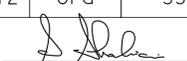
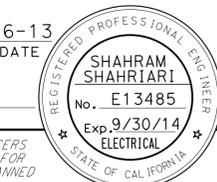
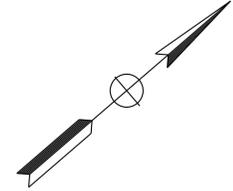


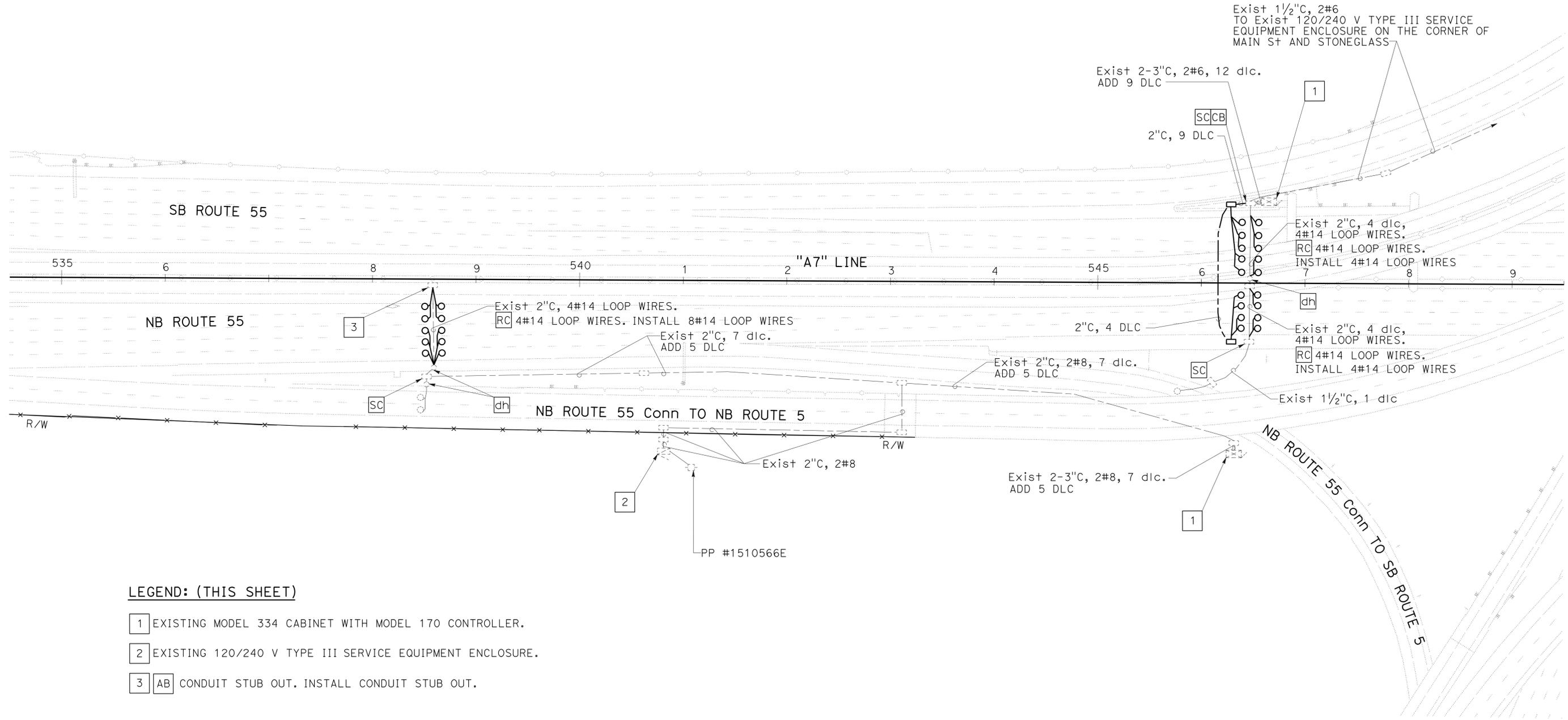
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	301	368
			01-16-13	DATE	
REGISTERED ELECTRICAL ENGINEER			DATE		
4-8-13			PLANS APPROVAL DATE		
					
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					



NOTES: (THIS SHEET)

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- THE CONTRACTOR MUST VERIFY THE EXACT LOCATION OF EXISTING LOOPS PRIOR TO CUTTING NEW LOOPS.
- SPACING FOR MAINLINE DOUBLE LOOPS IS 20' LEADING EDGE TO LEADING EDGE.
- AB** EXISTING LOOPS WHERE NEW LOOPS ARE CUT.
- LOOP DETECTORS MUST BE INSTALLED AFTER THE PLACEMENT OF UPPERMOST LAYER OF NEW PAVEMENT AND AFTER APPLYING PAVEMENT MARKINGS.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 ELECTRICAL DESIGN
 FUNCTIONAL SUPERVISOR: SHAHRAM SHAHRIARI
 CALCULATED/DESIGNED BY: FRANCIS M. ALVIAR
 CHECKED BY: VANESSA V. TRUONG
 REVISIONS: (None listed)



LEGEND: (THIS SHEET)

- 1** EXISTING MODEL 334 CABINET WITH MODEL 170 CONTROLLER.
- 2** EXISTING 120/240 V TYPE III SERVICE EQUIPMENT ENCLOSURE.
- 3** **AB** CONDUIT STUB OUT. INSTALL CONDUIT STUB OUT.

INDUCTIVE LOOP DETECTOR

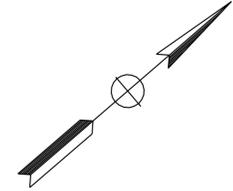
SCALE: 1" = 50'

E-18

APPROVED FOR ELECTRICAL WORK ONLY

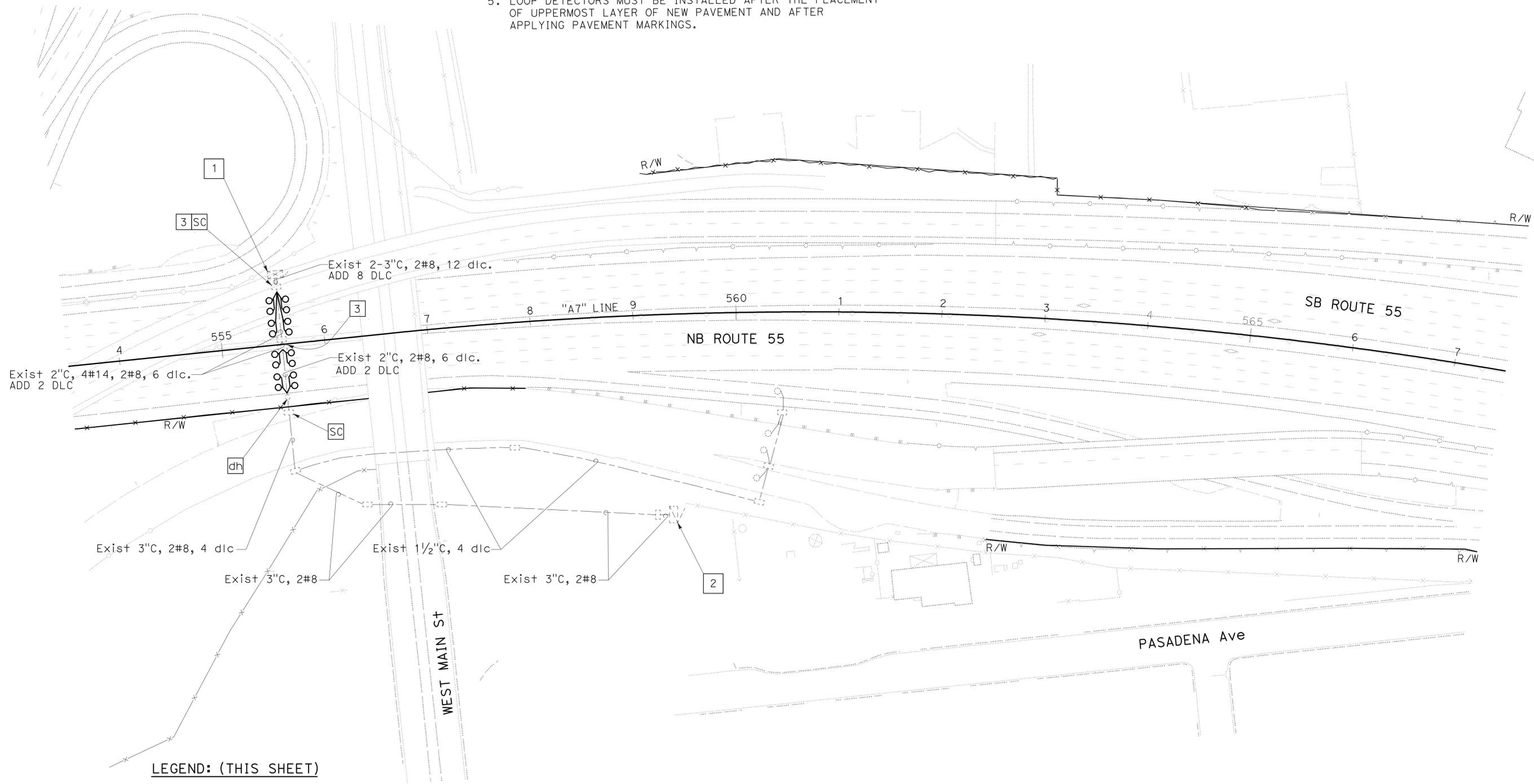
LAST REVISION: DATE PLOTTED => 16-APR-2013
 TIME PLOTTED => 11:45

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	302	368
			01-16-13	REGISTERED ELECTRICAL ENGINEER DATE	
			4-8-13	PLANS APPROVAL DATE	
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.					



NOTES: (THIS SHEET)

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- THE CONTRACTOR MUST VERIFY THE EXACT LOCATION OF EXISTING LOOPS PRIOR TO CUTTING NEW LOOPS.
- SPACING FOR MAINLINE DOUBLE LOOPS IS 20' LEADING EDGE TO LEADING EDGE.
- [AB]** EXISTING LOOPS WHERE NEW LOOPS ARE CUT.
- LOOP DETECTORS MUST BE INSTALLED AFTER THE PLACEMENT OF UPPERMOST LAYER OF NEW PAVEMENT AND AFTER APPLYING PAVEMENT MARKINGS.



LEGEND: (THIS SHEET)

- [1]** EXISTING MODEL 334 CABINET WITH MODEL 170 CONTROLLER.
- [2]** EXISTING 120/240 V TYPE III SERVICE EQUIPMENT ENCLOSURE.
- [3]** **[AB]** CONDUIT STUB OUT. INSTALL CONDUIT STUB OUT.

INDUCTIVE LOOP DETECTOR
SCALE: 1" = 50'

APPROVED FOR ELECTRICAL WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN
 FUNCTIONAL SUPERVISOR: SHAHRAM SHAHRIARI
 CALCULATED/DESIGNED BY: CHECKED BY:
 FRANCIS M. ALVIAR VANESSA V. TRUONG
 REVISED BY: DATE REVISED:

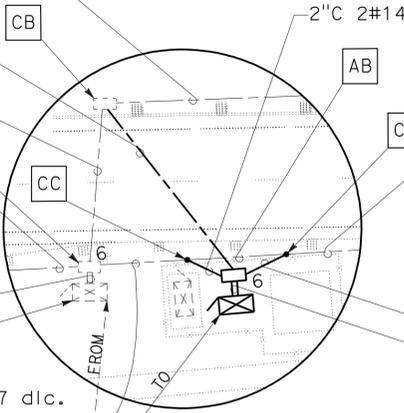
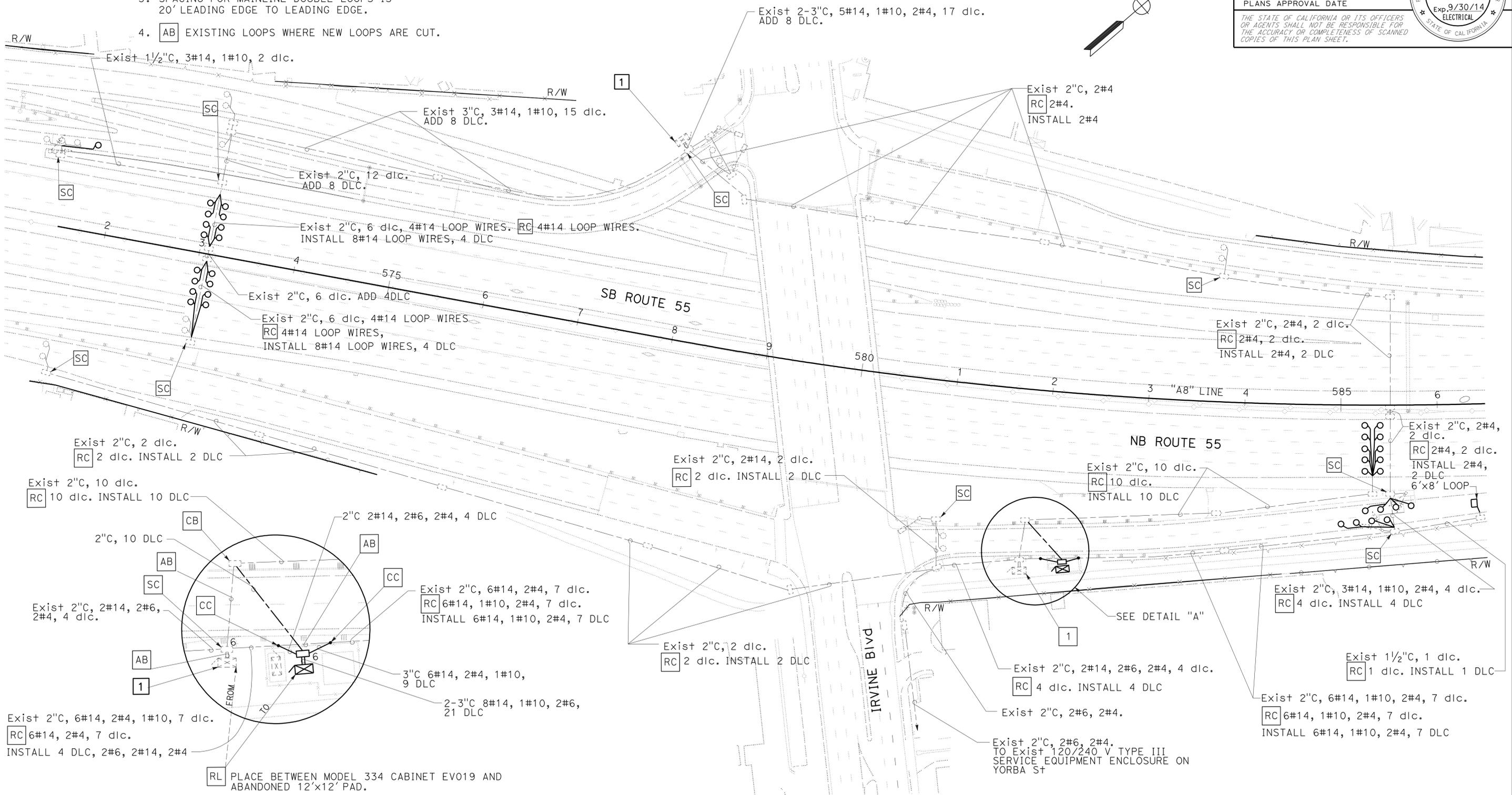
LAST REVISION: DATE PLOTTED => 12-APR-2013
 12-03-12 TIME PLOTTED => 11:25

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	303	368
			01-16-13	DATE	
REGISTERED ELECTRICAL ENGINEER			DATE		
4-8-13			PLANS APPROVAL DATE		
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					



NOTES: (THIS SHEET)

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- THE CONTRACTOR MUST VERIFY THE EXACT LOCATION OF EXISTING LOOPS PRIOR TO CUTTING NEW LOOPS.
- SPACING FOR MAINLINE DOUBLE LOOPS IS 20' LEADING EDGE TO LEADING EDGE.
- AB** EXISTING LOOPS WHERE NEW LOOPS ARE CUT.
- LOOP DETECTORS MUST BE INSTALLED AFTER THE PLACEMENT OF UPPERMOST LAYER OF NEW PAVEMENT AND AFTER APPLYING PAVEMENT MARKINGS.
- SEE SHEET E-1 FOR TYPICAL RAMP METERING DETAILS.



DETAIL "A"
NO SCALE

LEGEND: (THIS SHEET)

- 1** EXISTING MODEL 334 CABINET WITH MODEL 170 CONTROLLER.

INDUCTIVE LOOP DETECTOR
SCALE: 1" = 50'

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN
 FUNCTIONAL SUPERVISOR: SHAHRAM SHAHRIARI
 CALCULATED/DESIGNED BY: VANESSA V. TRUONG
 CHECKED BY: FRANCIS M. ALVIAR
 REVISED BY: DATE REVISIONS:

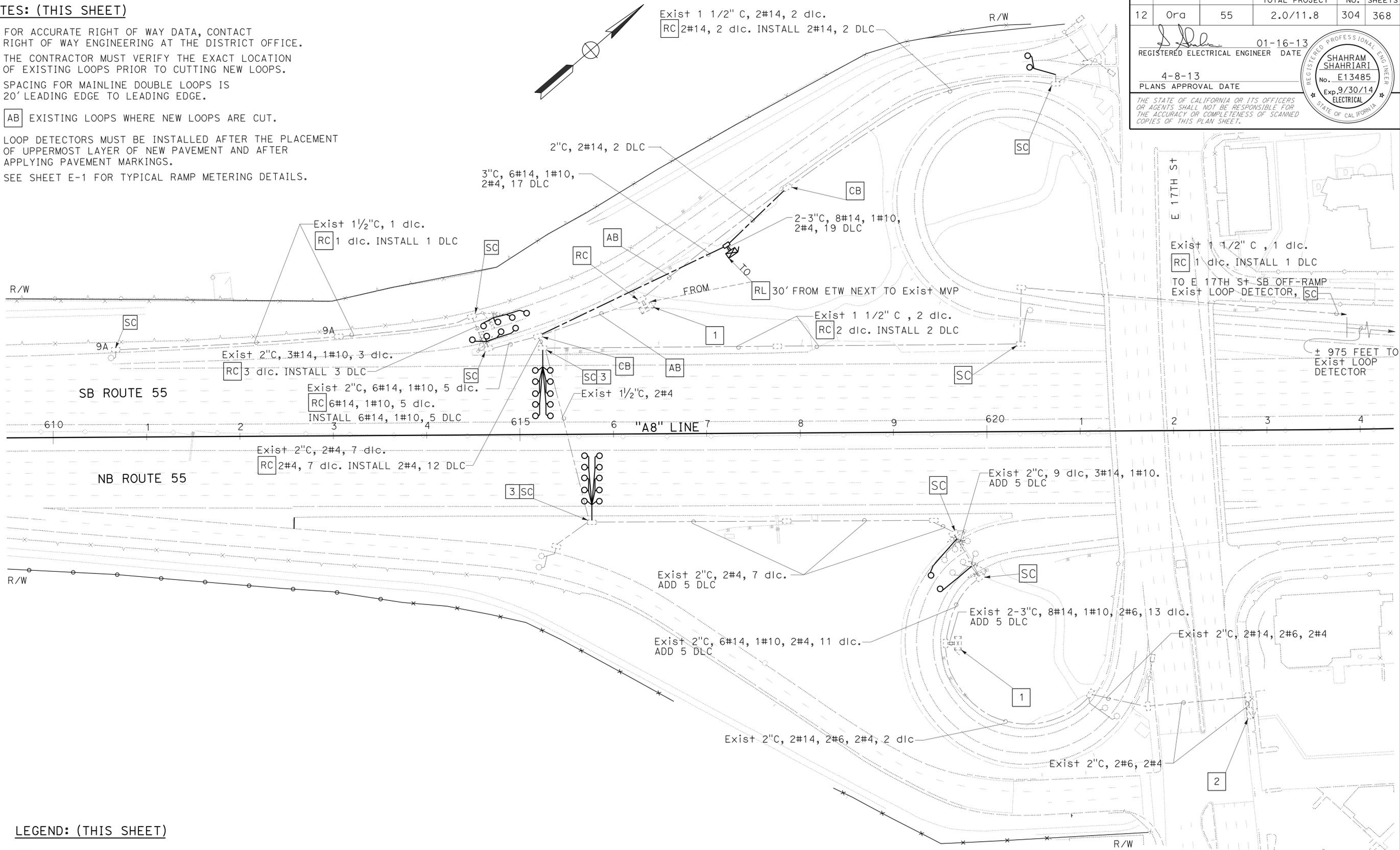
APPROVED FOR ELECTRICAL WORK ONLY

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	304	368
REGISTERED ELECTRICAL ENGINEER			DATE	01-16-13	
REGISTERED PROFESSIONAL ENGINEER			DATE	4-8-13	
PLANS APPROVAL DATE					
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					



NOTES: (THIS SHEET)

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- THE CONTRACTOR MUST VERIFY THE EXACT LOCATION OF EXISTING LOOPS PRIOR TO CUTTING NEW LOOPS.
- SPACING FOR MAINLINE DOUBLE LOOPS IS 20' LEADING EDGE TO LEADING EDGE.
- AB** EXISTING LOOPS WHERE NEW LOOPS ARE CUT.
- LOOP DETECTORS MUST BE INSTALLED AFTER THE PLACEMENT OF UPPERMOST LAYER OF NEW PAVEMENT AND AFTER APPLYING PAVEMENT MARKINGS.
- SEE SHEET E-1 FOR TYPICAL RAMP METERING DETAILS.



LEGEND: (THIS SHEET)

- 1** EXISTING MODEL 334 CABINET WITH MODEL 170 CONTROLLER.
- 2** EXISTING 120/240 V TYPE III-BF SERVICE EQUIPMENT ENCLOSURE.
- 3** **AB** CONDUIT STUB OUT. INSTALL CONDUIT STUB OUT.

INDUCTIVE LOOP DETECTOR

SCALE: 1" = 50'

E-21

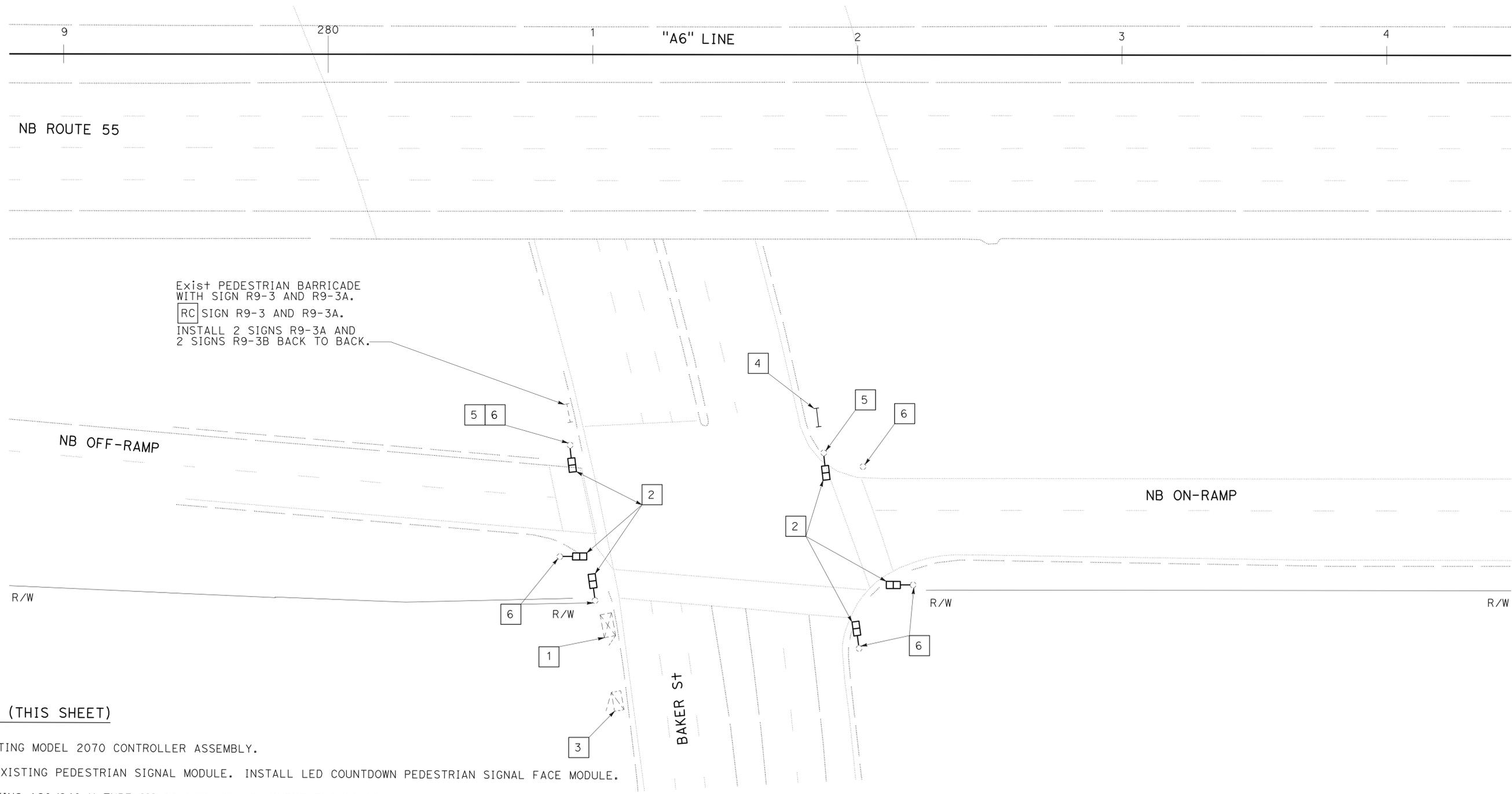
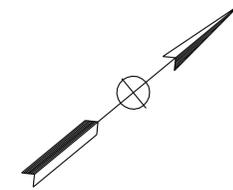
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN
 FUNCTIONAL SUPERVISOR: SHAHRAM SHAHRIARI
 CALCULATED/DESIGNED BY: VANESSA V. TRUONG
 CHECKED BY: FRANCIS M. ALVIAR
 REVISED BY: DATE
 REVISIONS:

APPROVED FOR ELECTRICAL WORK ONLY

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	305	368
			01-16-13	REGISTERED ELECTRICAL ENGINEER DATE	
			4-8-13	PLANS APPROVAL DATE	
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

NOTE: (THIS SHEET)

1. FOR COMPLETE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



Exist PEDESTRIAN BARRICADE WITH SIGN R9-3 AND R9-3A.
 RC SIGN R9-3 AND R9-3A.
 INSTALL 2 SIGNS R9-3A AND 2 SIGNS R9-3B BACK TO BACK.

LEGEND: (THIS SHEET)

- 1 EXISTING MODEL 2070 CONTROLLER ASSEMBLY.
- 2 RC EXISTING PEDESTRIAN SIGNAL MODULE. INSTALL LED COUNTDOWN PEDESTRIAN SIGNAL FACE MODULE.
- 3 EXISTING 120/240 V TYPE III-BF SERVICE EQUIPMENT ENCLOSURE.
- 4 INSTALL TYPE I PEDESTRIAN BARRICADE WITH 2 SIGNS R9-3A AND 2 SIGNS R9-3B BACK TO BACK.
- 5 RC EXISTING SIGN R9-3A AND R9-3B.
- 6 RC EXISTING ppb. INSTALL PPB WITH ACCESSIBLE PEDESTRIAN SIGNAL AT 40" HEIGHT.

APPROVED FOR ELECTRICAL WORK ONLY

MODIFY SIGNAL
 SCALE: 1" = 20'

E-22

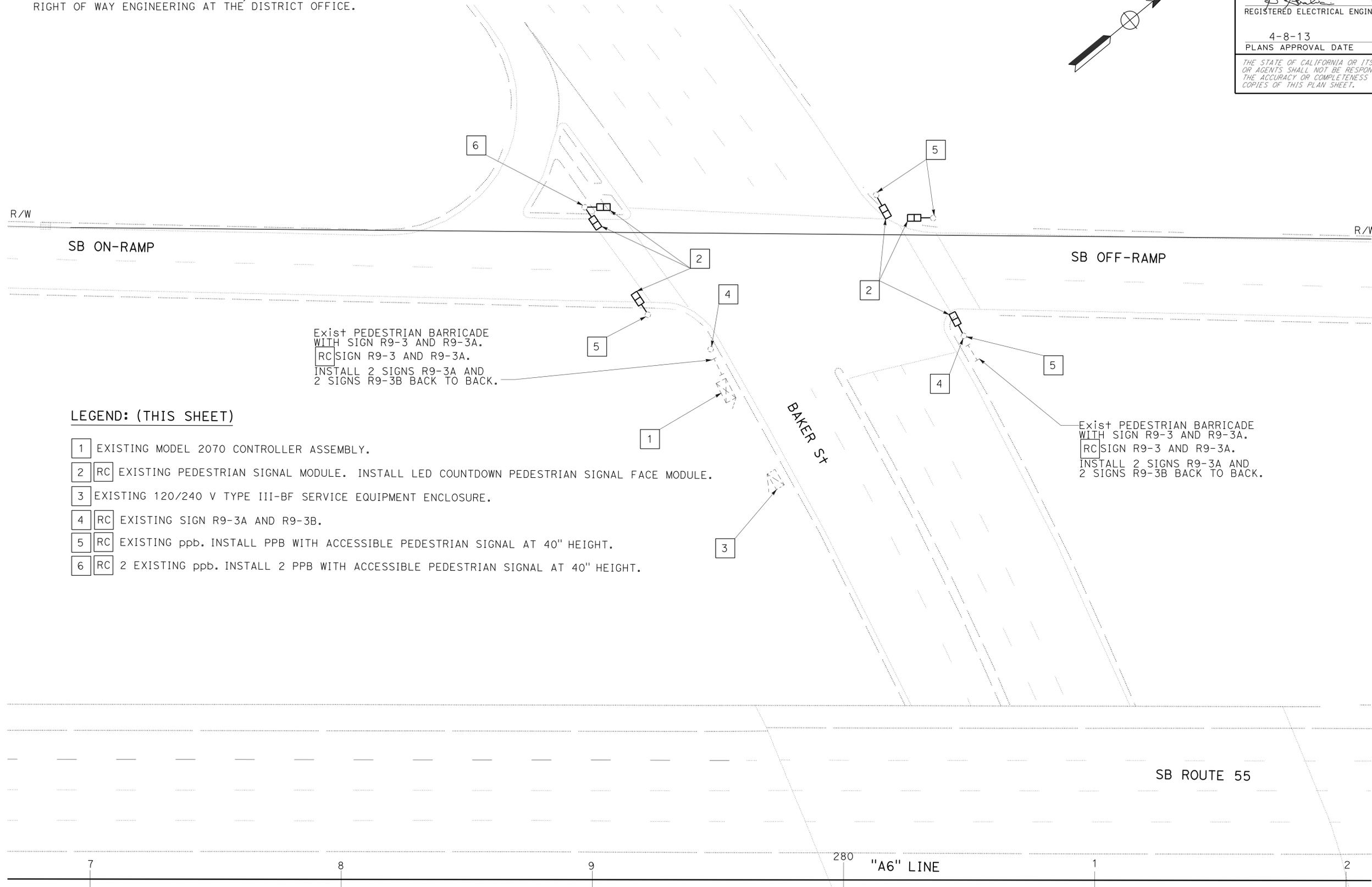
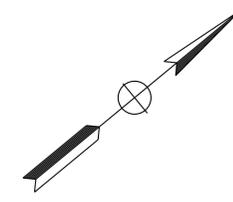
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISOR
Caltrans ELECTRICAL DESIGN	SHAHRAM SHAHRIARI	SHAHRAM SHAHRIARI	FRANCIS M. ALVIAR
		CHECKED BY	DATE
		VANESSA V. TRUONG	

LAST REVISION DATE PLOTTED => 12-APR-2013
 12-03-12 TIME PLOTTED => 11:26

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	306	368
			01-16-13	DATE	
			4-8-13	PLANS APPROVAL DATE	
REGISTERED ELECTRICAL ENGINEER No. E13485 Exp. 9/30/14 ELECTRICAL					
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

NOTES: (THIS SHEET)

1. FOR COMPLETE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



LEGEND: (THIS SHEET)

- 1 EXISTING MODEL 2070 CONTROLLER ASSEMBLY.
- 2 RC EXISTING PEDESTRIAN SIGNAL MODULE. INSTALL LED COUNTDOWN PEDESTRIAN SIGNAL FACE MODULE.
- 3 EXISTING 120/240 V TYPE III-BF SERVICE EQUIPMENT ENCLOSURE.
- 4 RC EXISTING SIGN R9-3A AND R9-3B.
- 5 RC EXISTING ppb. INSTALL PPB WITH ACCESSIBLE PEDESTRIAN SIGNAL AT 40" HEIGHT.
- 6 RC 2 EXISTING ppb. INSTALL 2 PPB WITH ACCESSIBLE PEDESTRIAN SIGNAL AT 40" HEIGHT.

Exist PEDESTRIAN BARRICADE WITH SIGN R9-3 AND R9-3A.
RC SIGN R9-3 AND R9-3A.
INSTALL 2 SIGNS R9-3A AND 2 SIGNS R9-3B BACK TO BACK.

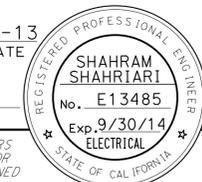
Exist PEDESTRIAN BARRICADE WITH SIGN R9-3 AND R9-3A.
RC SIGN R9-3 AND R9-3A.
INSTALL 2 SIGNS R9-3A AND 2 SIGNS R9-3B BACK TO BACK.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN
 FUNCTIONAL SUPERVISOR: SHAHRAM SHAHRIARI
 CALCULATED/DESIGNED BY: FRANCIS M. ALVIAR
 CHECKED BY: VANESSA V. TRUONG
 REVISED BY: DATE REVISED:

APPROVED FOR ELECTRICAL WORK ONLY

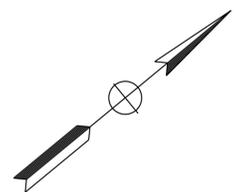
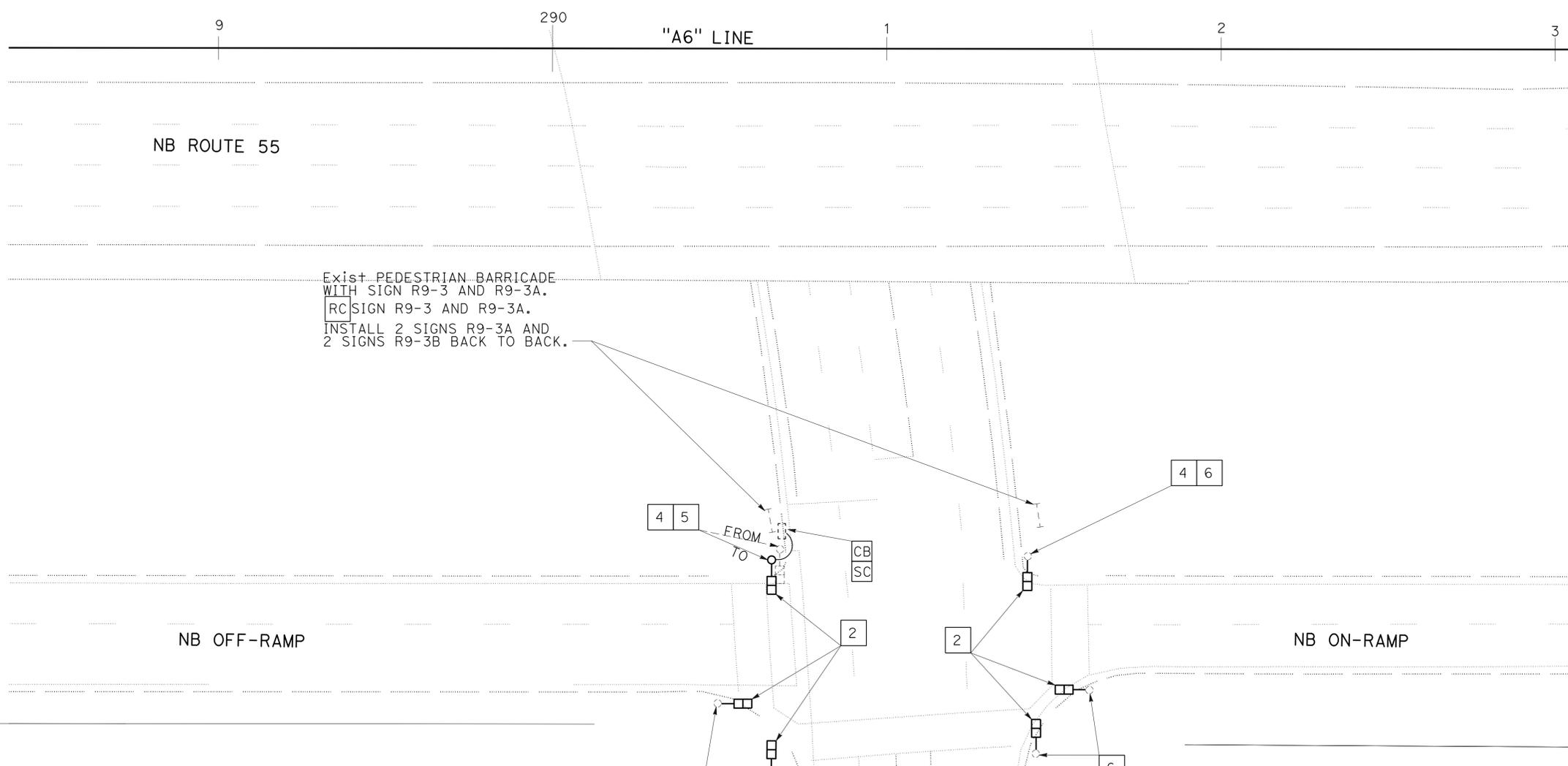
MODIFY SIGNAL
SCALE: 1" = 20'

E-23

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	307	368
			REGISTERED ELECTRICAL ENGINEER DATE	01-16-13	
			PLANS APPROVAL DATE	4-8-13	
					
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

NOTES: (THIS SHEET)

1. FOR COMPLETE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	REVISIONS	REVISIONS
Caltrans ELECTRICAL DESIGN	SHAHRAM SHAHRIARI	FRANCIS M. ALVIAR	FRANCIS M. ALVIAR
		VANESSA V. TRUONG	VANESSA V. TRUONG
		CHECKED BY	CHECKED BY
		DESIGNED BY	DESIGNED BY
		DATE	DATE
		REVISOR	REVISOR
		DATE	DATE

LEGEND: (THIS SHEET)

- 1 EXISTING MODEL 2070 CONTROLLER ASSEMBLY.
- 2 RC EXISTING PEDESTRIAN SIGNAL MODULE. INSTALL LED COUNTDOWN PEDESTRIAN SIGNAL FACE MODULE.
- 3 EXISTING 120/240 V TYPE III-BF SERVICE EQUIPMENT ENCLOSURE.
- 4 RC EXISTING SIGN R9-3A AND R9-3B.
- 5 RL EXISTING TYPE 1-A. RC EXISTING ppb. INSTALL PPB WITH ACCESSIBLE PEDESTRIAN SIGNAL AT 40" HEIGHT.
- 6 RC EXISTING ppb. INSTALL PPB WITH ACCESSIBLE PEDESTRIAN SIGNAL AT 40" HEIGHT.

APPROVED FOR ELECTRICAL WORK ONLY

MODIFY SIGNAL
SCALE: 1" = 20'

E-24

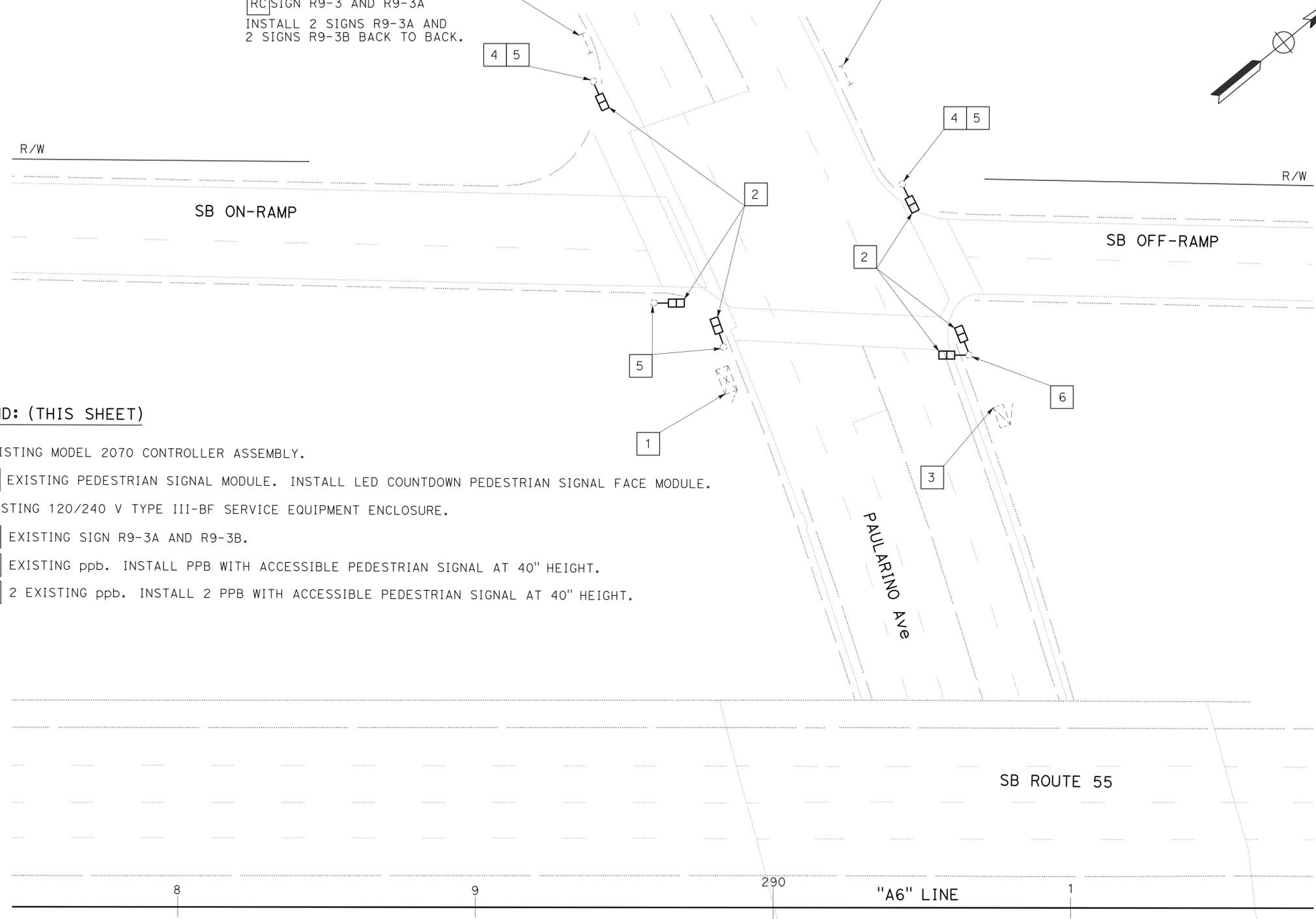
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	308	368
			01-16-13	DATE	
			4-8-13	PLANS APPROVAL DATE	
REGISTERED ELECTRICAL ENGINEER No. E13485 Exp. 9/30/12 ELECTRICAL					
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.					

NOTES: (THIS SHEET)

1. FOR COMPLETE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

Exist PEDESTRIAN BARRICADE WITH SIGN R9-3 AND R9-3A.
 RC SIGN R9-3 AND R9-3A
 INSTALL 2 SIGNS R9-3A AND 2 SIGNS R9-3B BACK TO BACK.

Exist PEDESTRIAN BARRICADE WITH SIGN R9-3 AND R9-3A.
 RC SIGN R9-3 AND R9-3A.
 INSTALL 2 SIGNS R9-3A AND 2 SIGNS R9-3B BACK TO BACK.



LEGEND: (THIS SHEET)

- 1 EXISTING MODEL 2070 CONTROLLER ASSEMBLY.
- 2 RC EXISTING PEDESTRIAN SIGNAL MODULE. INSTALL LED COUNTDOWN PEDESTRIAN SIGNAL FACE MODULE.
- 3 EXISTING 120/240 V TYPE III-BF SERVICE EQUIPMENT ENCLOSURE.
- 4 RC EXISTING SIGN R9-3A AND R9-3B.
- 5 RC EXISTING ppb. INSTALL PPB WITH ACCESSIBLE PEDESTRIAN SIGNAL AT 40" HEIGHT.
- 6 RC 2 EXISTING ppb. INSTALL 2 PPB WITH ACCESSIBLE PEDESTRIAN SIGNAL AT 40" HEIGHT.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN
 FUNCTIONAL SUPERVISOR: SHAHRAM SHAHRIARI
 CALCULATED/DESIGNED BY: SHAHRAM SHAHRIARI
 CHECKED BY: VANESSA V. TRUONG
 REVISED BY: FRANCIS M. ALVIAR
 DATE REVISED: VANESSA V. TRUONG

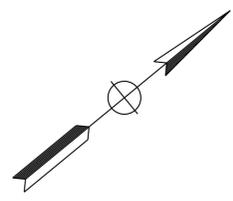
APPROVED FOR ELECTRICAL WORK ONLY

MODIFY SIGNAL
 SCALE: 1" = 20'

E-25

LAST REVISION DATE PLOTTED => 16-APR-2013
 12-03-12 TIME PLOTTED => 11:45

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	309	368
			01-16-13	REGISTERED ELECTRICAL ENGINEER DATE	
			4-8-13	PLANS APPROVAL DATE	
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.					



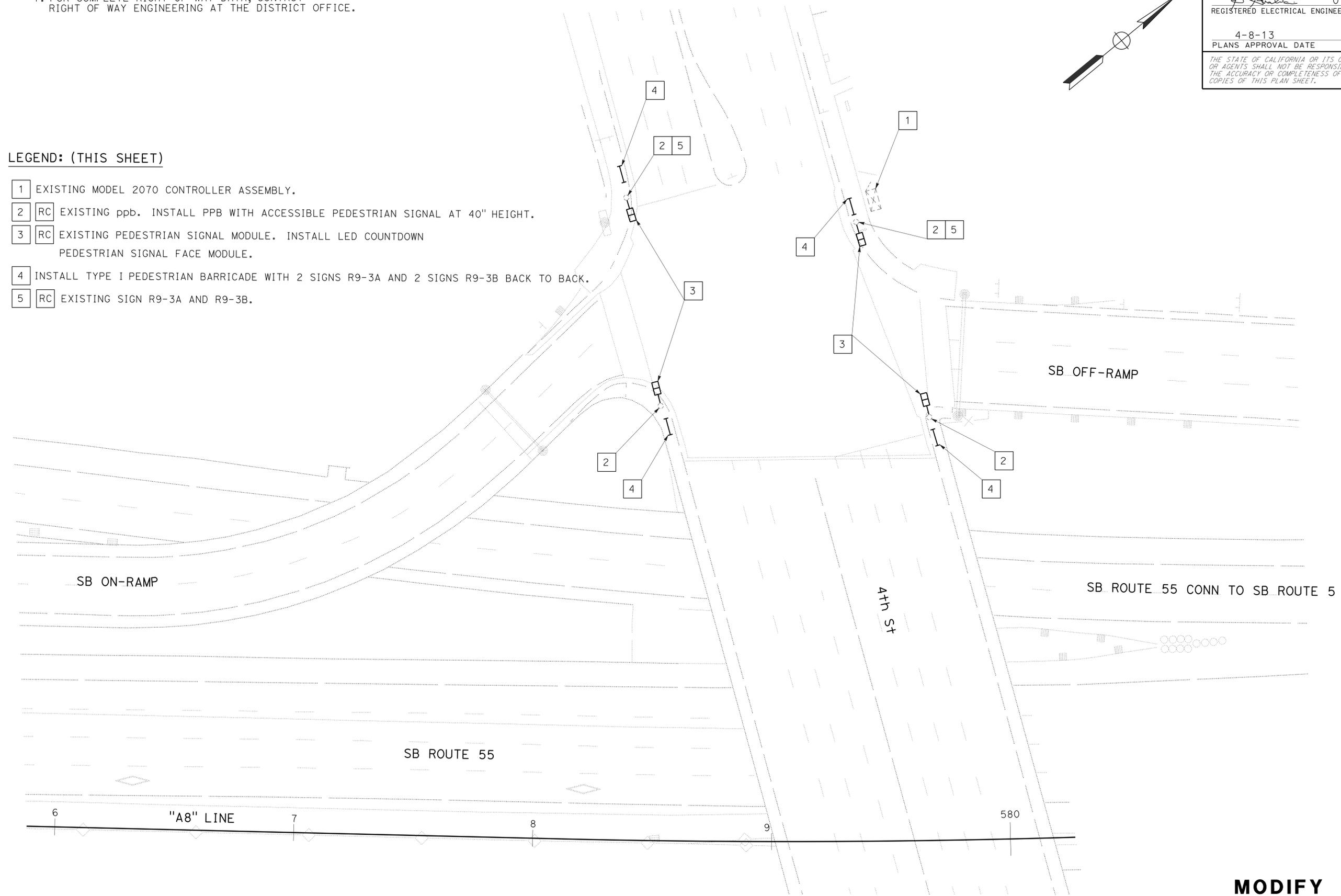
NOTES: (THIS SHEET)

1. FOR COMPLETE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

LEGEND: (THIS SHEET)

- 1 EXISTING MODEL 2070 CONTROLLER ASSEMBLY.
- 2 RC EXISTING ppb. INSTALL PPB WITH ACCESSIBLE PEDESTRIAN SIGNAL AT 40" HEIGHT.
- 3 RC EXISTING PEDESTRIAN SIGNAL MODULE. INSTALL LED COUNTDOWN PEDESTRIAN SIGNAL FACE MODULE.
- 4 INSTALL TYPE I PEDESTRIAN BARRICADE WITH 2 SIGNS R9-3A AND 2 SIGNS R9-3B BACK TO BACK.
- 5 RC EXISTING SIGN R9-3A AND R9-3B.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN
 FUNCTIONAL SUPERVISOR: SHAHRAM SHAHRJARI
 CALCULATED/DESIGNED BY: CHECKED BY:
 FRANCIS M. ALVIAR VANESSA V. TRUONG
 REVISED BY: DATE REVISED:



MODIFY SIGNAL
SCALE: 1" = 20'

APPROVED FOR ELECTRICAL WORK ONLY

E-26

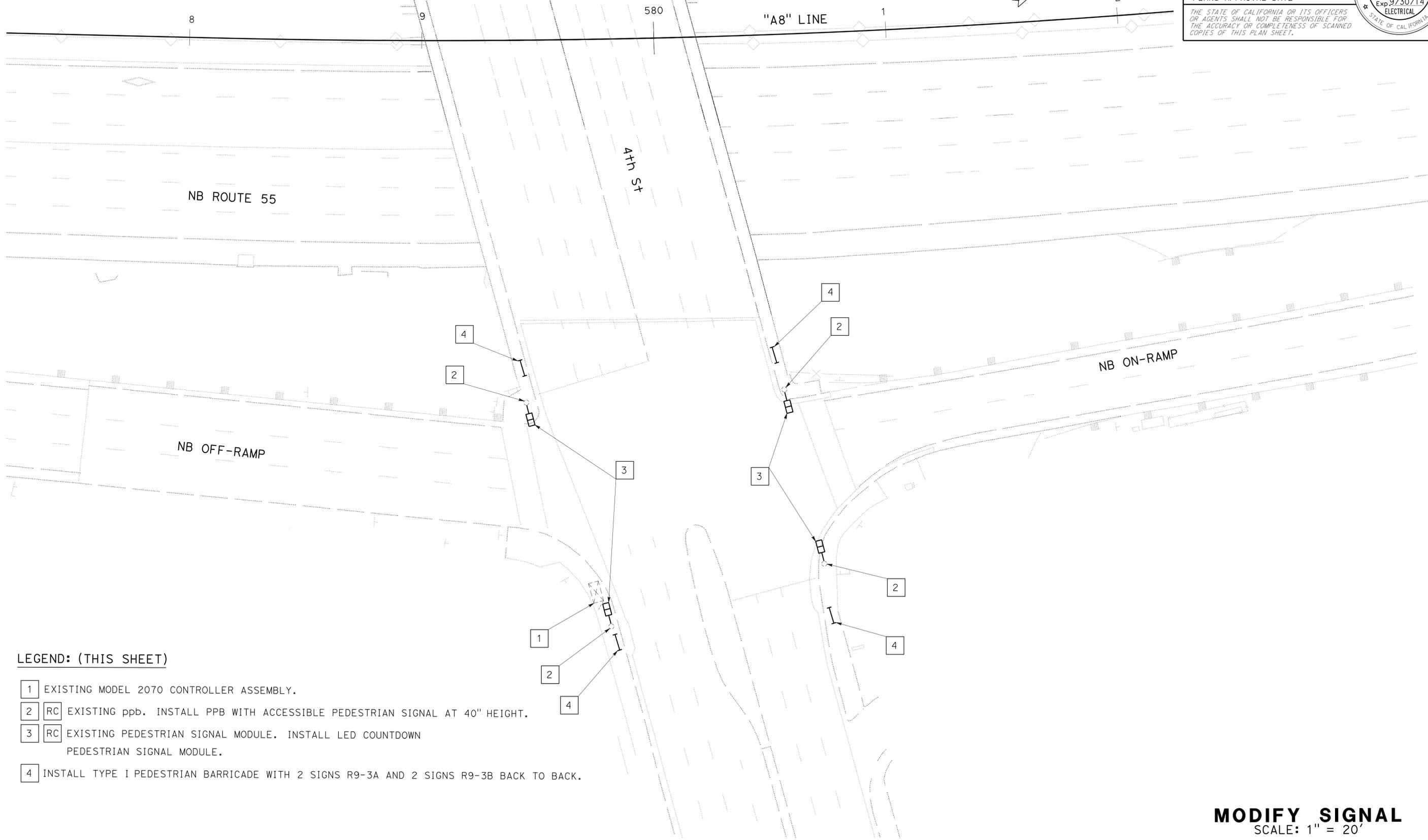
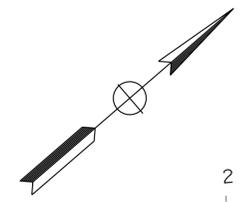
LAST REVISION: DATE PLOTTED => 16-APR-2013
 10-11-12 TIME PLOTTED => 11:45

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	310	368
REGISTERED ELECTRICAL ENGINEER		DATE			
S. Sha		01-16-13			
REGISTERED PROFESSIONAL ENGINEER		PLANS APPROVAL DATE			
SHAHRAM SHAHRIARI		4-8-13			
No. E13485		Exp. 9/30/14			
ELECTRICAL		STATE OF CALIFORNIA			

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTES: (THIS SHEET)

1. FOR COMPLETE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



LEGEND: (THIS SHEET)

- 1 EXISTING MODEL 2070 CONTROLLER ASSEMBLY.
- 2 RC EXISTING ppb. INSTALL PPB WITH ACCESSIBLE PEDESTRIAN SIGNAL AT 40" HEIGHT.
- 3 RC EXISTING PEDESTRIAN SIGNAL MODULE. INSTALL LED COUNTDOWN PEDESTRIAN SIGNAL MODULE.
- 4 INSTALL TYPE I PEDESTRIAN BARRICADE WITH 2 SIGNS R9-3A AND 2 SIGNS R9-3B BACK TO BACK.

MODIFY SIGNAL
SCALE: 1" = 20'

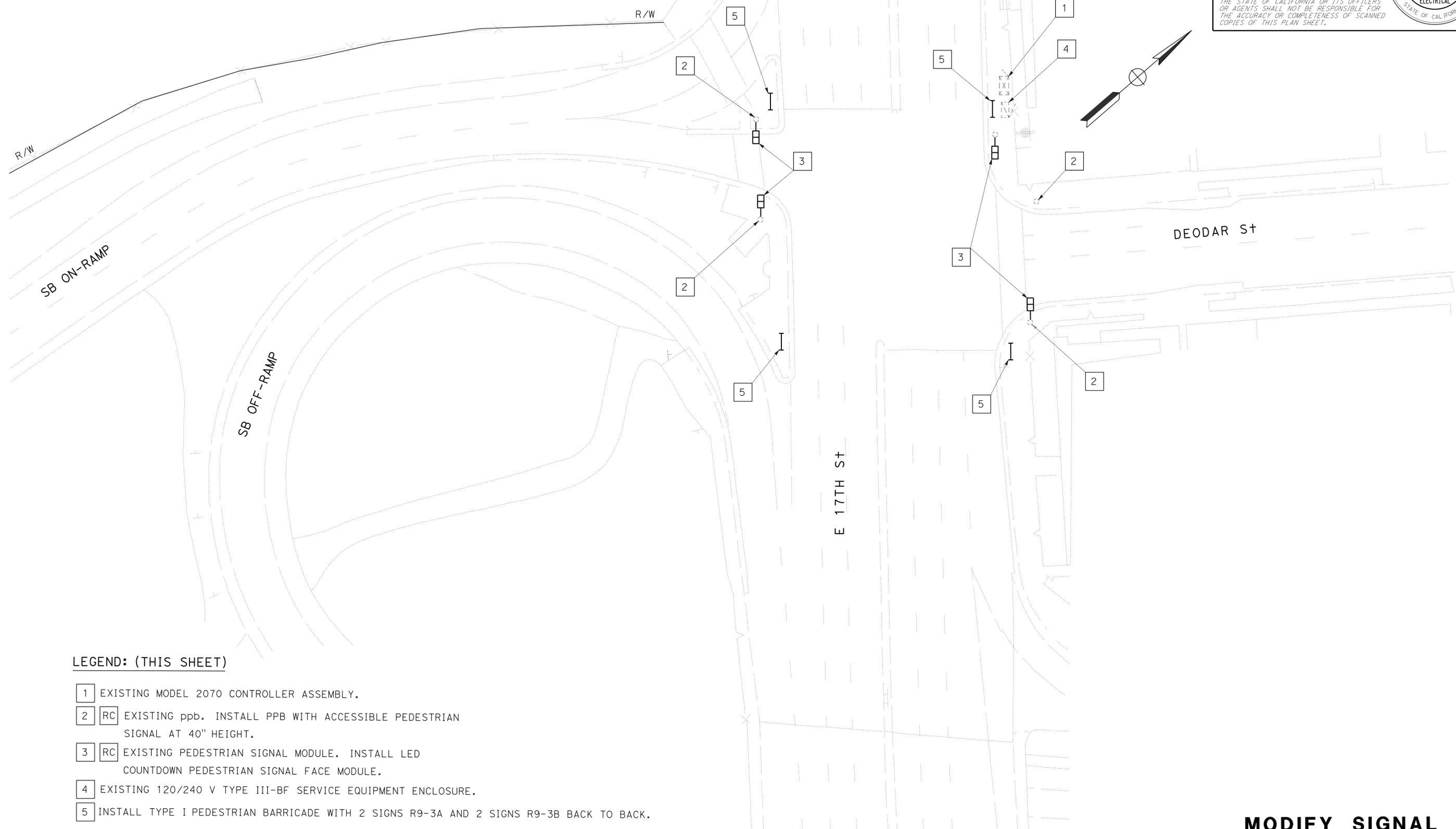
APPROVED FOR ELECTRICAL WORK ONLY

E-27

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN
FUNCTIONAL SUPERVISOR: SHAHRAM SHAHRIARI
CALCULATED/DESIGNED BY: CHECKED BY:
REVISED BY: FRANCIS M. ALVIAR VANESSA V. TRUONG
DATE: DATE REVISID

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	311	368
		01-16-13		REGISTERED ELECTRICAL ENGINEER DATE	
		4-8-13		PLANS APPROVAL DATE	
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

NOTES: (THIS SHEET)
 1. FOR COMPLETE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



LEGEND: (THIS SHEET)

- 1 EXISTING MODEL 2070 CONTROLLER ASSEMBLY.
- 2 RC EXISTING ppb. INSTALL PPB WITH ACCESSIBLE PEDESTRIAN SIGNAL AT 40" HEIGHT.
- 3 RC EXISTING PEDESTRIAN SIGNAL MODULE. INSTALL LED COUNTDOWN PEDESTRIAN SIGNAL FACE MODULE.
- 4 EXISTING 120/240 V TYPE III-BF SERVICE EQUIPMENT ENCLOSURE.
- 5 INSTALL TYPE I PEDESTRIAN BARRICADE WITH 2 SIGNS R9-3A AND 2 SIGNS R9-3B BACK TO BACK.

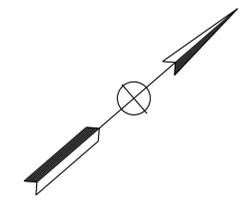
MODIFY SIGNAL
 SCALE: 1" = 20'

APPROVED FOR ELECTRICAL WORK ONLY

E-28

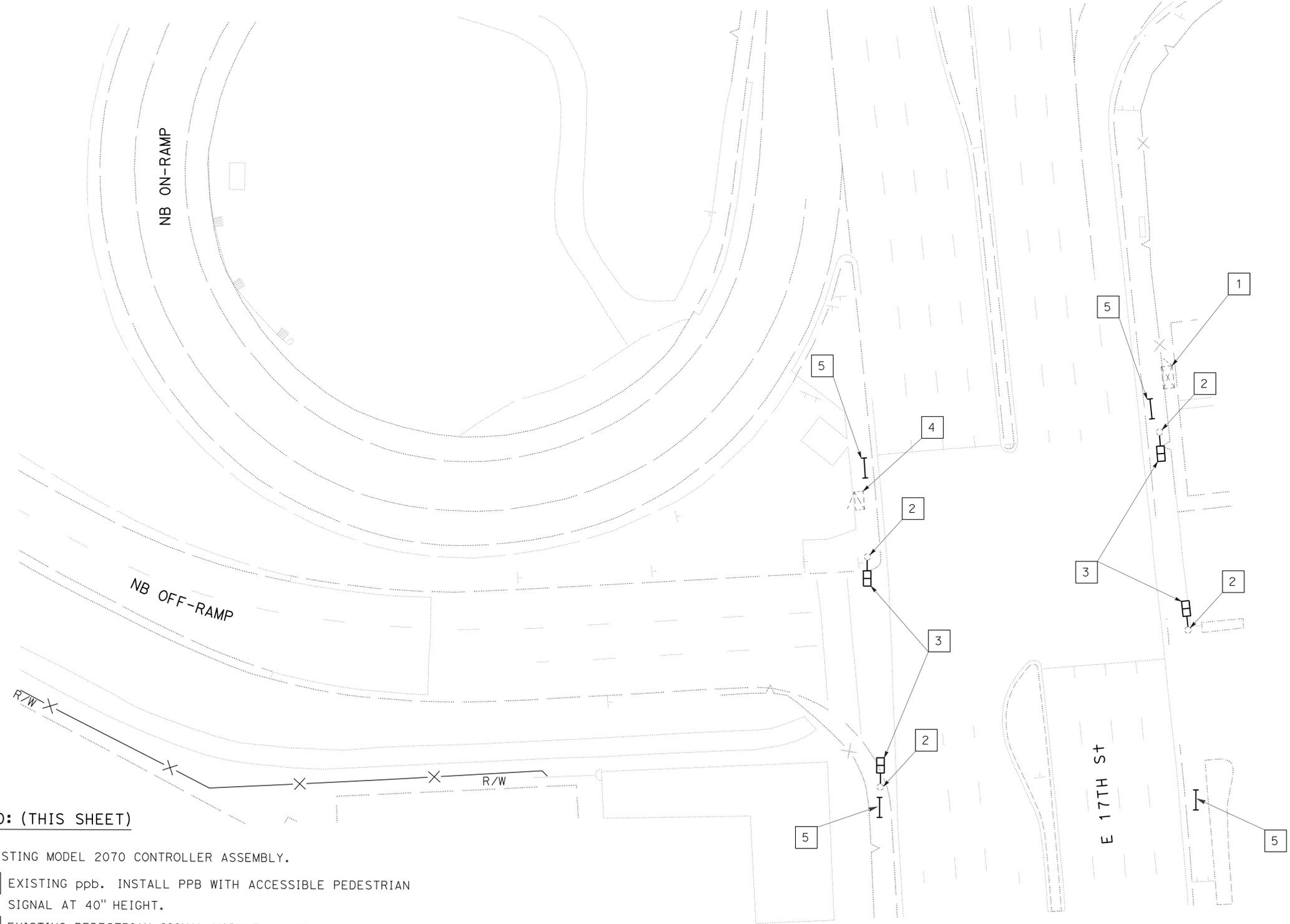
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN
 FUNCTIONAL SUPERVISOR: SHAHRAM SHAHRIARI
 CALCULATED/DESIGNED BY: CHECKED BY:
 FRANCIS M. ALVIAR VANESSA V. TRUONG
 REVISED BY: DATE REVISED:

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	312	368
			01-16-13	REGISTERED ELECTRICAL ENGINEER DATE	
			4-8-13	PLANS APPROVAL DATE	
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					



NOTES: (THIS SHEET)

1. FOR COMPLETE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



LEGEND: (THIS SHEET)

- 1 EXISTING MODEL 2070 CONTROLLER ASSEMBLY.
- 2 RC EXISTING ppb. INSTALL PPB WITH ACCESSIBLE PEDESTRIAN SIGNAL AT 40" HEIGHT.
- 3 RC EXISTING PEDESTRIAN SIGNAL MODULE. INSTALL LED COUNTDOWN PEDESTRIAN SIGNAL FACE MODULE.
- 4 EXISTING 120/240 V TYPE III-BF SERVICE EQUIPMENT ENCLOSURE.
- 5 INSTALL TYPE I PEDESTRIAN BARRICADE WITH 2 SIGNS R9-3A AND 2 SIGNS R9-3B BACK TO BACK.

