Combinations and Limit States

Service I Q=1.00DC+1.00EV+1.00EH+1.00LS+0.30WS
Service II Q=1.00DC+1.00EV+1.00EH+1.00WS
Strength I Q=aDC+BEV+1.50EH+1.75LS
Q=1.25DC+1.35EV+0.90EH+1.75LS (for piles at heel)
Strength III Q=aDC+BEV+1.50EH+1.40WS
Strength V Q=aDC+BEV+1.50EH+1.35LS+0.40WS
Extreme I Q=1.00DC+1.00EV+1.00EH+1.00EQD+1.00EQE
Extreme II Q=1.00DC+1.00EV+1.00EH+1.00CT

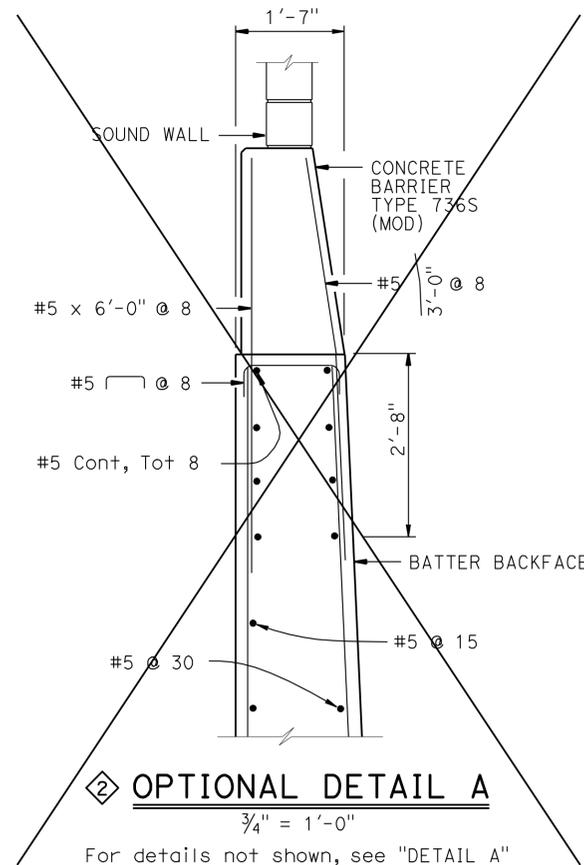
Where:

Q: Force Effects
a: 1.25 or 0.90, Which ever Controls Design
B: 1.35 or 1.00, which ever Controls Design
DC: Dead Load of Structure Components
EV: Vertical Earth Fill Pressure
LS: Live Load Surcharge
EQE: Seismic Earth Pressure
EQD: Soil and Structure Components Inertia.
Soil inertia ignored for stem design
WS: Wind Load on Sound Wall and Barrier
CT: Vehicular Collision Force



ELEVATION
No scale

NOTES:
"ha" and "hb" above ⊕ bars indicate distance from top of footing to upper end of ⊕ bars, see table.
"S" is ⊕ bar spacing, see table.
⊘ indicates 2 bar bundle.



OPTIONAL DETAIL A
3/4" = 1'-0"

For details not shown, see "DETAIL A"

SPECIAL DETAILS

REVISED STANDARD DRAWING	
FILE NO. xs14-370-2	APPROVAL DATE July 2011

- ① Revised Detail
- ② Deleted Detail

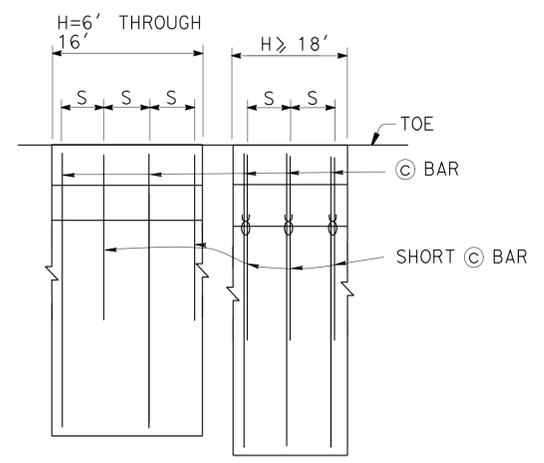
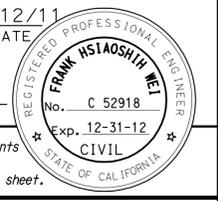
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

BRIDGE NO.	53E0193
POST MILE	5.13

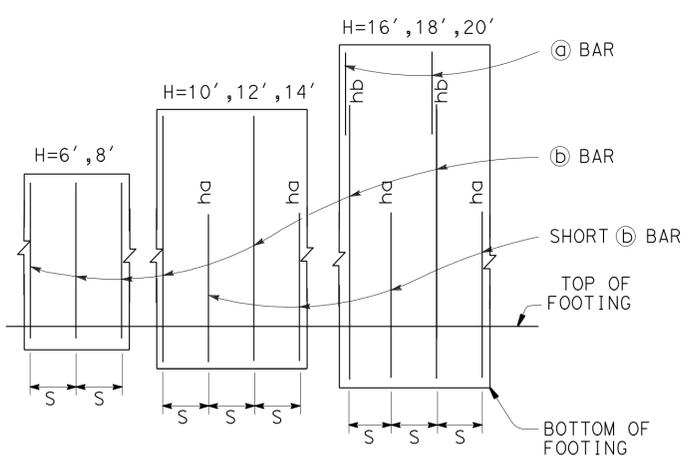
SOUND WALL NO. 291
RETAINING WALL TYPE 5SWBP - DETAIL NO. 2

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1586	1597
			DATE		
			12/12/11		
			REGISTERED CIVIL ENGINEER		
			4-9-12		
			PLANS APPROVAL DATE		
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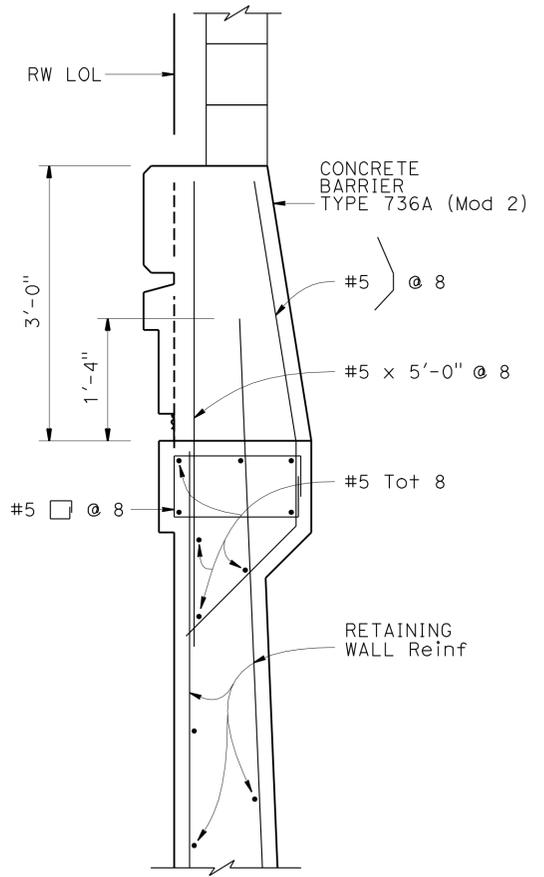
PLAN

Note:
 @ bars shown only.
 All @ bars end with standard 180° hooks on toe side, "s" is @ bar spacing, see table.
 ⌘ indicates 2 bar bundle.



ELEVATION

Note:
 "ha", "hb" above @ bars indicate distance from top of footing to upper end of @ bars, see table.
 "s" is @ bar spacing, see table.
 ⌘ indicates 2 bar bundle.



