DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO	TOTAL SHEETS
06	Ker	99	49.6	25	106

REGISTERED CIVIL ENGINEER — 8/3/15 DATE

11-16-15
PLANS APPROVAL DATE

JUAN J. JAUREGUI JR. No. C63939 Exp. 9/30/16 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

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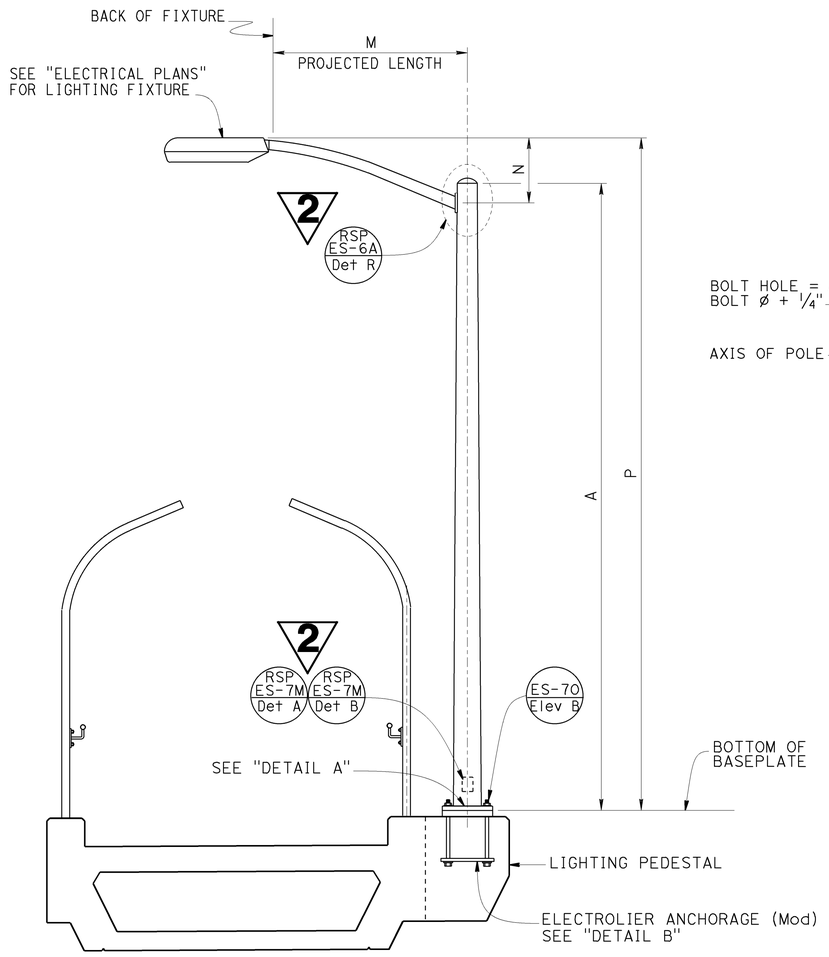
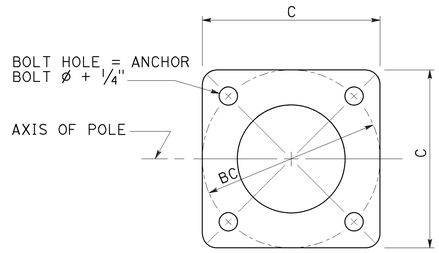
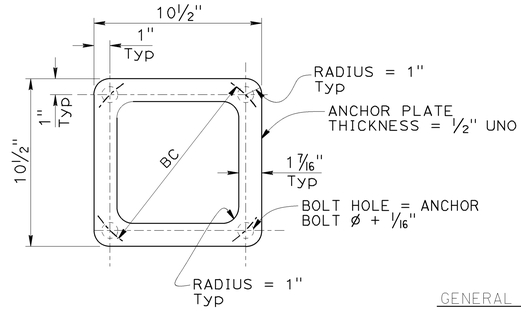


TYPE 15 (MOD) BRIDGE MOUNTED
ELEVATION

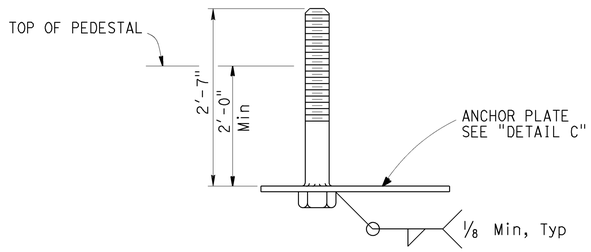
NOTE: Bridge and Lighting Pedestal configuration may vary.



BASE PLATE
DETAIL A



ANCHOR PLATE
DETAIL C



ELECTROLIER ANCHORAGE (MODIFIED)
DETAIL B

POLE TYPE	POLE DATA				BASE PLATE DATA				LUMINAIRE MAST ARM DATA				
	A HEIGHT	Min OD		THICKNESS	C	BC = BOLT CIRCLE	THICKNESS	ANCHOR BOLT SIZE	M PROJECTED LENGTH	N RISE	Min OD AT POLE	THICKNESS	P
		BASE	TOP										
15 (MODIFIED)	15'-0"	8"	5 13/16"	0.1196"	1'-0"	1'-0"	2"	1" ø x 2'-7"	4'-9"	1'-6"±	3¼"	0.1196"	16'-0"±

GENERAL NOTES:

SPECIFICATIONS

Design: AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals, Fifth Edition.

LOADING
Wind Loading: (3-sec gust) 100 Mph

UNIT STRESSES
Structural steel: fy = 55,000 psi (Tapered steel tube and anchor bolts)
fy = 50,000 psi unless otherwise noted

NOTES:

1. For pole locations, see "ELECTRICAL" plans.
2. All steel shall be galvanized after fabrication.
3. During pole erection the pole shall be raked as necessary with the use of leveling nuts to provide a plumb pole axis.
4. Handhole must face fence.
5. For Anchor details not shown see "DETAIL A" on 2 "2010 STANDARD PLANS" RSP ES-7M.
6. This plan accurate only for lighting pole and anchorage. For bridge and lighting pedestal details see"BRIDGE PLANS".
7. For details not shown, see "2010 STANDARD PLANS" and "2010 REVISED STANDARD PLANS."

STANDARD PLAN SHEET No.
DETAIL No.

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

2 **REPLACED PER ADDENDUM No. 2 DATED AUGUST 26, 2016**

NO SCALE

BRANCH CHIEF JEFF WOODY

	BY	CHECKED
DESIGN	J. JAUREGUI	E. LOPEZ
DETAILS	T. NGUYEN	J. JAUREGUI
QUANTITIES		

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
DESIGN AND TECHNICAL SERVICES
SPECIAL DESIGNS BRANCH A

BRIDGE NO. 50-0518
POST MILE 49.6

KERN AVENUE PEDESTRIAN OC
TYPE 15 MODIFIED - DETAILS

SES-1

(ENGLISH) SPECIAL DESIGNS BRANCH BORDER SHEET (REV. 7-1-09)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3619
PROJECT NUMBER & PHASE: 0614000266-1
CONTRACT NO.: 06-0H6424

DISREGARD PRINTS BEARING EARLIER REVISION DATES →
REVISION DATES: 7/31/15 8/24/16 11/20/15 6/13/16

SHEET OF

FILE => 2015\06-0H6424_ses-1.dgn

USERNAME => s129055 DATE PLOTTED => 24-AUG-2016 TIME PLOTTED => 10:01

2 REPLACED PER ADDENDUM No. 2 DATED AUGUST 26, 2016

2

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	99	49.6	56	106

REGISTERED CIVIL ENGINEER

July 15, 2016
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
Stanley P. Johnson
No. C57793
Exp. 3-31-18
CIVIL
STATE OF CALIFORNIA