MODIFY SIGNAL
SCALE: 1" = 20'

APPROVED FOR ELECTRICAL WORK ONLY

E - 29

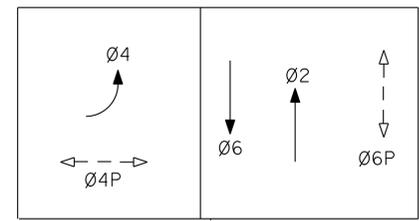
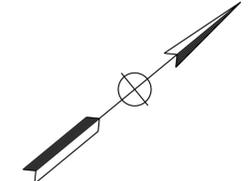
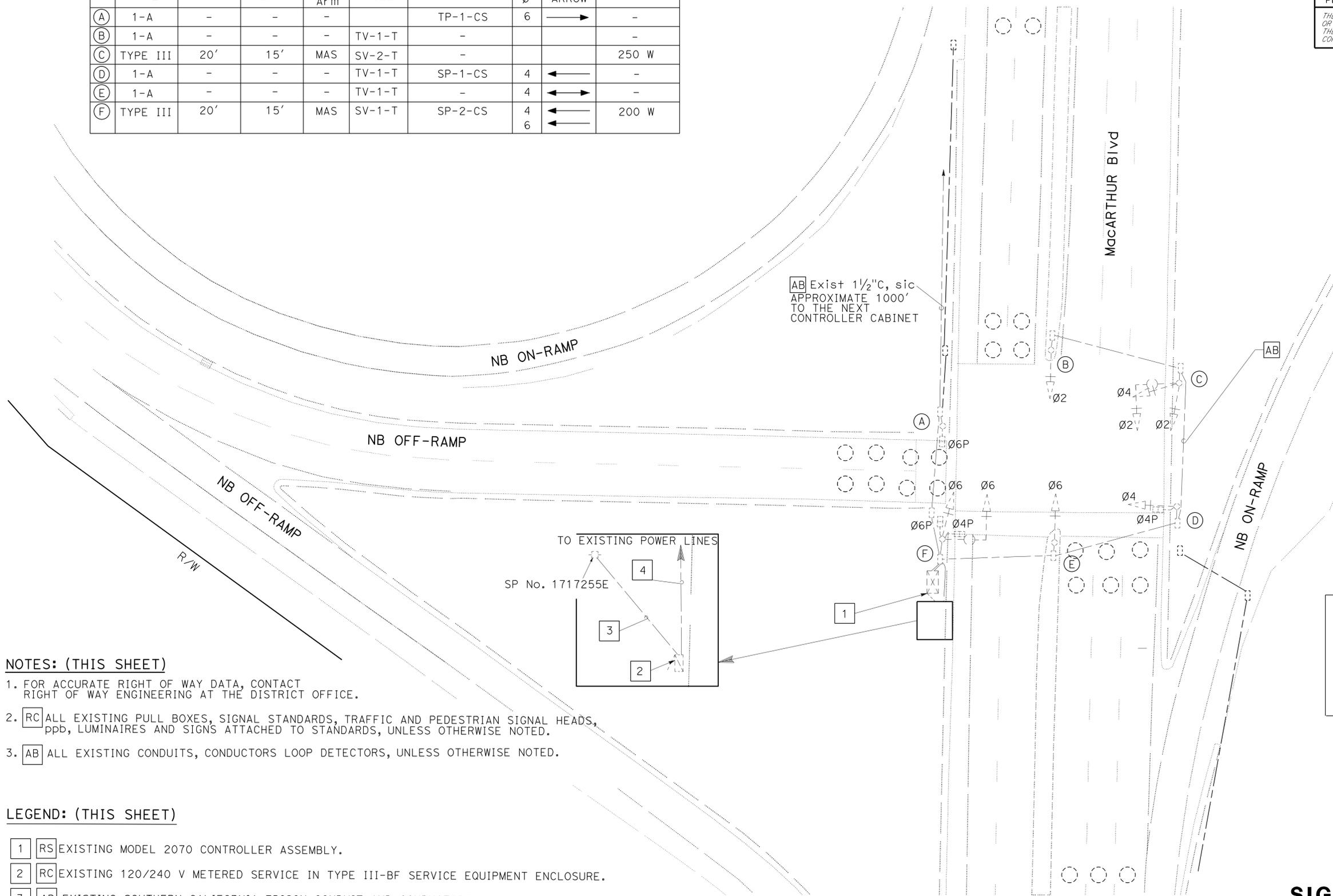
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISOR	DATE
Caltrans ELECTRICAL DESIGN	SHAHRAM SHAHRJARI	CHECKED BY	FRANCIS M. ALVIAR	
			VANESSA V. TRUONG	

EXISTING POLE AND EQUIPMENT SCHEDULE

X	STANDARD			VEH SIG MTG		PED SIGNAL MTG	PPB		HPS LUMINAIRE
	TYPE	SMA	LMA	Mast Arm	POLE		Ø	ARROW	
(A)	1-A	-	-	-		TP-1-CS	6	→	-
(B)	1-A	-	-	-	TV-1-T	-			-
(C)	TYPE III	20'	15'	MAS	SV-2-T	-			250 W
(D)	1-A	-	-	-	TV-1-T	SP-1-CS	4	←	-
(E)	1-A	-	-	-	TV-1-T	-	4	↔	-
(F)	TYPE III	20'	15'	MAS	SV-1-T	SP-2-CS	4	←	200 W
							6	←	

ABBREVIATION:

CS: CLAM SHELL



PHASE DIAGRAM

NOTES: (THIS SHEET)

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- RC** ALL EXISTING PULL BOXES, SIGNAL STANDARDS, TRAFFIC AND PEDESTRIAN SIGNAL HEADS, ppb, LUMINAIRES AND SIGNS ATTACHED TO STANDARDS, UNLESS OTHERWISE NOTED.
- AB** ALL EXISTING CONDUITS, CONDUCTORS LOOP DETECTORS, UNLESS OTHERWISE NOTED.

LEGEND: (THIS SHEET)

- RS** EXISTING MODEL 2070 CONTROLLER ASSEMBLY.
- RC** EXISTING 120/240 V METERED SERVICE IN TYPE III-BF SERVICE EQUIPMENT ENCLOSURE.
- AB** EXISTING SOUTHERN CALIFORNIA EDISON CONDUIT AND CONDUCTORS.
- Exist 1 1/2" C, 10#6 (4-RAMPS, FLASHER), 2#10 (CCTV), 2#8 (SIGNAL), 2#8 (LIGHTING).
RC 2#8 (SIGNAL), 2#8 (LIGHTING).

REMOVE

APPROVED FOR ELECTRICAL WORK ONLY

SIGNAL AND LIGHTING

SCALE: 1" = 20'

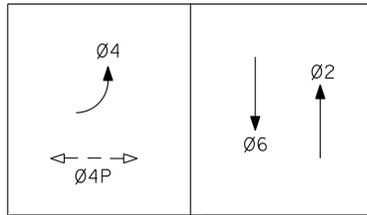
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
ELECTRICAL DESIGN
FUNCTIONAL SUPERVISOR: SHAHRAM SHAHRIARI
REVISOR: VANESSA V. TRUONG, JOANNE VO
CALCULATED/DESIGNED BY: CHECKED BY:

NOTE: (THIS SHEET)

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- PROVIDE A MINIMUM CLEARANCE OF 36", FROM FACE OF CURB TO FACE OF FIXED OBJECT, INSIDE CURB RETURNS AND NEAR DRIVEWAYS, A MINIMUM CLEARANCE OF 18" ELSEWHERE.
- MAINTAIN A MINIMUM CLEARANCE OF 48" FOR WALKWAY.
- DETAILS OF BBS FOUNDATION ARE IN SHEET E-32.
- INSTALL FRONT LOOPS ONE FOOT BEFORE LIMIT LINE.

CONDUIT AND CONDUCTOR SCHEDULE

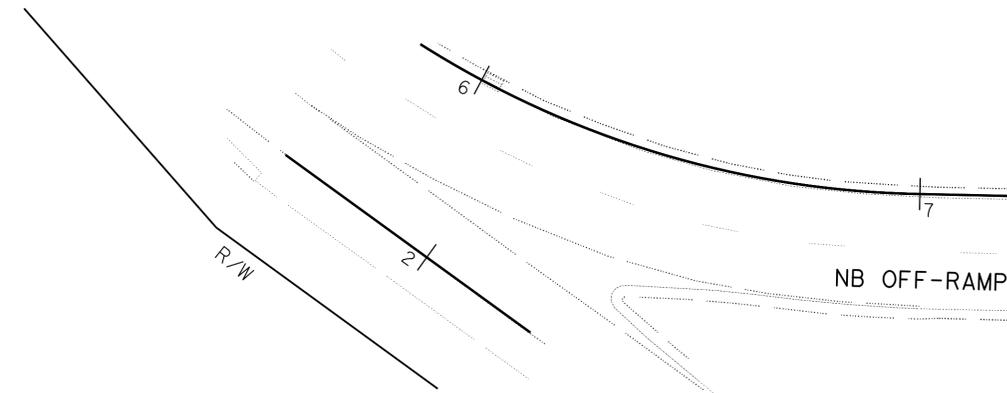
AWG OR CABLE	CONDUCTOR RUN	1	2	3	4	5	6	7
12 PAIRS #19 SIC							1	
12CSC	VEHICLE SIGNAL	1	1	3	1	6	6	
3CSC	PPB			1		2	2	
#8	STREET LIGHTING	2	2	2	2	2		
#10	IISNS			2		2		
DLC	Ø2 DETECTOR			6		6	6	
	Ø4 DETECTOR				4	4	4	
	Ø6 DETECTOR	4			4	4	4	2
#6	SERVICE					2		
CONDUIT SIZE		2"	2"	3½"	2½"	4"	2-3"	2"



PHASE DIAGRAM

ABBREVIATIONS:

APS: ACCESSIBLE PEDESTRIAN SIGNALS
 SCE: SOUTHERN CALIFORNIA EDISON

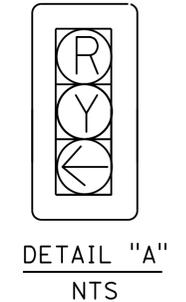
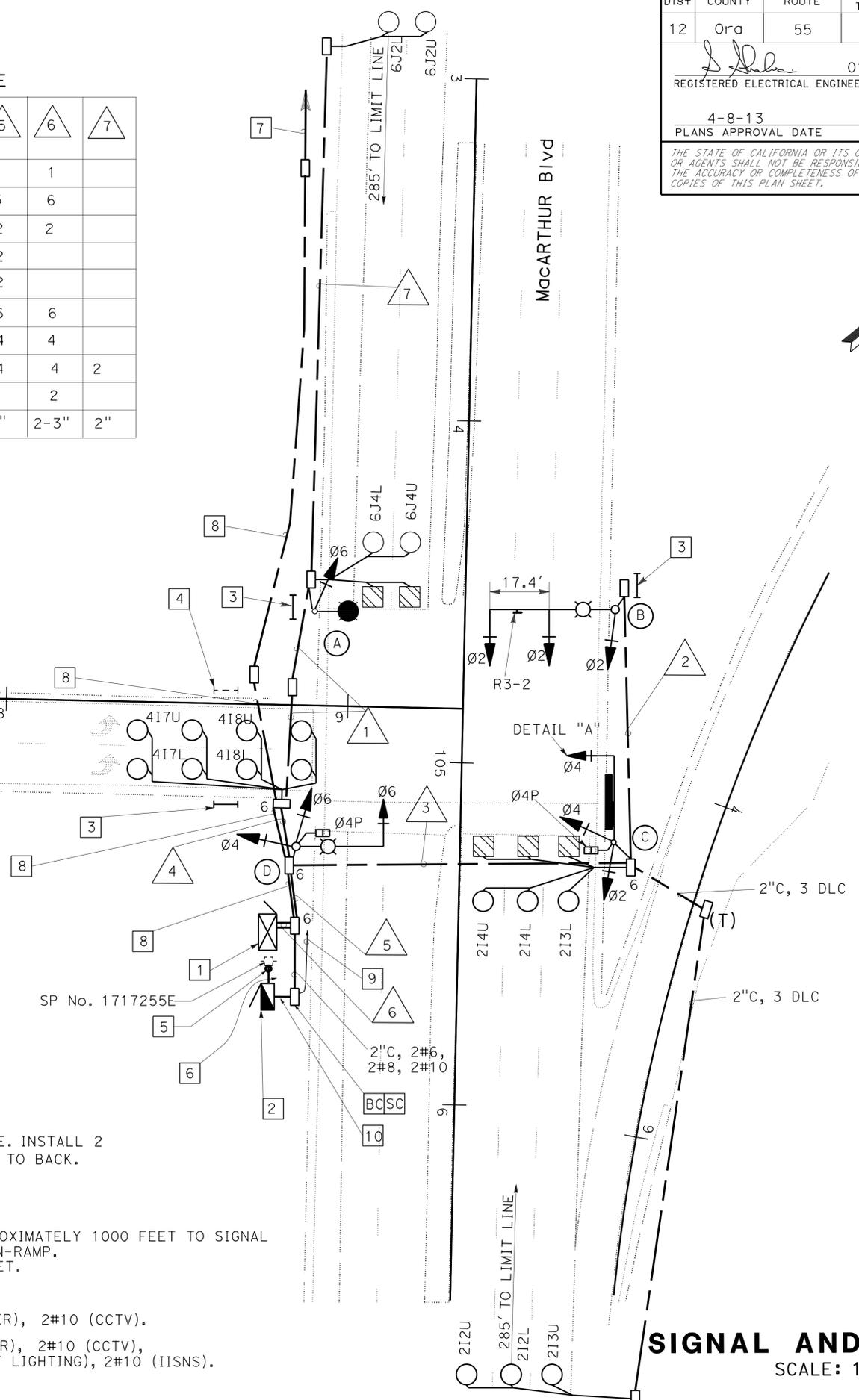


POLE AND EQUIPMENT SCHEDULE

X	TYPE	STANDARD		VEH SIG MTG		LED COUNT DOWN PED SIGNAL MTG	APS PPB		LED LUMINAIRE	IISNS
		SMA	LMA	Mast Arm	POLE		Ø	ARROW		
A	21TS	-	15'		SV-1-T	-			ROADWAY 2	
B	24-4-100	35'	12'	2-MAS	SV-1-T				ROADWAY 1	-
C	23-3-100	25'		MAS	SV-2-TA	SP-1-T	Ø4	→		MacARTHUR Blvd
D	19A-3-100	25'	15'	MAS	SV-2-TA	SP-1-T	Ø4	←	ROADWAY 2	-

LEGEND: (THIS SHEET)

- INSTALL DEPARTMENT-FURNISHED MODEL 2070L CONTROLLER ASSEMBLY AND BATTERY BACK-UP SYSTEM.
- INSTALL 120/240 V TYPE III-CR DUAL-METERED SERVICE EQUIPMENT ENCLOSURE, WITH TYPE V PEC:
 METER #1
 100 A, 240 V, 2P, CB (MAIN)
 40 A, 120 V, 1P, CB (SIGNAL)
 30 A, 120 V, 1P, CB (LIGHTING)
 15 A, 120 V, 1P, CB (IISNS)
 15 A, 120 V, 1P, CB (PEC)
 METER #2
 100 A, 240 V, 2P, CB (MAIN)
 30 A, 120 V, 1P, CB (RAMP 1)
 30 A, 120 V, 1P, CB (RAMP 2)
 30 A, 120 V, 1P, CB (RAMP 3)
 30 A, 120 V, 1P, CB (RAMP 4)
 20 A, 120 V, 1P, CB (CCTV)
 30 A, 120 V, 1P, CB (FLASHING BEACON)
- INSTALL TYPE I PEDESTRIAN BARRICADE WITH 2 SIGNS R9-3 AND 2 SIGNS R49 BACK TO BACK.
- EXISTING TYPE I PEDESTRIAN BARRICADE. INSTALL 2 SIGNS R9-3A AND 2 SIGNS R9-3B BACK TO BACK.
- INSTALL TYPE H RISER.
- INSTALL 3"C, MT, CONDUCTORS BY SCE.
- INSTALL 1½"C, 12 PAIRS #19 SIC APPROXIMATELY 1000 FEET TO SIGNAL CONTROLLER CABINET AT SOUTHBOUND ON-RAMP. INSTALL PULL BOXES (4) EVERY 200 FEET.
- INSTALL 1½"C, 12 PAIRS #19 SIC.
- EXISTING 1½"C, 10#6 (4-RAMPs, FLASHER), 2#10 (CCTV).
- INSTALL 2-3"C, 10#6 (4-RAMPs, FLASHER), 2#10 (CCTV), 2#6 (SIGNAL CONTROLLER), 2#8 (STREET LIGHTING), 2#10 (IISNS).



SIGNAL AND LIGHTING
 SCALE: 1" = 20'

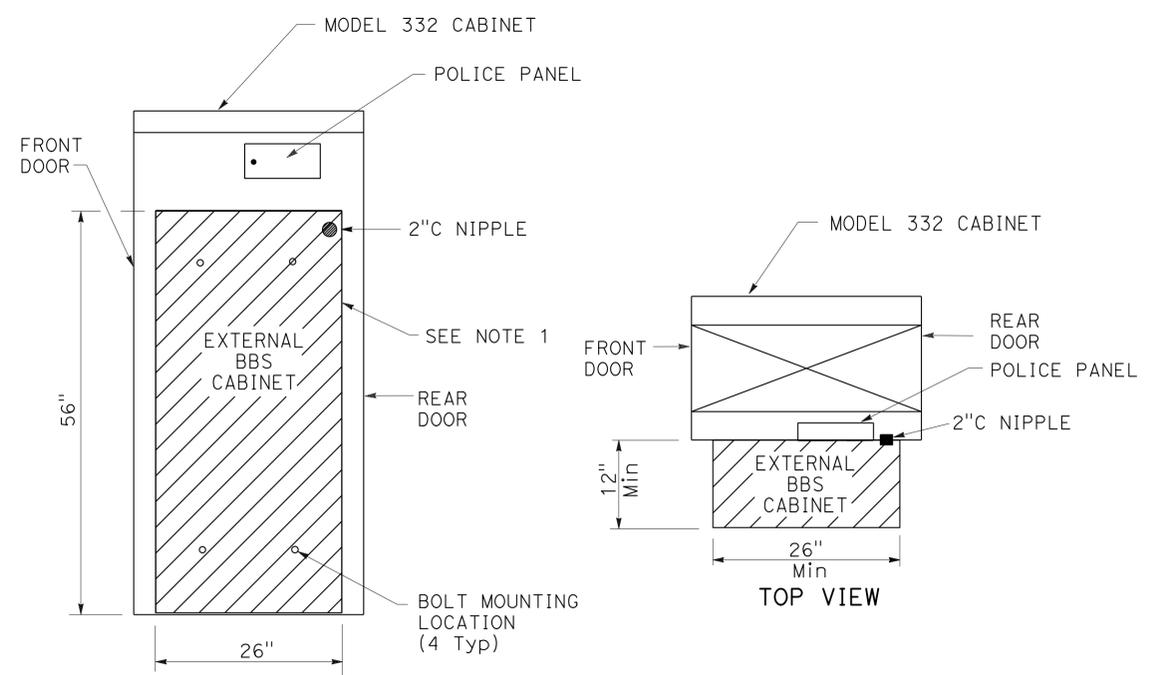
E-31

APPROVED FOR ELECTRICAL WORK ONLY

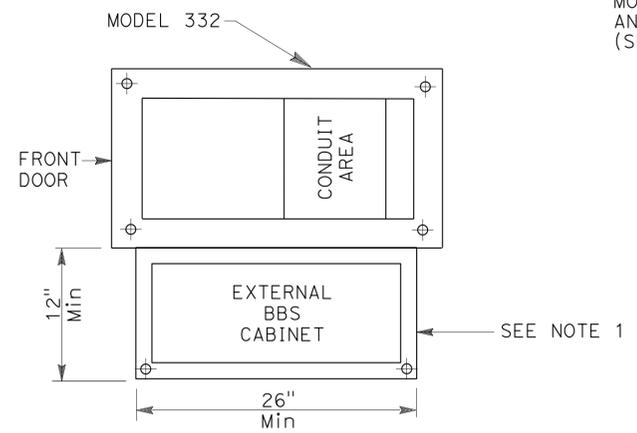
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	315	368

REGISTERED ELECTRICAL ENGINEER	DATE
JOANNE VO	01-16-13
No. E 16748	
PLANS APPROVAL DATE	
	4-8-13

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



EXTERNAL BBS CABINET MOUNTED TO THE MODEL 332 CABINET

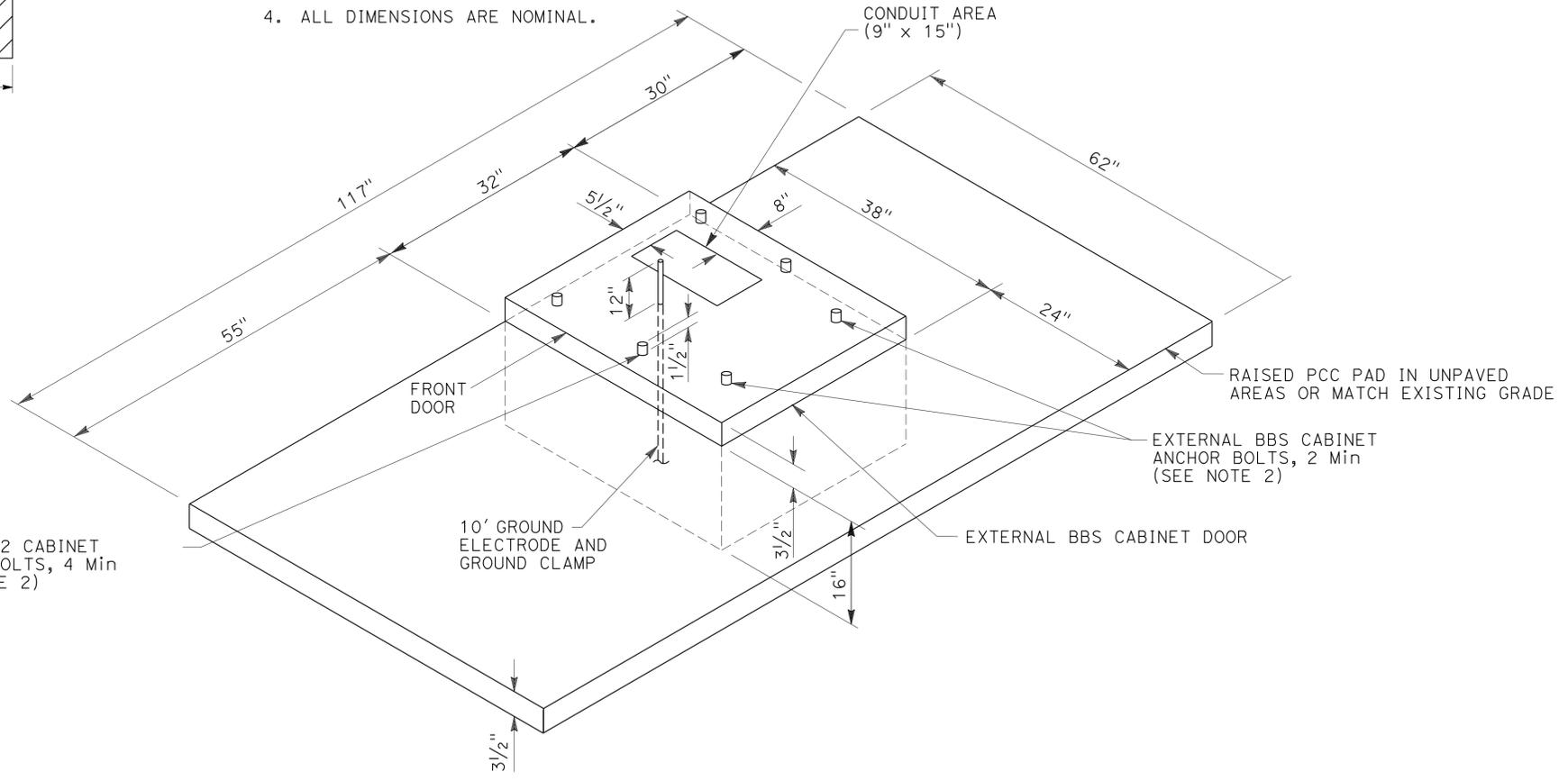


BASE PLAN FOR BBS MOUNTED TO THE MODEL 332 CABINET

(FOR DIMENSIONS AND DETAILS NOT SHOWN, SEE SHEET A6-1 TO A6-4, CABINET HOUSING DETAILS OF THE TRANSPORTATION ELECTRICAL EQUIPMENT SPECIFICATION (TEES))

NOTE: (THIS SHEET ONLY)

1. THE EXTERNAL BBS CABINET SHALL BE MOUNTED TO THE MODEL 332 CABINET WITH FOUR 18-8 STAINLESS STEEL Hex HEAD, FULLY-THREADED, 3/8"-16 X 1" BOLTS; TWO WASHERS PER BOLT, DESIGNED FOR 3/8" BOLTS AND ARE 18-8 STAINLESS STEEL, 1" OUTSIDE DIAMETER, ROUND, AND FLAT; AND ONE K-LOCK NUT PER BOLT THAT IS 18-8 STAINLESS STEEL AND A HEX-NUT. THE ENGINEER WILL HAVE TO APPROVE THE BOLT MOUNTING LOCATION PRIOR TO INSTALLATION.
2. THE ANCHOR BOLTS SHALL BE 3/4" Dia X 15" WITH A 2"-90° BEND. THE CABINET MANUFACTURER'S SPECIFICATION SHALL DETERMINE THE LOCATION OF THE ANCHOR BOLTS IN THE FOUNDATION. THE ENGINEER WILL HAVE TO APPROVE THE ANCHOR BOLTS AND ITS LOCATION IN THE FOUNDATION PRIOR TO CONSTRUCTION.
3. THE CONTRACTOR SHALL VERIFY THE DIMENSIONS OF THE BBS CABINET PRIOR TO CONSTRUCTING THE FOUNDATION OF THE MODIFIED PORTION OF THE Std MODEL 332 CABINET FOUNDATION. THE ENGINEER WILL HAVE TO APPROVE ANY NECESSARY DEVIATIONS PRIOR TO CONSTRUCTION.
4. ALL DIMENSIONS ARE NOMINAL.



MODIFIED MODEL 332 CABINET FOUNDATION DETAIL FOR BATTERY BACKUP SYSTEM (BBS)

(FOR DIMENSIONS AND DETAILS NOT SHOWN AND ADDITIONAL NOTES, SEE SHEET ES-3C OF THE STANDARD PLANS FOR MODEL 332 CABINET)

BBS FOUNDATION DETAILS

ELECTRICAL DETAILS
NO SCALE

APPROVED FOR ELECTRICAL WORK ONLY



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN
 FUNCTIONAL SUPERVISOR: SHAHRAM SHAHRIARI
 CHECKED BY: JOANNE VO, VANESSA TRUONG
 REVISIONS: (None shown)

USERNAME => s121614
 DGN FILE => 1213000066u032.dgn

RELATIVE BORDER SCALE IS IN INCHES

UNIT 3024

PROJECT NUMBER & PHASE

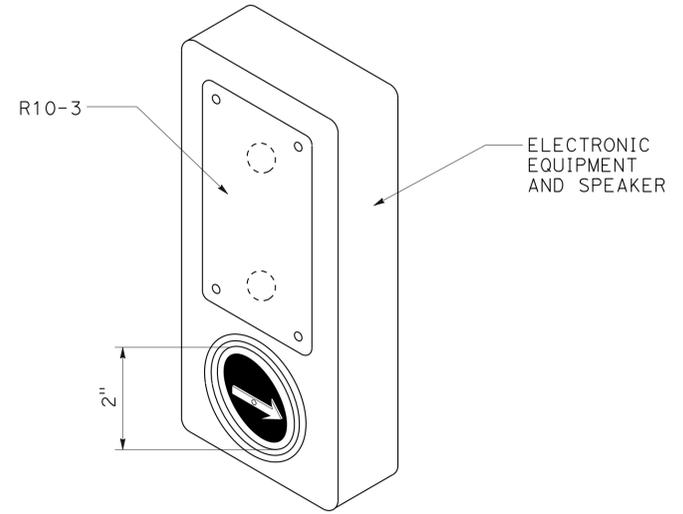
12130000661

DATE PLOTTED => 26-APR-2013
 TIME PLOTTED => 08:17

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	316	368
			01-16-13	REGISTERED ELECTRICAL ENGINEER DATE	
			4-8-13	PLANS APPROVAL DATE	
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.					



PEDESTRIAN PUSH BUTTON SIGNS (R10-3)
DETAIL A



ACCESSIBLE PEDESTRIAN SIGNAL
DETAIL B



PERSON WALKING INTERVAL



FLASHING UPRAISED HAND INTERVAL



STEADY UPRAISED HAND INTERVAL

PEDESTRIAN SIGNAL FACE
DETAIL C

ELECTRICAL DETAILS

NO SCALE

E-33

APPROVED FOR ELECTRICAL WORK ONLY

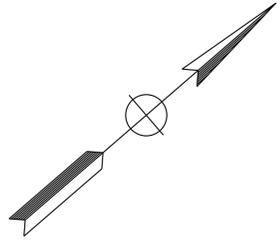
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN
FUNCTIONAL SUPERVISOR: SHAHRAM SHAHRIARI
DESIGNED BY: VANESSA V. TRUONG
CHECKED BY: JOANNE VO
REVISOR: VANESSA V. TRUONG
DATE: 7/2/2010

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	317	368

01-16-13
 REGISTERED ELECTRICAL ENGINEER DATE
 4-8-13
 PLANS APPROVAL DATE

JOANNE VO
 No. E 16748
 Exp. 9/30/14
 ELECTRICAL

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



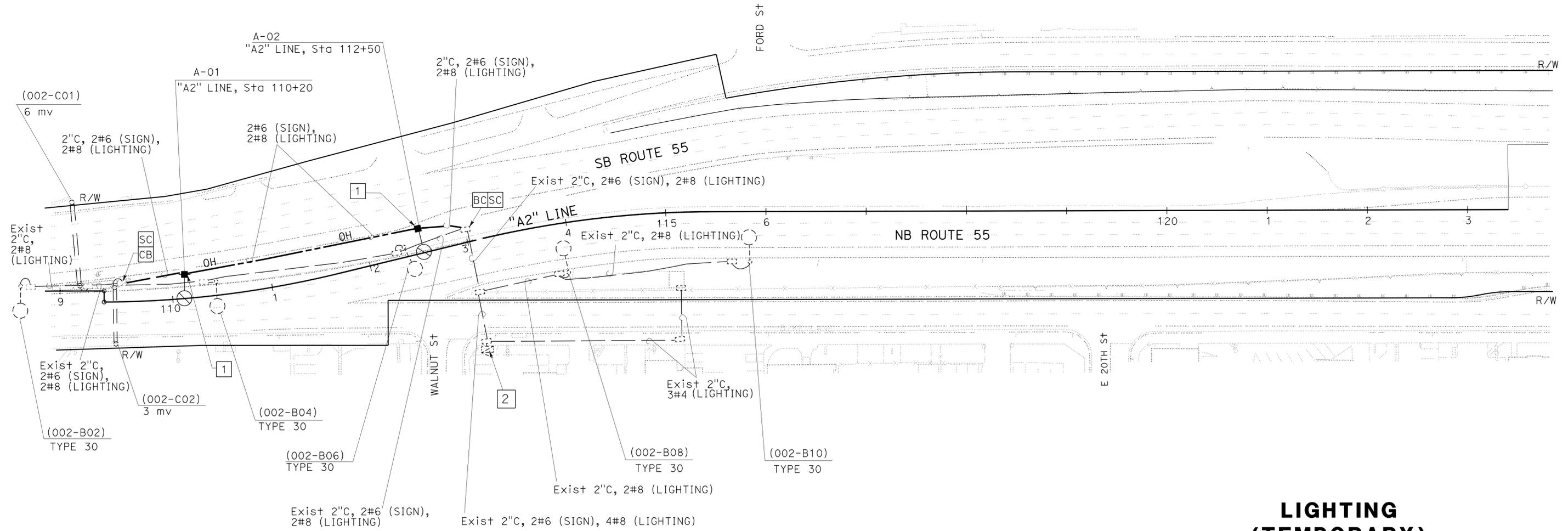
NOTE:

FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

LEGEND: (THIS SHEET ONLY)

- 1 INSTALL TYPE H RISER.
 - 2 EXISTING 120/240 V TYPE III-CF METERED SERVICE EQUIPMENT ENCLOSURE. ID No. 07-55-055-0-002-142
METER No. 1:
40 A, 240 V, 2P, CB (002B LIGHTING)
40 A, 240 V, 2P, CB (002C SIGN LIGHTING)
15 A, 120 V, 1P, CB (PEC)
- WOOD POLE WITH 15' LUMINAIRE MAST ARM AND LED LUMINAIRE ROADWAY 2. SEE SES SHEETS FOR DETAILS.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Electrans
 ELECTRICAL DESIGN
 FUNCTIONAL SUPERVISOR: SHAHRAM SHAHRIARI
 REVISIONS: VANESSA V. TRUONG, JOANNE VO



LIGHTING (TEMPORARY)
 SCALE: 1" = 50'

APPROVED FOR ELECTRICAL WORK ONLY

E-34

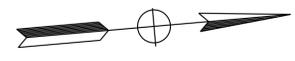
LAST REVISION: DATE PLOTTED => 16-APR-2013 TIME PLOTTED => 11:45

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	319	368

REGISTERED ELECTRICAL ENGINEER	DATE
JOANNE VO	01-16-13
PLANS APPROVAL DATE	4-8-13

REGISTERED PROFESSIONAL ENGINEER	No. E. 16748	Exp. 9/30/14
ELECTRICAL		

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



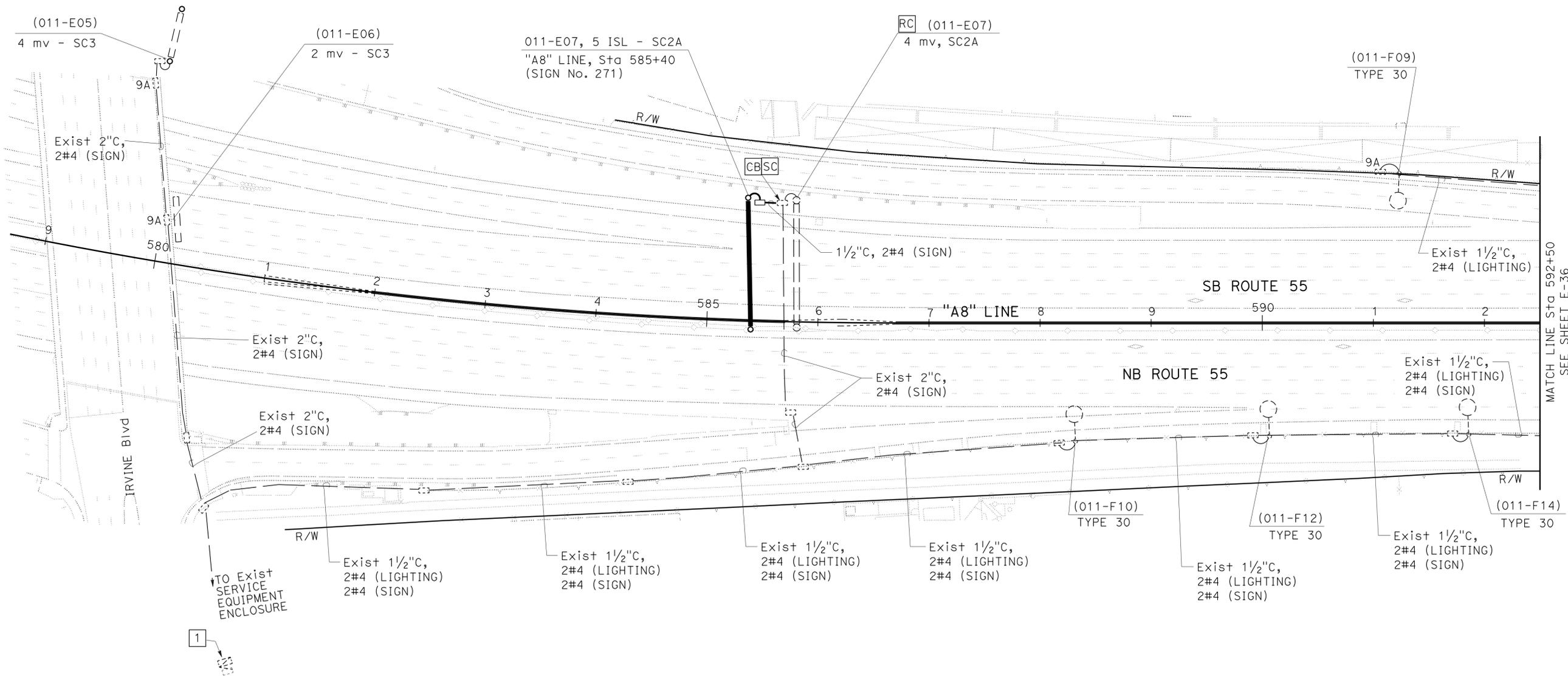
NOTES: (THIS SHEET ONLY)

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

LEGEND: (THIS SHEET ONLY)

- EXISTING 120/240 V TYPE III-BF METERED SERVICE EQUIPMENT ENCLOSURE.
ADDRESS: 17391 IRVINE ST (FOURTH ST).
40 A, 240 V, 2P, CB (CIRCUIT "5B1")
40 A, 240 V, 2P, CB (CIRCUIT "5B2")
40 A, 240 V, 2P, CB (CIRCUIT "5A")
15 A, 120 V, 1P, CB (PEC)

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN
 FUNCTIONAL SUPERVISOR: SHAHRAM SHAHRIARI
 CALCULATED/DESIGNED BY: VANESSA V. TRUONG
 CHECKED BY: JOANNE VO
 REVISED BY: VANESSA V. TRUONG
 DATE REVISED: JOANNE VO



**MODIFY LIGHTING
 AND SIGN ILLUMINATION**
 SCALE: 1" = 50'

APPROVED FOR ELECTRICAL WORK ONLY

E-36

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	320	368

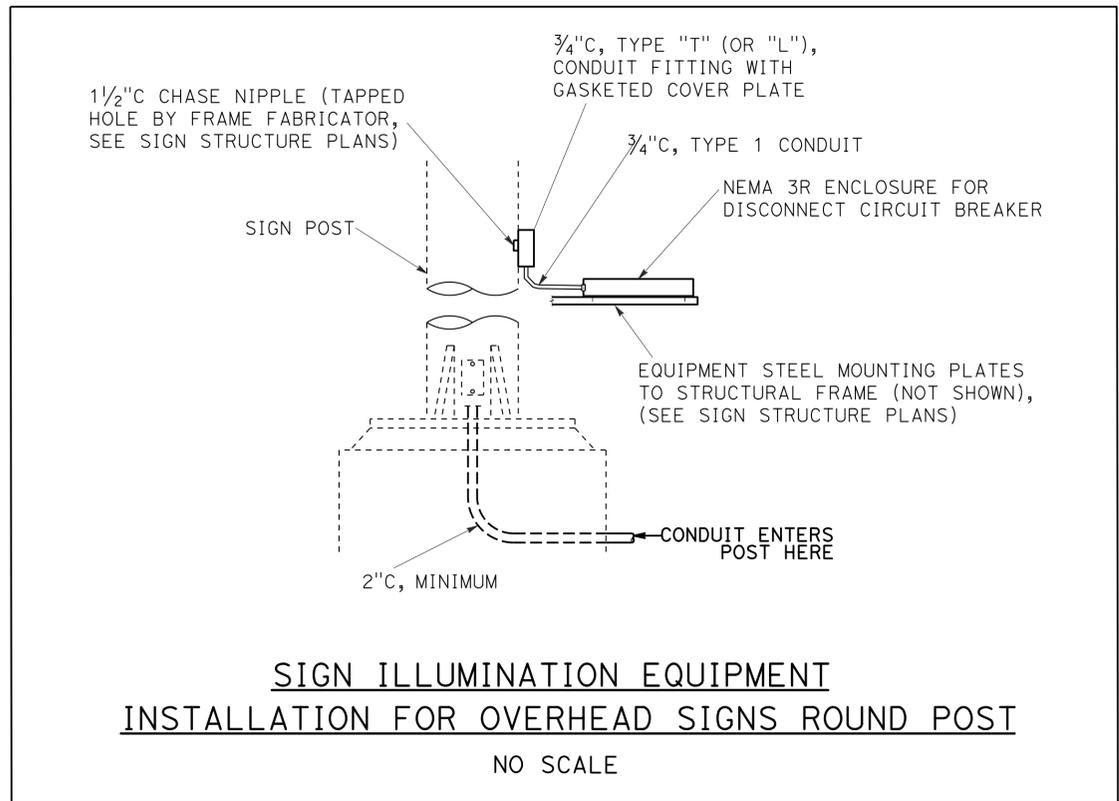
01-16-13
 REGISTERED ELECTRICAL ENGINEER DATE

4-8-13
 PLANS APPROVAL DATE

JOANNE VO
 No. E 16748
 Exp. 9/30/14
 ELECTRICAL

REGISTERED PROFESSIONAL ENGINEER
 STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



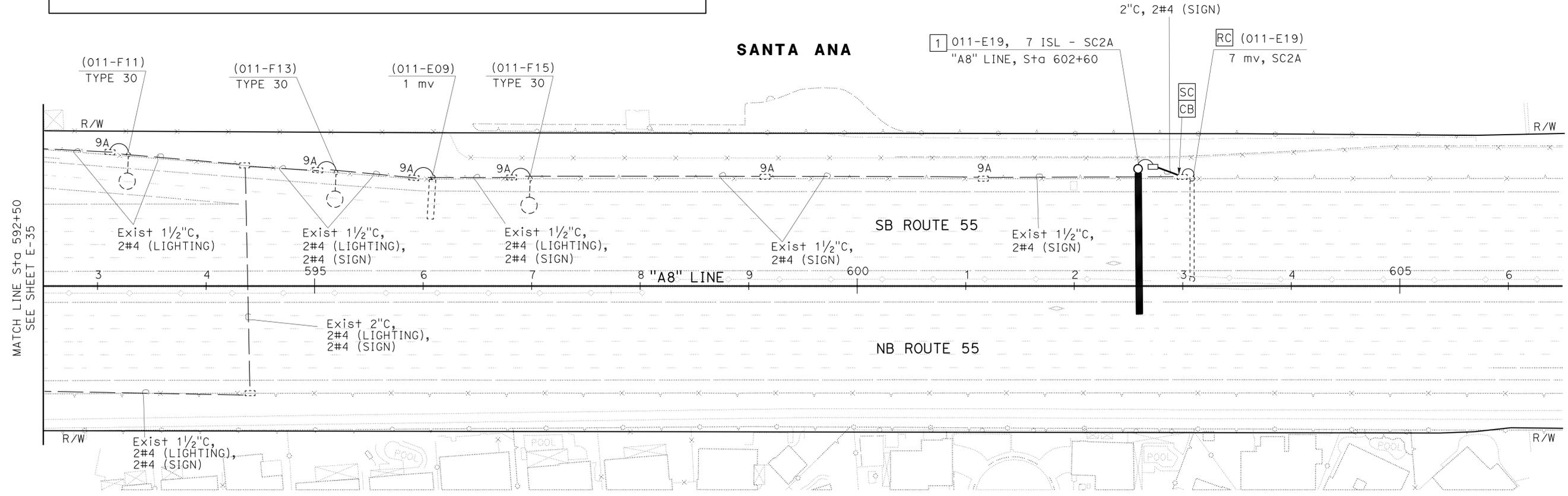
**SIGN ILLUMINATION EQUIPMENT
 INSTALLATION FOR OVERHEAD SIGNS ROUND POST**
 NO SCALE

NOTE: (THIS SHEET ONLY)

FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

LEGEND: (THIS SHEET ONLY)

- 1 SIGN ILLUMINATION EQUIPMENT MODIFIED, SEE DETAIL THIS SHEET AND SIGN STRUCTURE PLANS.



**MODIFY LIGHTING
 AND SIGN ILLUMINATION**

SCALE: 1" = 50'

E-37

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 ELECTRICAL DESIGN

FUNCTIONAL SUPERVISOR
 SHAHRAM SHAHRIARI

CALCULATED/DESIGNED BY
 CHECKED BY

VANESSA V. TRUONG
 JOANNE VO

REVISED BY
 DATE REVISED

APPROVED FOR ELECTRICAL WORK ONLY



LAST REVISION DATE PLOTTED => 16-APR-2013
 10-11-12 TIME PLOTTED => 11:45

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	322	368

03-20-13
 REGISTERED ELECTRICAL ENGINEER DATE
 4-8-13
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 SHAHRAM SHAHRIARI
 No. E13485
 Exp. 9/30/14
 ELECTRICAL
 STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTE: (THIS SHEET)

THE QUANTITIES ON THIS SHEET ARE NOT A SEPARATE PAY ITEM AND ARE FOR INFORMATION ONLY.

MODIFY SIGNAL

SHEET No.	ppb REMOVE	PPB WITH APS	PEDESTRIAN SIGNAL MODULE (REMOVE)	LED COUNTDOWN PEDESTRIAN SIGNAL MODULE	TYPE I PEDESTRIAN BARRICADE	SIGN R9-3A (REMOVE)	SIGN R9-3B (REMOVE)	SIGN R9-3A	SIGN R9-3B
	EA	EA	EA	EA	EA	EA	EA	EA	EA
E-22	6	6	6	6	1	1	1	4	4
E-23	6	6	6	6	1	1	1	4	4
E-24	6	6	6	6	-	1	1	4	4
E-25	6	6	6	6	-	1	1	4	4
E-26	6	6	6	6	-	4	-	4	4
E-27	4	4	4	4	4	2	2	8	8
E-28	4	4	4	4	4	-	-	8	8
E-29	4	4	4	4	4	-	-	8	8
E-30	4	4	4	4	4	-	-	8	8

INDUCTIVE LOOP DETECTOR (LS)

SHEET No.	INDUCTIVE LOOP DETECTOR	PULL BOX #5(T)	PULL BOX #5	PULL BOX #6	DETECTOR HANDHOLE	MODEL 334 CABINET (RELOCATE)	DLC	#14	#12	#10	#6	#4	3"C	2 1/2"C	2"C
	EA	EA	EA	EA	EA	EA	LF	LF	LF	LF	LF	LF	LF	LF	LF
E-1	25	-	3	-	2	-	3500	450	-	-	-	-	-	-	450
E-2	17	-	-	-	-	-	2675	600	-	-	-	-	-	-	-
E-3	27	-	2	-	2	-	5250	2800	-	-	-	-	-	-	450
E-4	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E-5	13	-	-	-	-	-	7800	-	-	-	-	-	-	-	-
E-6	13	-	1	-	-	1	10675	600	-	240	240	-	120	-	-
E-7	16	-	-	-	-	-	1600	1200	-	-	-	-	-	-	-
E-8	17	-	-	-	-	-	1975	-	-	-	-	-	-	-	-
E-9	10	-	-	-	-	-	3575	-	-	-	-	-	-	-	-
E-10	24	-	-	-	-	-	3675	500	-	-	-	-	-	-	-
E-11	24	-	1	-	-	1	7300	600	-	120	240	-	20	100	-
E-12	22	-	-	-	-	-	750	1800	-	-	-	-	-	-	-
E-13	10	-	-	-	-	-	-	600	-	-	-	-	-	-	-
E-14	37	-	-	-	-	-	4050	2400	-	-	-	-	-	-	450
E-15	20	1	1	-	-	-	2000	-	-	-	-	-	-	-	200
E-16	24	-	-	-	-	-	2800	400	-	-	-	-	-	-	-
E-17	26	-	1	-	-	-	3250	900	-	-	-	-	-	-	250
E-18	28	-	2	-	2	-	5350	2000	-	-	-	-	-	-	150
E-19	16	-	-	-	-	-	1000	220	-	-	-	-	-	-	75
E-20	36	-	-	1	-	1	10500	3490	-	350	-	2700	25	-	75
E-21	30	-	1	-	-	1	10665	1505	-	235	-	470	235	-	100

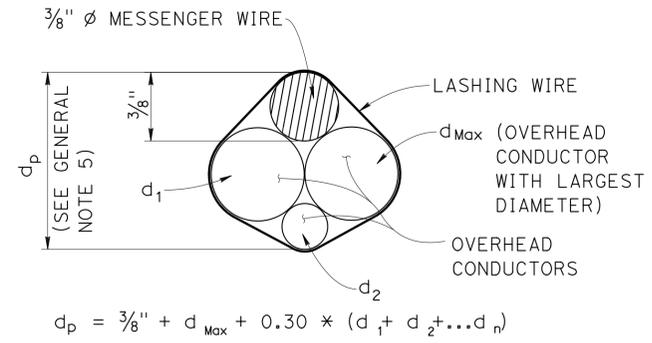
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN
 FUNCTIONAL SUPERVISOR: SHAHRAM SHAHRIARI
 CALCULATED/DESIGNED BY: FRANCIS M. ALVIAR
 CHECKED BY: VANESSA V. TRUONG
 REVISED BY: DATE REVISID

ELECTRICAL QUANTITIES

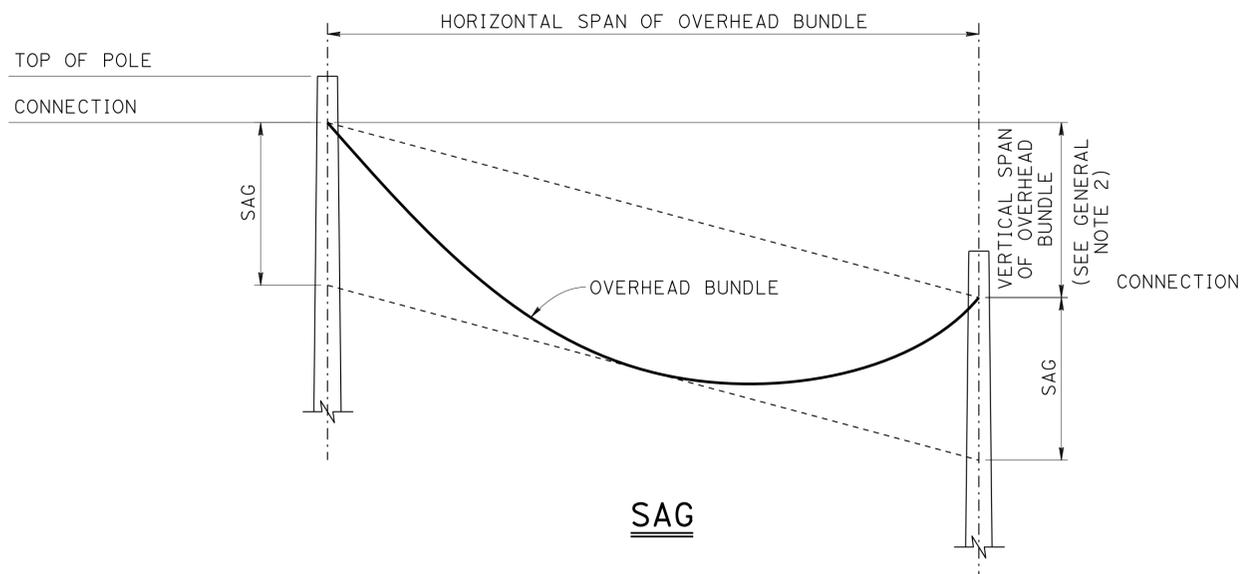
APPROVED FOR ELECTRICAL WORK ONLY

E-39





PROJECTED DEPTH OF OVERHEAD BUNDLE, (d_p)



Design: AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals, Fifth Edition (LTS-5).

GROUP LOAD COMBINATIONS:

- I Dead Load
- II Dead Load + Wind Load
- III Dead Load + 0.5 (Wind Load) + Ice Load
- IV Fatigue: Not used

LOADING:

Wind Loading: 100 mph (3-second gust)
 Wind Recurrence Interval: 10 years
 Combined height, exposure, and elevated terrain factor = 1.05
 (Exposure C, structure is not located on or over the top half of a ridge, hill, or escarpment)

Ice Loading: 3.0 psf on surfaces, 0.60 in radial thickness of ice at a unit weight of 60 pcf on overhead bundles

BASIC DESIGN VALUES:

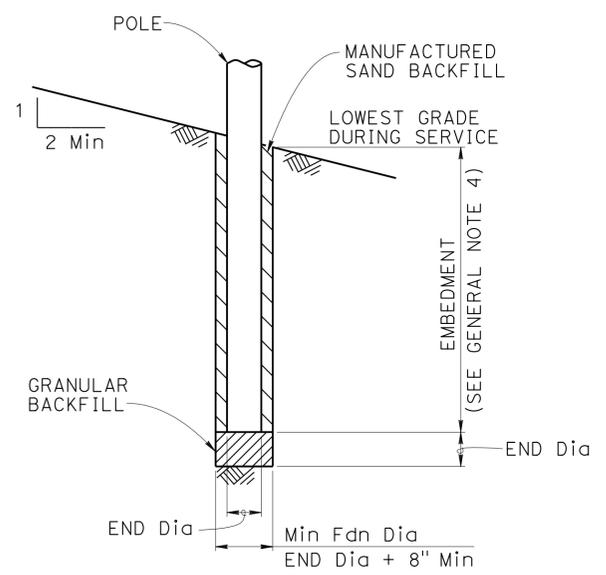
Timber Poles: F_b = 1850 psi
 F_v = 110 psi
 F_{cp} = 230 psi
 F_c = 950 psi
 E = 1500 x 10³ psi

DESIGN WIRE BREAKING STRENGTHS:

ASTM A475, Utilities Grade, 7 strand modified by termination efficiency factor of 0.8

FOUNDATION DESIGN NOTES:

1. Pole embedment depth design is based on Broms' approximate procedure as described in Article 13.6 of AASHTO LTS-5.
2. Embedment depth is calculated based on following soil parameters,
 Cohesive Soil:
 Shear strength of soil c = 1500 psf.
 Cohesionless Soil:
 φ = 30 deg, γ = 120 pcf.
 Soil assumed to be unsaturated.
3. An overload factor of 2.0 and an undercapacity factor of 0.7 were used for safety factor of 2.86.
4. Allowable vertical bearing pressure at the end bearing of poles is 3000 psf at 6 feet or more embedment.



POLE FOUNDATION

GENERAL NOTES:

1. The messenger wire and any combination of overhead conductors must not exceed either a self weight of 3.0 lb/ft or the maximum d_p.
2. The maximum vertical span is 10% of the horizontal span.
3. For poles with adjacent unbalanced horizontal spans, the shortest horizontal span must be at least 50% of the largest horizontal span.
4. Add 2'-0" for slopes above 1V:4H.
5. For a pole supporting multiple spans, calculate d_p for each span and use the largest value.
6. Do not exceed the attachments shown.

DIAMETERS AND SELF WEIGHT OF OVERHEAD CONDUCTORS

CONDUCTOR OR CABLE TYPE	DIAMETER d (in)	WEIGHT w (plf)
3 CONDUCTOR SIGNAL CABLE (3CSC)	0.400	0.0980
5 CONDUCTOR SIGNAL CABLE (5CSC)	0.500	0.1560
9 CONDUCTOR SIGNAL CABLE (9CSC)	0.650	0.2760
12 CONDUCTOR SIGNAL CABLE (12CSC)	0.800	0.3970
28 CONDUCTOR SIGNAL CABLE (28CSC)	0.900	0.6490
1-#14	0.166	0.0235
1-#12	0.185	0.0330
1-#10	0.210	0.0476
1-#8	0.271	0.0774
1-#6	0.310	0.1130
1-#4	0.359	0.1690
1-#3	0.388	0.2080
1-#2	0.420	0.2560
1-#1	0.498	0.3340
6-CONDUCTOR SIGNAL INTERCONNECT CABLE (SIC)	0.350	0.0860
12-CONDUCTOR SIGNAL INTERCONNECT CABLE (SIC)	0.500	0.1440
DETECTOR LEAD-IN CABLE (DLC)	0.310	0.0440
12 to 48-STRAND FIBER OPTIC CABLE (48FOC)	0.424	0.0600
72-STRAND FIBER OPTIC CABLE (72FOC)	0.484	0.0770
96-STRAND FIBER OPTIC CABLE (96FOC)	0.535	0.1050
144-STRAND FIBER OPTIC CABLE (144FOC)	0.670	0.1890
3/8" φ MESSENGER WIRE	0.375	0.2730

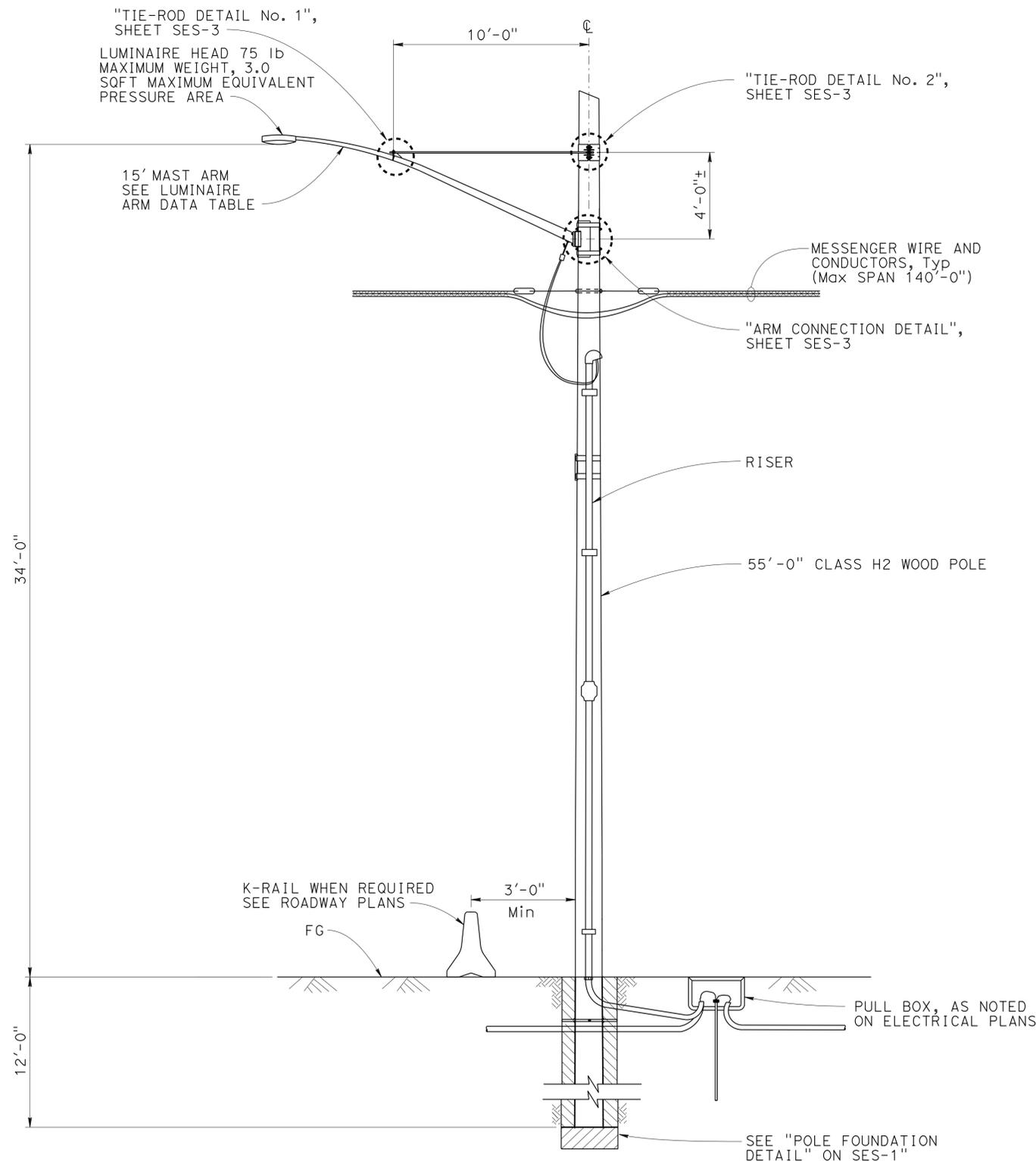
NO SCALE

BRANCH CHIEF	DESIGN	BY NIRANJEN KANEPATHIPILLAI	CHECKED JOEL MAGANA	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN SPECIAL DESIGN BRANCH	BRIDGE NO.	N/A	TEMPORARY WOOD POLES GENERAL NOTES	SES-1
	DETAILS	BY SHUMEI JIANG	CHECKED JOEL MAGANA			POST MILE	2.0/11.8		
	QUANTITIES	BY X	CHECKED X						

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	324	368

REGISTERED CIVIL ENGINEER *Joel Magana* DATE 3-15-13
 PLANS APPROVAL DATE 4-8-13
 No. C61500
 Exp. 6-30-13
 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.



LUMINAIRE ARM DATA			
Projected Length	N Rise	Min OD At Pole	Thickness
15'-0"	4'-9"	4 1/4"	0.1196"

Refer to ES-6A for Luminaire arm details

**TYPICAL WOOD POLE WITH
 OH CONDUCTORS AND OPTIONAL ATTACHMENTS**
 NO SCALE

BRANCH CHIEF DAVID A. NEUMANN

DESIGN	BY NIRANJEN KANEPATHIPILLAI	CHECKED JOEL MAGANA
DETAILS	BY SHUMEI JIANG	CHECKED JOEL MAGANA
QUANTITIES	BY X	CHECKED X

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
SPECIAL DESIGN BRANCH

BRIDGE NO.	N/A
POST MILE	2.0/11.8

TEMPORARY WOOD POLES
LIGHTING

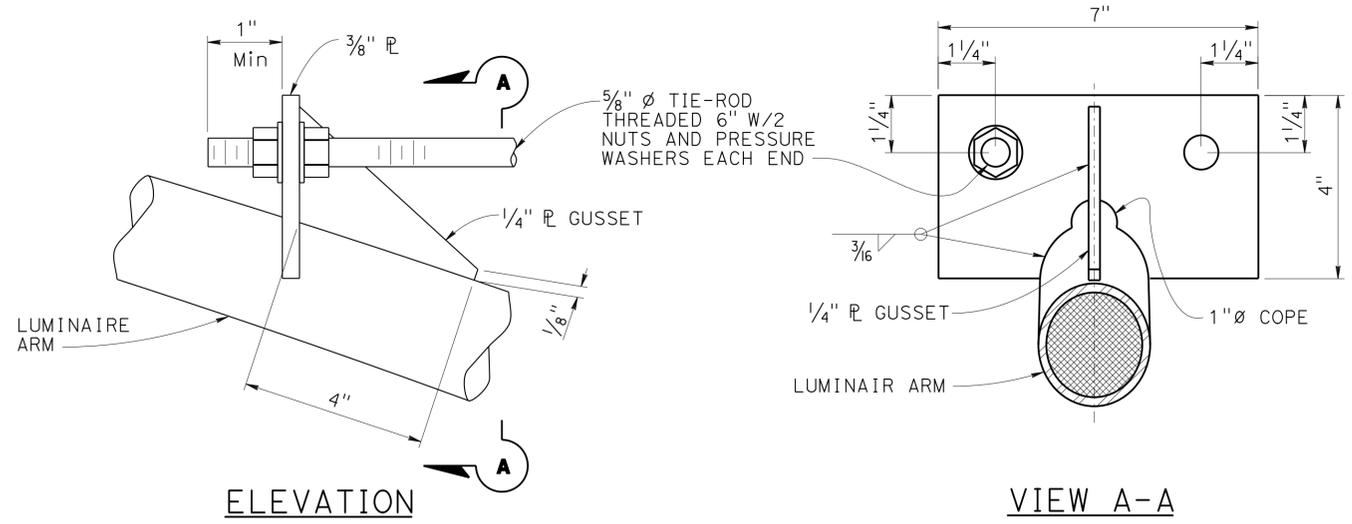
SES-2

REVISION DATES	SHEET	OF
3-04-13 3-06-13 3-14-13	2	3

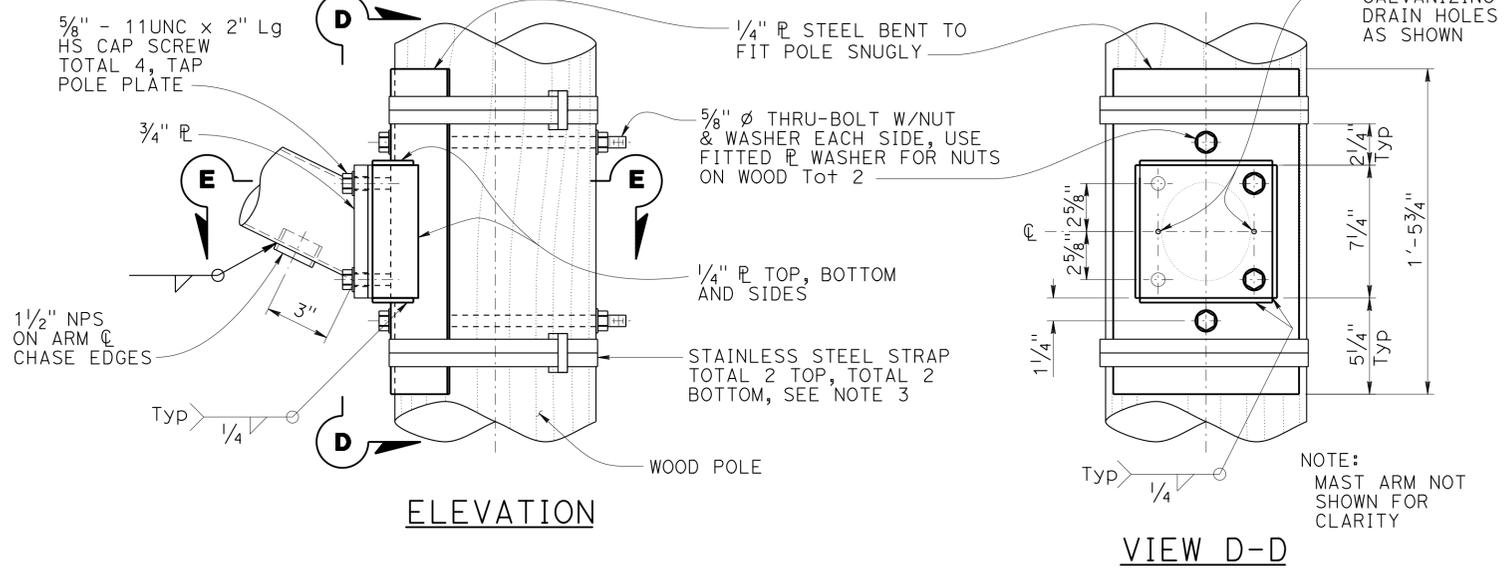
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	325	368
			3-15-13	DATE	
			4-8-13	PLANS APPROVAL DATE	
			REGISTERED PROFESSIONAL ENGINEER No. C61500 Exp. 6-30-13 CIVIL STATE OF CALIFORNIA		
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.					