DETAIL A

Note:
 For location of Detail A, see "RETAINING WALL TYPE 5SWBP WITH CIDH - DETAIL NO. 1" sheet

DESIGN DATA

Design: AASHTO LRFD Bridge Design Specifications
 4th edition with California Amendments

WS: 33 psf on soundwall and barrier
 LS: Varied surcharge on level ground surface
 CT: 54 kip maximum traffic impact loading evenly distributed over 10 feet at top of the barrier and 1:1 distribution down and outward

EQE: Mononobe-Okabe Method
 $K_h = 0.3$
 $K_v = 0.0$

Soil: $\phi = 34^\circ$
 $\gamma = 120$ pcf

Reinforced Concrete: $f'_c = 3600$ psi
 $f_y = 60,000$ psi

Load Combinations and Limit States

Service I $Q=1.00DC+1.00EV+1.00EH+1.00LS+0.30WS$
 Service II $Q=1.00DC+1.00EV+1.00EH+1.00WS$
 Strength I $Q=aDC+BEV+1.50EH+1.75LS$
 $Q=1.25DC+1.35EV+0.90EH+1.75LS$ (for piles at heel)
 Strength III $Q=aDC+BEV+1.50EH+1.40WS$
 Strength V $Q=aDC+BEV+1.50EH+1.35LS+0.40WS$
 Extreme I $Q=1.00DC+1.00EV+1.00EH+1.00EQD+1.00EQE$
 Extreme II $Q=1.00DC+1.00EV+1.00EH+1.00CT$

Where:

Q: Force Effects
 a: 1.25 or 0.90, Which ever Controls Design
 B: 1.35 or 1.00, which ever Controls Design
 DC: Dead Load of Structure Components
 EV: Vertical Earth Fill Pressure
 LS: Live Load Surcharge
 EQE: Seismic Earth Pressure
 EQD: Soil and Structure Components Inertia. Soil inertia ignored for stem design
 WS: Wind Load on Soundwall and Barrier
 CT: Vehicular Collision Force

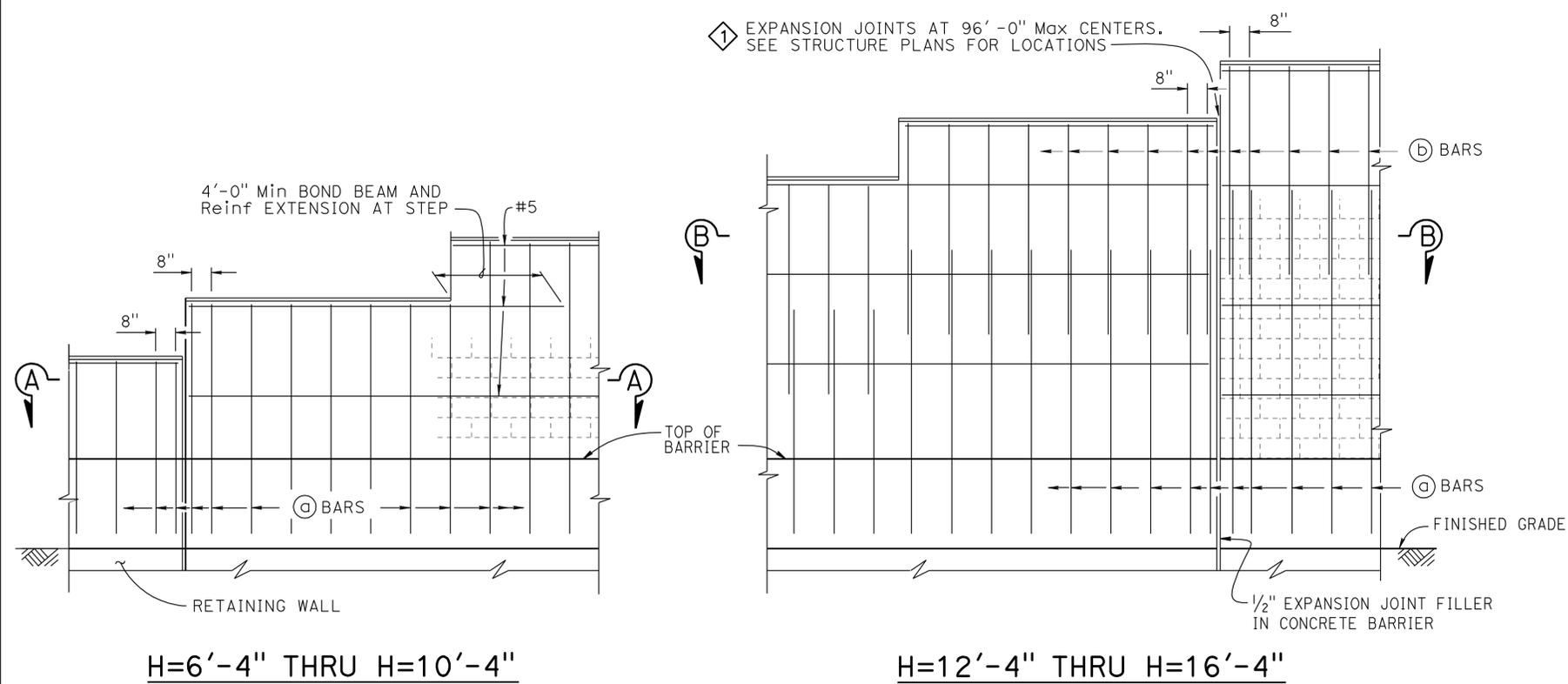
NOTE:
 THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

DESIGN	BY	C. VILLALOBOS	CHECKED	F. WEI	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN	BRIDGE NO.	53E0193	SOUND WALL NO. 291			
	DETAILS	BY	J. VALENCIA	CHECKED			F. WEI	POST MILE		5.13	RETAINING WALL TYPE 5SWBP WITH CIDH - DETAIL NO. 2	
	QUANTITIES	BY	C. VILLALOBOS	CHECKED			K. KIM					
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)					ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	UNIT: 3623	PROJECT NUMBER & PHASE: 0700001834 & 1	CONTRACT NO.: 07-215941	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET	OF
					0	1	2	3		03/22/12	60	71

