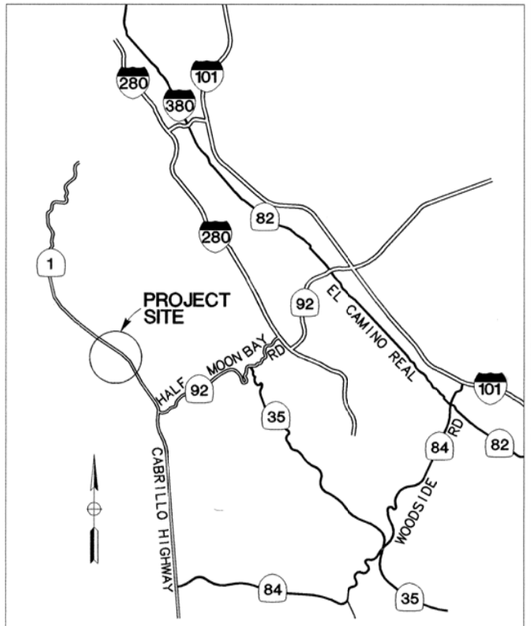
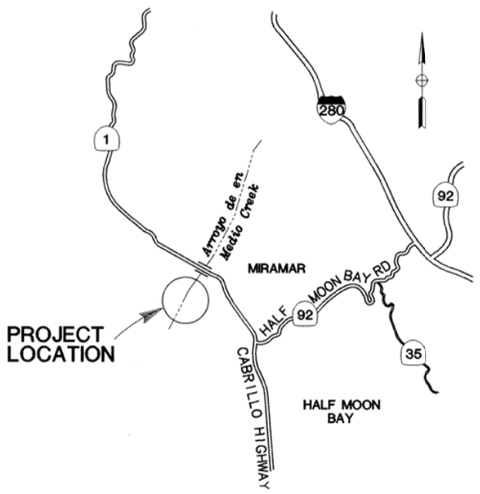


VICINITY MAP
NO SCALE



LOCATION MAP
NO SCALE

APPROVED:

DATE: MARCH 21, 2003

NEIL R. CULLEN, DIRECTOR OF PUBLIC WORKS
R. C. E. # 19109 / EXPIRES 9-30-2005

REGISTERED PROFESSIONAL ENGINEER
NEIL R. CULLEN
C 19109
CIVIL
STATE OF CALIFORNIA

SAN MATEO COUNTY

CALIFORNIA

PLANS FOR MIRADA ROAD PEDESTRIAN BRIDGE PROJECT IN HALF MOON BAY

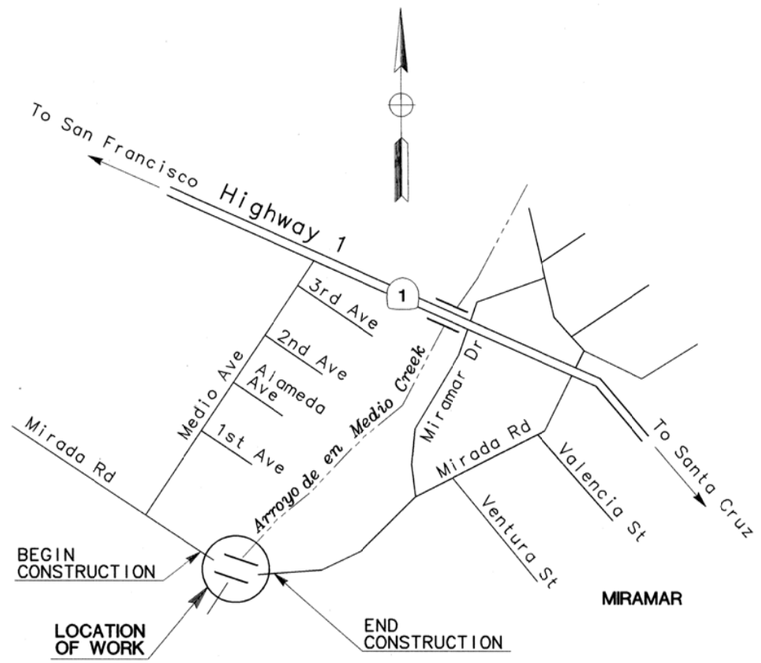
TO BE SUPPLEMENTED BY STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD PLANS AND STANDARD SPECIFICATIONS DATED JULY 1999 AND ADOPTED BY SAN MATEO COUNTY, FEBRUARY 15, 2000, BY RESOLUTION NO. 63418

SHEET INDEX

1. TITLE SHEET
2. PLAN AND PROFILE
3. CONSTRUCTION DETAILS

STRUCTURAL PLANS
4. GENERAL PLAN
5. FOUNDATION PLAN
6. ABUTMENT 1 DETAILS
7. ABUTMENT 2 DETAILS
8. MISCELLANEOUS DETAILS

ELECTRICAL
9. ELECTRICAL GENERAL
10. LIGHTING PLAN



BENCH MARKS:

1. BRASS DISC AT THE RADIUS POINT OF CUL DE SAC OF MIRADA ROAD, SOUTHERLY OF MEDIO CREEK, MARKED IN PAVEMENT AS MT-102. DISTANCE AND BEARING FROM MT-102 TO CONTROL POINT B (STA "A" 2+80) IS 74.2168' @ N 55°31'32" W.
   N=2007975.9414
   E=5993224.3095
   EL=31.68
2. NAIL AT THE INTERSECTION OF MIRADA ROAD AND MEDIO AVE. MARKED AS MT-105.
   N=2008225.8097
   E=5992919.9072
   EL=26.50
3. BRASS DISC IN THE CENTERLINE OF MIRADA ROAD APPROXIMATELY 244 FEET EAST OF CUL DE SAC RADIUS POINT MARKED AS MT-111.
   N=2007980.6313
   E=5993467.8717
   EL=34.94
4. FOUND NAIL IN THE CENTERLINE OF MIRADA ROAD APPROXIMATELY 216 FEET EAST OF CUL DE SAC RADIUS POINT MARKED AS MT-112.
   N=2007980.1159
   E=5993441.3809
   EL=35.10

RECORD DRAWINGS
Resident Engineer JOSEPH A. LO COCO
Date FEBRUARY 12, 2004

GENERAL NOTES

1. THE PLANIMETRIC MAPPING SHOWN ON THE PLANS WAS GENERALLY REPRESENTATIVE OF THE SITE CONDITIONS AT THE TIME IT WAS PRODUCED AND IS NOT NECESSARILY REPRESENTATIVE OF THE CURRENT CONDITIONS. THE CONTRACTOR IS ADVISED THAT THE COASTLINE IS SUBJECT TO SEVERE EROSION AND THAT THE GRADES AND SLOPES SHOWN ON THE PLANS MAY HAVE CHANGED FROM THE TIME THEY WERE PRODUCED. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR VISITING THE SITE TO VERIFY THE EXISTING CONDITIONS.
2. CONTRACTOR SHALL CONFINE HIS OPERATIONS AND ACTIVITIES WITHIN THE PROJECT LIMITS, CONSISTING OF ROAD RIGHT OF WAY, RIGHTS OF ENTRY AND/OR PROJECT CONFORMS, AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER.
3. CONTINUOUS DUST CONTROL SHALL BE PROVIDED AS REQUIRED BY SECTION 17 OF THE SPECIAL PROVISIONS AND AS DIRECTED BY THE ENGINEER.
4. LOCATIONS AND DEPTHS OF EXISTING UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE UTILITIES TO DETERMINE EXACT LOCATIONS AND DEPTHS. CONTRACTOR SHALL CALL "UNDERGROUND SERVICE ALERT" (U.S.A.) AT 1-800-642-2444, TWO (2) WORKING DAYS BEFORE EXCAVATION WORK IS TO BEGIN. WHEN CALLING, BE PREPARED TO GIVE LOCATION AND NATURE OF WORK, START DATE, COMPANY NAME, ADDRESS, AND TELEPHONE NUMBER.
5. PLANS MAY NOT SHOW ALL EXISTING WATER, GAS OR SANITARY SEWER LATERALS. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION AND PRESERVATION OF ALL SUCH FACILITIES, SHOWN ON THE PLANS OR IDENTIFIED BY U.S.A., WHICH ARE NOT TO BE RELOCATED.
6. WHEN DIRECTED BY THE ENGINEER, CUT AND FILL SLOPE RATIOS SHALL BE VARIED TO AVOID TREES OR OTHER EXISTING IMPROVEMENTS.
7. CONTRACTOR IS ADVISED THAT EXCAVATION MAY CONFLICT WITH SANITARY SEWER LATERALS, GAS LINES, WATER LINES AND OTHER UNDERGROUND UTILITIES. ANY DAMAGE TO EXISTING FACILITIES CAUSED BY THE CONTRACTOR SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
8. VEGETATION AND IMPROVEMENTS (INCLUDING FENCES) WHICH ARE DESIGNATED TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR. VEGETATION AND IMPROVEMENTS (INCLUDING FENCES) SHALL BE REMOVED ONLY WHEN DIRECTED IN WRITING BY THE ENGINEER. NO TREES, VEGETATION OR IMPROVEMENTS (INCLUDING FENCES) SHALL BE REMOVED WITHOUT THE PRIOR WRITTEN CONSENT AND APPROVAL OF THE ENGINEER. REFER TO PROJECT SPECIAL PROVISIONS SECTION 11 REGARDING REQUIREMENTS FOR ADVANCE NOTIFICATION OF PROPERTY OWNERS.
9. PROJECT SURVEY AND STAKING SERVICES WILL BE PROVIDED BY THE ENGINEER. THE CONTRACTOR'S ATTENTION IS DIRECTED TO SECTION 5-1.07 OF THE STANDARD SPECIFICATIONS.
10. DIMENSIONS OF THE STRUCTURAL SECTION ARE SUBJECT TO TOLERANCES IN THE STANDARD SPECIFICATIONS.
11. NO FALSEWORK SHALL BE ALLOWED IN CREEK FOR CONSTRUCTION.
12. CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE OPERATING OR FABRICATING ANY MATERIAL.