NOTES:

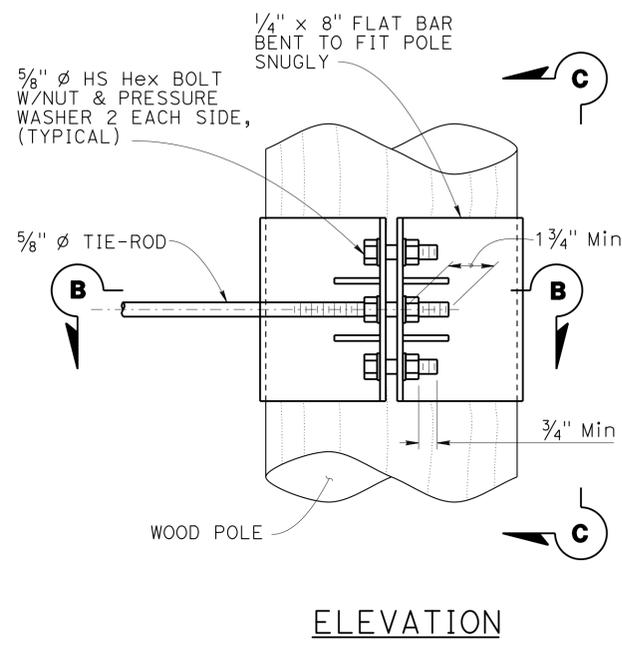
1. All hardware and steel shall be galvanized after fabrication.
2. Arm base connection details shall be in compliance with Standard Plan Detail ES-6A with noted modifications.
3. 3500 lb Min capacity strap system shall be used for top and bottom of plate.
4. Verify pole dimensions at Tie-Rod attachment height. Fabricate 8" flat bar with "L" Dimension to maintain an open gap between flanges in finished installation.



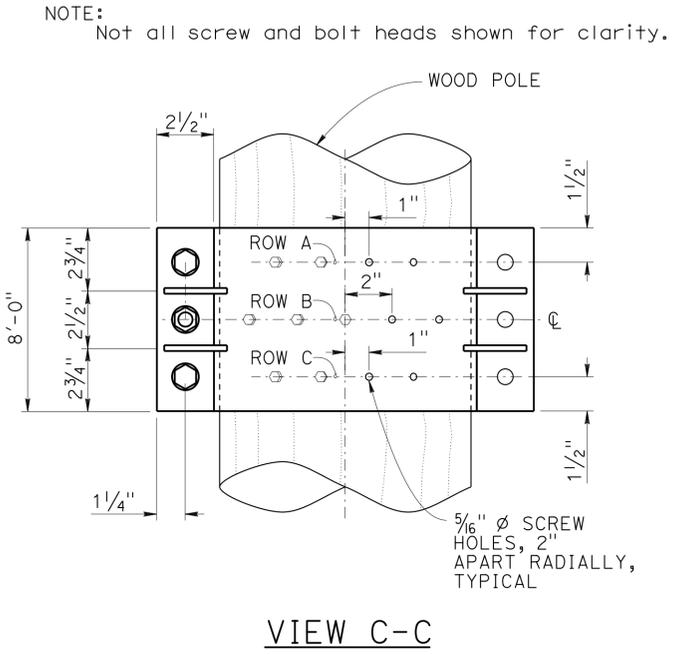
TIE-ROD DETAILS No. 1
NO SCALE



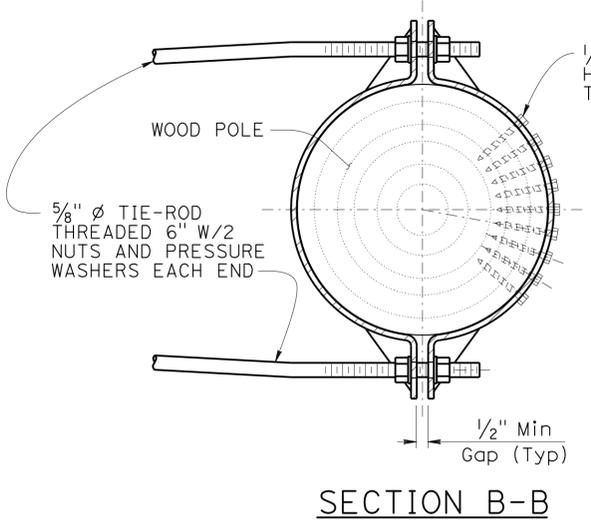
ARM CONNECTION DETAILS
NO SCALE



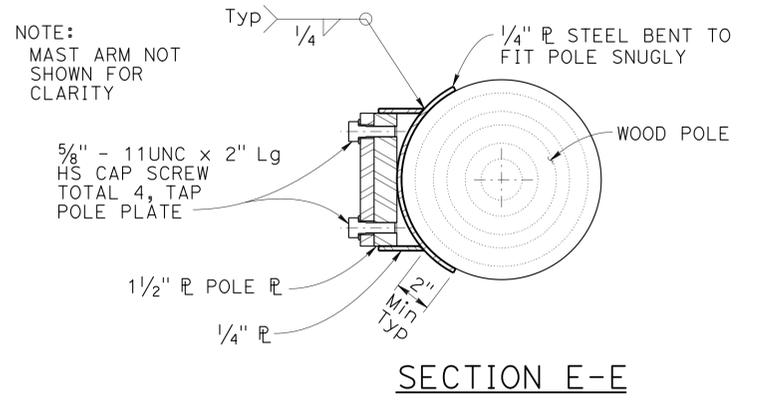
TIE-ROD DETAILS No. 2
NO SCALE



LAG SCREW AND GUSSET PLATE LAYOUT



SECTION B-B



SECTION E-E

BRANCH CHIEF DAVID A. NEUMANN

DESIGN	BY	CHECKED
DETAILS	BY	CHECKED
QUANTITIES	BY	CHECKED
	X	X

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
SPECIAL DESIGN BRANCH

BRIDGE NO.
N/A
POST MILE
2.0/11.8

TEMPORARY WOOD POLES
MISCELLANEOUS DETAILS

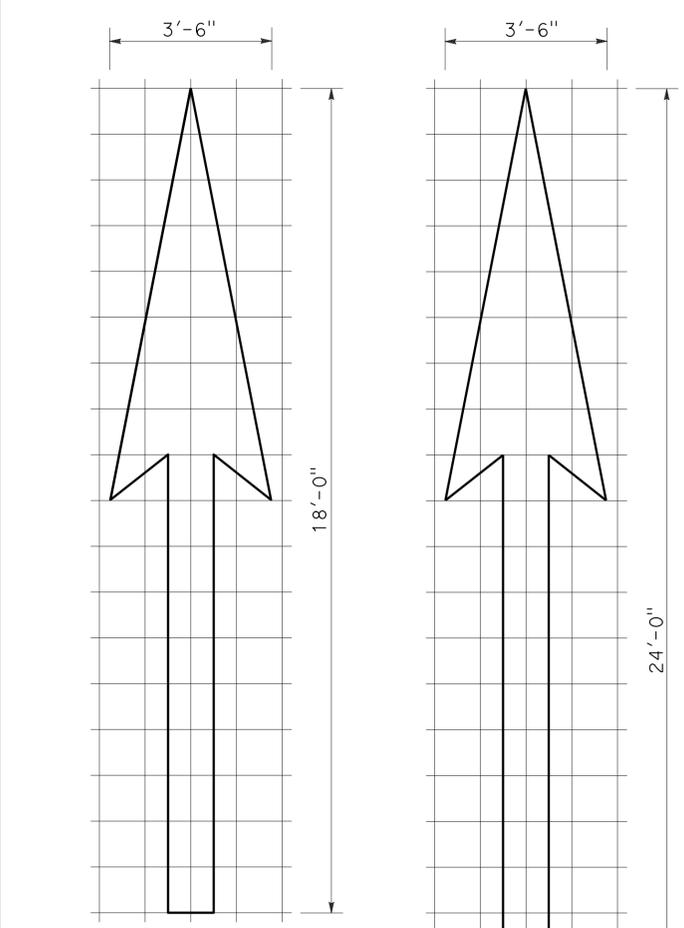
SES-3

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	326	368

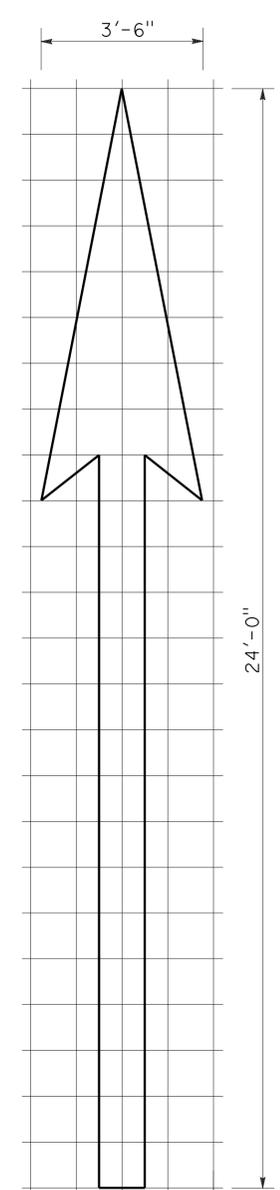
Roberto L. McLaughlin
 REGISTERED CIVIL ENGINEER
 April 20, 2012
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER
 Roberto L. McLaughlin
 No. C40375
 Exp. 3-31-13
 CIVIL
 STATE OF CALIFORNIA

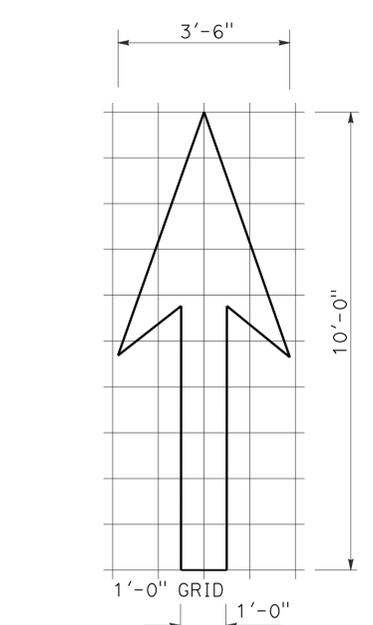
TO ACCOMPANY PLANS DATED 4-8-13



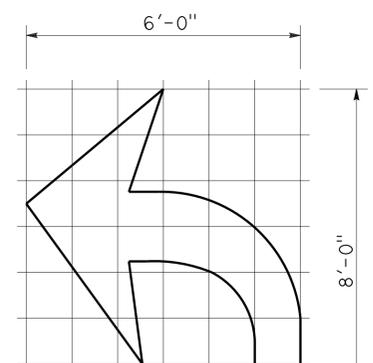
A=25 ft²
TYPE I 18'-0" ARROW



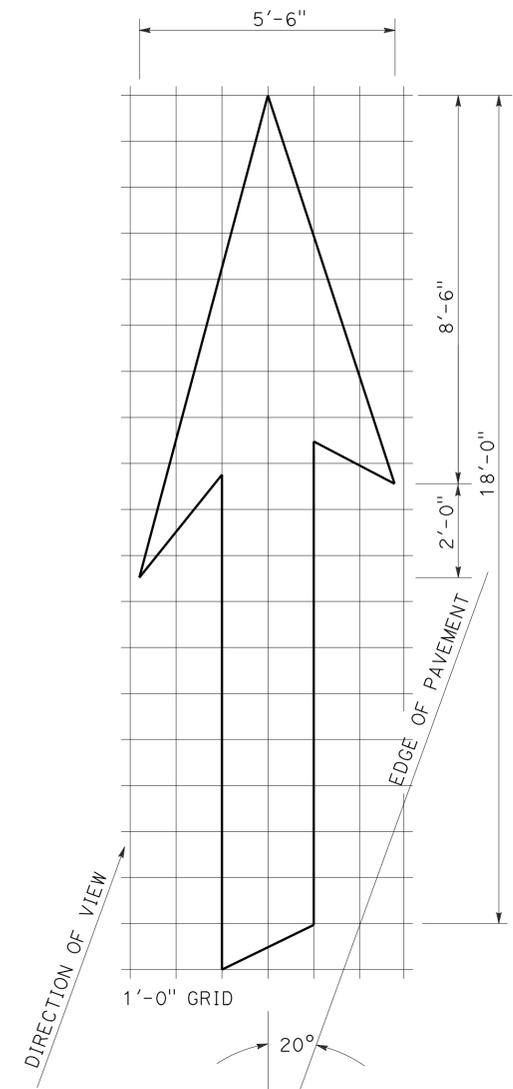
A=31 ft²
TYPE I 24'-0" ARROW



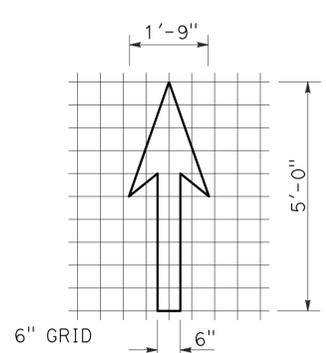
A=14 ft²
TYPE I 10'-0" ARROW



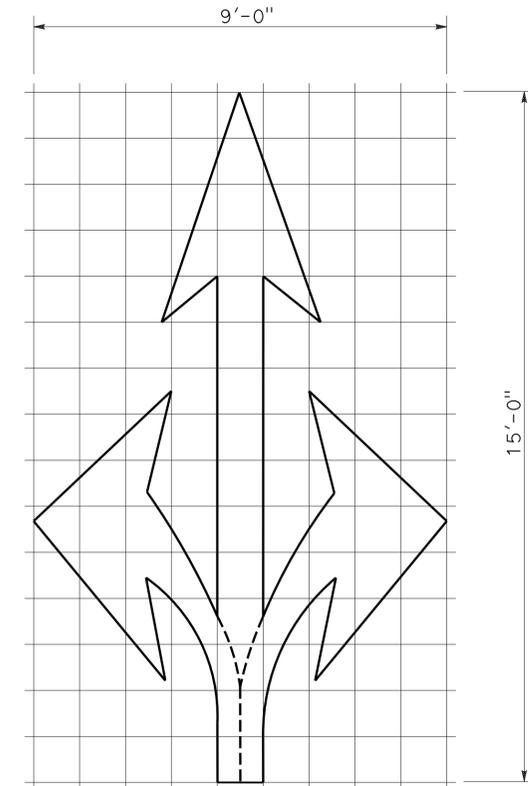
A=15 ft²
TYPE IV (L) ARROW
 (For Type IV (R) arrow, use mirror image)



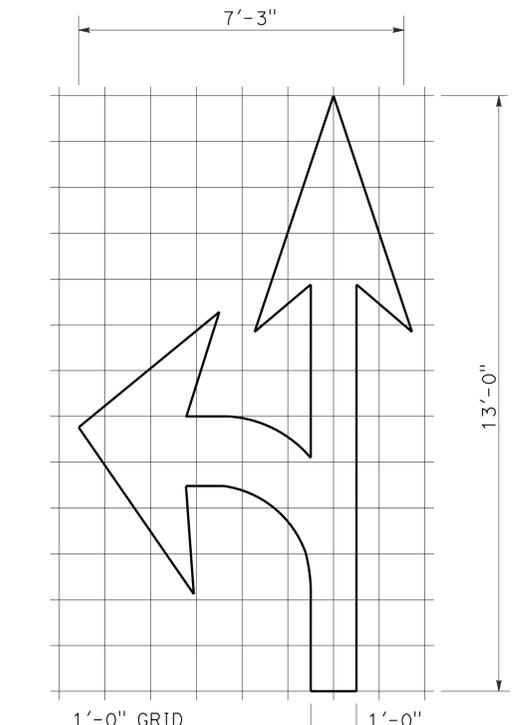
A=42 ft²
TYPE VI ARROW
 Right lane drop arrow
 (For left lane, use mirror image)



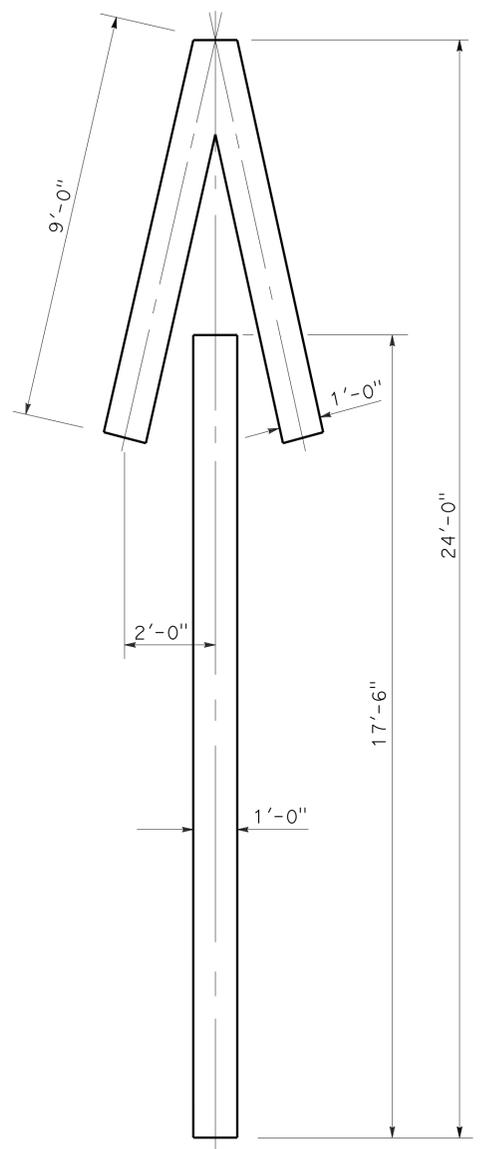
A=3.5 ft²
BIKE LANE ARROW



A=36 ft²
TYPE VIII ARROW



A=27 ft²
TYPE VII (L) ARROW
 (For Type VII (R) arrow, use mirror image)



A=33 ft²
TYPE V ARROW

NOTE:
 Minor variations in dimensions may be accepted by the Engineer.

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKINGS
 ARROWS**
 NO SCALE

RSP A24A DATED APRIL 20, 2012 SUPERSEDES STANDARD PLAN A24A DATED MAY 20, 2011 - PAGE 13 OF THE STANDARD PLANS BOOK DATED 2010.

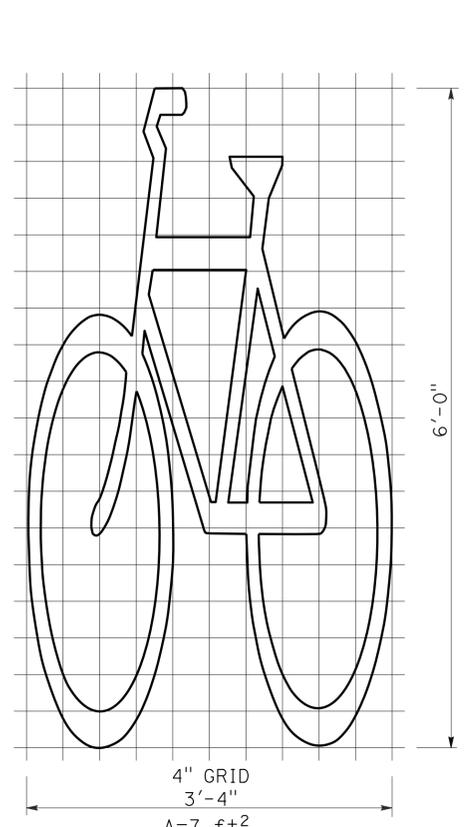
2010 REVISED STANDARD PLAN RSP A24A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	327	368

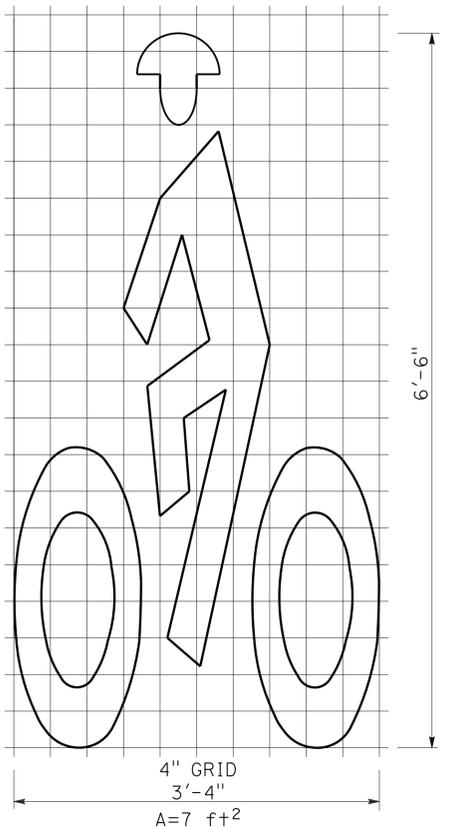
Registered Professional Engineer
 Roberto L. McLaughlin
 No. C40375
 Exp. 3-31-13
 CIVIL
 STATE OF CALIFORNIA

October 19, 2012
 PLANS APPROVAL DATE

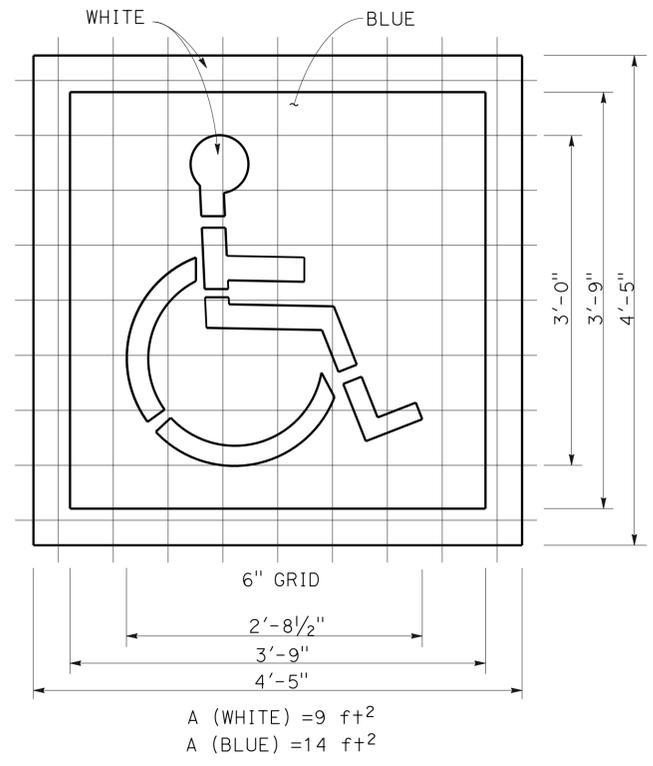
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



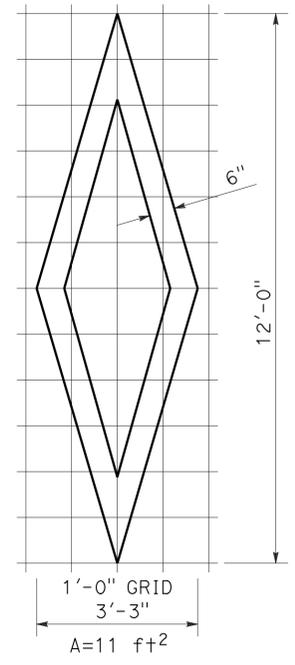
BIKE LANE SYMBOL WITHOUT PERSON



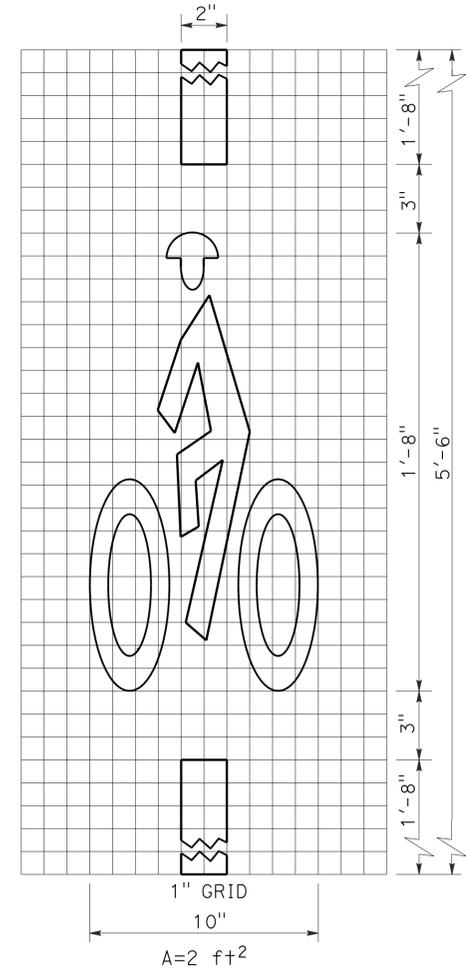
BIKE LANE SYMBOL WITH PERSON



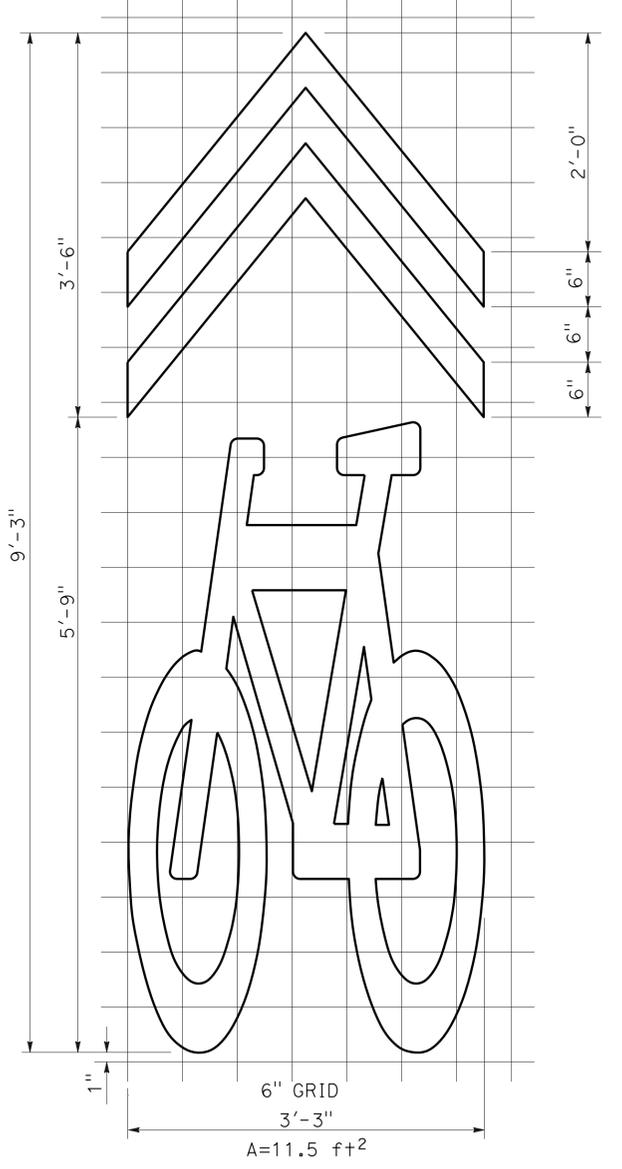
INTERNATIONAL SYMBOL OF ACCESSIBILITY (ISA) MARKING



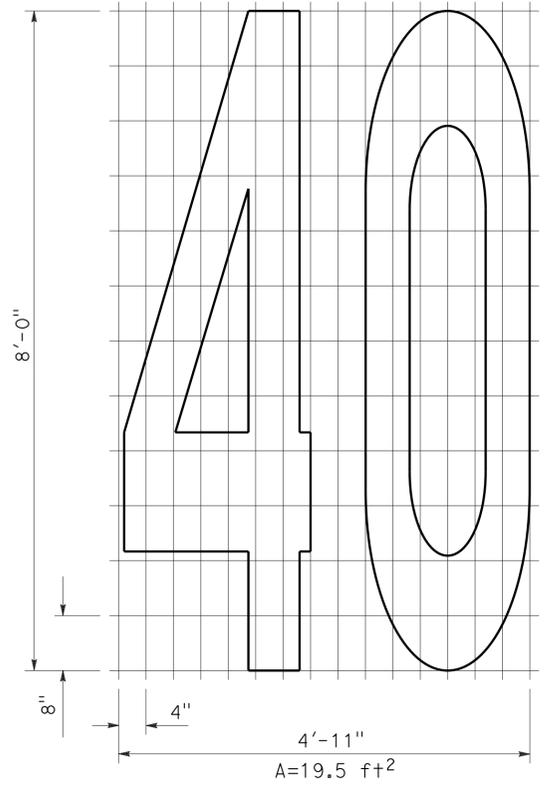
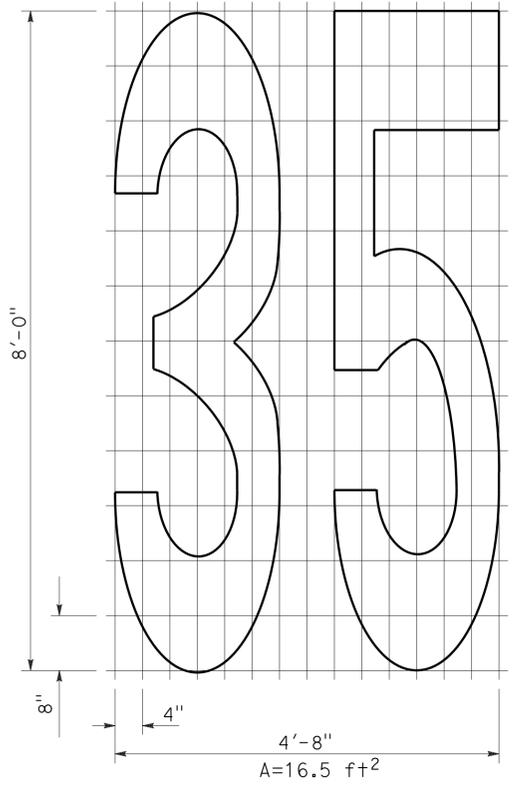
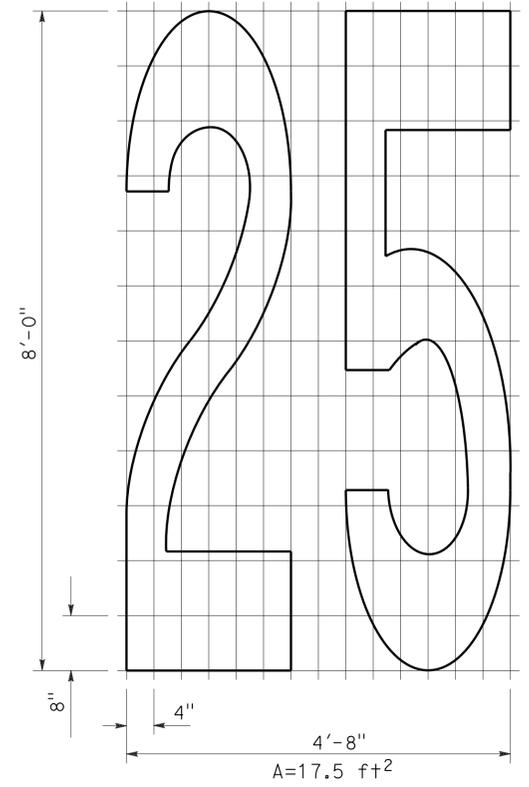
DIAMOND SYMBOL



BICYCLE LOOP DETECTOR SYMBOL



SHARED ROADWAY BICYCLE MARKING



NUMERALS

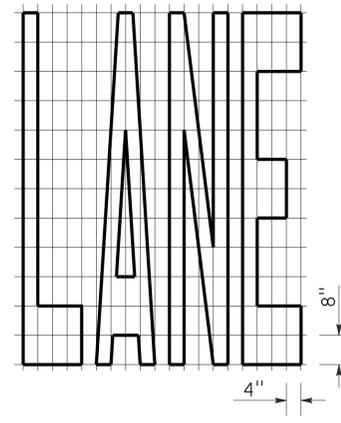
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
PAVEMENT MARKINGS SYMBOLS AND NUMERALS
 NO SCALE

RSP A24C DATED OCTOBER 19, 2012 SUPERSEDES STANDARD PLAN A24C DATED MAY 20, 2011 - PAGE 15 OF THE STANDARD PLANS BOOK DATED 2010.

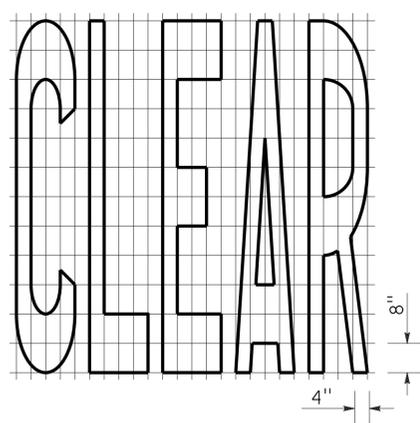
REVISED STANDARD PLAN RSP A24C

2010 REVISED STANDARD PLAN RSP A24C

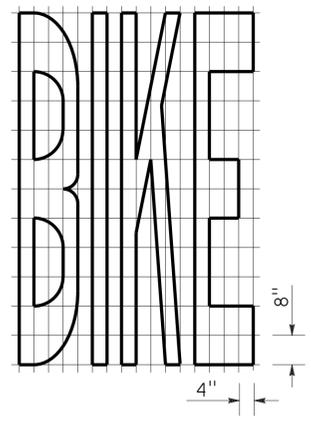
TO ACCOMPANY PLANS DATED 4-8-13



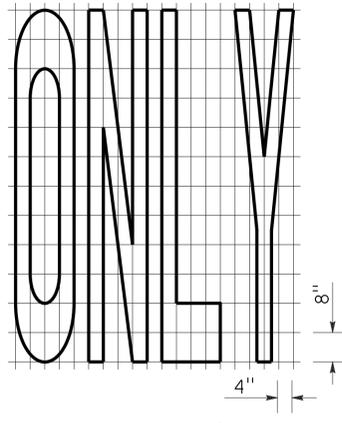
A=24 ft²



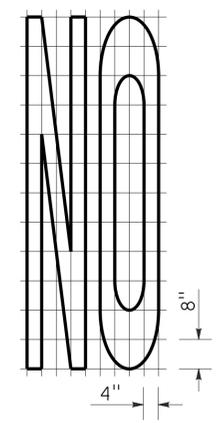
A=27 ft²



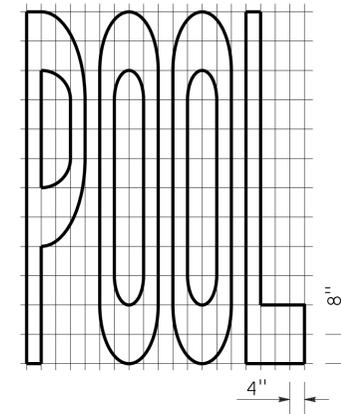
A=21 ft²



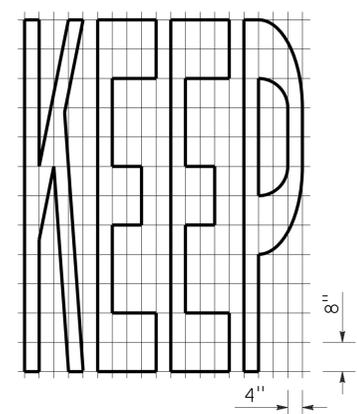
A=22 ft²



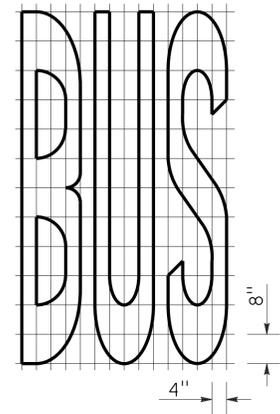
A=14 ft²



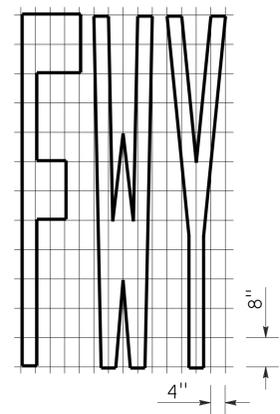
A=23 ft²



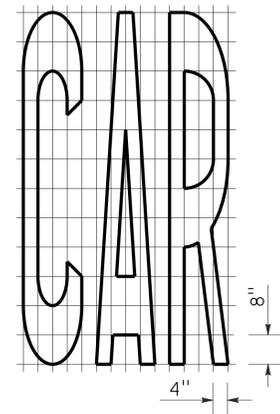
A=24 ft²



A=20 ft²

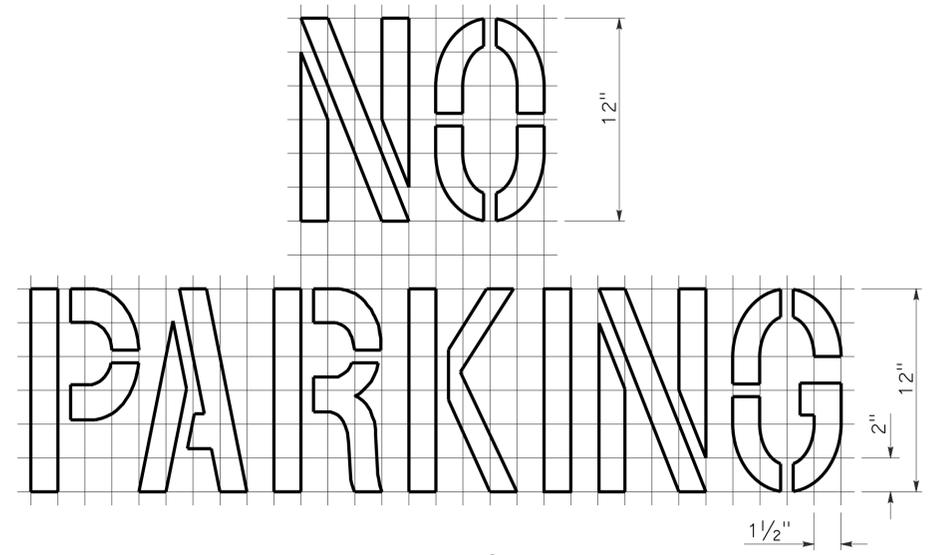


A=16 ft²

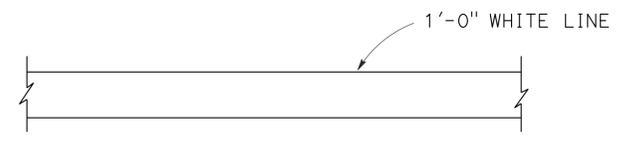


A=17 ft²

WORD MARKINGS			
ITEM	ft ²	ITEM	ft ²
LANE	24	NO	14
POOL	23	BIKE	21
CAR	17	BUS	20
CLEAR	27	ONLY	22
KEEP	24	FWY	16



A=2 ft²
See Notes 6 and 7



LIMIT LINE (STOP LINE)



YIELD LINE

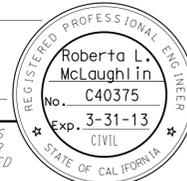
NOTES:

1. If a message consists of more than one word, it should read "UP", i.e., the first word should be nearest the driver.
2. The space between words should be at least four times the height of the characters for low speed roads, but not more than ten times the height of the characters. The space may be reduced appropriately where there is limited space because of local conditions.
3. Minor variations in dimensions may be accepted by the Engineer.
4. Portions of a letter, number or symbol may be separated by connecting segments not to exceed 2" in width.
5. The words "NO PARKING" pavement marking is to be used for parking facilities. For typical locations of markings, see Standard Plans A90A and A90B.
6. The words "NO PARKING", shall be painted in white letters no less than 1'-0" high on a contrasting background and located so that it is visible to traffic enforcement officials.

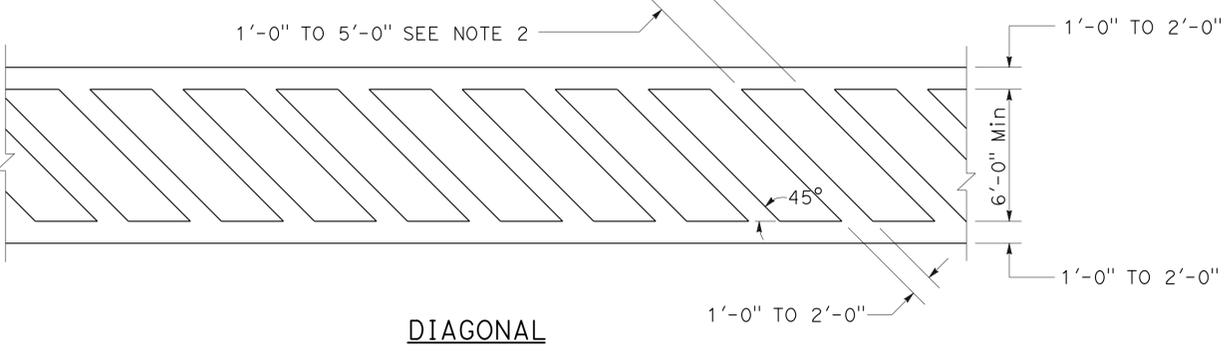
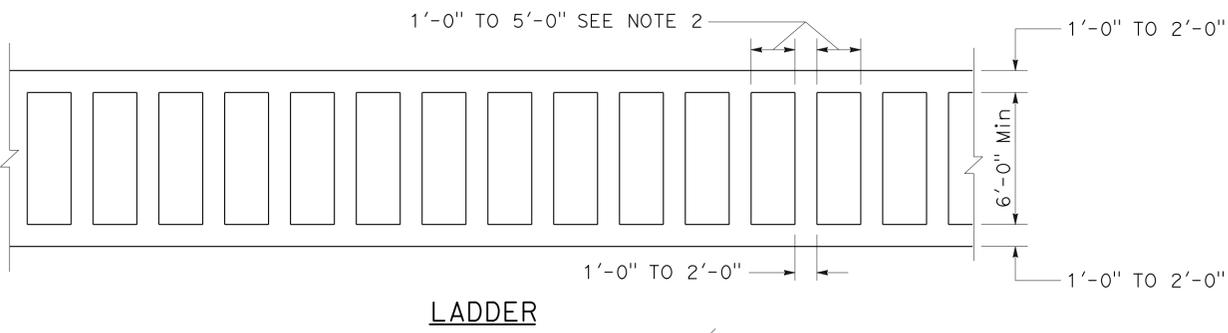
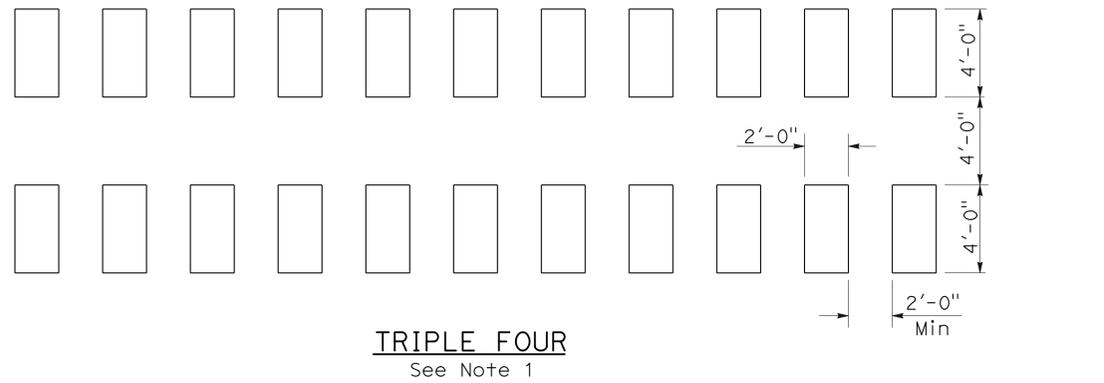
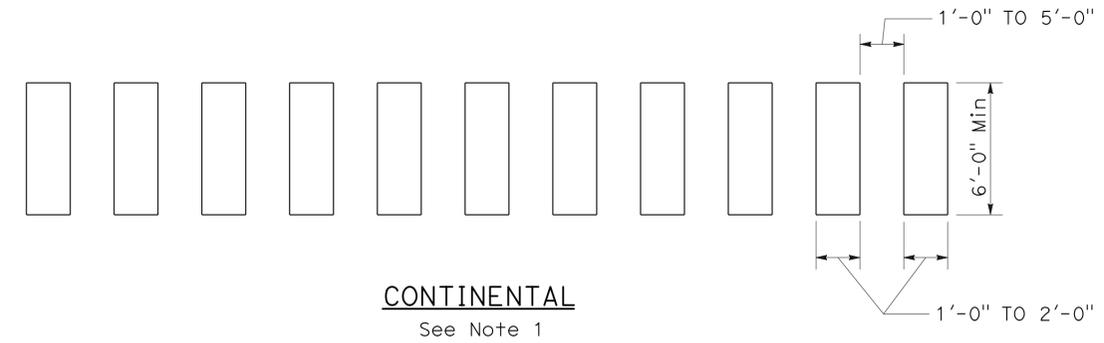
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKINGS
WORDS, LIMIT AND YIELD LINES**
NO SCALE

RSP A24E DATED JULY 20, 2012 SUPERSEDES STANDARD PLAN A24E
DATED MAY 20, 2011 - PAGE 17 OF THE STANDARD PLANS BOOK DATED 2010.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	329	368

 REGISTERED CIVIL ENGINEER		
July 20, 2012 PLANS APPROVAL DATE		
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>		

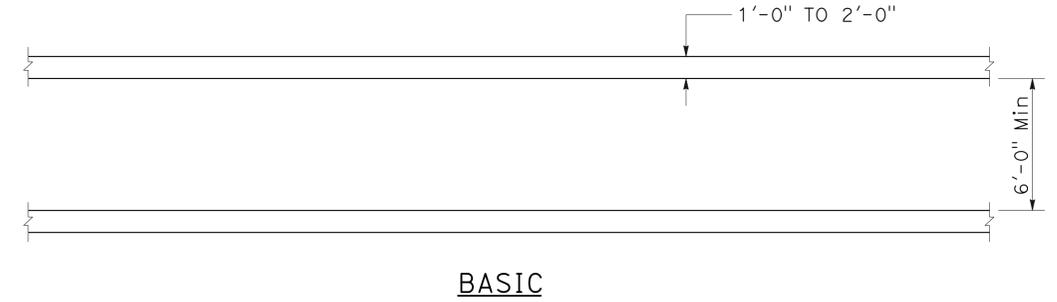
TO ACCOMPANY PLANS DATED 4-8-13



HIGHER VISIBILITY CROSSWALKS

NOTES:

1. Spaces between markings should be placed in wheel tracks of each lane.
2. Spacings not to exceed 2.5 times width of longitudinal line.
3. All crosswalk markings must be white except for those near schools must be yellow.



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKINGS
CROSSWALKS**
NO SCALE

RSP A24F DATED JULY 20, 2012 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP A24F

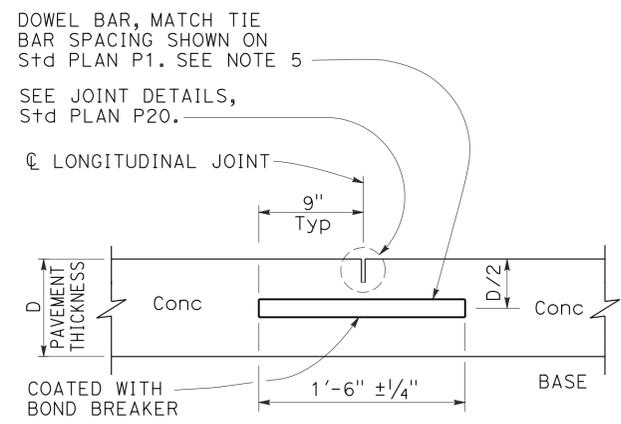
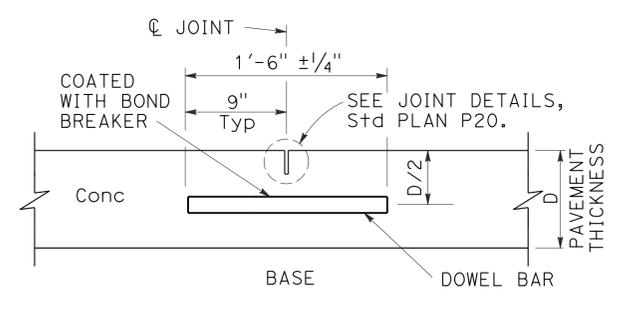
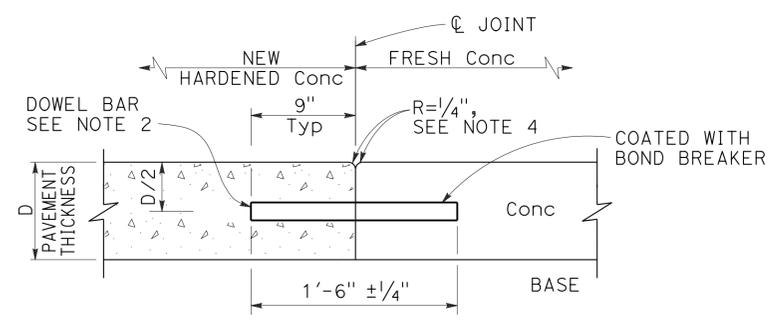
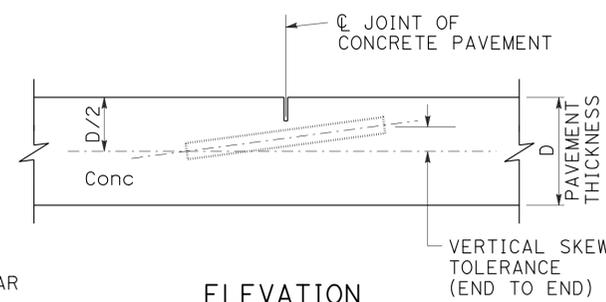
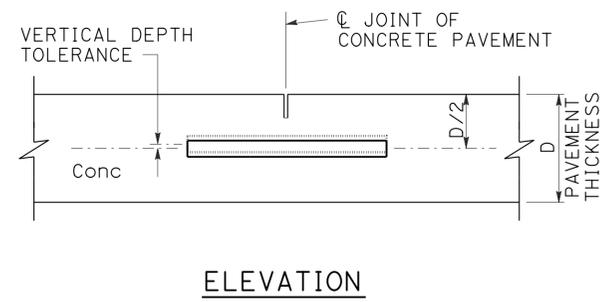
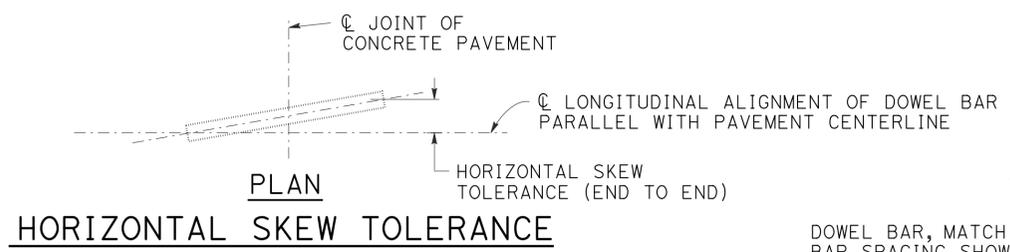
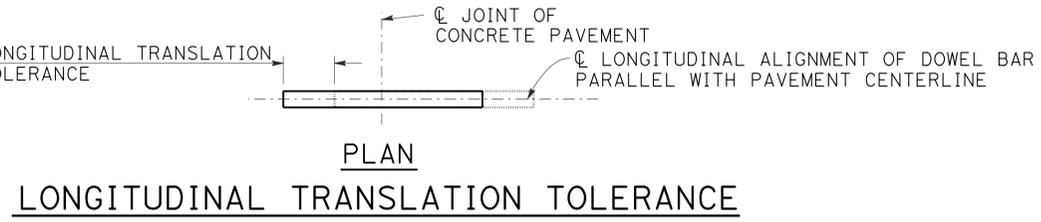
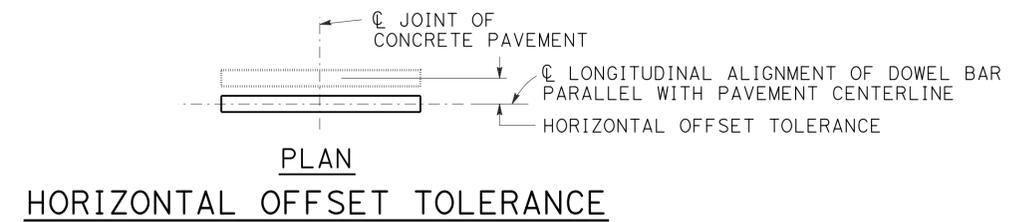
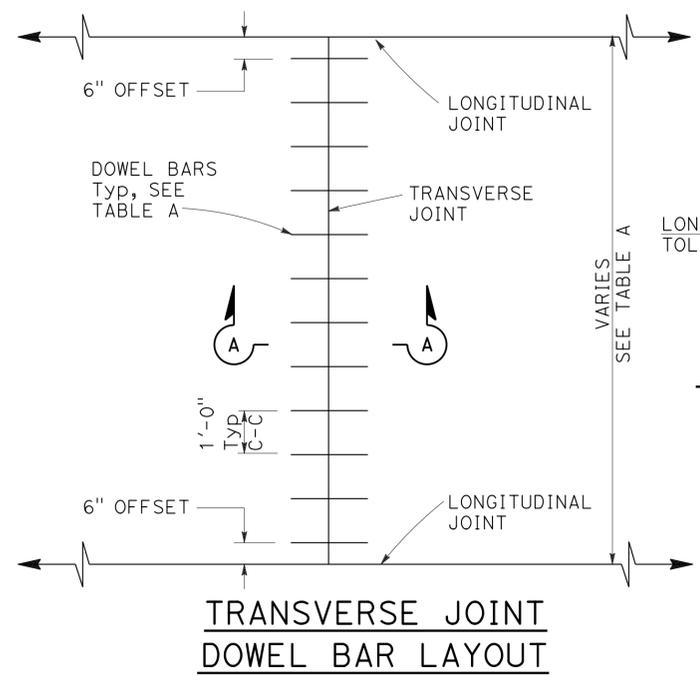
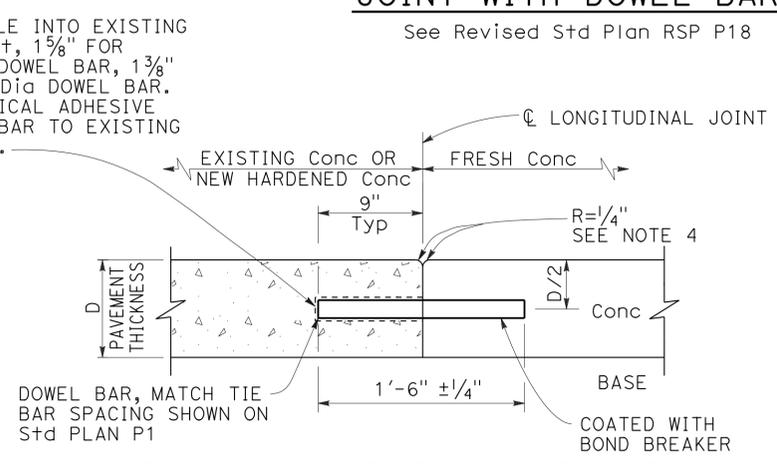
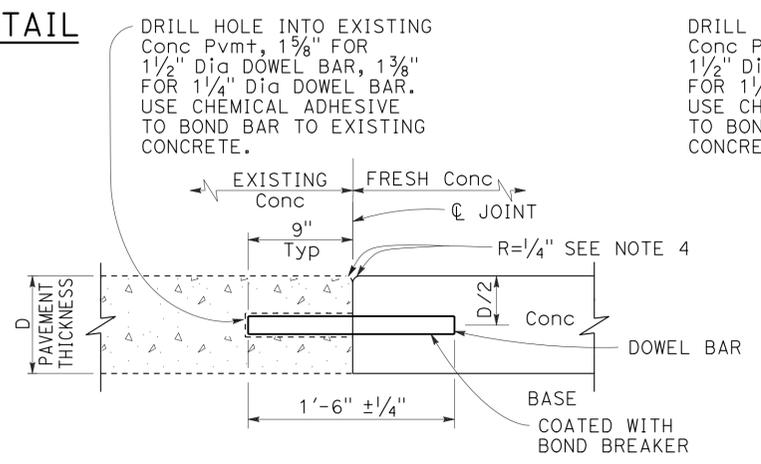


TABLE A (See Note 3)

DOWEL BAR TRANSVERSE SPACING TABLE	
WIDTH BETWEEN LONGITUDINAL JOINTS	NUMBER OF DOWELS BETWEEN LONGITUDINAL JOINTS
14'-0"	14
13'-0"	13
12'-0"	12
11'-0"	11
10'-0"	10
8'-0"	8
5'-0"	5
4'-0"	4



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**CONCRETE PAVEMENT-
DOWEL BAR
DETAILS**
NO SCALE

RSP P10 DATED APRIL 20, 2012 SUPERSEDES STANDARD PLAN P10
DATED MAY 20, 2011 - PAGE 131 OF THE STANDARD PLANS BOOK DATED 2010.

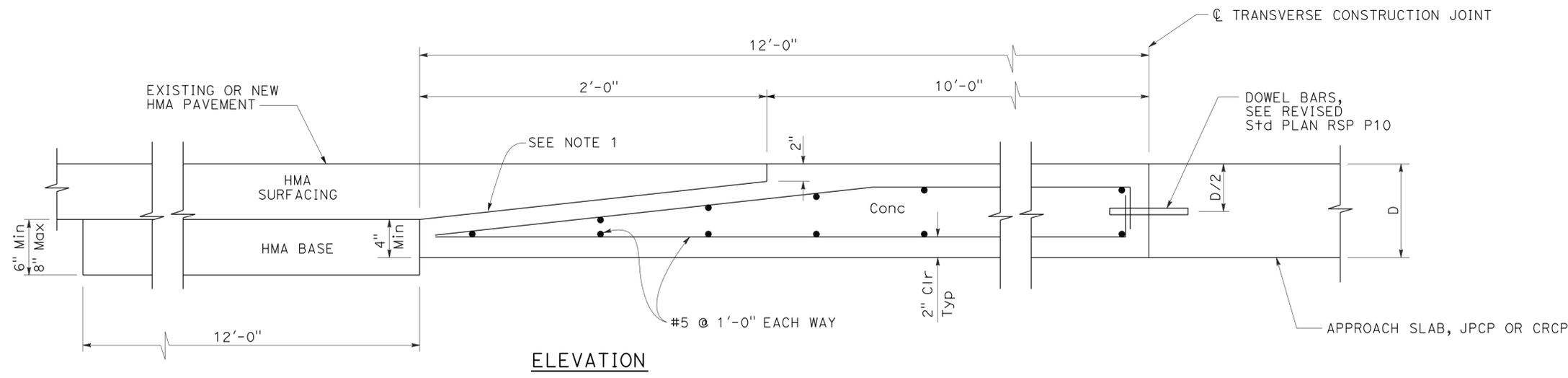
REVISED STANDARD PLAN RSP P10

2010 REVISED STANDARD PLAN RSP P10

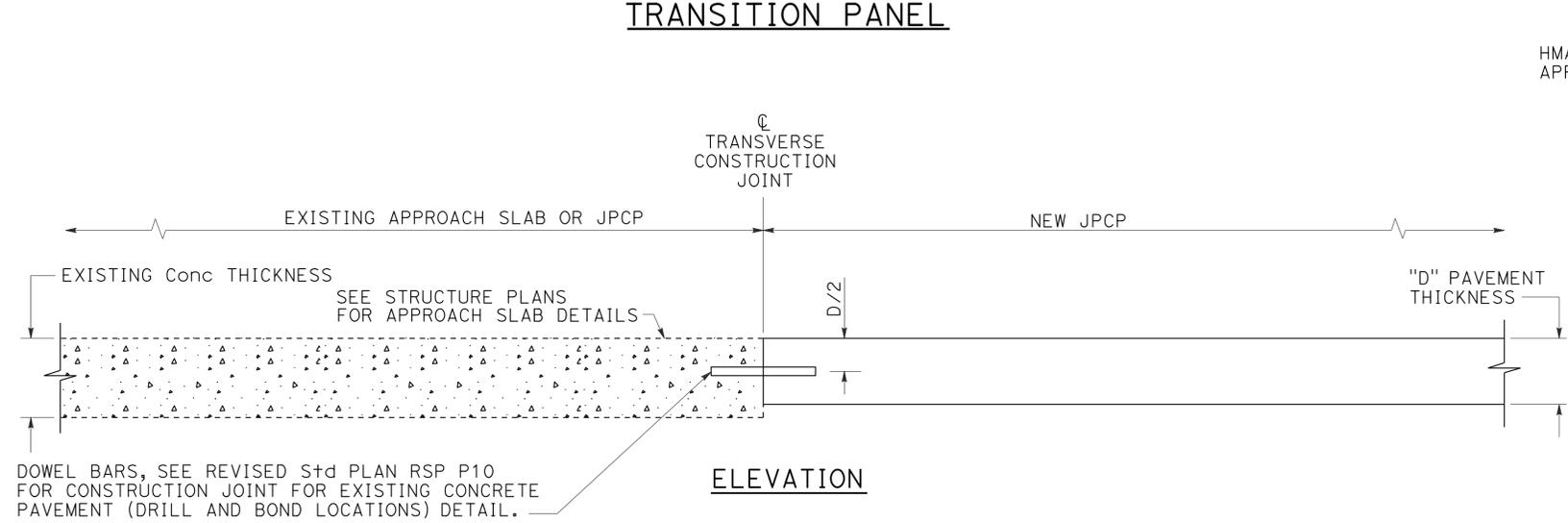
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	331	368

William K. Farnbach
 REGISTERED CIVIL ENGINEER
 April 20, 2012
 PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

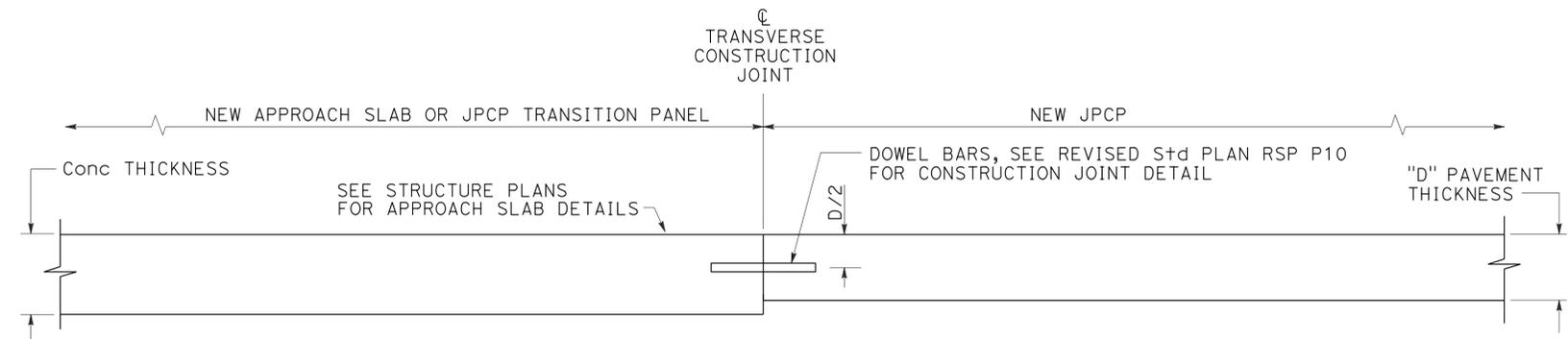
TO ACCOMPANY PLANS DATED 4-8-13



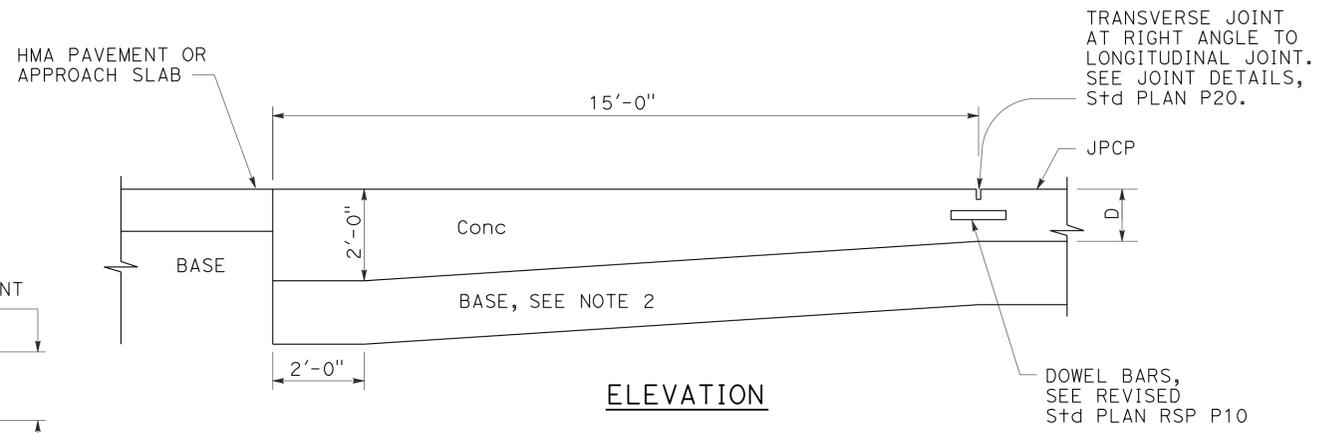
ELEVATION
CONCRETE PAVEMENT
TRANSITION PANEL



ELEVATION
TERMINAL JOINT TYPE 1
 For Exist JPCP or Structure Approach Slab



ELEVATION
TERMINAL JOINT TYPE 2
 For JPCP Transition Panel or Structure Approach Slab



ELEVATION
PAVEMENT END ANCHOR
 For HMA Pvmf or Structure Approach Slab

- NOTES:**
1. Heavy broom finish.
 2. Maintain same base thickness as JPCP.