USERNAME => DATE PLOTTED => TIME PLOTTED => 14-APR-2012 07:48

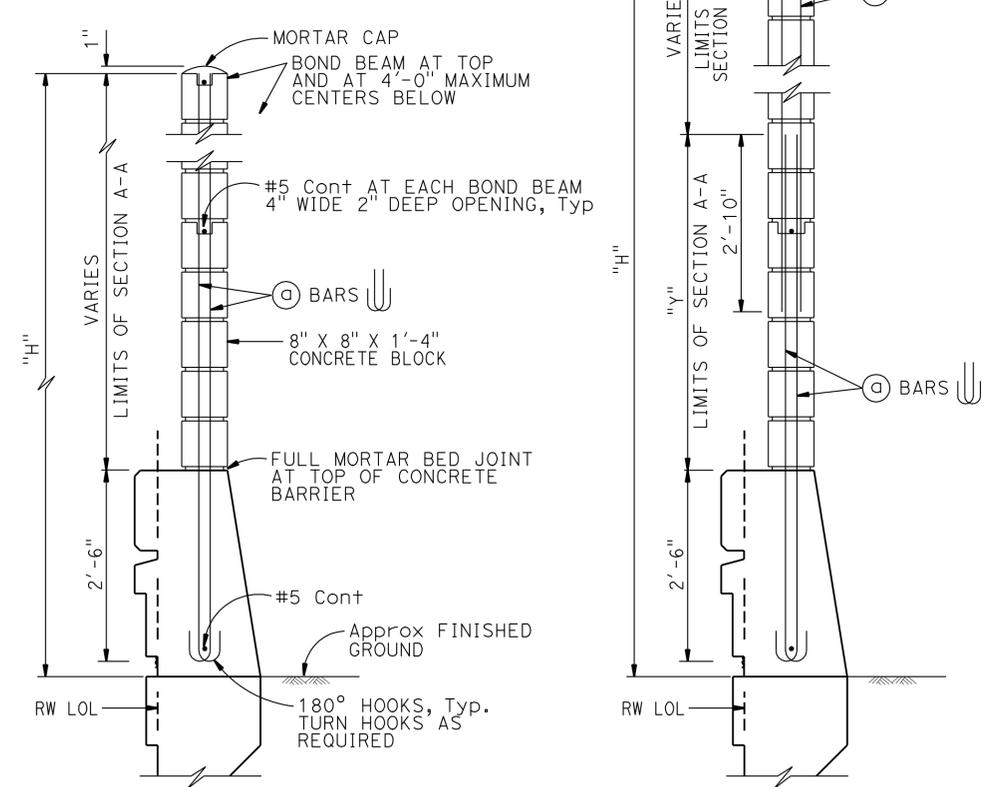
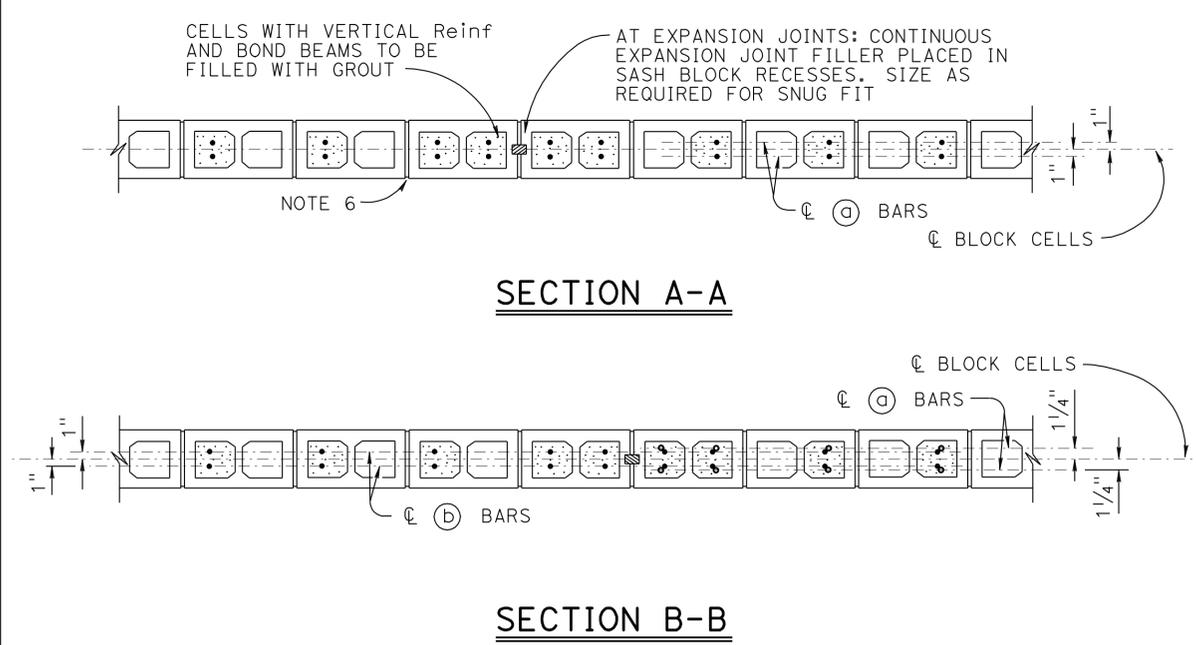
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1587	1597

Frank H. Wei 12/12/11
 REGISTERED CIVIL ENGINEER DATE
 4-9-12
 PLANS APPROVAL DATE
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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



- NOTES:
- For details not shown, see "SOUND WALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL - DETAILS NO. 2" sheet
 - Slope ground at traffic side of barrier to drain. Maximum slope $\pm 10\%$
 - 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

TYPICAL SECTION

SPECIAL DETAILS

NO SCALE

REVISED STANDARD DRAWING

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

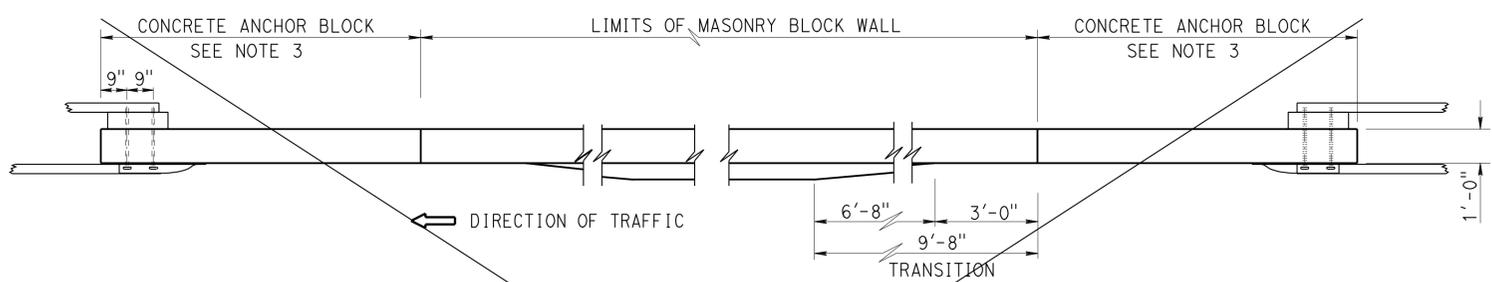
APPROVAL DATE 10-22-09

Revised Call Out
 Modified Detail

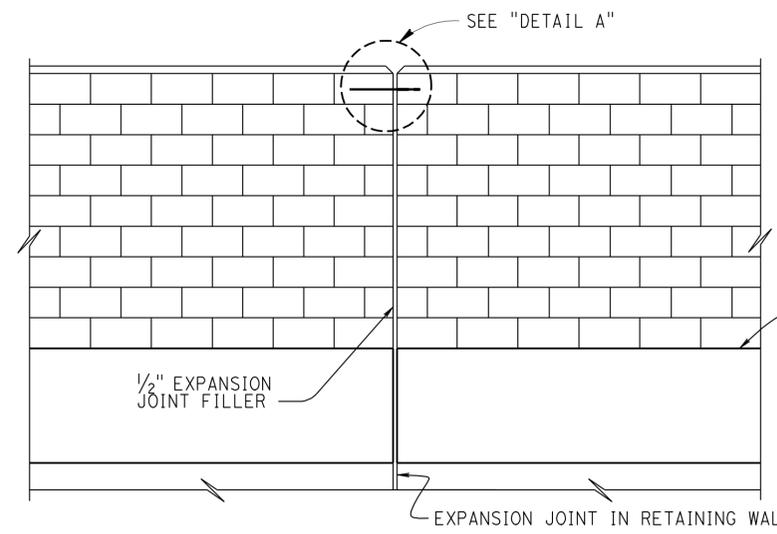
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF ENGINEERING SERVICES

BRIDGE NO. 53E0193
 POST MILE 5.13
SOUND WALL NO. 291
SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 1

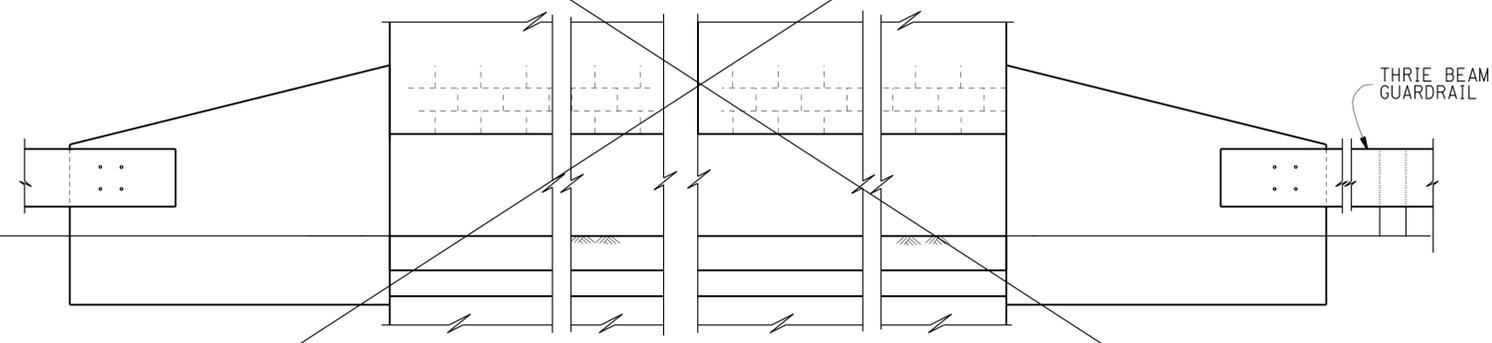
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1588	1597
			DATE		
			2/12/11		
			REGISTERED CIVIL ENGINEER		
			FRANK H. WEI		
			No. C 52918		
			EXP. 12-31-12		
			CIVIL		
			STATE OF CALIFORNIA		