APPROVED DATE:

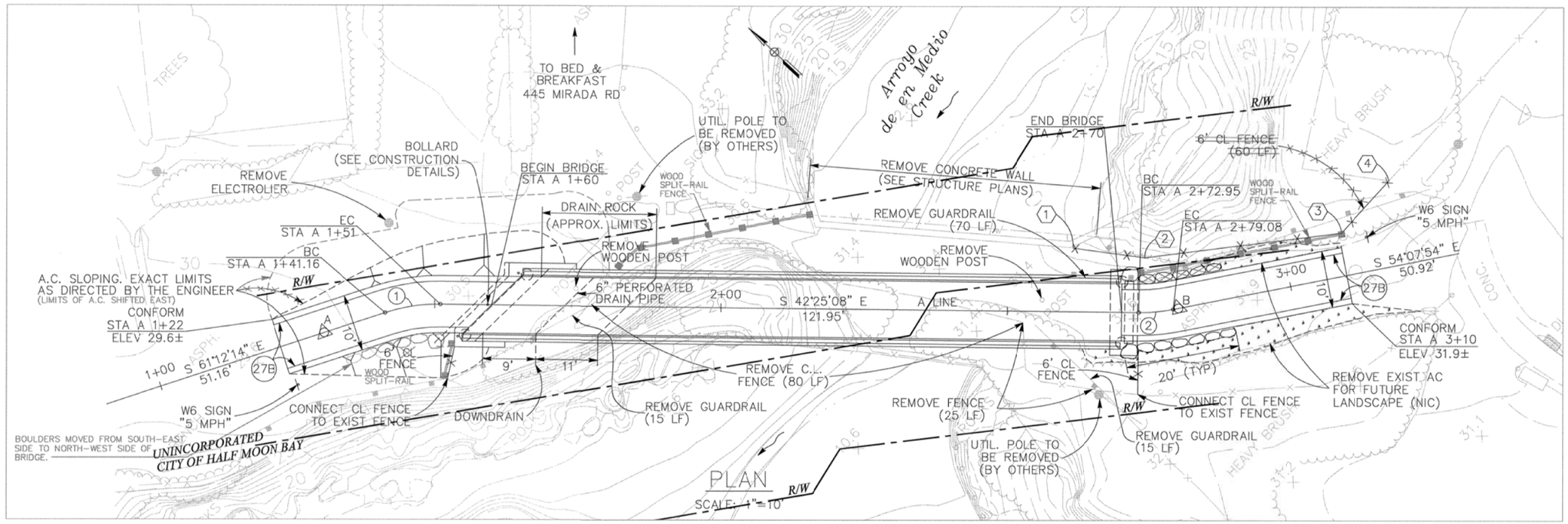
JAMES M. COSTANTINI, ENGINEERING CONSULTANT
MARK THOMAS & CO. INC.
R. C. E. # 51415 / EXPIRES 06/30/06

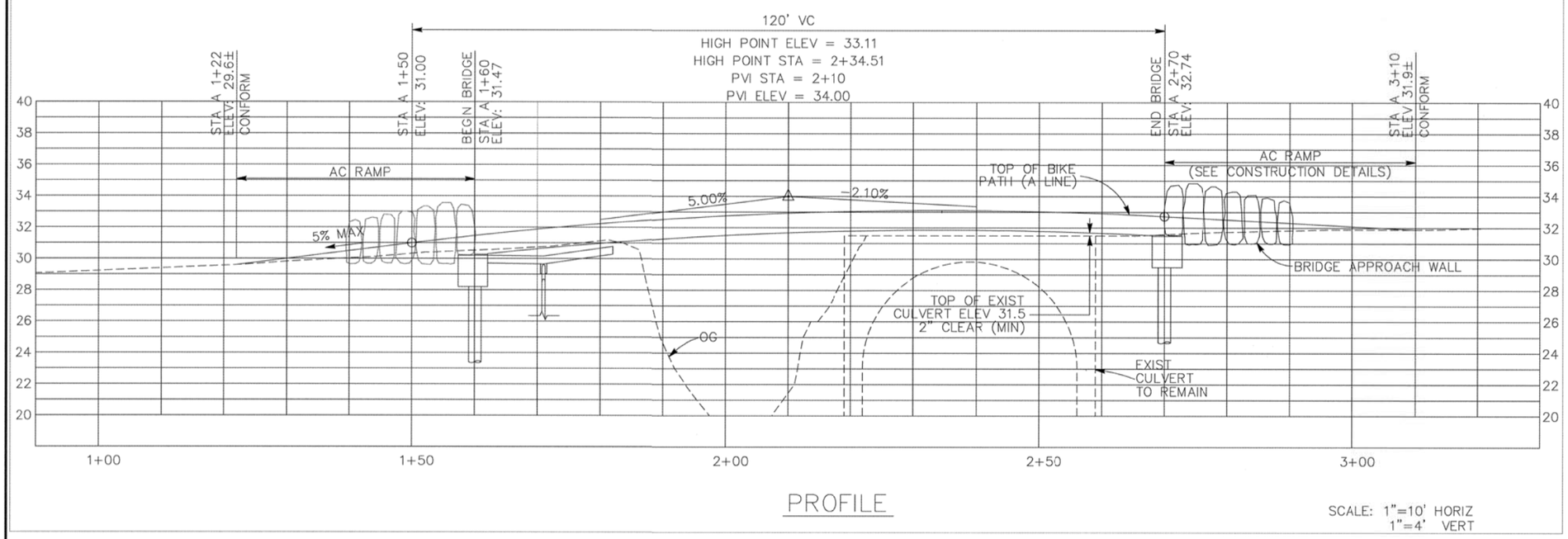
REGISTERED PROFESSIONAL ENGINEER
J. M. COSTANTINI
No. 51415
Exp. 06/30/06
CIVIL
STATE OF CALIFORNIA

REVISION	DATE		
		DESIGNED BY: AS	MIRADA ROAD PEDESTRIAN BRIDGE
		CHECKED BY: JV	TITLE SHEET
		DRAWN BY: KA	
		NEIL R. CULLEN, DIRECTOR OF PUBLIC WORKS SAN MATEO COUNTY	555 COUNTY CENTER, 5TH FLOOR REDWOOD CITY, CALIFORNIA

SCALE: AS SHOWN
DATE: 4-12-2002
FILE NO. 1/4657

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3 4





PROFILE

SCALE: 1"=10' HORIZ
1"=4' VERT

APPROVED:

DATE: MARCH 21, 2003

NEIL R. CULLEN, DIRECTOR OF PUBLIC WORKS
RCE # 19109 / EXPIRES 9-30-2005

REGISTERED PROFESSIONAL ENGINEER NEIL R. CULLEN C 19109 CIVIL STATE OF CALIFORNIA

LEGEND

(NO.) CURVE ALIGNMENT DATA

MULCH (TO BE PLANTED BY OTHERS – NIC)

A CONTROL POINT

(27B) CALTRANS STANDARD DETAIL 27B WHITE EDGELINE (SEE CONSTRUCTION DETAILS)

NOTES:

1. SEE STRUCTURAL PLANS FOR DETAIL OF PREFABRICATED PEDESTRIAN/ BIKE BRIDGE.
2. SEE ABUTMENT DELTAILS NO. 2 FOR WALL REMOVAL DETAIL.
3. SEE CONSTRUCTION DETAILS FOR BRIDGE APPROACH WALL.
4. SEE CONSTRUCTION DETAILS FOR DRAIN PIPE AND DRAIN ROCK.
5. SPLIT-RAIL FENCE ON EACH END OF BRIDGE (EAST SIDE): APPROX. 1'x1' POSTS, 5' TO 6' ON CENTER (7 POSTS TOTAL W/ 6" WIDE RAIL BETWEEN)

CURVE DATA

	RADIUS	DELTA	LENGTH	TANGENT	N-COORD*	E-COORD*
(1)	30.00	18°47'06"	9.84	4.96	2008092.35	5993053.41
(2)	30.00	11°42'46"	6.13	3.08	2008042.80	5993179.96

* COORDINATES GIVEN AT CENTER POINT OF ARC.

CONTROL DATA

CONTROL POINT	"A" STA	N-COORD	E-COORD
A	1+30.0	2008124.02	5993058.07
B	2+80.0	2008017.95	5993163.13

CL FENCE LOCATION

	N-COORDINATE	E-COORDINATE
1	2008038.57	5993158.23
2	2008028.34	5993165.52
3	2008006.09	5993192.20
4	2008006.27	5993204.54

RECORD DRAWINGS

Resident Engineer JOSEPH A. LOCOCO

Date FEBRUARY 12, 2004

APPROVED DATE:

JAMES M. COSTANTINI, ENGINEERING CONSULTANT

MARK THOMAS & CO. INC.

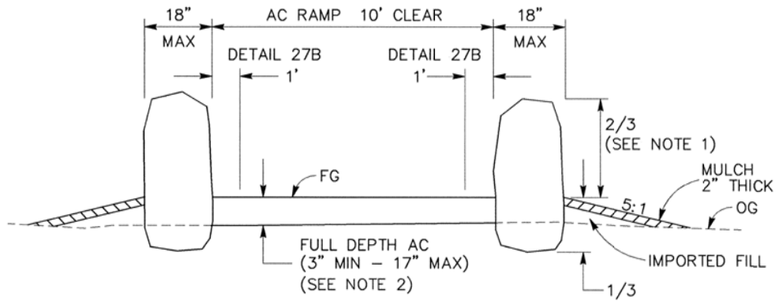
R. C. E. # 51415 / EXPIRES 06/30/06

REGISTERED PROFESSIONAL ENGINEER J. M. COSTANTINI No. 51415 Exp. 06/30/06 CIVIL STATE OF CALIFORNIA

REVISION	DATE	DESIGNED BY: AS	CHECKED BY: JV	DRAWN BY: KA	MIRADA ROAD PEDESTRIAN BRIDGE PLAN AND PROFILE	SCALE: AS SHOWN	DATE: 4-12-2002	FILE NO.: 1/4657
		NEIL R. CULLEN, DIRECTOR OF PUBLIC WORKS SAN MATEO COUNTY			555 COUNTY CENTER, 5TH FLOOR REDWOOD CITY, CALIFORNIA			

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3 4

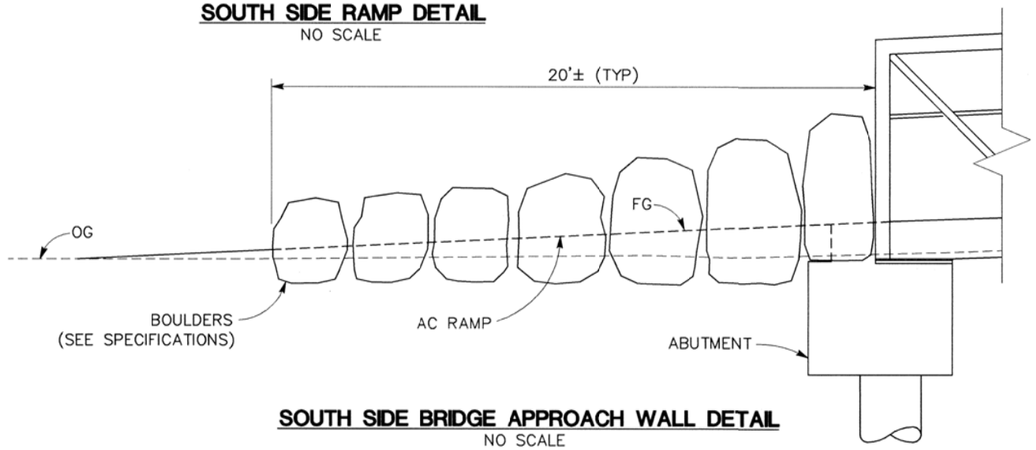
SHEET 2 of 10



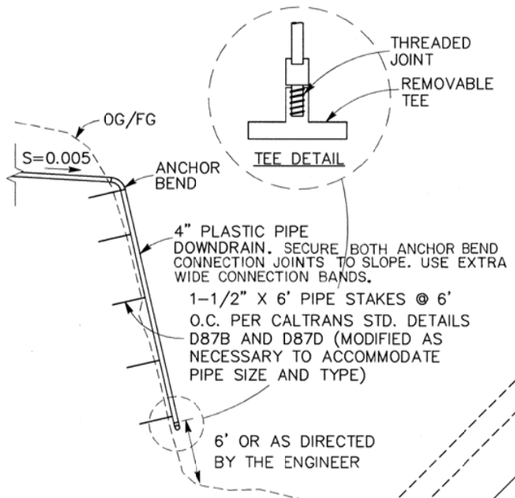
SOUTH SIDE RAMP DETAIL
NO SCALE

NOTES:

