

INDEX OF PLANS

SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2	LAYOUTS
3	CONSTRUCTION AREA SIGNS
4-6	REVISED STANDARD PLANS

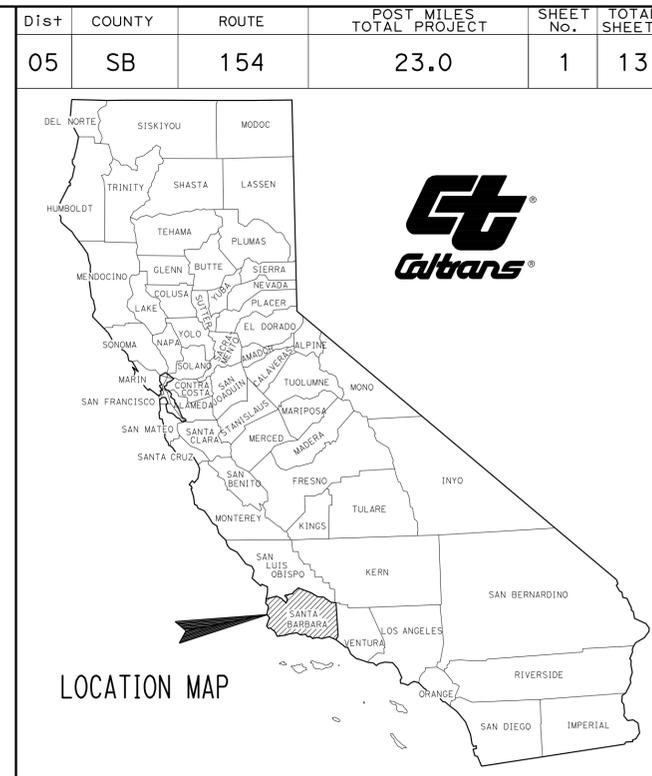
STRUCTURE PLANS

7-13	COLD SPRING CANYON BRIDGE Br No. 51-0037
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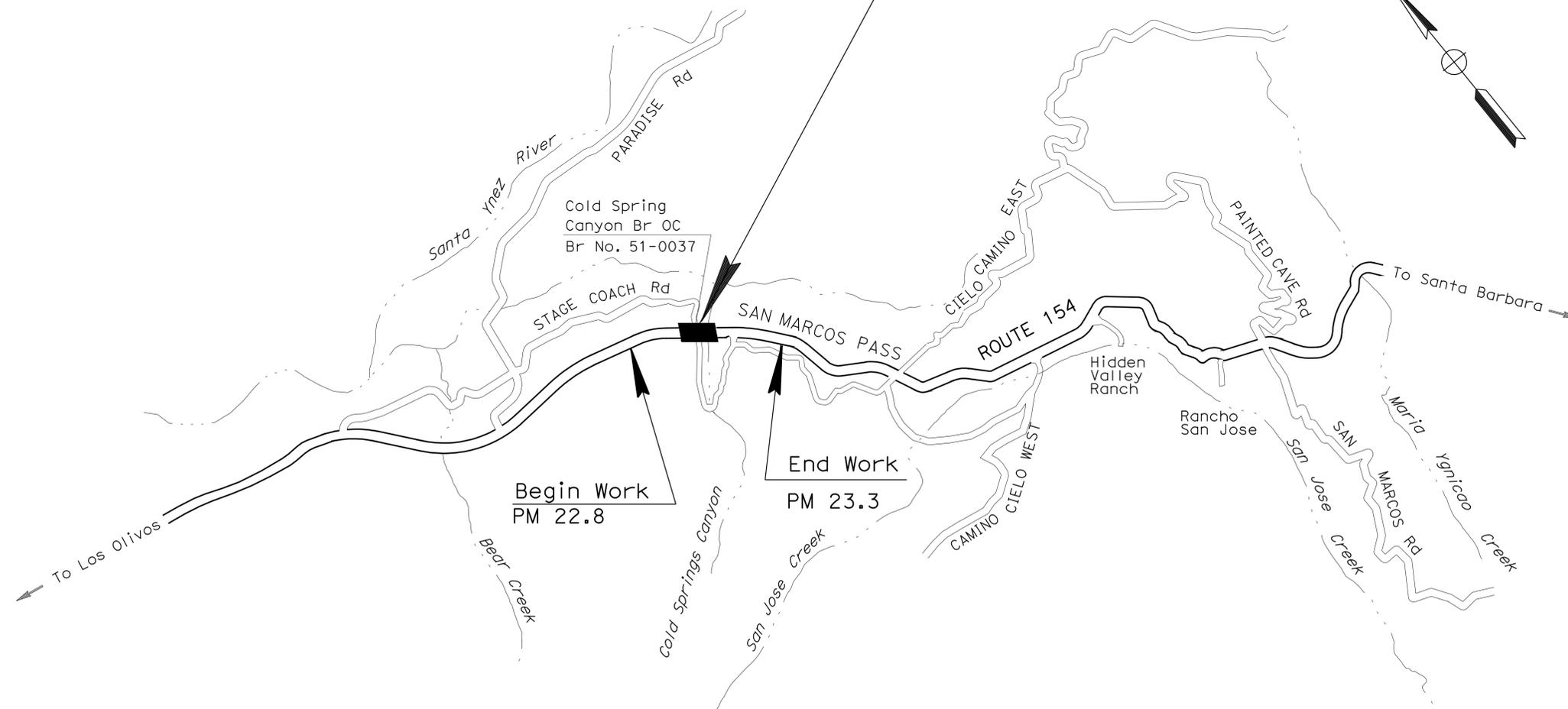
THE STANDARD PLANS LIST APPLICABLE TO THIS CONTRACT IS INCLUDED IN THE NOTICE TO BIDDERS AND SPECIAL PROVISIONS BOOK.

STATE OF CALIFORNIA ARRAL-P154(018)E
DEPARTMENT OF TRANSPORTATION
PROJECT PLANS FOR BUILDING CONSTRUCTION
IN SANTA BARBARA COUNTY
ABOUT 9 MILES WEST OF SANTA BARBARA
AT COLD SPRING CANYON BRIDGE

TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006



LOCATION OF CONSTRUCTION
COLD SPRING CANYON BRIDGE
Br No. 51-0037 PM 23.0



NO SCALE

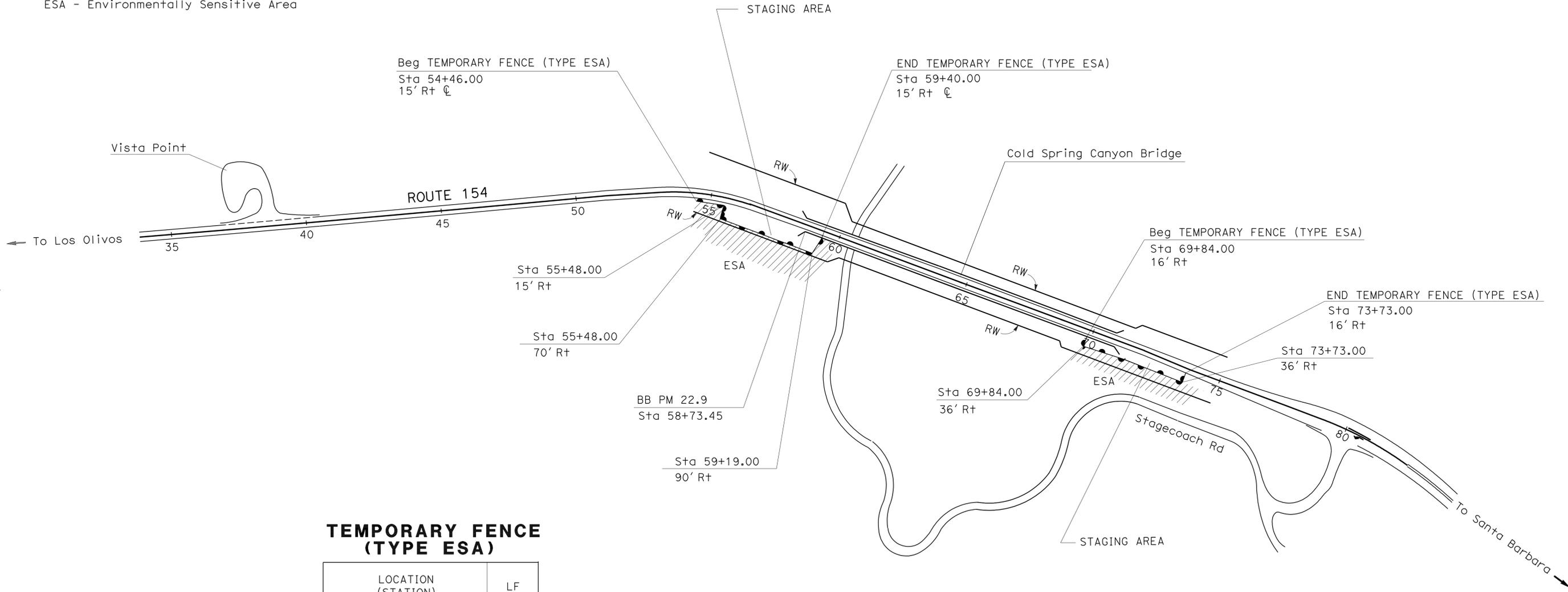
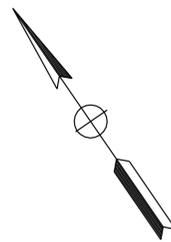
PROJECT MANAGER
SARA VON SHWIND
 DESIGN ENGINEER
JAMES ESPINOSA

James Espinosa 10/29/09
 PROJECT ENGINEER DATE
 REGISTERED CIVIL ENGINEER
November 30, 2009
 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.

THE CONTRACTOR SHALL POSSESS THE CLASS (OR CLASSES) OF LICENSE AS SPECIFIED IN THE "NOTICE TO BIDDERS."