PLAN

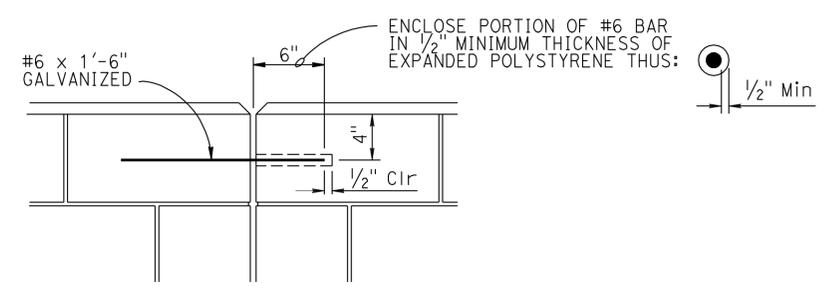


ALIGNMENT KEY DETAIL



ELEVATION

3 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

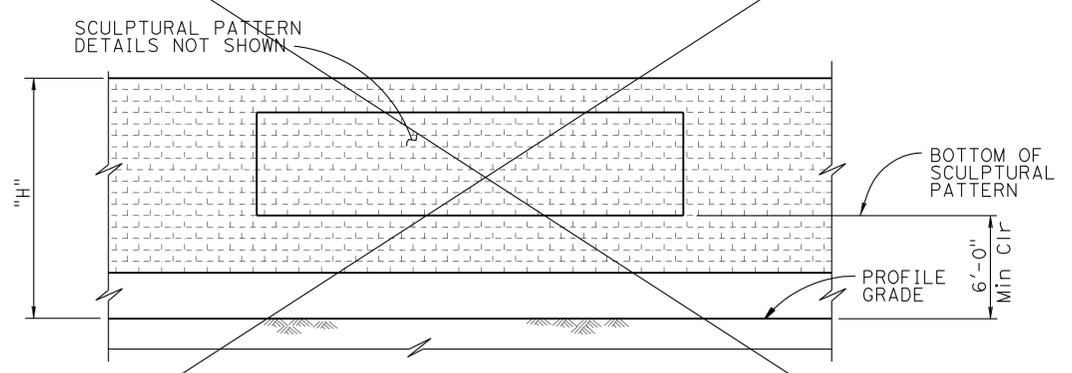
DESIGN WIND LOAD
33 psf

DESIGN SEISMIC LOAD
0.57 Dead load

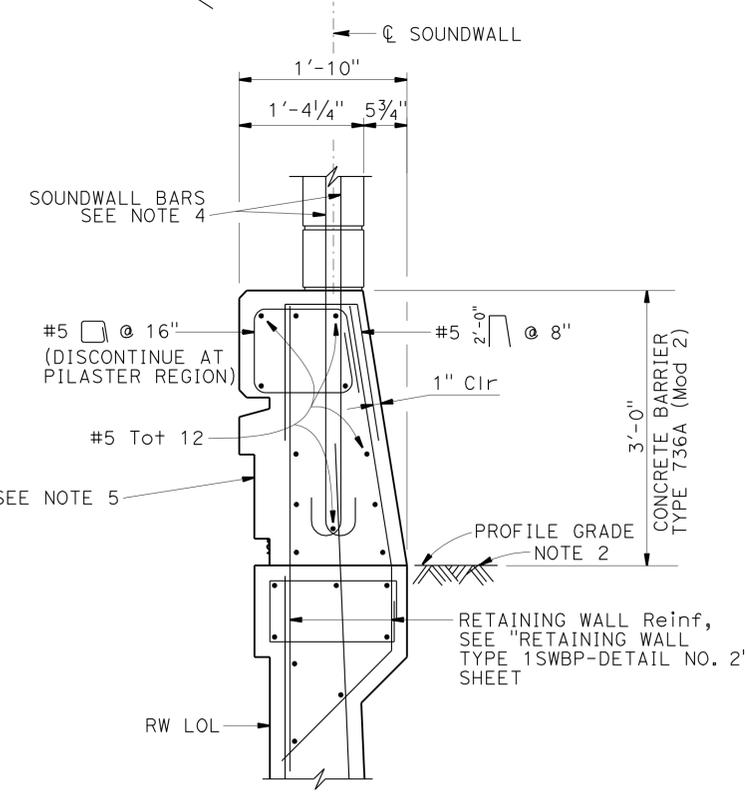
CONCRETE MASONRY

	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

- 2** NOTES:
- For details not shown, see REVISED STANDARD PLAN B15-6.
 - Slope ground at traffic side of barrier to drain. Maximum slope ±10%. See STANDARD PLAN B11-56, Note D.
 - For concrete anchor block and connection details, see "CONNECTION DETAIL DD" on STANDARD PLAN A77J3.
 - See "TYPICAL SECTIONS" on "SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 1" sheet.
 - For barrier architectural details, see "RETAINING WALL AND BARRIER ARCHITECTURAL DETAILS" sheet.



3 CLEARANCE DETAIL



1 BARRIER SECTION

SPECIAL DETAILS

- Modified Detail
- Deleted Detail
- Revised Notes

REVISED STANDARD DRAWING

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

APPROVAL DATE 10-22-09

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

BRIDGE NO. 53E0193	SOUND WALL NO. 291
POST MILE 5.13	
SOUNDWALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS NO. 2	

FOR PLAN VIEW, SEE
"LOG OF TEST BORINGS" 1 OF 9

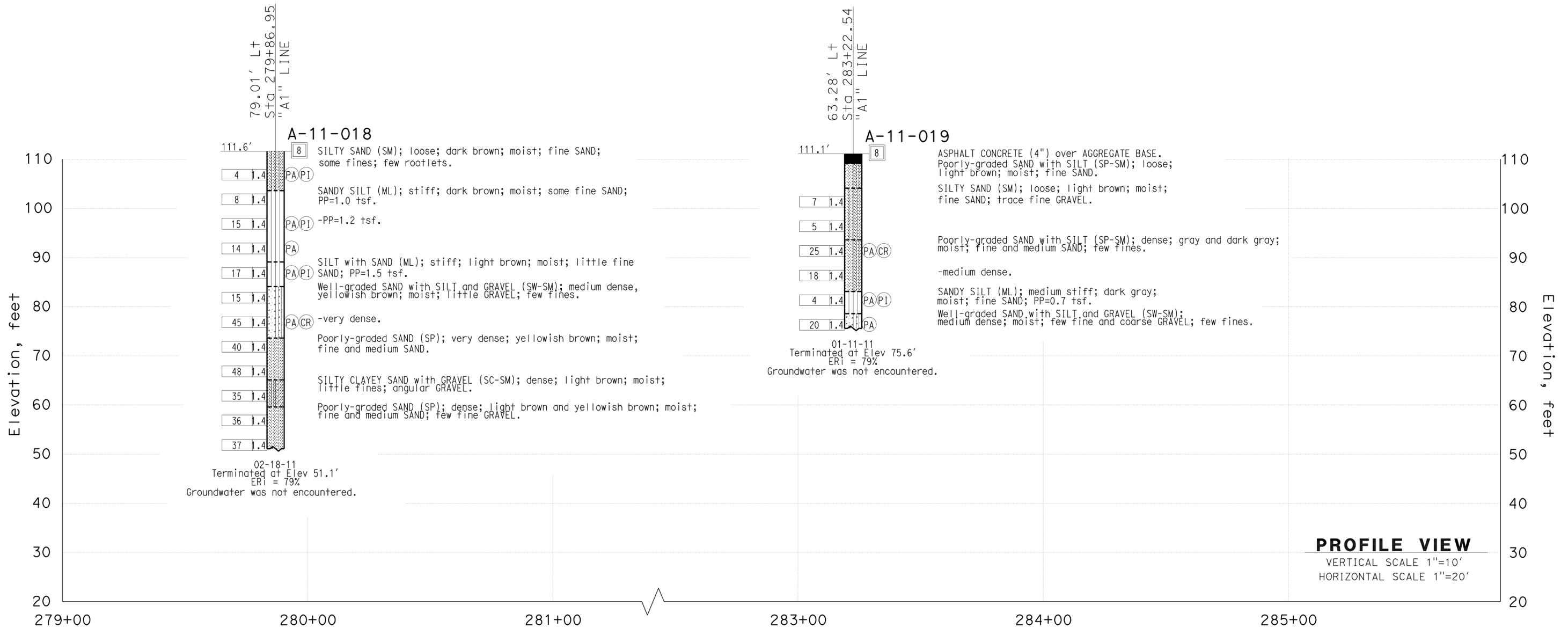
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1590	1597