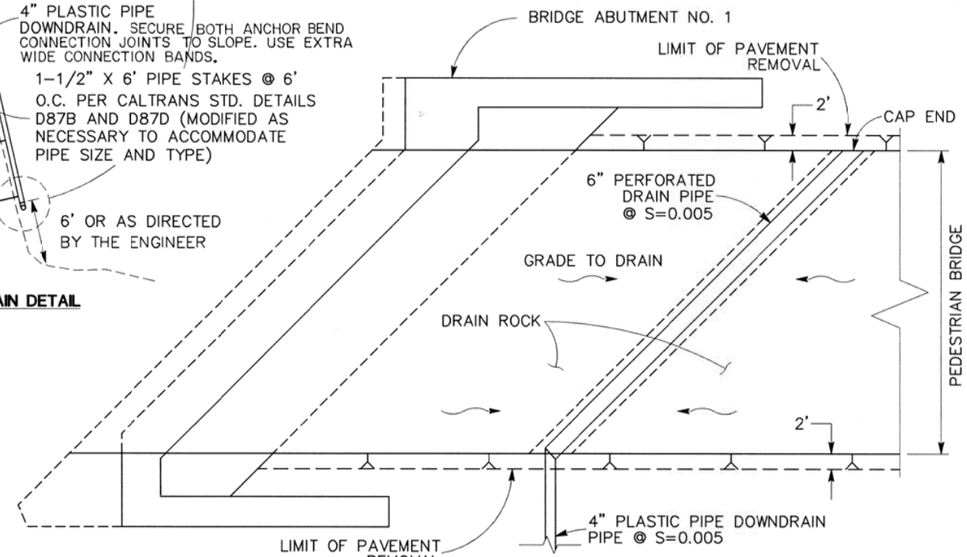
1. FINISHED GROUND TO TOP OF BOULDER CLOSEST TO (BUT NOT SEATED ON BRIDGE ABUTMENT) SHALL BE 40". FINISHED GROUND TO TOP OF LAST BOULDER (FURTHEST FROM BRIDGE) SHALL BE 24".
2. CONTRACTOR TO SAWCUT AND REMOVE EXISTING AC SURFACING AND BASE MATERIAL AT APPROACH END OF RAMPS TO PROVIDE FOR A MINIMUM OF 3 INCHES OF ASPHALT CONCRETE PAVING.



SOUTH SIDE BRIDGE APPROACH WALL DETAIL
NO SCALE

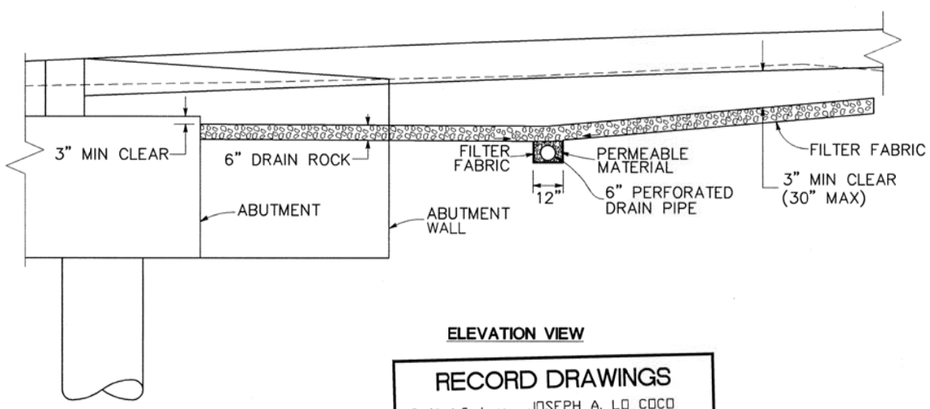


DOWN DRAIN DETAIL

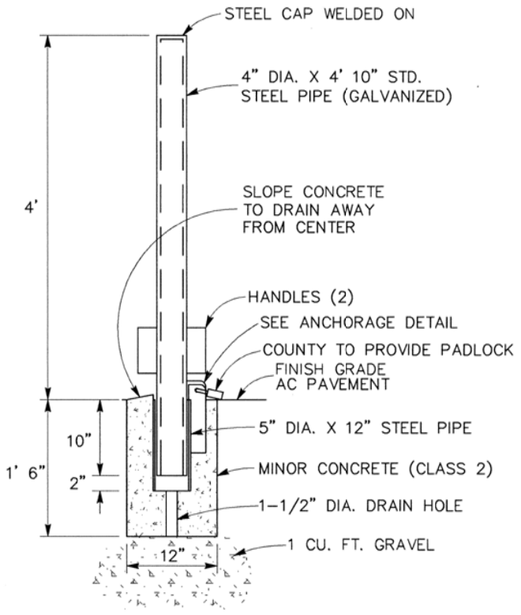


PLAN VIEW

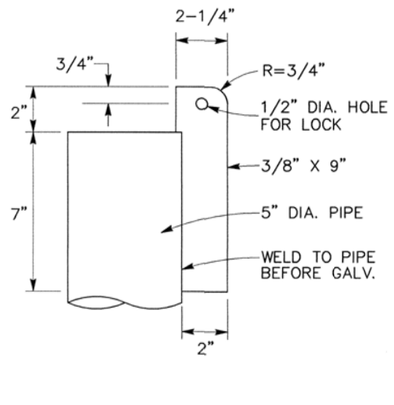
DRAIN PIPE DETAILS
NO SCALE



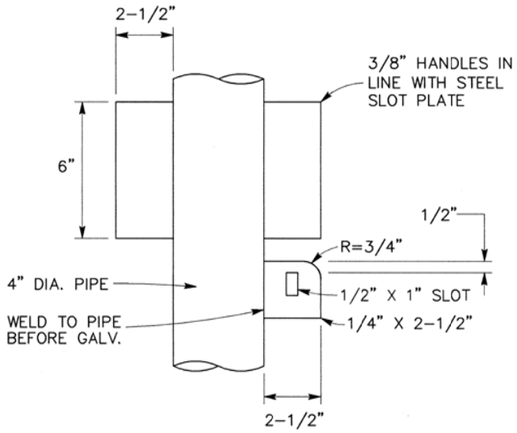
ELEVATION VIEW



BOLLARD DETAIL
NO SCALE



ANCHORAGE



POST

ANCHORAGE & POST DETAIL
NO SCALE

RECORD DRAWINGS
Resident Engineer JOSEPH A. LO COCO
Date FEBRUARY 12, 2004

APPROVED:
DATE: MARCH 21, 2003
NEIL R. CULLEN, DIRECTOR OF PUBLIC WORKS
R. C. E. # 19109 / EXPIRES 9-30-2005

REGISTERED PROFESSIONAL ENGINEER NEIL R. CULLEN C 19109 CIVIL STATE OF CALIFORNIA

APPROVED DATE:
JAMES M. COSTANTINI, ENGINEERING CONSULTANT
MARK THOMAS & CO. INC.
R. C. E. # 51415 / EXPIRES 06/30/06

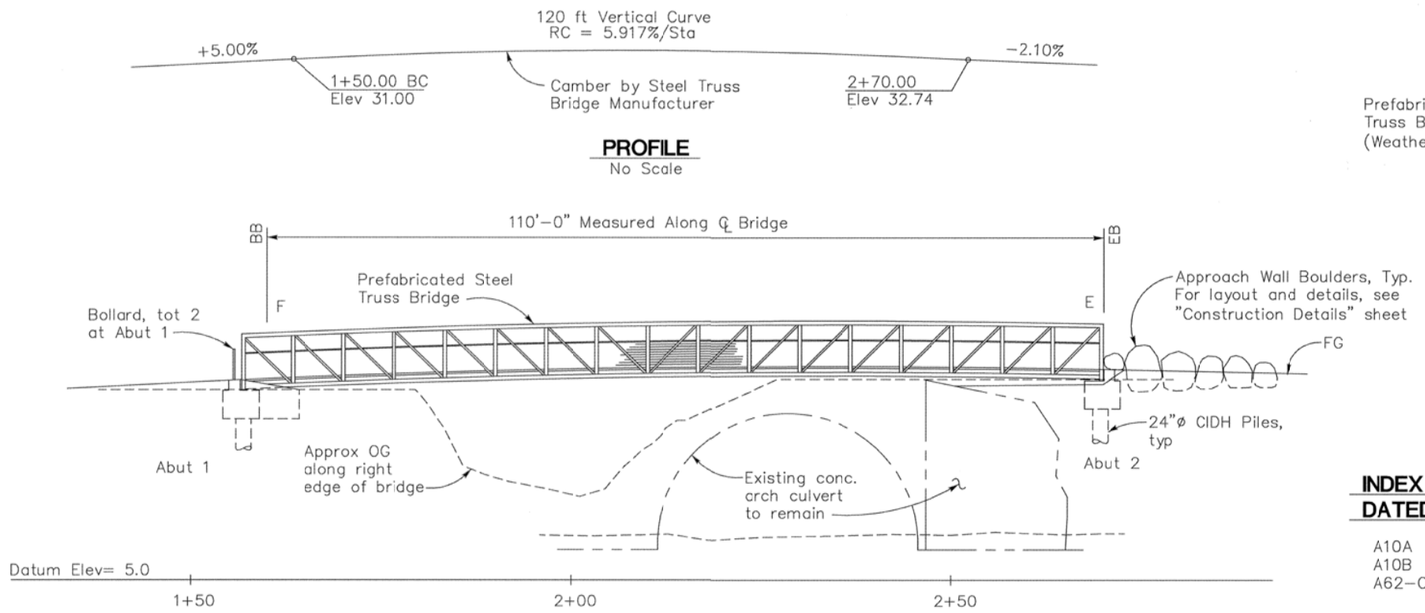
REGISTERED PROFESSIONAL ENGINEER J. M. COSTANTINI No. 51415 Exp. 06/30/06 CIVIL STATE OF CALIFORNIA

REVISION	DATE	DESIGNED BY: AS	CHECKED BY: JV	DRAWN BY: KA	NEIL R. CULLEN, DIRECTOR OF PUBLIC WORKS SAN MATEO COUNTY

MIRADA ROAD PEDESTRIAN BRIDGE
CONSTRUCTION DETAILS
555 COUNTY CENTER, 5TH FLOOR REDWOOD CITY, CALIFORNIA

SCALE: AS SHOWN
DATE: 4-12-2002
FILE NO.: 1/4657

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3 4

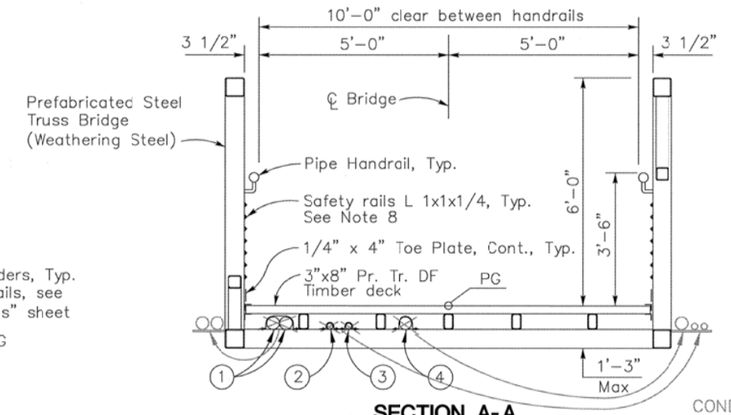


ELEVATION
1" = 10'

Note:
E=Expansion Bearing
F=Fixed Bearing
(For details see "Miscellaneous Details" sheet)

Pile Data - CIDH Concrete Piles

Location	Diameter	Design Loading (Service Load)	Nominal Resistance Compression	Design Tip Elevation
Abut 1	24"	30 Tons	120 Kips	-6.50 ft
Abut 2	24"	30 Tons	120 Kips	-5.50 ft



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

CONDUITS MOVED FROM UNDER BRIDGE DECKING TO OUTSIDE EDGES OF BRIDGE.