NOTE: FOR COMPLETE RIGHT OF WAY DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE

ABBREVIATION
 ESA - Environmentally Sensitive Area



TEMPORARY FENCE (TYPE ESA)

LOCATION (STATION)	LF
54+44.60 To 58+77.25	589
70+08.44 To 74+57.10	429
TOTAL	1018

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 06-DESIGN
 FUNCTIONAL SUPERVISOR **DAVID FAPP**
 CHECKED BY
 CALCULATED-DESIGNED BY
 JAMES ESPINOSA
 PETROS DEMOZ
 REVISED BY
 DATE REVISED

LAYOUT L-1

NO SCALE

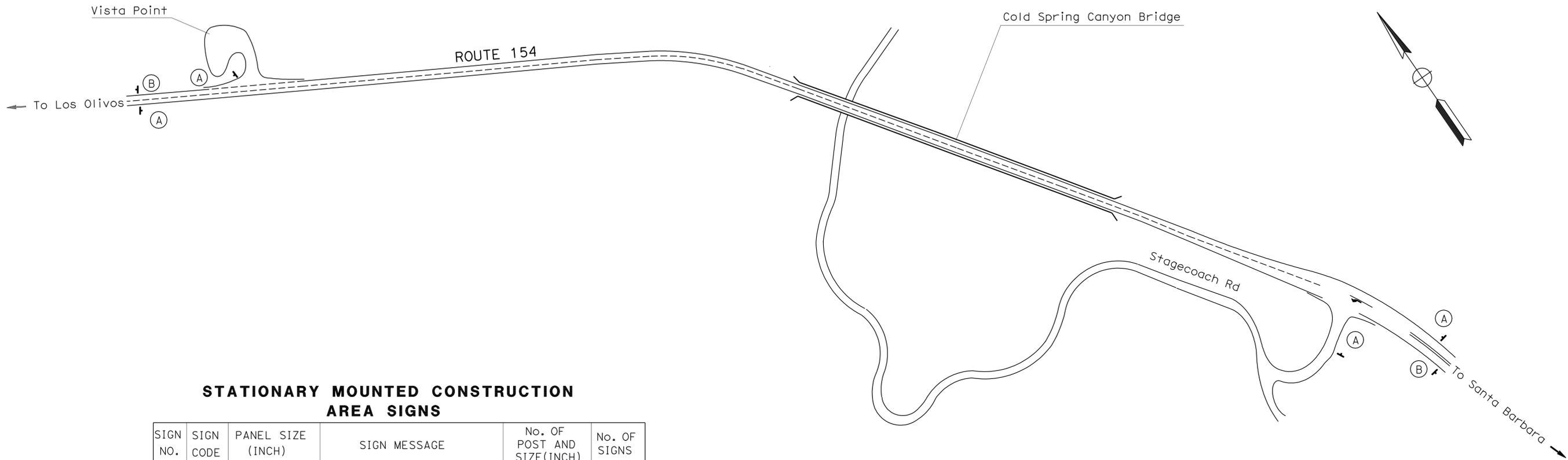
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SB	154	23.0	3	13

REGISTERED CIVIL ENGINEER DATE 10-29-09
 REGISTERED PROFESSIONAL ENGINEER
 JAMES ESPINOSA
 No. 54100
 Exp. 12/31/09
 CIVIL
 STATE OF CALIFORNIA

11-30-09
 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.

NOTE: FOR ACCURATE RIGHT OF WAY AND ACCESS DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

SIGN NO.	SIGN CODE	PANEL SIZE (INCH)	SIGN MESSAGE	No. OF POST AND SIZE(INCH)	No. OF SIGNS
(A)	W20-1	36" x 36"	ROAD WORK AHEAD	1 - 4" x 6"	4
(B)	G20-2	36" x 18"	END ROAD WORK	1 - 4" x 4"	2

NOTE: SIGN LOCATIONS SHOWN ARE APPROXIMATE. EXACT LOCATIONS TO BE DETERMINED BY THE ENGINEER.

CONSTRUCTION AREA SIGNS

NO SCALE

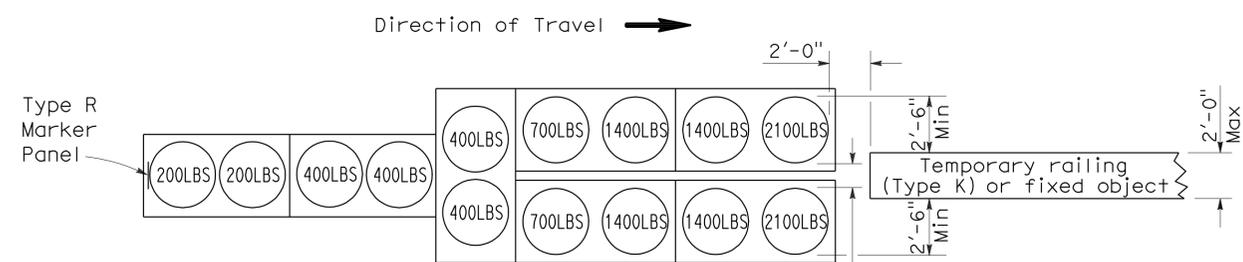
CS-1

THIS PLAN ACCURATE FOR CONSTRUCTION AREA SIGN ONLY.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 06-DESIGN
 DAVID FAPP
 FUNCTIONAL SUPERVISOR
 CHECKED BY
 DESIGNED BY
 JAMES ESPINOSA
 PETROS DEMOZ
 REVISED BY
 DATE REVISED

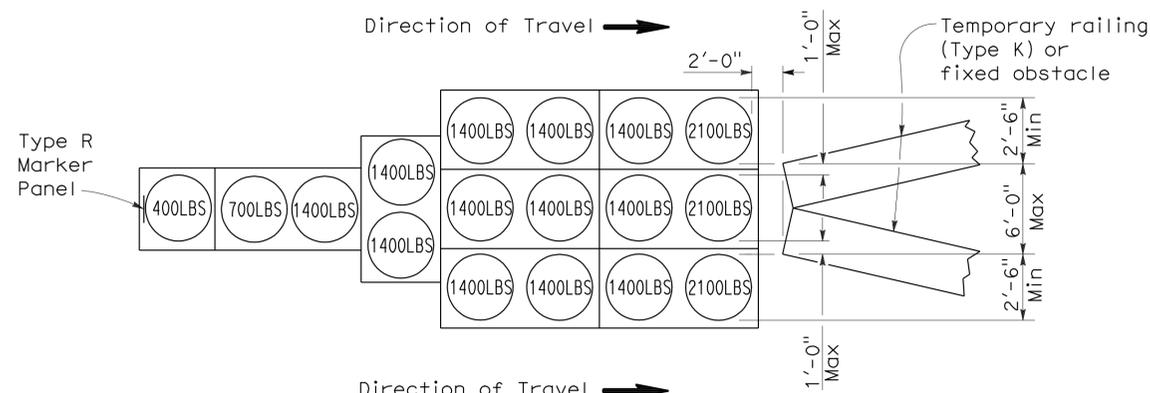
To accompany plans dated 11-30-09

2006 REVISED STANDARD PLAN RSP T1A



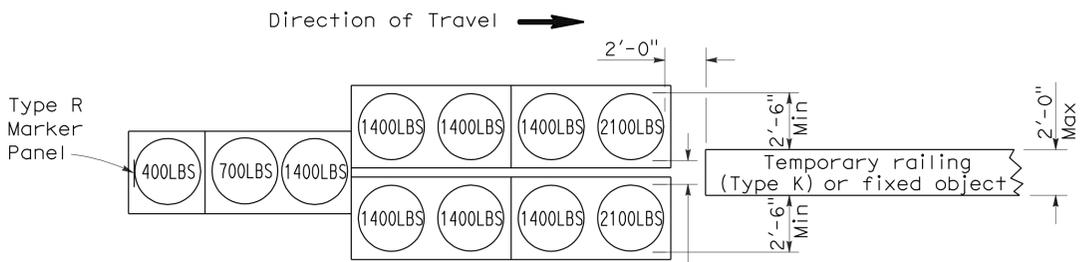
ARRAY 'TU14'

Approach speed 45 mph or more



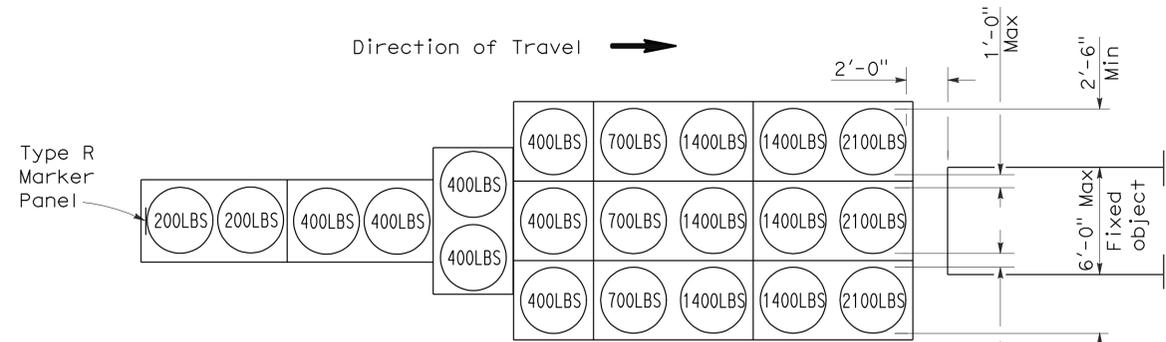
ARRAY 'TU17'

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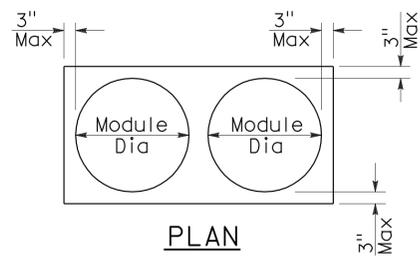
ARRAY 'TU11'

Approach speed less than 45 mph

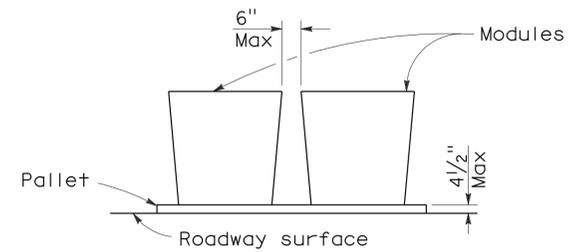


ARRAY 'TU21'

Approach speed 45 mph or more



PLAN



ELEVATION

CRASH CUSHION PALLET DETAIL

See Note 7

NOTES:

1. (XXX) Indicates sand filled module location and weight of sand in pounds for each module. Module spacing is based on the greater diameter of the module.
2. All sand weights are nominal.
3. Temporary crash cushion arrays shall not encroach on the traveled way.
4. Place the top of Type R marker panel 1" below the module lid.
5. Refer to Standard Plan A73B for marker details.
6. Approach speeds indicated conform to NCHRP 350 Report criteria.
7. Use of pallets is optional.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**TEMPORARY CRASH CUSHION,
SAND FILLED
(UNIDIRECTIONAL)**

NO SCALE

RSP T1A DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN T1A
DATED MAY 1, 2006 - PAGE 211 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP T1A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
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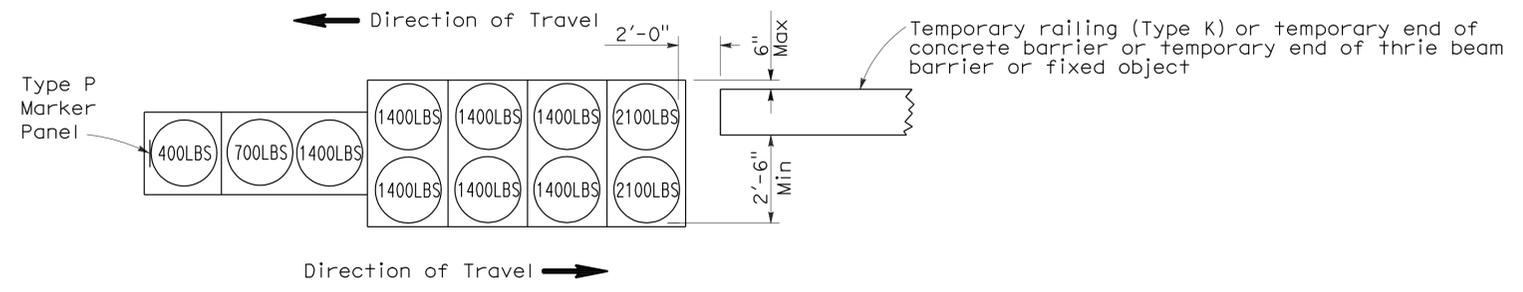
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