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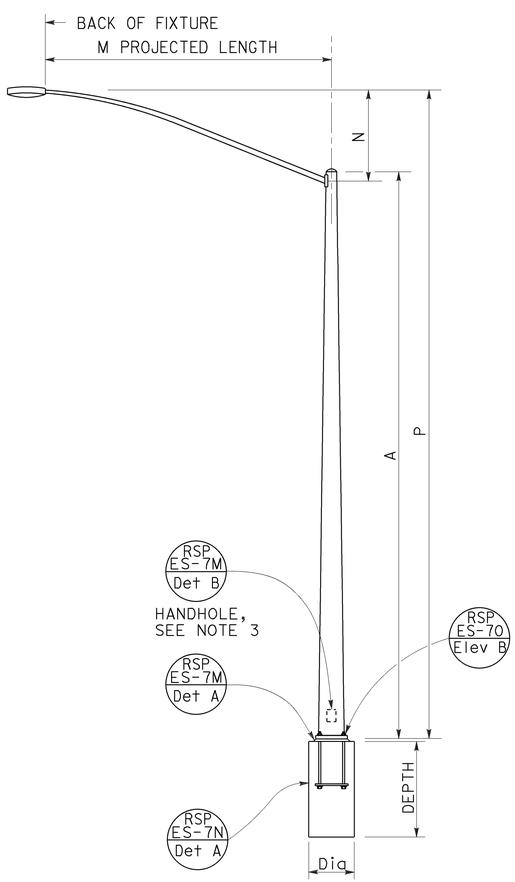
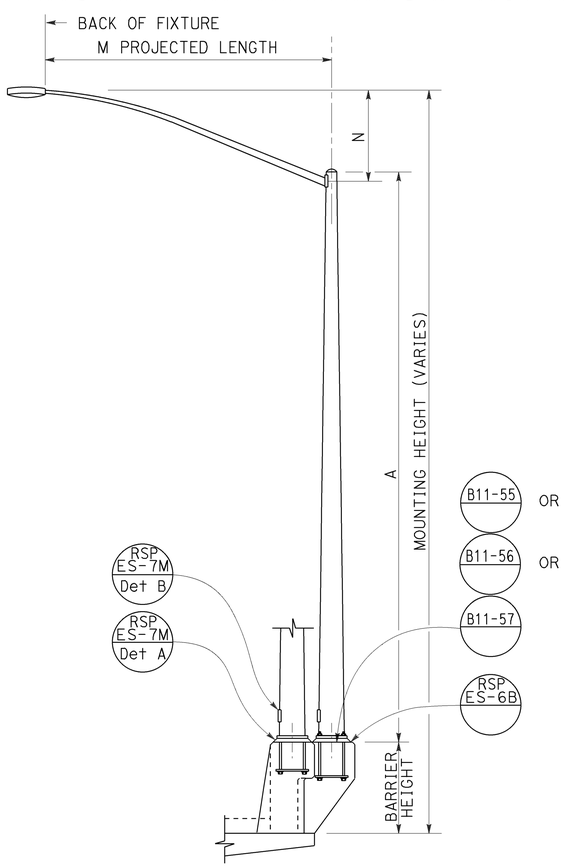
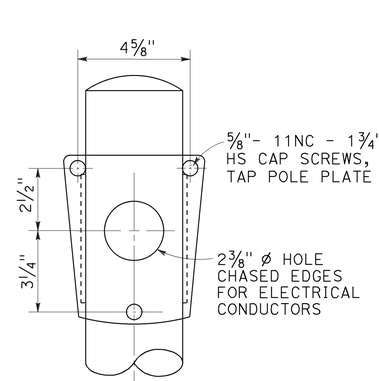
TO ACCOMPANY PLANS DATED 11-16-15



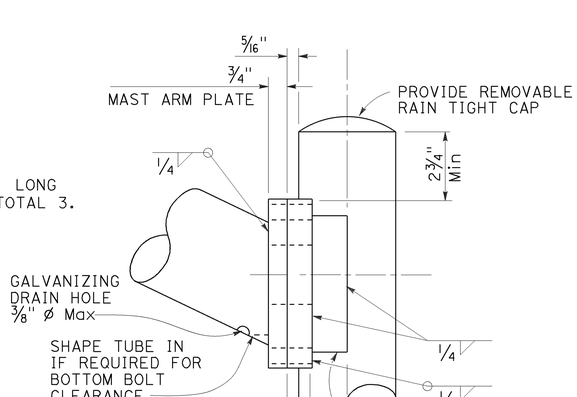
TYPE 15 AND TYPE 21
ELEVATION A



TYPE 15 AND TYPE 21 BARRIER RAIL MOUNTED
ELEVATION B

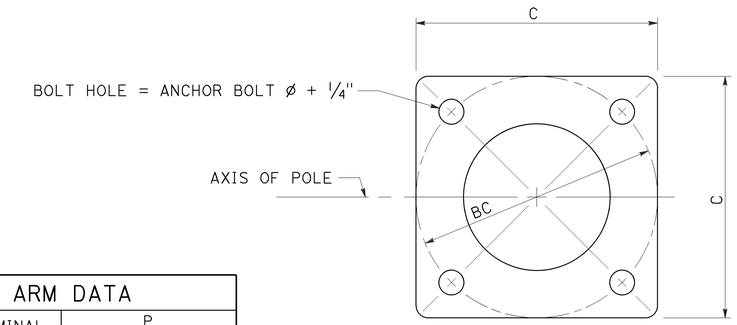


FRONT VIEW



SIDE VIEW

LUMINAIRE MAST ARM CONNECTION
DETAIL R



BASE PLATE
DETAIL A

POLE TYPE	POLE DATA				BASE PLATE DATA				CIDH PILE FOUNDATION	
	A HEIGHT	Min OD BASE	Min OD TOP	WALL THICKNESS	C	BC = BOLT CIRCLE	THICKNESS	ANCHOR BOLT SIZE	Dia	DEPTH
15	30'-0"	8"	3 11/16"	0.1196"	1'-0"	1'-0"	1½"	1" ø x 36" *	2'-6"	6'-0"
21	35'-0"	8⅝"	3 7/16"	0.1793"			2"	1¼" ø x 36" *		7'-0"

* FOR BARRIER RAIL BOLTS, SEE REVISED STANDARD PLAN RSP ES-6B.

LUMINAIRE MAST ARM DATA					
M PROJECTED LENGTH	N RISE	Min OD AT POLE	NOMINAL THICKNESS	P TYPE 15	P TYPE 21
6'-0"	2'-0"±	3¼"	0.1196"	31'-6"±	36'-6"±
8'-0"	2'-6"±	3½"		32'-0"±	37'-0"±
10'-0"	3'-3"±	3⅞"		32'-9"±	37'-9"±
12'-0"	4'-3"±			33'-9"±	38'-9"±
15'-0"	4'-9"±	4¼"		34'-3"±	39'-3"±

NOTES:

1. ☐ Indicates mast arm length to be used unless otherwise noted on the plans.
2. For Type 15-SB, use Type 15 standard with Type 30 slip base plate details, see Revised Standard Plan RSP ES-6F.
3. Handhole shall be located on the downstream side of traffic.
4. For additional notes and details, see Revised Standard Plans RSP ES-7M and RSP ES-7N.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (LIGHTING STANDARD, TYPES 15 AND 21)

NO SCALE

RSP ES-6A DATED JULY 15, 2016 SUPERSEDES STANDARD PLAN ES-6A
DATED OCTOBER 30, 2015 - PAGE 449 OF THE STANDARD PLANS BOOK DATED 2015.

REVISED STANDARD PLAN RSP ES-6A

2015 REVISED STANDARD PLAN RSP ES-6A

4-15-16

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	99	49.6	56A	106

REGISTERED CIVIL ENGINEER

July 15, 2016
PLANS APPROVAL DATE

Stanley P. Johnson
No. C57793
Exp. 3-31-18
CIVIL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

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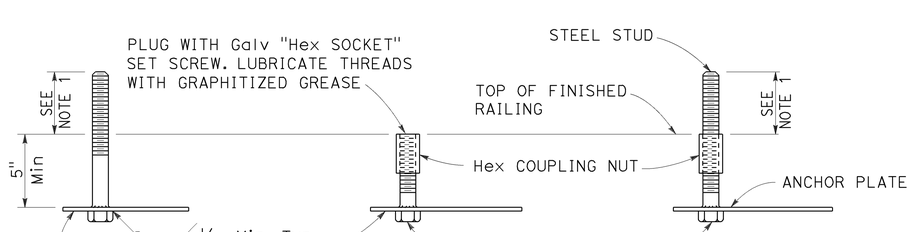
TO ACCOMPANY PLANS DATED 11-16-15



FOR IMMEDIATE INSTALLATION
DETAIL B-1

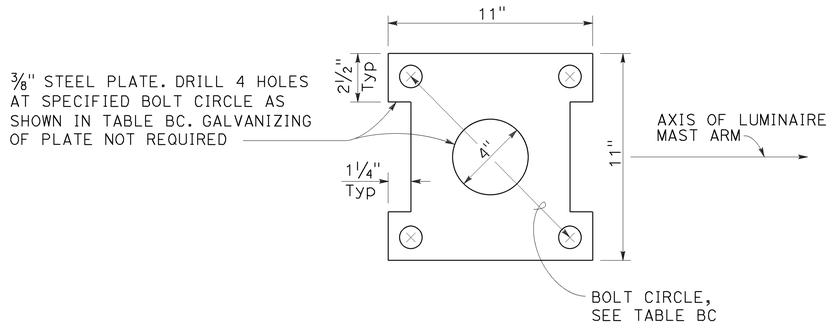
FOR FUTURE INSTALLATION WITH PLUG
DETAIL B-2

FOR INSTALLATION ON FUTURE ANCHORAGE WITH STUD
DETAIL B-3

ELECTROLIER ANCHORAGES
DETAIL B

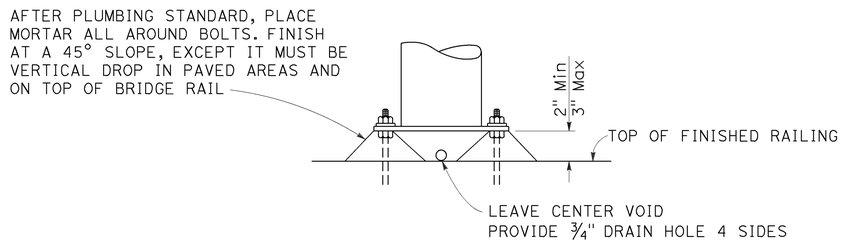
NOTES:

1. Anchor bolt or stud length shall be such that thread extends 1/2" maximum above nut on level base plate after grouting. See Detail N.
2. Electrolier anchor bolts shall be held in position for pouring by means of anchor plates and suitable templates. Deviation from the true position, vertical and height shall not exceed 1/16".
3. See railing sheets for reinforcement and structural details at electroliers and pull boxes.