APPROVED:
DATE: MARCH 21, 2003
NEIL R. CULLEN, DIRECTOR OF PUBLIC WORKS
R. C. E. # 19109 / EXPIRES 9-30-05

REGISTERED PROFESSIONAL ENGINEER
NEIL R. CULLEN
C 19109
CIVIL
STATE OF CALIFORNIA

LEGEND
1. 2-4"ø Conduits (galv.) for future use (PG&E)
2. 2"ø Electrical conduit (galv.)
3. 2"ø Conduit (galv.) (Pacbell)
4. 4"ø Conduit (galv.) (AT&T)

INDEX TO STANDARD PLANS DATED JULY, 1999

A10A	Abbreviations
A10B	Symbols
A62-C	Limits of Payment for Excavation and Backfill - Bridge
BO-1	Bridge Details
BO-3	Bridge Details
BO-13	Bridge Details

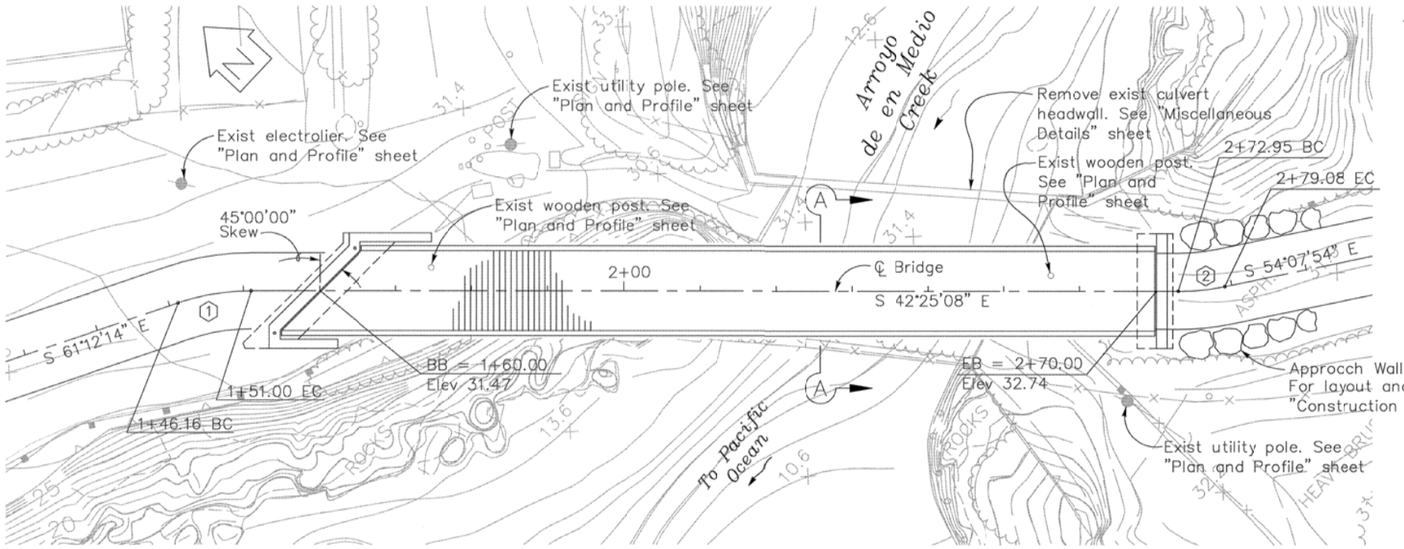
Standard Plan Sheet No.
Detail No.

GENERAL NOTES

1. Structural steel shall be designed, detailed and fabricated according to the latest provisions of the AASHTO Standard Specifications for Highway Bridges, AISC Manual of Steel Construction, and the Structural Welding Code (ANSI/AWS D1.1-88).
2. Bridge shall be made from Cold Formed Carbon Steel tubing conforming to ASTM A500 Grade B (Fy=46,000 psi). Incidental steel angles, plates and shapes shall be made from structural steel conforming to ASTM A36 (Fy=36,000 psi).
3. Bridge decking to be nominal 3-inch thick select structural fir (Fb = 1800 psi min) grade No. 1. Timber deck material shall be treated with chromated copper arsenate (CCA) to a 0.4 pcf retention or to refusal.
4. Welding shall be performed with series E80 Electrodes and compatible with the base metal being welded.
5. All top and bottom chord shop splices to be complete penetration type welds. Weld between top chord and end vertical shall be partial penetration.
6. Unless otherwise noted, welded connections shall be fillet welds (or have the effective throat of a fillet weld) of a size equal to the thickness of the lightest gage member in the connection. Welds shall be applied as follows:
   A) Both ends of verticals, diagonals, and floor beams shall be welded all around.
   B) Brace diagonals will be welded for full length of top, bottom and outside vertical faces.
   C) Miscellaneous non-structural members will be stitch welded to their supporting members.
7. Bridge design is based on combinations of the following loads which will produce maximum critical member stresses:
   A) 85 psf uniform live loading on the full deck area or one 10,000 pound vehicle load plus impact. The load shall be distributed as a four-wheel vehicle with 80% of load on the rear wheels. The wheels shall be spaced for a pickup truck driving down the center of the bridge.
   B) 75 psf wind load on the full height of the bridge, as if enclosed.
   C) 20 psf upward force applied at the windward quarter point of the transverse bridge width (AASHTO 3.15.3).
   D) Seismic Loading: Caltrans Seismic Design Criteria (SDC), Version 1.1 July 1999. PRA = 0.6g
   See 'ARS Design Curve' on "Foundation Plan" sheet.
8. The Contractor shall submit shop plan for safety railing details. Safety railings shall be free of sharp edges. Maximum spacing between safety rails shall be 4" and locations shall be coordinated with hand rail location.

ABBREVIATIONS

cont. - continuous
A.B. - anchor bolt
T&B - Top & Bottom
Pr. Tr. - Pressure Treated
DF - Douglas Fir



PLAN
1" = 10'

℄ Bridge Curve Data

1	R=30.0' Δ=18°47'06" L=9.84' T=4.96'
2	R=30.0 Δ=11°42'46" L=6.13' T=3.08'

Note:
Contractor shall verify all controlling field dimensions before ordering or fabricating any material.

RECORD DRAWINGS
Resident Engineer JOSEPH A. LOCOCO
Date FEBRUARY 12, 2004

APPROVED DATE:	
PO-KANG CHEN, STRUCTURAL ENGINEER	
MARK THOMAS & CO. INC.	
S.E. #3112 - EXPIRES 9/30/05	

RECORDED PROFESSIONAL ENGINEER
PO-KANG CHEN
No. S 3112
Exp. 9/30/05
STRUCTURAL
STATE OF CALIFORNIA

		DESIGNED BY: TW	MIRADA ROAD PEDESTRIAN BRIDGE
		CHECKED BY: PC	GENERAL PLAN
		DRAWN BY: TW	
REVISION	DATE	NEIL R. CULLEN, DIRECTOR OF PUBLIC WORKS SAN MATEO COUNTY	555 COUNTY CENTER, 5TH FLOOR REDWOOD CITY, CALIFORNIA

SCALE: AS SHOWN
DATE: 7-29-2002
FILE NO.: 1/4657

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3 4

BENCH MARKS

MT-102
Brass disk in Mirada Road cul-de-sac. Elev=31.68
N2007975.941 E5993224.309

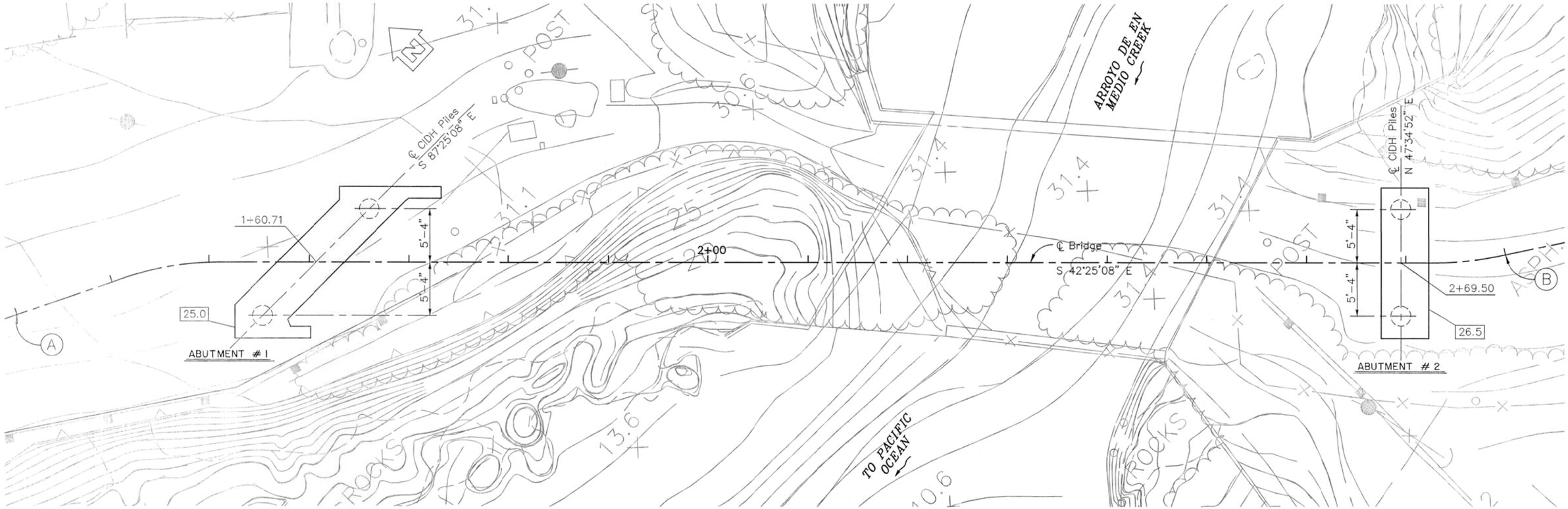
City of Half Moon Bay Monument
Elev.=34.94
N2007980.631 E5993467.872

DATUM:

National Geodetic Vertical
Datum 1929-61
Mean Sea Level

REGISTERED PROFESSIONAL ENGINEER
NEIL R. CULLEN
C 19109
CIVIL
STATE OF CALIFORNIA

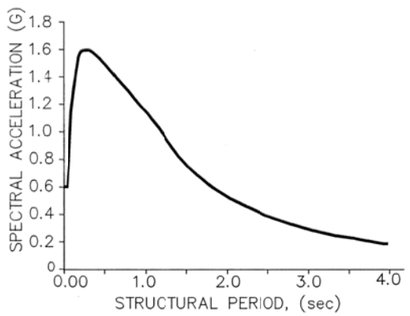
APPROVED:
DATE: MARCH 21, 2003
NEIL R. CULLEN, DIRECTOR OF PUBLIC WORKS
R. C. E. # 19109 / EXPIRES 9-30-2005



PLAN
1" = 5'

℄ BRIDGE ALIGNMENT DATA

		North	East
Ⓐ	1+30.00 POT	2008124.02	5993058.07
Ⓑ	2+80.00 POT	2008017.95	5993163.13