Amare Tsegie
REGISTERED CIVIL ENGINEER DATE
4-9-12
PLANS APPROVAL DATE

Amare Tsegie
No. C67529
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).



ENGINEERING SERVICES		MATERIALS AND GEOTECHNICAL SERVICES		STATE OF CALIFORNIA		DIVISION OF ENGINEERING SERVICES		BRIDGE NO.		SOUND WALL NO. 291	
FUNCTIONAL SUPERVISOR		DRAWN BY: P.QUACH / T.Pandh (URS CORP)		FIELD INVESTIGATION BY:		CALIFORNIA		53E0193		LOG OF TEST BORINGS SHEET 2 OF 9	
NAME: CHI-TSENG LIU		CHECKED BY: F.GERAMI		A.TSEGIE/M.ISLAM		DEPARTMENT OF TRANSPORTATION		POST MILE		DESIGN BRANCH 21	
065 CIVIL LOG OF TEST BORINGS SHEET		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		0 1 2 3		UNIT: 3658		5.13		CONTRACT NO.: 07-215941	
						PROJECT NUMBER & PHASE: 07 00001834 1		DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES	
						CONTRACT NO.: 07-215941		12/14/11		SHEET 64 OF 71	

FILE => 53-E0193-z-1otb_02.dgn

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1591	1597

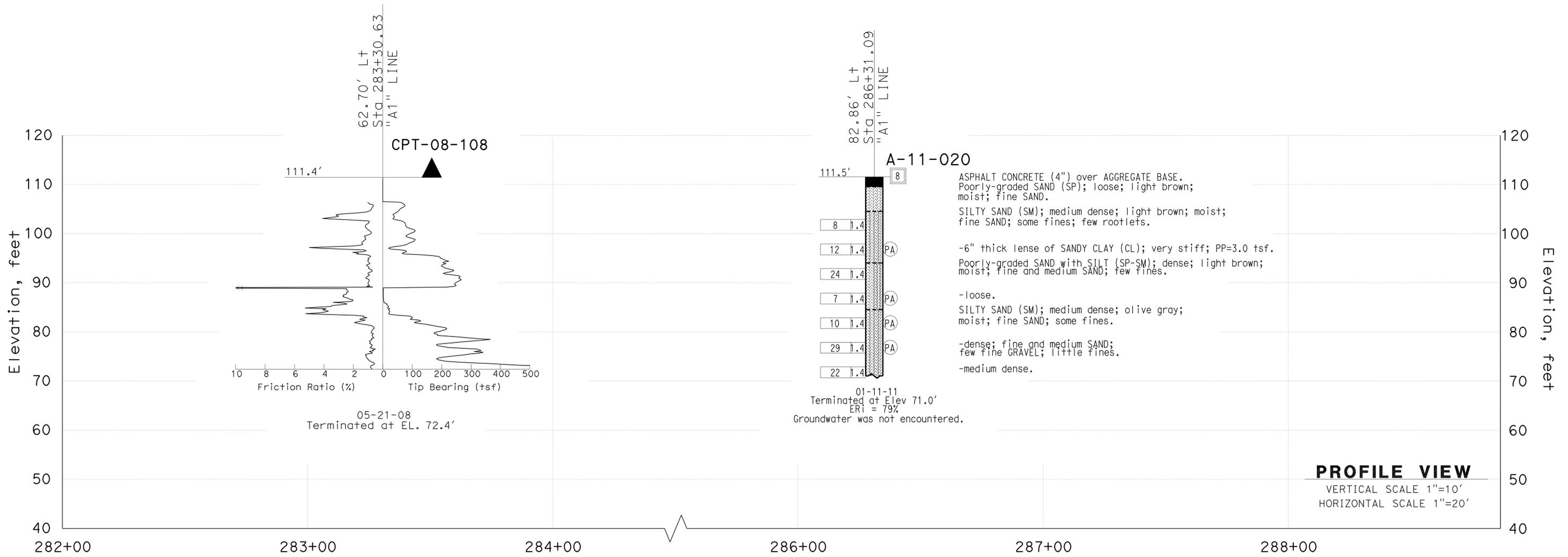
FOR PLAN VIEW, SEE
"LOG OF TEST BORINGS" 1 OF 9

Amare Tsegie
REGISTERED CIVIL ENGINEER DATE
4-9-12
PLANS APPROVAL DATE

Amare Tsegie
No. C67529
Exp. 6-30-13
CIVIL
STATE OF CALIFORNIA

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ENGINEERING SERVICES		MATERIALS AND GEOTECHNICAL SERVICES		STATE OF CALIFORNIA		DIVISION OF ENGINEERING SERVICES		BRIDGE NO.		SOUND WALL NO. 291	
FUNCTIONAL SUPERVISOR		DRAWN BY: P.QUACH / T.Pandh (URS CORP)		FIELD INVESTIGATION BY:		STRUCTURE DESIGN		53E0193		LOG OF TEST BORINGS SHEET 3 OF 9	
NAME: CHI-TSENG LIU		CHECKED BY: F.GERAMI		A.TSEGIE/M.ISLAM/P.MCDONALD		DESIGN BRANCH 21		POST MILE			
065 CIVIL LOG OF TEST BORINGS SHEET		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		0 1 2 3		UNIT: 3658		5.13		REVISION DATES	
						PROJECT NUMBER & PHASE: 07 00001834 1		CONTRACT NO.: 07-215941		SHEET OF	
						DISREGARD PRINTS BEARING EARLIER REVISION DATES		12/14/11		65 71	