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

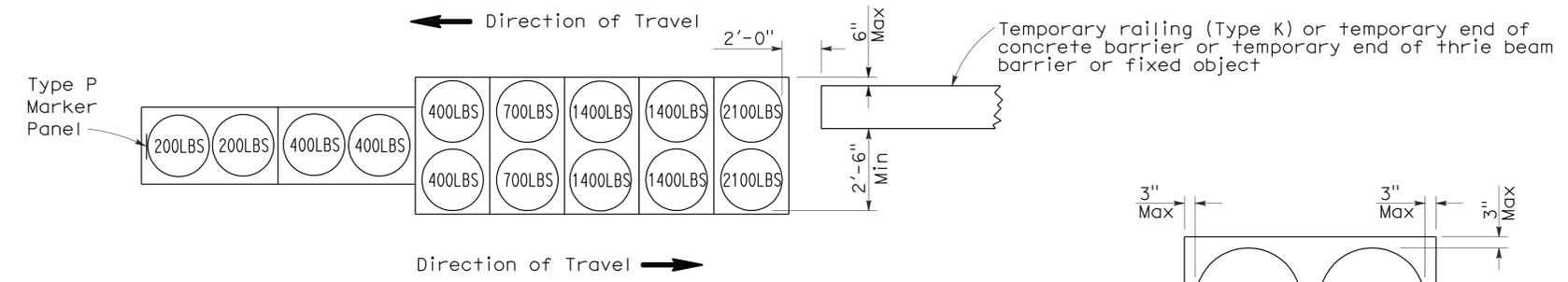
REGISTERED PROFESSIONAL ENGINEER
No. C50200
Exp. 6-30-09
CIVIL
STATE OF CALIFORNIA

To accompany plans dated 11-30-09



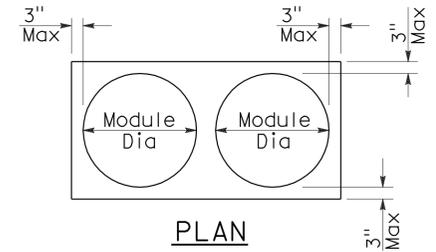
ARRAY 'TB11'

Approach speed less than 45 mph

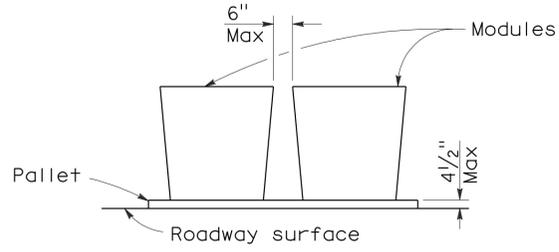


ARRAY 'TB14'

Approach speed 45 mph or more



PLAN



ELEVATION

CRASH CUSHION PALLET DETAIL

See Note 7

NOTES:

1. (XXX) Indicates sand filled module location and weight of sand in pounds for each module. Module spacing is based on the greater diameter of the module.
2. All sand weights are nominal.
3. Temporary crash cushion arrays shall not encroach on the traveled way.
4. Place the Type P marker panel so that the bottom of the panel rests upon the pallet.
5. Refer to Standard Plan A73B for marker details.
6. Approach speeds indicated conform to NCHRP 350 Report criteria.
7. Use of pallets is optional.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**TEMPORARY CRASH CUSHION,
SAND FILLED
(BIDIRECTIONAL)**

NO SCALE

RSP T1B DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN T1B
DATED MAY 1, 2006 - PAGE 212 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP T1B

2006 REVISED STANDARD PLAN RSP T1B

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
05	SB	154	23.0	6	13

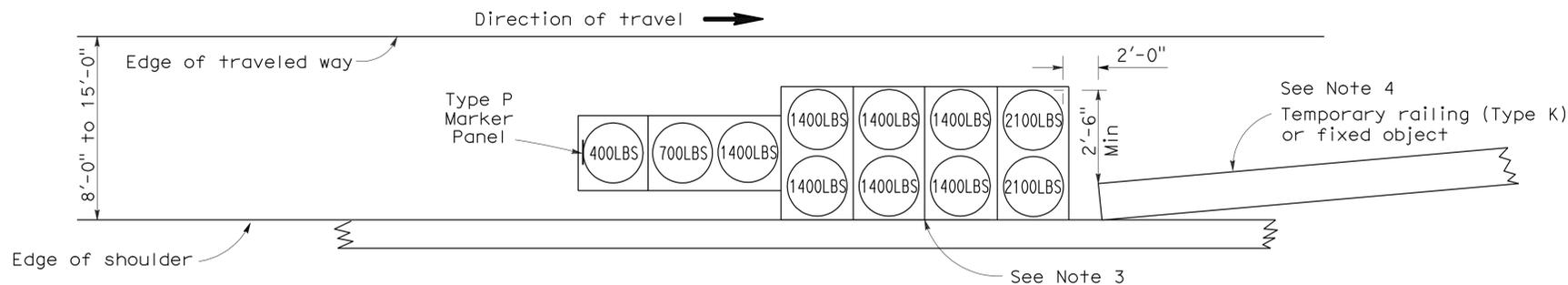
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

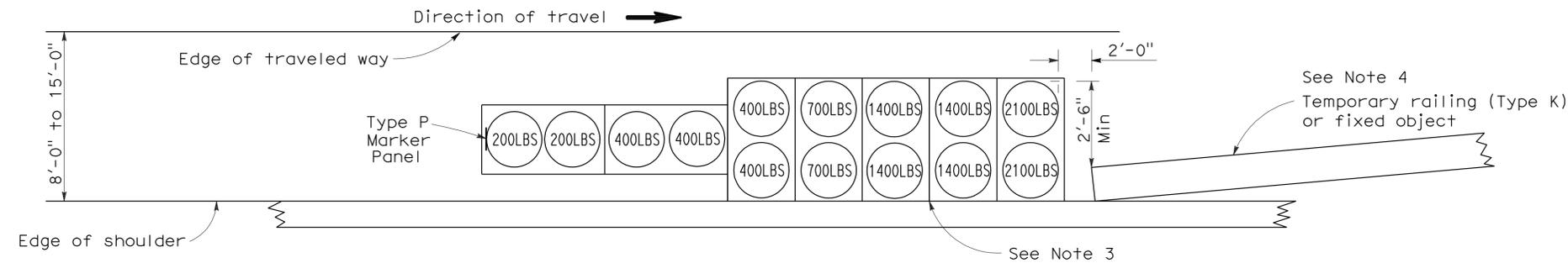
Randell D. Hiatt
REGISTERED PROFESSIONAL ENGINEER
No. C50200
Exp. 6-30-09
CIVIL
STATE OF CALIFORNIA

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To accompany plans dated 11-30-09



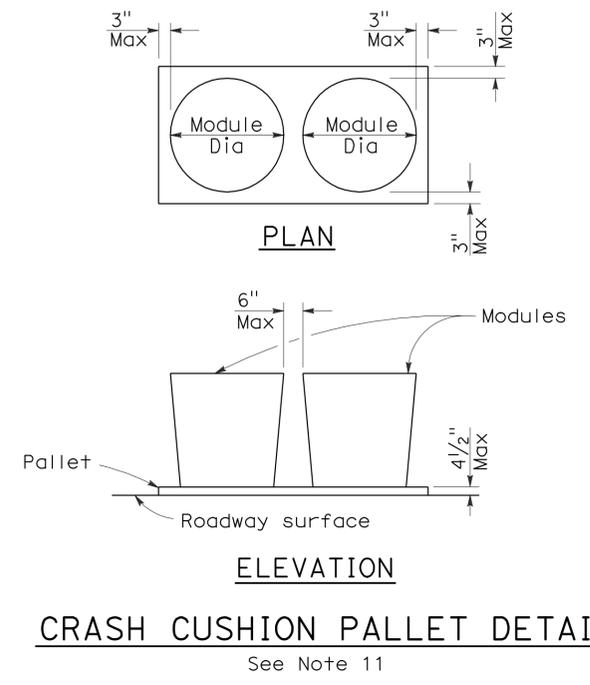
ARRAY 'TS11'
Approach speed less than 45 mph
See Note 9



ARRAY 'TS14'
Approach speed 45 mph or more
See Note 9

NOTES:

- (XXX) Indicates sand filled module location and weight of sand in pounds for each module. Module spacing is based on the greater diameter of the module.
- All sand weights are nominal.
- The temporary crash cushion arrays shown on this plan shall be used only in locations where there will be traffic on one side of the temporary crash cushion array.
- If the fixed object or approach end of the temporary railing is less than 15'-0" from the edge of traveled way, a temporary crash cushion is required in a construction or work zone.
- Temporary crash cushion arrays shall not encroach on the traveled way.
- Arrays for median shoulders shall conform to details shown on this plan for outside shoulders.
- Place the Type P marker panel so that the bottom of the panel rests upon the pallet and faces traffic.
- Refer to Standard Plan A73B for marker details.
- For shoulder widths less than 8'-0", appropriate approved crash cushion protection, other than sand filled modules, shall be provided at fixed objects and at approach ends of temporary railing. The specific type of crash cushion shall be as shown on the project plans or as specified in the Special Provisions, or if not shown on the project plans or specified in the Special Provisions, shall be as approved by the Engineer.
- Approach speeds indicated conform to NCHRP 350 Report criteria.
- Use of pallets is optional.