ARS DESIGN CURVE
No scale

NOTES & LEGEND

- 25.0 Denotes bottom of footing elevation
- Denotes CIDH piles
- 30.5 Spot Elevation
- Contour as of 4/12/2001

RECORD DRAWINGS
Resident Engineer JOSEPH A. LO COCO
Date FEBRUARY 12, 2004

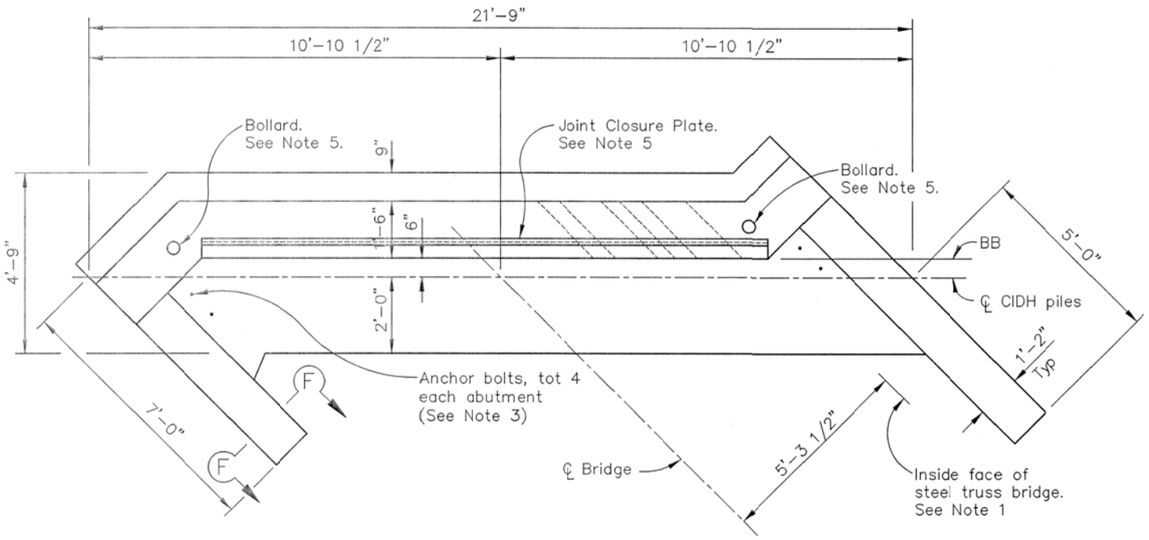
Note:
Contractor shall verify all controlling field dimensions before ordering or fabricating any material.

APPROVED DATE:
P. K. Chen 10/7/02
PO-KANG CHEN, STRUCTURAL ENGINEER
MARK THOMAS & CO. INC.
S.E. #3112 – EXPIRES 9/30/05

REGISTERED PROFESSIONAL ENGINEER
PO-KANG CHEN
No. S 3112
Exp 9/30/05
STRUCTURAL
STATE OF CALIFORNIA

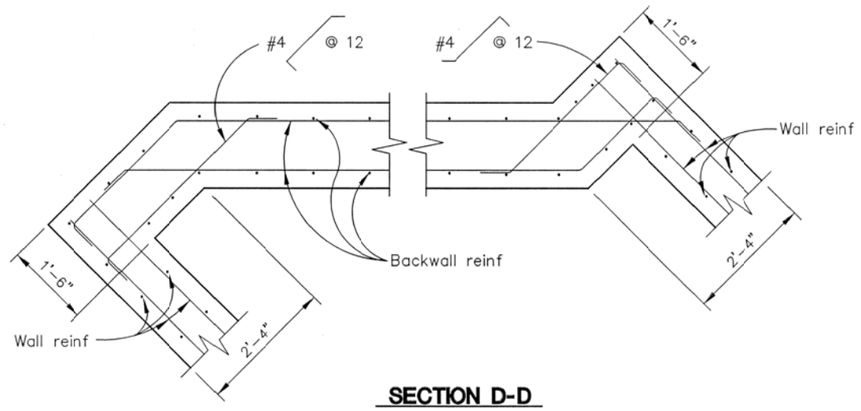
REVISION	DATE	DESIGNED BY: TW	CHECKED BY: PC	DRAWN BY: TW	MIRADA ROAD PEDESTRIAN BRIDGE FOUNDATION PLAN	SCALE: AS SHOWN	DATE: 7-29-2002	FILE NO.: 1/4857
		NEIL R. CULLEN, DIRECTOR OF PUBLIC WORKS SAN MATEO COUNTY				555 COUNTY CENTER, 5TH FLOOR REDWOOD CITY, CALIFORNIA		

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3 4



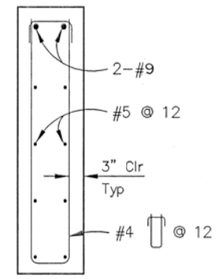
PLAN - ABUTMENT 1

Scale 1/2"=1'–0"
(Steel truss bridge not shown)



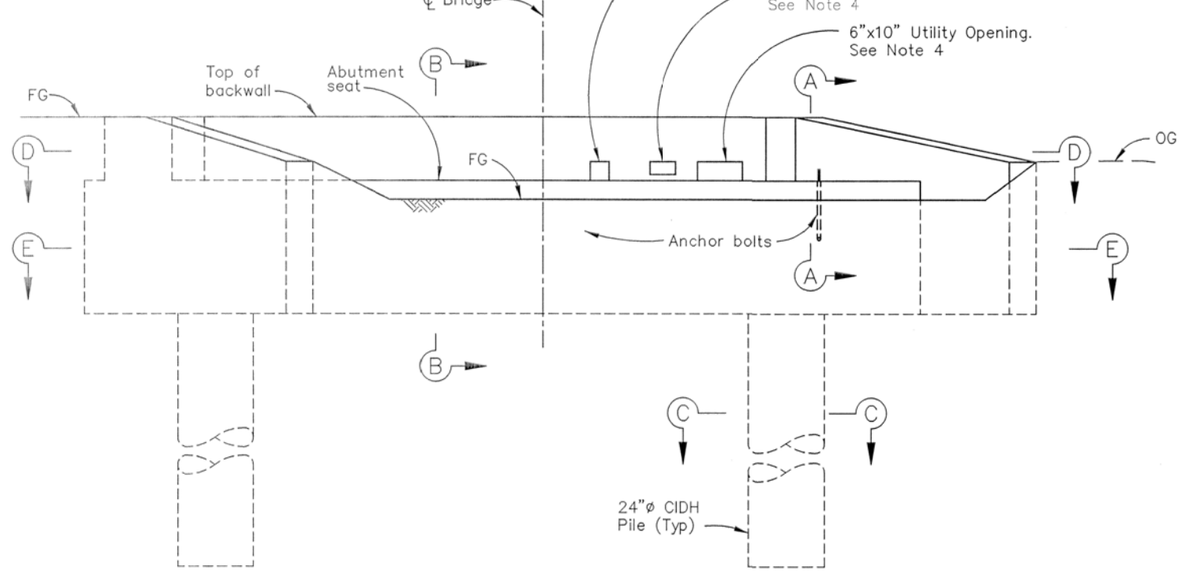
SECTION D-D

Scale 3/4"=1'–0"



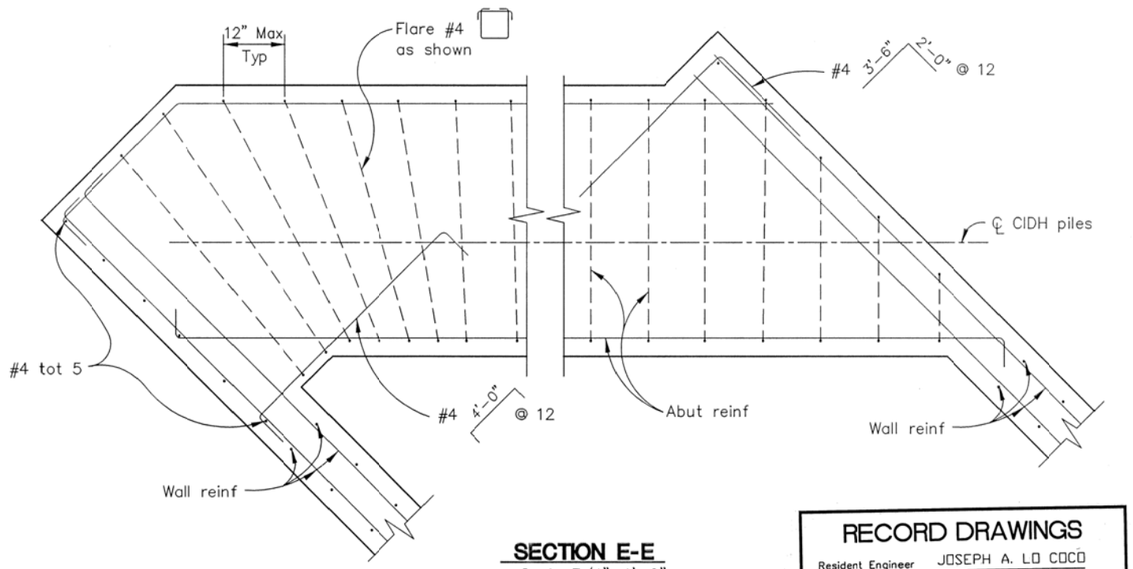
SECTION F-F

Scale 3/4"=1'–0"



ELEVATION - ABUTMENT 1

Scale 1/2"=1'–0"



SECTION E-E

Scale 3/4"=1'–0"

ABBREVIATIONS (This Sheet)

Abut	Abutment
CIDH	Cast in drilled hole
reinf	Reinforcement

Notes:

1. For steel truss bridge details, see prefabricated steel truss bridge drawings.
2. For AC pavement details see "Plan and Profile" sheet.
3. Contractor to coordinate location of anchor bolts with the truss manufacturer.
4. For 'Section A–A', 'Section B–B', 'Section C–C' and 'Utility Opening at Backwall' detail, see "Abutment 2 Details" sheet.
5. For 'Bollard Detail' and 'Joint Closure Plate Detail', see "Miscellaneous Details" sheet.

Note:
Contractor shall verify all controlling field dimensions before ordering or fabricating any material.