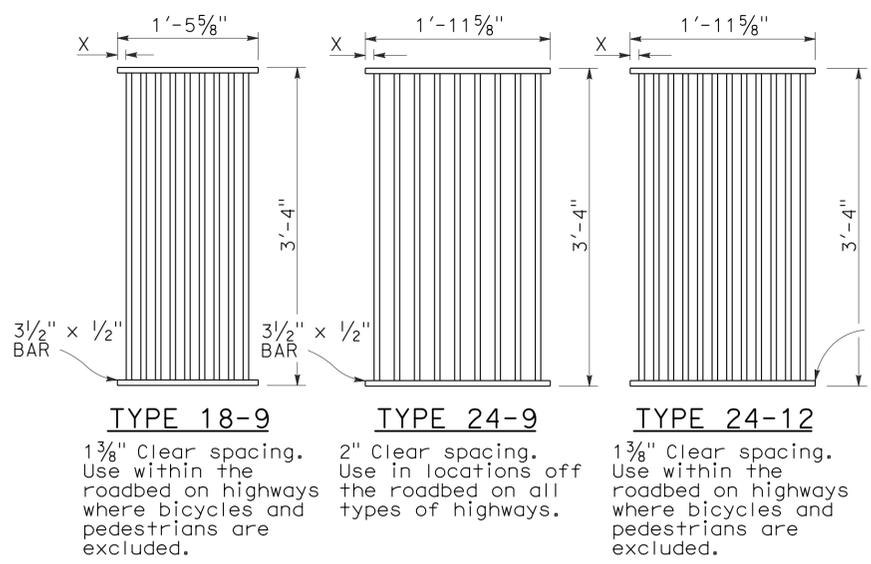
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**CONCRETE PAVEMENT-
 END PANEL
 PAVEMENT TRANSITIONS**

NO SCALE

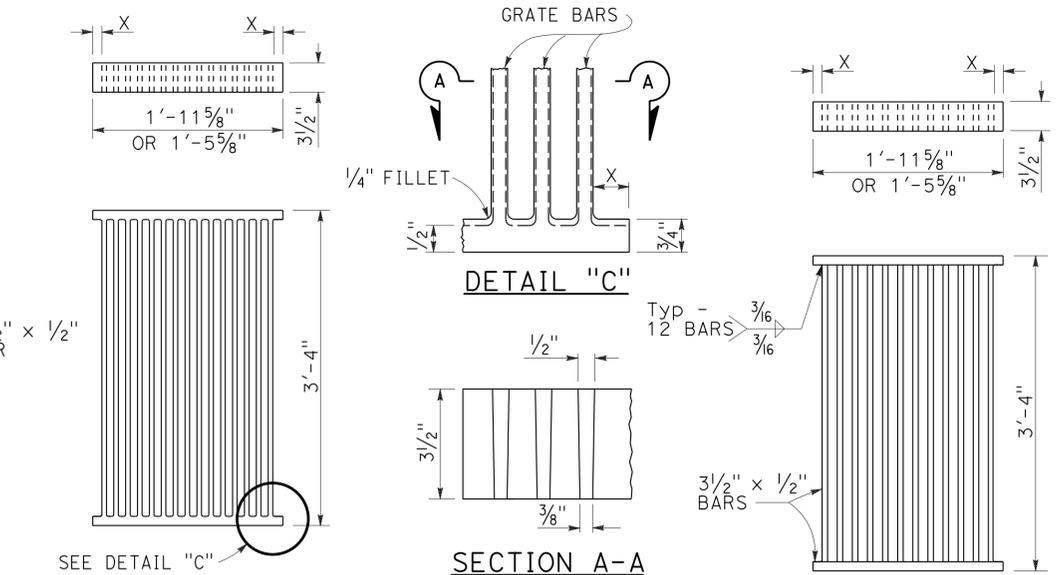
RSP P30 DATED APRIL 20, 2012 SUPERSEDES STANDARD PLAN P30
 DATED MAY 20, 2011 - PAGE 137 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP P30

2010 REVISED STANDARD PLAN RSP P30

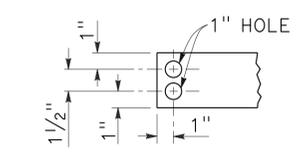


RECTANGULAR GRATE DETAILS
(See table below)



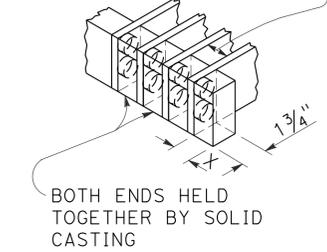
ALTERNATIVE CAST DUCTILE IRON GRATE OR CAST CARBON STEEL GRATE
ALTERNATIVE WELDED GRATE

CAST END BLOCK



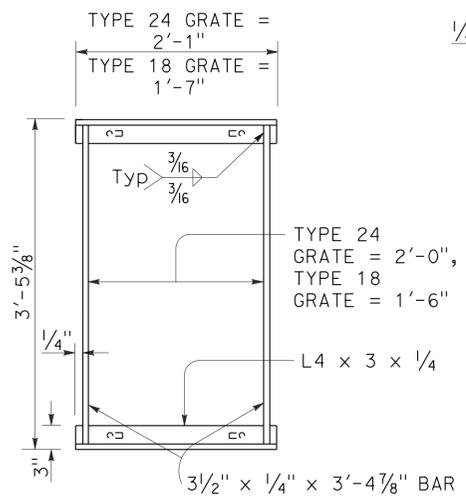
END OF BAR

ALTERNATIVE CAST DUCTILE IRON OR CAST CARBON STEEL END BLOCK GRATE

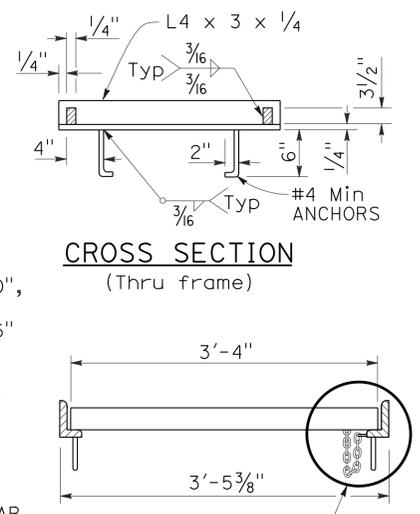


NOTES:

1. Grate type numbers refer to approximate width of grate in inches and number of bars, respectively.
2. Contractor has the option of using cast ductile iron, cast carbon steel, welded, bolted, or cast end block grate.
3. Rounded top of bars optional on all grates.
4. Pipe inlets with a grate shall be placed so that bars parallel direction of principle surface flow.
5. Complete joint penetration butt welds may be substituted for the fillet welds on all anchors.
6. Standard square, hexagon, round or equivalent headed anchors may be substituted for the right angle hooks on the anchors shown on this plan.
7. Grate and frame weights are based on welded grates (weights of face angles, steps, protection bars, etc. are not included).
8. Connect chain to grate and frame only at locations shown on the plans. When chain is required, do not use cast ductile iron grates.

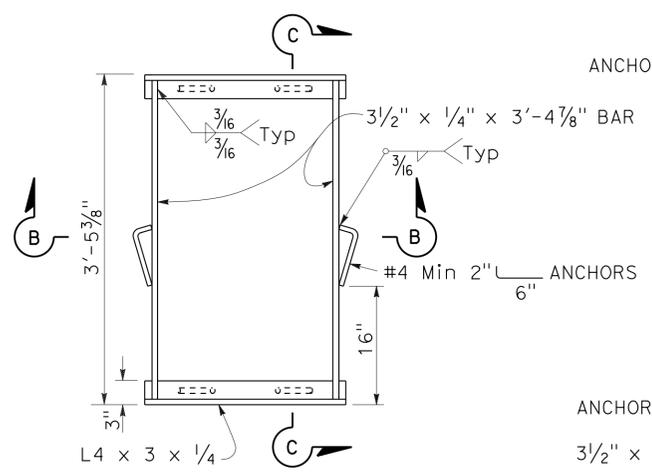


TYPICAL FRAME



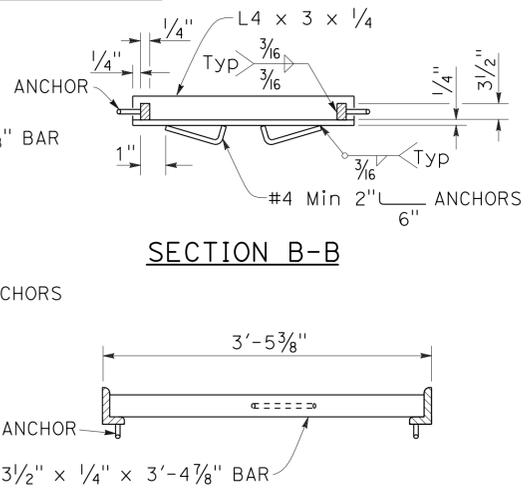
CROSS SECTION
(Thru frame)

LONGITUDINAL SECTION
(Thru frame and grate)



TYPICAL FRAME

ALTERNATIVE ANCHOR FOR RECTANGULAR FRAME
(For details not shown, See Rectangular Frame Details)



SECTION B-B

SECTION C-C

RECTANGULAR FRAME DETAILS

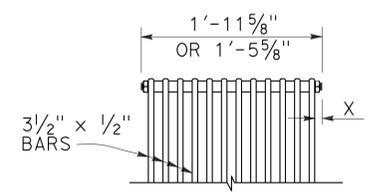
(For all rectangular grates)

GRATE BAR SPACING TABLE

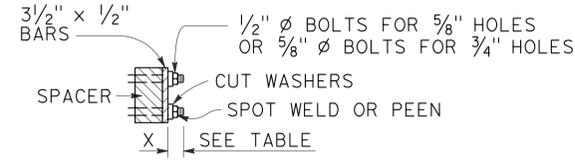
TYPE	NO. OF BARS	CLEAR BAR SPACING	X
18-9	9	1 3/8"	1 1/16"
24-9	9	2"	1 9/16"
24-12	12	1 3/8"	1 1/4"

INLET TYPE	COVER TYPE	WEIGHT LB
OS	PLATE	174
OL-7	PLATE	170
OL-10	PLATE	170
OL-14	PLATE	170
OL-21	PLATE	170
OCPI	PLATE	112
OCPI	PLATE	112
OCPI	REDWOOD	42
OMP	PLATE	177
OMPI	PLATE	177

INLET TYPE	GRATE TYPE	NO. OF GRATES	WEIGHT LB
GDO	24-12	2	634
GOL-7	24-12	1	326
GOL-10	24-12	1	326
G0,G1,G2,G3,G4 (TYPE 24)	24-9	1	263
	24-12	1	326
G4 (TYPE 18),G5,G6	18-9	1	249
GT1	18-9	2	498
GT2	18-9	2	498
GT3	24-12	2	652
GT4	24-12	2	652
TRASH RACK			22
GRATE CHAIN			3

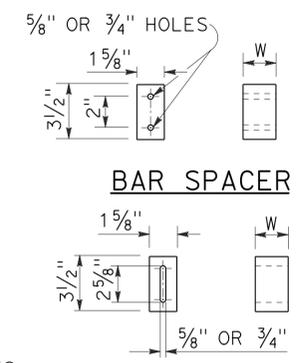


BOLTED END BLOCK



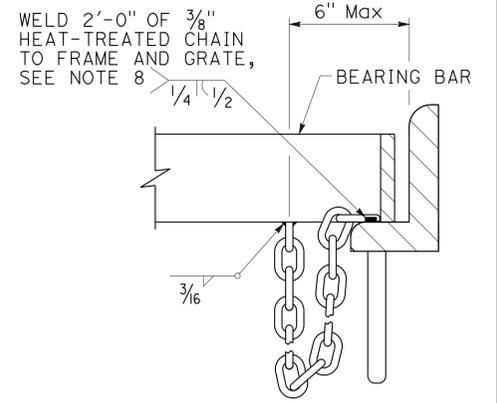
BOLTING DETAIL

ALTERNATIVE BOLTED GRATE



BAR SPACER

ALTERNATIVE SPACER
W = 1 3/8" or 2"



DETAIL "D"
(Steel grates only)

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
GRATE DETAILS

NO SCALE

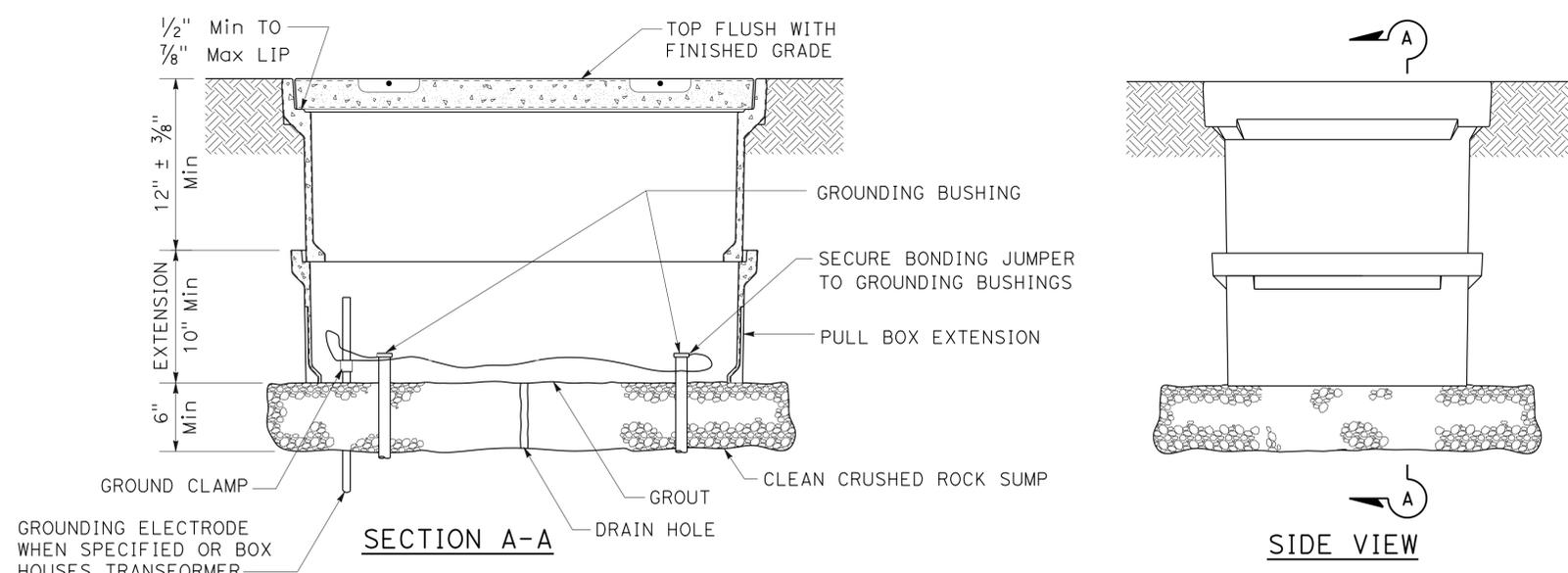
RSP D77A DATED JULY 20, 2012 SUPERSEDES STANDARD PLAN D77A
DATED MAY 20, 2011 - PAGE 164 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP D77A

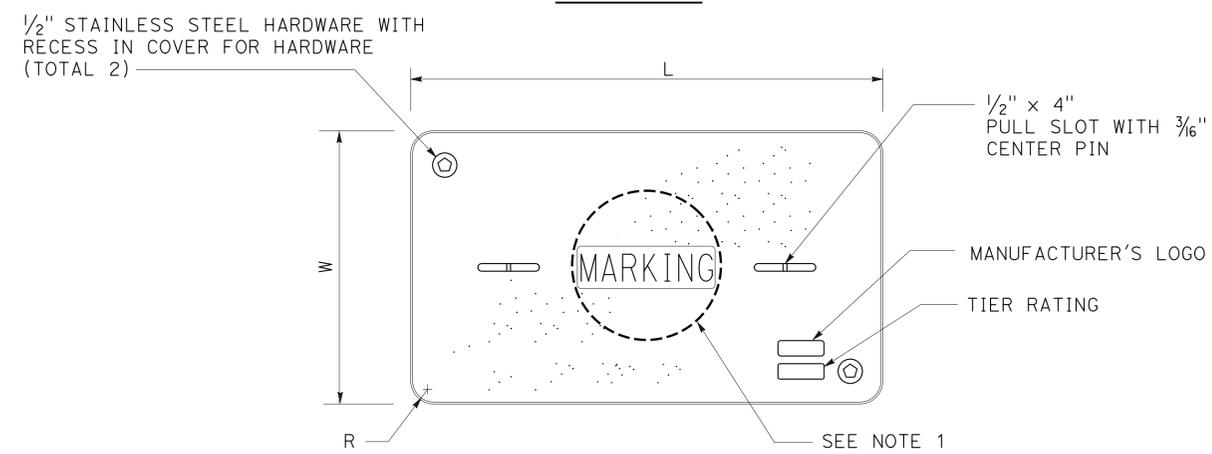
2010 REVISED STANDARD PLAN RSP D77A

BASIS FOR MISC IRON & STEEL FINAL PAY WEIGHTS FOR DRAINAGE INLETS
(See Note 7)

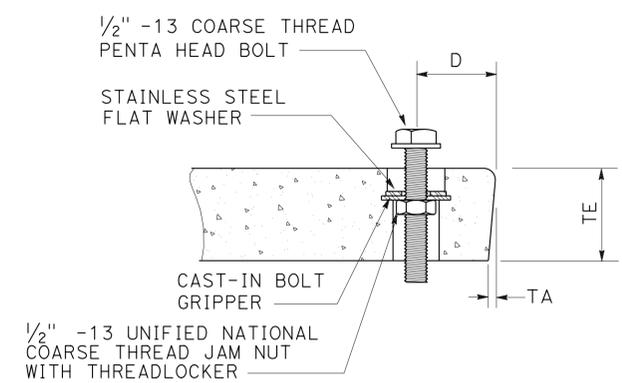
2010 REVISED STANDARD PLAN RSP ES-8A



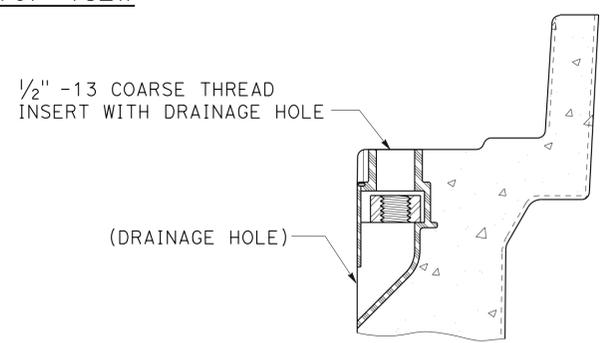
INSTALLATION DETAILS
DETAIL A



COVER TOP VIEW



TYPICAL COVER CAPTIVE BOLT
OR SIMILAR



TYPICAL THREADED INSERT
OR SIMILAR

NOTES ON PULL BOXES:

1. Pull box covers must be marked as follows: "SERVICE" Service circuits between service point and service disconnect; "SPRINKLER-CONTROL" sprinkler control circuits, 50 V or less; "CALTRANS" on all pull boxes, except pull boxes marked "SPRINKLER-CONTROL"; and "TELEPHONE" Telephone service;
 - A) No. 3/2 pull box.
 - 1) "SIGNAL" - Traffic signal circuits with or without street or sign lighting circuits.
 - 2) "ST LIGHTING" - Street or sign lighting circuits where voltage is under 600 V.
 - B) No. 5, 6, 9 or 9A pull box.
 - 1) "TRAFFIC SIGNAL" - Traffic signal circuits with or without street or sign lighting circuits.
 - 2) "STREET LIGHTING" - Street or sign lighting circuits where voltage is under 600 V.
 - 3) "STREET LIGHTING-HIGH VOLTAGE" - Street or sign lighting circuits where voltage is above 600 V.
 - 4) "IRRIGATION" - Circuits to irrigation controller 120 V or more.
 - 5) "RAMP METER" - Ramp meter circuits.
 - 6) "COUNT STATION" - Count or speed monitor circuits.
 - 7) "COMMUNICATIONS" - Communication circuits.
 - 8) "TOS COMMUNICATIONS" - TOS communication line.
 - 9) "TOS POWER" - TOS power.
 - 10) "TDC POWER" - Telephone demarcation cabinet power.
 - 11) "CCTV" - Closed circuit television circuits.
 - 12) "TMS" - Traffic monitoring station circuits.
 - 13) "CMS" - Changeable message sign circuits.
 - 14) "HAR" - Highway advisory radio circuits.
2. The nominal dimensions of the opening in which the cover sets must be the same as the cover dimensions (L and W) plus 1/8" or greater.
3. Covers and boxes must be interchangeable with California Standard. When interchanged with a standard, the top surfaces must be flush within 1/8". Top outside radius of covers and pull boxes must have a 1/8" radius.
4. Pull box extension may be another pull box as long as the bottom edge of the pull box can fit into the cover opening.

TO ACCOMPANY PLANS DATED 4-8-13

DIMENSION TABLE										
PULL BOX	PULL BOX			COVER						
	MINIMUM DEPTH BOX	MINIMUM DEPTH EXTENSION	MAXIMUM WEIGHT	L	W	R	TE	TA	D	MAXIMUM WEIGHT
No. 3/2	12"	N/A	40 lb	1' - 3 3/8"	10 1/8"	1 3/8"	2"	1/8"	1 3/4"	30 lb
No. 5	12"	10"	55 lb	1' - 11 1/4"	1' - 1 3/4"	1 3/8"	2"	1/8"	1 3/4"	60 lb
No. 6	12"	10"	70 lb	2' - 6 1/2"	1' - 5 1/2"	1 3/8"	2"	1/8"	2"	85 lb

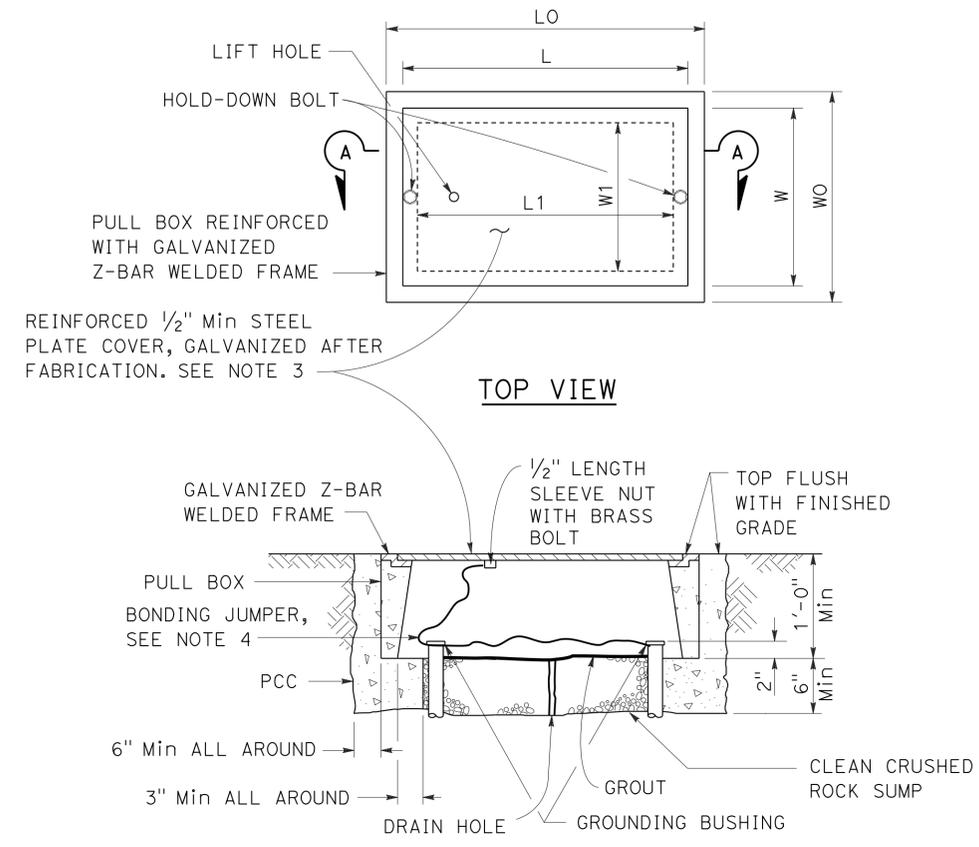
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
ELECTRICAL SYSTEMS
(PULL BOX)
 NO SCALE

RSP ES-8A DATED JANUARY 20, 2012 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
12	Ora	55	2.0/11.8	335	368

Jeffrey G. McRae
 REGISTERED ELECTRICAL ENGINEER
 January 20, 2012
 PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



**No. 3 1/2(T), No. 5(T) AND
 No. 6(T) TRAFFIC PULL BOX**

NOTES ON PULL BOXES:

- Traffic pull box shall be provided with steel cover and special concrete footing. Steel cover shall have embossed non-skid pattern.
- Steel reinforcing shall be as regularly used in the standard products of the respective manufacturer.
- Pull box covers must be marked as follows: "SERVICE" Service circuits between service point and service disconnect; "SPRINKLER-CONTROL" Sprinkler control circuits, 50 V or less; "CALTRANS" On all pull boxes, except pull boxes marked "SPRINKLER-CONTROL"; and "TELEPHONE" Telephone service.
 - No. 3 1/2(T) pull box.
 - "SIGNAL" - Traffic signal circuits with or without street or sign lighting circuits.
 - "ST LIGHTING" - Street or sign lighting circuits where voltage is under 600 V.
 - No. 5(T) or 6(T) pull box.
 - "TRAFFIC SIGNAL" - Traffic signal circuits with or without street or sign lighting circuits.
 - "STREET LIGHTING" - Street or sign lighting circuits where voltage is under 600 V.
 - "STREET LIGHTING-HIGH VOLTAGE" - Street or sign lighting circuits where voltage is above 600 V.
 - "IRRIGATION" - Circuits to irrigation controller 120 V or more.
 - "RAMP METER" - Ramp meter circuits.
 - "COUNT STATION" - Count or speed monitor circuits.
 - "COMMUNICATION" - Communication circuits.
 - "TOS COMMUNICATIONS" - TOS communications line.
 - "TOS POWER" - TOS power.
 - "TDC POWER" - Telephone demarcation cabinet power.
 - "CCTV" - Closed circuit television circuits.
 - "TMS" - Traffic monitoring station circuits.
 - "CMS" - Changeable message sign circuits.
 - "HAR" - Highway advisory radio circuits.
- Bonding jumper for metal covers shall be 3' long, minimum.
- The nominal dimensions of the opening in which the cover sets must be the same as the cover dimensions except the length and width dimensions shall be 1/8" greater.
- Covers and boxes must be interchangeable with California standard male and female gages. When interchanged with a standard male or female gage, the top surfaces must be flush within 1/8".

TO ACCOMPANY PLANS DATED 4-8-13

PULL BOX	BOX						COVER				
	MINIMUM * THICKNESS	MINIMUM DEPTH BOX AND EXTENSION	W0	L0	L1	W1	L **	W **	R	EDGE THICKNESS	EDGE TAPER
No. 3 1/2(T)	1 1/2"	1'-0"	1'-5"± 1"	1'-8 7/8"±	1'-2 1/2"±	10 5/8"± 1"	1'-8"±	1'-1 3/4"±	0"	1/2"	NONE
No. 5(T)	1 3/4"	1'-0"	1'-11 1/2"± 1"	2'-5 1/2"±	1'-7"±	1'-1"± 1"	2'-3"±	1'-4"±	0"	1/2"	NONE
No. 6(T)	2"	1'-0"	2'-6"± 1"	2'-11 1/2"±	1'-11 1/2"±	1'-5"± 1"	2'-9"±	1'-8"±	0"	1/2"	NONE

* EXCLUDING CONDUIT WEB ** TOP DIMENSION

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
 (TRAFFIC RATED PULL BOX)**
 NO SCALE

RSP ES-8B DATED JANUARY 20, 2012 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

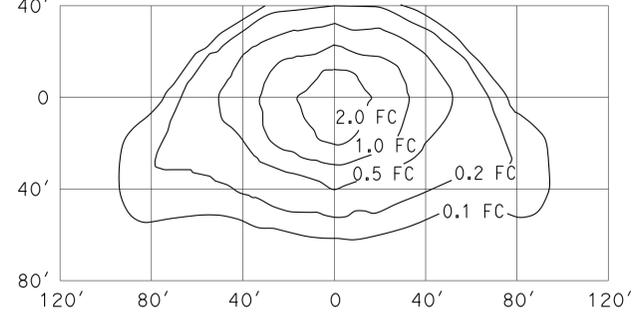
2010 REVISED STANDARD PLAN RSP ES-8B

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	336	368

Jeffrey B. McRae
 REGISTERED ELECTRICAL ENGINEER
 July 20, 2012
 PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

TO ACCOMPANY PLANS DATED 4-8-13

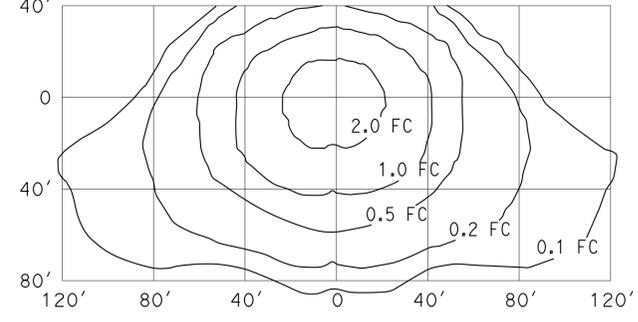
ISOFOOTCANDLE CURVE - MINIMUM



TYPE III MEDIUM CUTOFF

Cutoff Luminaire
 34' Mounting Height
 Lamp operated at 22,000 lm
 200-W high pressure sodium lamp
 ANSI Designation S66

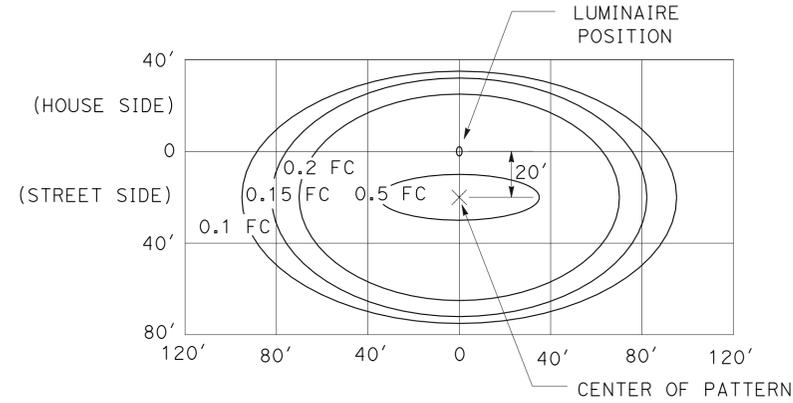
ISOFOOTCANDLE CURVE - MINIMUM



TYPE III MEDIUM CUTOFF

Cutoff Luminaire
 40' Mounting Height
 Lamp operated at 37,000 lm
 310-W high pressure sodium lamp
 ANSI Designation S67

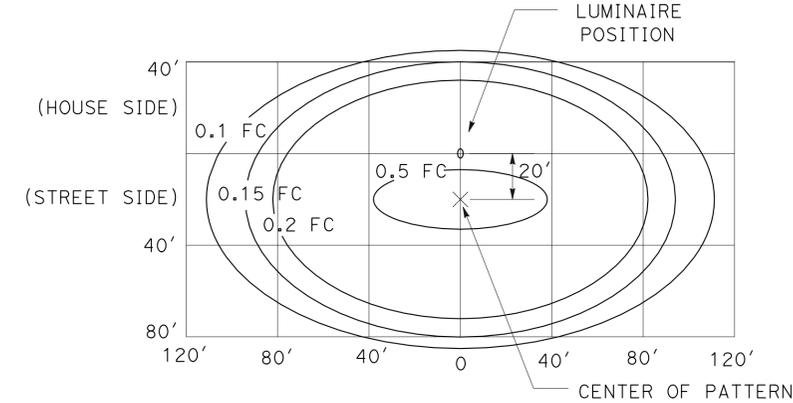
ISOFOOTCANDLE CURVE - MINIMUM



LED LUMINAIRE ROADWAY 1

200-W HPS Equivalent at 34' Mounting Height

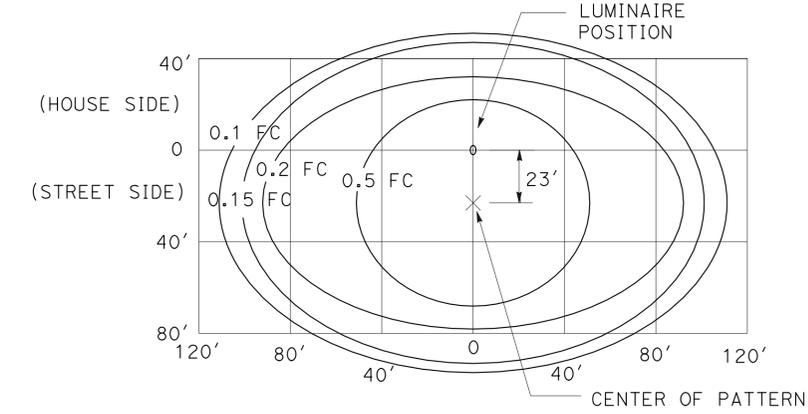
ISOFOOTCANDLE CURVE - MINIMUM



LED LUMINAIRE ROADWAY 2

310-W HPS Equivalent at 40' Mounting Height

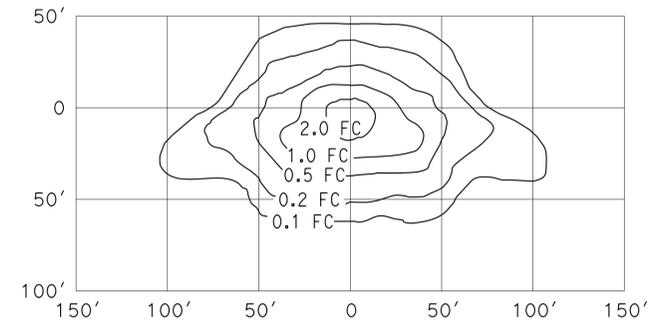
ISOFOOTCANDLE CURVE - MINIMUM



LED LUMINAIRE ROADWAY 4

400-W HPS Equivalent at 40' Mounting Height

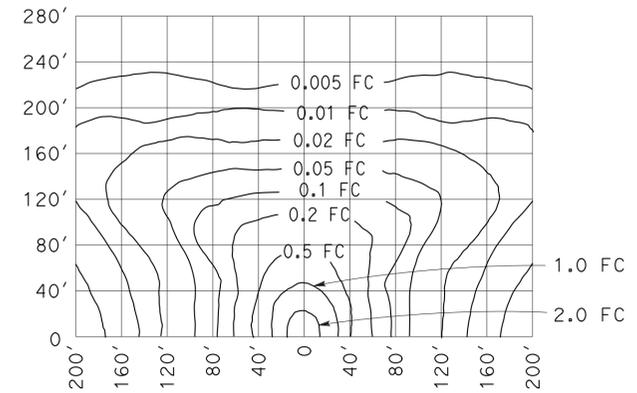
ISOFOOTCANDLE CURVE - MINIMUM



TYPE III MEDIUM CUTOFF

Cutoff Luminaire
 30' Mounting Height
 Lamp operated at 16,000 lm
 150-W high pressure sodium lamp
 ANSI Designation S55

ISOFOOTCANDLE CURVE - MINIMUM



LOW PRESSURE SODIUM LUMINAIRE

40' Mounting Height
 Lamp operated at 33,000 lm
 180-W low pressure sodium lamp

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

**ELECTRICAL SYSTEMS
 (ISOFOOTCANDLE DIAGRAMS)**

NO SCALE

RSP ES-10A DATED JULY 20, 2012 SUPPLEMENTS THE
 STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP ES-10A

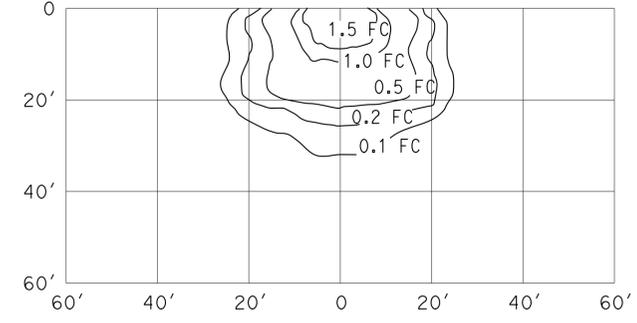
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
12	Ora	55	2.0/11.8	337	368

Jeffery G. McRae
 REGISTERED ELECTRICAL ENGINEER
 July 20, 2012
 PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER
 Jeffery G. McRae
 No. E14512
 Exp. 6-30-14
 ELECTRICAL
 STATE OF CALIFORNIA

TO ACCOMPANY PLANS DATED 4-8-13

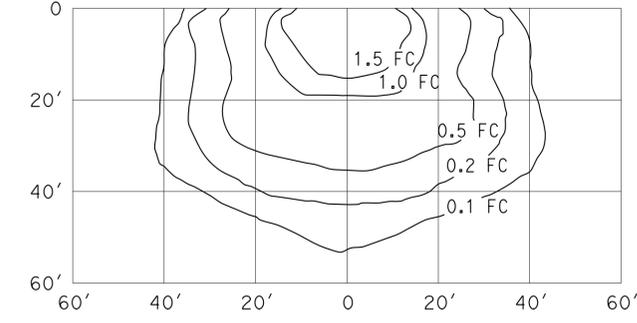
ISOFOOTCANDLE CURVE - MINIMUM



WALL LUMINAIRE

15' Mounting Height
 Lamp operated at 5,800 lm
 70-W high pressure sodium lamp
 ANSI Designation S62

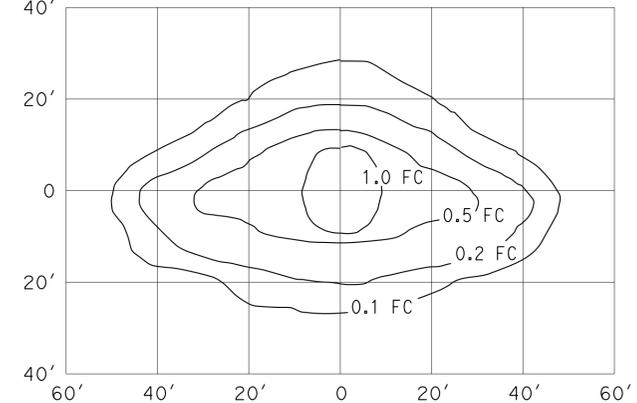
ISOFOOTCANDLE CURVE - MINIMUM



WALL LUMINAIRE

15' Mounting Height
 Lamp operated at 9,500 lm
 100-W high pressure sodium lamp
 ANSI Designation S54

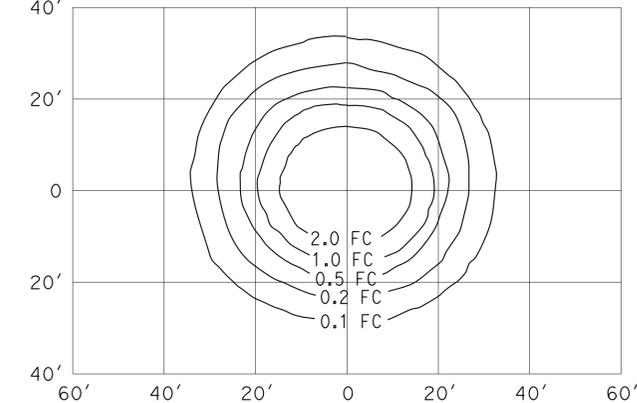
ISOFOOTCANDLE CURVE - MINIMUM



**PENDANT SOFFIT LUMINAIRE
 TYPE III SHORT**

17' Mounting Height
 Lamp operated at 5,800 lm
 70-W high pressure sodium lamp
 ANSI Designation S62

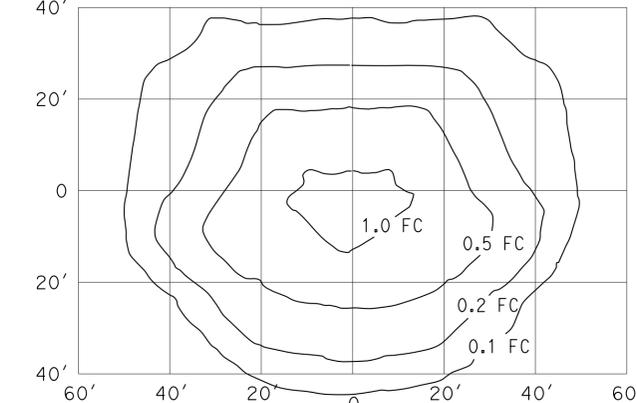
ISOFOOTCANDLE CURVE - MINIMUM



PENDANT SOFFIT LUMINAIRE

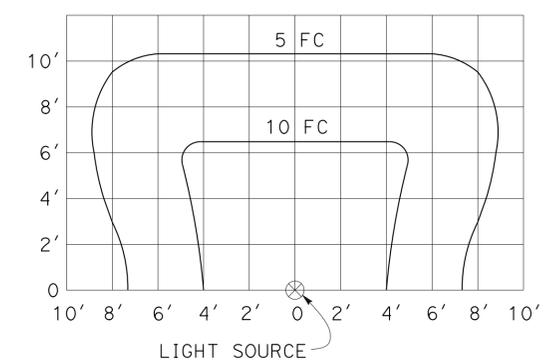
17' Mounting Height
 Lamp operated at 5,800 lm
 70-W high pressure sodium lamp
 ANSI Designation S62

ISOFOOTCANDLE CURVE - MINIMUM



FLUSH SOFFIT LUMINAIRE

17' Mounting Height
 Lamp operated at 5,800 lm
 70-W high pressure sodium lamp
 ANSI Designation S62



**SIGN LIGHTING FIXTURE
 ISOFOOTCANDLE DIAGRAM**

NOTES:

- Curves represent the minimum footcandle (FC) of initial illumination on a 10'-0" x 20'-0" panel.
- The FC shown are with the fixture attached to the light fixture mounting channel which places the center of the source 4'-8" in front of panel and 1'-0" below the bottom edge.
- Applicable lamp: 85-W fluorescent phosphor coated induction lamp.

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

**ELECTRICAL SYSTEMS
 (ISOFOOTCANDLE DIAGRAMS)**

NO SCALE

RSP ES-10B DATED JULY 20, 2012 SUPPLEMENTS THE
 STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP ES-10B

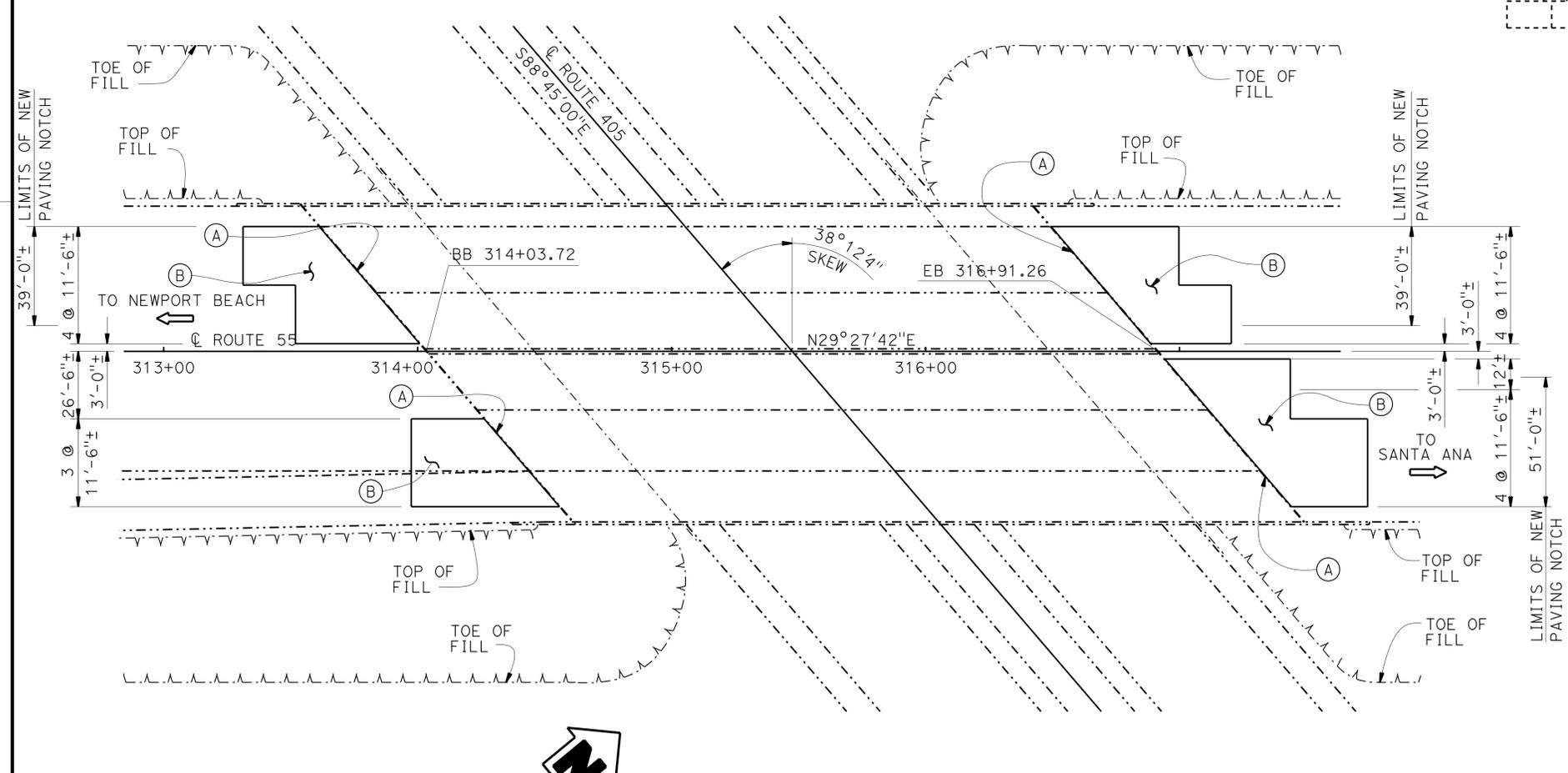
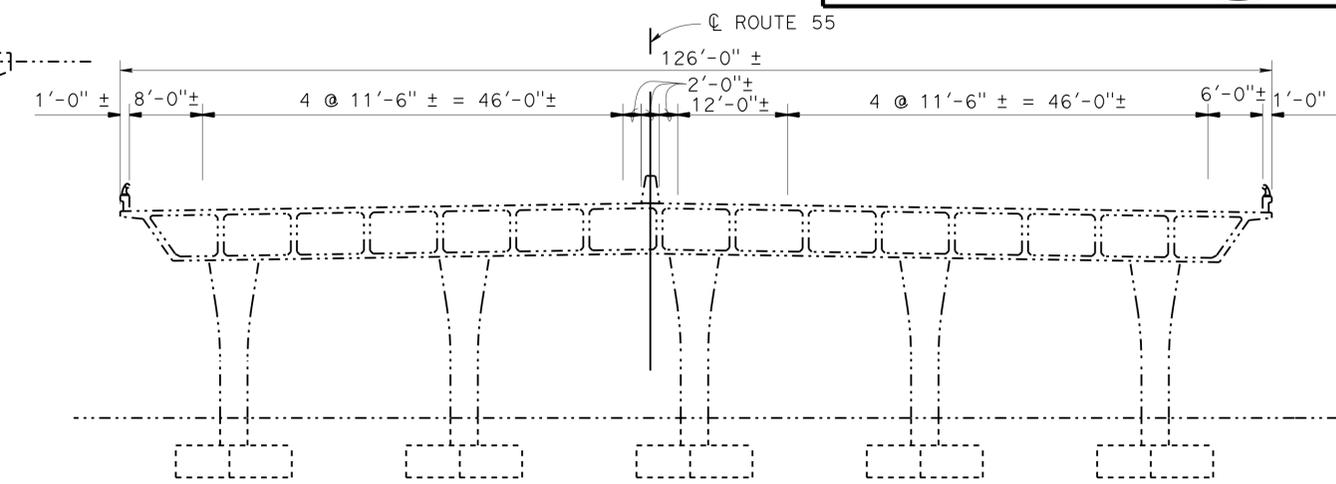
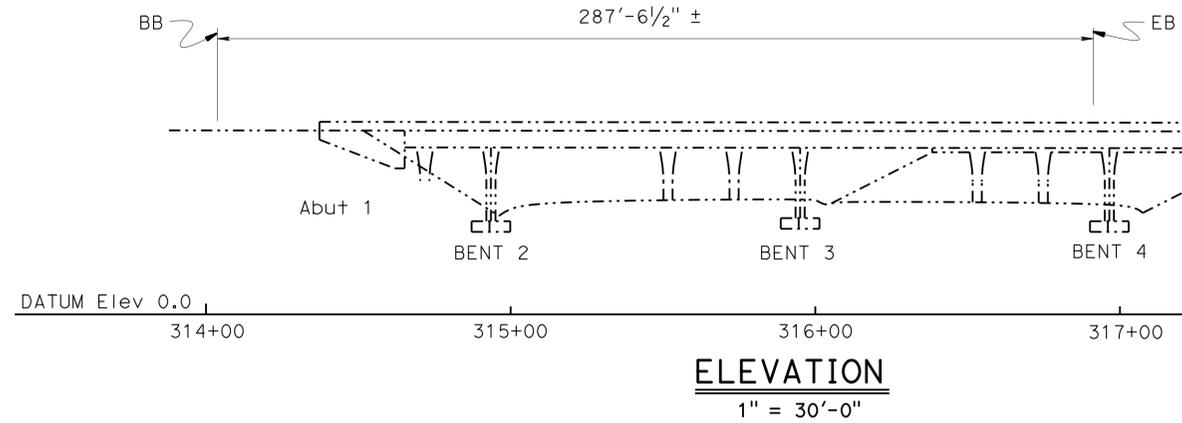
QUANTITIES	
AGGREGATE BASE (APPROACH SLAB)	28 CY
STRUCTURAL CONCRETE, APPROACH SLAB (TYPE R)	278 CY
PAVING NOTCH EXTENSION	156 CF
JOINT SEAL (MR 1")	234 LF

INDEX TO PLANS

SHEET NO.	TITLE
1	GENERAL PLAN
2	STRUCTURE APPROACH TYPE R(30D)

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	338	368

REGISTERED CIVIL ENGINEER *Douglas J. Dunrud* 1-7-13
 DATE
 4-8-13
 PLANS APPROVAL DATE
 REGISTERED PROFESSIONAL ENGINEER
 DOUGLAS JAMES DUNRUD
 No. C47240
 Exp. 12-30-13
 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.

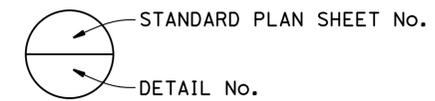


LOCATION	PAVING NOTCH	JOINT SEAL LENGTH (FEET)	APPROX DEPTH TO CLEAN JOINT SEAL (INCHES)
N/B APPROACH	YES	43.89 ±	N/A
N/B DEPARTURE	YES	73.80 ±	N/A
S/B APPROACH	YES	58.50 ±	N/A
S/B DEPARTURE	YES	58.80 ±	N/A

- NOTES:
- (A) Replace Joint Seal (MR=1")
 - (B) Structure Approach Type R(30D)
 - Indicates existing structure

STANDARD PLANS DATED 2010

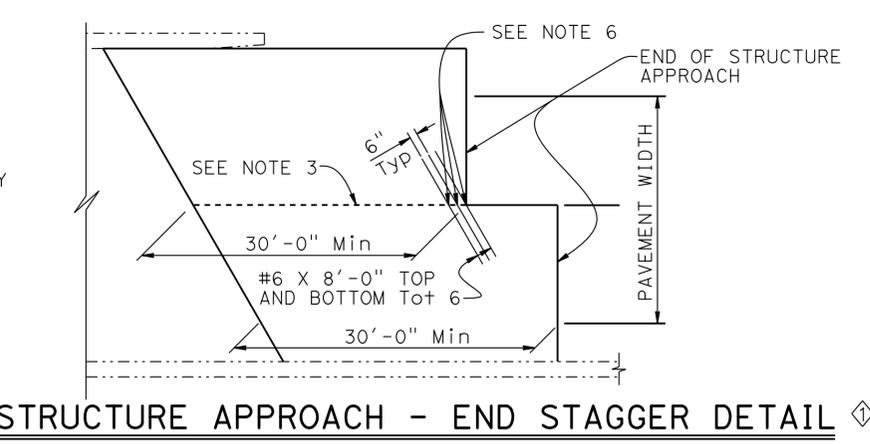
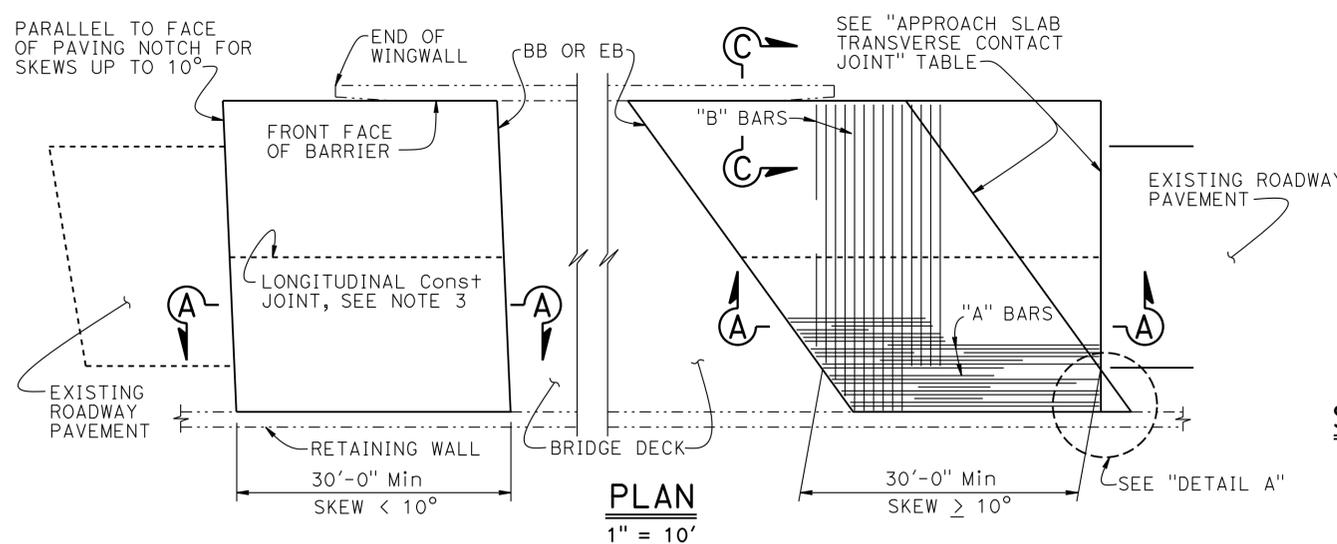
A10A ABBREVIATIONS (SHEET 1 OF 2)
 A10B ABBREVIATIONS (SHEET 2 OF 2)
 B6-21 JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")



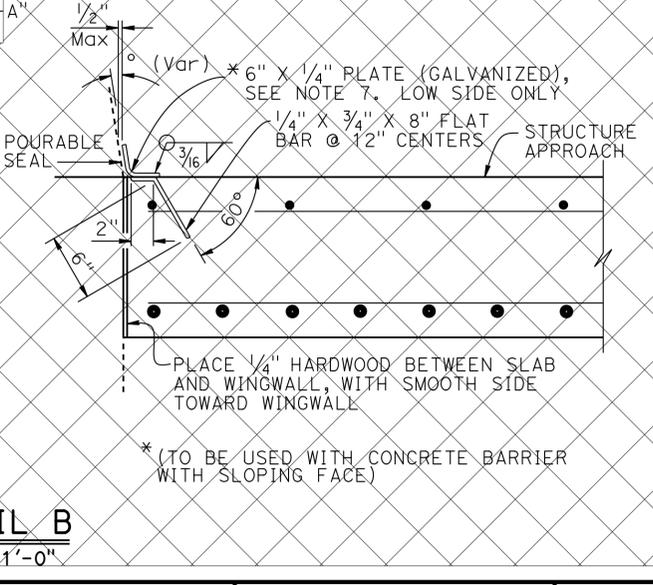
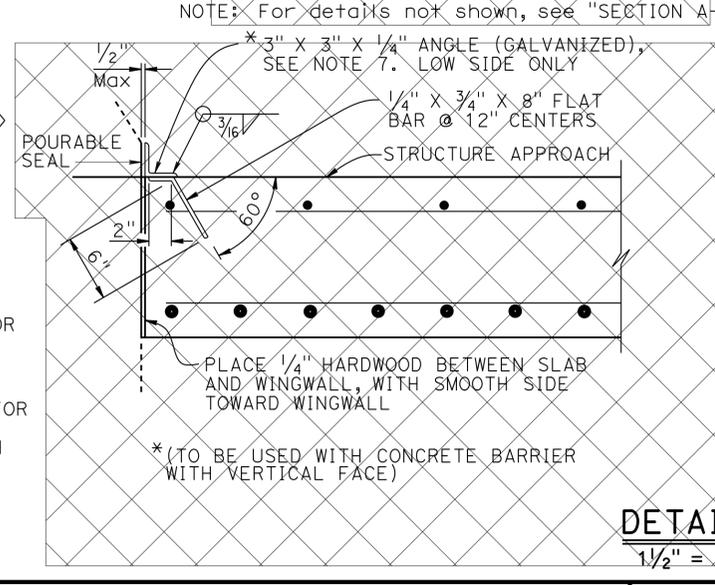
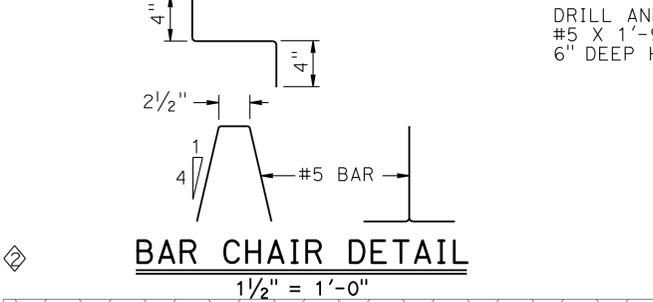
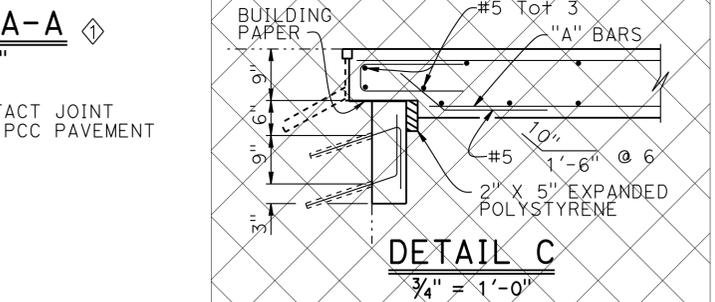
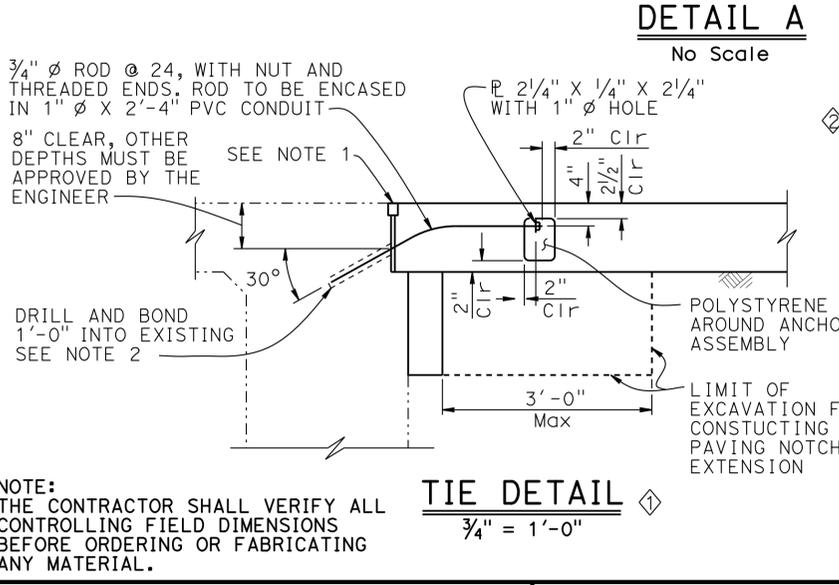
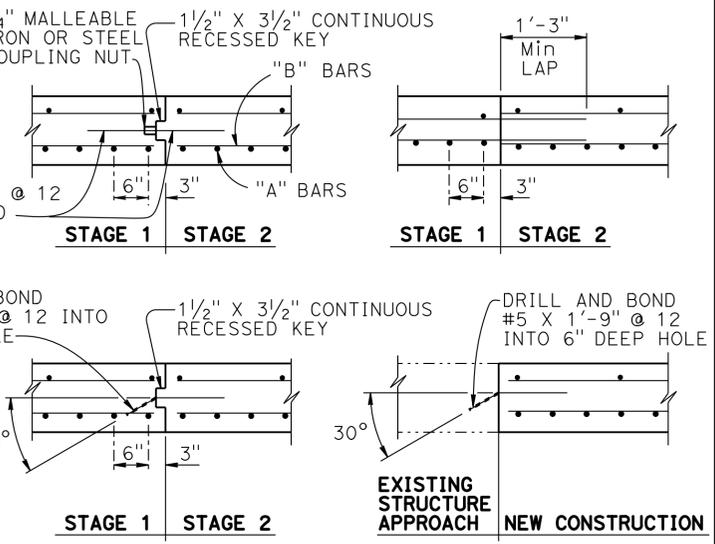
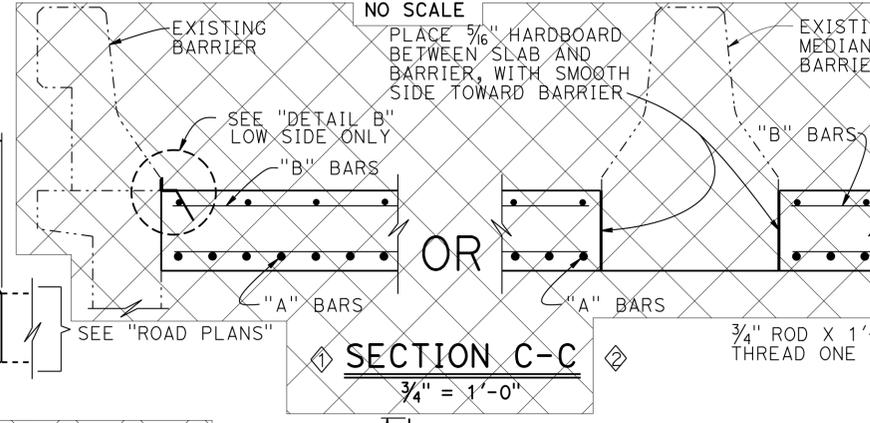
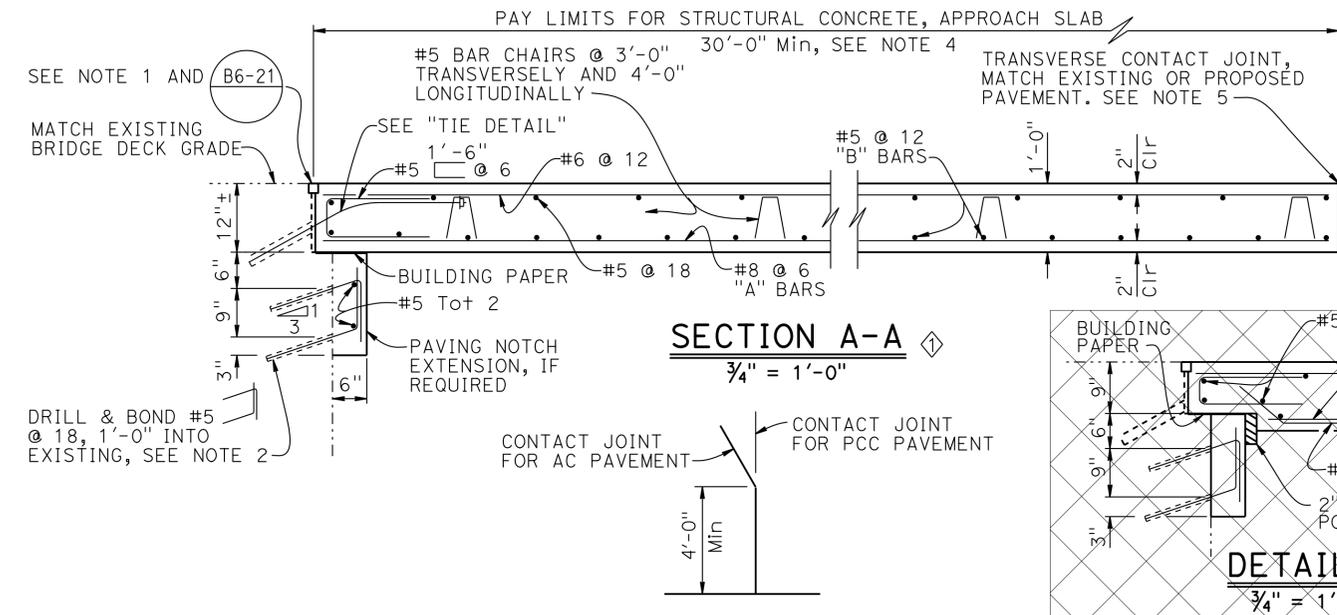
NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

NOTE:
Exact locations of Approach Slabs to be determined by the Field Engineer.