ANCHOR PLATE
DETAIL A

TABLE BC				
TYPE	BC = BOLT CIRCLE	ANCHOR BOLT DIAMETER	COUPLING NUT BASIC LENGTH	SET SCREW LENGTH DETAIL B-2
15	1'-0"	1"	3"	1 1/2"
21		1 1/4"	3 3/4"	1 7/8"



GROUTING AT ELECTROLIER
DETAIL N

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (ELECTROLIER ANCHORAGE AND GROUTING FOR TYPE 15 AND TYPE 21 BARRIER RAIL MOUNTED)

NO SCALE

RSP ES-6B DATED JULY 15, 2016 SUPERSEDES STANDARD PLAN ES-6B
DATED OCTOBER 30, 2015 - PAGE 450 OF THE STANDARD PLANS BOOK DATED 2015.

REVISED STANDARD PLAN RSP ES-6B

2 ADDED PER ADDENDUM No. 2 DATED AUGUST 26, 2016

2015 REVISED STANDARD PLAN RSP ES-6B

4-15-16

2 **REPLACED PER ADDENDUM No. 2 DATED AUGUST 26, 2016**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	99	49.6	57	106

REGISTERED CIVIL ENGINEER

July 15, 2016
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Stanley P. Johnson — No. C57793 — Exp. 3-31-18 CIVIL — STATE OF CALIFORNIA

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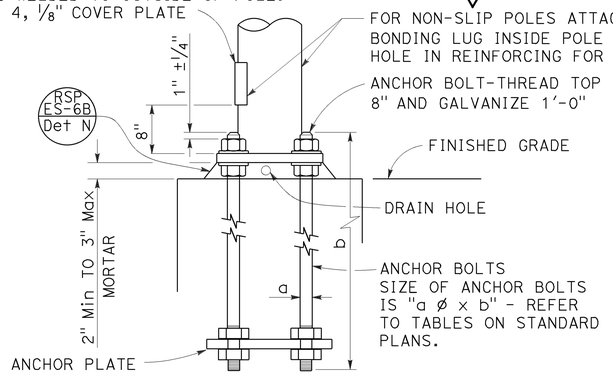
TO ACCOMPANY PLANS DATED 11-16-15

2015 REVISED STANDARD PLAN RSP ES-7M

4" x 6½" ROUNDED RECTANGLE HANDHOLE REINFORCED WITH RING WELDED TO OUTSIDE OF POLE. SEE NOTE 4, ⅛" COVER PLATE



HANDHOLE AND ANCHORAGE
DETAIL A

IDENTIFICATION NUMBER

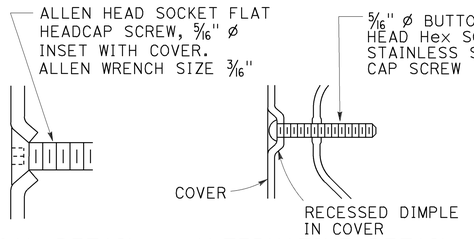
1. Attach a stamped metal tag with pole's identification number above the handhole. ¼" high number, minimum.
2. Attach a stamped metal tag with mast arm's identification number to the bottom of the signal mast arm near the pole plate. ¼" high number, minimum.

2

Type — Load case (Use SL for special load case) — Design wind velocity (mph) — Signal mast arm length (ft) — Near handhole: Maximum signal mast arm length for pole type / Near pole plate: Installed signal mast arm length — Standard plan year — Only for poles or mast arms using Detail F — Only for poles or mast arms Using RSP ES-7D

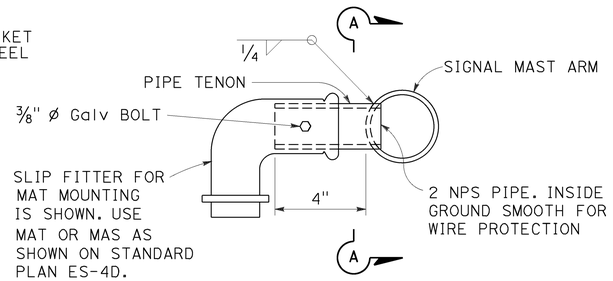
26A - 3 - 100 - 45 - 10 - F or FB

SAMPLE IDENTIFICATION NUMBER

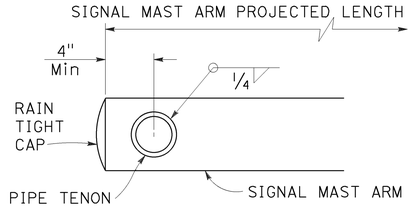


TYPICAL DETAIL
DETAIL B-1

ALTERNATIVE DETAIL
DETAIL B-2



SIDE TENON
DETAIL S-1



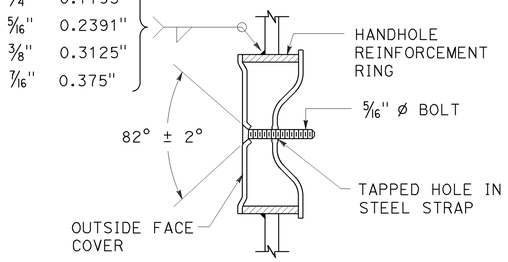
SECTION A-A

PIPE TENONS
DETAIL S

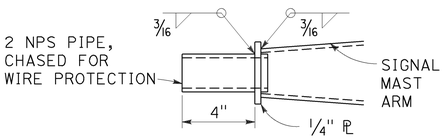
NOTES:

1. Provide a Hex nut, leveling nut and 2 washers for each bolt.
2. Luminaire mast arms shall be round, tapered steel tubes, taper of 0.1375" to 0.143-inch per foot with an end section 2⅜" OD for mounting hardware. Extensions of 2 NPS Standard pipe and 7" long may be used at the option of the manufacturer. When low pressure sodium luminaires are required, the extension shall be 1'-3".
3. Signal mast arms shall be round, tapered steel tubes, maximum taper 0.143-inch per foot.
4. Handhole reinforcement ring shall be ¼" x 2" for 0.1196" to 0.2391" thick poles, ⅜" x 2" for 0.3125" to 0.375" thick poles.
5. Handholes shall be located on the downstream side of traffic.
6. Detail F, fatigue resistant weld, is required at socket welded signal mast arm plate and pole base plate.
7. Cap screws shall be tightened by the turn-of-nut method ⅓ turn from a snug tight condition. No washer will be required.
8. Outside diameter, wall thickness, and corresponding section properties of poles and mast arms as shown in the Standard Plans are minimums. Unless otherwise specified, alternative sections shall require approval by the Engineer.
9. Design: AASHTO Standard Specifications for Structural Support for Highway Signs, Luminaires, and Traffic Signals, 6th Edition.
   Basic Wind Speed = 100 mph (3 seconds gust).
   Yearly Mean Wind Velocity = 15.6 mph.
10. Materials (Structural steel):
    fy = 55,000 psi (tapered steel tube and anchor bolts)
    fy = 50,000 psi (unless otherwise noted)
11. Materials (Reinforced concrete):
    f'c = 3,625 psi
    fy = 60,000 psi

WELD SIZE	WALL THICKNESS
3/16"	0.1196"
¼"	0.1793"
5/16"	0.2391"
⅜"	0.3125"
7/16"	0.375"



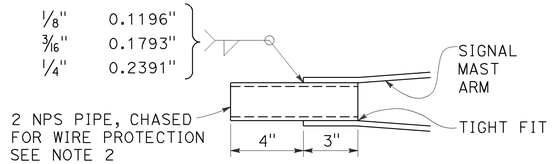
TAMPER RESISTANT HANDHOLE COVER
DETAIL B



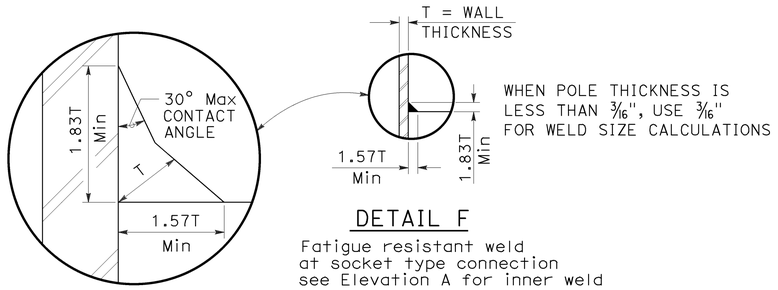
TIP TENON
DETAIL TL

This detail supersedes Detail S when so designated

WELD SIZE	WALL THICKNESS
⅛"	0.1196"
3/16"	0.1793"
¼"	0.2391"

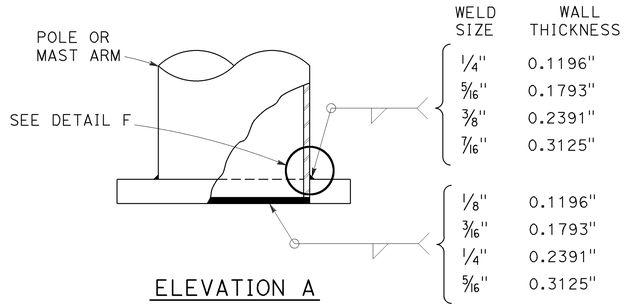


TIP TENON
DETAIL TS



DETAIL F

Fatigue resistant weld at socket type connection see Elevation A for inner weld



WELD SIZE	WALL THICKNESS
¼"	0.1196"
5/16"	0.1793"
⅜"	0.2391"
7/16"	0.3125"

WELD SIZE	WALL THICKNESS
⅛"	0.1196"
3/16"	0.1793"
¼"	0.2391"
5/16"	0.3125"

ELEVATION A

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (SIGNAL AND LIGHTING STANDARD, DETAIL No. 1)

NO SCALE

RSP ES-7M DATED JULY 15, 2016 SUPERSEDES STANDARD PLAN ES-7M DATED OCTOBER 30, 2015 - PAGE 467 OF THE STANDARD PLANS BOOK DATED 2015.