USERNAME => s128843 DATE PLOTTED => 14-APR-2012 TIME PLOTTED => 07:48

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1592	1597

Amare
REGISTERED CIVIL ENGINEER DATE

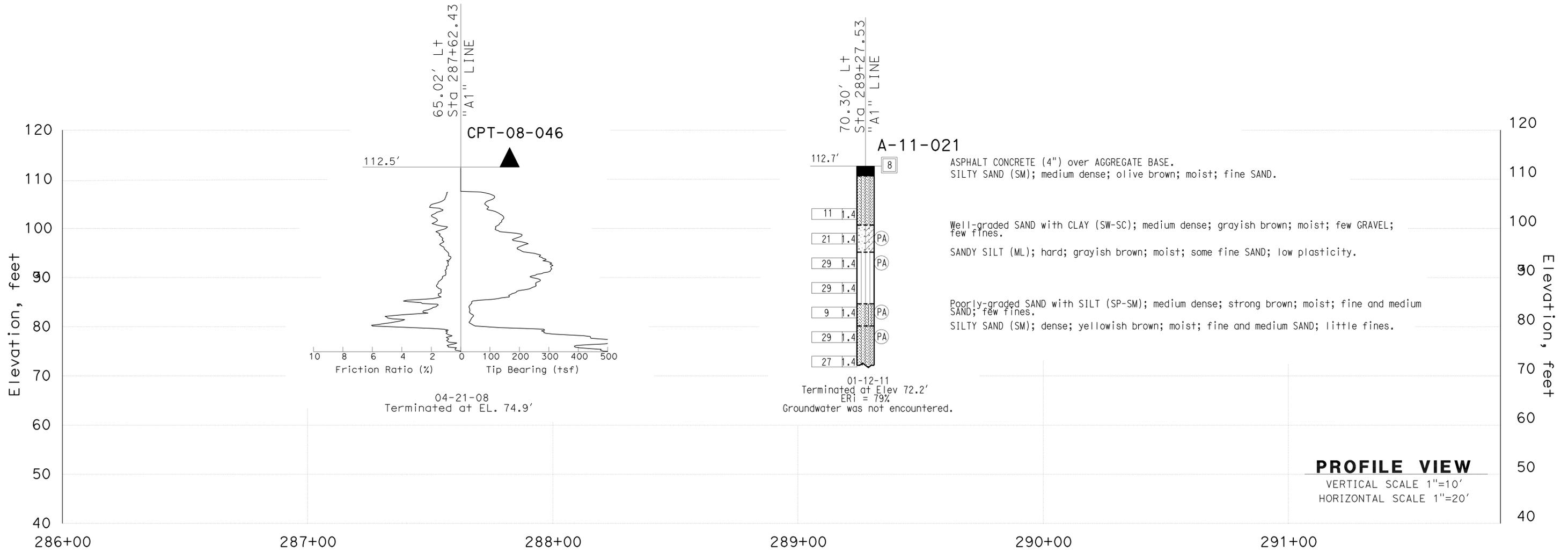
4-9-12
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
Amare Tsegie
No. C67529
Exp. 6-30-13
CIVIL
STATE OF CALIFORNIA

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FOR PLAN VIEW, SEE
"LOG OF TEST BORINGS" 1 OF 9

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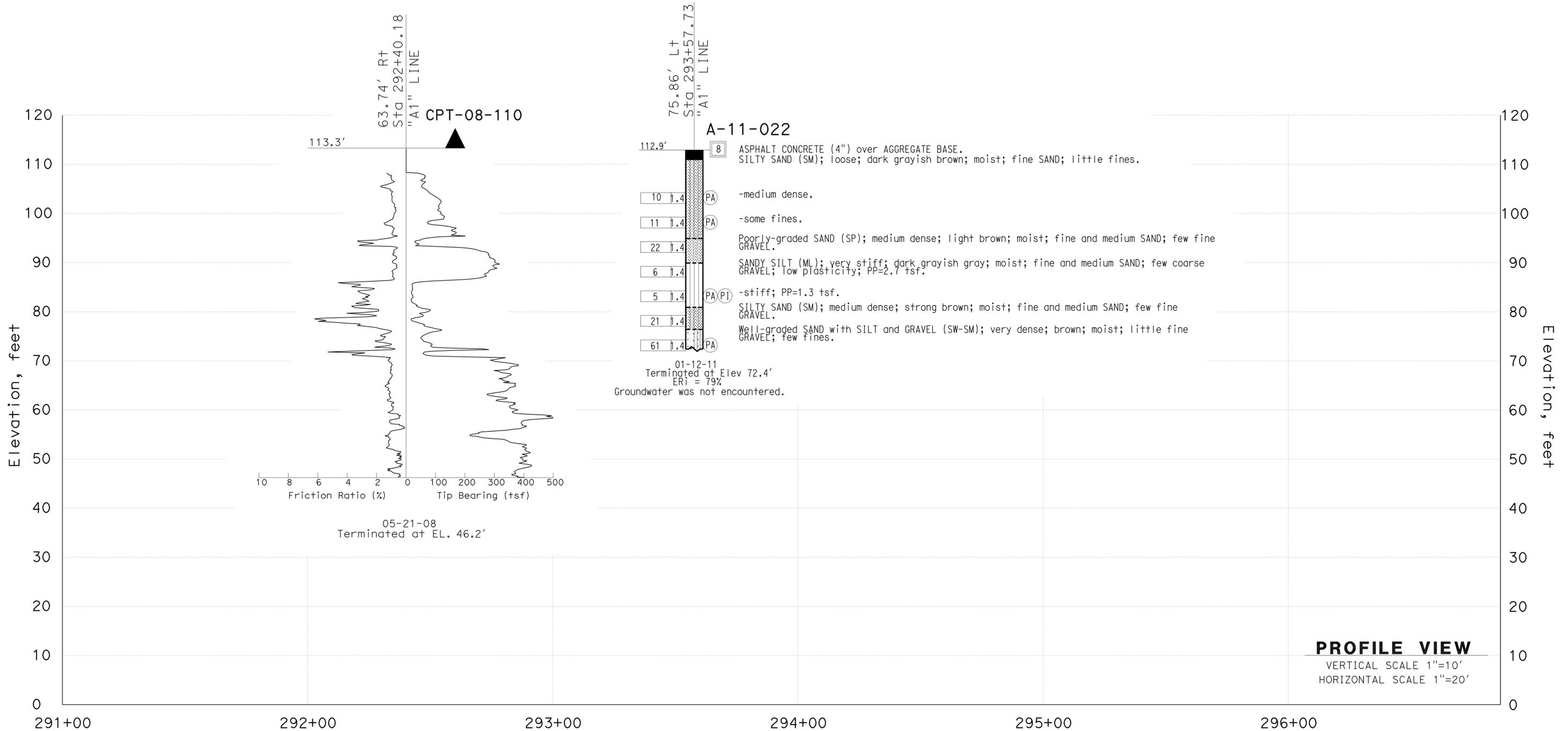
ENGINEERING SERVICES		MATERIALS AND GEOTECHNICAL SERVICES		STATE OF CALIFORNIA	DIVISION OF ENGINEERING SERVICES	BRIDGE NO.	SOUND WALL NO. 291	
FUNCTIONAL SUPERVISOR	DRAWN BY: P.QUACH / T.Pandh (URS CORP)	FIELD INVESTIGATION BY:		DEPARTMENT OF TRANSPORTATION	STRUCTURE DESIGN	53E0193	LOG OF TEST BORINGS SHEET 4 OF 9	
NAME: CHI-TSENG LIU	CHECKED BY: F.GERAMI	A.TSEGIE/M.ISLAM/P.MCDONALD		DESIGN BRANCH 21		POST MILE		
						5.13		
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS					UNIT: 3658	PROJECT NUMBER & PHASE: 07 00001834 1		CONTRACT NO.: 07-215941
065 CIVIL LOG OF TEST BORINGS SHEET					DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES	SHEET 66 OF 71

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FOR PLAN VIEW, SEE
"LOG OF TEST BORINGS" 1 OF 9

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1593	1597

Amare
 REGISTERED CIVIL ENGINEER DATE _____
 4-9-12
 PLANS APPROVAL DATE _____
 No. C67529
 Exp. 6-30-13
 CIVIL
 STATE OF CALIFORNIA
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ENGINEERING SERVICES		MATERIALS AND GEOTECHNICAL SERVICES		STATE OF CALIFORNIA		DIVISION OF ENGINEERING SERVICES		SOUND WALL NO. 291	
FUNCTIONAL SUPERVISOR		DRAWN BY: P.QUACH / T.Pandh (URS CORP)		FIELD INVESTIGATION BY:		BRIDGE NO.		LOG OF TEST BORINGS SHEET 5 OF 9	
NAME: CHI-TSENG LIU		CHECKED BY: F.GERAMI		A.TSEGIE/M.ISLAM/P.MCDONALD		53E0193			
						POST MILE			
						5.13			
065 CIVIL LOG OF TEST BORINGS SHEET		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		0 1 2 3		UNIT: 3658		REVISION DATES	
						PROJECT NUMBER & PHASE: 07 00001834 1		SHEET OF	
						CONTRACT NO.: 07-215941		67 71	
						DISREGARD PRINTS BEARING EARLIER REVISION DATES		12/14/11	
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FOR PLAN VIEW, SEE
"LOG OF TEST BORINGS" 1 OF 9