 DESIGN ENGINEER 1-7-13	DESIGN	BY S. Galgiani	CHECKED L. Han	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 14	BRIDGE NO.	55-0252	ROUTE 55/405 SEPARATION GENERAL PLAN	
	DETAILS	BY L. Xiong	CHECKED S. Galgiani	LAYOUT	BY S. Galgiani		POST MILE	R5.99		
	QUANTITIES	BY S. Galgiani	CHECKED L. Han	SPECIFICATIONS	BY Karen Doll		PLANS AND SPECS COMPARED	Karen Doll		
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS						UNIT: 3613 PROJECT NUMBER & PHASE: 1213000066	CONTRACT NO.: 12-0L74U1	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES 11-29-12 12-28-12 12-31-12 1-3-13	SHEET 1 OF 2



APPROACH SLAB TRANSVERSE CONTACT JOINT		
APPROACH SKEW	WITH AC ROADWAY PAVEMENT	WITH PCC ROADWAY PAVEMENT
< 10°	PARALLEL TO FACE OF PN	PARALLEL TO FACE OF PAVING NOTCH
10° - 45°	PARALLEL TO FACE OF PN USE "DETAIL A"	STAGGER LINES 24' TO 36' APART
> 45°	PARALLEL TO FACE OF PN USE "DETAIL A"	STAGGER AT EACH LANE LINE



- NOTES:
- For details not shown or noted, see Structure Plans. Adjust bar reinforcement to clear a sawcut for sealed joint, when required
 - Space to avoid existing prestress anchorages and main reinforcement
 - Longitudinal construction joints, when permitted by the Engineer, shall be located on lane lines
 - Transverse contact joint shall be a minimum of 5'-0" from an existing or constructed weakened plane joint
 - For transverse contact joint with new PCC paving, refer to Standard Plan P10
 - Couplers are required for stage construction
 - End angle or plate at beginning of barrier transition, end of wingwall or end of structure approach as applicable

REVISED STANDARD DRAWING
 FILE NO. **xs3-150**
 APPROVAL DATE July 2011

MODIFIED DETAILS
 DELETED DETAILS

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF ENGINEERING SERVICES
 BRIDGE NO. 55-0252
 POST MILE R5.99

ROUTE 55/405 SEPARATION
 STRUCTURE APPROACH TYPE R(30D)
 REVISION DATES SHEET OF
 11-29-12 2 2

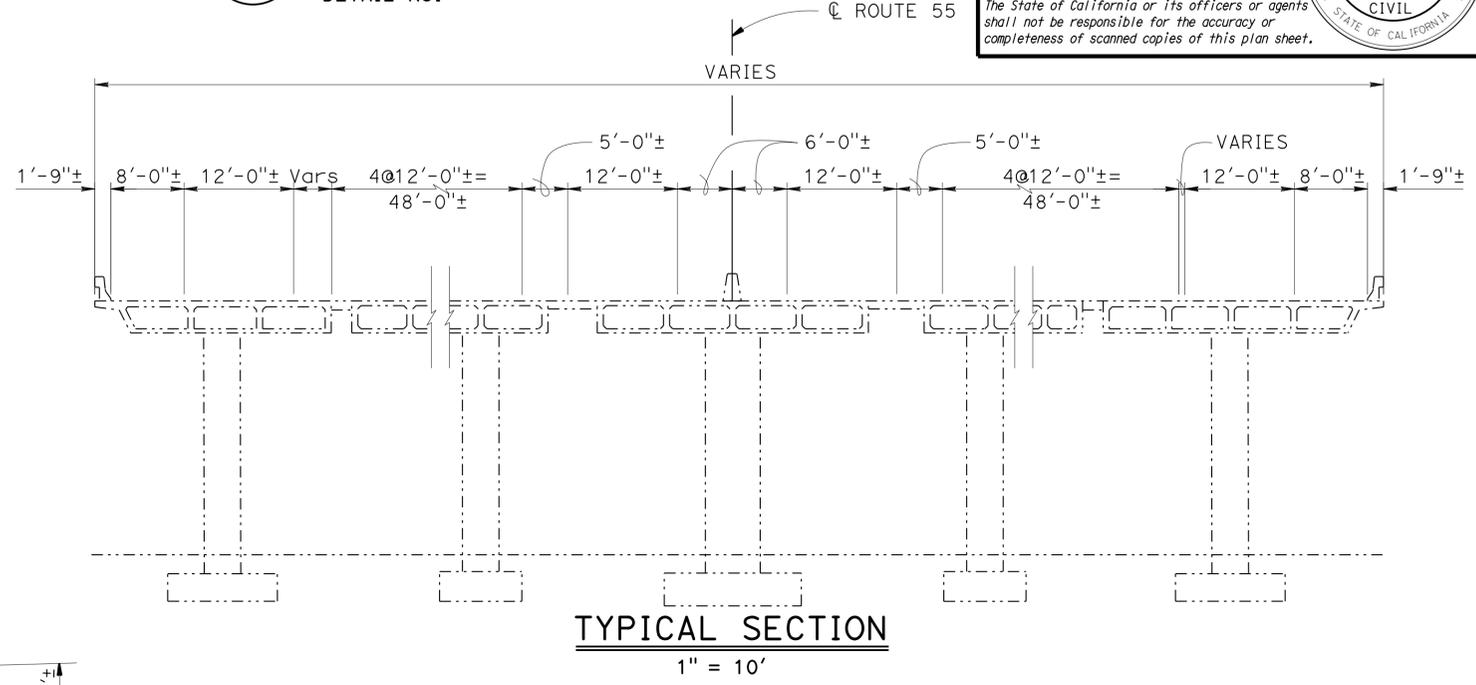
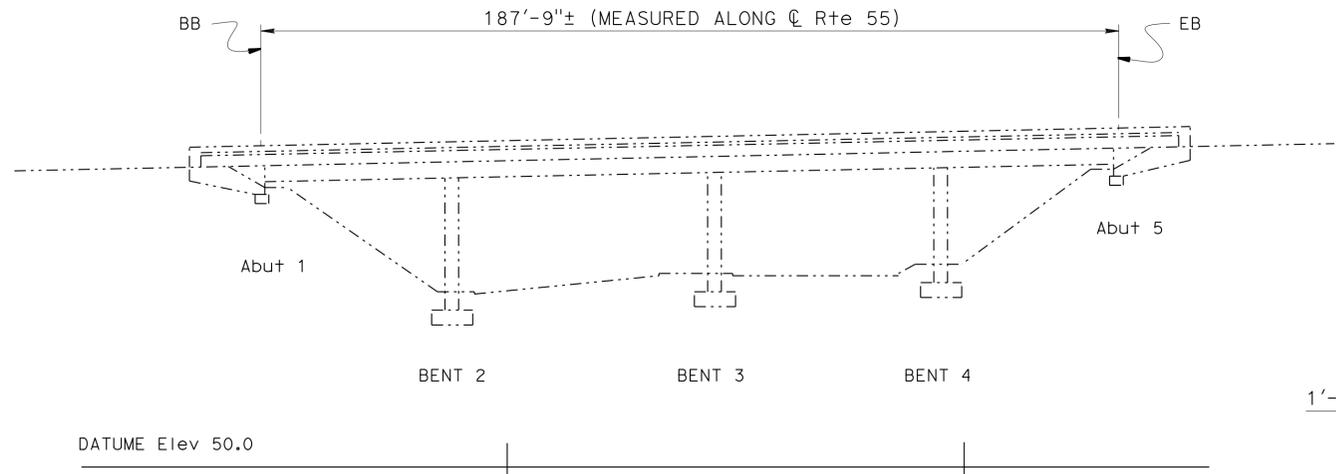
STANDARD PLANS DATED 2010

A10A ABBREVIATIONS (SHEET 1 OF 2)
 A10B ABBREVIATIONS (SHEET 2 OF 2)
 B6-21 JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")

STANDARD PLAN SHEET No. 
 DETAIL No. 

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	340	368

REGISTERED CIVIL ENGINEER *Douglas J. Dunrud* 1-7-13 DATE
 PLANS APPROVAL DATE 4-8-13
 No. C47240 Exp. 12-30-13
 CIVIL
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.



QUANTITIES

PUBLIC SAFETY PLAN	LUMP SUM
RAPID SETTING CONCRETE (PATCH)	65 CF
REMOVE UNSOUND CONCRETE	65 CF
PREPARE CONCRETE BRIDGE DECK SURFACE	25,944 SQFT
TREAT BRIDGE DECK	25,944 SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	360 GAL
AGGREGATE BASE (APPROACH SLAB)	5 CY
STRUCTURAL CONCRETE, APPROACH SLAB (TYPE R)	53 CY
PAVING NOTCH EXTENSION	36 CF
JOINT SEAL (MR 1")	48 LF

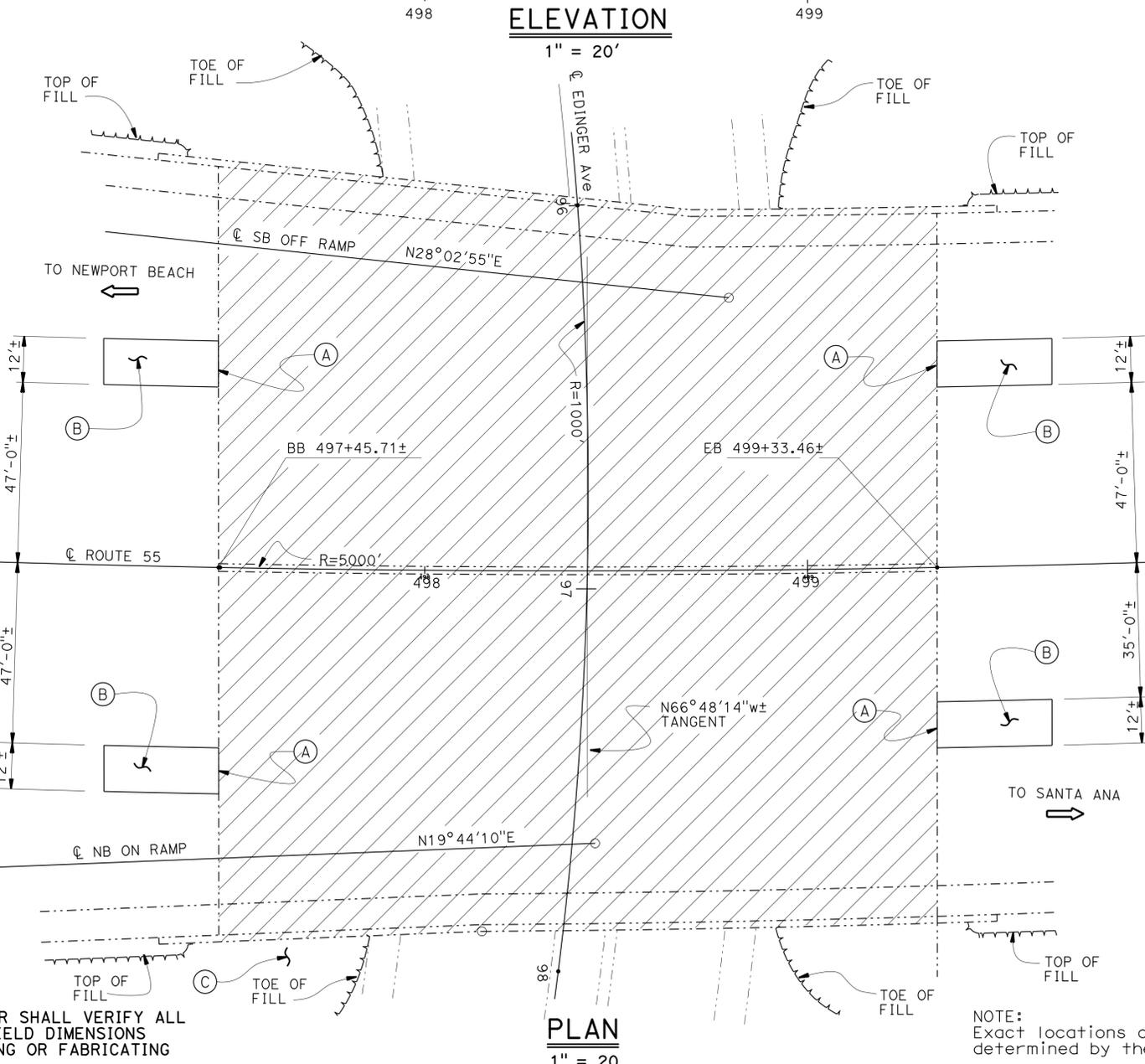
JOINT SEAL / PAVING NOTCH TABLE

LOCATION	PAVING NOTCH	JOINT SEAL LENGTH (FEET)	APPROX DEPTH TO CLEAN JOINT SEAL (INCHES)
N/B APPROACH	NO	12 ±	N/A
N/B DEPARTURE	NO	12 ±	N/A
S/B APPROACH	NO	12 ±	N/A
S/B DEPARTURE	NO	12 ±	N/A

- NOTES:
- (A) Replace Joint Seal (MR=1")
 - (B) Structure Approach Type R(30D)
 - (C) Backfill and Compact Erosion Gully on Southerly Abutment (See Road Plans)
 - Indicates existing structure
 -  Indicates Limits of Prepare Concrete Bridge Deck and treat with High Molecular Weight Methacrylate and remove unsound concrete and patch with rapid setting concrete (Patch)

INDEX TO PLANS

SHEET No.	TITLE
1	GENERAL PLAN
2	MISCELLANEOUS DETAILS
3	STRUCTURE APPROACH TYPE R(30D)



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

NOTE:
 Exact locations of Approach Slabs to be determined by the Field Engineer.

Douglas J. Dunrud 1-7-13
 DESIGN ENGINEER

DESIGN	BY S. Galgiani	CHECKED L. Han	LOAD & RESISTANCE FACTOR DESIGN	LIVE LOADING: HL93 W/"LOW-BOY"; PERMIT DESIGN VEHICLE
DETAILS	BY M. Lane	CHECKED S. Galgiani	LAYOUT	BY S. Galgiani
QUANTITIES	BY S. Galgiani	CHECKED L. Han	SPECIFICATIONS	BY Karen Doll

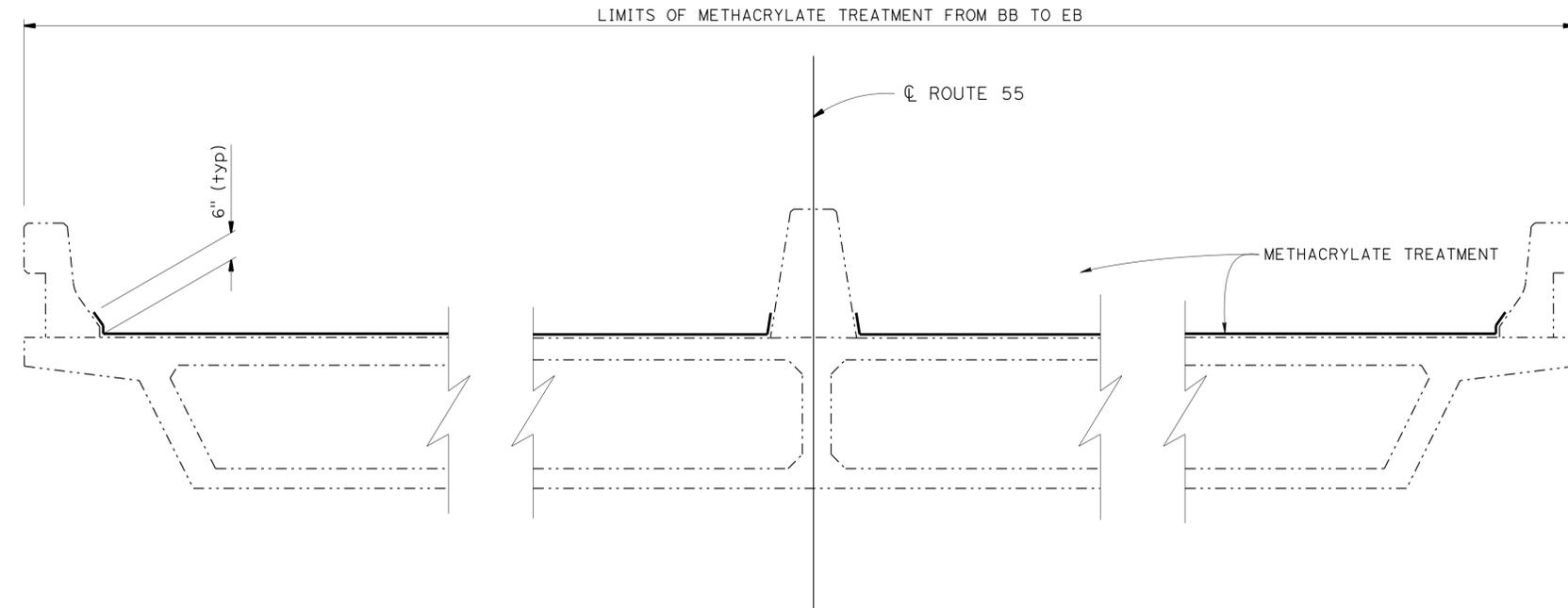
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 14

BRIDGE NO. 55-0393
 POST MILE R9.44
EDINGER AVENUE UNDERCROSSING
GENERAL PLAN

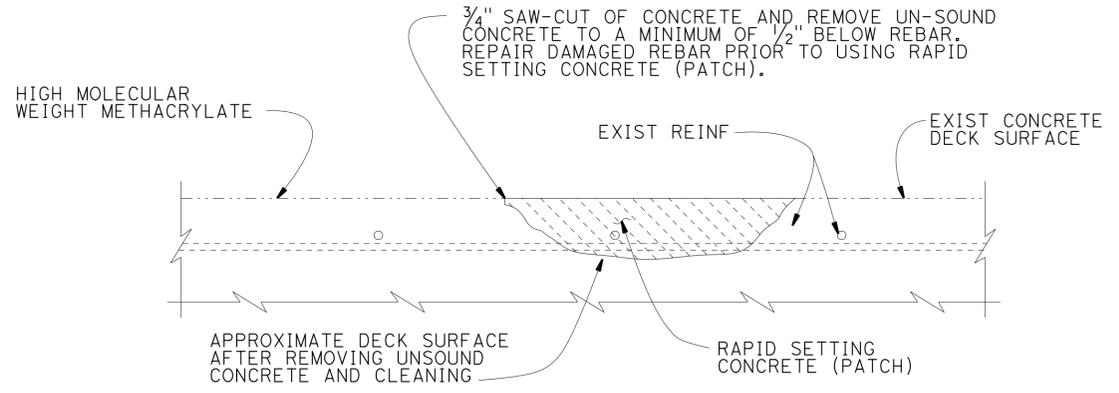
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	341	368

REGISTERED CIVIL ENGINEER *Douglas J. Dunrud* DATE 1-7-13
 PLANS APPROVAL DATE 4-8-13
 REGISTERED PROFESSIONAL ENGINEER
 DOUGLAS JAMES DUNRUD
 No. C47240
 Exp. 12-30-13
 CIVIL
 STATE OF CALIFORNIA
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.



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

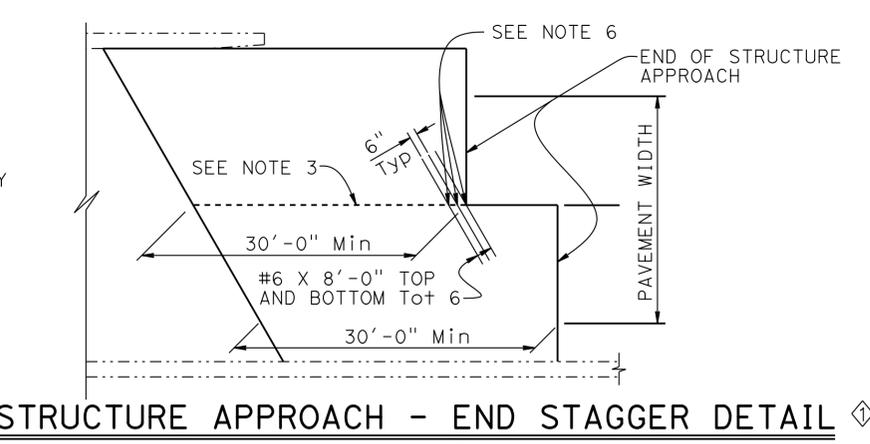
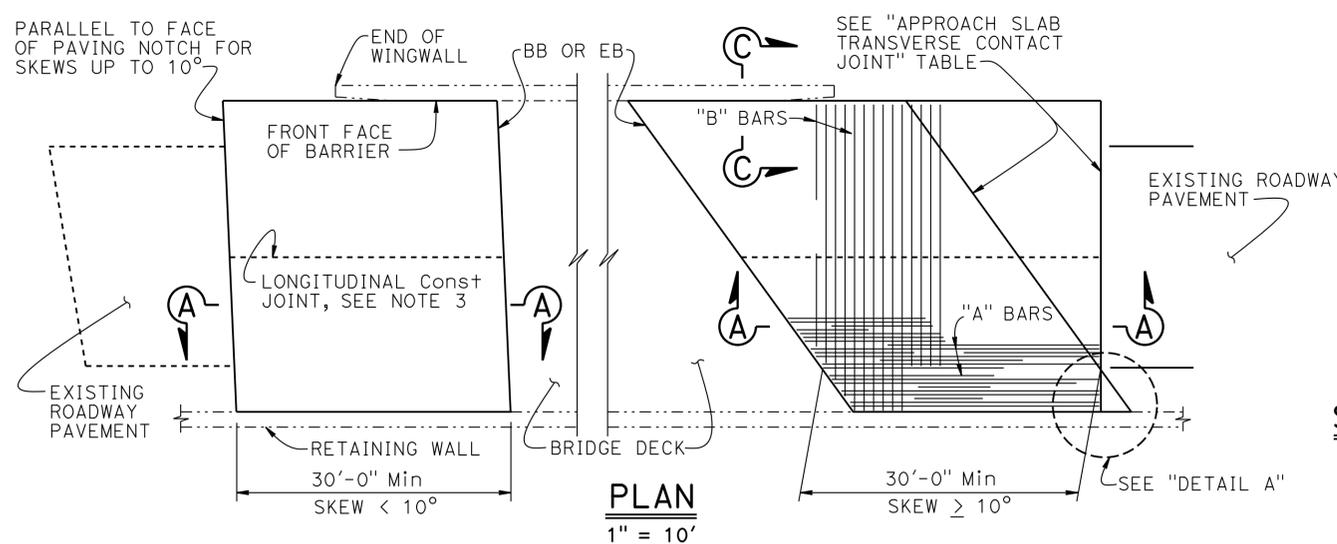
CONCRETE REPAIR TABLE				
APPROXIMATE AREA DAMAGED (PERCENT)	AVERAGE DEPTH (INCHES)	APPROXIMATE DECK AREA (SQ FT)	UNBOUND CONCRETE (CF)	RAPID SETTING CONCRETE PATCH (CF)
1	3	25,944	65	65



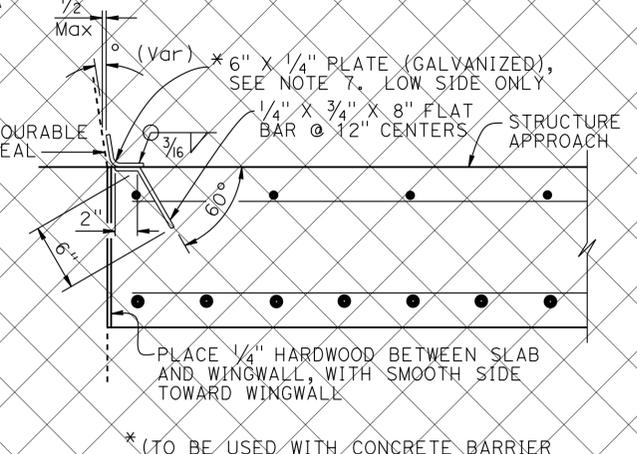
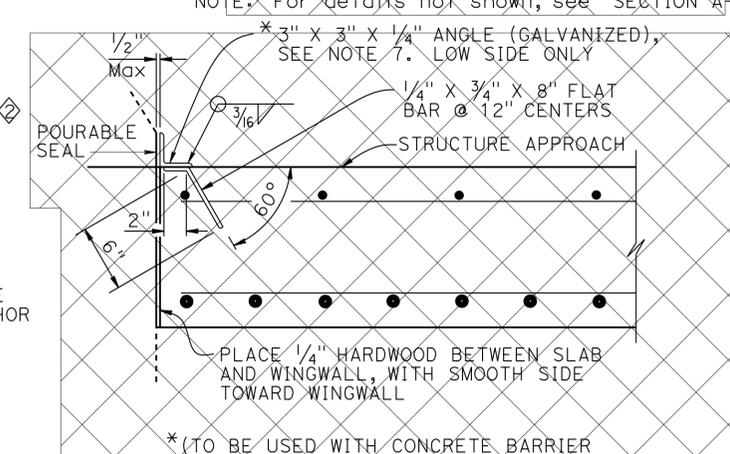
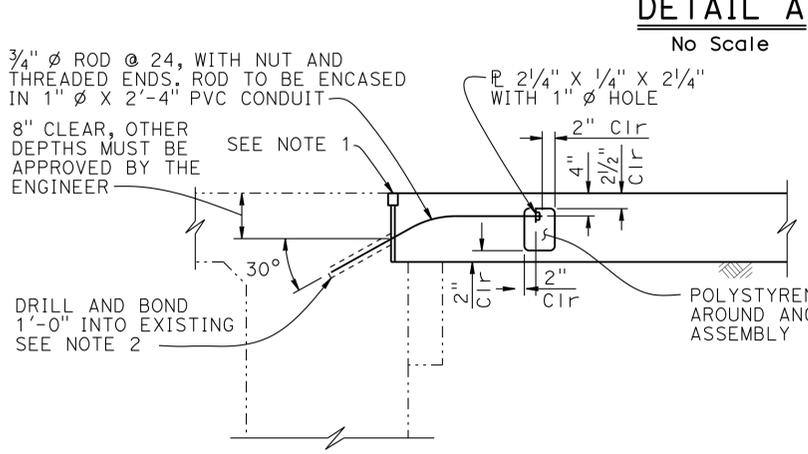
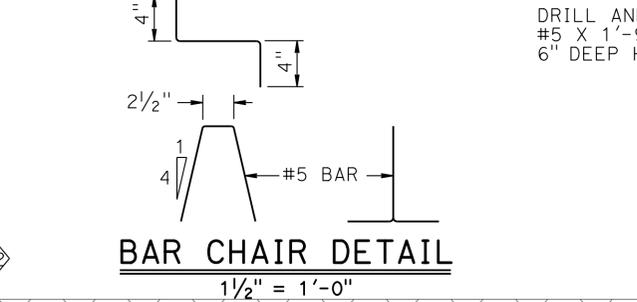
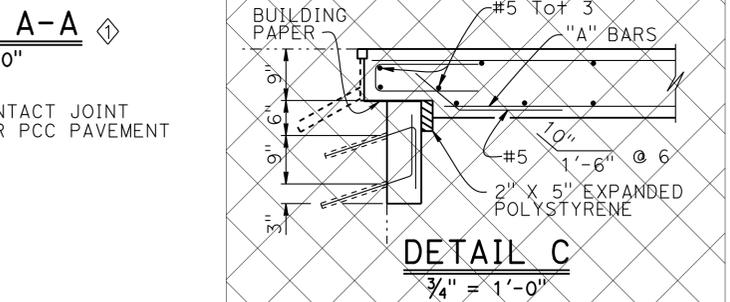
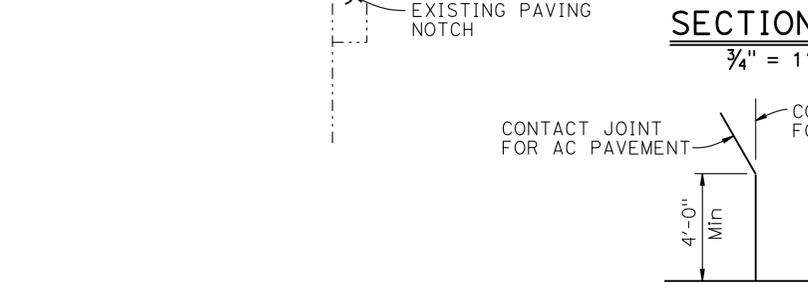
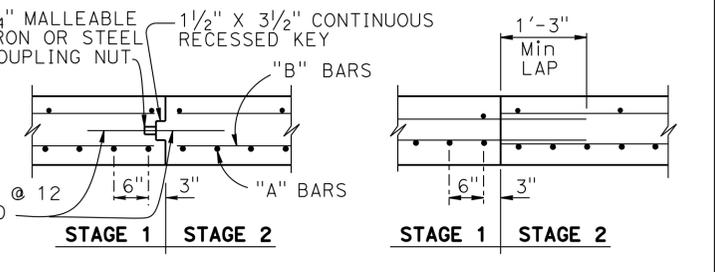
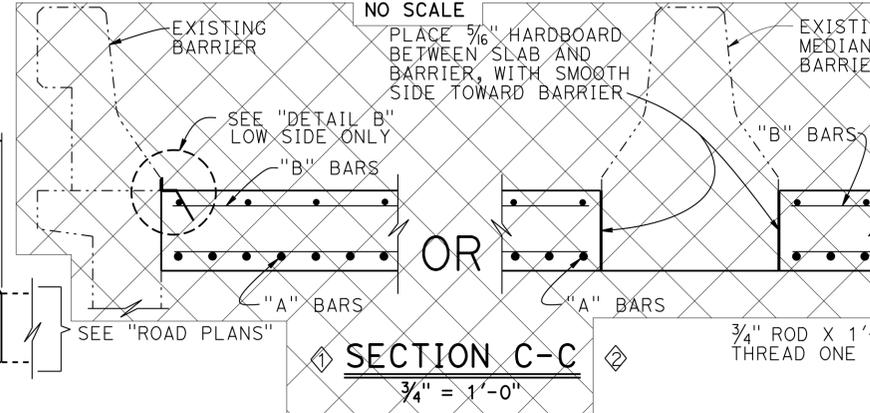
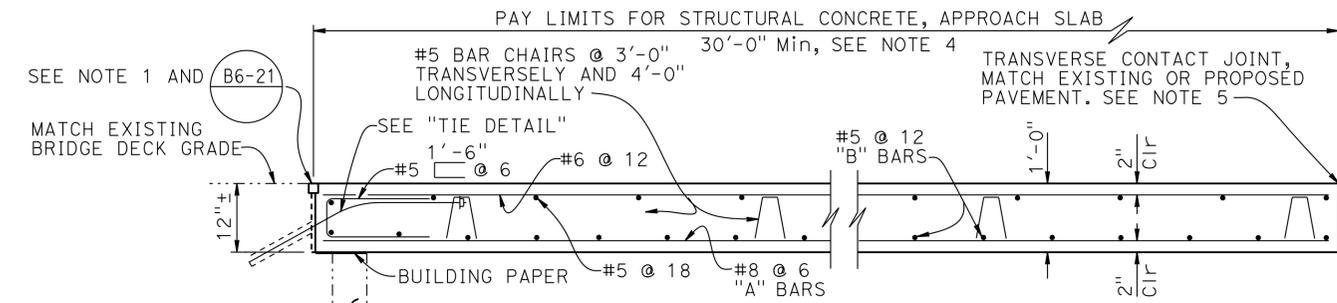
DECK REPAIR DETAIL
REINFORCEMENT MAY BE ENCOUNTERED DURING DECK CONCRETE REMOVAL.
NO SCALE

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3	DESIGN BY S. Galgiani CHECKED L. Han	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 14	BRIDGE NO. 55-0393	EDINGER AVENUE UNDERCROSSING MICELLANEOUS DETAILS	
	DETAILS BY L. Xiong CHECKED S. Galgiani			POST MILE R9.44		
	QUANTITIES BY S. Galgiani CHECKED L. Han			UNIT: 3613 PROJECT NUMBER & PHASE: 1213000066 CONTRACT NO.: 12-0L74U1		
DISREGARD PRINTS BEARING EARLIER REVISION DATES					REVISION DATES: 10-28-12, 11-28-12, 1-3-13	SHEET 2 OF 3

USERNAME => s114926 DATE PLOTTED => 12-APR-2013 TIME PLOTTED => 1:31:11



APPROACH SLAB TRANSVERSE CONTACT JOINT		
APPROACH SKEW	WITH AC ROADWAY PAVEMENT	WITH PCC ROADWAY PAVEMENT
< 10°	PARALLEL TO FACE OF PN	PARALLEL TO FACE OF PAVING NOTCH
10° - 45°	PARALLEL TO FACE OF PN USE "DETAIL A"	STAGGER LINES 24' TO 36' APART
> 45°	PARALLEL TO FACE OF PN USE "DETAIL A"	STAGGER AT EACH LANE LINE



- NOTES:
- For details not shown or noted, see Structure Plans. Adjust bar reinforcement to clear a sawcut for sealed joint, when required
 - Space to avoid existing prestress anchorages and main reinforcement
 - Longitudinal construction joints, when permitted by the Engineer, shall be located on lane lines
 - Transverse contact joint shall be a minimum of 5'-0" from an existing or constructed weakened plane joint
 - For transverse contact joint with new PCC paving, refer to Standard Plan P10
 - Couplers are required for stage construction
 - End angle or plate at beginning of barrier transition, end of wingwall or end of structure approach as applicable

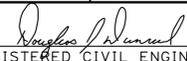
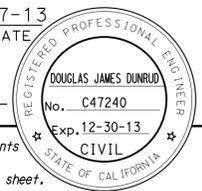
NOTE: THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

REVISED STANDARD DRAWING
 FILE NO. **xs3-150**
 APPROVAL DATE July 2011

◊ MODIFIED DETAILS
 ◊ DELETED DETAILS

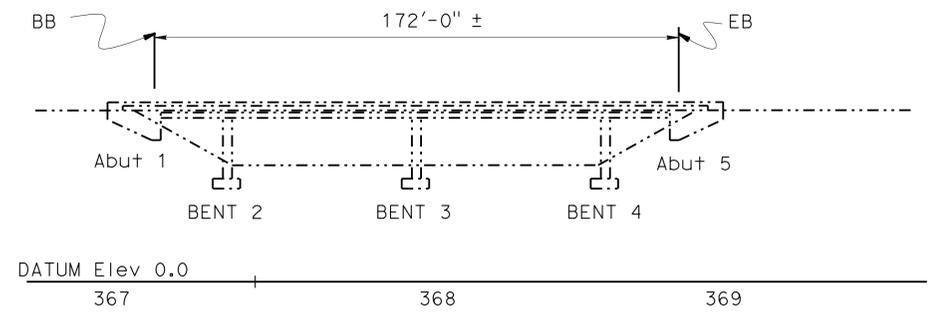
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF ENGINEERING SERVICES
 BRIDGE NO. 55-0393
 POST MILE R9.44

EDINGER AVENUE UNDERCROSSING
STRUCTURE APPROACH TYPE R(30D)

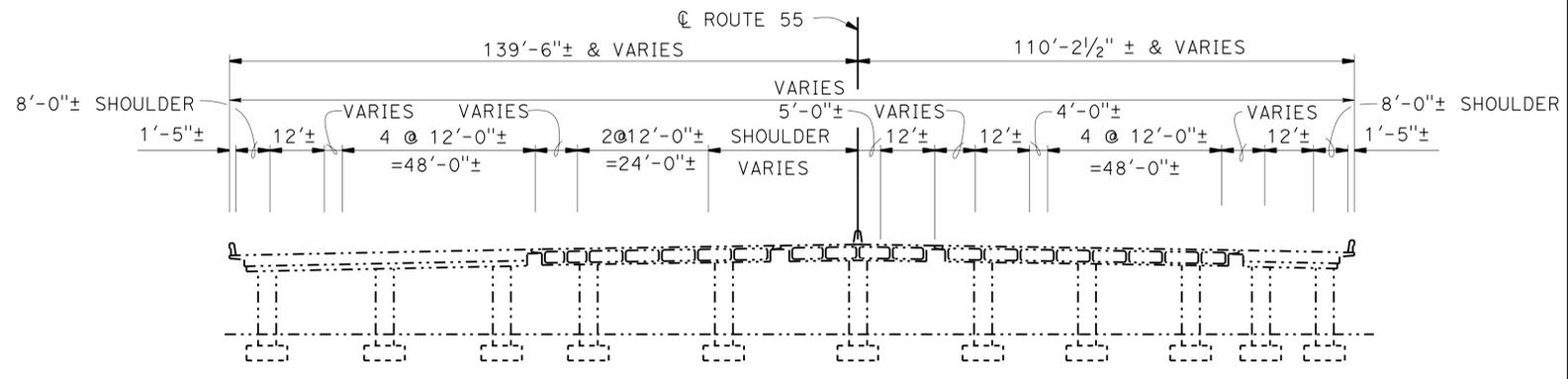
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	343	368
 REGISTERED CIVIL ENGINEER			1-7-13	DATE	
4-8-13 PLANS APPROVAL DATE					
<small>The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.</small>					

QUANTITIES

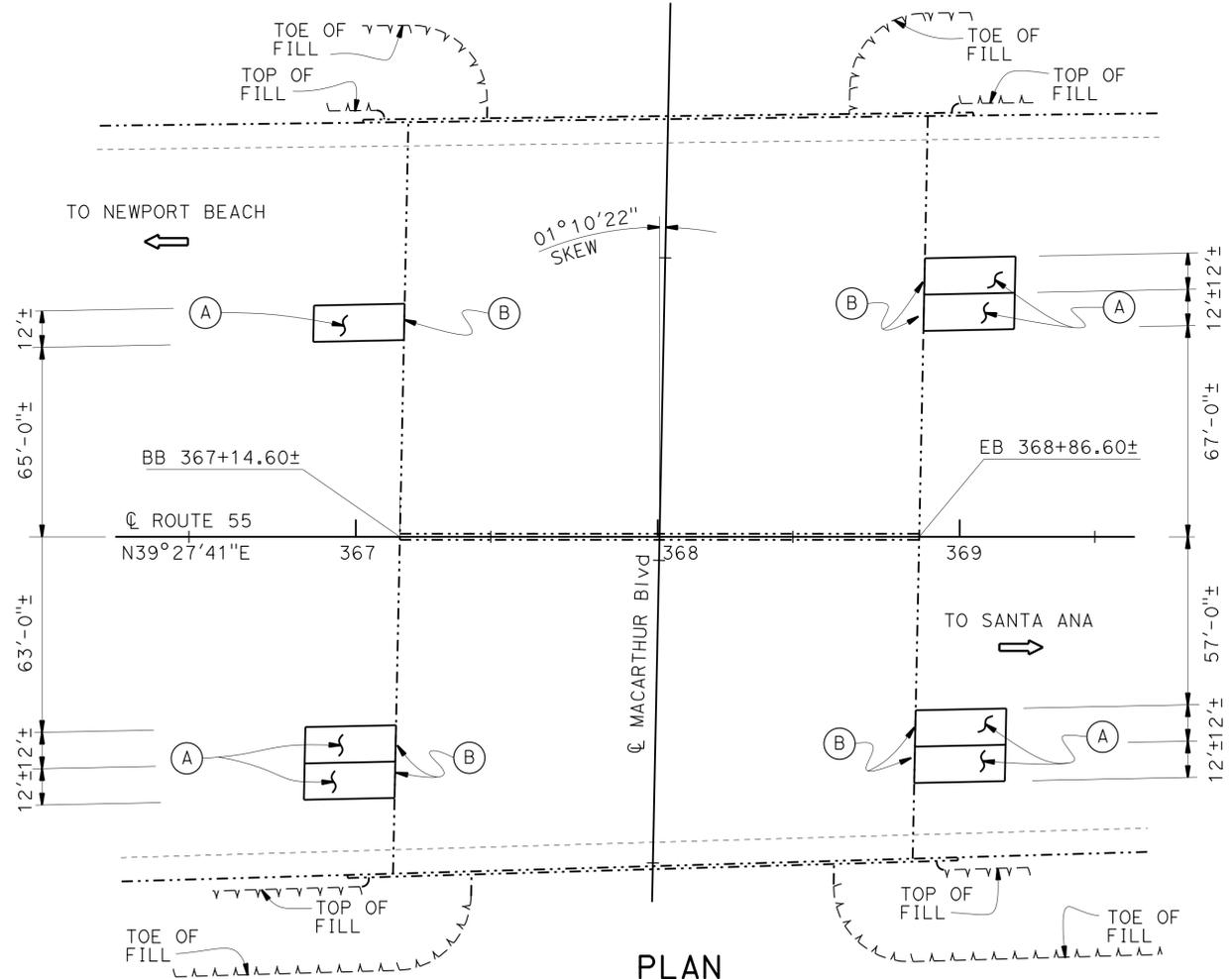
AGGREGATE BASE (APPROACH SLAB)	10	CY
STRUCTURAL CONCRETE, APPROACH SLAB (TYPE R)	93	CY
PAVING NOTCH EXTENSION	63	CF
JOINT SEAL (MR 1")	84	LF



ELEVATION
1" = 30'-0"



TYPICAL SECTION
1" = 10'-0"



PLAN
1" = 30'-0"

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

NOTE:
Exact locations of Approach Slabs to be determined by the Field Engineer.

JOINT SEAL / PAVING NOTCH TABLE

LOCATION	PAVING NOTCH	JOINT SEAL LENGTH (FEET)	APPROX DEPTH TO CLEAN JOINT SEAL (INCHES)
N/B APPROACH LANES 3 & 4	YES	24	N/A
N/B DEPARTURE LANES 3 & 4	YES	24	N/A
S/B APPROACH LANES 1 & 2	YES	24	N/A
S/B DEPARTURE LANE 1	YES	12	N/A

INDEX TO PLANS

SHEET NO.	TITLE
1	GENERAL PLAN
2	STRUCTURE APPROACH TYPE R(30D)

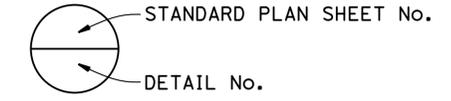
NOTES:

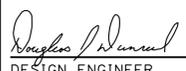
- (A) Structure Approach Type R(30D)
- (B) Replace Joint Seal (MR=1")

----- Indicates existing structure

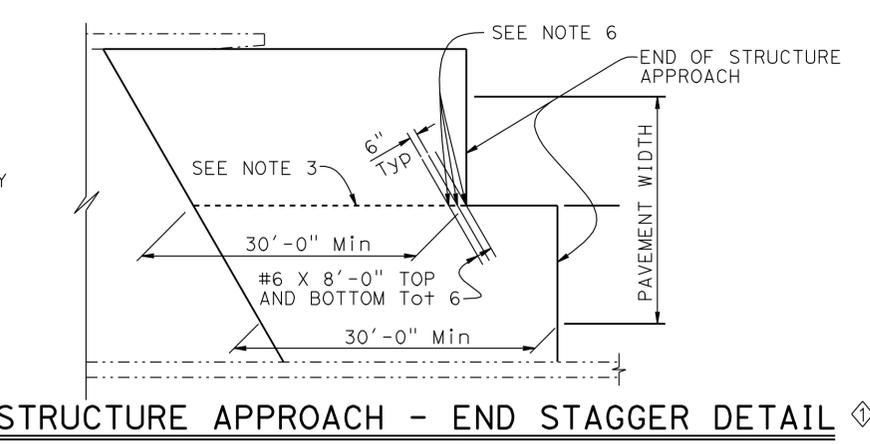
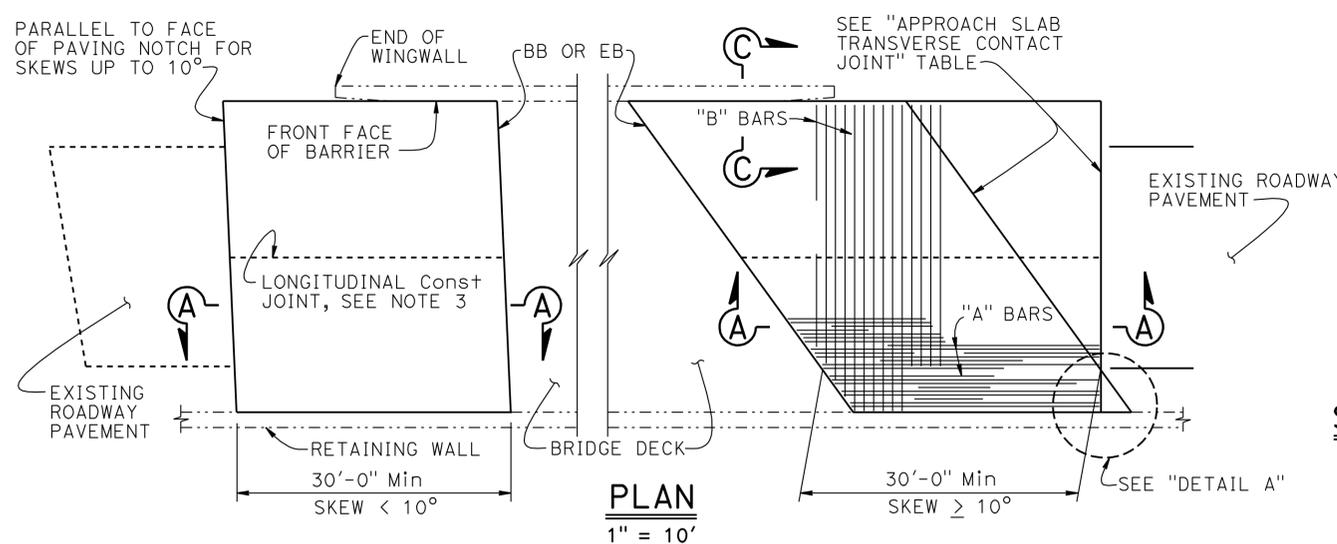
STANDARD PLANS DATED 2010

- A10A ABBREVIATIONS (SHEET 1 OF 2)
- A10B ABBREVIATIONS (SHEET 2 OF 2)
- B6-21 JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")

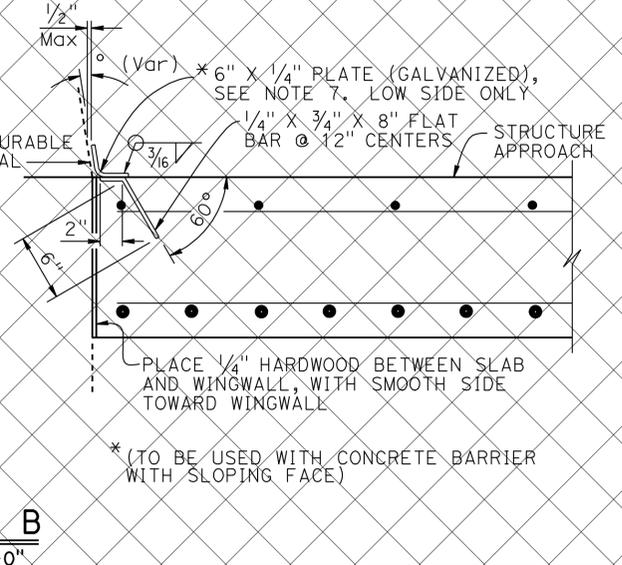
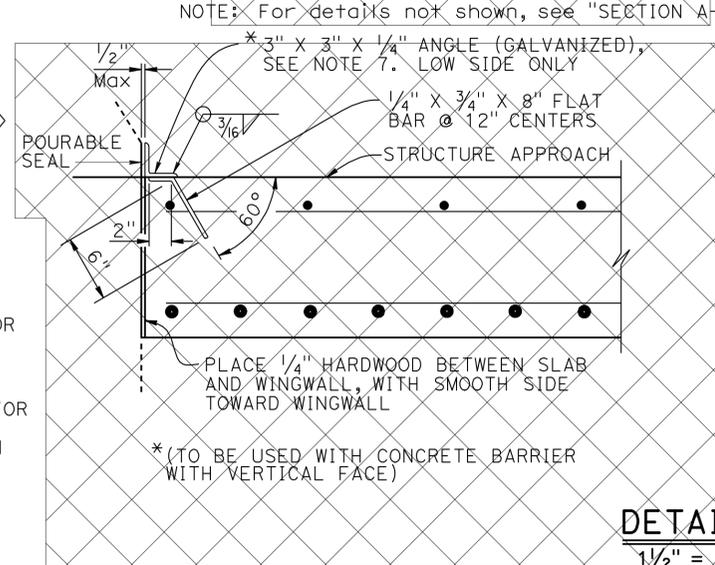
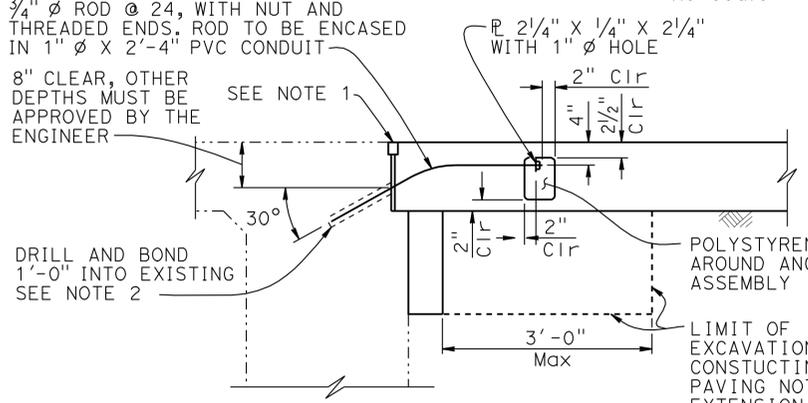
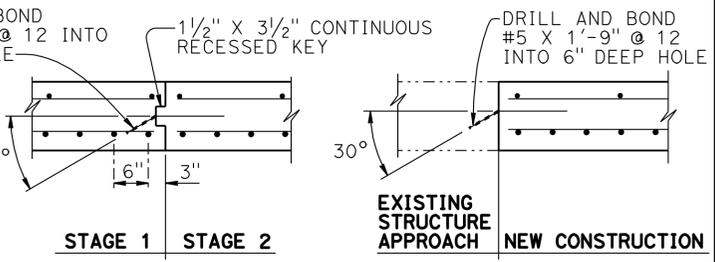
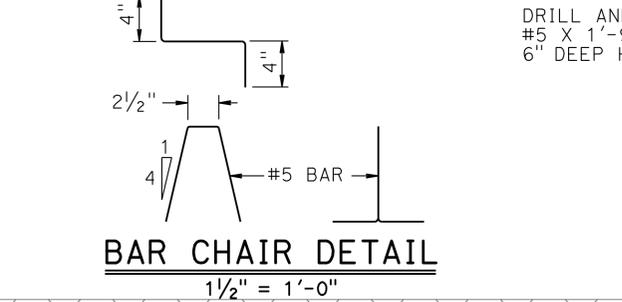
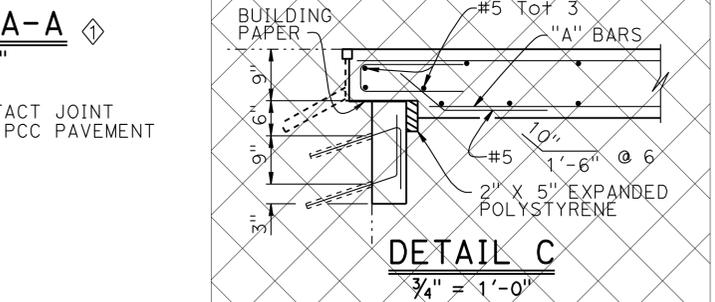
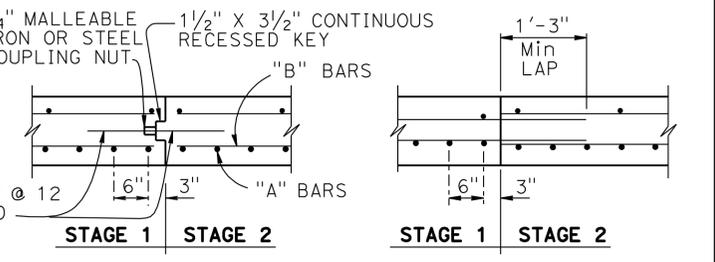
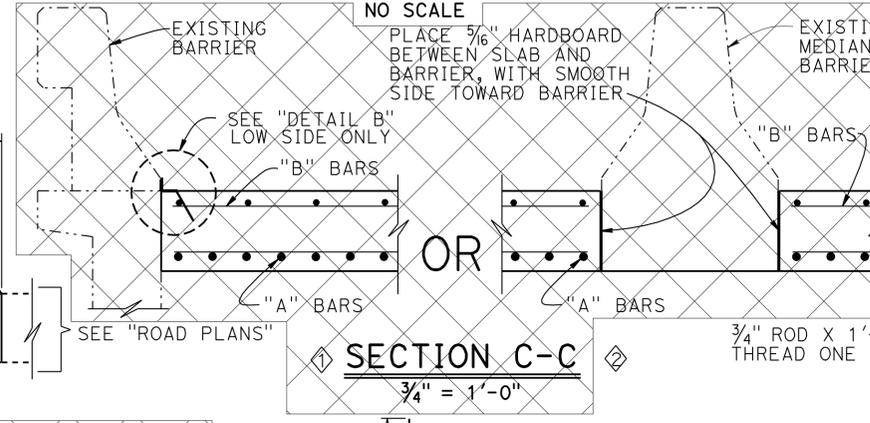
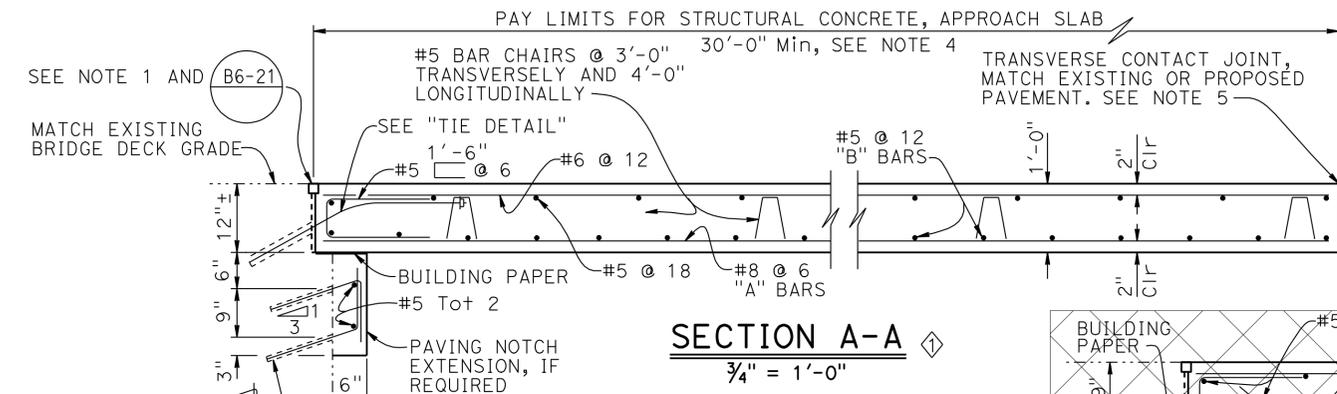


 DESIGN ENGINEER	DESIGN	BY S. Galgiani	CHECKED L. Han	LOAD & RESISTANCE FACTOR DESIGN	LIVE LOADING: HL93 W/"LOW-BOY"; PERMIT DESIGN VEHICLE	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 14	BRIDGE NO.	MACARTHUR BLVD UNDERCROSSING GENERAL PLAN
	DETAILS	BY L. Xiong	CHECKED L. Han	LAYOUT	BY S. Galgiani			CHECKED L. Han	
	QUANTITIES	BY S. Galgiani	CHECKED L. Han	SPECIFICATIONS	BY Karen Doll		POST MILE		
							R6.99		

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS: 0 1 2 3
 UNIT: 3613 PROJECT NUMBER & PHASE: 1213000066 CONTRACT NO.: 12-0L74U1
 DISREGARD PRINTS BEARING EARLIER REVISION DATES



APPROACH SLAB TRANSVERSE CONTACT JOINT		
APPROACH SKEW	WITH AC ROADWAY PAVEMENT	WITH PCC ROADWAY PAVEMENT
< 10°	PARALLEL TO FACE OF PN	PARALLEL TO FACE OF PAVING NOTCH
10° - 45°	PARALLEL TO FACE OF PN USE "DETAIL A"	STAGGER LINES 24' TO 36' APART
> 45°	PARALLEL TO FACE OF PN USE "DETAIL A"	STAGGER AT EACH LANE LINE



- NOTES:
- For details not shown or noted, see Structure Plans. Adjust bar reinforcement to clear a sawcut for sealed joint, when required
 - Space to avoid existing prestress anchorages and main reinforcement
 - Longitudinal construction joints, when permitted by the Engineer, shall be located on lane lines
 - Transverse contact joint shall be a minimum of 5'-0" from an existing or constructed weakened plane joint
 - For transverse contact joint with new PCC paving, refer to Standard Plan P10
 - Couplers are required for stage construction
 - End angle or plate at beginning of barrier transition, end of wingwall or end of structure approach as applicable

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

REVISED STANDARD DRAWING
 FILE NO. **xs3-150**
 APPROVAL DATE July 2011

◊ MODIFIED DETAILS
 ◊ DELETED DETAILS

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF ENGINEERING SERVICES
 BRIDGE NO. 55-0410
 POST MILE R6.99

MACARTHUR BLVD UNDERCROSSING
STRUCTURE APPROACH TYPE R(30D)

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	345	368

REGISTERED CIVIL ENGINEER *Douglas J. Dunrud* 1-7-13 DATE

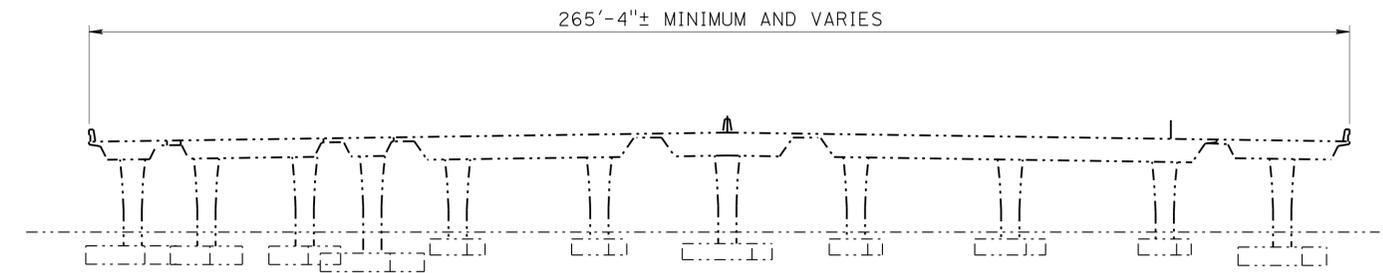
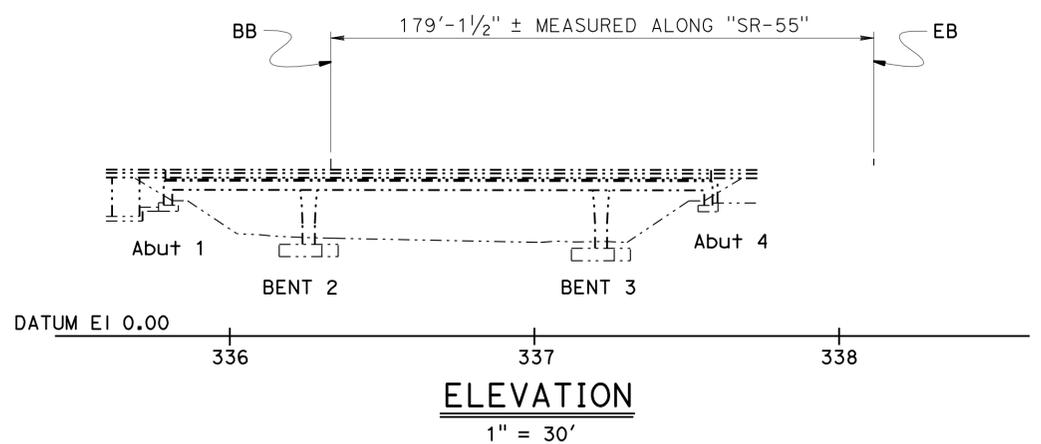
4-8-13 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 DOUGLAS JAMES DUNRUD
 No. C47240
 Exp. 12-30-13
 CIVIL
 STATE OF CALIFORNIA

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

QUANTITIES

RAPID SETTING CONCRETE (PATCH)	30	CF
REMOVE UNSOUND CONCRETE	15	CF
CLEAN EXPANSION JOINT	56	LF
JOINT SEAL (MR 1")	56	LF



TYPICAL SECTION
1" = 20'

JOINT SEAL TABLE

LOCATION	JOINT SEAL LENGTH (FEET)	APPROXIMATE DEPTH TO CLEAN JOINT SEAL (INCHES)
S/B DEPARTURE LANES 1 & 2	26.5 ±	12
S/B DEPARTURE OFF RAMP	26.5 ±	12

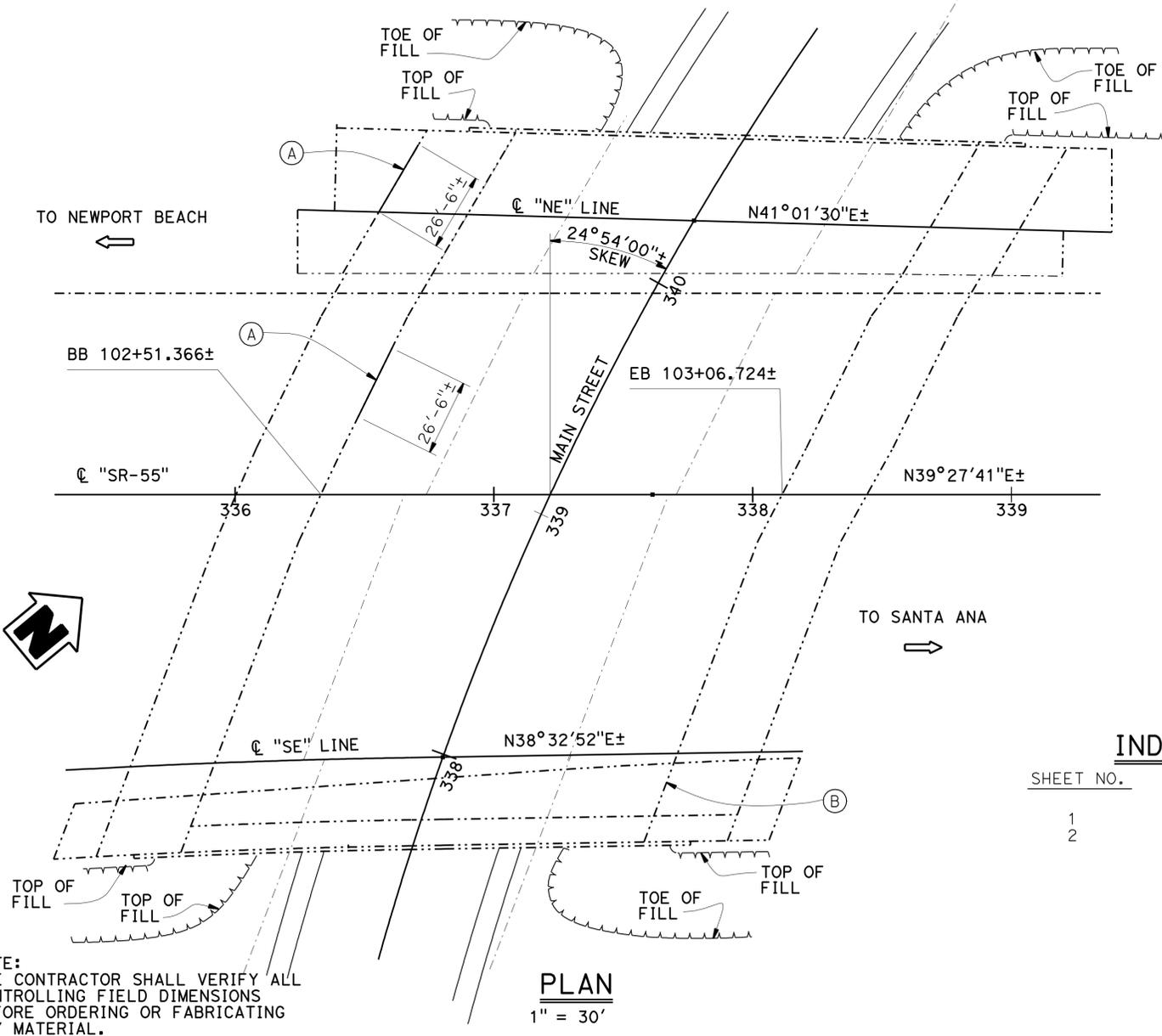
- NOTES:
- (A) Clean Expansion Joint and Replace Joint Seal (MR=1")
 - (B) Remove Unsound Concrete and Patch Spalled Deck areas with Rapid Setting Concrete (Patch)
- Indicates existing structure

STANDARD PLANS DATED 2010

- A10A ABBREVIATIONS (SHEET 1 OF 2)
 - A10B ABBREVIATIONS (SHEET 2 OF 2)
 - B6-21 JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")
- STANDARD PLAN SHEET No.
- DETAIL No.