REVISED STANDARD PLAN RSP ES-7M

6-20-16

2 REPLACED PER ADDENDUM No. 2 DATED AUGUST 26, 2016

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	99	49.6	65	106

REGISTERED CIVIL ENGINEER — 10-20-15 DATE

11-16-15
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — DON NGUYEN-TAN — No. C 57510 — Exp. 12-31-15 — CIVIL — STATE OF CALIFORNIA

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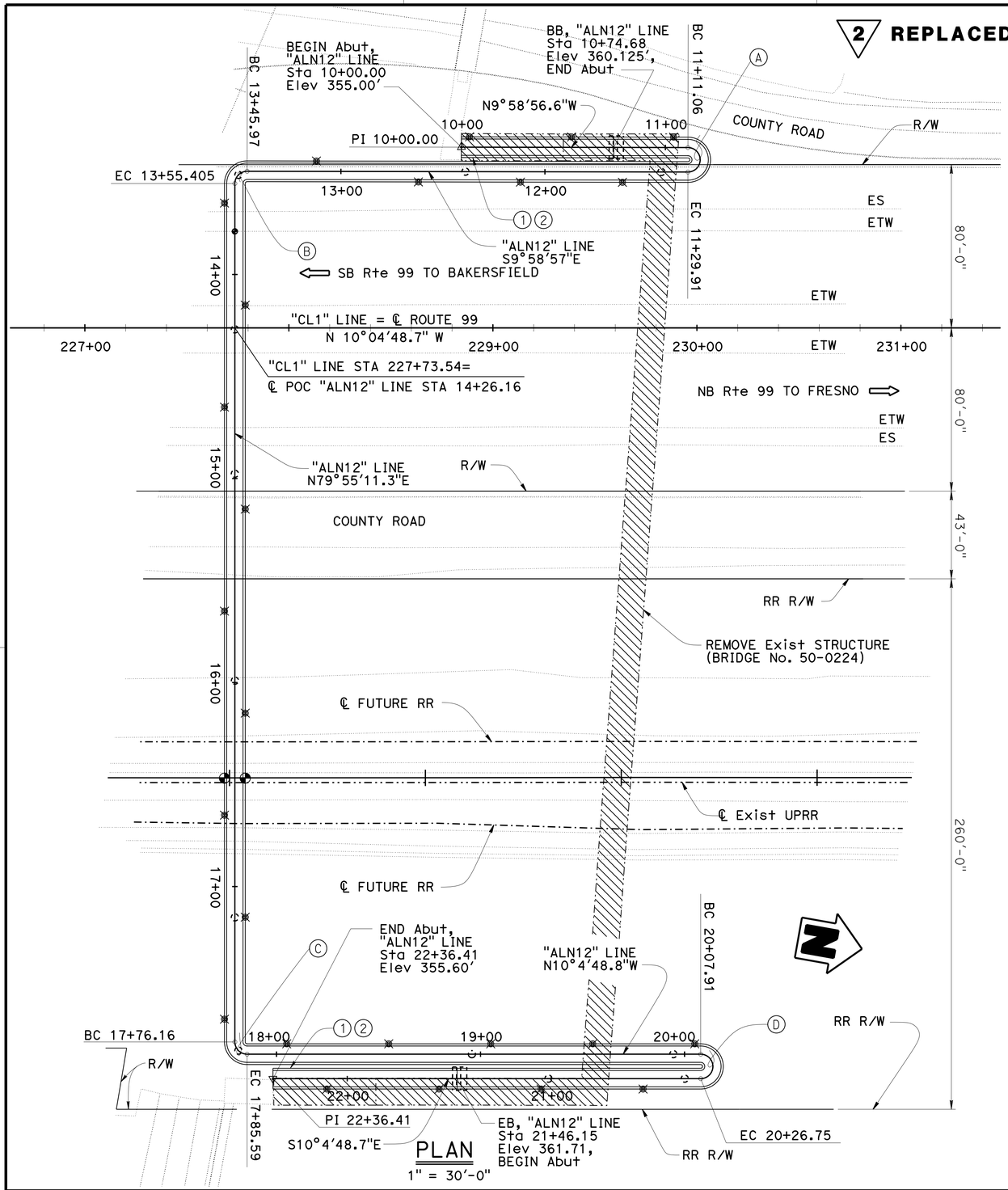


PLAN
1" = 30'-0"

CURVE DATA TABLE

No. ⊛	R	Δ	T	L
Ⓐ	6.0′	180°0′0"	NA	18.85′
Ⓑ	6.0′	90°5′52"	6.01′	9.43′
Ⓒ	6.0′	90°0′00"	6.00′	9.43′
Ⓓ	6.0′	180°0′0"	NA	18.84′

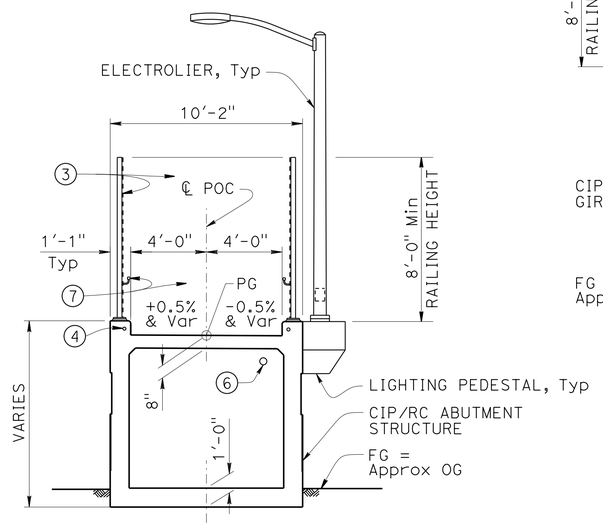
LEGEND:

- Indicates existing structure.
- Indicates Bridge Removal.
- Indicates point of minimum vertical clearance.
- ⊛ Indicates Electrolier, see ROADWAY PLANS and "LIGHTING PEDESTAL DETAILS" sheet.
- ① Paint "Bridge No. 50-0518"
- ② Paint "Kern Ave Pedestrian Overcrossing"
- ③ Chain Link Railing Type 7 (Mod)
- 2 ④ 1½"ø Lighting System Conduit, Typ see Roadway Plans
- ⑤ 1½"ø Communication Conduit (Bridge) for future utilities, see "STRUCTURE PLAN" sheets
- ⑥ Deck Drain System
- ⑦ Tubular Handrailing

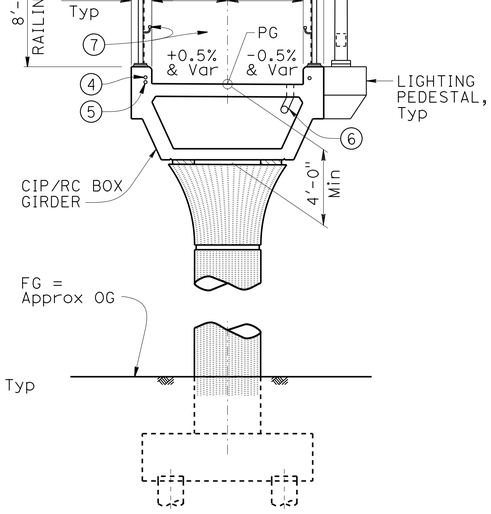
NOTE:
VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING MATERIAL.

NOTES:

1. For STRUCTURE QUANTITIES see "STRUCTURE PLAN No. 1" sheet.
2. For ELEVATION VIEW, PROFILE GRADE, INDEX TO PLANS and STANDARD PLANS list, see "GENERAL PLAN No. 2" sheet.
3. For PILE DATA TABLE and SPREAD FOOTING DATA TABLE, see "GENERAL NOTES" sheet.