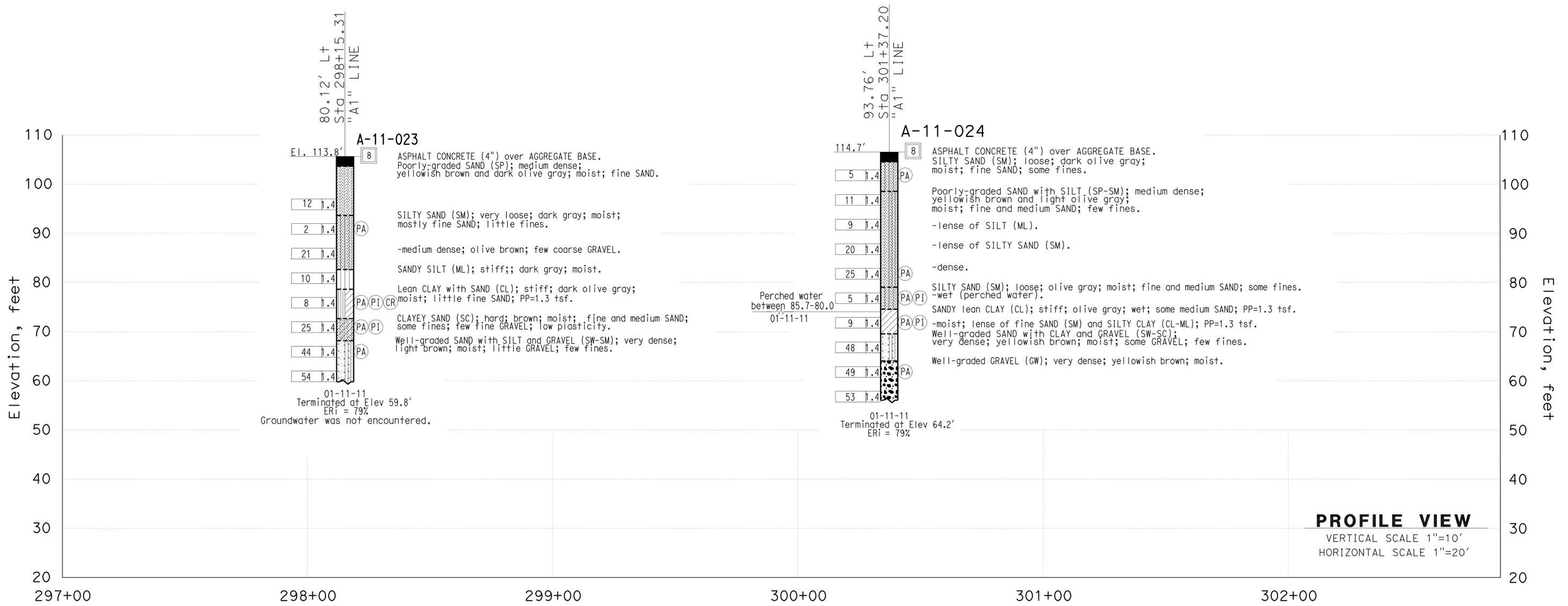
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1594	1597

Amare Tsegie
REGISTERED CIVIL ENGINEER DATE
4-9-12
PLANS APPROVAL DATE

Amare Tsegie
No. C67529
Exp. 6-30-13
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ENGINEERING SERVICES		MATERIALS AND GEOTECHNICAL SERVICES		STATE OF CALIFORNIA		DIVISION OF ENGINEERING SERVICES		SOUND WALL NO. 291	
FUNCTIONAL SUPERVISOR	DRAWN BY: P.QUACH / T.Pandh (URS CORP)	FIELD INVESTIGATION BY:		DEPARTMENT OF TRANSPORTATION		BRIDGE NO. 53E0193		LOG OF TEST BORINGS SHEET 6 OF 9	
NAME: CHI-TSENG LIU	CHECKED BY: F.GERAMI	A.TSEGIE/M.ISLAM		DESIGN BRANCH 21		POST MILE 5.13			
065 CIVIL LOG OF TEST BORINGS SHEET		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		UNIT: 3658		PROJECT NUMBER & PHASE: 07 00001834 1		CONTRACT NO.: 07-215941	
				DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES		SHEET 68 OF 71	

FILE => 53-E0193-z-1otb_06.dgn

FOR PLAN VIEW, SEE
"LOG OF TEST BORINGS" 1 OF 9

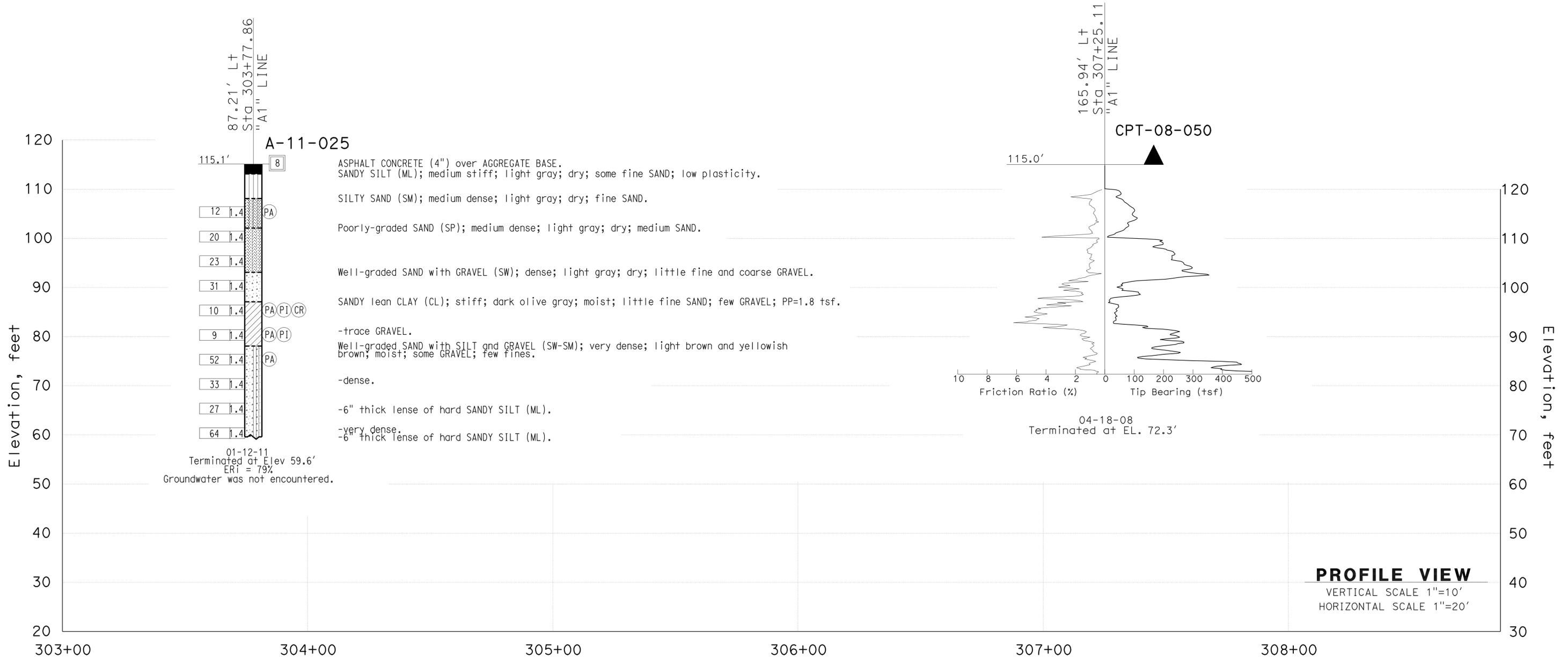
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1595	1597