INDEX TO PLANS

SHEET NO.	TITLE
1	GENERAL PLAN
2	MISCELLANEOUS DETAILS



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

PLAN
1" = 30'

1-7-13 DESIGN ENGINEER	DESIGN BY S. Galgiani	CHECKED L. Han	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 14	BRIDGE NO. 55-0416	MAIN STREET UNDERCROSSING GENERAL PLAN
	DETAILS BY M. Lane	CHECKED S. Galgiani	LAYOUT BY S. Galgiani	CHECKED L. Han			POST MILE R6.39	
	QUANTITIES BY S. Galgiani	CHECKED L. Han	SPECIFICATIONS BY Karen Doll	PLANS AND SPECS COMPARED Karen Doll				

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

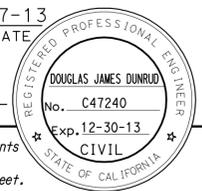
UNIT: 3613 PROJECT NUMBER & PHASE: 1213000066 CONTRACT NO.: 12-0L74U1

DISREGARD PRINTS BEARING EARLIER REVISION DATES

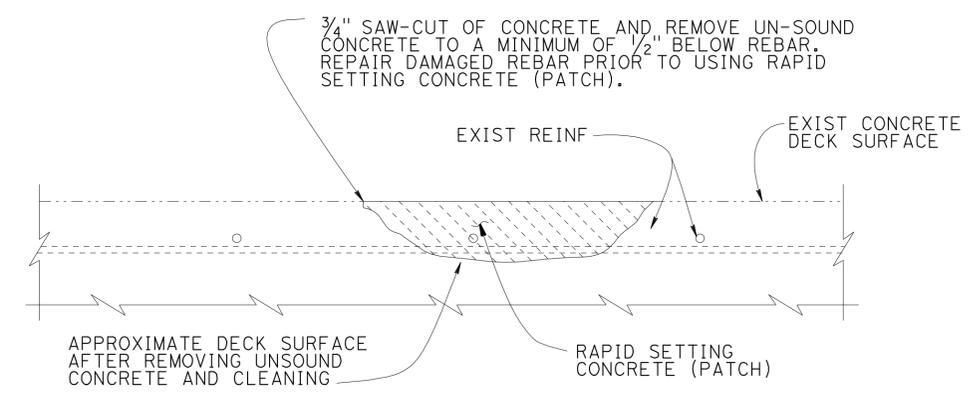
REVISION DATES	SHEET	OF
10-24-12 11-28-12 1-3-13	1	2

STRUCTURES DESIGN GENERAL PLAN SHEET (ENGLISH) (REV.09-01-10) FILE => 55-0416_gp.dgn

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	346	368
			1-7-13		
REGISTERED CIVIL ENGINEER			DATE		
4-8-13			PLANS APPROVAL DATE		
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.					



CONCRETE REPAIR TABLE				
APPROXIMATE AREA DAMAGED (PERCENT)	AVERAGE DEPTH (INCHES)	APPROXIMATE DECK AREA (SQ FT)	UN SOUND CONCRETE (CF)	RAPID SETTING CONCRETE PATCH (CF)
0.25%	3	47,435	15	30



DECK REPAIR DETAIL
 REINFORCEMENT MAY BE ENCOUNTERED DURING DECK CONCRETE REMOVAL.
 NO SCALE

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY S. Galgiani	CHECKED L. Han	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 14	BRIDGE NO.	MAIN STREET UNDERCROSSING MISCELLANEOUS DETAILS			
	DETAILS	BY K. Kubo	CHECKED S. Galgiani			POST MILE				
	QUANTITIES	BY S. Galgiani	CHECKED L. Han			R6.39				
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				0 1 2 3	UNIT: 3613	PROJECT NUMBER & PHASE: 1213000066	CONTRACT NO.: 07-0L74U1	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES 1-3-13 10-26-12 11-29-12 12-31-12	SHEET OF 2 2

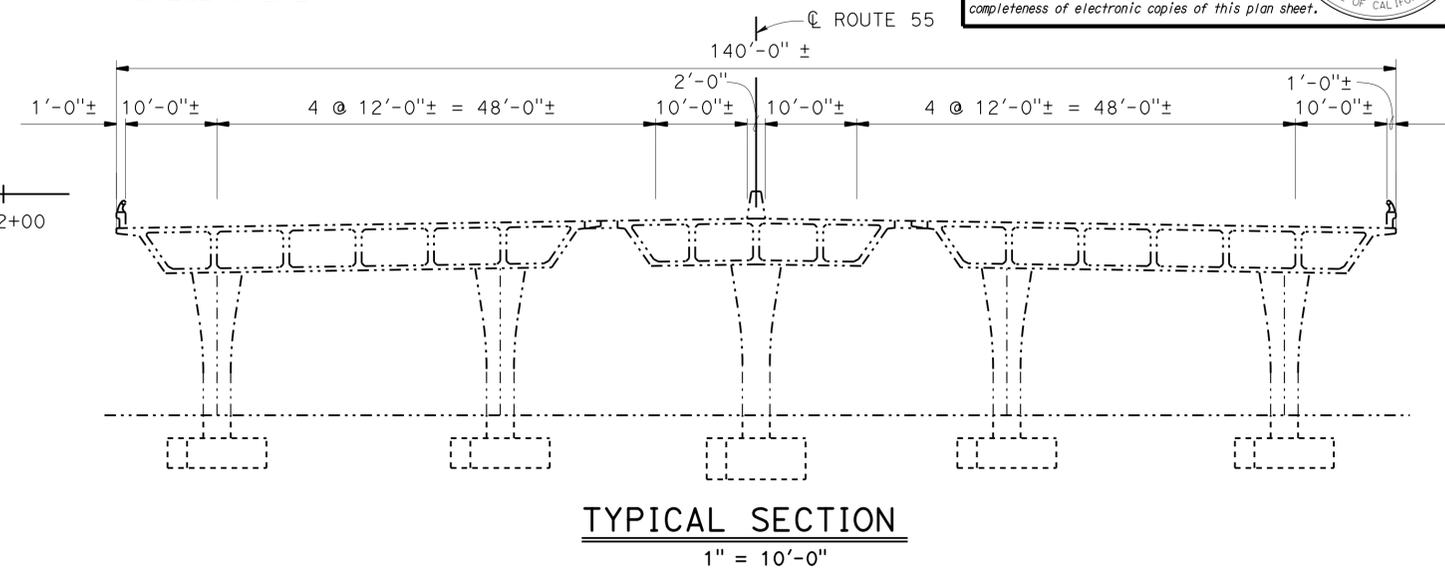
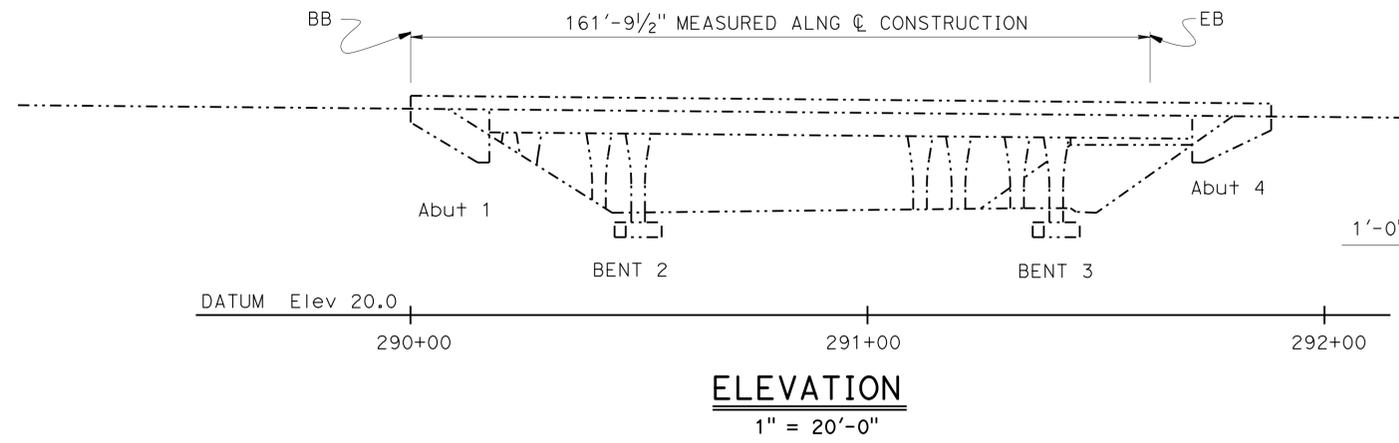
USERNAME => s114640 DATE PLOTTED => 12-APR-2013 TIME PLOTTED => 12:26

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	347	368

INDEX TO PLANS

SHEET NO.	TITLE
1	GENERAL PLAN
2	MISCELLANEOUS DETAILS
3	STRUCTURE APPROACH TYPE R(30D)

REGISTERED CIVIL ENGINEER
 DOUGLAS JAMES DUNRUD
 No. C47240
 Exp. 12-30-13
 CIVIL
 STATE OF CALIFORNIA
 1-7-13 DATE
 4-8-13 PLANS APPROVAL DATE
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



QUANTITIES

RAPID SETTING CONCRETE (PATCH)	57	CF
REMOVE UNSOUND CONCRETE	57	CF
PREPARE CONCRETE BRIDGE DECK SURFACE	22,651	SQFT
TREAT BRIDGE DECK	22,651	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	315	GAL
AGGREGATE BASE (APPROACH SLAB)	8	CY
STRUCTURAL CONCRETE, APPROACH SLAB (TYPE R)	72	CY
PAVING NOTCH EXTENSION	45	CF
JOINT SEAL (MR 1")	61	LF

JOINT SEAL / PAVING NOTCH TABLE

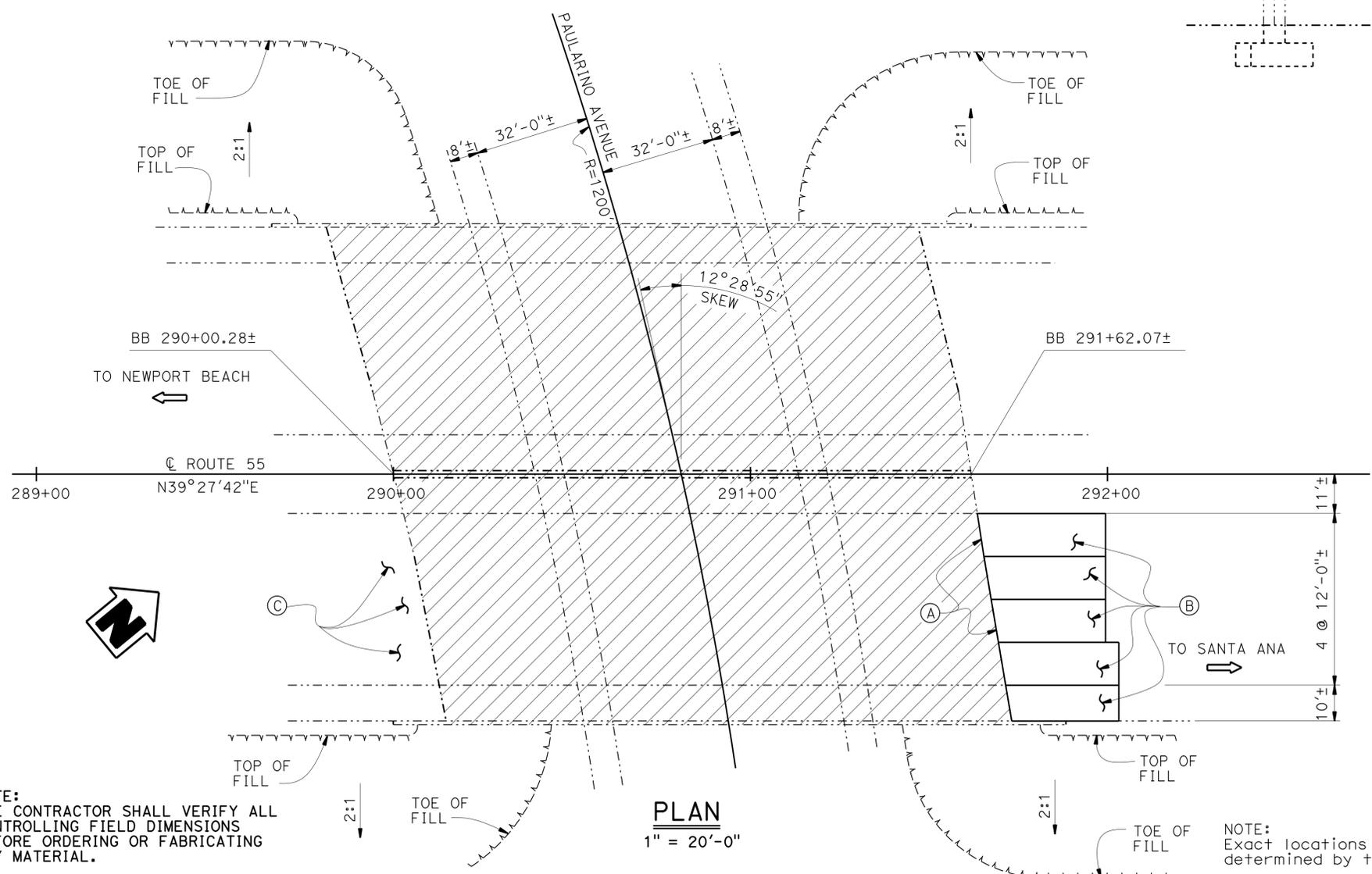
LOCATION	PAVING NOTCH	JOINT SEAL LENGTH (FEET)	APPROX DEPTH TO CLEAN JOINT SEAL (INCHES)
N/B DEPARTURE	YES	61±	N/A

- NOTES:
- (A) Replace Joint Seal (MR=1")
 - (B) Structure Approach Type R(30D)
 - (C) Remove Unsound Concrete and patch Spalled Approach Slab areas with Rapid Setting Concrete (Patch)
 - Indicates existing structure
 - /// Indicates Limits of Prepare Concrete Bridge Deck and treat with High Molecular Weight Methacrylate and remove Unsound Concrete and Patch with Rapid Setting Concrete (Patch)

STANDARD PLANS DATED 2010

A10A	ABBREVIATIONS (SHEET 1 OF 2)
A10B	ABBREVIATIONS (SHEET 2 OF 2)
B6-21	JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")

STANDARD PLAN SHEET No.
 DETAIL No.



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

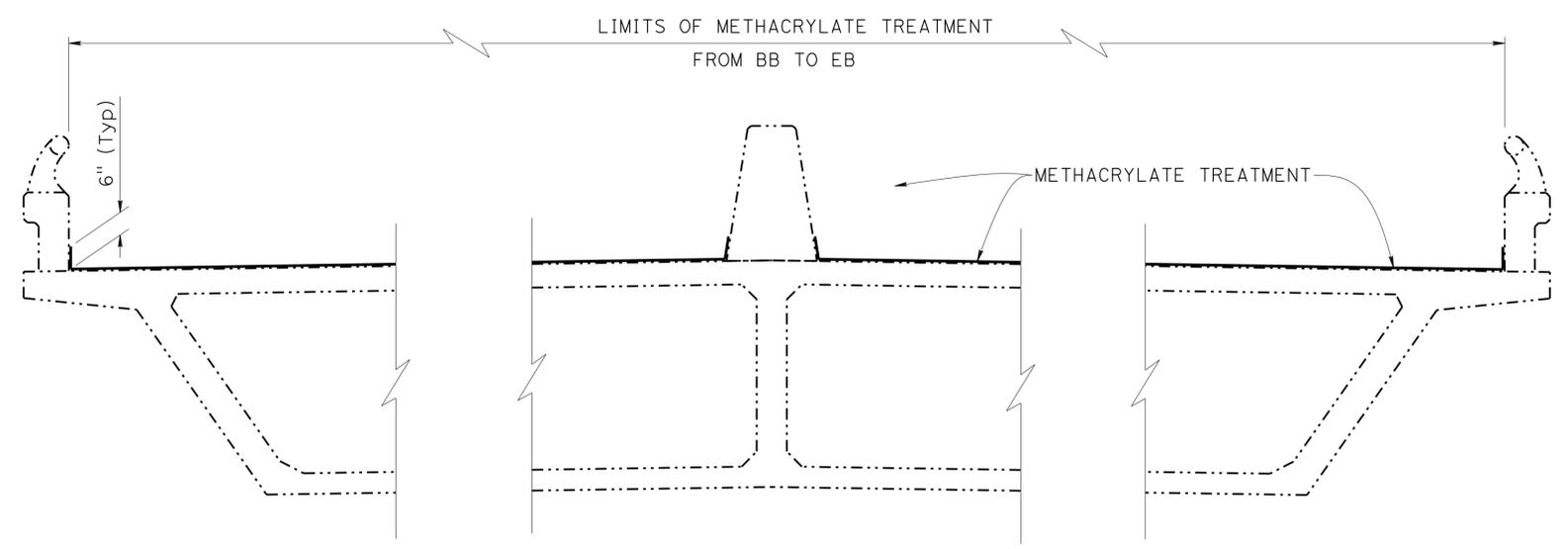
NOTE: Exact locations of Approach Slabs to be determined by the Field Engineer.

 DESIGN ENGINEER 1-7-13	DESIGN	BY S. Galgiani	CHECKED L. Han	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 14	BRIDGE NO.	55-0417	PAULARINO AVE UNDERCROSSING GENERAL PLAN
	DETAILS	BY L. Xiong	CHECKED S. Galgiani	LAYOUT	BY S. Galgiani		POST MILE	R5.52	
	QUANTITIES	BY S. Galgiani	CHECKED L. Han	SPECIFICATIONS	BY Karen Doll		PLANS AND SPECS COMPARED	Karen Doll	

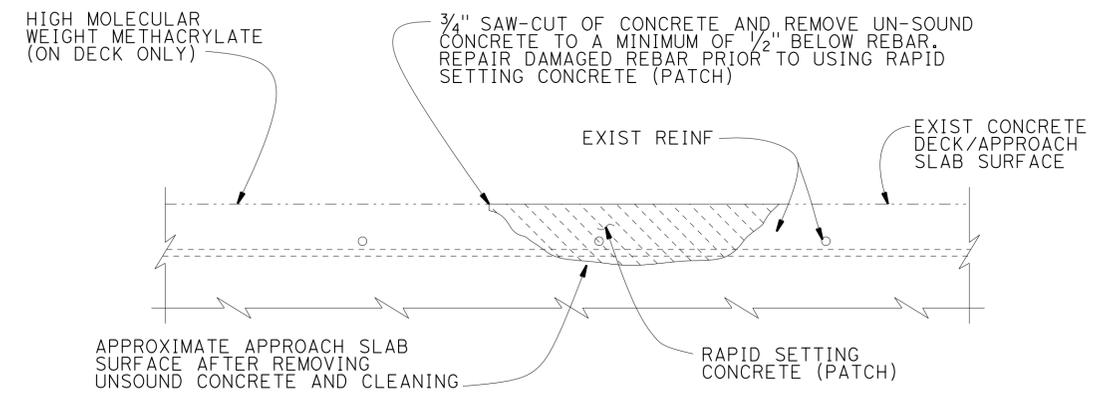
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS: 0 1 2 3
 UNIT: 3613 PROJECT NUMBER & PHASE: 1213000066 CONTRACT NO.: 12-0L74U1
 DISREGARD PRINTS BEARING EARLIER REVISION DATES
 REVISION DATES: 10-23-12, 11-28-12, 12-26-12, 1-3-13
 SHEET 1 OF 3

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	348	368

REGISTERED CIVIL ENGINEER *Douglas J. Dunrud* DATE 1-7-13
 PLANS APPROVAL DATE 4-8-13
 DOUGLAS JAMES DUNRUD
 No. C47240
 Exp. 12-30-13
 CIVIL
 STATE OF CALIFORNIA
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.



PART TYPICAL SECTION
 $\frac{1}{2}'' = 1'-0''$

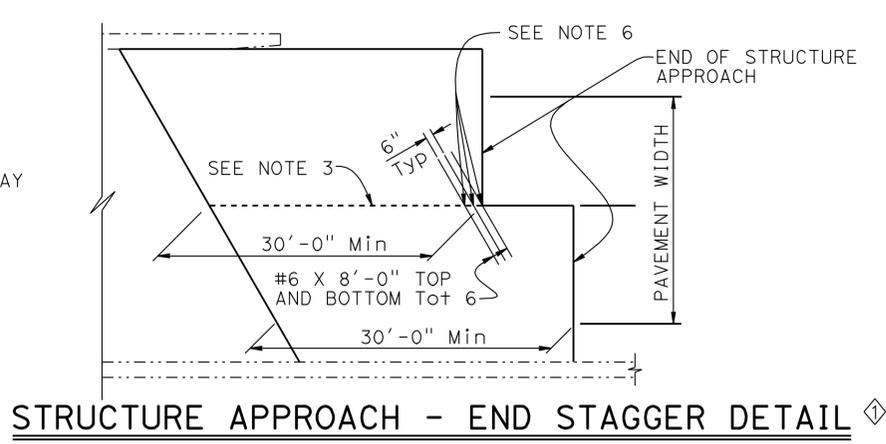
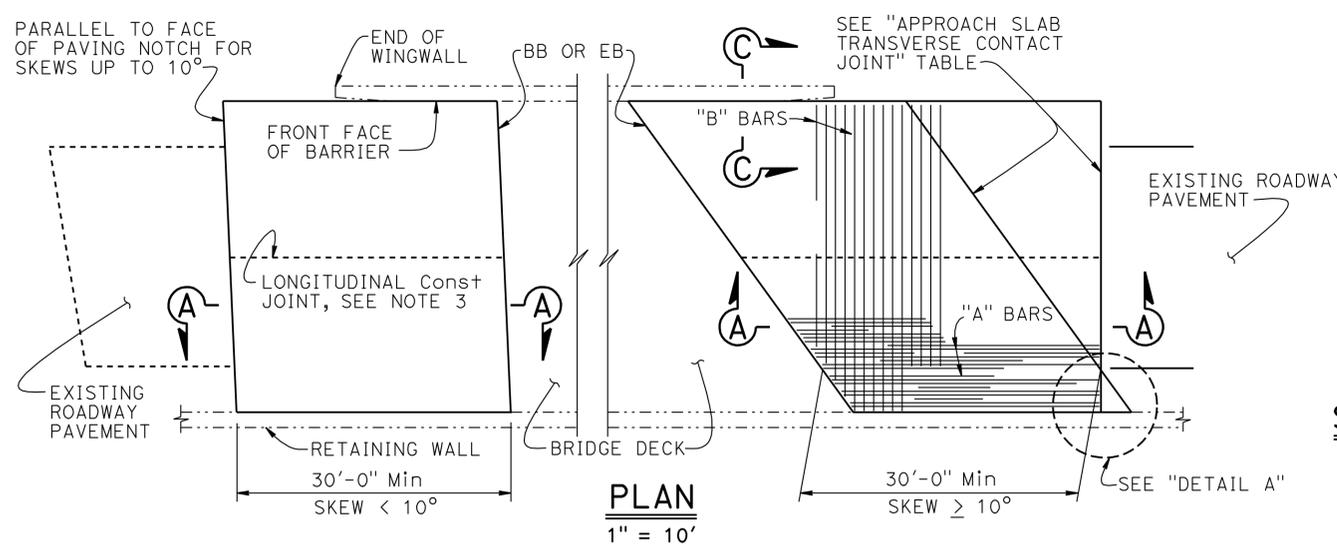


DECK AND APPROACH SLAB REPAIR DETAIL
 REINFORCEMENT MAY BE ENCOUNTERED DURING DECK CONCRETE REMOVAL.
 NO SCALE

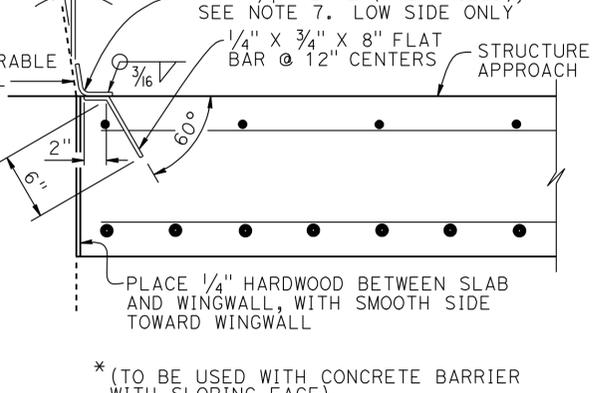
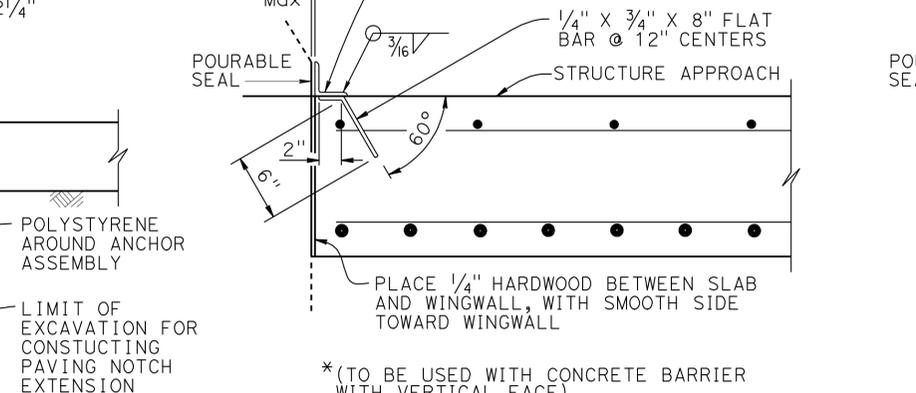
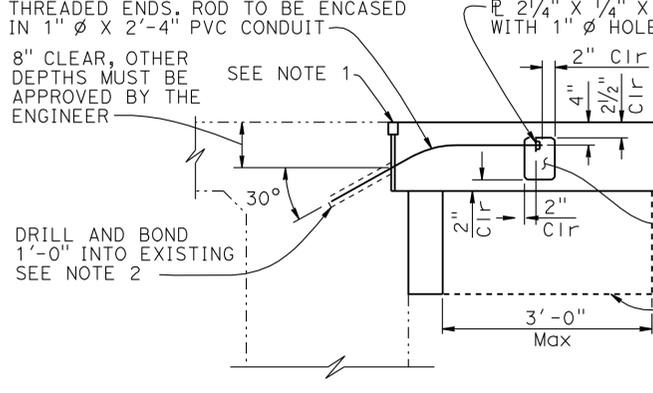
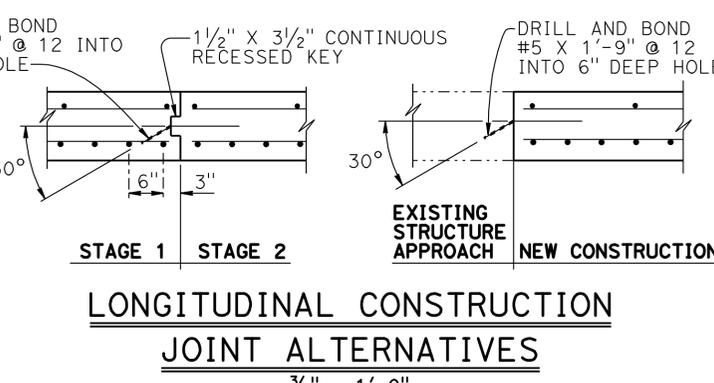
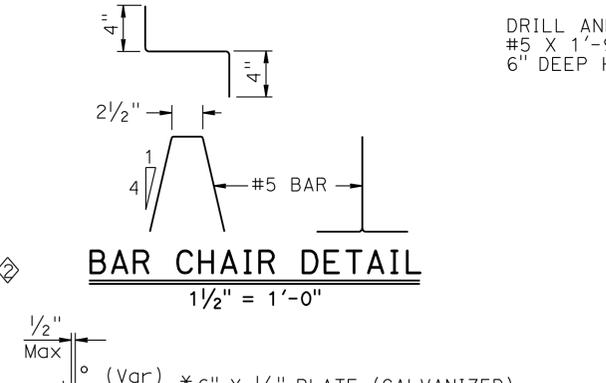
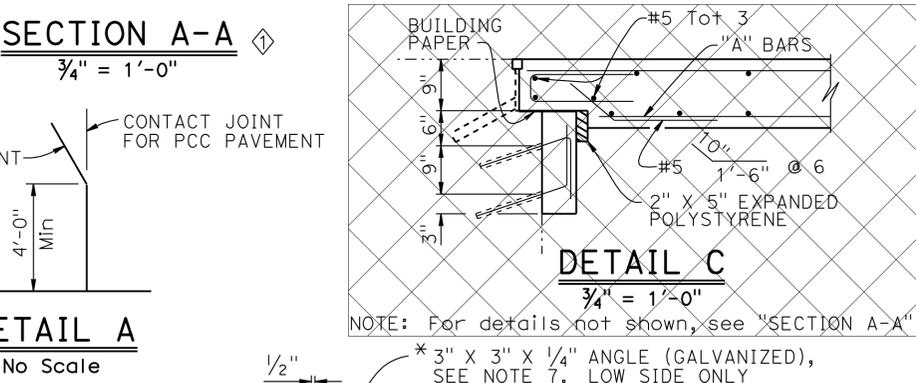
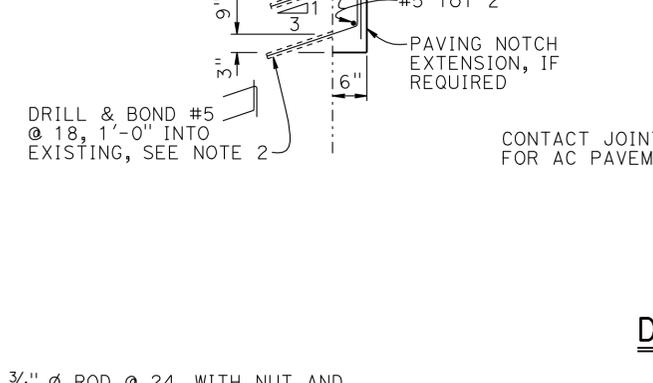
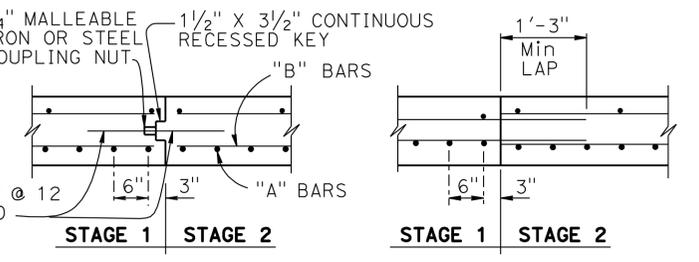
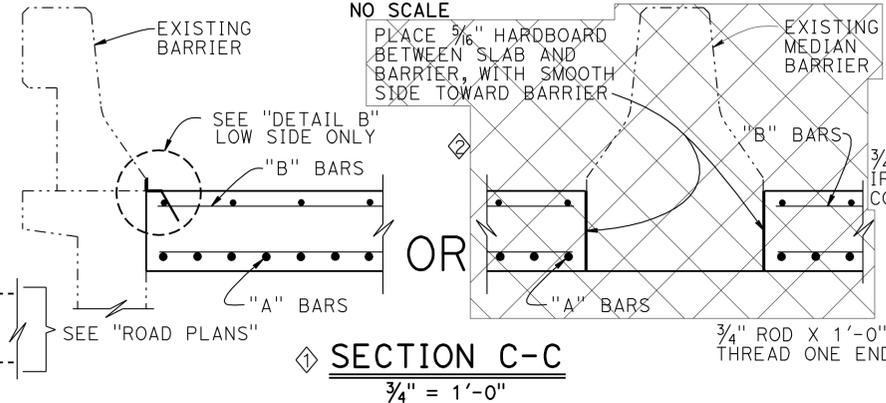
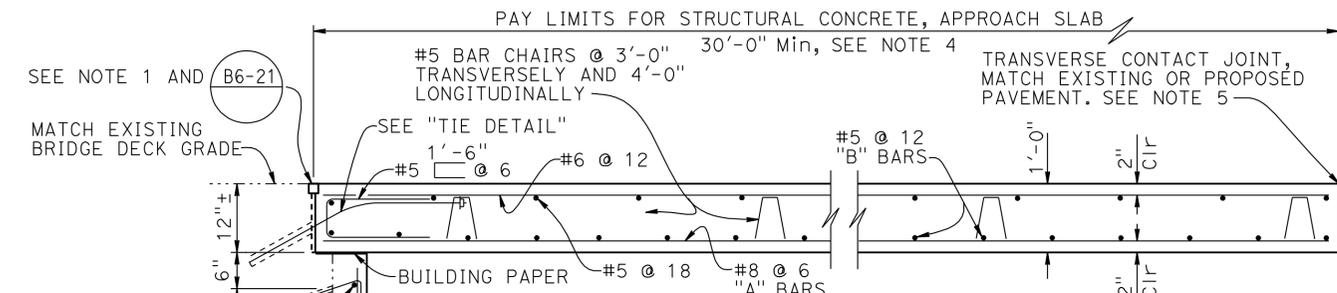
CONCRETE REPAIR TABLE				
APPROXIMATE AREA DAMAGED (PERCENT)	AVERAGE DEPTH (INCHES)	APPROXIMATE DECK AREA (SQ FT)	UNSOUD CONCRETE (CF)	RAPID SETTING CONCRETE PATCH (CF)
1	3	22,651	57	57

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	DESIGN BY S. Galgiani	CHECKED L. Han	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 14	BRIDGE NO. 55-0417	PAULARINO AVE UNDERCROSSING MISCELLANEOUS DETAILS
	DETAILS BY L. Xiong	CHECKED S. Galgiani			POST MILE R5.52	
	QUANTITIES BY S. Galgiani	CHECKED L. Han				
	UNIT: 3613 PROJECT NUMBER & PHASE: 1213000066			CONTRACT NO.: 12-0L74U1	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES: 11-29-12, 12-28-12, 12-31-12, 1-3-13 SHEET 2 OF 3

USERNAME => s121614 DATE PLOTTED => 25-APR-2013 TIME PLOTTED => 1:34:49



APPROACH SLAB TRANSVERSE CONTACT JOINT		
APPROACH SKEW	WITH AC ROADWAY PAVEMENT	WITH PCC ROADWAY PAVEMENT
< 10°	PARALLEL TO FACE OF PN	PARALLEL TO FACE OF PAVING NOTCH
10° - 45°	PARALLEL TO FACE OF PN USE "DETAIL A"	STAGGER LINES 24' TO 36' APART
> 45°	PARALLEL TO FACE OF PN USE "DETAIL A"	STAGGER AT EACH LANE LINE

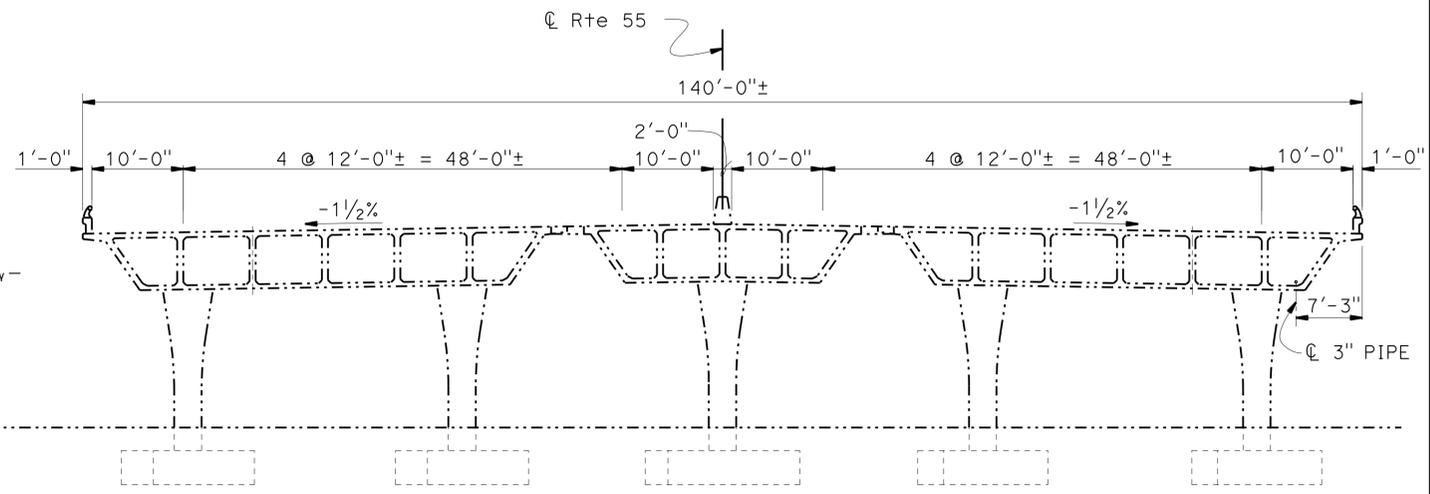
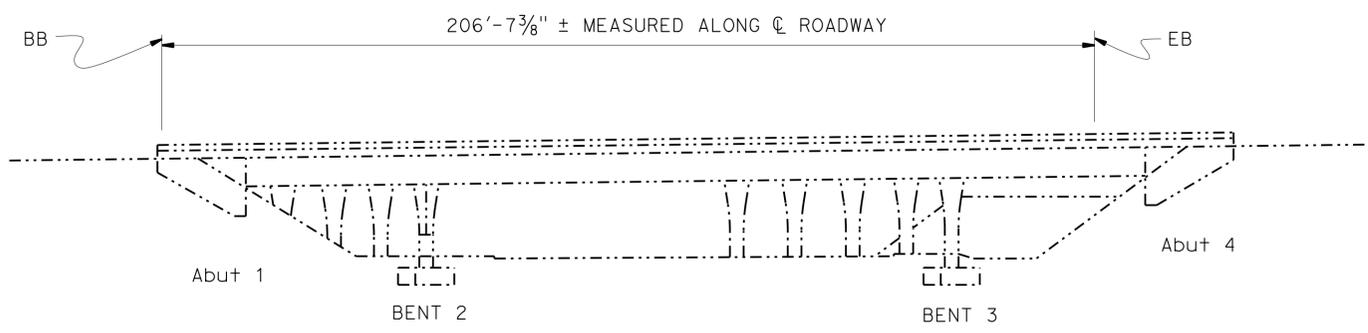


- NOTES:
- For details not shown or noted, see Structure Plans. Adjust bar reinforcement to clear a sawcut for sealed joint, when required
 - Space to avoid existing prestress anchorages and main reinforcement
 - Longitudinal construction joints, when permitted by the Engineer, shall be located on lane lines
 - Transverse contact joint shall be a minimum of 5'-0" from an existing or constructed weakened plane joint
 - For transverse contact joint with new PCC paving, refer to Standard Plan P10
 - Couplers are required for stage construction
 - End angle or plate at beginning of barrier transition, end of wingwall or end of structure approach as applicable

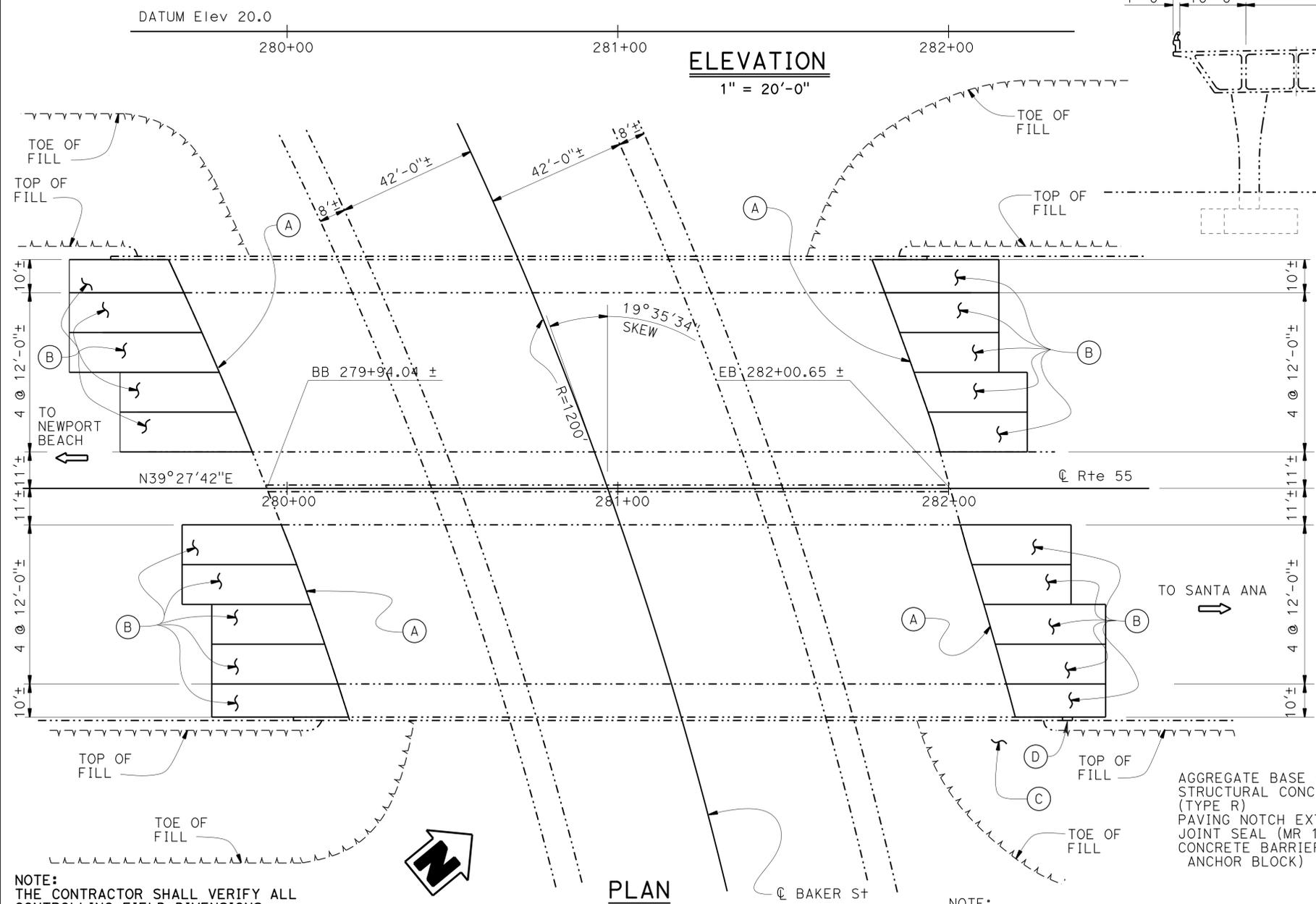
NOTE: THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

INDEX TO PLANS

SHEET NO.	TITLE
1	GENERAL PLAN
2	MISCELLANEOUS DETAILS
3	STRUCTURE APPROACH TYPE R(30D)



TYPICAL SECTION
1" = 10'-0"



ELEVATION
1" = 20'-0"

PLAN
1" = 20'-0"

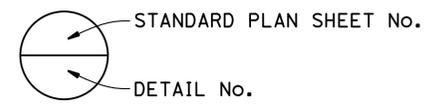
LOCATION	PAVING NOTCH	JOINT SEAL LENGTH (FEET)	APPROX DEPTH TO CLEAN JOINT SEAL (INCHES)
N/B APPROACH	YES	62.6	N/A
N/B DEPARTURE	YES	62.6	N/A
S/B APPROACH	YES	62.6	N/A
S/B DEPARTURE	YES	62.6	N/A

NOTES:

- (A) Replace Joint Seal (MR=1")
 - (B) Structure Approach Type R(30D)
 - (C) Backfill and Compact Erosion Gully Repair broken Pipe to toe of Roadway fill (See Road Plans)
 - (D) Construct Reinforced Concrete End Block (See Miscellaneous Details Sheets)
- --- Indicates existing structure

STANDARD PLANS DATED 2010

A10A	ABBREVIATIONS (SHEET 1 OF 2)
A10B	ABBREVIATIONS (SHEET 2 OF 2)
A77J1	METAL BEAM GUARD RAILING-CONNECTIONS TO BRIDGE RAILINGS WITHOUT SIDEWALKS DETAILS No. 1
B6-21	JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")



QUANTITIES

AGGREGATE BASE (APPROACH SLAB)	30	CY
STRUCTURAL CONCRETE, APPROACH SLAB (TYPE R)	304	CY
PAVING NOTCH EXTENSION	185	CF
JOINT SEAL (MR 1")	250	LF
CONCRETE BARRIER (TRANSITION ANCHOR BLOCK)	3	LF

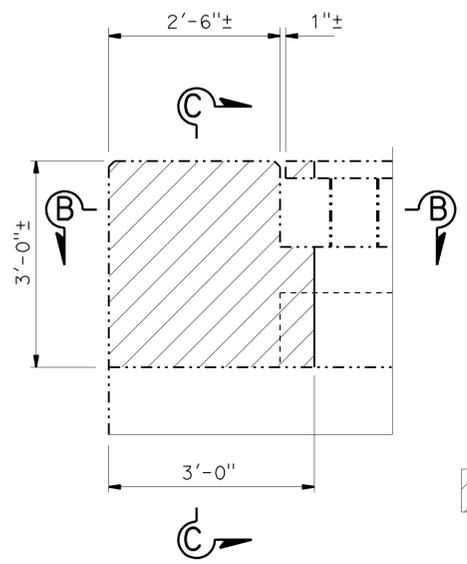
NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

NOTE:
Exact locations of Approach Slabs to be determined by the Field Engineer.

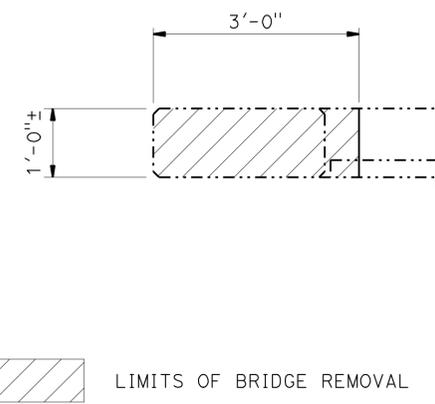
 DESIGN ENGINEER 1-7-13	DESIGN	BY S. Galgiani	CHECKED L. Han	LOAD & RESISTANCE FACTOR DESIGN	LIVE LOADING: HL93 W/"LOW-BOY"; PERMIT DESIGN VEHICLE	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 14	BRIDGE NO.	55-0419	BAKER ST UNDERCROSSING GENERAL PLAN
	DETAILS	BY L. Xiong	CHECKED L. Han	LAYOUT	BY S. Galgiani			POST MILE	R5.34	
	QUANTITIES	BY S. Galgiani	CHECKED L. Han	SPECIFICATIONS	BY Karen Doll			PLANS AND SPECS COMPARED	Karen Doll	

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	351	368

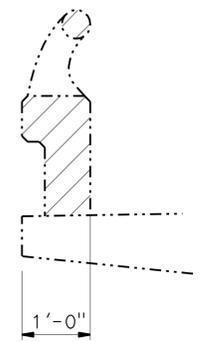
REGISTERED CIVIL ENGINEER *Douglas J. Dunrud* 1-7-13 DATE
 PLANS APPROVAL DATE 4-8-13
 REGISTERED PROFESSIONAL ENGINEER
 DOUGLAS JAMES DUNRUD
 No. C47240
 Exp. 12-30-13
 CIVIL
 STATE OF CALIFORNIA
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.



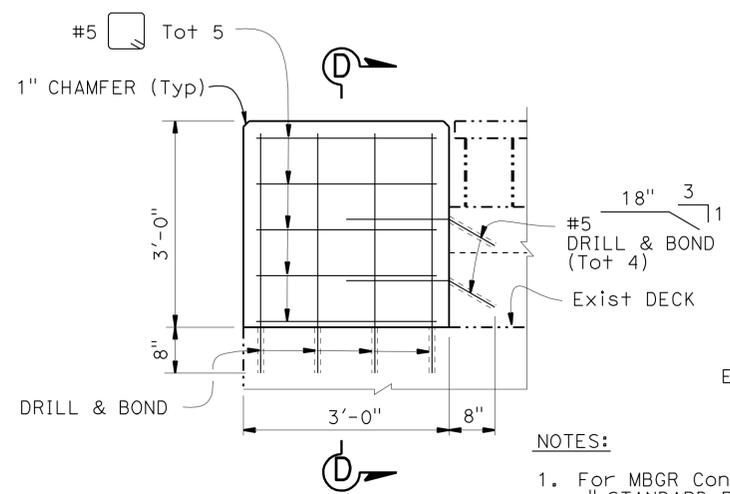
NOTE: Preserve Existing Steel where possible
EXISTING TYPE 1 RAILING
 3/4" = 1'-0"



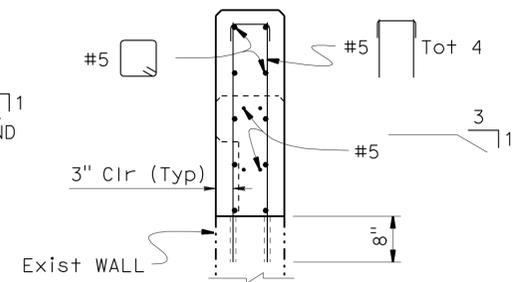
SECTION B-B
 3/4" = 1'-0"



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



REINFORCED CONCRETE END BLOCK
 3/4" = 1'-0"



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

- NOTES:
- For MBGR Connection see "CONNECTION DETAIL BB" on "STANDARD PLAN A77J1".
 - Existing Reinforcing not shown.
 - Space Reinforcement evenly

DESIGN	BY S. Galgiani	CHECKED L. Han
DETAILS	BY L. Xiong	CHECKED S. Galgiani
QUANTITIES	BY S. Galgiani	CHECKED L. Han

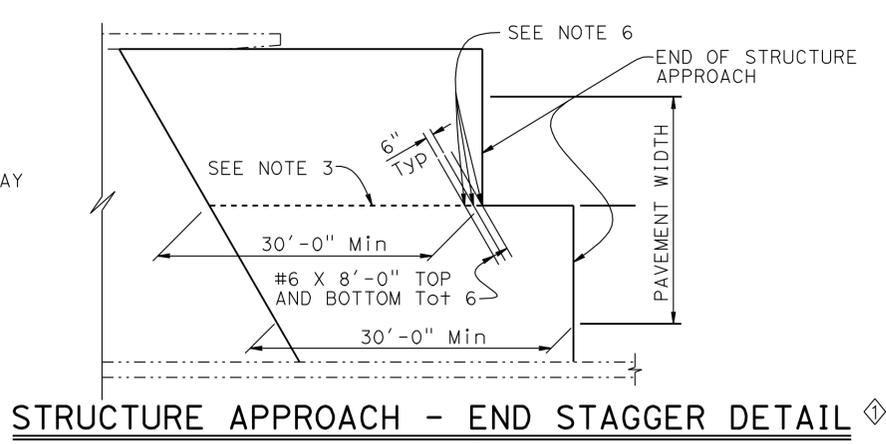
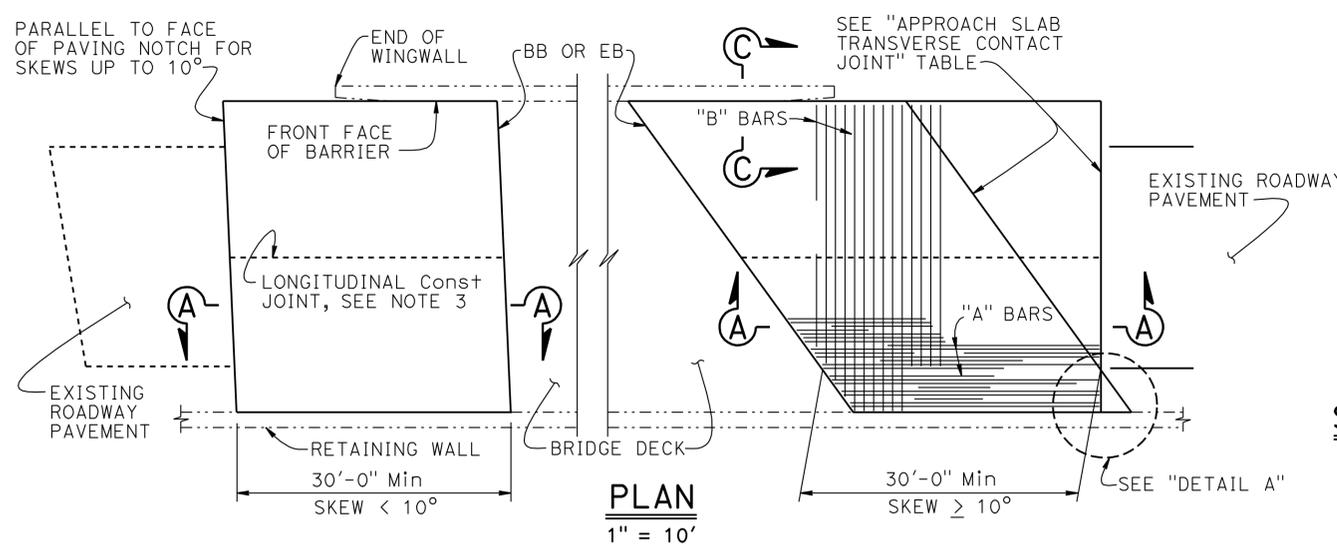
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
 DESIGN BRANCH 14

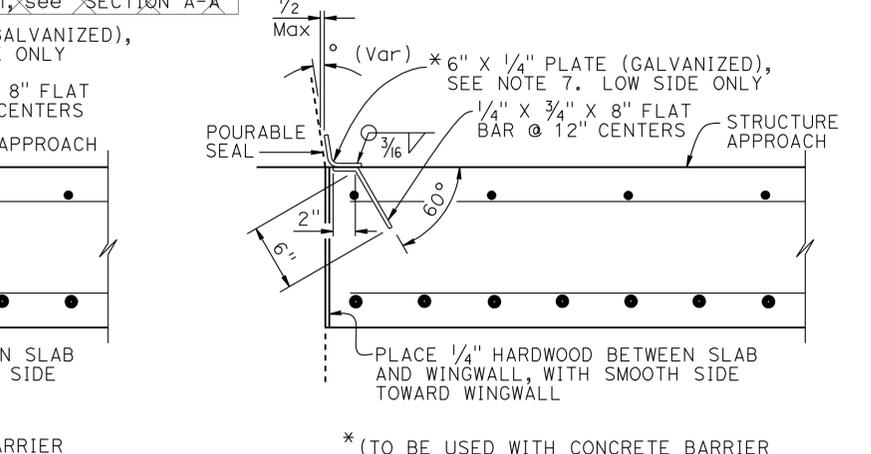
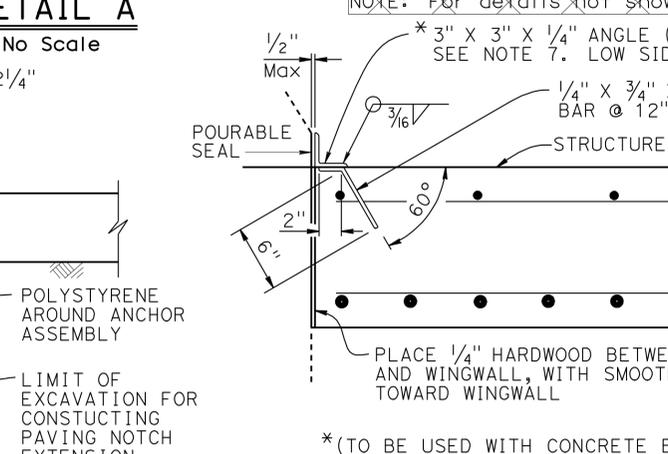
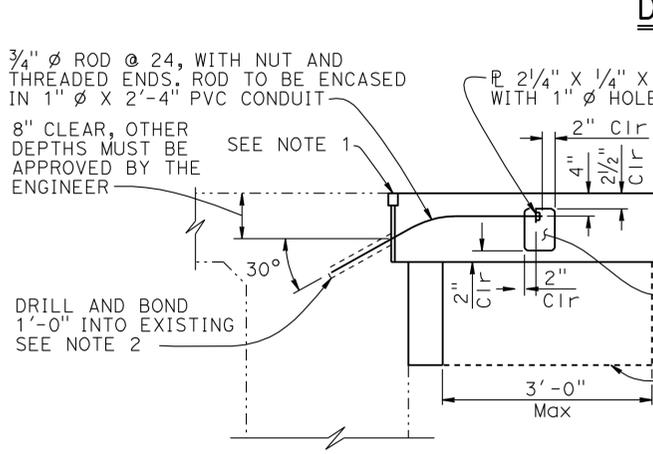
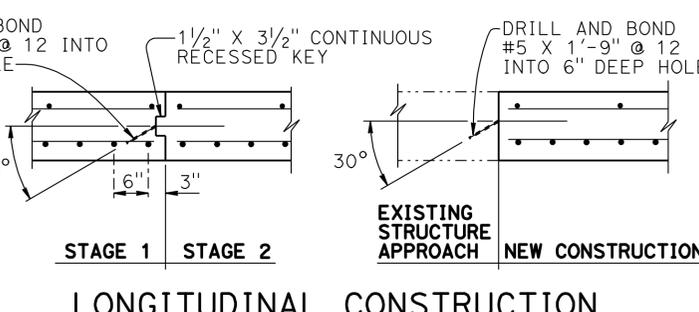
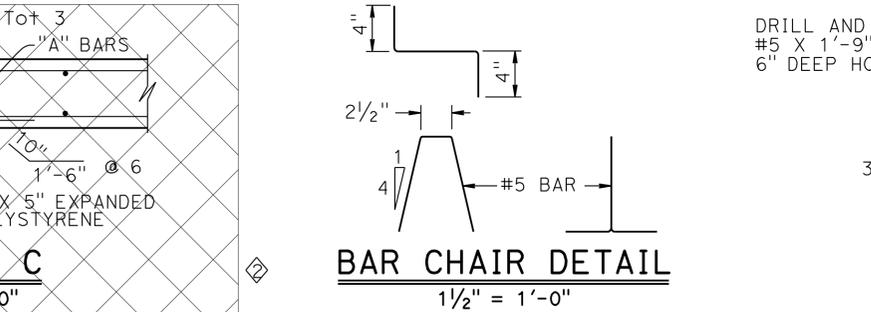
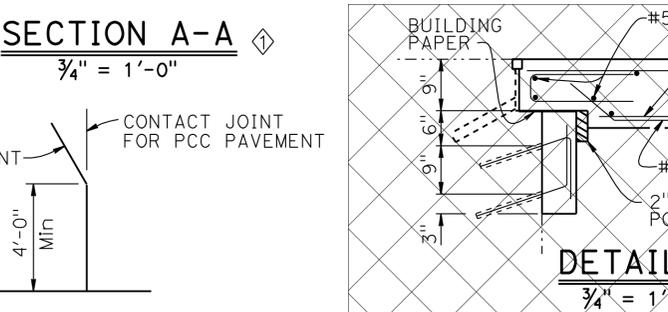
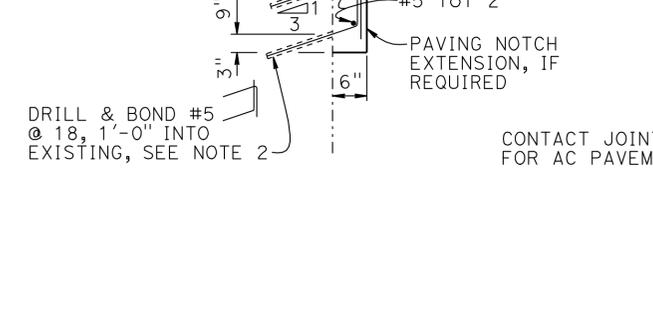
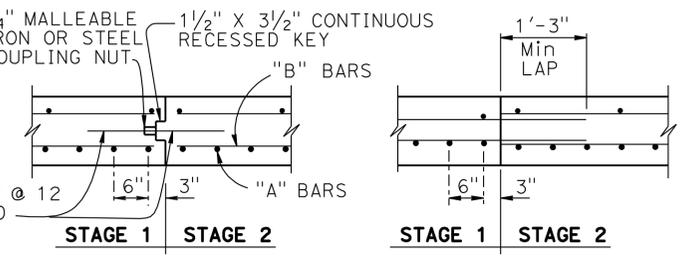
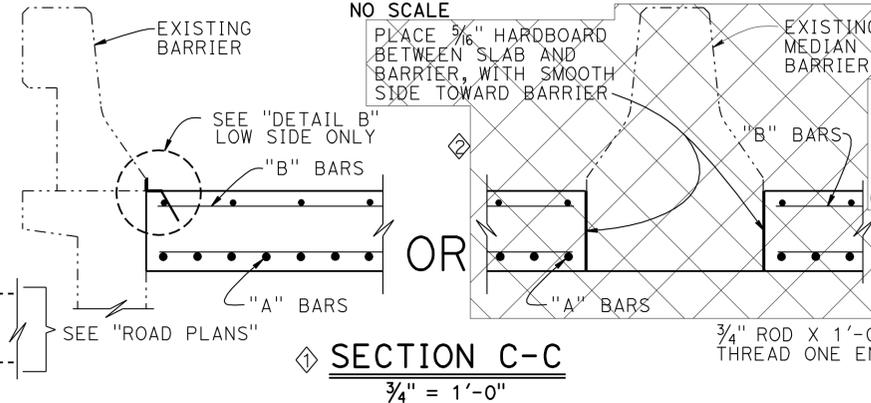
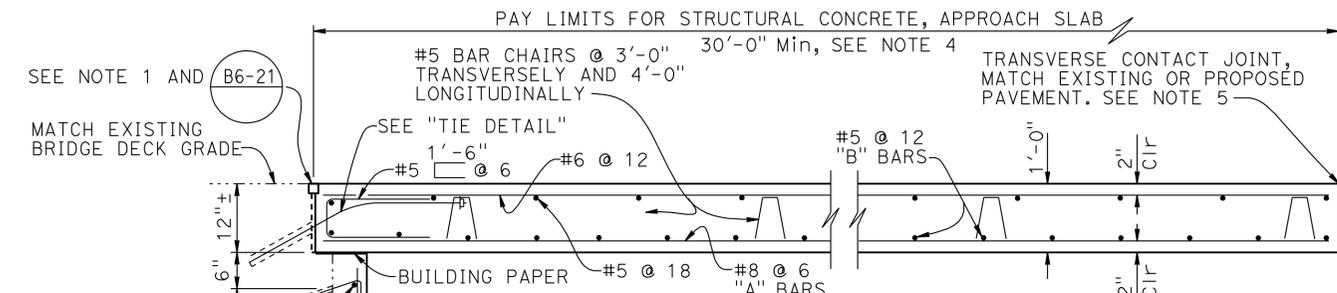
BRIDGE NO.	55-0419
POST MILE	R5.34

BAKER ST UNDERCROSSING
MISCELLANEOUS DETAILS

REVISION DATES	SHEET	OF
10-24-12 10-25-12 10-26-12 11-29-12	2	3



APPROACH SLAB TRANSVERSE CONTACT JOINT		
APPROACH SKEW	WITH AC ROADWAY PAVEMENT	WITH PCC ROADWAY PAVEMENT
< 10°	PARALLEL TO FACE OF PN	PARALLEL TO FACE OF PAVING NOTCH
10° - 45°	PARALLEL TO FACE OF PN USE "DETAIL A"	STAGGER LINES 24' TO 36' APART
> 45°	PARALLEL TO FACE OF PN USE "DETAIL A"	STAGGER AT EACH LANE LINE

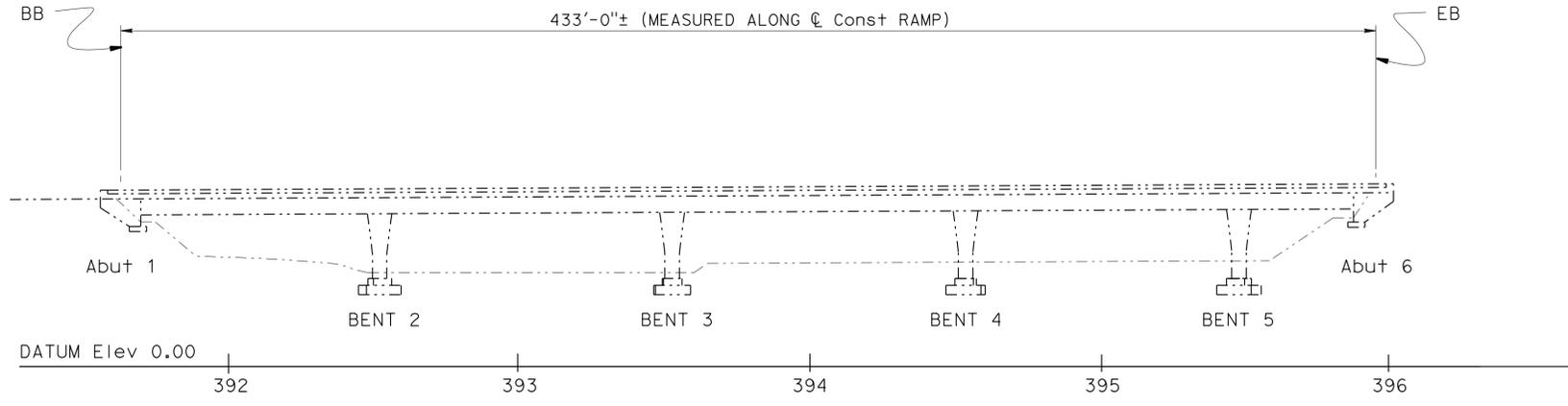


- NOTES:
- For details not shown or noted, see Structure Plans. Adjust bar reinforcement to clear a sawcut for sealed joint, when required
 - Space to avoid existing prestress anchorages and main reinforcement
 - Longitudinal construction joints, when permitted by the Engineer, shall be located on lane lines
 - Transverse contact joint shall be a minimum of 5'-0" from an existing or constructed weakened plane joint
 - For transverse contact joint with new PCC paving, refer to Standard Plan P10
 - Couplers are required for stage construction
 - End angle or plate at beginning of barrier transition, end of wingwall or end of structure approach as applicable

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

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	353	368

REGISTERED CIVIL ENGINEER: *Douglas J. Dunrud*
 DATE: 1-7-13
 PLANS APPROVAL DATE: 4-8-13
 REGISTERED PROFESSIONAL ENGINEER: DOUGLAS JAMES DUNRUD
 No. C47240
 Exp. 12-30-13
 CIVIL
 STATE OF CALIFORNIA
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.