CRASH CUSHION PALLET DETAIL
See Note 11

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**TEMPORARY CRASH CUSHION,
SAND FILLED
(SHOULDER INSTALLATIONS)**

NO SCALE

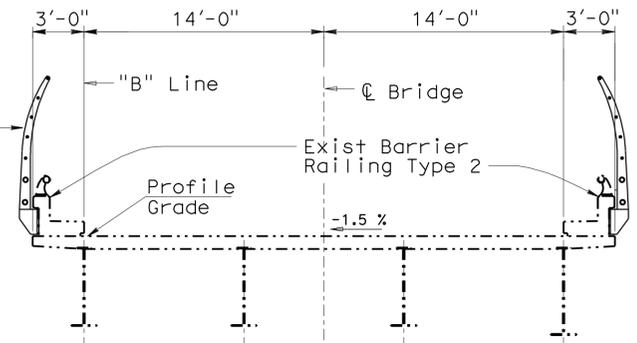
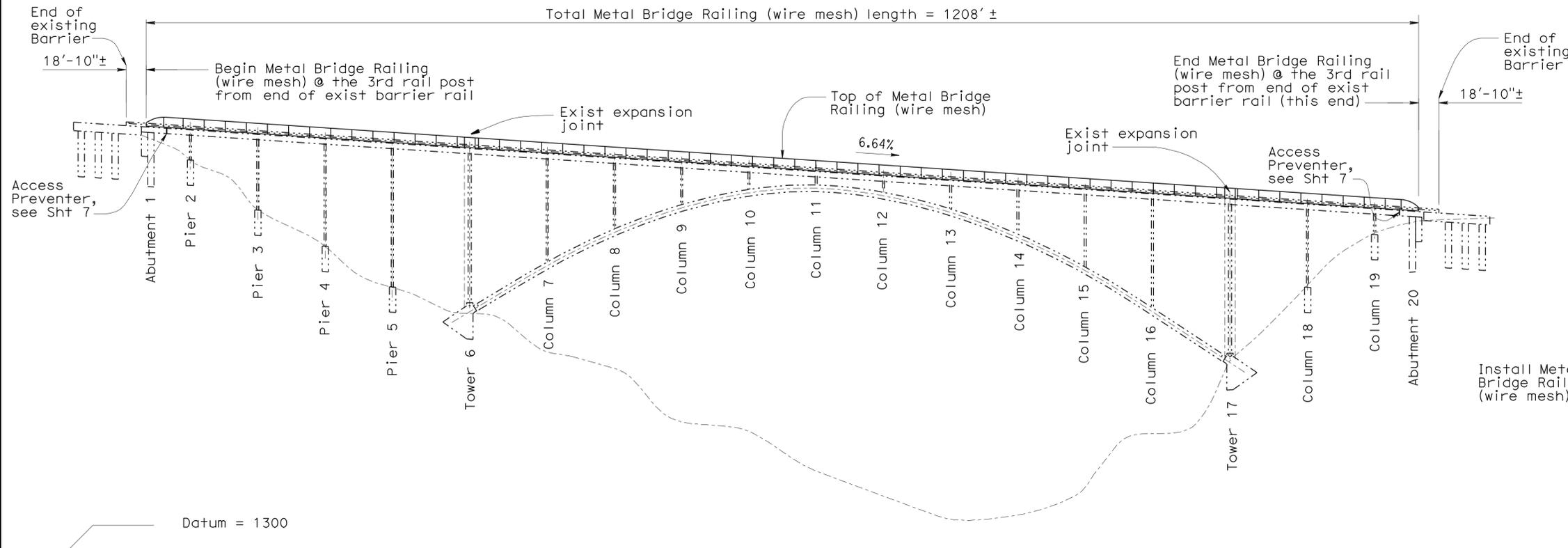
RSP T2 DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN T2
DATED MAY 1, 2006 - PAGE 213 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP T2

2006 REVISED STANDARD PLAN RSP T2

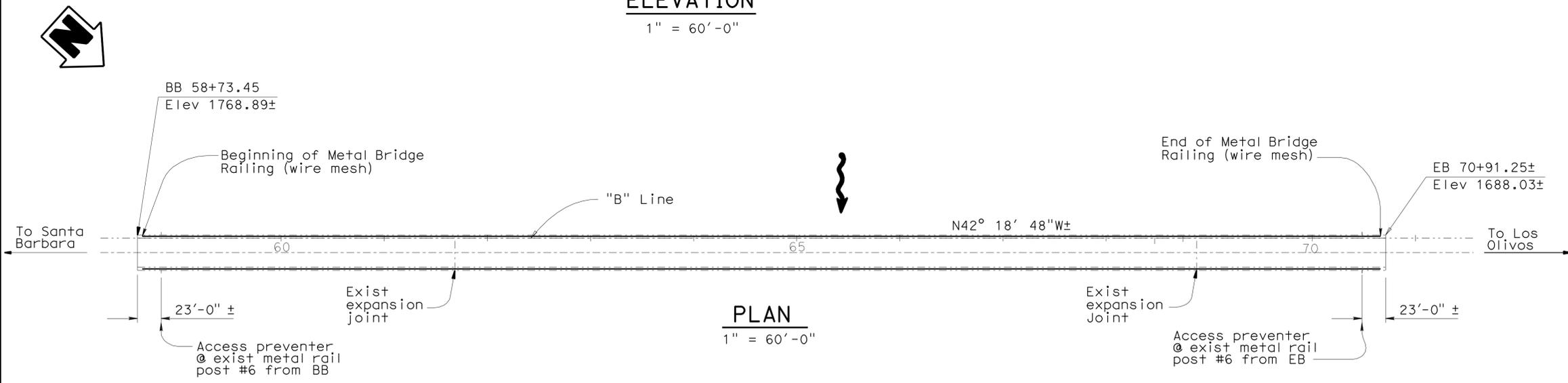
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
05	SB	154	23.0	7	13

REGISTERED CIVIL ENGINEER DATE
 11-30-09
 PLANS APPROVAL DATE
 No. C63583
 Exp. 9/30/10
 CIVIL
 STATE OF CALIFORNIA



ELEVATION
1" = 60'-0"

TYPICAL SECTION
3/16" = 1'-0"



PLAN
1" = 60'-0"

INDEX TO PLANS

SHEET No.	TITLE
1.	GENERAL PLAN
2.	BEGIN AND END DETAIL
3.	TYPICAL PANEL DETAILS
4.	EXPANSION JOINT PANEL
5.	MESH TO POST CONNECTION DETAILS
6.	POST AND POST BRACKET DETAILS
7.	ACCESS PREVENTER DETAILS

QUANTITIES

DRILL AND BOND DOWEL (CHEMICAL ADHESIVE)	2,080	EA
BAR REINFORCING STEEL (BRIDGE)	2,850	LB
METAL BRIDGE RAILING (WIRE MESH)	2,416	LF

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

DESIGN	BY W. Kwan	CHECKED G. Doria	LAYOUT	BY H. Nguyen	CHECKED W. Kwan	BRIDGE NO.	51-0037	COLD SPRING CANYON BRIDGE GENERAL PLAN
DETAILS	BY H. Nguyen	CHECKED G. Doria	SPECIFICATIONS	BY	PLANS AND SPECS COMPARED	POST MILE	22.9	
QUANTITIES	BY D. Sandhu	CHECKED G. Doria						

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
 SPECIAL DESIGNS BRANCH

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS
 0 1 2 3

CU 05
 EA OP9101

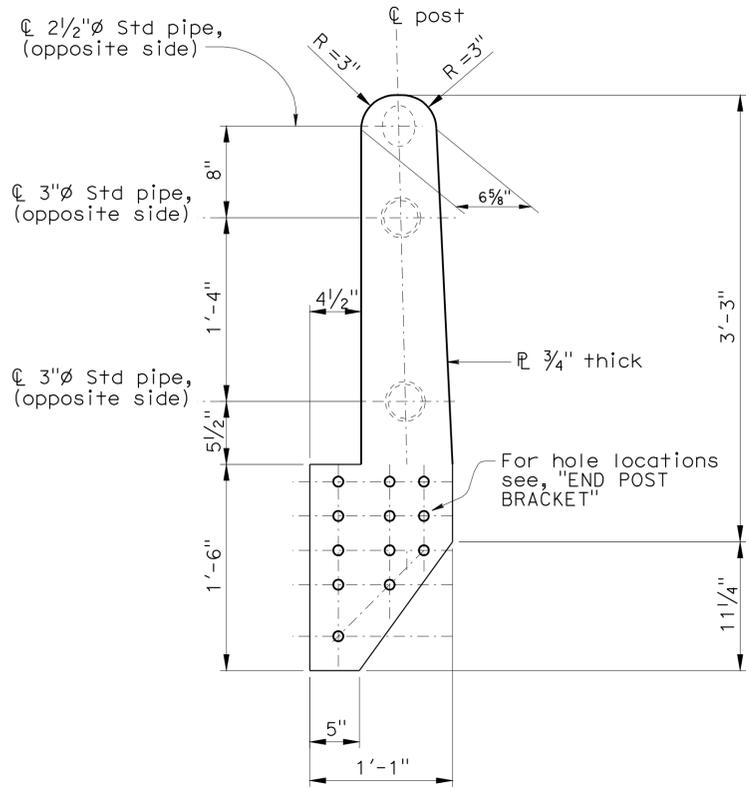
DISREGARD PRINTS BEARING EARLIER REVISION DATES
 REVISION DATES: 11/28/07, 5/8/09, 1/13/09, 10-15-09

STRUCTURES DESIGN GENERAL PLAN SHEET (ENGLISH) (REV. 10/25/09)

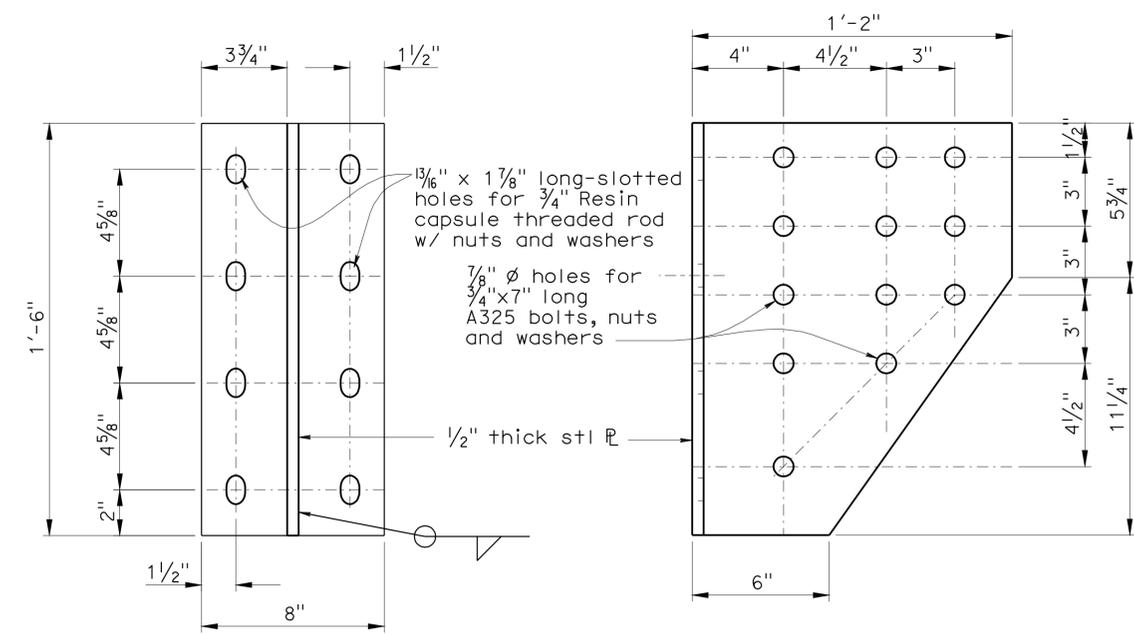
USERNAME => fhmikes DATE PLOTTED => 07-DEC-2009 TIME PLOTTED => 05:44