ABUTMENT STRUCTURE TYPICAL SECTION
¼" = 1'-0"



BRIDGE TYPICAL SECTION
¼" = 1'-0"

GARY BLAKESLEY
DESIGN ENGINEER

	BY	CHECKED
DESIGN	DAVID ALVAREZ	MIKE CULLEN
DETAILS	SUSAN NG	DON NGUYEN-TAN
QUANTITIES	GLORIA REYES-GUTIERREZ	DAVID ALVAREZ

LOAD & RESISTANCE FACTOR DESIGN — LIVE LOADING: HL93 W/"LOW-BOY"; PERMIT DESIGN VEHICLE

	BY	CHECKED
LAYOUT	SUSAN NG	MIKE CULLEN
SPECIFICATIONS	MICHAEL KETELTAS	PLANS AND SPECS COMPARED: DON NGUYEN-TAN

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 6

BRIDGE NO. 50-0518
POST MILE 49.6

KERN AVENUE POC (REPLACE)
GENERAL PLAN No. 1

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3591
PROJECT NUMBER & PHASE: 06 1400 0266 1 CONTRACT NO.: 06-0H6424

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
11-04-15		10-28-15	06-17-16	1	42

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

FILE => 50-0518-a-gp-01.dgn

USERNAME => s1197104 DATE PLOTTED => 23-AUG-2016 TIME PLOTTED => 11:07

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	99	49.6	66	106

REGISTERED CIVIL ENGINEER — DATE 10-20-15

11-16-15
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 — DON NGUYEN-TAN — No. C 57510 — Exp. 12-31-15 — CIVIL — STATE OF CALIFORNIA

LEGEND:

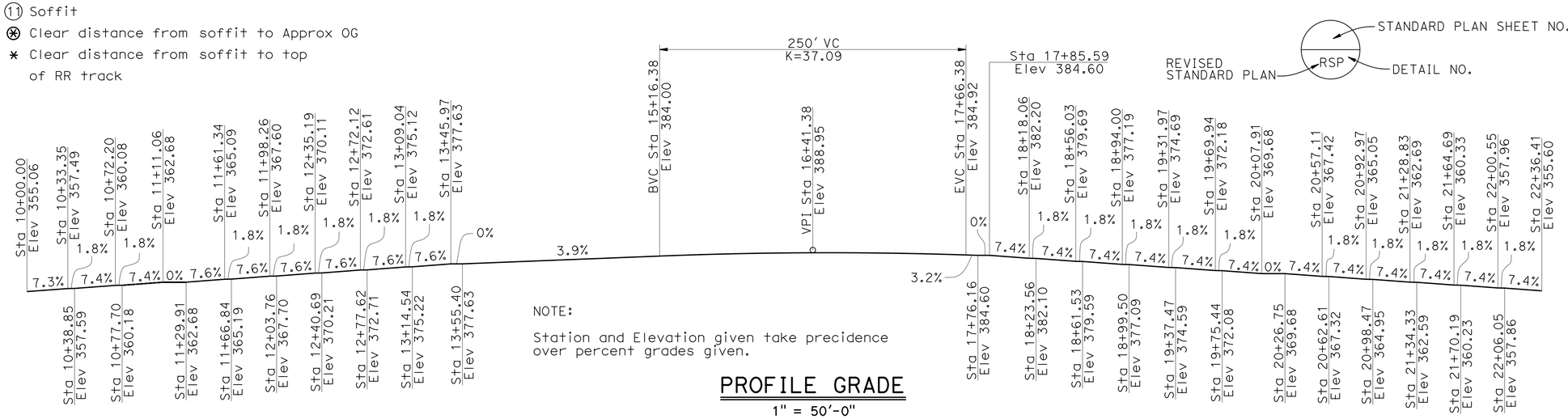
1. County Road
2. ℄ Future RR track
3. ETW
4. NB Route 99
5. SB Route 99
6. ES
7. Top of Exist RR Track, Elev 357.48'±
8. Western limit of 50' wide easement for ramp
9. Top of Chain Link Railing
10. Top of Parapet
11. Soffit

⊛ Clear distance from soffit to Approx OG

* Clear distance from soffit to top of RR track

STANDARD PLANS DATED MAY 2010

	A10A	ABBREVIATIONS (SHEET 1 OF 2)
	A10B	ABBREVIATIONS (SHEET 2 OF 2)
	A10C	LINES AND SYMBOLS (SHEET 1 OF 3)
	A10D	LINES AND SYMBOLS (SHEET 2 OF 3)
	A10E	LINES AND SYMBOLS (SHEET 3 OF 3)
	A10F	LEGEND - SOIL (SHEET 1 OF 2)
	A10G	LEGEND - SOIL (SHEET 2 OF 2)
	A10H	LEGEND - ROCK
	A62C	LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL - BRIDGE
	B0-1	BRIDGE DETAILS
	B0-5	BRIDGE DETAILS
	B0-13	BRIDGE DETAILS
	B2-8	PILE DETAILS CLASS 200
RSP	B6-21	JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")
	B7-1	BOX GIRDER DETAILS
	B7-5	DECK DRAINS
	B7-8	DECK DRAINAGE DETAILS
	B7-10	UTILITY OPENING-BOX GIRDER
	B14-3	COMMUNICATION AND SPRINKLER CONTROL CONDUITS (CONDUIT LESS THAN 4")
	B14-5	WATER SUPPLY LINE (DETAILS) (PIPE LESS THAN 4")
RSP	ES-6A	ELECTRICAL SYSTEMS (LIGHTING STANDARD, TYPES 15 AND 21)
RSP	ES-7M	ELECTRICAL SYSTEMS (SIGNAL AND LIGHTING STANDARDS - DETAILS NO.1)
RSP	ES-8B	ELECTRICAL SYSTEMS (NON-TRAFFIC PULL BOX)
RSP	ES-9A	ELECTRICAL SYSTEMS (STRUCTURE PULL BOX INSTALLATION)
RSP	ES-9B	ELECTRICAL SYSTEMS (CONDUIT RISER AND EXPANSION FITTING, STRUCTURE INSTALLATIONS)
RSP	ES-9C	ELECTRICAL SYSTEMS (STRUCTURE PULL BOX)
RSP	ES-9D	ELECTRICAL SYSTEMS (STRUCTURE PULL BOX INSTALLATIONS)

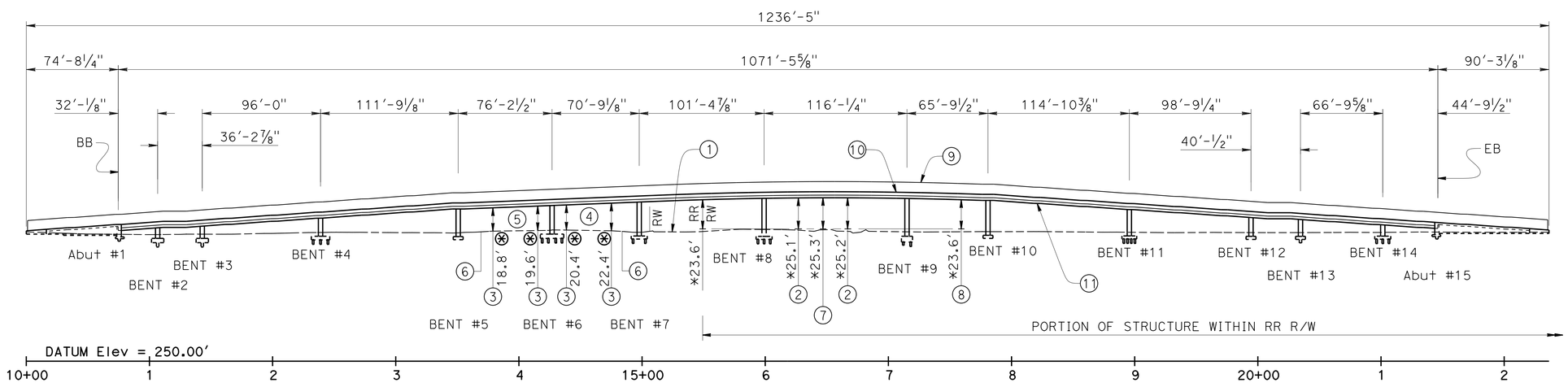


NOTE:

Station and Elevation given take precidence over percent grades given.

PROFILE GRADE

1" = 50'-0"



2 REPLACED PER ADDENDUM No. 2 DATED AUGUST 26, 2016

DEVELOPED ELEVATION

1" = 50'-0"

INDEX TO PLANS

1 GENERAL PLAN No. 1
2 GENERAL PLAN No. 2
3 GENERAL NOTES
4 STRUCTURE PLAN No. 1
5 STRUCTURE PLAN No. 2
6 STRUCTURE PLAN No. 3
7 STRUCTURE PLAN No. 4
8 STRUCTURE PLAN No. 5
9 STRUCTURE PLAN No. 6
10 DECK CONTOURS No. 1
11 DECK CONTOURS No. 2
12 DECK CONTOURS No. 3
13 DECK CONTOURS No. 4
14 DECK CONTOURS No. 5
15 DECK CONTOURS No. 6
16 DECK CONTOURS No. 7
17 FOUNDATION PLAN
18 ABUTMENT LAYOUT
19 ABUTMENT DETAILS No. 1
20 ABUTMENT DETAILS No. 2
21 BENT LAYOUT
22 BENT DETAILS No. 1
23 BENT DETAILS No. 2
24 BENT DETAILS No. 3
25 BENT DETAILS No. 4
26 BENT DETAILS No. 5
27 BENT DETAILS No. 6
28 BENT DETAILS No. 7
29 TYPICAL SECTION
30 LIGHTING PEDESTAL DETAILS
31 GIRDER LAYOUT No. 1
32 GIRDER LAYOUT No. 2
33 GIRDER LAYOUT No. 3
34 GIRDER LAYOUT No. 4
35 ADDITIONAL REINFORCEMENT No. 1
36 ADDITIONAL REINFORCEMENT No. 2
37 ADDITIONAL REINFORCEMENT No. 3
38 ADDITIONAL REINFORCEMENT No. 4
39 ADDITIONAL REINFORCEMENT No. 5
40 CHAIN LINK RAILING TYPE 7 (MOD) No. 1
41 CHAIN LINK RAILING TYPE 7 (MOD) No. 2
42 LOG OF TEST BORINGS (AS-BUILT)

NOTE:
For SUPERELEVATION DIAGRAM, See "GENERAL NOTES" sheet.