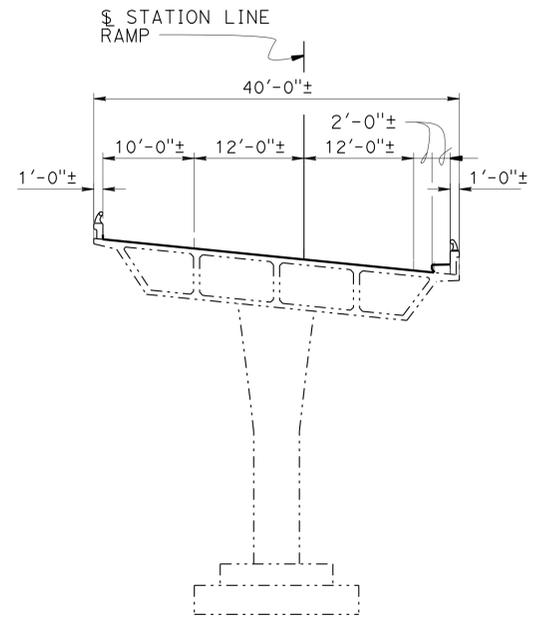


ELEVATION
1" = 30'

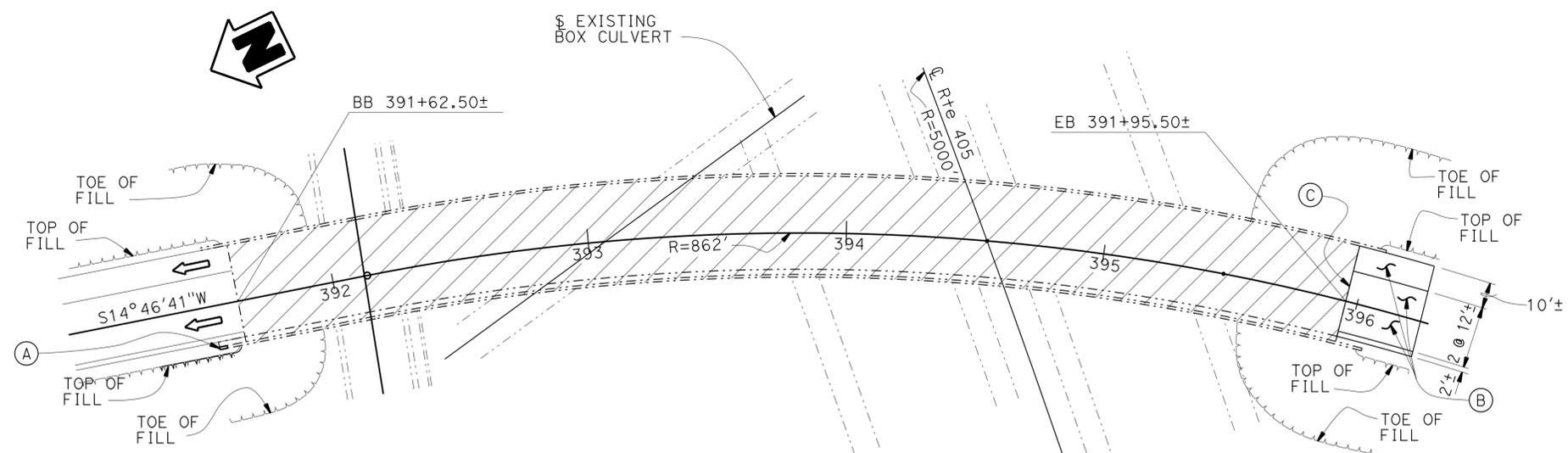
QUANTITIES

RAPID SETTING CONCRETE (PATCH)	42	CF
REMOVE UNSOUND CONCRETE	42	CF
PREPARE CONCRETE BRIDGE DECK SURFACE	16,887	SQFT
TREAT BRIDGE DECK	16,887	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	235	GAL
AGGREGATE BASE (APPROACH SLAB)	4	CY
STRUCTURAL CONCRETE, APPROACH SLAB (TYPE R)	40	CY
JOINT SEAL (MR 1")	40	LF
CONCRETE BARRIER (TRANSITION ANCHOR BLOCK)	3	LF

JOINT SEAL TABLE			
LOCATION	JOINT SEAL LENGTH (FEET)	APPROX DEPTH TO CLEAN JOINT SEAL (INCHES)	EXISTING WATERSTOP
N/B APPROACH	40 ±	N/A	YES



TYPICAL SECTION
1" = 10'



PLAN
1" = 30'

NOTES:

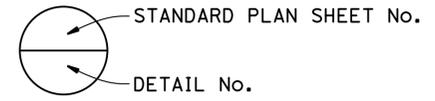
- (A) Construct Reinforced Concrete End Block (See "Miscellaneous Details" sheets)
- (B) Structure Approach Type R(30S)
- (C) Replace Joint Seal (MR=1")
- Indicates existing structure
- ▨ Indicates Limits of Prepare Concrete Bridge Deck and treat with High Molecular Weight Methacrylate and remove Unsound Concrete and Patch with Rapid Setting Concrete (Patch)

INDEX TO PLANS

SHEET NO.	TITLE
1	GENERAL PLAN
2	MISCELLANEOUS DETAILS
3	STRUCTURE APPROACH TYPE R(30S)

STANDARD PLANS DATED 2010

A10A	ABBREVIATIONS (SHEET 1 OF 2)
A10B	ABBREVIATIONS (SHEET 2 OF 2)
A77J1	METAL BEAM GUARD RAILING-CONNECTIONS TO BRIDGE RAILINGS
B6-21	WITHOUT SIDEWALKS DETAILS No. 1
	JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")



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

NOTE:
Exact locations of Approach Slabs to be determined by the Field Engineer.

 DESIGN ENGINEER 1-7-13	DESIGN	BY S. Galgiani	CHECKED L. Han	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 14	BRIDGE NO.	55-0421F	S405-N55 CONNECTOR OVERCROSSING GENERAL PLAN
	DETAILS	BY M. Lane	CHECKED S. Galgiani	LAYOUT	BY S. Galgiani			POST MILE	R8.65	
	QUANTITIES	BY S. Galgiani	CHECKED L. Han	SPECIFICATIONS	BY Karen Doll			PLANS AND SPECS COMPARED	Karen Doll	

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS: 0 1 2 3
 UNIT: 3613
 PROJECT NUMBER & PHASE: 1213000066
 CONTRACT NO.: 12-0L74U1
 DISREGARD PRINTS BEARING EARLIER REVISION DATES
 REVISION DATES: 1-3-13, 10-24-12, 11-29-12, 12-31-12
 SHEET 1 OF 3

LIMITS OF METHACRYLATE TREATMENT FROM BB TO EB

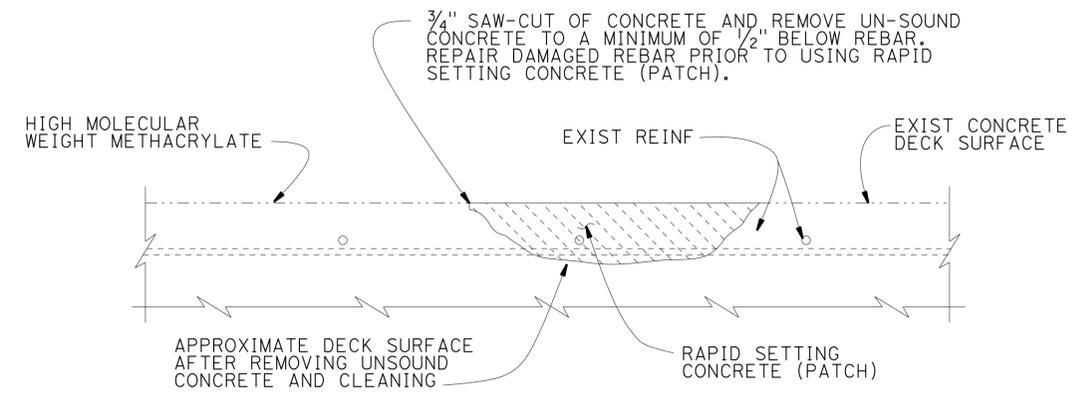
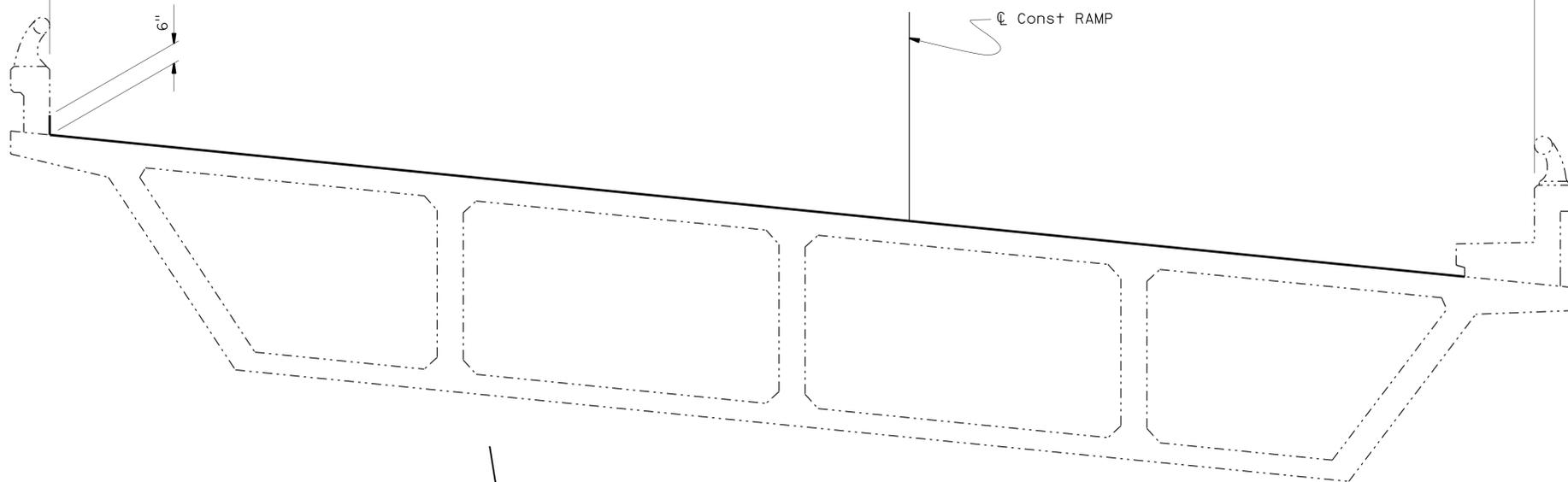
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	354	368

REGISTERED CIVIL ENGINEER **Douglas J. Dunrud** 1-7-13 DATE

4-8-13 PLANS APPROVAL DATE

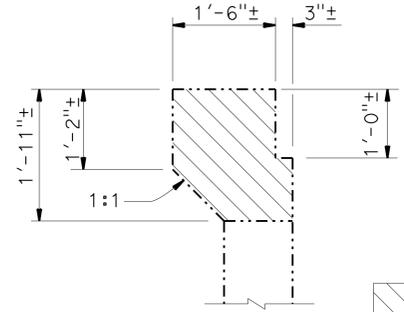
REGISTERED PROFESSIONAL ENGINEER
 DOUGLAS JAMES DUNRUD
 No. C47240
 Exp. 12-30-13
 CIVIL
 STATE OF CALIFORNIA

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



TYPICAL SECTION

1/2" = 1'-0"



LIMITS OF EXISTING BACKWALL REMOVAL

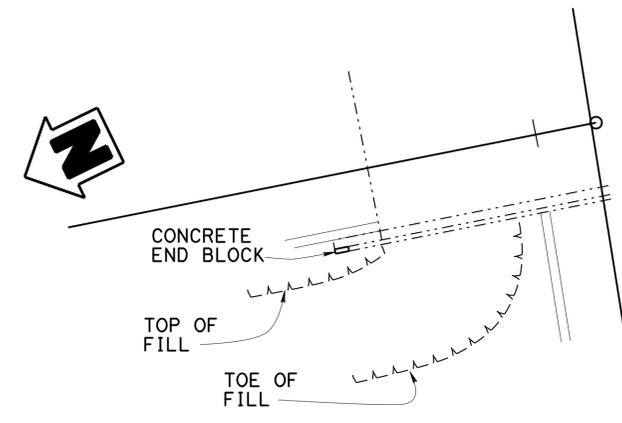
3/4" = 1'-0"

DECK REPAIR DETAIL

REINFORCEMENT MAY BE ENCOUNTERED DURING DECK CONCRETE REMOVAL.
NO SCALE

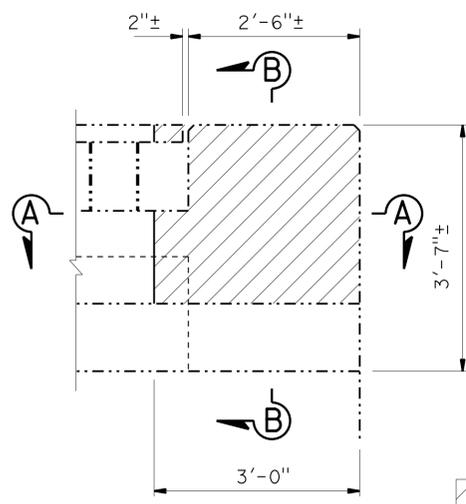
CONCRETE REPAIR TABLE

APPROXIMATE AREA DAMAGED (PERCENT)	AVERAGE DEPTH (INCHES)	APPROXIMATE DECK AREA (SQ FT)	UN SOUND CONCRETE (CF)	RAPID SETTING CONCRETE PATCH (CF)
1	3	16,887	42	42



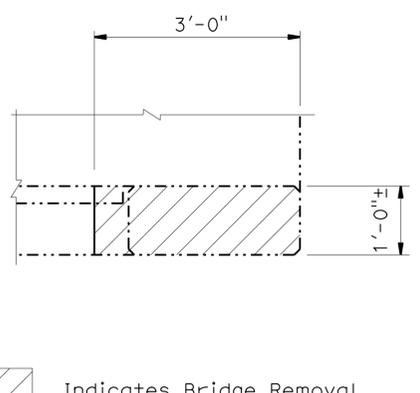
PLAN

1" = 20'



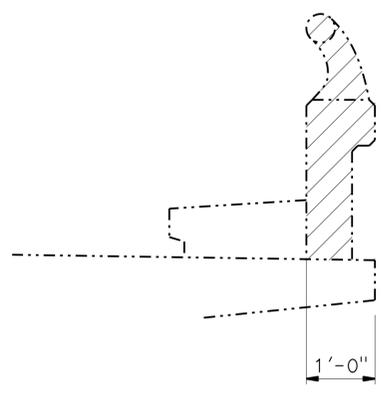
EXISTING TYPE 2 RAILING

3/4" = 1'-0"



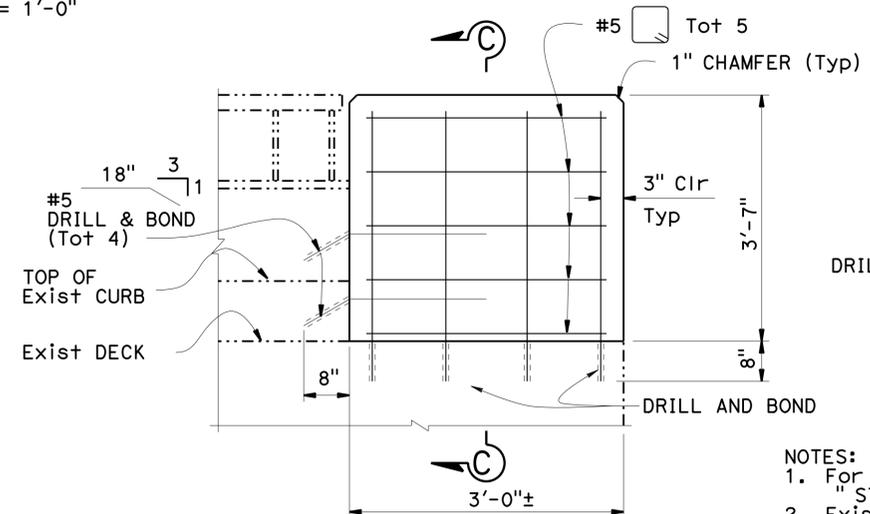
SECTION A-A

3/4" = 1'-0"



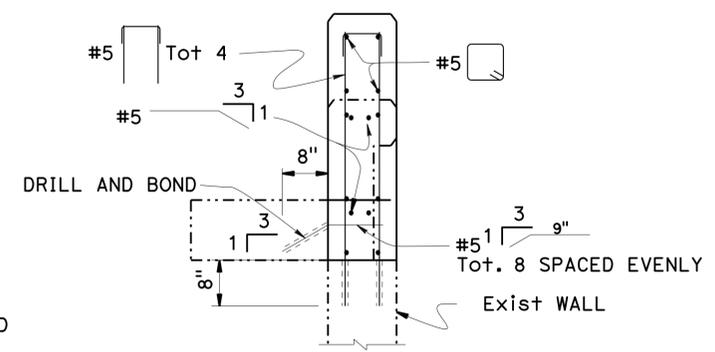
SECTION B-B

3/4" = 1'-0"



REINFORCED CONCRETE END BLOCK

3/4" = 1'-0"



SECTION C-C

3/4" = 1'-0"

NOTES:
 1. For MBGR Connection see "CONNECTION DETAIL BB" on "STANDARD PLAN A77J1".
 2. Existing Reinforcing not shown.

DESIGN	BY S. Galgiani	CHECKED L. Han
DETAILS	BY L. Xiong	CHECKED S. Galgiani
QUANTITIES	BY S. Galgiani	CHECKED L. Han

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
 DESIGN BRANCH 14

BRIDGE NO.	55-0421F
POST MILE	R8.65

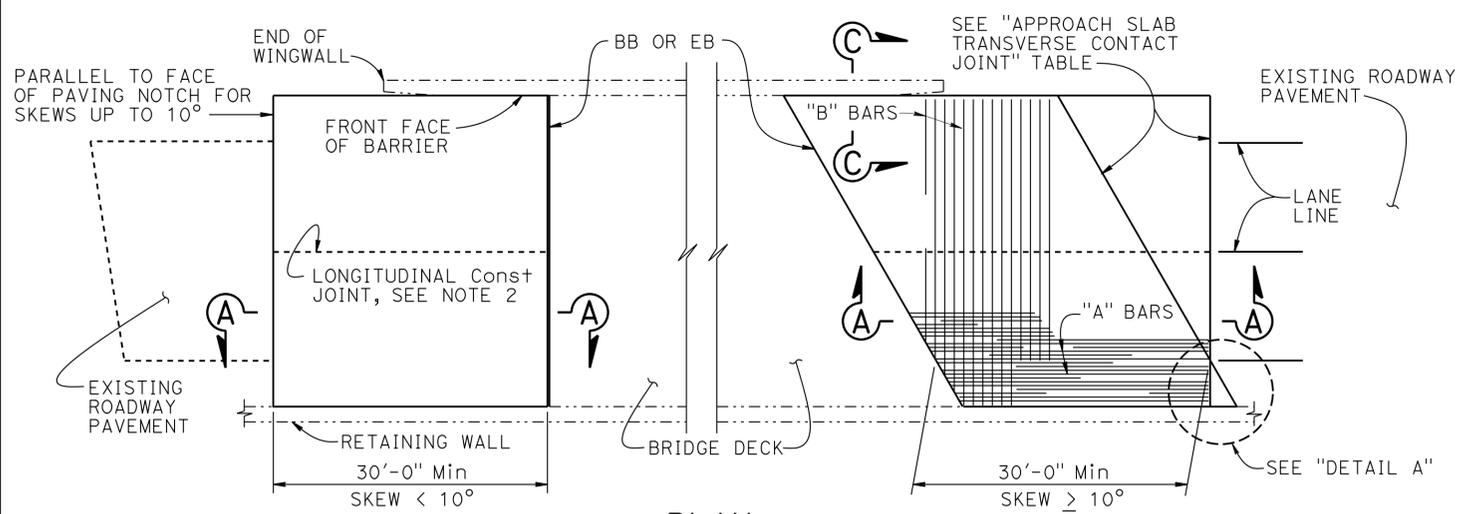
S405-N55 CONNECTOR OVERCROSSING
MISCELLANEOUS DETAILS

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	355	368

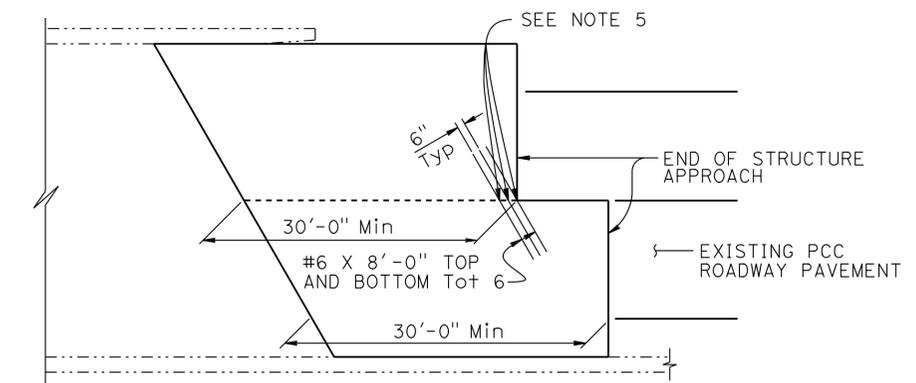
REGISTERED CIVIL ENGINEER
 DOUGLAS JAMES DUNRUD
 No. C47240
 Exp. 12-30-13
 CIVIL
 STATE OF CALIFORNIA

1-7-13 DATE
 4-8-13 PLANS APPROVAL DATE

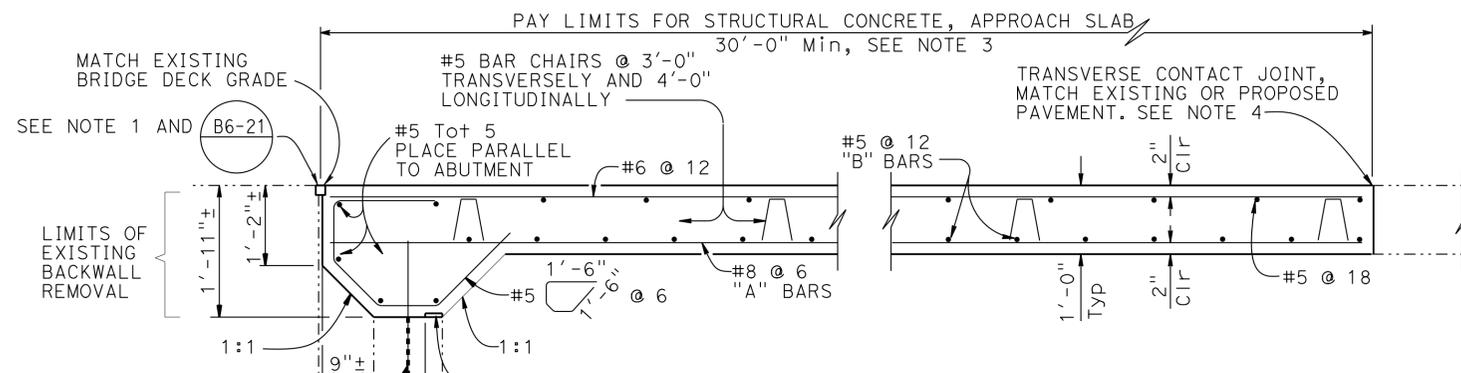
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



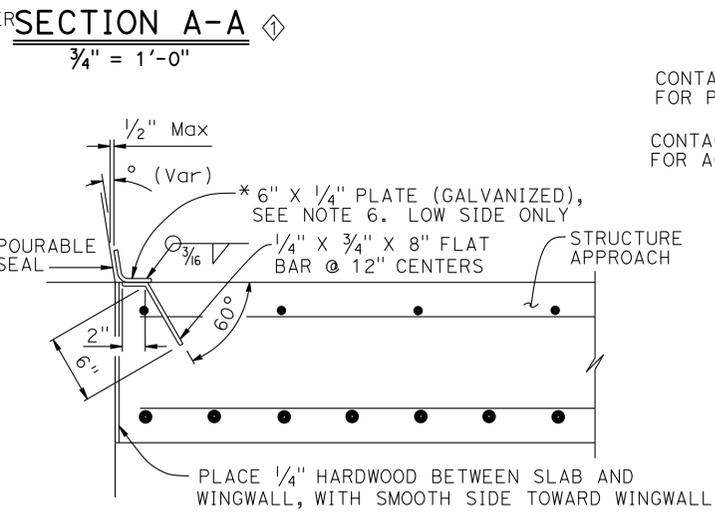
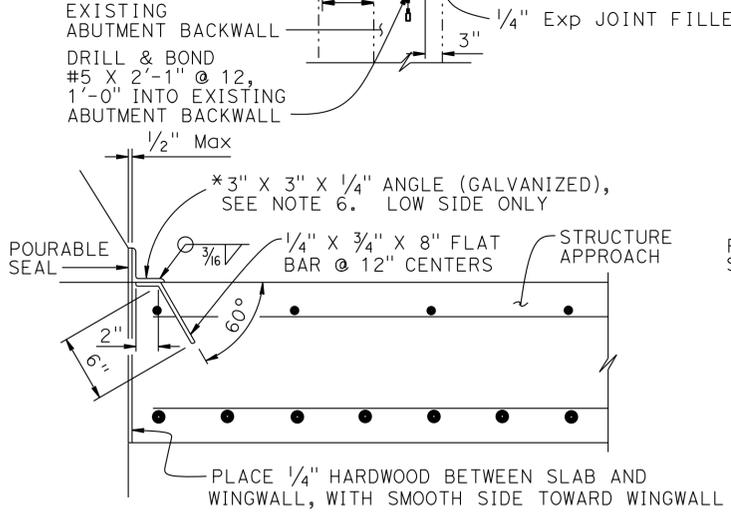
PLAN
1" = 10'



STRUCTURE APPROACH - END STAGGER DETAIL
NO SCALE

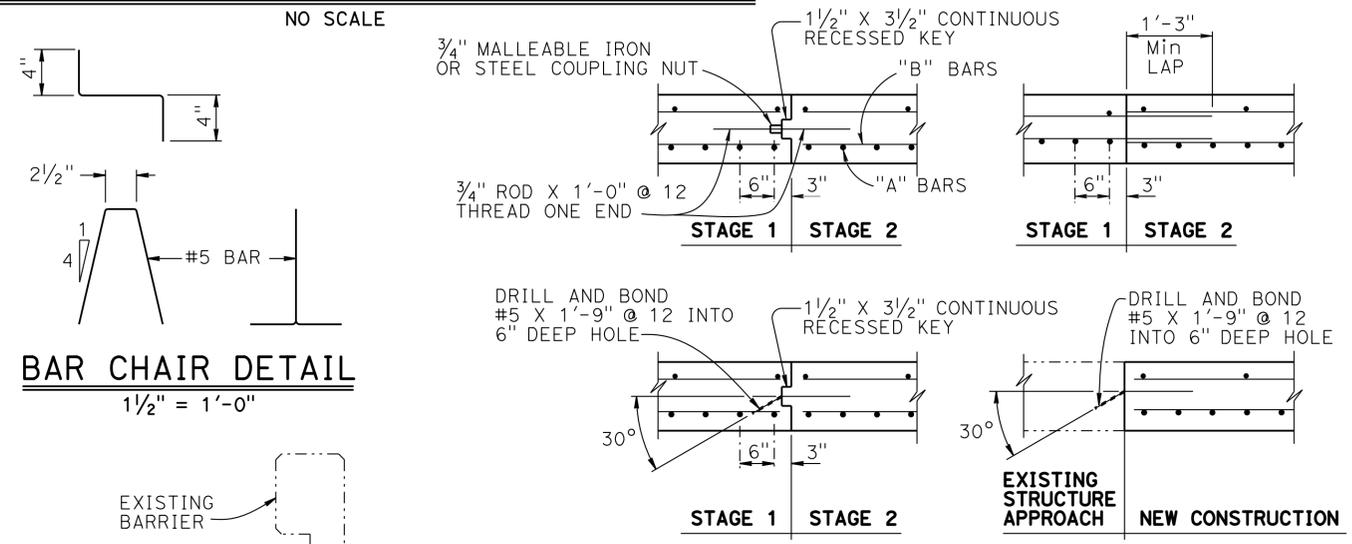


SECTION A-A
3/4" = 1'-0"

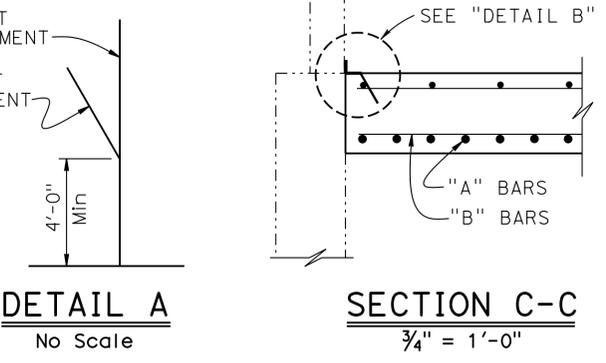


DETAIL B
1/2" = 1'-0"

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



LONGITUDINAL CONSTRUCTION JOINT ALTERNATIVES
3/4" = 1'-0"



APPROACH SLAB TRANSVERSE CONTACT JOINT		
APPROACH SKEW	WITH AC ROADWAY PAVEMENT	WITH PCC ROADWAY PAVEMENT
< 10°	PARALLEL TO FACE OF PN	PARALLEL TO FACE OF PN
10° - 45°	PARALLEL TO FACE OF PN USE "DETAIL A"	STAGGER LINES 24' TO 36' APART
> 45°	PARALLEL TO FACE OF PN USE "DETAIL A"	STAGGER AT EACH LANE LINE

- NOTES:
- Sealed joint, for MR see Structure Plans. Adjust bar reinforcement to clear a sawcut for sealed joint, when required
 - Longitudinal construction joints, when permitted by Engineer, shall be located on lane lines
 - Transverse contact joint shall be a minimum of 5'-0" from an existing or constructed weakened plane joint
 - For transverse contact joint with new PCC paving, refer to Standard Plan P10
 - Couplers are required for stage construction
 - End angle or plate at beginning of barrier transition, end of wingwall or end of structure approach as applicable

REVISED STANDARD DRAWING

FILE NO. **xs3-130**

APPROVAL DATE July 2011

MODIFIED DETAILS

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

BRIDGE NO. 55-0421F
POST MILE R8.65

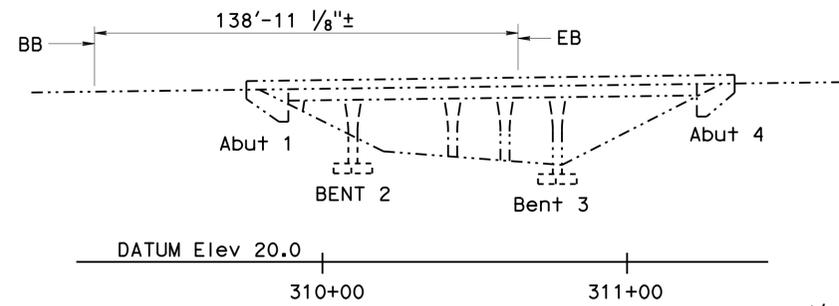
S405-N55 CONNECTOR OVERCROSSING
STRUCTURE APPROACH TYPE R(30S)

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	356	368

INDEX TO PLANS

SHEET NO.	TITLE
1	GENERAL PLAN
2	MISCELLANEOUS DETAILS
3	STRUCTURE APPROACH TYPE R(30D)

REGISTERED CIVIL ENGINEER *Douglas J. Dunrud* 1-7-13
 DATE
 4-8-13
 PLANS APPROVAL DATE
 REGISTERED PROFESSIONAL ENGINEER
 DOUGLAS JAMES DUNRUD
 No. C47240
 Exp. 12-30-13
 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.

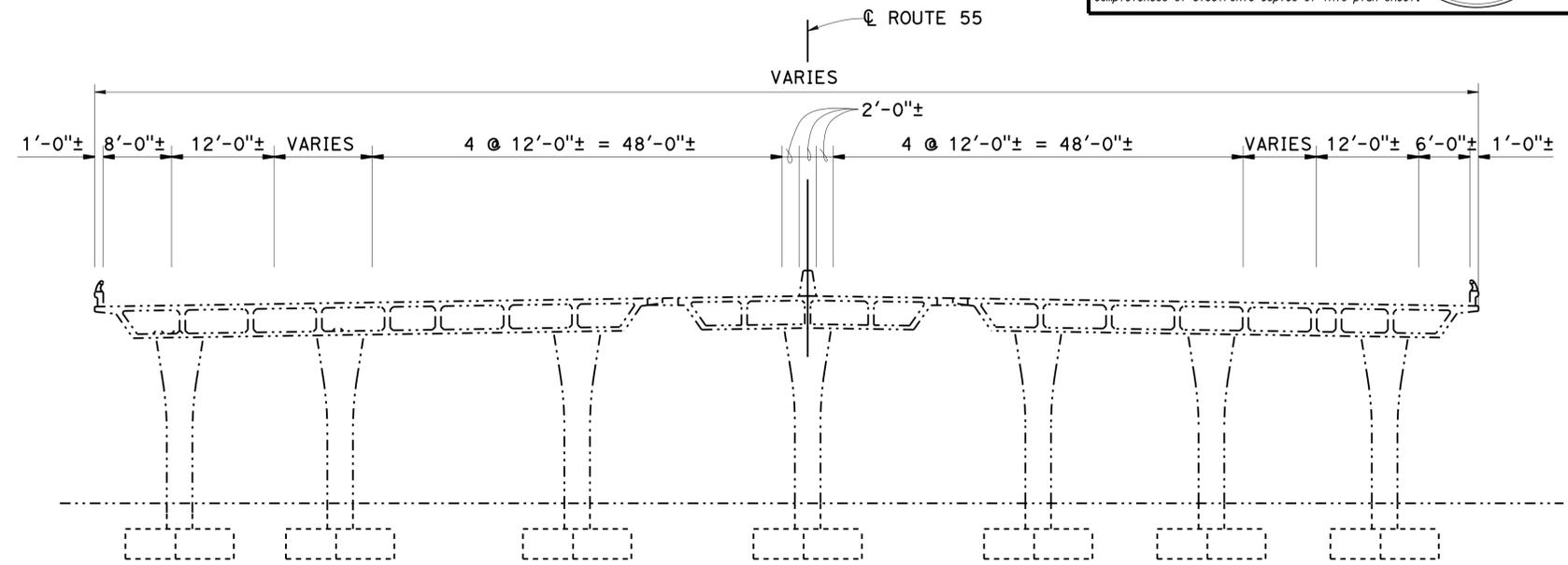


ELEVATION

1" = 30'-0"

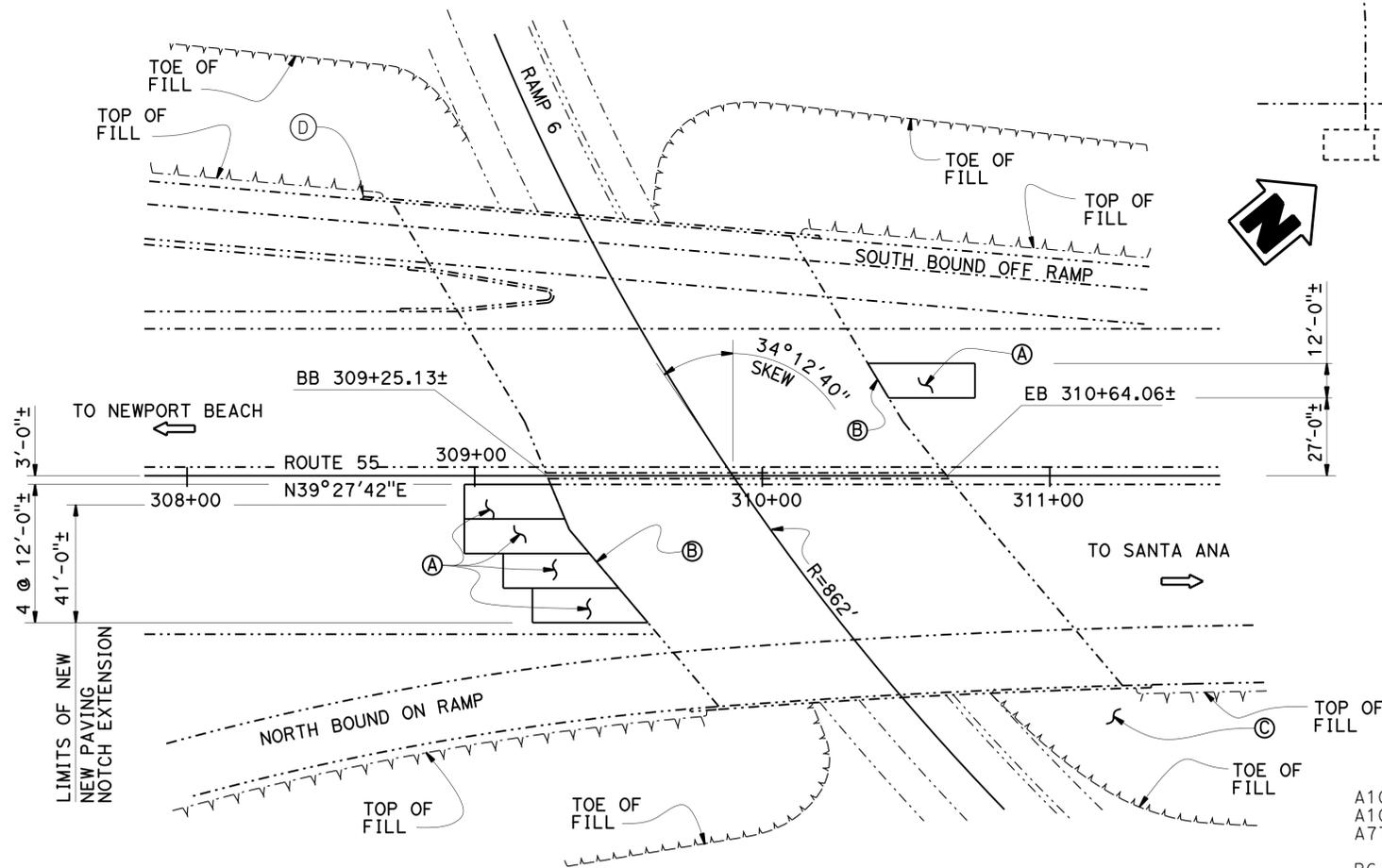
QUANTITIES

AGGREGATE BASE (APPROACH SLAB)	8	CY
STRUCTURAL CONCRETE, APPROACH SLAB (TYPE R)	76	CY
PAVING NOTCH EXTENSION	48	CF
JOINT SEAL (MR 1")	73	LF
CONCRETE BARRIER (TRANSITION ANCHOR BLOCK)	3	LF



TYPICAL SECTION

1" = 10'-0"



PLAN

1" = 30'-0"

NOTE: Exact locations of Approach Slabs to be determined by the Field Engineer.

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

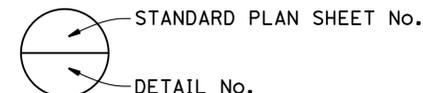
LOCATION	PAVING NOTCH	JOINT SEAL LENGTH (FEET)	APPROX DEPTH TO CLEAN JOINT SEAL (INCHES)
N/B APPROACH	YES	58	N/A
S/B APPROACH	YES	14.5	N/A

STANDARD PLANS DATED 2010

A10A	ABBREVIATIONS (SHEET 1 OF 2)
A10B	ABBREVIATIONS (SHEET 2 OF 2)
A77J1	METAL BEAM GUARD RAILING-CONNECTIONS TO BRIDGE RAILINGS WITHOUT SIDEWALKS DETAILS No. 1
B6-21	JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")

NOTES:

- (A) Structure Approach Type R(30D)
- (B) Replace Joint Seal (MR=1")
- (C) Backfill and Compact Erosion Gully (See Road Plans)
- (D) Construct Reinforced Concrete End Block (See "Miscellaneous Details" sheet)
- Indicates existing structure



 DESIGN ENGINEER 1-7-13	DESIGN	BY S. Galgiani	CHECKED L. Han	LOAD & RESISTANCE FACTOR DESIGN	LIVE LOADING: HL93 W/"LOW-BOY"; PERMIT DESIGN VEHICLE
	DETAILS	BY L. Xiong	CHECKED S. Galgiani	LAYOUT	BY S. Galgiani
	QUANTITIES	BY S. Galgiani	CHECKED L. Han	SPECIFICATIONS	BY Karen Doll

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

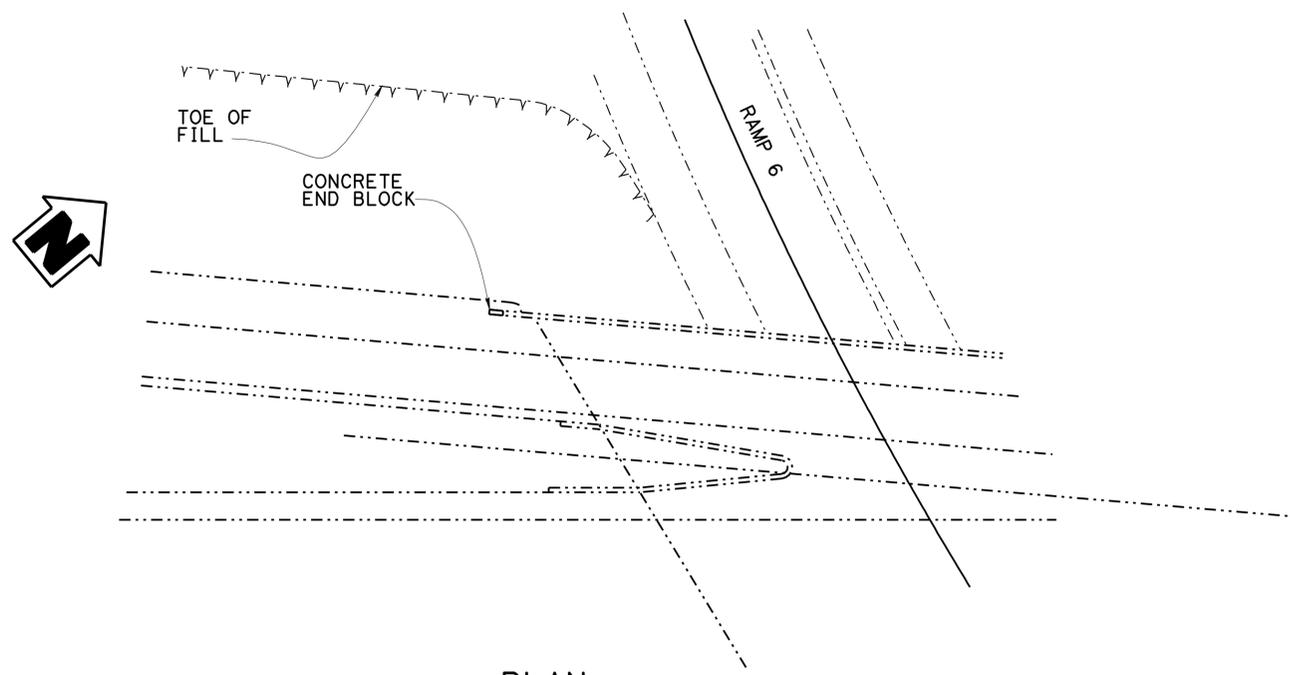
DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 14

BRIDGE NO. 55-0423
 POST MILE R5.89
55/ S405-N55 CONNECTOR SEPARATION
GENERAL PLAN

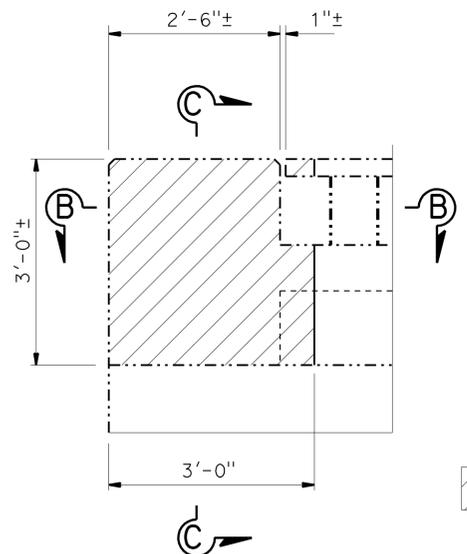
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	0 1 2 3	UNIT: 3613 PROJECT NUMBER & PHASE: 1213000066	CONTRACT NO.: 12-0L74U1	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES 12-31-12 1-3-13 10-18-12 11-29-12	SHEET 1 OF 3
--	---------	--	-------------------------	---	---	--------------

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	357	368

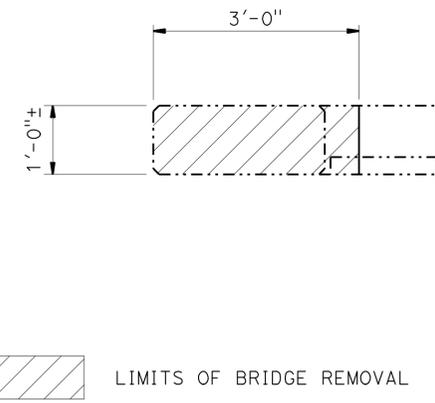
REGISTERED CIVIL ENGINEER *Douglas J. Dunrud* 1-7-13 DATE
 PLANS APPROVAL DATE 4-8-13
 REGISTERED PROFESSIONAL ENGINEER
 DOUGLAS JAMES DUNRUD
 No. C47240
 Exp. 12-30-13
 CIVIL
 STATE OF CALIFORNIA
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.



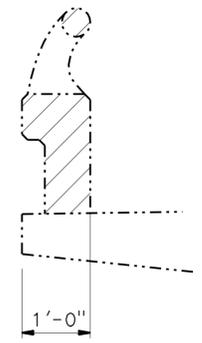
PLAN
1" = 20'-0"



EXISTING TYPE 1 RAILING
3/4" = 1'-0"



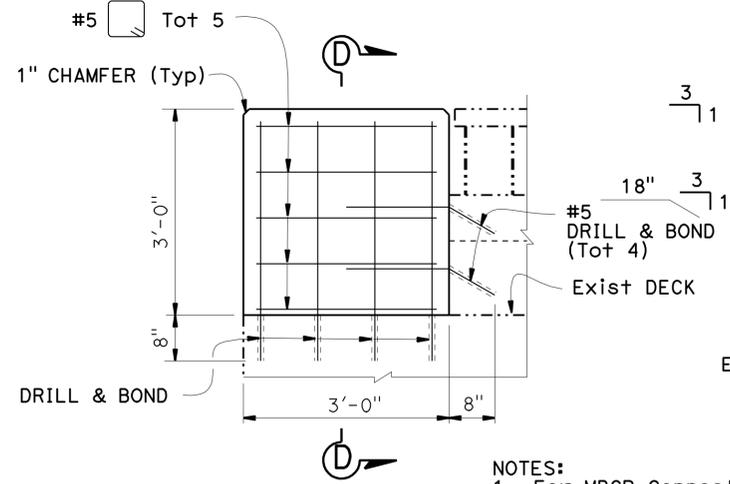
SECTION C-C
3/4" = 1'-0"



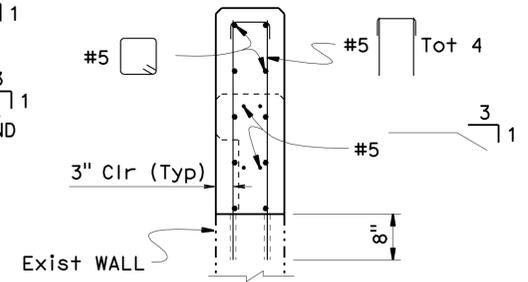
SECTION D-D
3/4" = 1'-0"

LIMITS OF BRIDGE REMOVAL

NOTE: Preserve Existing Steel where possible



REINFORCED CONCRETE END BLOCK
3/4" = 1'-0"



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

- NOTES:
 1. For MBGR Connection see "CONNECTION DETAIL BB" on "STANDARD PLAN A77J1".
 2. Existing Reinforcing not shown.

DESIGN	BY S. Galgiani	CHECKED L. Han
DETAILS	BY L. Xiong	CHECKED S. Galgiani
QUANTITIES	BY S. Galgiani	CHECKED L. Han

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

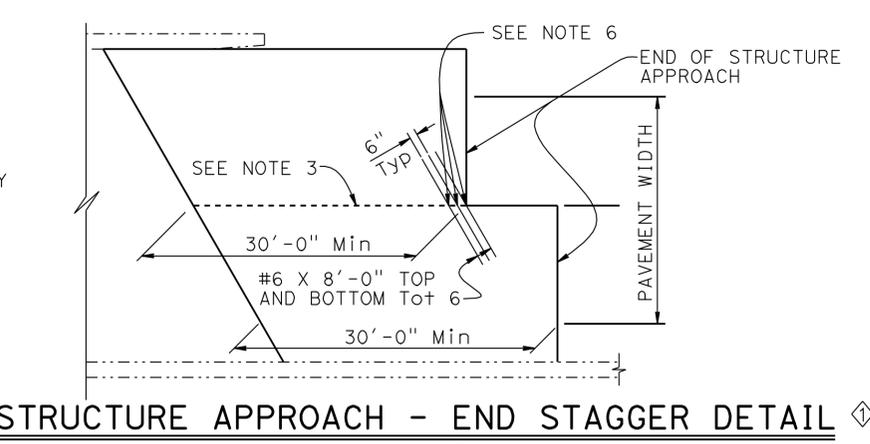
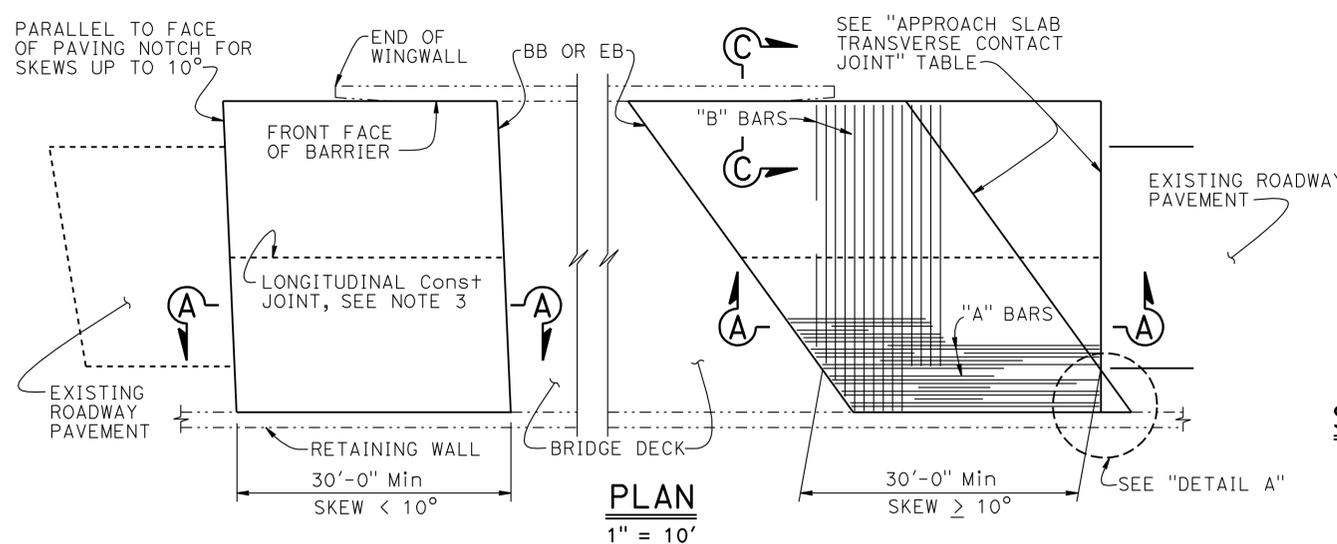
DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 14

BRIDGE NO.	55-0423
POST MILE	R5.89

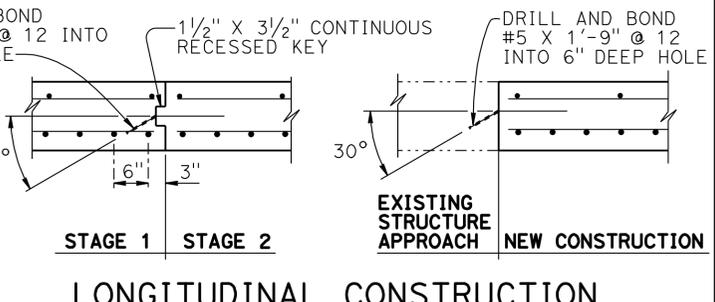
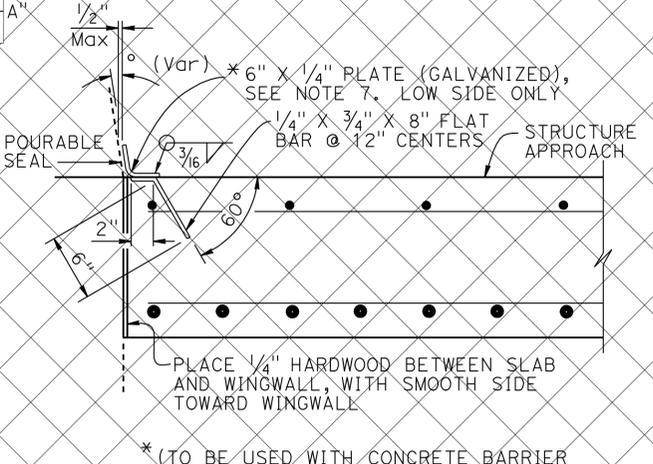
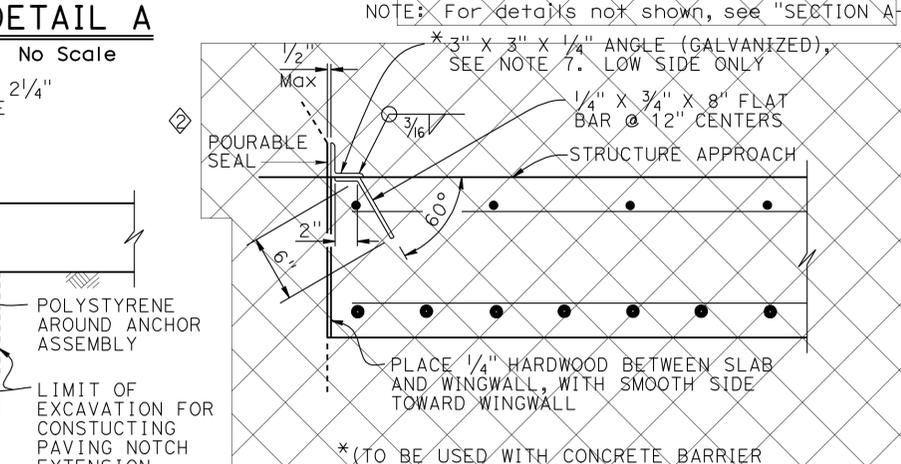
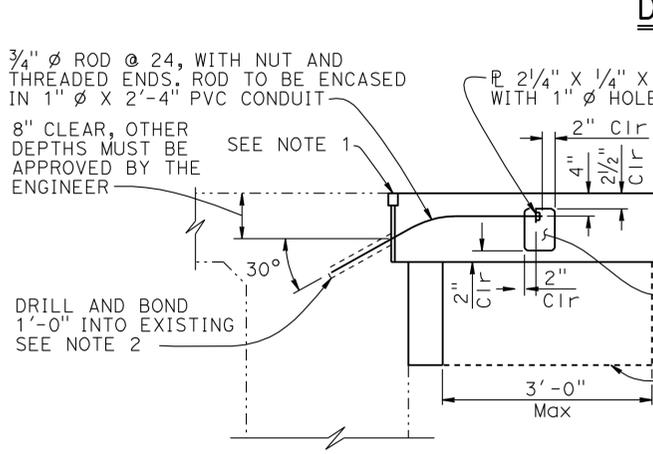
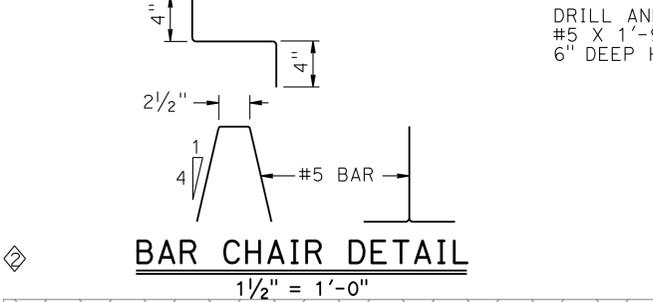
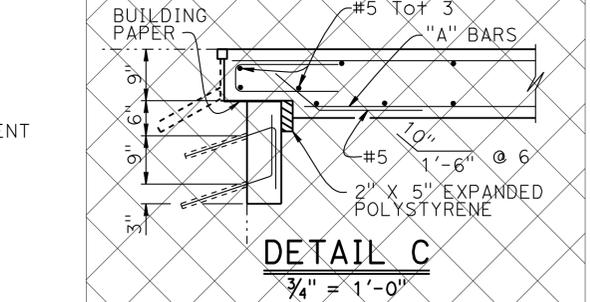
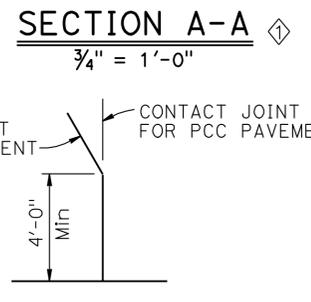
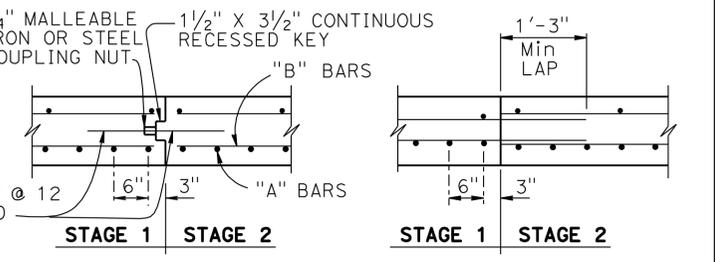
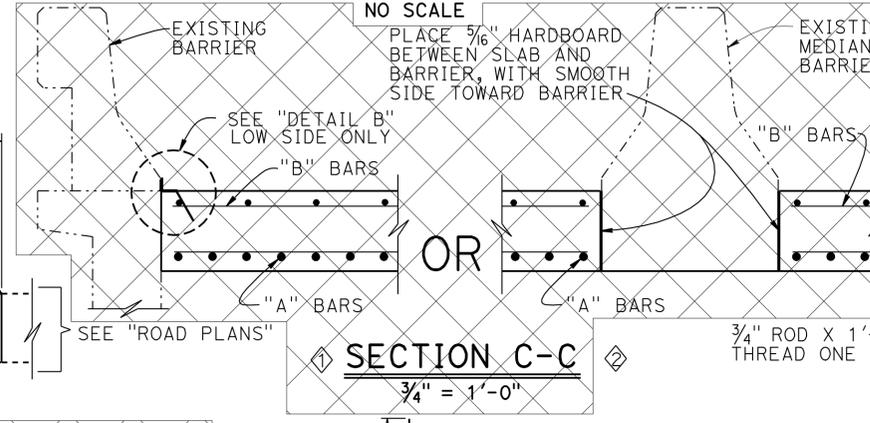
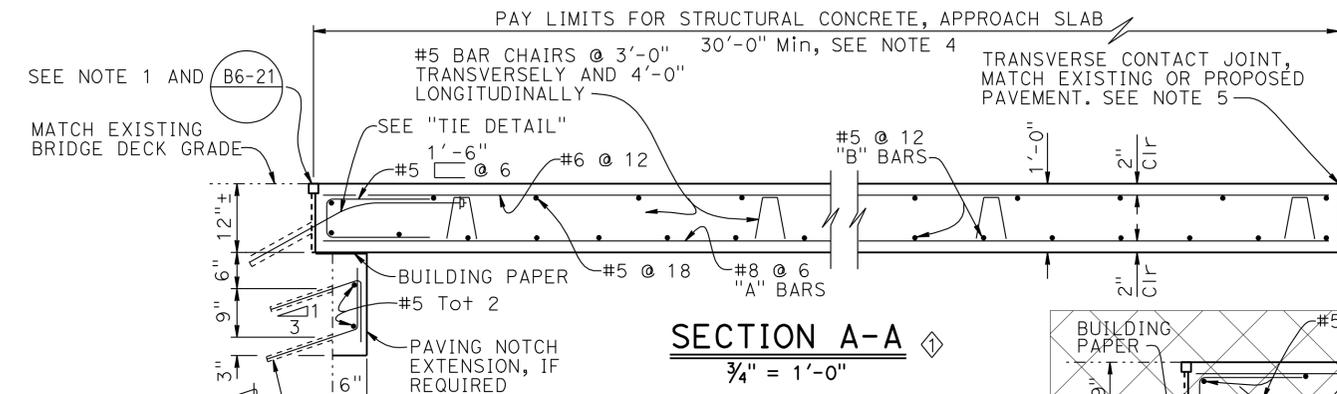
**55/ S405-N55 CONNECTOR SEPARATION
MISCELLANEOUS DETAILS**

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	358	368

REGISTERED CIVIL ENGINEER **Douglas J. Dunrud** 1-7-13
 DATE
 PLANS APPROVAL DATE 4-8-13
 REGISTERED PROFESSIONAL ENGINEER
 No. C47240
 Exp. 12-30-13
 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.