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
05	SB	154	23.0	8	13

REGISTERED CIVIL ENGINEER DATE _____
 11-30-09
 PLANS APPROVAL DATE _____
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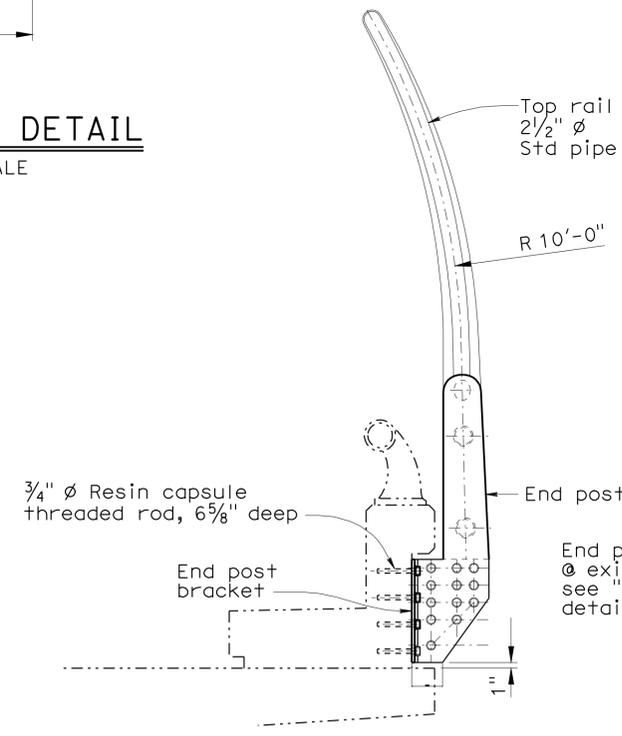


END POST DETAIL
NO SCALE

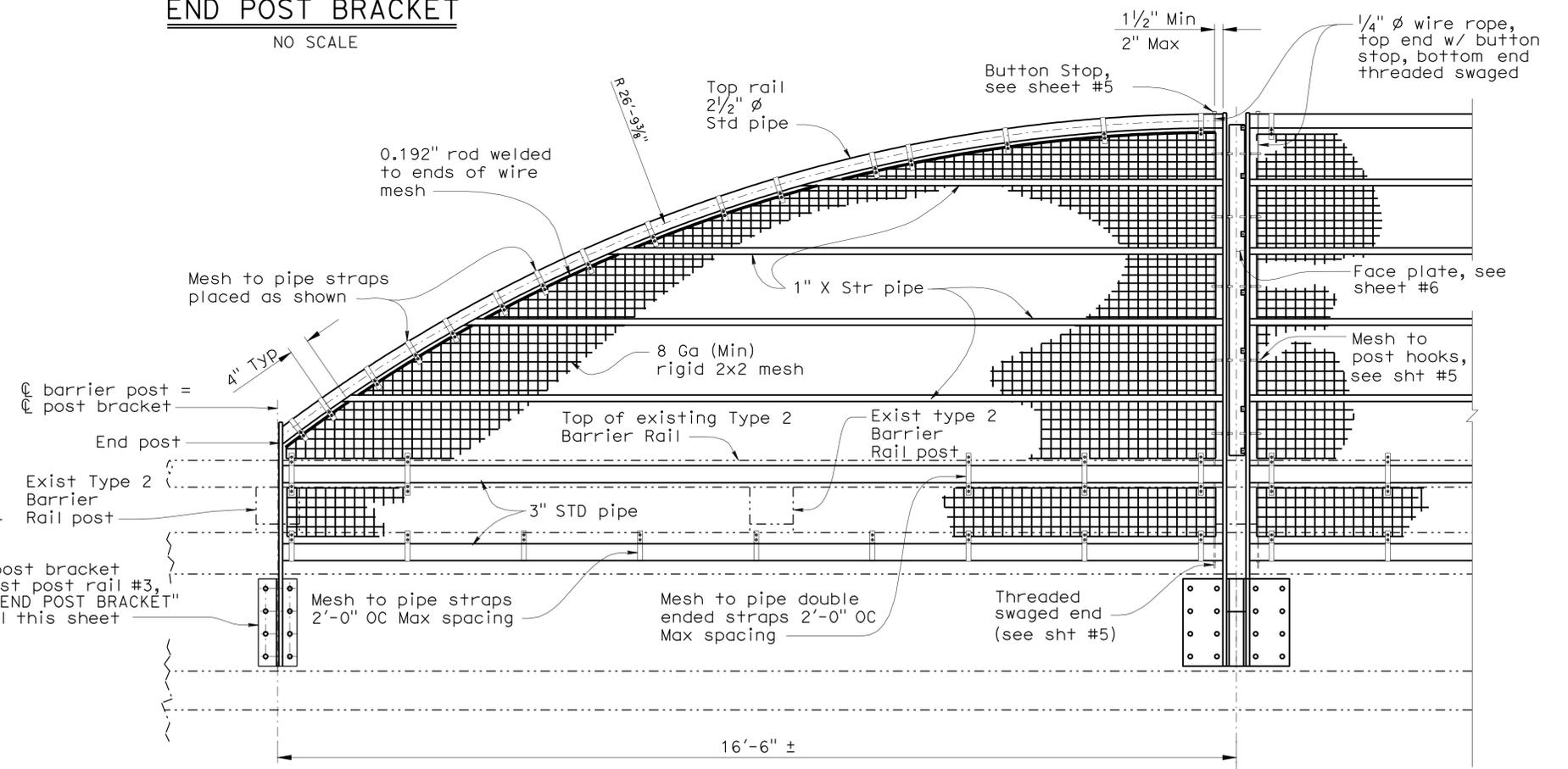


END POST BRACKET
NO SCALE

- Notes:
- For mesh to pipe connection details see "MESH TO POST CONNECTION DETAILS".
 - Place mesh hooks centered along center line of post and midway between horizontal bars or pipes.
 - 9 gauge galvanized wire ties shall be used along 1" horz pipes @ 1'-0" OC Max. (typical all panels).
 - All four corners have similar beginning and ending detail. Metal Bridge Railing (wire mesh) begins and ends at 3rd post rail from BB and EB.



END VIEW @ BEGINNING OF METAL BRIDGE RAILING (WIRE MESH)
NO SCALE



ELEVATION @ BEGINNING OF METAL BRIDGE RAILING (WIRE MESH)
NO SCALE

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

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05)	DESIGN	BY W. Kwan	CHECKED G. Doria	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN SPECIAL DESIGNS BRANCH	BRIDGE NO.	COLD SPRING CANYON BRIDGE	
	DETAILS	BY P. Wells	CHECKED G. Doria			51-0037		BEGIN AND END DETAIL
	QUANTITIES	BY D. Sandhu	CHECKED G. Doria			POST MILE		
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				CU 05 EA 0P9101	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 2 OF 7	

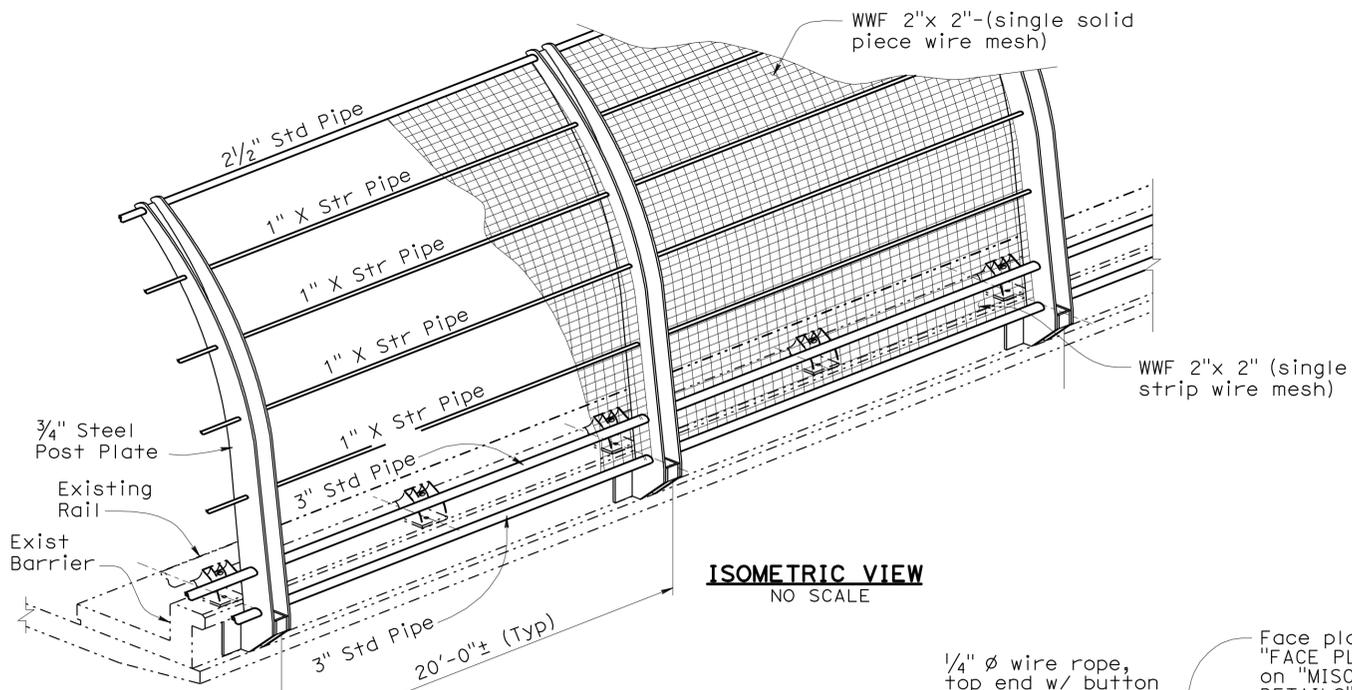
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
05	SB	154	23.0	9	13