NOTE:
VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING MATERIAL.

GARY BLAKESLEY
DESIGN ENGINEER

DESIGN	BY DAVID ALVAREZ	CHECKED MIKE CULLEN	LOAD & RESISTANCE FACTOR DESIGN	LIVE LOADING: PEDESTRIAN AND H5	
DETAILS	BY SUSAN NG	CHECKED DON NGUYEN-TAN	LAYOUT	BY SUSAN NG	CHECKED MIKE CULLEN
QUANTITIES	BY GLORIA REYES-GUTIERREZ	CHECKED DAVID ALVAREZ	SPECIFICATIONS	BY MICHAEL KETELTAS	PLANS AND SPECS COMPARED DON NGUYEN-TAN

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 6

UNIT: 3591
PROJECT NUMBER & PHASE: 06 1400 0266 1 CONTRACT NO.: 06-0H6424

BRIDGE NO. 50-0518
POST MILE 49.6

KERN AVENUE POC (REPLACE)
GENERAL PLAN No. 2

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
11-01-12		9-30-15	02-24-16	2	42

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

FILE => 50-0518-a-gp-02.dgn

USERNAME => s61l9704 DATE PLOTTED => 23-AUG-2016 TIME PLOTTED => 11:07

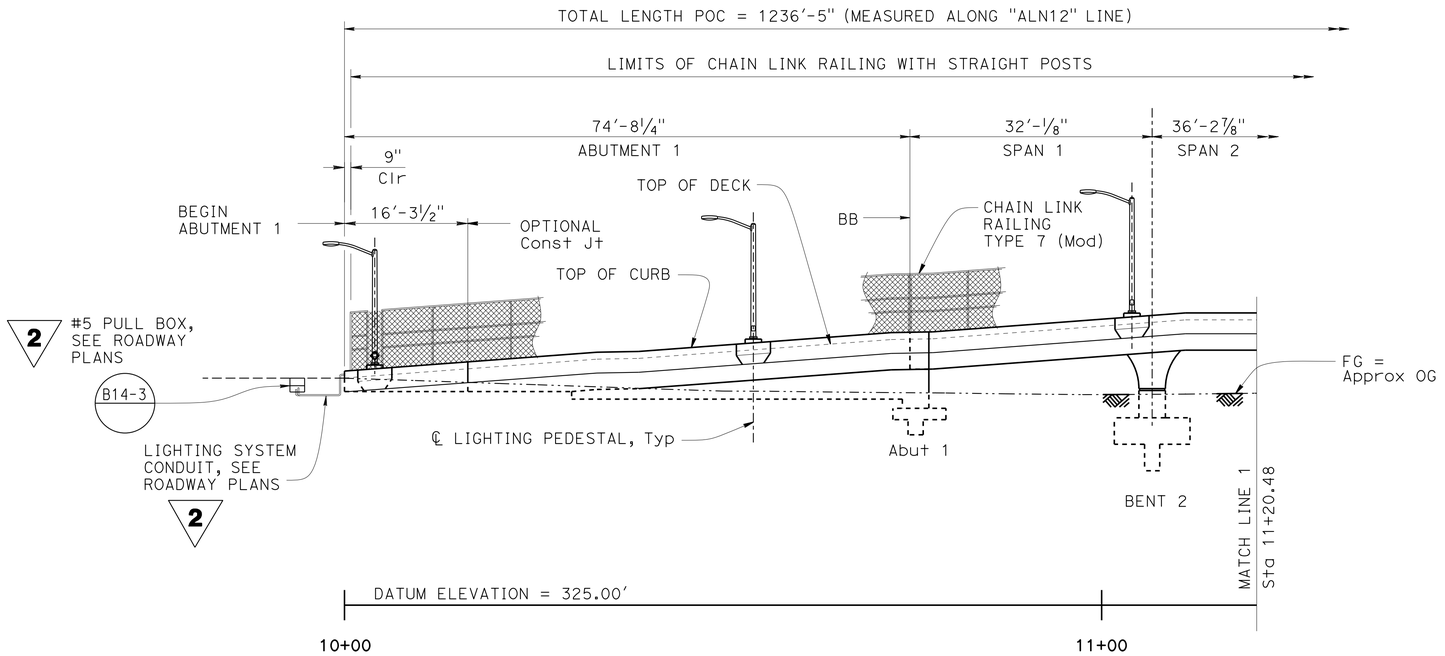
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	99	49.6	68	106

REGISTERED CIVIL ENGINEER — 10-20-15 DATE

11-16-15
PLANS APPROVAL DATE

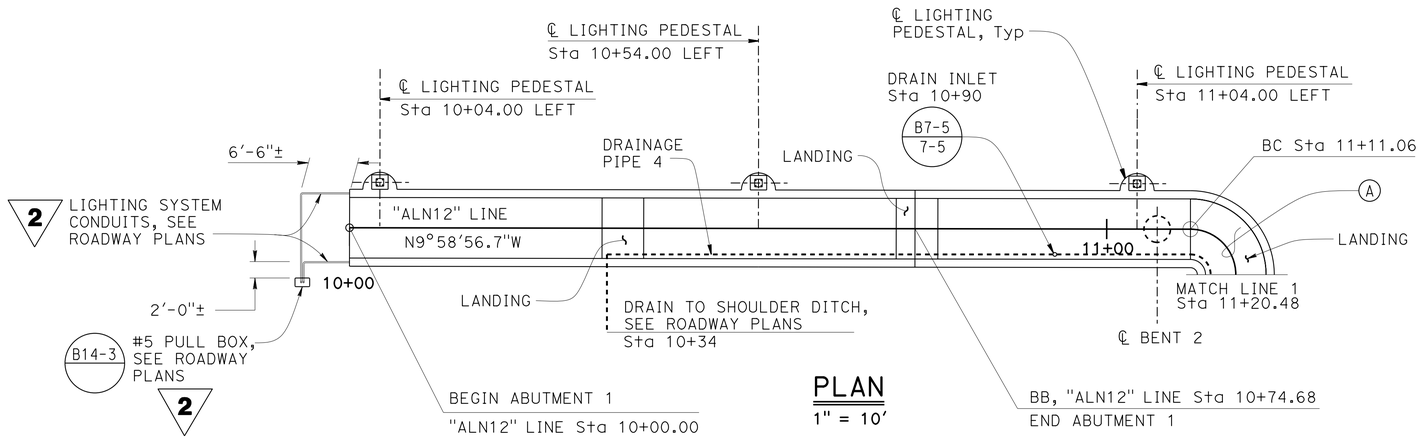
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.

REGISTERED PROFESSIONAL ENGINEER — DON NGUYEN-TAN — No. C 57510 — Exp. 12-31-15 — CIVIL — STATE OF CALIFORNIA



MIRRORED DEVELOPED ELEVATION

1" = 10'



PLAN

1" = 10'

NOTES:

1. For clarity, not all chain link railing details are shown.
2. For Column Architectural details, see "BENT DETAILS No. 7" sheet.
3. For Abutment Architectural details, see "ABUTMENT LAYOUT" and "ABUTMENT DETAILS" sheets.
4. For Lighting Pedestal details, see "LIGHTING PEDESTAL DETAIL" sheet.