REGISTERED PROFESSIONAL ENGINEER NEIL R. CULLEN C 19109 CIVIL STATE OF CALIFORNIA

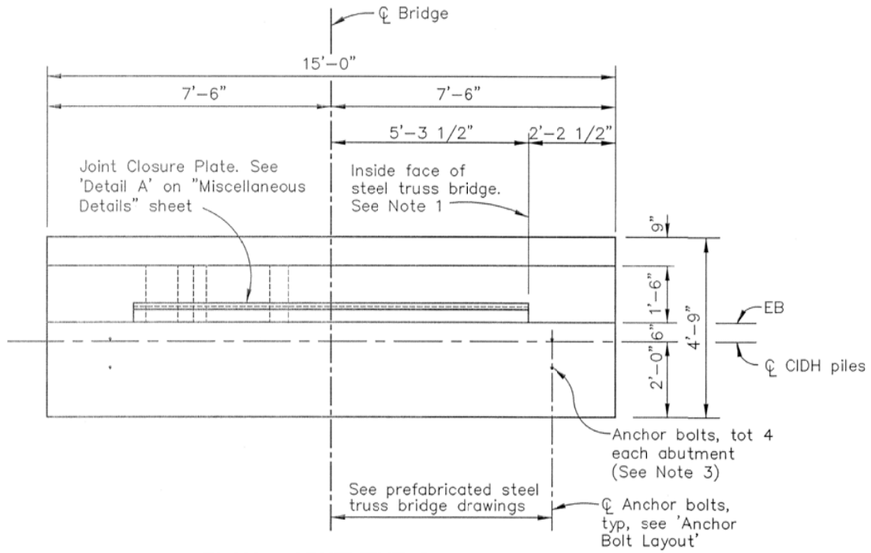
APPROVED:
DATE: MARCH 21, 2003
NEIL R. CULLEN, DIRECTOR OF PUBLIC WORKS
R. C. E. # 19109 / EXPIRES 9–30–2005

RECORD DRAWINGS
Resident Engineer JOSEPH A. LO COCO
Date FEBRUARY 12, 2004

APPROVED DATE:	
P.K. Chen 10/7/02	
PO-KANG CHEN, STRUCTURAL ENGINEER	
MARK THOMAS & CO. INC.	
S.E. #3112 – EXPIRES 9/30/05	

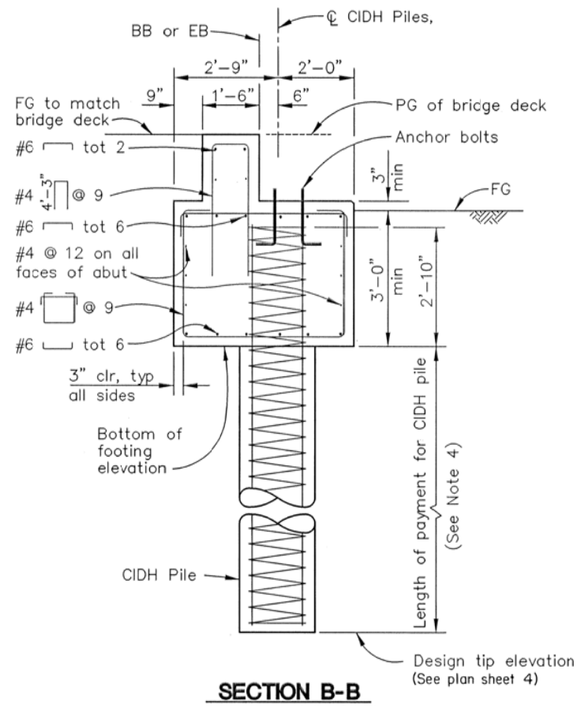
REGISTERED PROFESSIONAL ENGINEER PO-KANG CHEN No. S 3112 Exp. 9/30/05 STRUCTURAL STATE OF CALIFORNIA

		DESIGNED BY: TW	MIRADA ROAD PEDESTRIAN BRIDGE	SCALE: AS SHOWN
		CHECKED BY: PC	ABUTMENT 1 DETAILS	DATE: 7–29–2002
		DRAWN BY: TW		FILE NO.: 1/4657
REVISION	DATE	NEIL R. CULLEN, DIRECTOR OF PUBLIC WORKS SAN MATEO COUNTY	555 COUNTY CENTER, 5TH FLOOR REDWOOD CITY, CALIFORNIA	
		FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3 4		SHEET 6 of 10



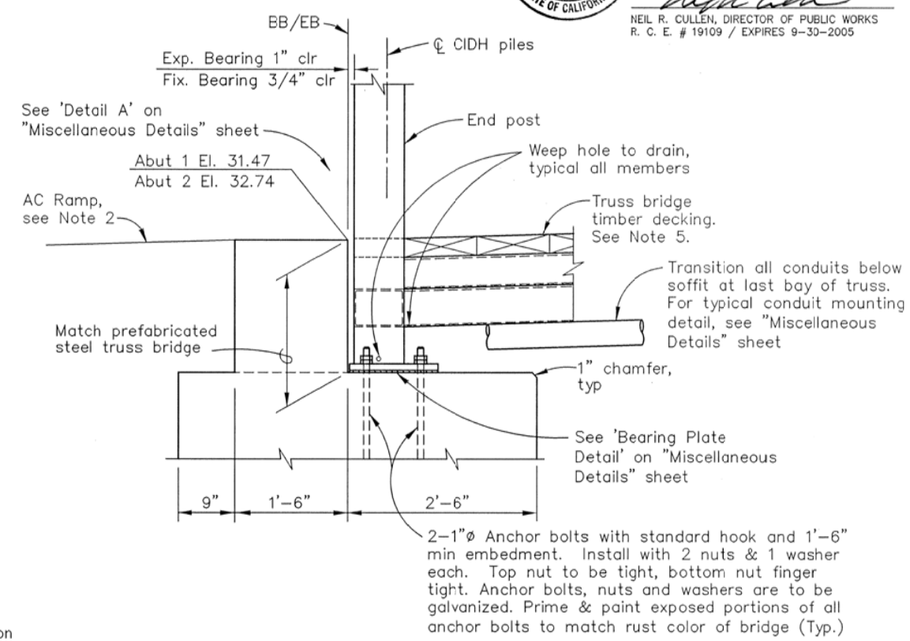
PLAN - ABUTMENT 2

Scale 1/2"=1'–0"
(Steel truss bridge not shown)



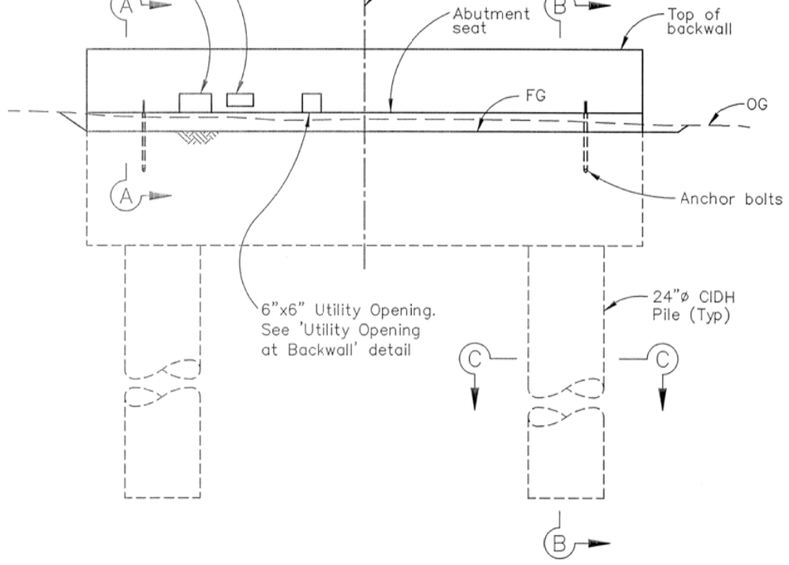
SECTION B-B

Scale 1/2"=1'–0"
(Steel truss bridge not shown)



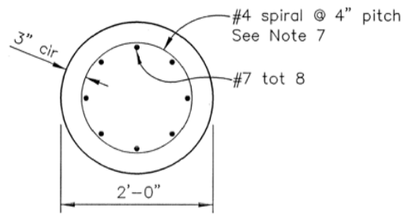
SECTION A-A AT EXPANSION BEARING ASSEMBLY

Scale 1"=1'–0"
(See Note 1)



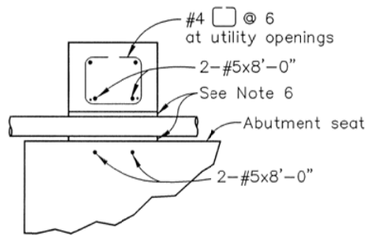
ELEVATION - ABUTMENT 2

Scale 1/2"=1'–0"
(Landscape boulders not shown.)



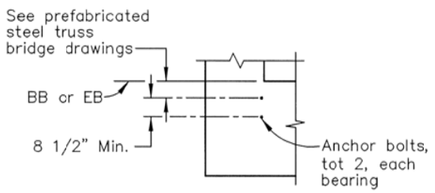
SECTION C-C

Scale 1"=1'–0"



UTILITY OPENING AT BACKWALL

No Scale
Note: For reinf not shown, see 'Section B–B'.



ANCHOR BOLT LAYOUT

No Scale
(See Note 3)

Note:
Contractor shall verify all controlling field dimensions before ordering or fabricating any material.

Notes:

1. For steel truss bridge details, see prefabricated steel truss bridge drawings.
2. For AC pavement details see "Plan and Profile" sheet.
3. Contractor to coordinate location of anchor bolts with the truss manufacturer.
4. Drilled hole filled with concrete. Concrete to be placed in a dry hole. Concrete maximum aggregate size to be 1/2" diameter. Groundwater may be anticipated during pile construction and dewatering may be required. The use of temporary steel casing may be required to maintain the integrity of the piles.
5. Gap between timber decking to be 1/4" max after 1 year shrinkage.
6. Seal utilities at abutments with concrete or mortar, after tightly wrapping utility with 2 layers of 7 kg building paper.
7. Where splices are required, spiral reinforcement shall be lapped 80 diameters minimum. A 135 degree 6" hook that is hooked around a longitudinal bar shall be used to terminate the ends of the spiral reinforcement at lapped splices and at the top and bottom of the pile.

REGISTERED PROFESSIONAL ENGINEER NEIL R. CULLEN C 19109 CIVIL STATE OF CALIFORNIA

APPROVED:
DATE: MARCH 21, 2003
NEIL R. CULLEN, DIRECTOR OF PUBLIC WORKS
R. C. E. # 19109 / EXPIRES 9-30-2005

RECORD DRAWINGS
Resident Engineer JOSEPH A. LO COCO
Date FEBRUARY 12, 2004

APPROVED DATE: 10/7/02
PO-KANG CHEN, STRUCTURAL ENGINEER
MARK THOMAS & CO. INC.
S.E. #3112 – EXPIRES 9/30/05

REGISTERED PROFESSIONAL ENGINEER PO-KANG CHEN No. S 3112 Exp 9/30/05 STRUCTURAL STATE OF CALIFORNIA

REVISION	DATE

DESIGNED BY: TW
CHECKED BY: PC
DRAWN BY: TW

MIRADA ROAD PEDESTRIAN BRIDGE
ABUTMENT 2 DETAILS

SCALE: AS SHOWN
DATE: 7-29-2002
FILE NO.: 1/4657

NEIL R. CULLEN, DIRECTOR OF PUBLIC WORKS
SAN MATEO COUNTY

555 COUNTY CENTER, 5TH FLOOR
REDWOOD CITY, CALIFORNIA

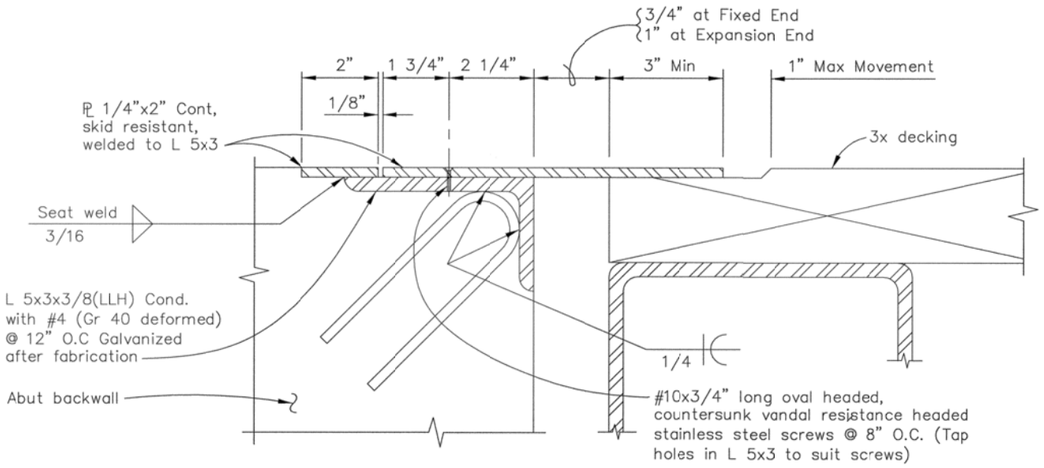
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3 4