Gemaro M. Doria
REGISTERED CIVIL ENGINEER DATE _____

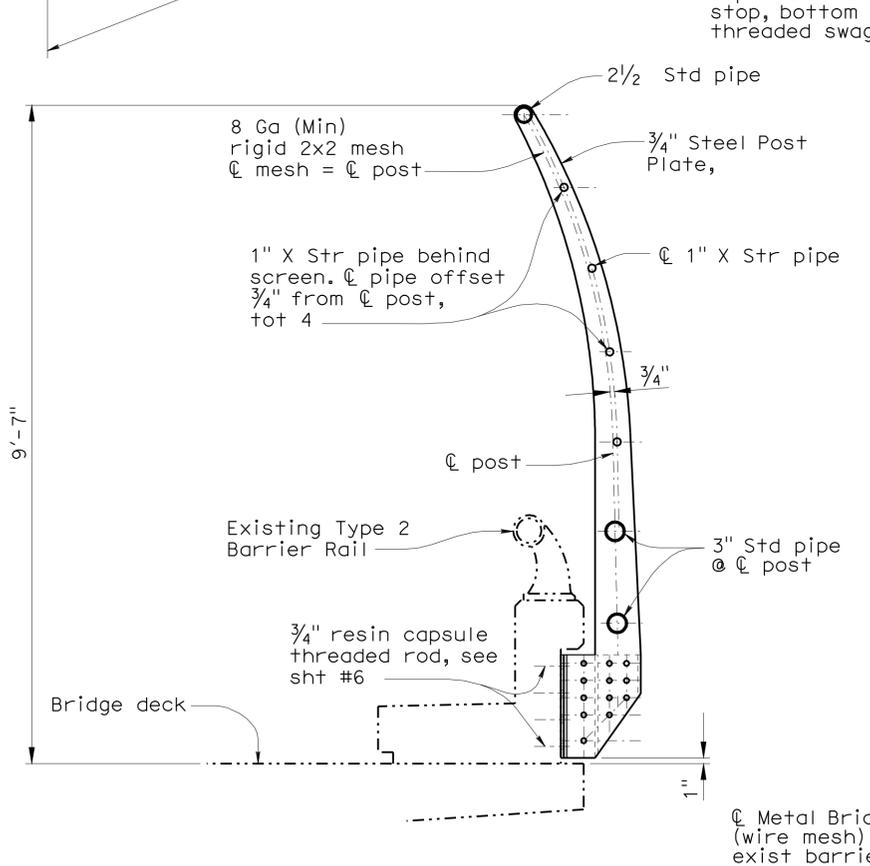
11-30-09
PLANS APPROVAL DATE

No. C63583
Exp. 9/30/10
CIVIL
STATE OF CALIFORNIA

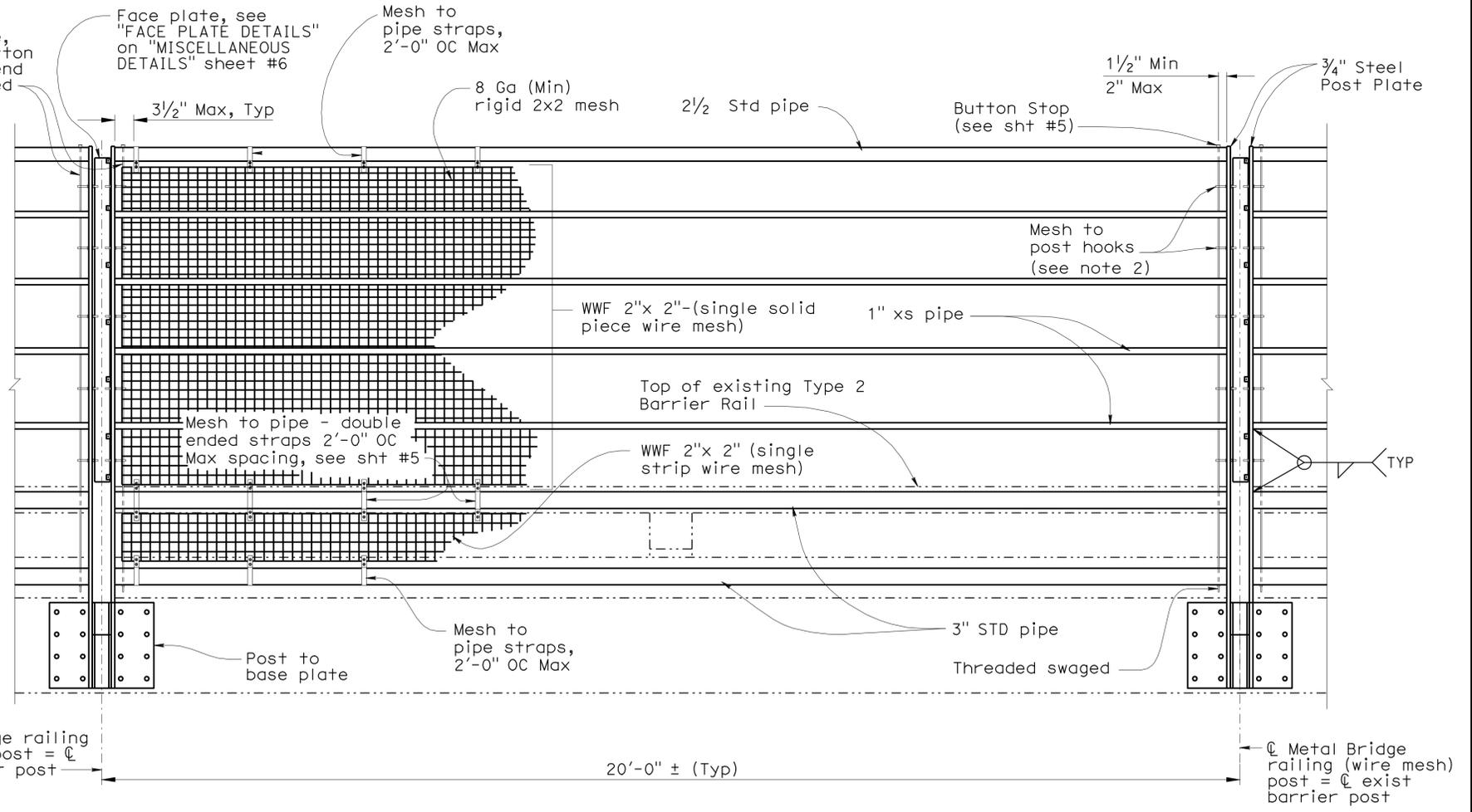
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



- Notes:
1. For mesh to pipe connection details see "MESH TO POST CONNECTION DETAILS".
 2. Place mesh to post hooks centered along center line of post and midway between horizontal bars as shown.
 3. 9 gauge galvanized wire ties shall be used along 1" horz pipes @ 1'-0" OC Max. (typical all panels).



TYPICAL SECTION
NO SCALE



PART ELEVATION
NO SCALE

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

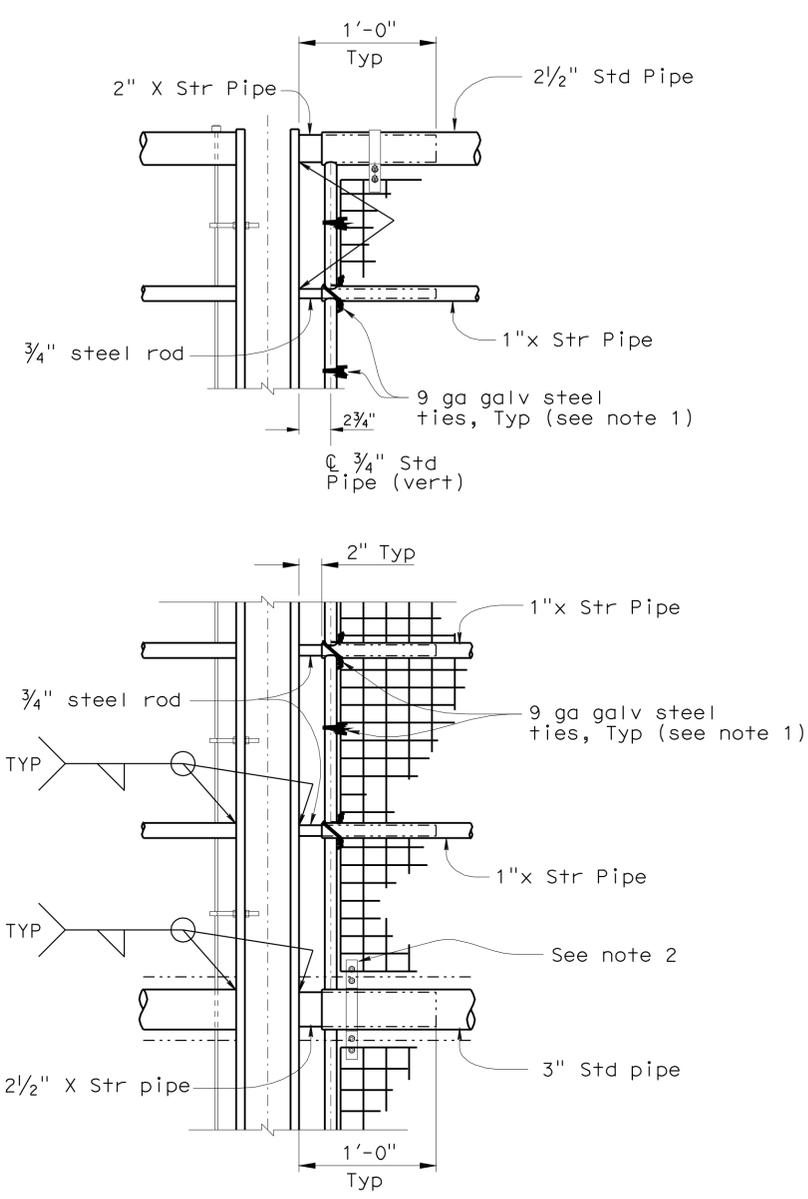
DESIGN	BY	W. Kwan	CHECKED	G. Doria	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN	BRIDGE NO.	51-0037	COLD SPRING CANYON BRIDGE TYPICAL PANEL DETAILS	
	DETAILS	BY	P. Wells	CHECKED			G. Doria	POST MILE		22.9
	QUANTITIES	BY	D. Sandhu	CHECKED			G. Doria			
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05)					ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	0 1 2 3	CU 05 EA 0P9101	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 3 OF 7

USERNAME => hrmikes DATE PLOTTED => 07-DEC-2009 TIME PLOTTED => 05:44

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
05	SB	154	23.0	10	13

Gennaro M. Doria
REGISTERED CIVIL ENGINEER DATE _____
11-30-09
PLANS APPROVAL DATE _____
No. C63583
Exp. 9/30/10
CIVIL
STATE OF CALIFORNIA