CURVE DATA

No. ℗	R	Δ	T	L
Ⓐ	6.0′	180°0′0"	NA	18.85′
Ⓑ	6.0′	90°5′52"	6.01′	9.43′
Ⓒ	6.0′	90°0′00"	6.00′	9.43′
Ⓓ	6.0′	180°0′0"	NA	18.84′

QUANTITIES

	LEAD COMPLIANCE PLAN	LUMP SUM
	WORK AREA MONITORING (BRIDGE)	LUMP SUM
	BRIDGE REMOVAL	LUMP SUM
	STRUCTURE EXCAVATION (BRIDGE)	662 CY
	STRUCTURE BACKFILL (BRIDGE)	361 CY
	FURNISH PILING (CLASS 200) (ALTERNATIVE W)	2,403 LF
	DRIVE PILE (CLASS 200) (ALTERNATIVE W)	44 EA
	STRUCTURAL CONCRETE, BRIDGE FOOTING	204 CY
	STRUCTURAL CONCRETE, BRIDGE	979 CY
	FRACTURED RIB TEXTURE	2,788 SQFT
	JOINT SEAL (MR 1½")	20 LF
	BAR REINFORCING STEEL (BRIDGE)	350,600 LB
	MISCELLANEOUS METAL (BRIDGE)	895 LB
	BRIDGE DECK DRAINAGE SYSTEM	7,292 LB
2	CHAIN LINK RAILING (TYPE 7 MODIFIED)	2,472 LF
2	COMMUNICATION CONDUIT (BRIDGE)	490 LF

2 REPLACED PER ADDENDUM No. 2 DATED AUGUST 26, 2016

	BY	CHECKED
DESIGN	DAVID ALVAREZ	MIKE CULLEN
DETAILS	SUSAN NG	DON NGUYEN-TAN
QUANTITIES	GLORIA REYES-GUTIERREZ	DAVID ALVAREZ

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 6

BRIDGE NO. 50-0518
POST MILE 49.60

KERN AVENUE POC (REPLACE)
STRUCTURE PLAN No. 1

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3591
PROJECT NUMBER & PHASE: 06 1400 0266 1 CONTRACT NO.: 06-0H6424

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
9-10-13		06-20-16	10-20-15	4	42

FILE => 50-0518-c-sp1.dgn

USERNAME => s1119704 DATE PLOTTED => 23-AUG-2016 TIME PLOTTED => 11:07

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	99	49.6	73	106

REGISTERED CIVIL ENGINEER — 10-20-15 DATE

11-16-15
PLANS APPROVAL DATE

DON NGUYEN-TAN
No. C 57510
Exp. 12-31-15
CIVIL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

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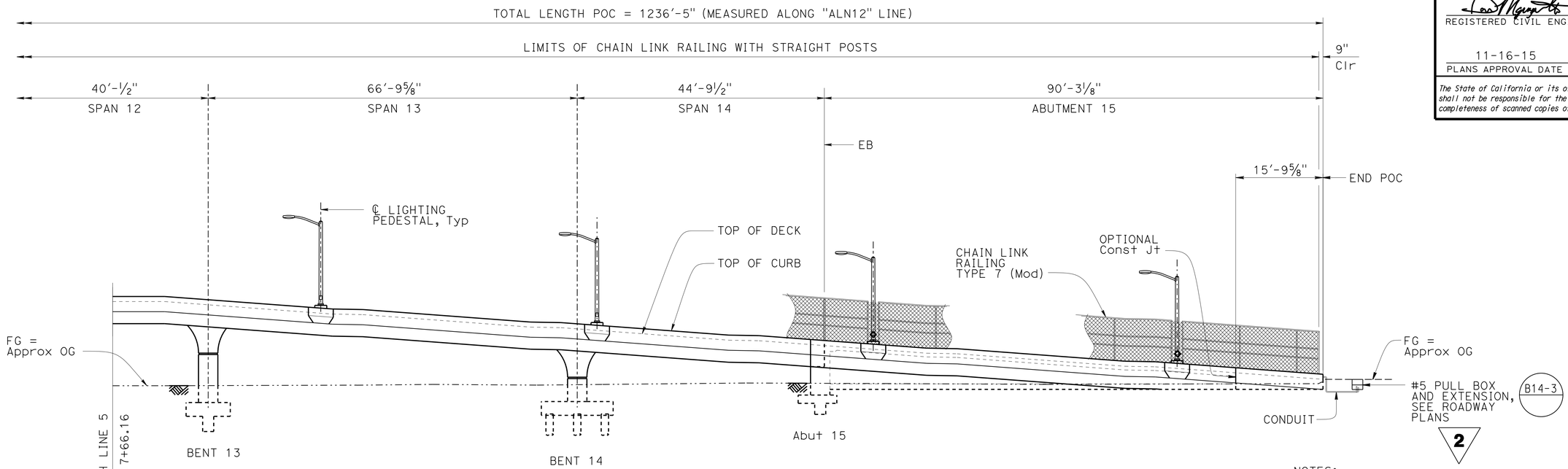


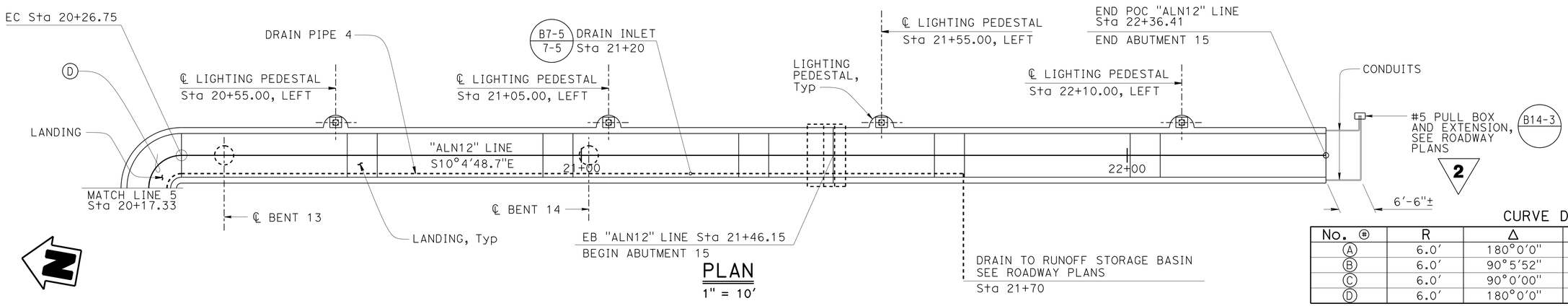
MIRRORED DEVELOPED ELEVATION

1" = 10'

NOTES:

1. For clarity, not all chain link railing details are shown.
2. For Column Architectural details, see "BENT DETAILS No. 7" sheet.
3. For Abutment Architectural details, see "ABUTMENT LAYOUT" and "ABUTMENT DETAILS" sheets.
4. For Lighting Pedestal details, see "LIGHTING PEDESTAL DETAIL" sheet.

2 REPLACED PER ADDENDUM No. 2 DATED AUGUST 26, 2016



PLAN

1" = 10'

CURVE DATA

No. ⓐ	R	Δ	T	L
Ⓐ	6.0'	180°0'0"	NA	18.85'
Ⓑ	6.0'	90°5'52"	6.01'	9.43'
Ⓒ	6.0'	90°0'00"	6.00'	9.43'
Ⓓ	6.0'	180°0'0"	NA	18.84'

	BY	CHECKED
DESIGN	DAVID ALVAREZ	MIKE CULLEN
DETAILS	SUSAN NG	DON NGUYEN-TAN
QUANTITIES	GLORIA REYES-GUTIERREZ	DAVID ALVAREZ

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 6

BRIDGE NO. 50-0518
POST MILE 49.60

KERN AVENUE POC (REPLACE)
STRUCTURE PLAN No. 6

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3591
PROJECT NUMBER & PHASE: 06 1400 0266 1 CONTRACT NO.: 06-0H6424

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES				SHEET	OF
9-10-15		05-14-15	10-06-15	9	42

FILE => 50-0518-c-sp6.add

USERNAME => s1197704 DATE PLOTTED => 23-AUG-2016 TIME PLOTTED => 11:07

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	99	49.6	83	106

REGISTERED CIVIL ENGINEER — DATE 10-20-15

11-16-15
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — DON NGUYEN-TAN — No. C 57510 — Exp. 12-31-15 — CIVIL — STATE OF CALIFORNIA