SHEET 7 of 10

APPROVED:

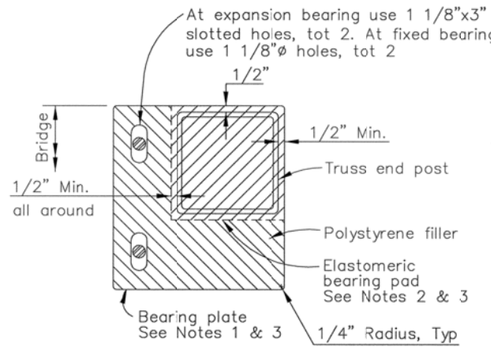
DATE: MARCH 21,2003

NEIL R. CULLEN, DIRECTOR OF PUBLIC WORKS
R. C. E. # 19109 / EXPIRES 9-30-2005



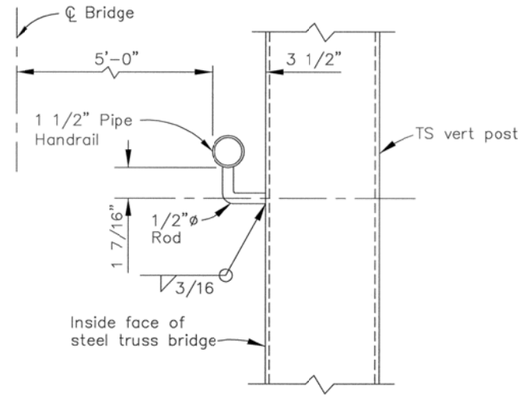
DETAIL A - JOINT CLOSURE PLATE

No Scale



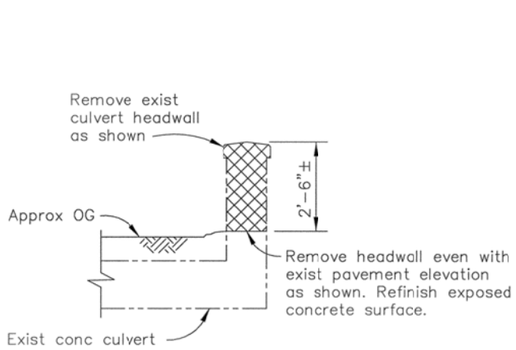
BEARING PLATE DETAIL

Scale 2"=1'-0"



PIPE HANDRAIL DETAIL

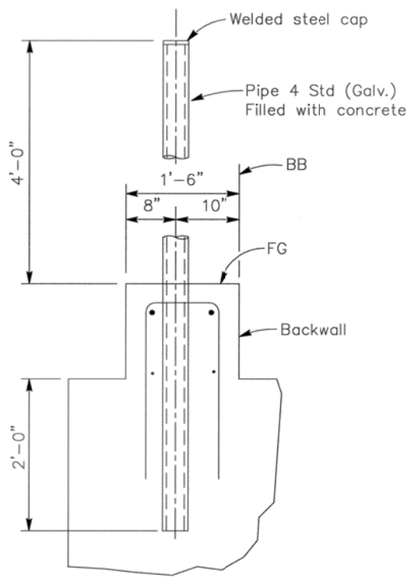
No Scale



EXISTING REINFORCED CONCRETE CULVERT HEADWALL REMOVAL

No Scale

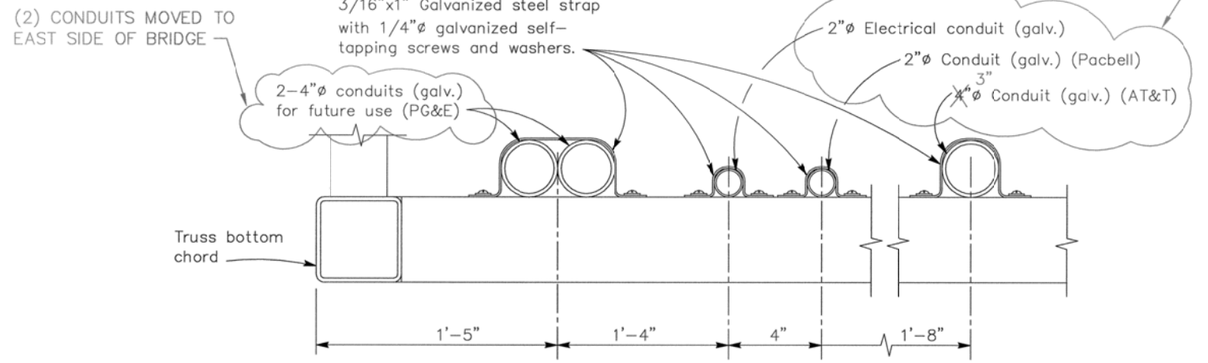
Note: Reinforcement not shown (see specifications).



BOLLARD DETAIL

No scale

Note: Not all reinf is shown.



CONDUIT MOUNTING DETAIL

No scale

Note: Contractor to coordinate installation of all conduits with the truss manufacturer.

NOTE:
SEE SHEET 4, SECTION A-A FOR LOCATION OF CONDUITS (RELOCATED)

SYMBOLS

- Indicates new construction.
- Indicates existing structure.
- Indicates limits of concrete removal
- Indicates Elastomeric Bearing Pad
- Indicates Polystyrene Filler

Notes:

1. For steel truss bridge details, see prefabricated steel truss bridge drawings.
2. Use minimum 7"x8"x1 1/2" thick elastomeric bearing pad.
3. Bearing pad dimensions to be a minimum of 1" greater than end post dimensions. Place bearing pad under end post as shown. Epoxy bond bearing pad to abutment seat. Fill remaining space under bearing plate with polystyrene of same thickness as bearing pad.

Note:
Contractor shall verify all controlling field dimensions before ordering or fabricating any material.

RECORD DRAWINGS

Resident Engineer JOSEPH A. LOCOCO

Date FEBRUARY 12, 2004

APPROVED DATE:	
PO-KANG CHEN, STRUCTURAL ENGINEER	
MARK THOMAS & CO. INC.	
S.E. #3112 – EXPIRES 9/30/05	

PO-KANG CHEN No. S 3112 Exp. 9/30/05 STRUCTURAL

		DESIGNED BY: TW	MIRADA ROAD PEDESTRIAN BRIDGE	SCALE: AS SHOWN
		CHECKED BY: PC	MISCELLANEOUS DETAILS	DATE: 7-29-2002
		DRAWN BY: TW		FILE NO.: 1/4657
REVISION	DATE	NEIL R. CULLEN, DIRECTOR OF PUBLIC WORKS SAN MATEO COUNTY	555 COUNTY CENTER, 5TH FLOOR REDWOOD CITY, CALIFORNIA	
		FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3 4		SHEET 8 of 10

GENERAL NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CALIFORNIA ELECTRICAL CODE 1998 EDITION AND THE COUNTY OF SAN MATEO "STANDARD DRAWINGS FOR PUBLIC IMPROVEMENT – COUNTY LIGHTING STANDARD"
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD INSPECTION AND INVESTIGATION TO DETERMINE ACTUAL FIELD CONDITIONS PRIOR TO BIDDING THE PROJECT.
3. CONTRACTOR SHALL CONFIRM LOCATIONS OF ELECTROLIERS WITH COUNTY REPRESENTATIVE BEFORE INSTALLATION. THE COUNTY OF SAN MATEO ELECTRIC UTILITIES WILL DISCONNECT EXISTING ELECTRIC SERVICE TO STREET LIGHTS IN CONFLICT WITH CONSTRUCTION BEFORE THE CONTRACTOR BEGINS ANY WORK.
4. THE ELECTRICAL PLANS ARE ACCURATE FOR ELECTRICAL WORK ONLY.
5. ALL EXISTING EQUIPMENT SHALL REMAIN IN PLACE UNLESS OTHERWISE NOTED.
6. LOCATION OF STANDARDS, CONDUITS, PULL BOXES AND OTHER EQUIPMENT SHOWN ON THE PLANS ARE APPROXIMATE. CONTRACTOR SHALL CONFIRM EXACT LOCATION OF ELECTROLIERS WITH THE COUNTY REPRESENTATIVE.
7. LOCATION OF ELECTROLIERS IS DIRECTLY RELATED TO THE GEOMETRIC LAYOUT. IF THE GEOMETRIC LAYOUT IS CHANGED FROM THAT SHOWN ON THESE PLANS, NEW ELECTROLIER OR LUMINAIRE LOCATIONS SHALL BE ESTABLISHED BY THE ENGINEER.
8. THE CONTRACTOR SHALL BE RESPONSIBLE UNDER THIS CONTRACT TO REPAIR AND REPLACE ANY AND ALL DAMAGES TO EXISTING PCC WALKS, AC PAVINGS, UTILITIES, TREES, TURF, PLANTED AREAS AND OTHER FACILITIES RESULTING FROM THIS PROJECT. WHEN CUTTING OR TRENCHING THROUGH EXISTING CONCRETE SIDEWALKS, DRIVEWAYS AND WALKWAYS, CONTRACTOR SHALL BE REQUIRED TO COMPLETELY REPLACE SECTIONS OF CONCRETE PANELS FROM SCOREMARK TO SCOREMARK AFFECTED BY THE CONSTRUCTION WORK. ALL SIDEWALKS, DRIVEWAYS, AND WALKWAYS, SHALL BE REPLACED PER COUNTY STANDARDS.
9. UNLESS NOTED OTHERWISE, ALL UNDERGROUND CONDUIT SHALL BE SCHEDULE 40 PVC, U.L. APPROVED FOR DIRECT BURIAL AND TERMINATED WITH THE FACTORY END BELL FITTINGS. ALL ELBOWS, BENDS AND TURNS TRANSITIONING TO GRADE SHALL BE INSTALLED USING PREMANUFACTURED 40–MIL PVC COATED GALVANIZED RIGID STEEL ELBOWS AND OFFSETS.
10. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES AT LEAST TWO (2) WORKING DAYS BEFORE EXCAVATION BEGINS. CALL UNDERGROUND SERVICE ALERT AT 1–800–642–2444. CONTRACTOR SHALL CONTACT THE LOCAL AGENCIES TO LOCATE EXISTING WATER, SANITARY SEWER AND STORM DRAIN LINES.
11. ALL CONDUCTORS SHALL BE 600 VOLT, STRANDED COPPER WITH TYPE THW OR XHHW INSULATION, UNLESS OTHERWISE NOTED. ALL CONDUCTORS SHALL BE COLOR CODED TO MEET COUNTY STANDARD SPECIFICATIONS AND NEC REQUIREMENTS.
12. ALL UNDERGROUND SPLICES SHALL BE MADE WATERPROOF WITH "SPLICE–KOTE" SPLICE KITS ALL FUSEHOLDERS SHALL BE WATERTIGHT.
13. ALL RACEWAYS SHALL BE INSTALLED WITH SOLID COPPER EQUIPMENT GROUNDING CONDUCTOR. BONDING SHALL COMPLY WITH THE STANDARD PROVISIONS.