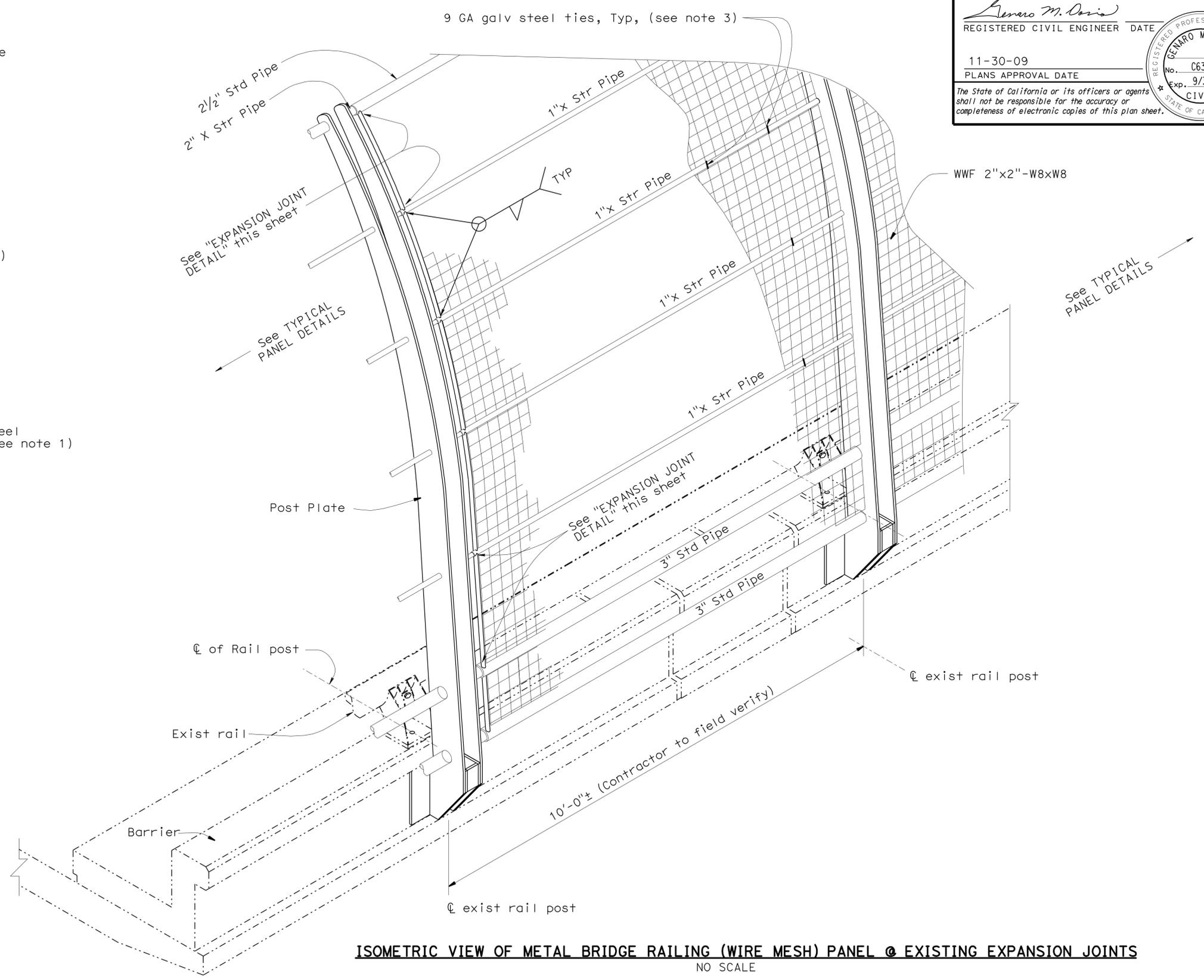
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



EXPANSION JOINT DETAIL
NO SCALE

- NOTES:
1. 9 gauge galvanized wire ties shall be used along 3/4" vert pipes.
 2. All straps along 3" ø horz pipes and 2 1/2" ø horz pipes are similar to typical Metal Bridge Railing (wire mesh) panel.
 3. 9 gauge galvanized wire ties shall be used along 1" horz pipes @ 1'-0" OC Max.
 4. Total of four 10'-0" panels to be placed at expansion joint locations as referred to on GP.

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



ISOMETRIC VIEW OF METAL BRIDGE RAILING (WIRE MESH) PANEL @ EXISTING EXPANSION JOINTS
NO SCALE

DESIGN	BY W. Kwan	CHECKED G. Doria
DETAILS	BY P. Wells	CHECKED G. Doria
QUANTITIES	BY D. Sandhu	CHECKED G. Doria

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

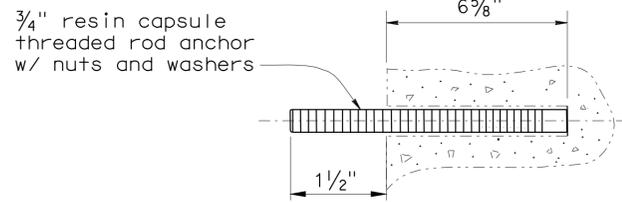
DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
SPECIAL DESIGNS BRANCH

BRIDGE NO.	51-0037	COLD SPRING CANYON BRIDGE
POST MILE	22.9	
EXPANSION JOINT PANEL		

USERNAME => hrmikes DATE PLOTTED => 07-DEC-2009 TIME PLOTTED => 05:45

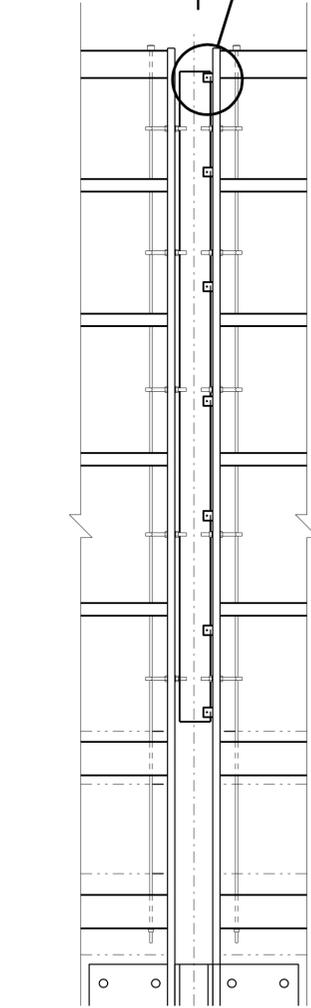
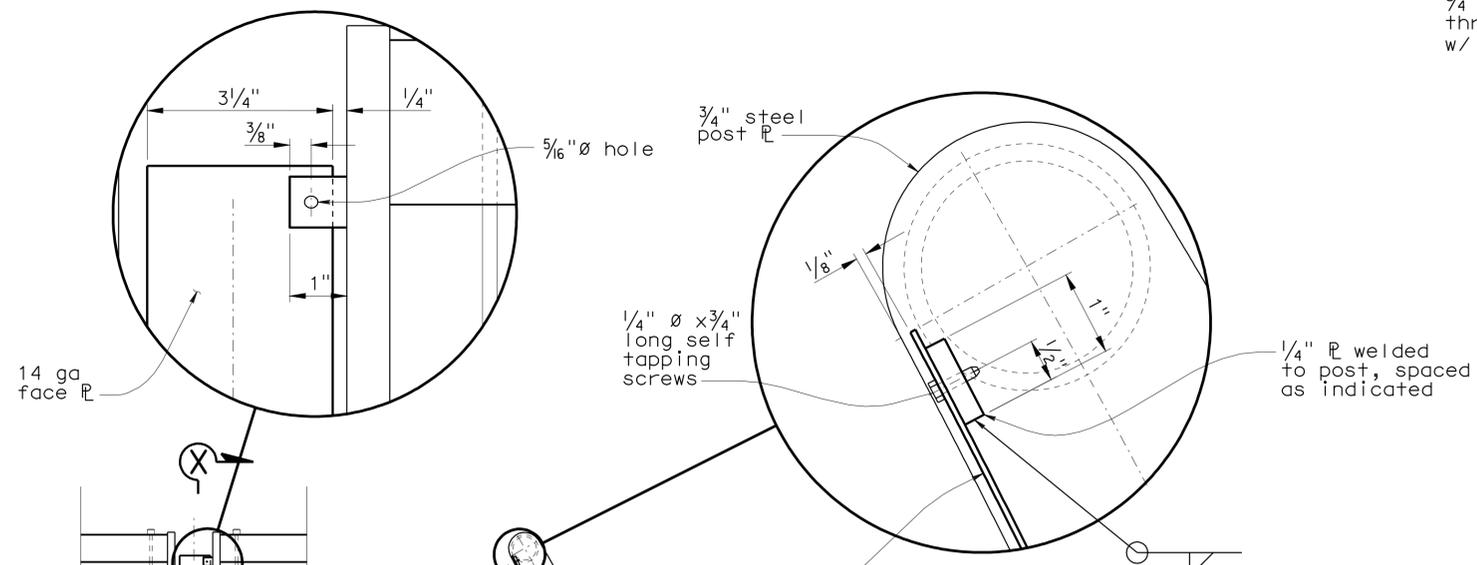
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
05	SB	154	23.0	12	13

REGISTERED CIVIL ENGINEER	DATE
11-30-09	
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>	

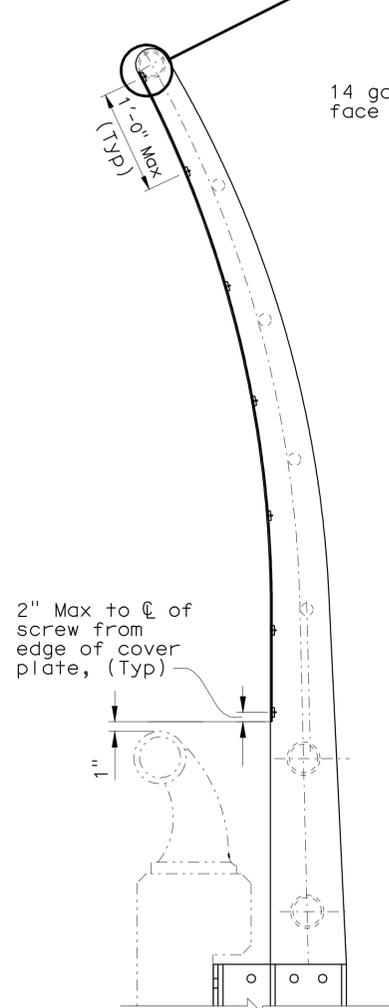


RESIN CAPSULE ANCHORAGE

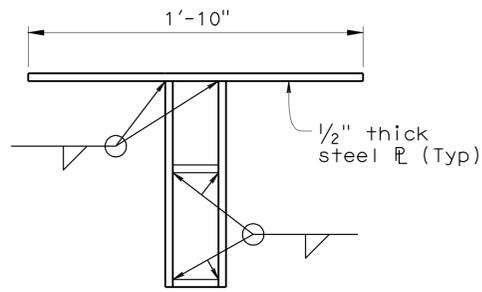
NOTE:
Resin capsule anchorage is subject to approval of Engineer. Installation procedures shall comply with manufacturer's instruction.