Amare Tsegie
REGISTERED CIVIL ENGINEER DATE
4-9-12
PLANS APPROVAL DATE

Amare Tsegie
No. C67529
Exp. 6-30-13
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ENGINEERING SERVICES		MATERIALS AND GEOTECHNICAL SERVICES		STATE OF CALIFORNIA		DIVISION OF ENGINEERING SERVICES		BRIDGE NO.		SOUND WALL NO. 291	
FUNCTIONAL SUPERVISOR		DRAWN BY: P.QUACH / T.Pandh (URS CORP)		FIELD INVESTIGATION BY:		STRUCTURE DESIGN		53E0193		LOG OF TEST BORINGS SHEET 7 OF 9	
NAME: CHI-TSENG LIU		CHECKED BY: F.GERAMI		A.TSEGIE/M.ISLAM/P.MCDONALD		DESIGN BRANCH 21		POST MILE		REVISION DATES	
065 CIVIL LOG OF TEST BORINGS SHEET		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		0 1 2 3		UNIT: 3658		5.13		SHEET OF	
						PROJECT NUMBER & PHASE: 07 00001834 1		CONTRACT NO.: 07-215941		DISREGARD PRINTS BEARING EARLIER REVISION DATES	
						FILE => 53-E0193-z-1otb_07.dgn				12/14/11 69 71	

USERNAME => s128843 DATE PLOTTED => 14-APR-2012 TIME PLOTTED => 07:49

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	4.0/5.9	1596	1597

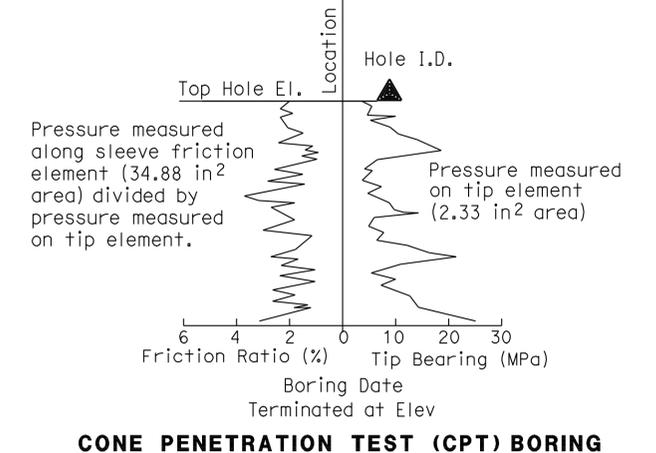
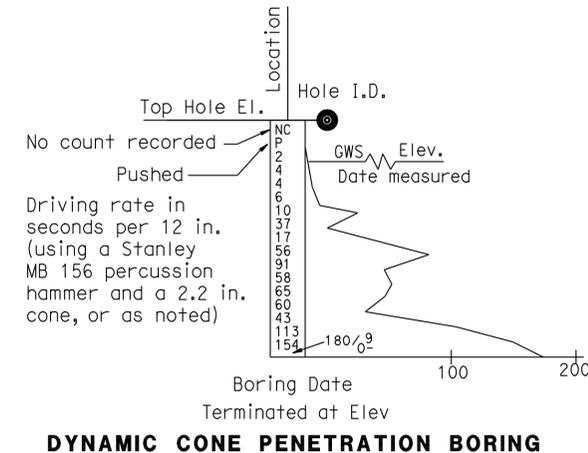
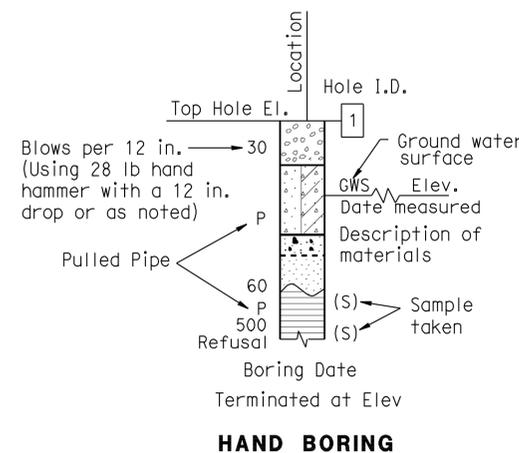
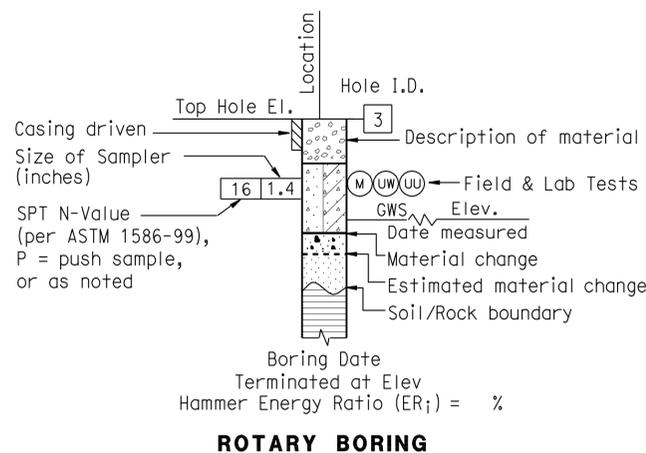
REGISTERED CIVIL ENGINEER *Amare* DATE _____
 PLANS APPROVAL DATE 4-9-12
 Amare Tsegie
 No. C67529
 Exp. 6-30-13
 CIVIL
 STATE OF CALIFORNIA
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CEMENTATION	
Description	Criteria
Weak	Crumbles or breaks with handling or little finger pressure.
Moderate	Crumbles or breaks with considerable finger pressure.
Strong	Will not crumble or break with finger pressure.

BOREHOLE IDENTIFICATION		
Symbol	Hole Type	Description
	A	Auger Boring (hollow or solid stem bucket)
	R	Rotary drilled boring (conventional)
	RW	Rotary drilled with self-casing wire-line
	RC	Rotary core with continuously-sampled, self-casing wire-line
	P	Rotary percussion boring (air)
	R	Rotary drilled diamond core
	HD	Hand driven (1-inch soil tube)
	HA	Hand Auger
	D	Dynamic Cone Penetration Boring
	CPT	Cone Penetration Test (ASTM D 5778)
	O	Other (note on LOTB)

Note: Size in inches.

CONSISTENCY OF COHESIVE SOILS				
Description	Shear Strength (tsf)	Pocket Penetrometer Measurement, PP, (tsf)	Torvane Measurement, TV, (tsf)	Vane Shear Measurement, VS, (tsf)
Very Soft	Less than 0.12	Less than 0.25	Less than 0.12	Less than 0.12
Soft	0.12 - 0.25	0.25 - 0.5	0.12 - 0.25	0.12 - 0.25
Medium Stiff	0.25 - 0.5	0.5 - 1	0.25 - 0.5	0.25 - 0.5
Stiff	0.5 - 1	1 - 2	0.5 - 1	0.5 - 1
Very Stiff	1 - 2	2 - 4	1 - 2	1 - 2
Hard	Greater than 2	Greater than 4	Greater than 2	Greater than 2



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FUNCTIONAL SUPERVISOR		DRAWN BY: P.QUACH / T.Pandh (URS CORP)		FIELD INVESTIGATION BY:		STRUCTURE DESIGN		53E0193		LOG OF TEST BORINGS SHEET 8 OF 9	
NAME: CHI-TSENG LIU		CHECKED BY: F.GERAMI		A.TSEGIE/M.ISLAM/P.MCDONALD		DESIGN BRANCH 21		POST MILE			
06S CIVIL LOG OF TEST BORINGS SHEET		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		UNIT: 3658		PROJECT NUMBER & PHASE: 07 00001834 1		CONTRACT NO.: 07-215941		DISREGARD PRINTS BEARING EARLIER REVISION DATES	
								REVISION DATES		SHEET OF	
								12/14/11		70 71	

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