APPROACH SLAB TRANSVERSE CONTACT JOINT		
APPROACH SKEW	WITH AC ROADWAY PAVEMENT	WITH PCC ROADWAY PAVEMENT
< 10°	PARALLEL TO FACE OF PN	PARALLEL TO FACE OF PAVING NOTCH
10° - 45°	PARALLEL TO FACE OF PN USE "DETAIL A"	STAGGER LINES 24' TO 36' APART
> 45°	PARALLEL TO FACE OF PN USE "DETAIL A"	STAGGER AT EACH LANE LINE



- NOTES:
- For details not shown or noted, see Structure Plans. Adjust bar reinforcement to clear a sawcut for sealed joint, when required
 - Space to avoid existing prestress anchorages and main reinforcement
 - Longitudinal construction joints, when permitted by the Engineer, shall be located on lane lines
 - Transverse contact joint shall be a minimum of 5'-0" from an existing or constructed weakened plane joint
 - For transverse contact joint with new PCC paving, refer to Standard Plan P10
 - Couplers are required for stage construction
 - End angle or plate at beginning of barrier transition, end of wingwall or end of structure approach as applicable

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

REVISED STANDARD DRAWING

FILE NO. **xs3-150**

APPROVAL DATE July 2011

◊ MODIFIED DETAILS
 ◊ DELETED DETAILS

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

BRIDGE NO. 55-0423

POST MILE R5.89

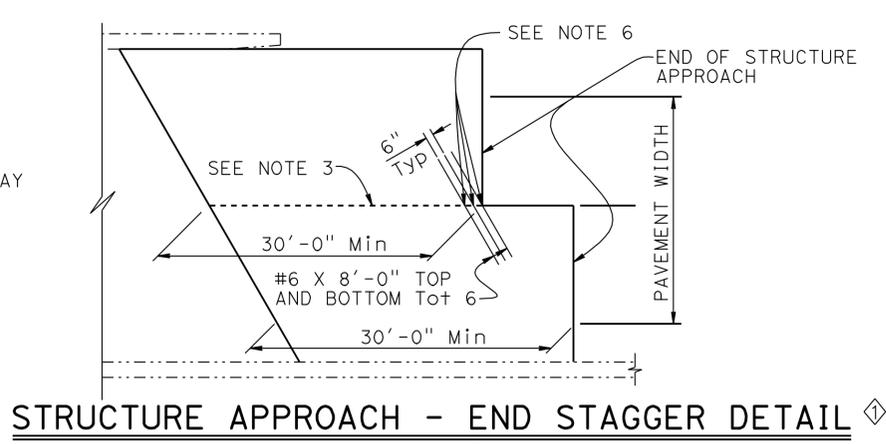
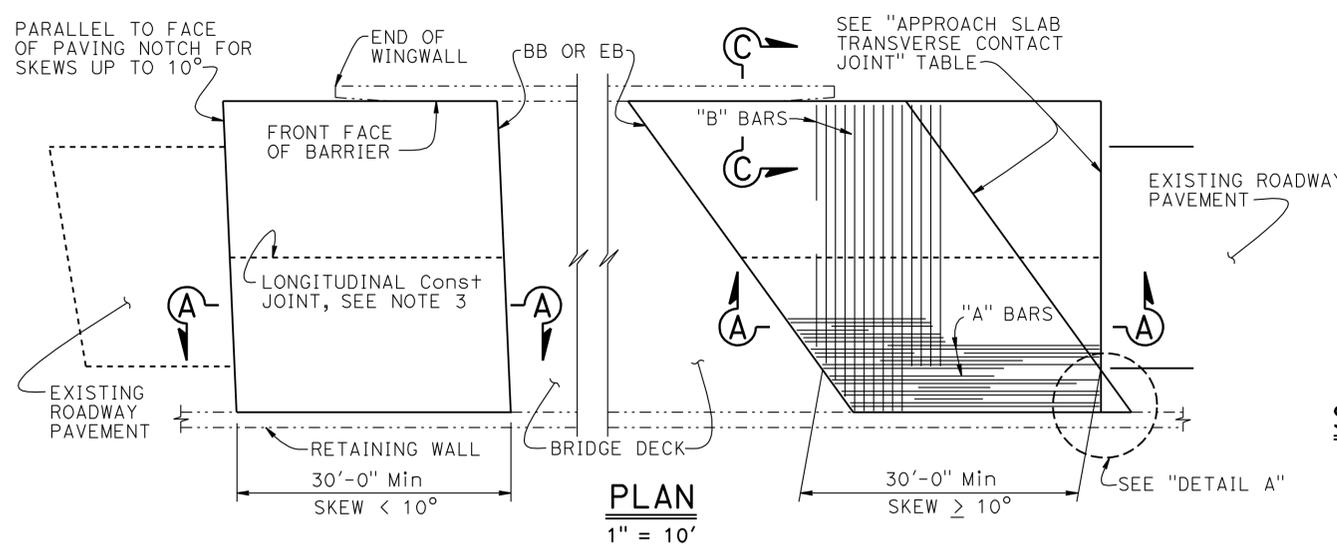
55/ S405-N55 CONNECTOR SEPARATION

STRUCTURE APPROACH TYPE R(30D)

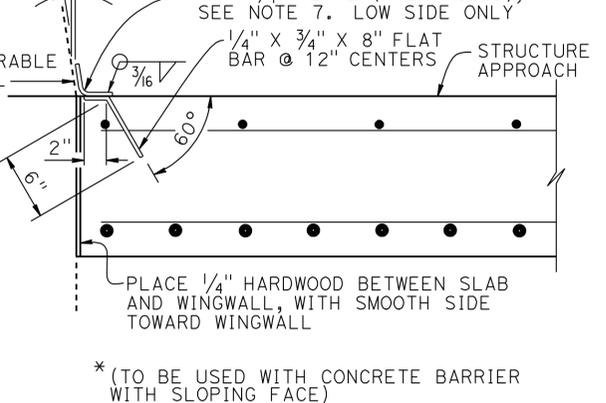
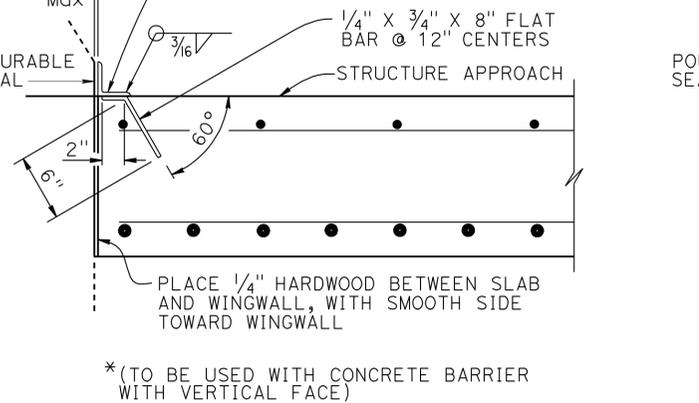
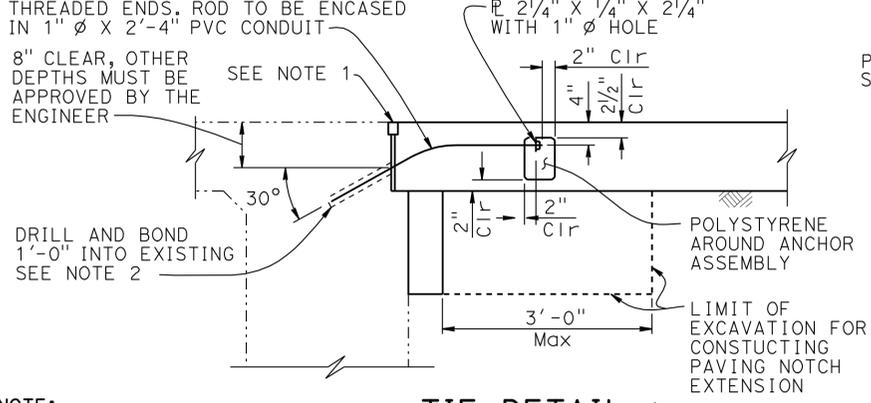
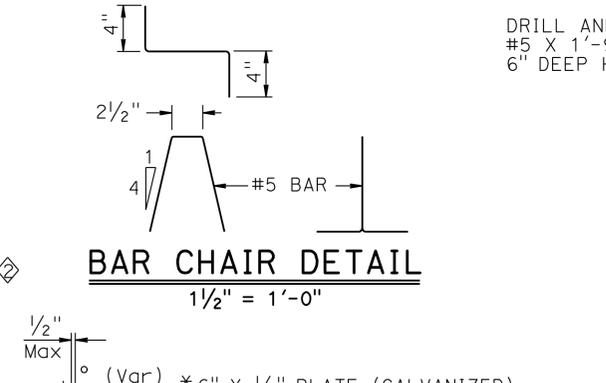
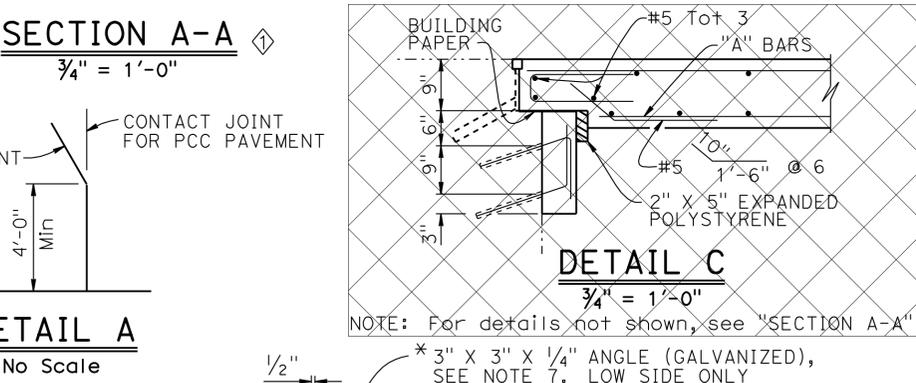
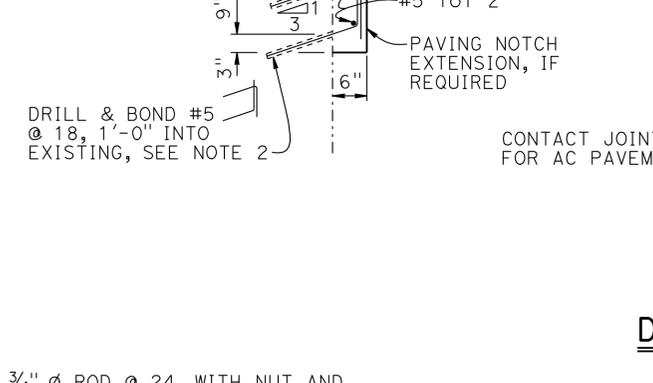
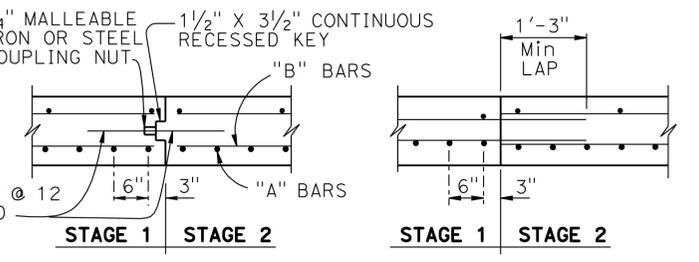
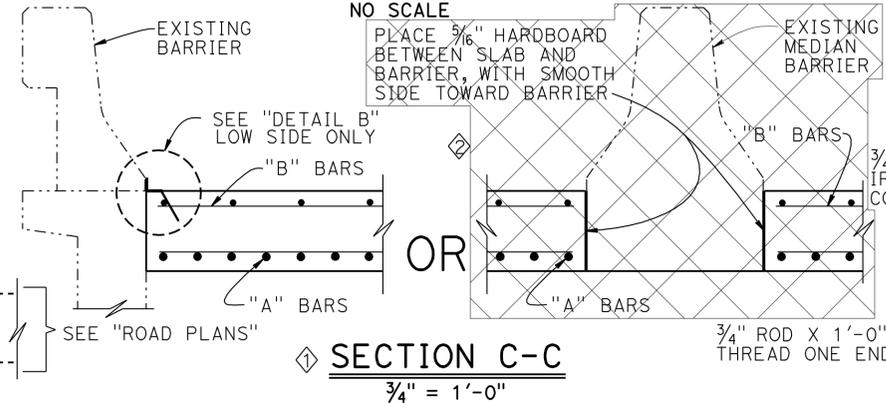
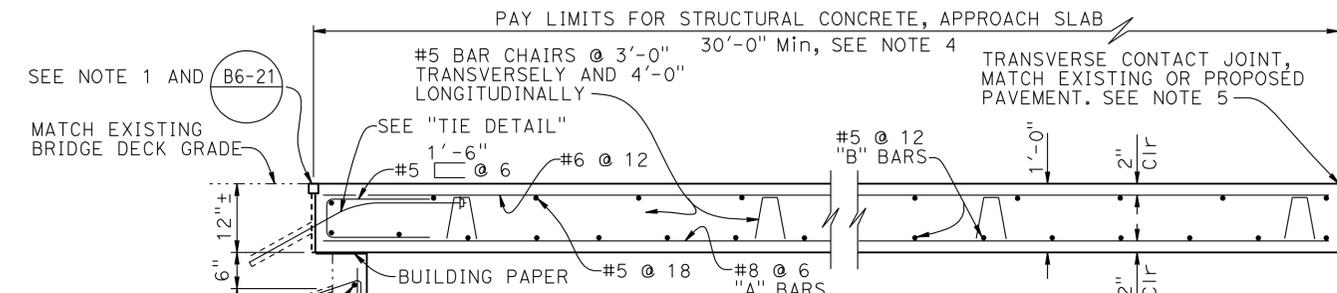
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	360	368

REGISTERED CIVIL ENGINEER **Douglas J. Dunrud** 1-7-13
 DOUGLAS JAMES DUNRUD No. C47240 Exp. 12-30-12 CIVIL
 STATE OF CALIFORNIA

4-8-13 PLANS APPROVAL DATE
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



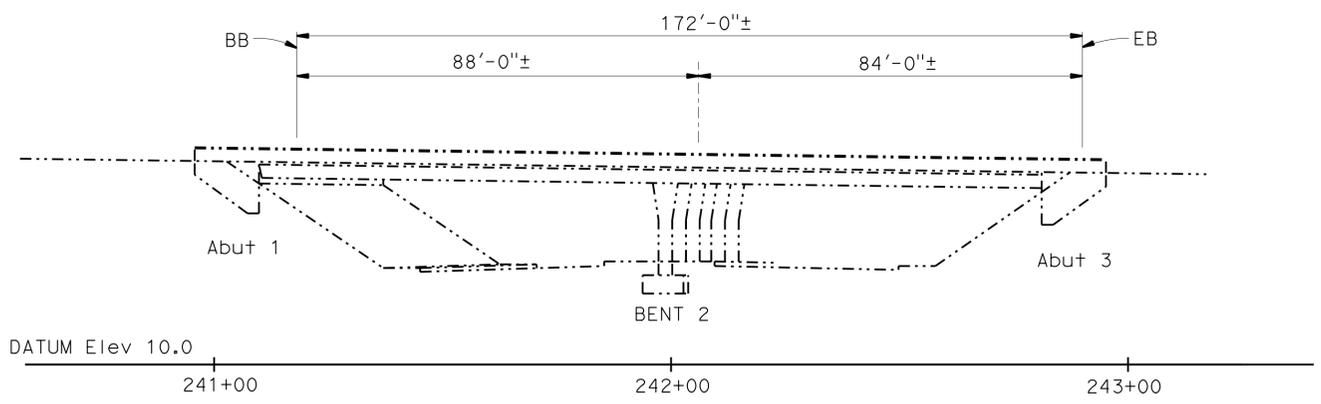
APPROACH SLAB TRANSVERSE CONTACT JOINT		
APPROACH SKEW	WITH AC ROADWAY PAVEMENT	WITH PCC ROADWAY PAVEMENT
< 10°	PARALLEL TO FACE OF PN	PARALLEL TO FACE OF PAVING NOTCH
10° - 45°	PARALLEL TO FACE OF PN USE "DETAIL A"	STAGGER LINES 24' TO 36' APART
> 45°	PARALLEL TO FACE OF PN USE "DETAIL A"	STAGGER AT EACH LANE LINE



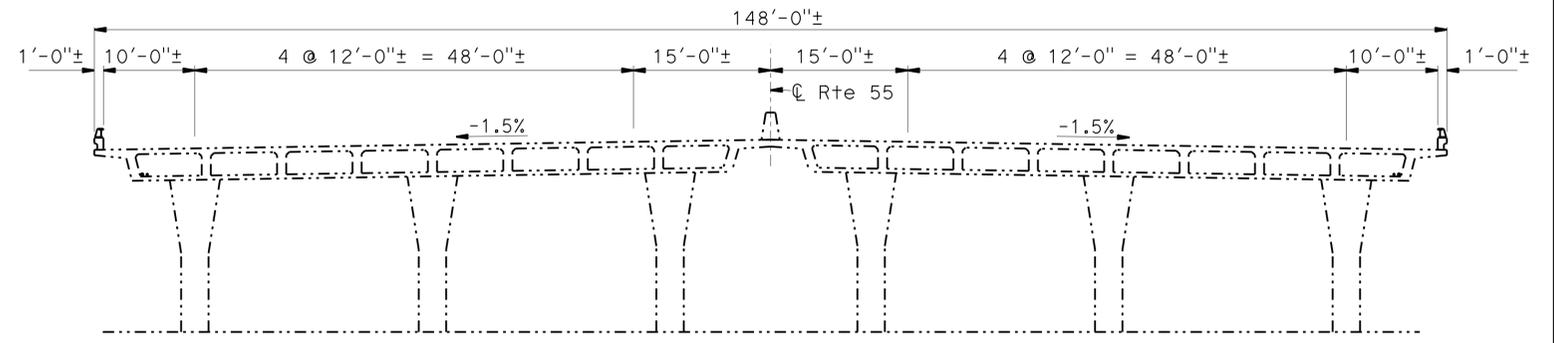
- NOTES:
- For details not shown or noted, see Structure Plans. Adjust bar reinforcement to clear a sawcut for sealed joint, when required
 - Space to avoid existing prestress anchorages and main reinforcement
 - Longitudinal construction joints, when permitted by the Engineer, shall be located on lane lines
 - Transverse contact joint shall be a minimum of 5'-0" from an existing or constructed weakened plane joint
 - For transverse contact joint with new PCC paving, refer to Standard Plan P10
 - Couplers are required for stage construction
 - End angle or plate at beginning of barrier transition, end of wingwall or end of structure approach as applicable

REVISED STANDARD DRAWING	MODIFIED DETAILS	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES	BRIDGE NO. 55-0424 POST MILE R6.06	55/N405-S55 CONNECTOR SEPARATION
FILE NO. xs3-150	APPROVAL DATE July 2011	PROJECT NUMBER & PHASE: 1213000066		CONTRACT NO.: 07-0L74U1	STRUCTURE APPROACH TYPE R(30D)
DS OSD 2147A (ENGLISH STANDARD DRAWING "XS" BORDER REV. (02-02-11))		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		UNIT: 3613	DISREGARD PRINTS BEARING EARLIER REVISION DATES
		0 1 2 3		REVISION DATES 11-29-12	SHEET 2 OF 2

FILE => 55-0424_xs3-150.dgn



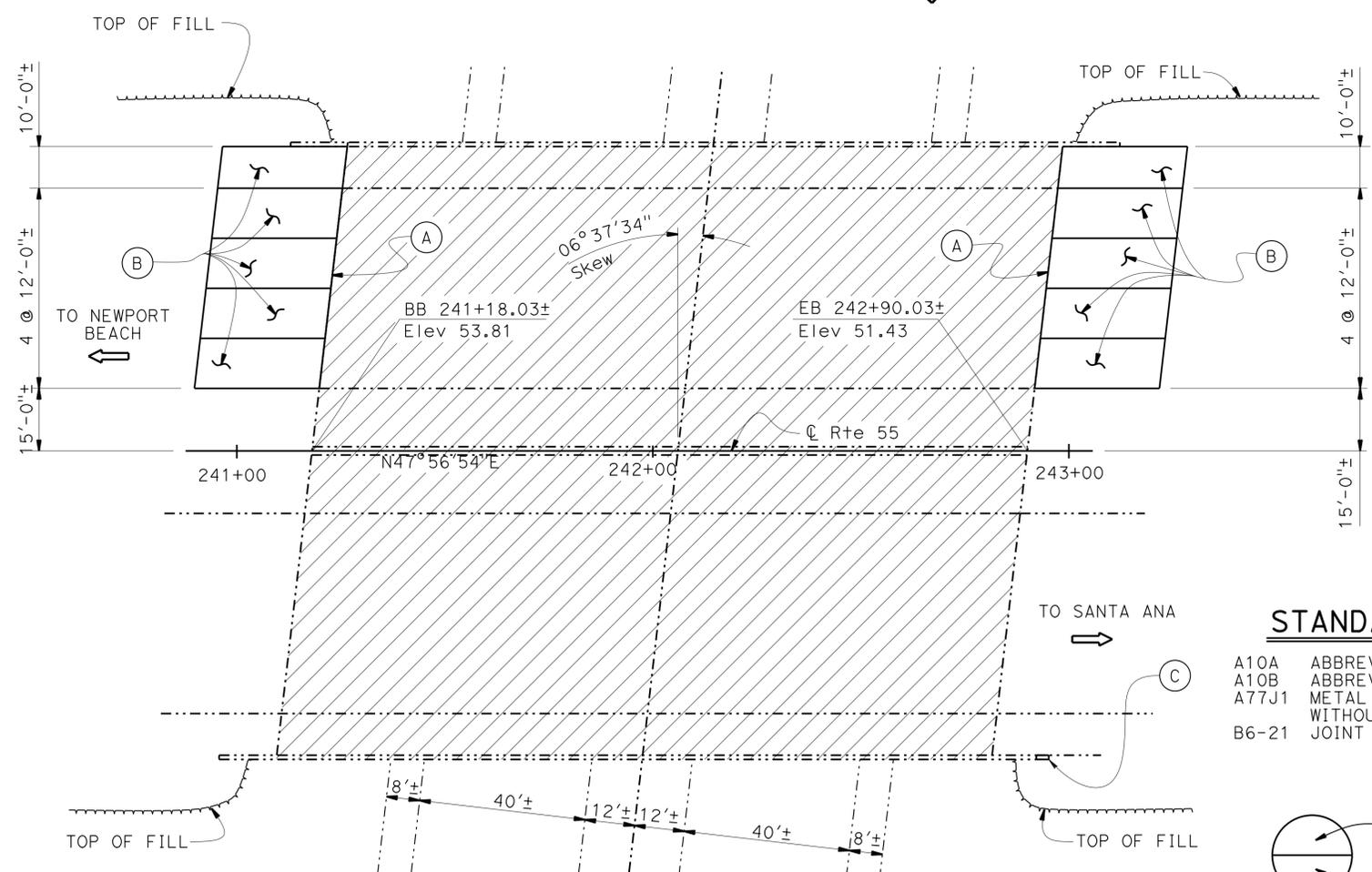
ELEVATION
1" = 20'-0"



TYPICAL SECTION
1" = 10'-0"

QUANTITIES

RAPID SETTING CONCRETE (PATCH)	64	CF
REMOVE UNSOUND CONCRETE	64	CF
PREPARE CONCRETE BRIDGE DECK SURFACE	25,456	SQFT
TREAT BRIDGE DECK	25,456	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	354	GAL
AGGREGATE BASE (APPROACH SLAB)	13	CY
STRUCTURAL CONCRETE, APPROACH SLAB (TYPE R)	129	CY
PAVING NOTCH EXTENSION	88	CF
JOINT SEAL (MR 1")	119	LF
CONCRETE BARRIER (TRANSITION ANCHOR BLOCK)	3	LF



PLAN
1" = 20'-0"

NOTE: Exact locations of Approach Slabs to be determined by the Field Engineer.

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

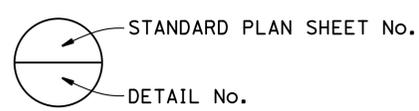
JOINT SEAL / PAVING NOTCH TABLE

LOCATION	PAVING NOTCH	JOINT SEAL LENGTH (FEET)	APPROX DEPTH TO CLEAN JOINT SEAL (INCHES)
S/B APPROACH	YES	59.4±	N/A
S/B DEPARTURE	YES	59.4±	N/A

STANDARD PLANS DATED 2010

- A10A ABBREVIATIONS (SHEET 1 OF 2)
- A10B ABBREVIATIONS (SHEET 2 OF 2)
- A77J1 METAL BEAM GUARD RAILING-CONNECTIONS TO BRIDGE RAILINGS WITHOUT SIDEWALKS DETAILS No. 1
- B6-21 JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")

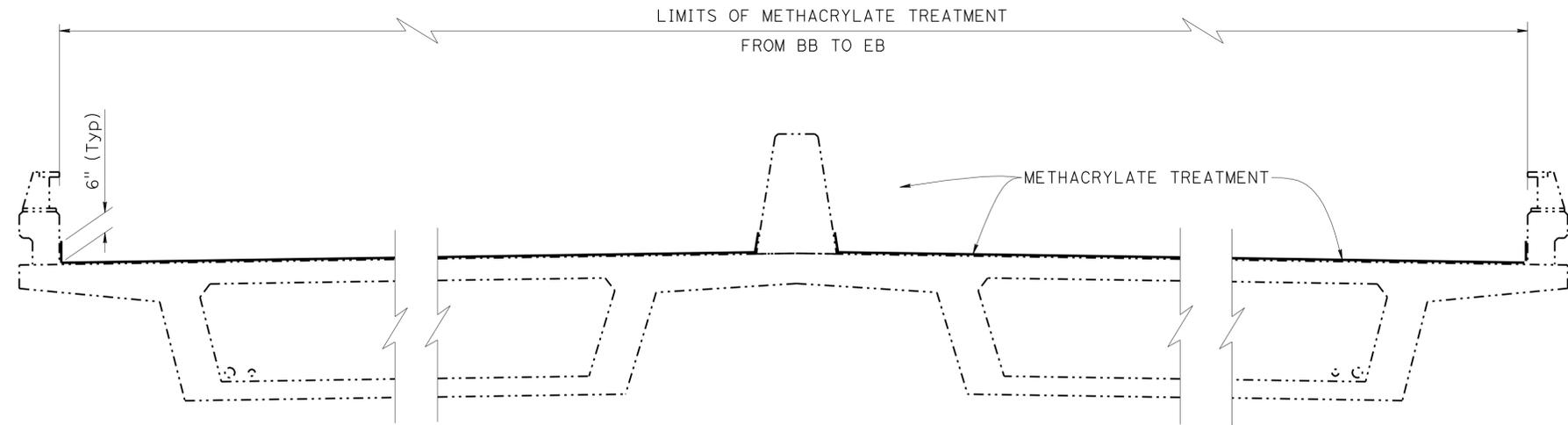
- NOTES:
- (A) Replace Joint Seal (MR=1")
 - (B) Structure Approach Type R(300)
 - (C) Construct Reinforced Concrete End Block (See "Miscellaneous Details" sheet)
 - Indicates existing structure
 - ▨ Indicates Limits of Prepare Concrete Bridge Deck and treat with High Molecular Weight Methacrylate and remove Unsound Concrete and Patch with Rapid Setting Concrete (Patch)



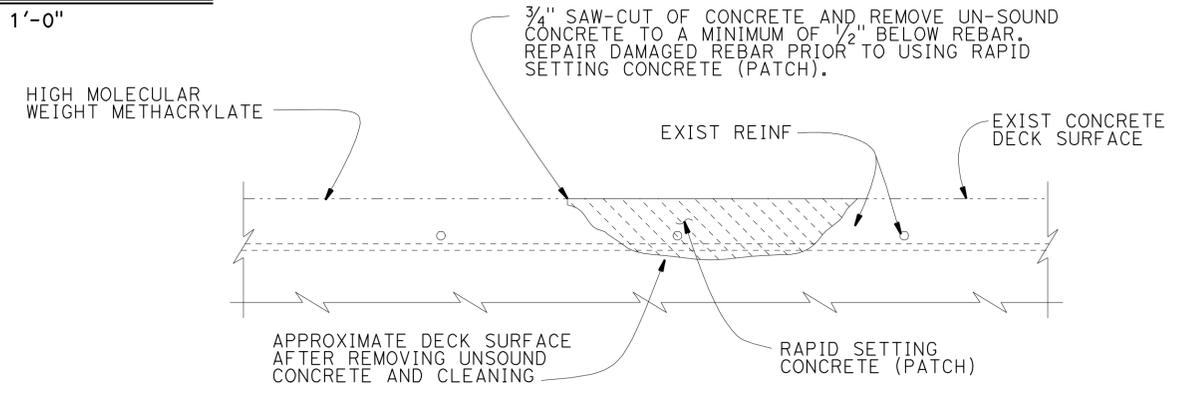
1-7-13 DESIGN ENGINEER	DESIGN BY S. Galgiani	CHECKED L. Han	LOAD & RESISTANCE FACTOR DESIGN	LIVE LOADING: HL93 W/"LOW-BOY"; PERMIT DESIGN VEHICLE	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 14 BRIDGE NO. 55-0517 POST MILE R4.58	BRISTOL STREET UNDERCROSSING GENERAL PLAN
	DETAILS BY L. Xiong	CHECKED S. Galgiani	LAYOUT BY S. Galgiani	CHECKED L. Han		
	QUANTITIES BY S. Galgiani	CHECKED L. Han	SPECIFICATIONS BY Karen Ball	PLANS AND SPECS COMPARED Karen Ball		

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS
 UNIT: 3613 PROJECT NUMBER & PHASE: 1213000066 CONTRACT NO.: 12-0L74U1
 DISREGARD PRINTS BEARING EARLIER REVISION DATES
 REVISION DATES: 12-26-12, 1-3-13, 10-18-12, 11-29-12
 SHEET 1 OF 3

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	362	368
REGISTERED CIVIL ENGINEER			DATE	1-7-13	
PLANS APPROVAL DATE			4-8-13		
REGISTERED PROFESSIONAL ENGINEER DOUGLAS JAMES DUNRUD No. C47240 Exp. 12-30-13 CIVIL STATE OF CALIFORNIA					
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.					

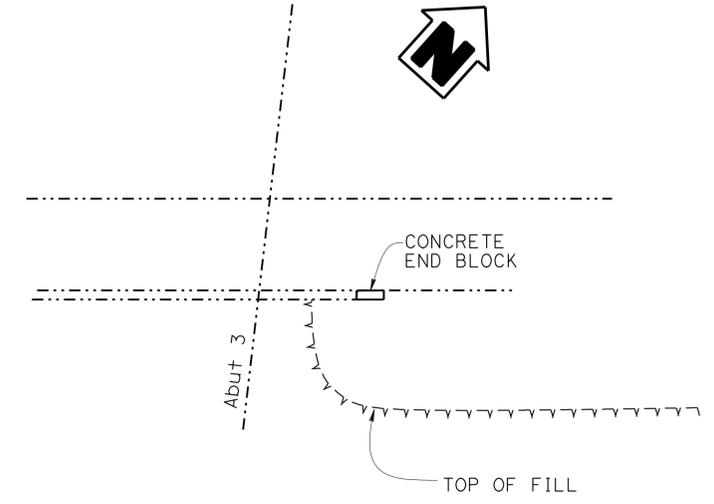


PART TYPICAL SECTION
1/2" = 1'-0"



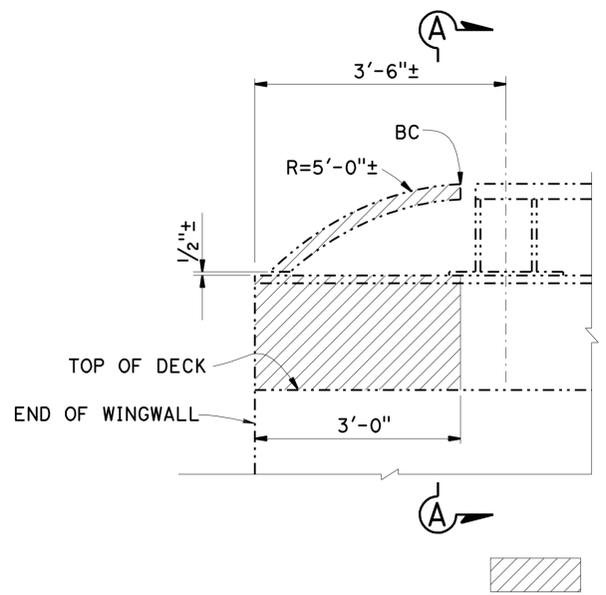
DECK REPAIR DETAIL

REINFORCEMENT MAY BE ENCOUNTERED DURING DECK CONCRETE REMOVAL.
NO SCALE

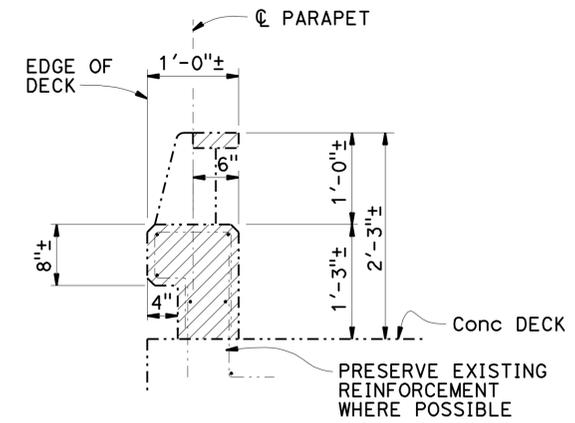


PLAN
1" = 10'-0"

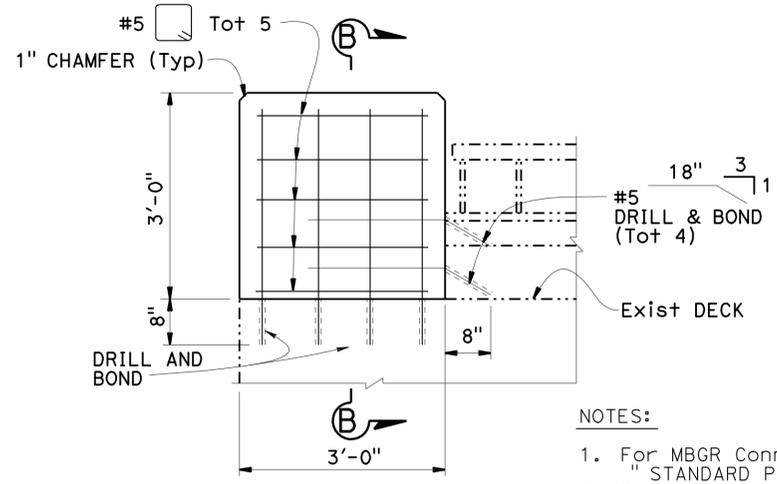
CONCRETE REPAIR TABLE				
APPROXIMATE AREA DAMAGED (PERCENT)	AVERAGE DEPTH (INCHES)	APPROXIMATE DECK AREA (SQ FT)	UNSOUD CONCRETE (CF)	RAPID SETTING CONCRETE PATCH (CF)
1	3	25,456	64	64



EXISTING TYPE 9 RAILING
3/4" = 1'-0"



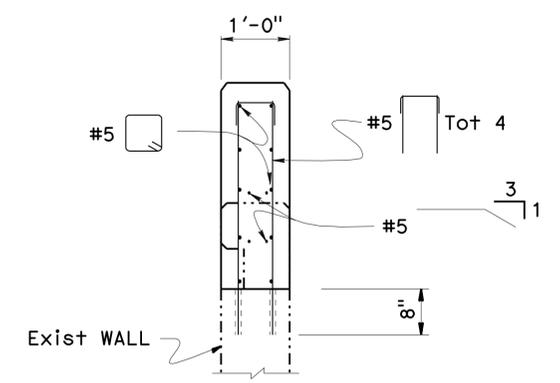
SECTION A-A
3/4" = 1'-0"



REINFORCED CONCRETE END BLOCK
3/4" = 1'-0"

NOTES:

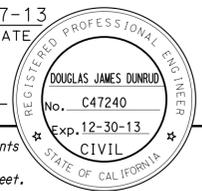
- For MBGR Connection see "CONNECTION DETAIL BB" on "STANDARD PLAN A77J1".
- Existing Reinforcing not shown.
- Space Reinforcement equally



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

DESIGN BY S. Galgiani CHECKED L. Han DETAILS BY L. Xiong CHECKED S. Galgiani QUANTITIES BY S. Galgiani CHECKED L. Han	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 14	BRIDGE NO. 55-0517 POST MILE R4.58	BRISTOL STREET UNDERCROSSING MISCELLANEOUS DETAILS
	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3	UNIT: 3613 PROJECT NUMBER & PHASE: 1213000066 CONTRACT NO.: 12-0L74U1	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES 10-25-12 10-26-12 11-29-12 1-3-13 SHEET 2 OF 3
	STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	FILE => 55-0517_mlsdt.dgn	USERNAME => 8128843 DATE PLOTTED => 12-APR-2013 TIME PLOTTED => 12:55	

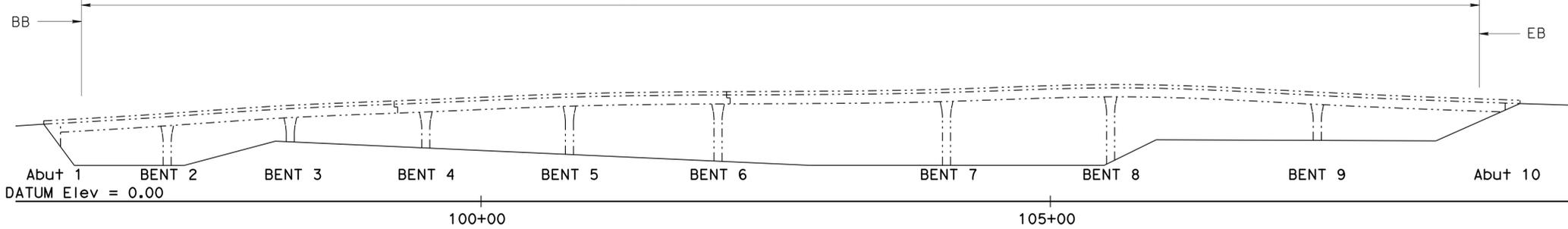
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	364	368
REGISTERED CIVIL ENGINEER			DATE	1-7-13	
4-8-13			PLANS APPROVAL DATE		
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.					



INDEX TO PLANS

SHEET NO.	TITLE
1	GENERAL PLAN
2	MISCELLANEOUS DETAILS

1333'-7/4" ± MEASURED ALONG PROFILE GRADE



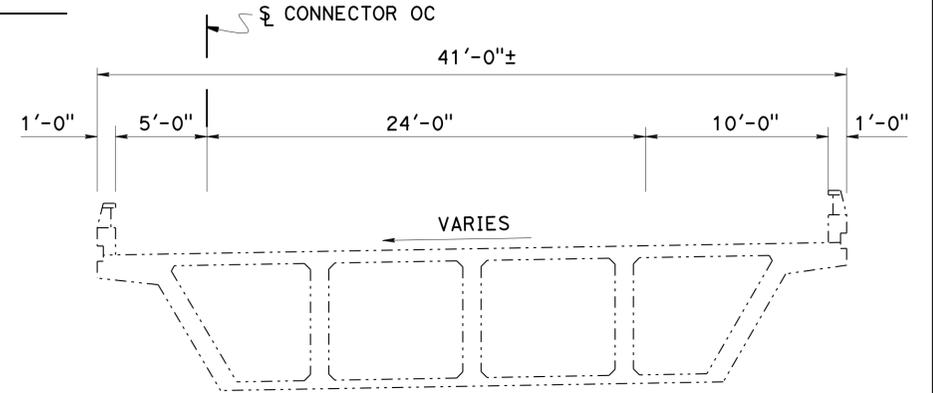
ELEVATION
1" = 60'-0"

QUANTITIES

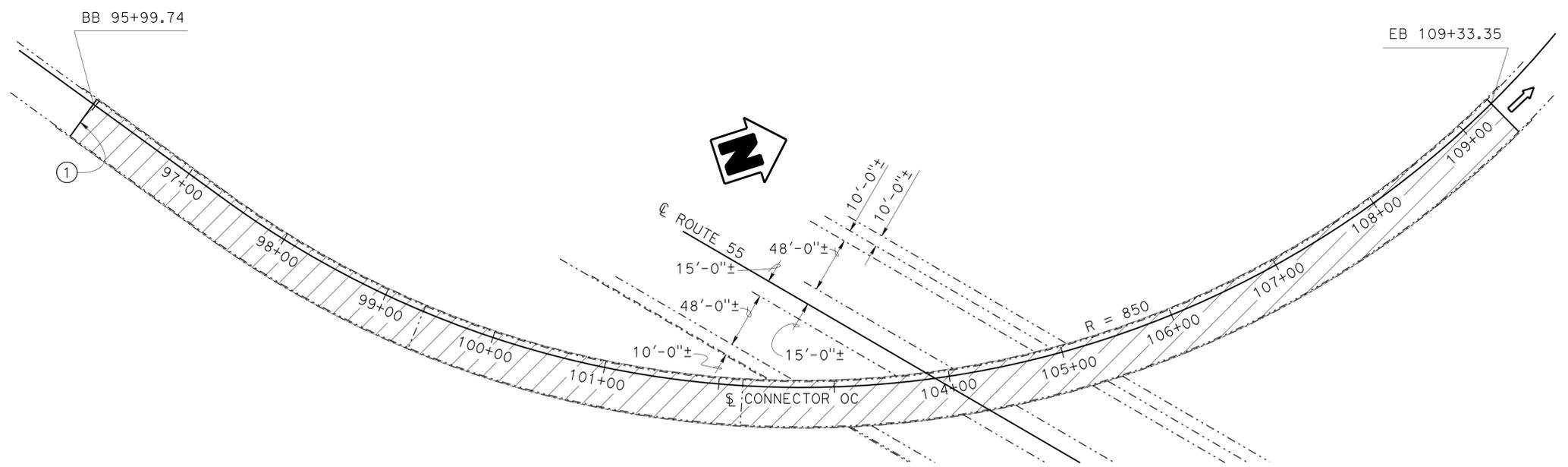
PUBLIC SAFETY PLAN	LUMP	SUM
RAPID SETTING CONCRETE (PATCH)	137	CF
REMOVE UNSOUND CONCRETE	137	CF
PREPARE CONCRETE BRIDGE DECK SURFACE	54,678	SOFT
TREAT BRIDGE DECK	54,678	SOFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	759	GAL
CLEAN EXPANSION JOINT	41	LF
JOINT SEAL (MR 1/2")	41	LF

JOINT SEAL TABLE

LOCATION	JOINT SEAL LENGTH (FEET)	APPROX DEPTH TO CLEAN JOINT SEAL (INCHES)	EXISTING WATERSTOP
N/B APPROACH	41	12"	NO



TYPICAL SECTION
1" = 5'-0"



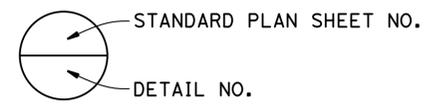
PLAN
1" = 60'-0"

NOTES:

- ① Clean Expansion Joint and Replace Joint Seal (MR=1/2")
- Indicates existing structure
- ▨ Indicates Limits of Prepare Concrete Bridge Deck and treat with High Molecular Weight Methacrylate and Remove Unsound Concrete and Patch with Rapid Setting Concrete (Patch)

STANDARD PLANS DATED 2010

- A10A ACRONYMS AND ABBREVIATIONS (1 OF 2)
- A10B ACRONYMS AND ABBREVIATIONS (2 OF 2)
- B6-21 JOINT SEALS MAXIMUM MOVEMENT RATING = 2"



Douglas J. Dunrud
DESIGN ENGINEER
1-7-13

DESIGN	BY S. Galgiani	CHECKED L. Han	LOAD & RESISTANCE FACTOR DESIGN	LIVE LOADING: HL93 W/"LOW-BOY"; PERMIT DESIGN VEHICLE
DETAILS	BY L. Xiong	CHECKED S. Galgiani	LAYOUT	BY S. Galgiani
QUANTITIES	BY S. Galgiani	CHECKED L. Han	SPECIFICATIONS	BY Karen Doll

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

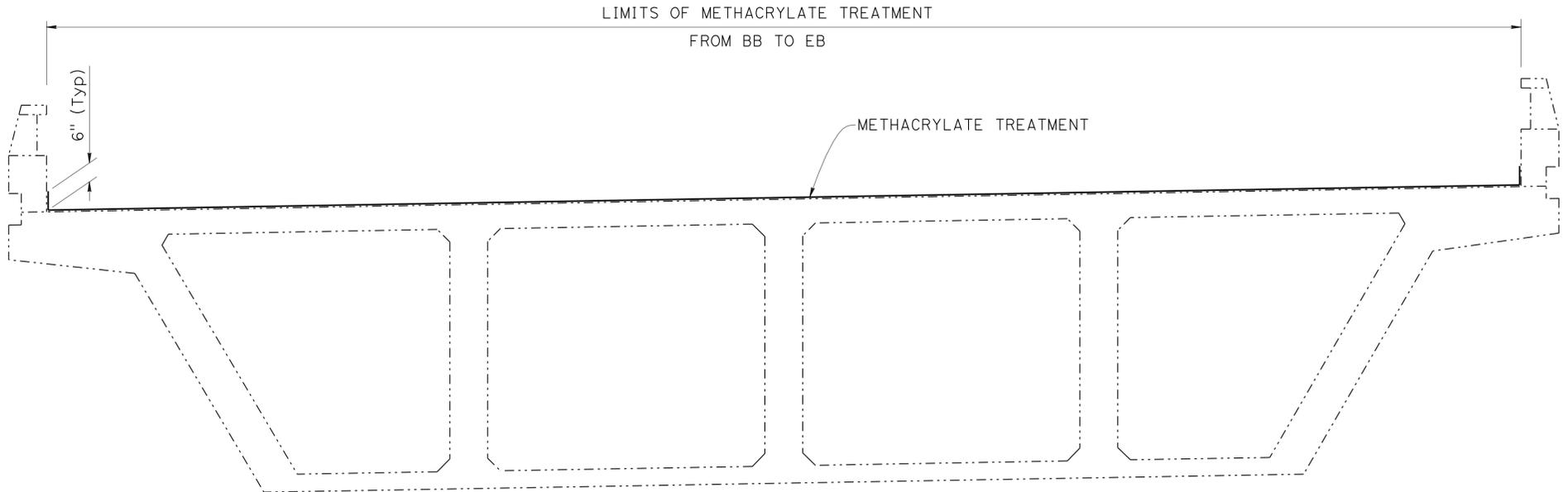
DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 14

BRIDGE NO. 55-0536G
POST MILE R4.71

**N55-N73 CONNECTOR SEPARATION
GENERAL PLAN**

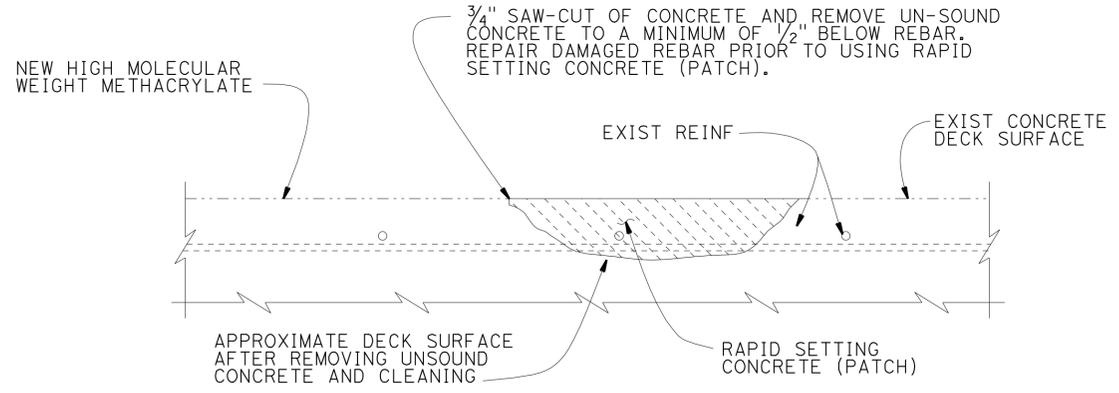
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	365	368

REGISTERED CIVIL ENGINEER *Douglas J. Dunrud* DATE 1-7-13
 PLANS APPROVAL DATE 4-8-13
 DOUGLAS JAMES DUNRUD
 No. C47240
 Exp. 12-30-13
 CIVIL
 STATE OF CALIFORNIA
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.



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

CONCRETE REPAIR TABLE				
APPROXIMATE AREA DAMAGED (PERCENT)	AVERAGE DEPTH (INCHES)	APPROXIMATE DECK AREA (SQ FT)	UNSOUD CONCRETE (CF)	RAPID SETTING CONCRETE PATCH (CF)
1	3	54,653	137	137



DECK REPAIR DETAIL

REINFORCEMENT MAY BE ENCOUNTERED DURING DECK CONCRETE REMOVAL.
NO SCALE

DESIGN	BY S. Galgiani	CHECKED L. Han
DETAILS	BY L. Xiong	CHECKED S. Galgiani
QUANTITIES	BY S. Galgiani	CHECKED L. Han

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 14

BRIDGE NO.	55-0536G
POST MILE	R4.71

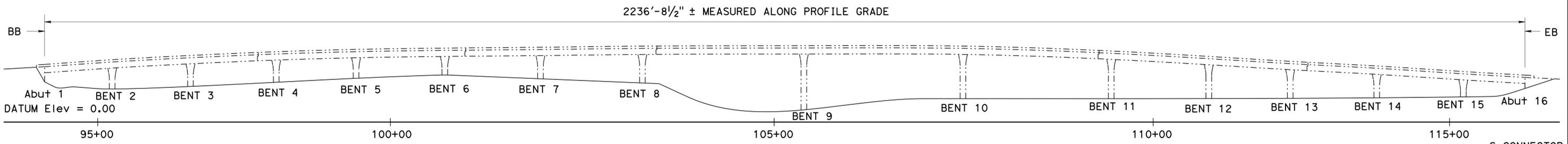
N55-N73 CONNECTOR SEPARATION
MISCELLANEOUS DETAILS

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	366	368

INDEX TO PLANS

SHEET NO.	TITLE
1	GENERAL PLAN
2	MISCELLANEOUS DETAILS

REGISTERED CIVIL ENGINEER *Douglas J. Dunrud* 1-7-13
 DATE
 4-8-13
 PLANS APPROVAL DATE
 No. C47240
 Exp. 12-30-13
 CIVIL
 STATE OF CALIFORNIA
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.

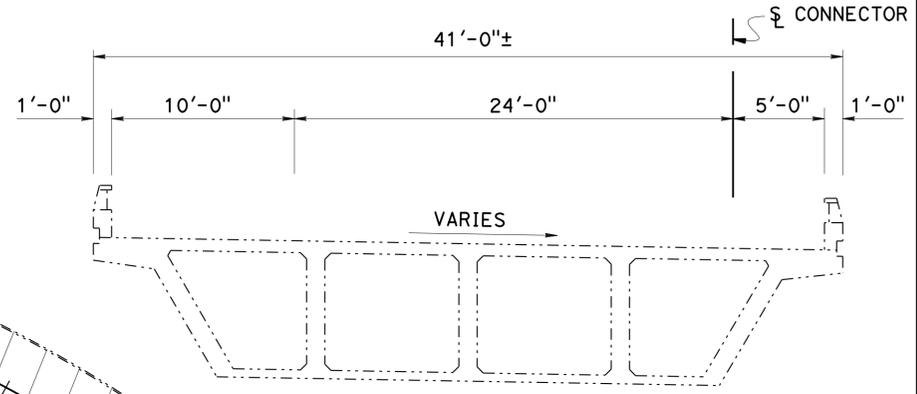


QUANTITIES

	LUMP	SUM
PUBLIC SAFETY PLAN		
RAPID SETTING CONCRETE (PATCH)	229	CF
REMOVE UNSOUND CONCRETE	229	CF
PREPARE CONCRETE BRIDGE DECK SURFACE	91,705	SOFT
TREAT BRIDGE DECK	91,705	SOFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	1,274	GAL
CLEAN EXPANSION JOINT	82	LF
JOINT SEAL (MR 1")	41	LF
JOINT SEAL (MR 1 1/2")	41	LF

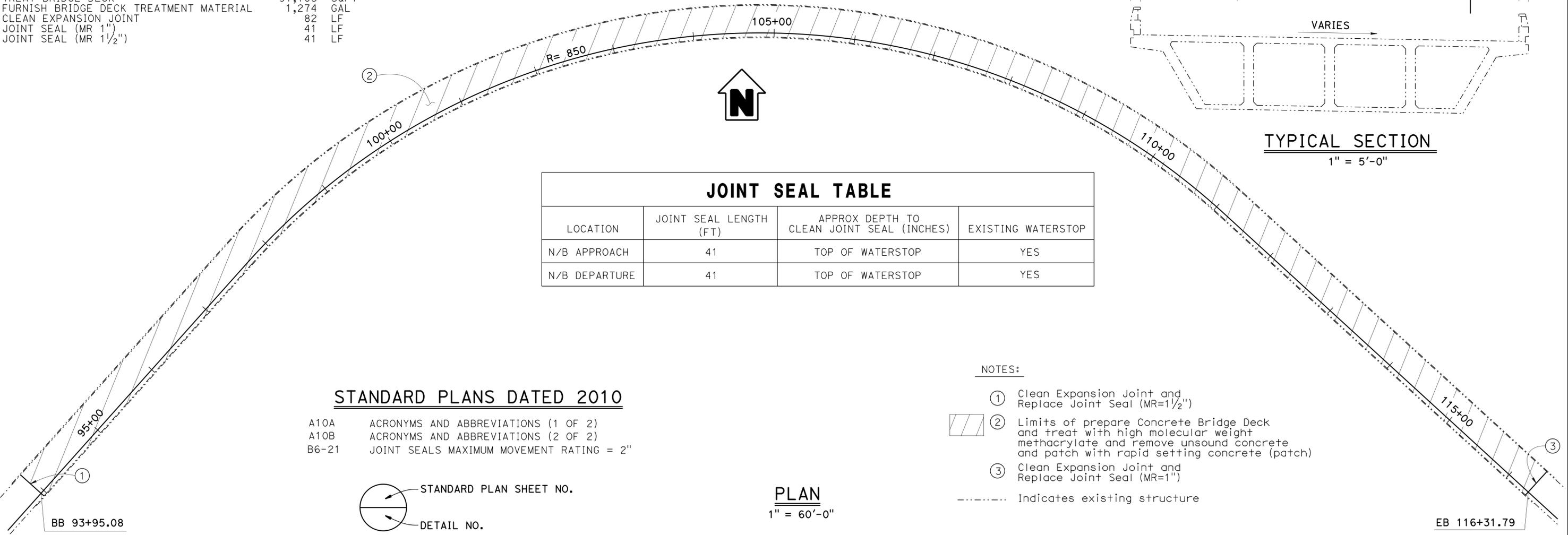
ELEVATION

1" = 60'-0"



TYPICAL SECTION

1" = 5'-0"

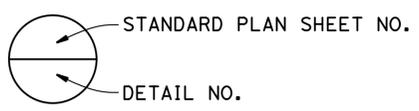


JOINT SEAL TABLE

LOCATION	JOINT SEAL LENGTH (FT)	APPROX DEPTH TO CLEAN JOINT SEAL (INCHES)	EXISTING WATERSTOP
N/B APPROACH	41	TOP OF WATERSTOP	YES
N/B DEPARTURE	41	TOP OF WATERSTOP	YES

STANDARD PLANS DATED 2010

- A10A ACRONYMS AND ABBREVIATIONS (1 OF 2)
- A10B ACRONYMS AND ABBREVIATIONS (2 OF 2)
- B6-21 JOINT SEALS MAXIMUM MOVEMENT RATING = 2"



PLAN

1" = 60'-0"

NOTES:

- ① Clean Expansion Joint and Replace Joint Seal (MR=1 1/2")
- ② Limits of prepare Concrete Bridge Deck and treat with high molecular weight methacrylate and remove unsound concrete and patch with rapid setting concrete (patch)
- ③ Clean Expansion Joint and Replace Joint Seal (MR=1")
- Indicates existing structure

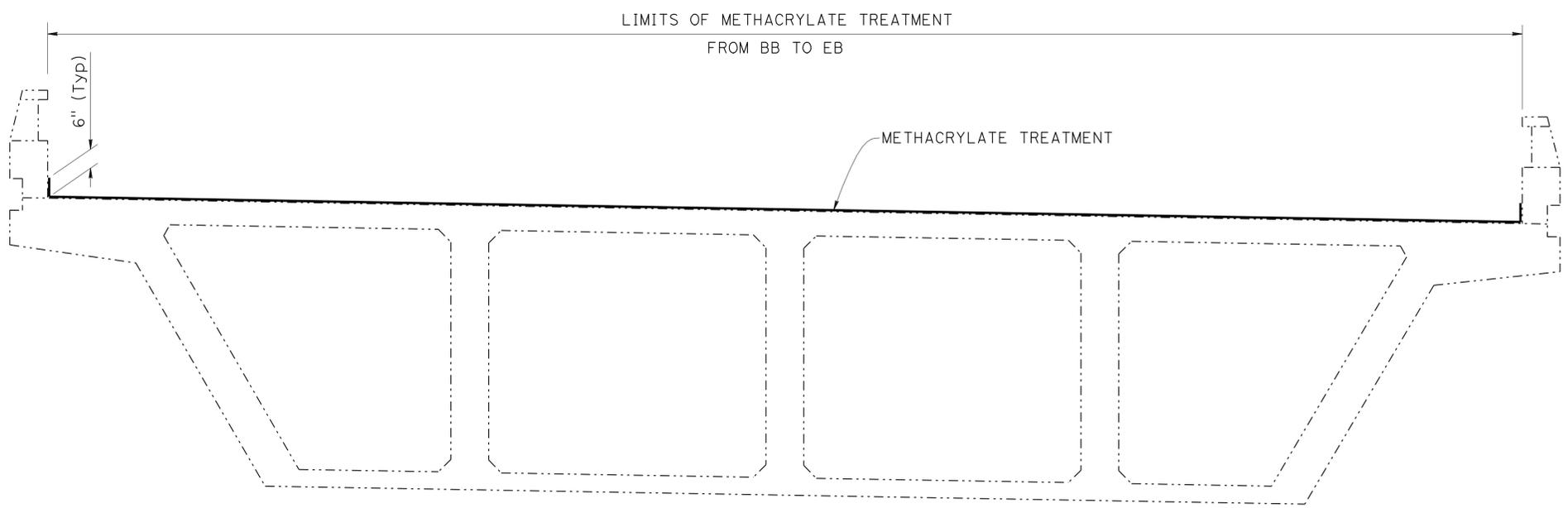
 DESIGN ENGINEER 1-7-13	DESIGN	BY S. Galgiani	CHECKED L. Han	LOAD & RESISTANCE FACTOR DESIGN	LIVE LOADING: HL93 W/"LOW-BOY"; PERMIT DESIGN VEHICLE	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 14	BRIDGE NO.	55-0538F	S55-S73 CONNECTOR O.C. GENERAL PLAN
	DETAILS	BY L. Xiong	CHECKED S. Galgiani	LAYOUT	BY S. Galgiani			CHECKED L. Han	POST MILE	
	QUANTITIES	BY S. Galgiani	CHECKED L. Han	SPECIFICATIONS	BY Karen Doll					

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS: 0 1 2 3
 UNIT: 3613
 PROJECT NUMBER & PHASE: 1213000066
 CONTRACT NO.: 12-0L74U1
 DISREGARD PRINTS BEARING EARLIER REVISION DATES
 REVISION DATES: 12-26-12, 12-29-12, 1-3-13, 11-29-12
 SHEET 1 OF 2

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	367	368

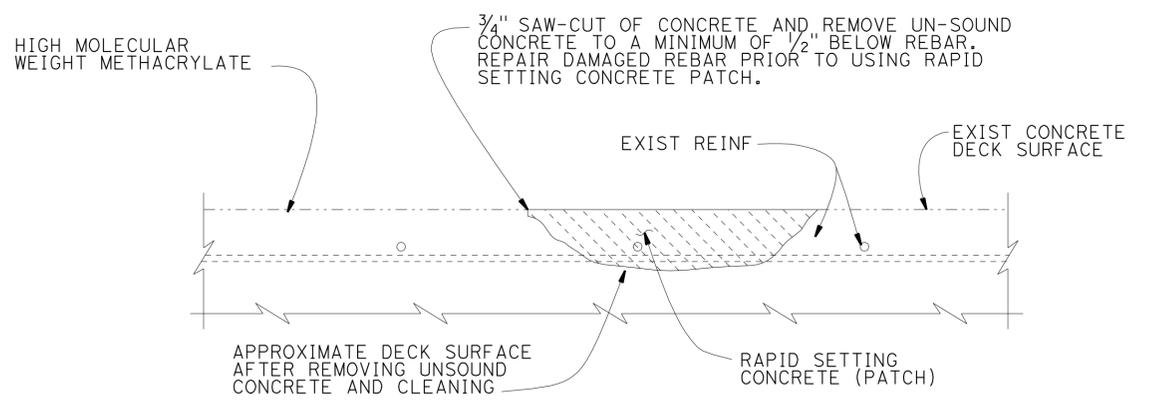
REGISTERED CIVIL ENGINEER *Douglas J. Dunrud* DATE 1-7-13
 PLANS APPROVAL DATE 4-8-13
 No. C47240
 Exp. 12-30-13
 CIVIL
 STATE OF CALIFORNIA

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



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

CONCRETE REPAIR TABLE				
APPROXIMATE AREA DAMAGED (PERCENT)	AVERAGE DEPTH (INCHES)	APPROXIMATE DECK AREA (SQ FT)	UN SOUND CONCRETE (CF)	RAPID SETTING CONCRETE PATCH (CF)
1	3	91,705	229	229



DECK REPAIR DETAIL
REINFORCEMENT MAY BE ENCOUNTERED DURING DECK CONCRETE REMOVAL.
NO SCALE

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	DESIGN BY S. Galgiani	CHECKED L. Han	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 14	BRIDGE NO. 55-0538F	S55-S73 CONNECTOR OVERCROSSING MISCELLANEOUS DETAILS
	DETAILS BY L. Xiong	CHECKED S. Galgiani			POST MILE R4.74	
	QUANTITIES BY S. Galgiani	CHECKED L. Han			REVISION DATES	

UNIT: 3613 PROJECT NUMBER & PHASE: 1213000066 CONTRACT NO.: 12-0L74U1
 DISREGARD PRINTS BEARING EARLIER REVISION DATES
 1-3-13

USERNAME => s128843 DATE PLOTTED => 12-APR-2013 TIME PLOTTED => 12:56

QUANTITIES

CLEAN EXPANSION JOINT 62 LF
 JOINT SEAL (MR 1") 62 LF

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	2.0/11.8	368	368

INDEX TO PLANS

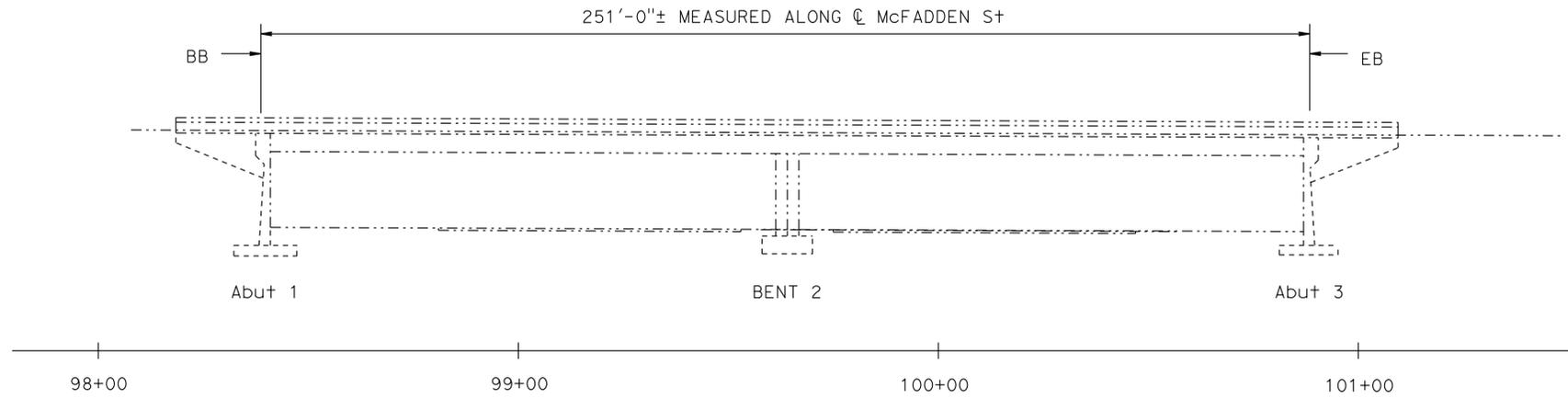
SHEET NO. 1 TITLE GENERAL PLAN

REGISTERED CIVIL ENGINEER *Douglas J. Dunrud* 1-7-13 DATE

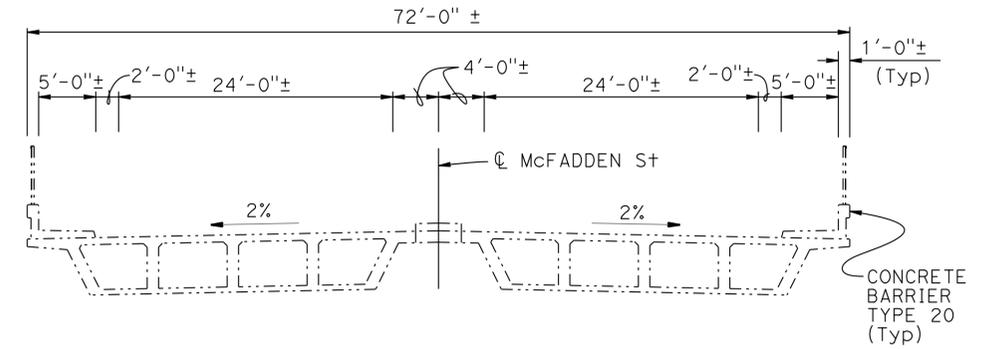
4-8-13 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 DOUGLAS JAMES DUNRUD
 No. C47240
 Exp. 12-30-13
 CIVIL
 STATE OF CALIFORNIA

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

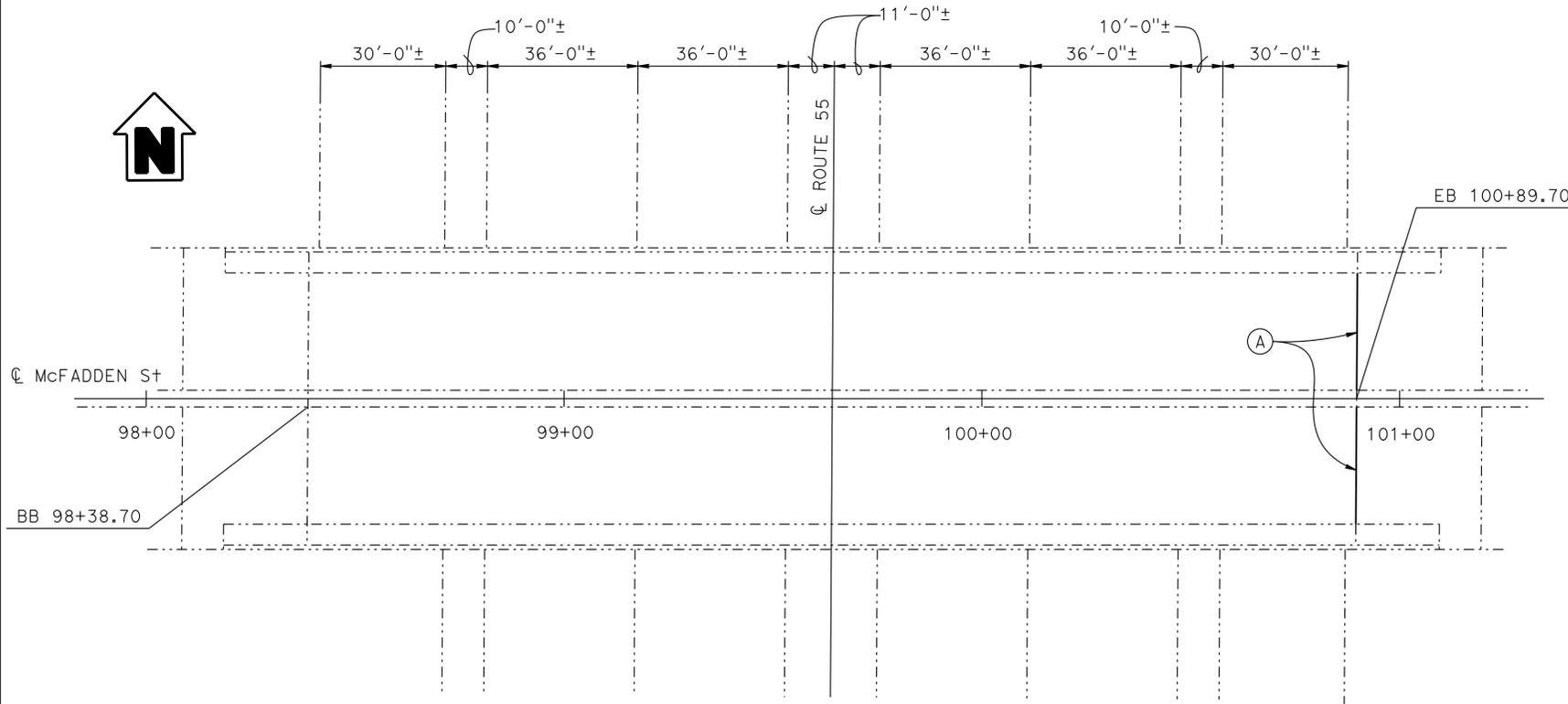


ELEVATION
 1" = 20'-0"



TYPICAL SECTION
 1/8" = 1'-0"

LOCATION	PAVING NOTCH	JOINT SEAL LENGTH (FEET)	APPROX DEPTH TO CLEAN JOINT SEAL (INCHES)
ABUTMENT 3	NO	62	12



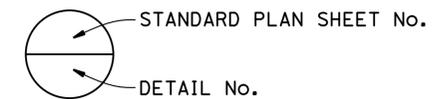
PLAN
 1" = 20'-0"

NOTES:

- (A) Clean Expansion Joint and Replace Joint Seal (MR=1")
- Indicates existing structure

STANDARD PLANS DATED 2010

- A10A ABBREVIATIONS (SHEET 1 OF 2)
- A10B ABBREVIATIONS (SHEET 2 OF 2)
- A76A CONCRTE BARRIER TYPE 60
- B6-21 JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")



Douglas J. Dunrud 1-7-13
 DESIGN ENGINEER

DESIGN BY S. Galgiani	CHECKED L. Han	LOAD & RESISTANCE FACTOR DESIGN	LIVE LOADING: HL93 W/"LOW-BOY"; PERMIT DESIGN VEHICLE
DETAILS BY L. Xiong	CHECKED S. Galgiani	LAYOUT BY S. Galgiani	CHECKED L. Han
QUANTITIES BY S. Galgiani	CHECKED L. Han	SPECIFICATIONS BY Karen Doll	PLANS AND SPECS COMPARED Karen Doll

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 14

BRIDGE NO. 55-0641
 POST MILE R10.06

MCFADDEN STREET OVERCROSSING
GENERAL PLAN