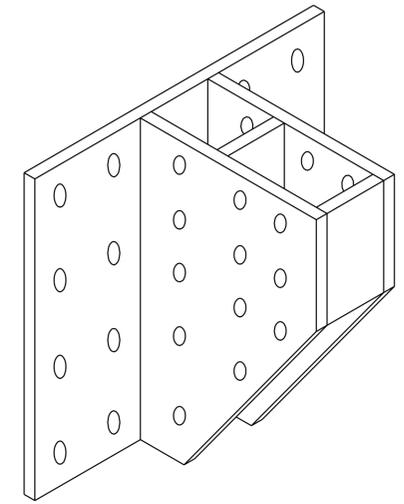
BACK VIEW
FACE PLATE DETAILS
NO SCALE



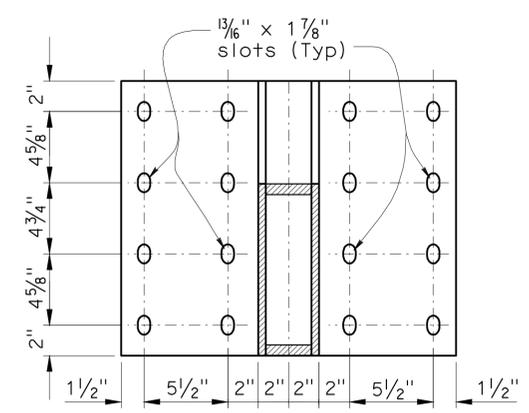
SECTION X-X



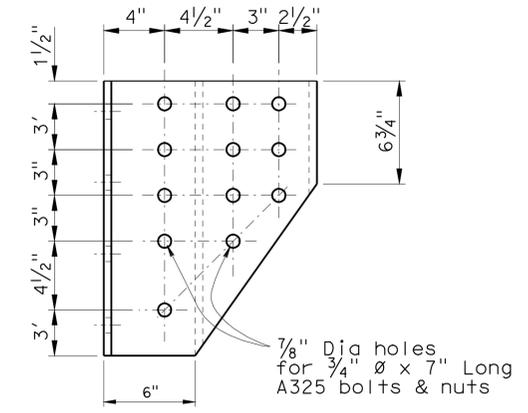
TOP VIEW



ISOMETRIC VIEW

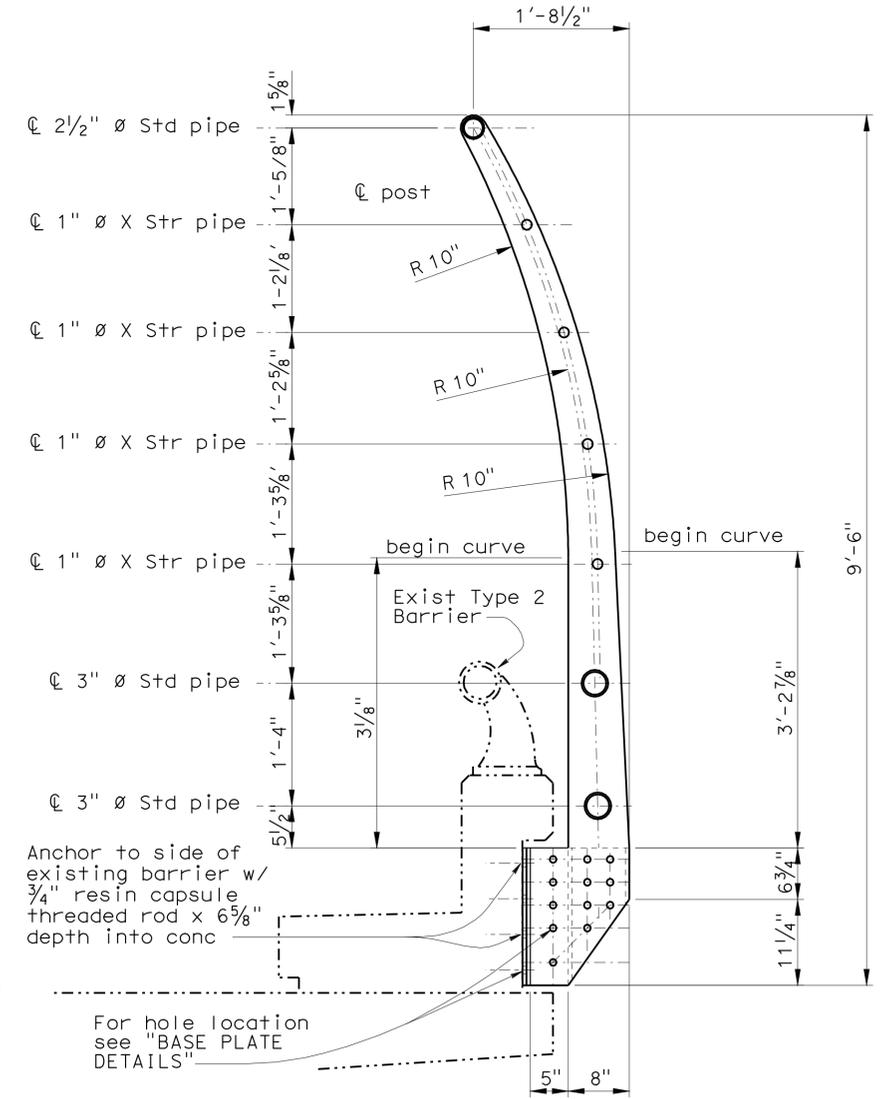


ELEVATION



FRONT

BASE PLATE DETAILS
NO SCALE



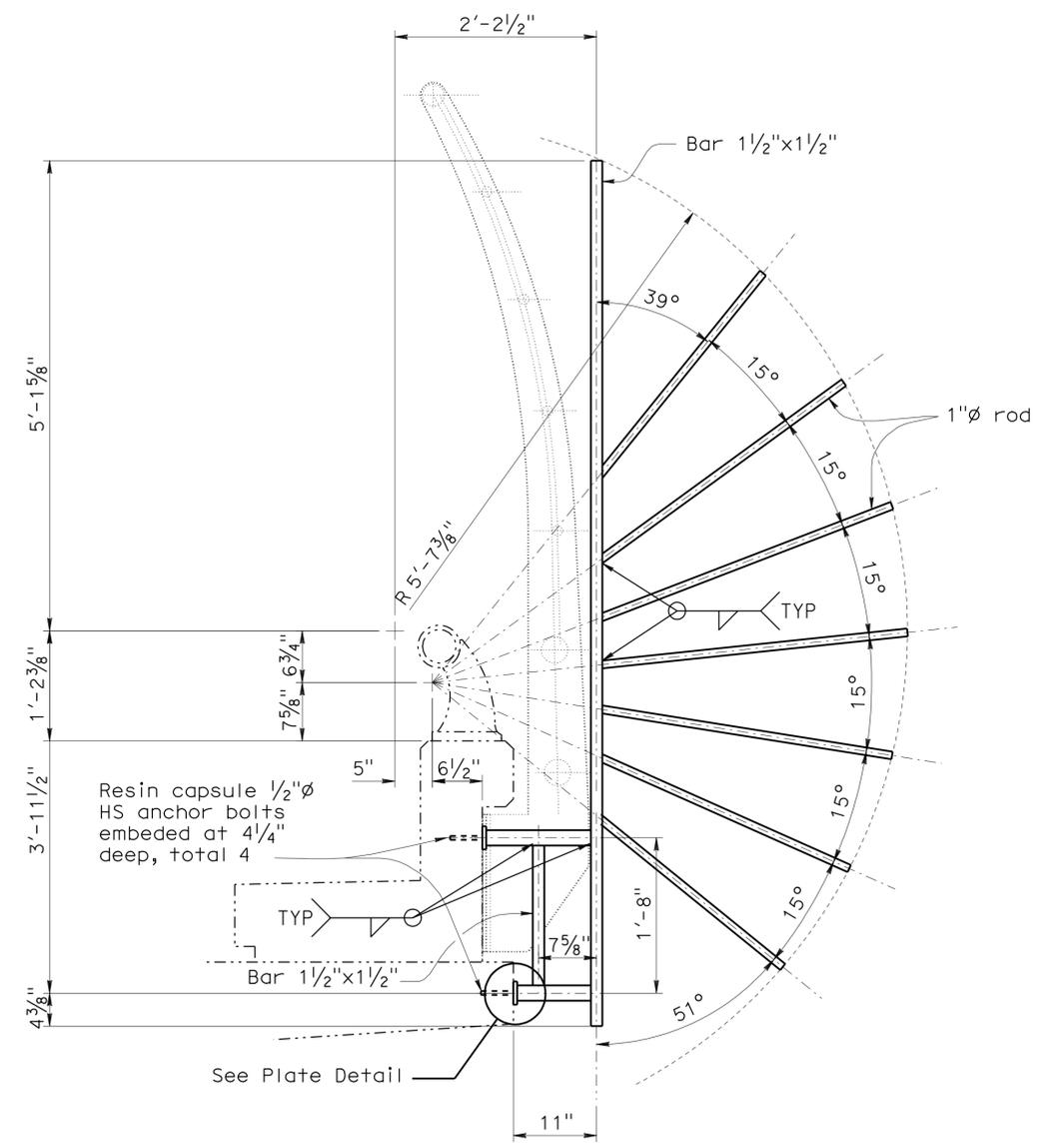
POST DETAILS
NO SCALE

DESIGN BY W. Kwan CHECKED G. Doria DETAILS BY P. Wells CHECKED G. Doria QUANTITIES BY D. Sandhu CHECKED G. Doria	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN SPECIAL DESIGNS BRANCH	BRIDGE NO. 51-0037 POST MILE 22.9	COLD SPRING CANYON BRIDGE MISCELLANEOUS DETAILS
	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	CU 05 EA 0P9101	DISREGARD PRINTS BEARING EARLIER REVISION DATES	SHEET 6 OF 7
	0 1 2 3	FILE => 050P9101umisc05.dgn	REVISION DATES	2/28/07 1/12/09

USERNAME => hrmikes DATE PLOTTED => 07-DEC-2009 TIME PLOTTED => 05:45

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
05	SB	154	23.0	13	13

Genaro M. Doria
 REGISTERED CIVIL ENGINEER DATE _____
 11-30-09
 PLANS APPROVAL DATE _____
 No. C63583
 Exp. 9/30/10
 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.



ACCESS PREVENTER DETAIL
NO SCALE

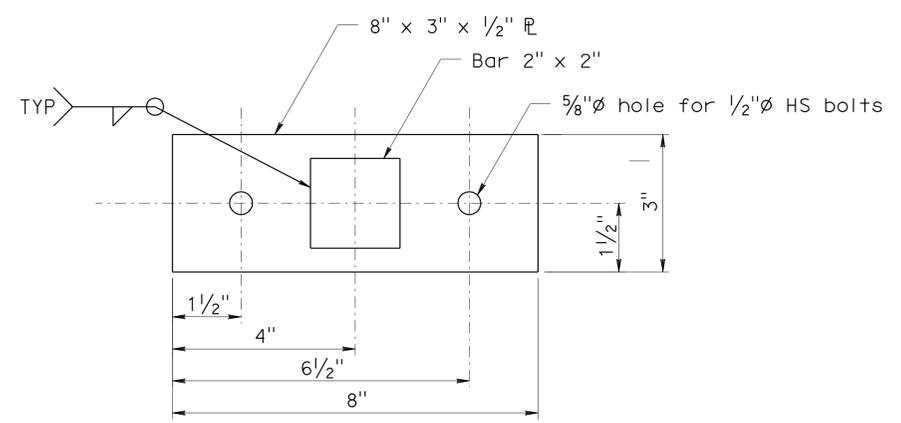


PLATE DETAIL
NO SCALE

NOTE:
See GP sheet for approx layout locations of 4 Access Preventers.

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

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05)	DESIGN	BY G. Doria	CHECKED V. Lopez	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN SPECIAL DESIGNS BRANCH	BRIDGE NO.	COLD SPRING CANYON BRIDGE	
	DETAILS	BY B. Edwards	CHECKED G. Doria			51-0037		ACCESS PREVENTER DETAILS
	QUANTITIES	BY D. Sandhu	CHECKED G. Doria			POST MILE 22.9		
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS					CU 05 EA 0P9101	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 7 OF 7

USERNAME => hrmikes DATE PLOTTED => 07-DEC-2009 TIME PLOTTED => 05:45