GENERAL NOTES CONTINUATION

14. ALL ELECTRICAL EQUIPMENT AND MATERIALS SHALL BE NEW. ALL ELECTRICAL EQUIPMENT AND MATERIALS USED ON THIS PROJECT SHALL BE U.L. LABELED, LISTED AND APPROVED FOR THE INTENDED APPLICATION.
14. ALL UNDERGROUND PVC CONDUIT SHALL HAVE A BURIAL DEPTH OF 24" MINIMUM, UNLESS OTHERWISE NOTED.
15. EACH STREET LIGHT STANDARD SHALL BE INSTALLED WITH CALTRANS 3 1/2 STREET LIGHT PULL BOX AND A SPLICED–FUSED CONNECTOR.
16. SHOP DRAWINGS OF ALL LIGHTING AND ELECTRICAL MATERIALS USED IN THIS PROJECT SHALL BE SUBMITTED TO THE COUNTY FOR APPROVAL PRIOR TO ORDERING MATERIALS.

PROJECT NOTES

[1] EXISTING PG&E POLE AND LTG TO REMAIN.

[2] INSTALL 1 1/2"C, 2 #8 (LTG, 240V)
1 #8 (G)

[3] INSTALL 2" RSC (FUTURE LTG CIRCUIT). SEE CIVIL DRAWINGS FOR CONDUIT LOCATION AND ATTACHMENT UNDER BRIDGE DECK.

[4] INSTALL 2"C (FUTURE LTG CIRCUIT).

SYMBOLS

- NEW 240V, 70 W HPS LUMINAIRE, BRONZE, DIE CAST ALUMINUM HOUSING WITH PHOTO ELECTRIC UNIT, HIGH POWER FACTOR BALLAST, FLAT GLASS TYPE II DISTRIBUTION. LUMINAIRE SHALL BE "AMERICAN ELECTRIC LIGHTING" CATALOG No. 53–9F1E2–AJ OR APPROVED EQUIVALENT. MOUNTED ON 35'–0" CENTERED BORED WOOD POLE. POLE DEPTH SETTING SHALL BE 6'. POLE HOLE DIAMETER SHALL HAVE 3" ALL AROUND AND SHALL BE SUPPORTED BY CRIBBING USING A BARREL TO BE FILLED WITH LEAN MIX CONCRETE TO MAKE THE POLE SECURED.
- EXISTING ELECTROLIER ON PG&E WOOD POLE WITH 2–FT MAST ARM, 100 W HPS LUMINAIRE AND INTEGRAL BALLAST.
- SCHEDULE 40 PVC UNDERGROUND CONDUIT WITH CONDUCTORS. SEE PROJECT NOTES FOR SIZES.
- 6(E) CALTRANS No. 6(E) PULL BOX
- CALTRANS No. 3 1/2 PULL BOX
- EXISTING WOODEN UTILITY POLE
- [1] PROJECT NOTE REFERENCE. IN THIS CASE, SEE NOTE 1.
- [BC] INSTALL PULLBOX IN EXISTING CONDUIT RUN.
- [SC] SPLICE NEW TO EXISTING CONDUCTORS.
- [MT] EMPTY CONDUIT WITH PULL WIRE.

APPROVED:

DATE: MARCH 21, 2003

NEIL R. CULLEN, DIRECTOR OF PUBLIC WORKS
R. C. E. # 19109 / EXPIRES 9–30–2005

REGISTERED PROFESSIONAL ENGINEER NEIL R. CULLEN C 19109 CIVIL STATE OF CALIFORNIA

DRAWING INDEX

E–1	ELECTRICAL GENERAL
E–2	LIGHTING PLAN

ABBREVIATIONS

AWG	AMERICAN WIRE GAUGE
CKT	CIRCUIT
(E)	EXISTING
(G)	GROUND
HPS	HIGH PRESSURE SODIUM
LTG	LIGHTING
(N)	NEW
PEU	(N) PHOTOELECTRIC UNIT
peu	(E) PHOTOELECTRIC UNIT
PG&E	PACIFIC GAS AND ELECTRIC
W	WATT
RSC	RIGID STEEL CONDUIT (GALVANIZED)

RECORD DRAWINGS
Resident Engineer JOSEPH A. LO COCO
Date FEBRUARY 12, 2004

MTH engineers, inc.
3350 scott blvd., bldg. 11
santa clara, ca 95054
(408) 986–8558
FAX (408) 986–9627
PROJECT NO. 01650–03

REGISTERED PROFESSIONAL ENGINEER JULIO C. HERDOCIA 9580 Exp. 9/30/02 ELECT. STATE OF CALIFORNIA

REVISION	DATE		
		DESIGNED BY: HR	MIRADA ROAD PEDESTRIAN BRIDGE
		CHECKED BY: JH	ELECTRICAL GENERAL
		DRAWN BY: TD	FILE NO.: 1/4657
		NEIL R. CULLEN, DIRECTOR OF PUBLIC WORKS SAN MATEO COUNTY	555 COUNTY CENTER, 5TH FLOOR REDWOOD CITY, CALIFORNIA

SCALE: NONE
DATE: 02/08/02

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3 4

E–1
SHEET 9 OF 10

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BORDER = 34x22

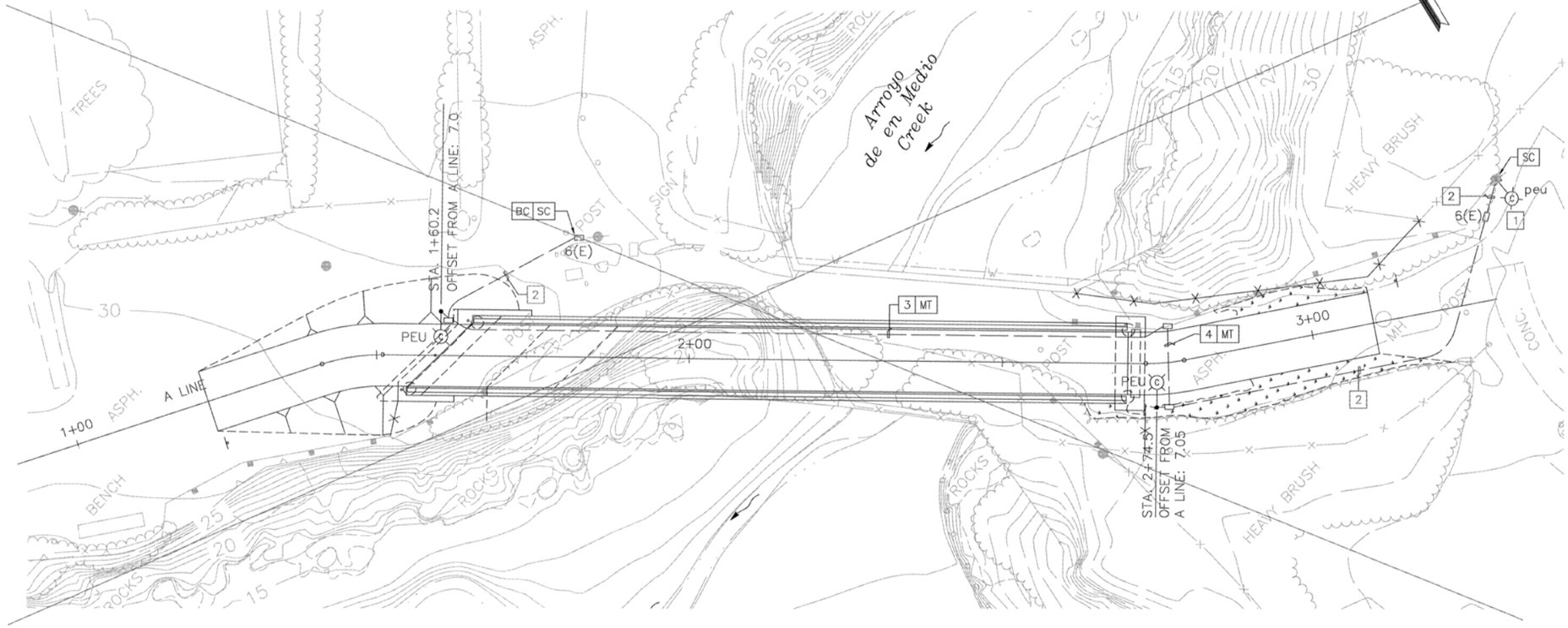
APPROVED:

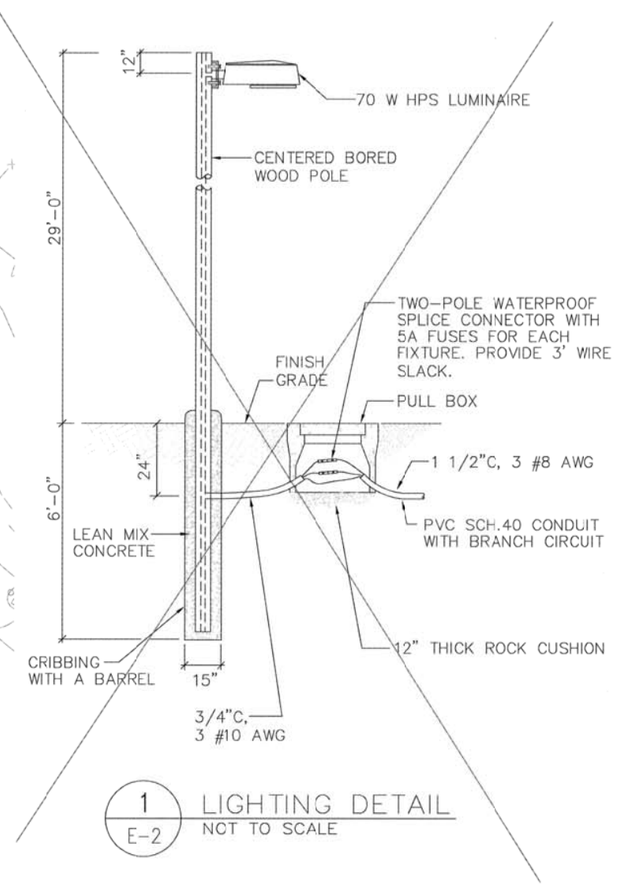
DATE: MARCH 21, 2003

NEIL R. CULLEN, DIRECTOR OF PUBLIC WORKS
R. C. E. # 19109 / EXPIRES 9-30-2005

REGISTERED PROFESSIONAL ENGINEER
NEIL R. CULLEN
C 19109
CIVIL
STATE OF CALIFORNIA

NOT CONSTRUCTED





1 / E-2 LIGHTING DETAIL
NOT TO SCALE

NOT CONSTRUCTED

RECORD DRAWINGS

Resident Engineer JOSEPH A. LOCOCO

Date FEBRUARY 12, 2004

engineers, inc.
3350 scott blvd., bldg. 11
santa clara, ca 95054
(408) 986-8558
FAX (408) 986-9627
PROJECT NO. 01650-03

REGISTERED PROFESSIONAL ENGINEER
JULIO C. HERDOCIA
No. 9580
Exp. 9/30/02
ELECT.
STATE OF CALIFORNIA

REVISION	DATE		
		DESIGNED BY: HR	MIRADA ROAD PEDESTRIAN BRIDGE
		CHECKED BY: JH	TITLESHEET
		DRAWN BY: TD	NEIL R. CULLEN, DIRECTOR OF PUBLIC WORKS, SAN MATEO COUNTY
			555 COUNTY CENTER, 5TH FLOOR, REDWOOD CITY, CALIFORNIA

SCALE: 1"=10'-0"
DATE: 02/08/2002
FILE NO.: 1/4657

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3 4