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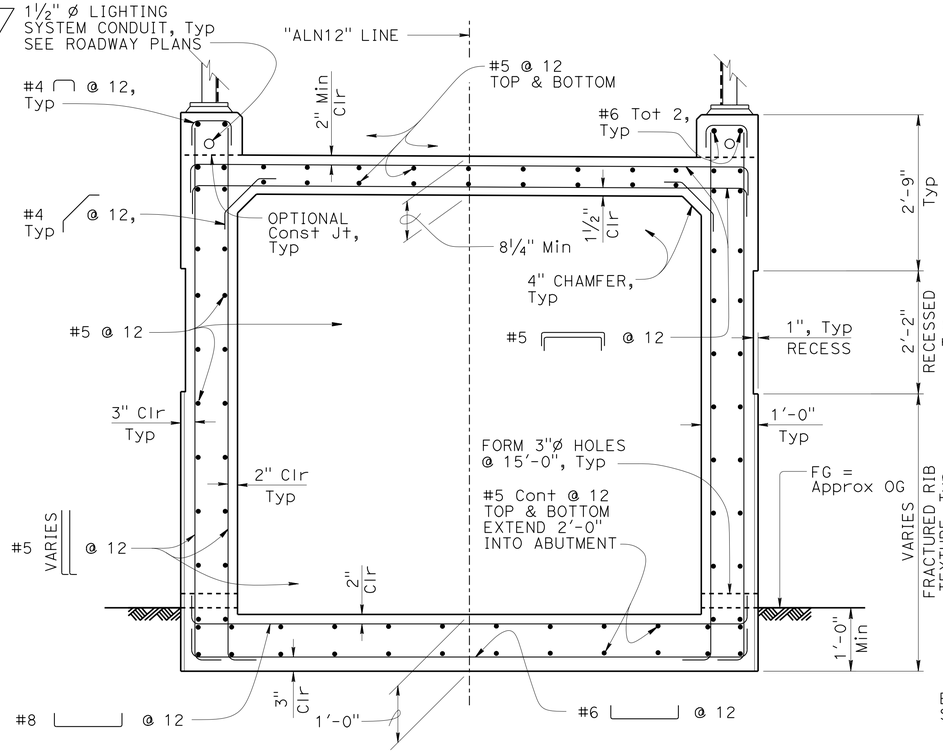
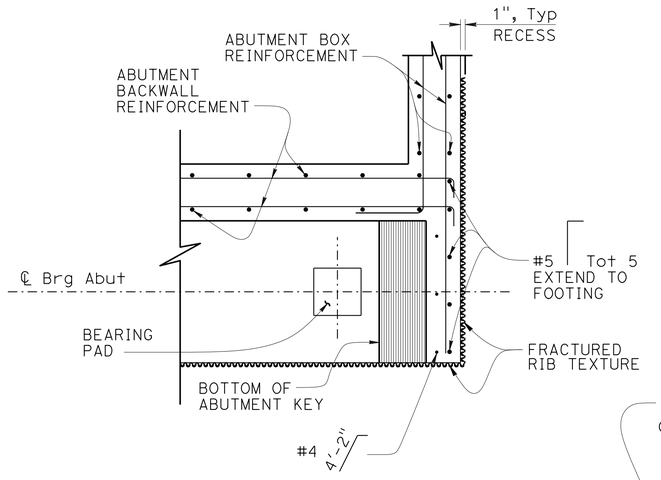
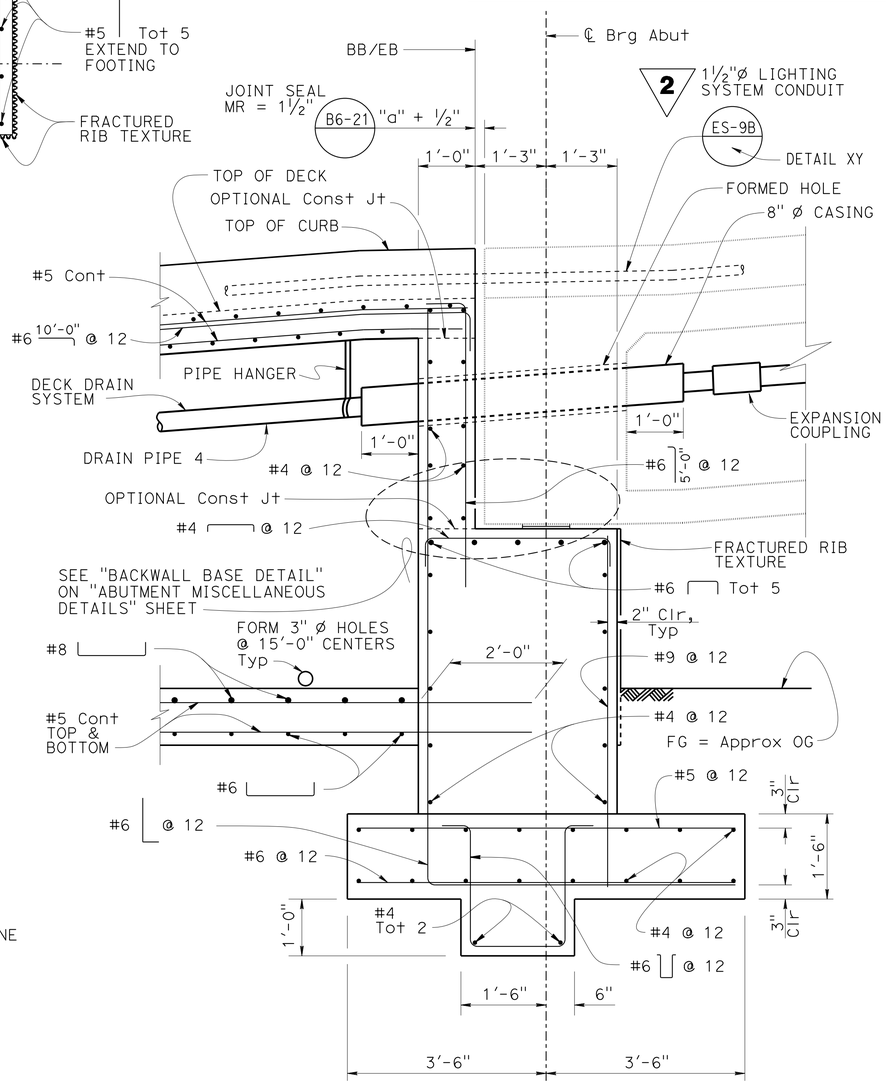
2 1½" ø LIGHTING SYSTEM CONDUIT, Typ SEE ROADWAY PLANS



SECTION D-D
¾" = 1'-0"



SECTION B-B
¾" = 1'-0"



SECTION A-A
¾" = 1'-0"

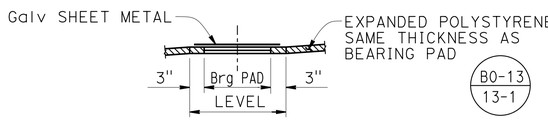
B7-8 | B7-10 U-2 | B7-10 U-3

NOTE:
Abutment 1 shown, Abutment 15 similar

PLAN

Note:

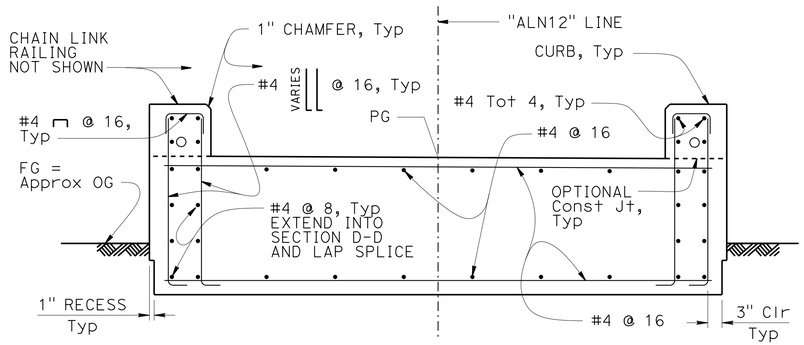
Coat top of Bearing Pad with grease prior to placing sheet metal.



SECTION R-R
BEARING PAD DETAIL
NO SCALE

NOTE: Details typical at all bearing pads

2 REPLACED PER ADDENDUM No. 2 DATED AUGUST 26, 2016



SECTION C-C
¾" = 1'-0"

DESIGN	BY DAVID ALVAREZ	CHECKED MIKE CULLEN	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 6	BRIDGE NO. 50-0518	KERN AVENUE POC (REPLACE)	
DETAILS	BY SUSAN NG	CHECKED DON NGUYEN-TAN			POST MILE 49.6	ABUTMENT DETAILS No. 1	
QUANTITIES	BY GLORIA REYES-GUTIERREZ	CHECKED DAVID ALVAREZ					

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3591
PROJECT NUMBER & PHASE: 06 1400 0266 1 CONTRACT NO.: 06-0H6424

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES			SHEET	OF
10-04-13		10-09-15 06-17-16	19	42

FILE => 50-0518-f-abt-sa-dt-01.add

USERNAME => s1197704 DATE PLOTTED => 23-AUG-2016 TIME PLOTTED => 11:07

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	99	49.6	93	106

REGISTERED CIVIL ENGINEER — 10-20-15 DATE

11-16-15
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — DON NGUYEN-TAN — No. C 57510 — Exp. 12-31-15 — CIVIL — STATE OF CALIFORNIA

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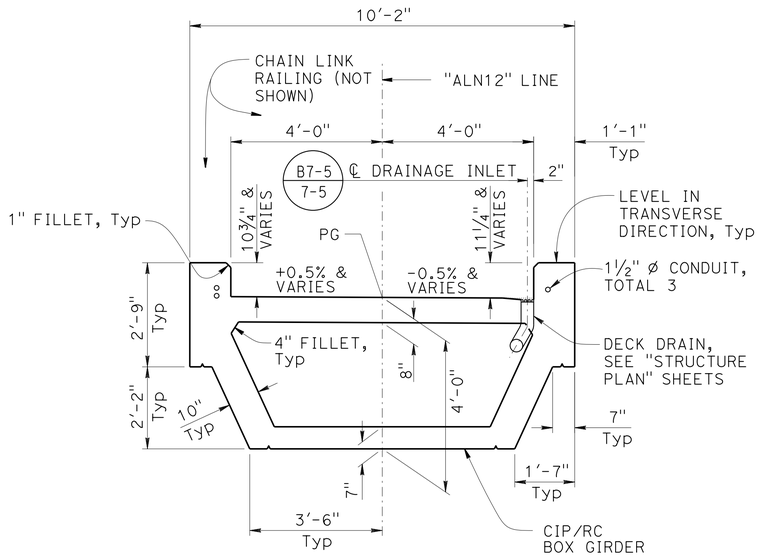
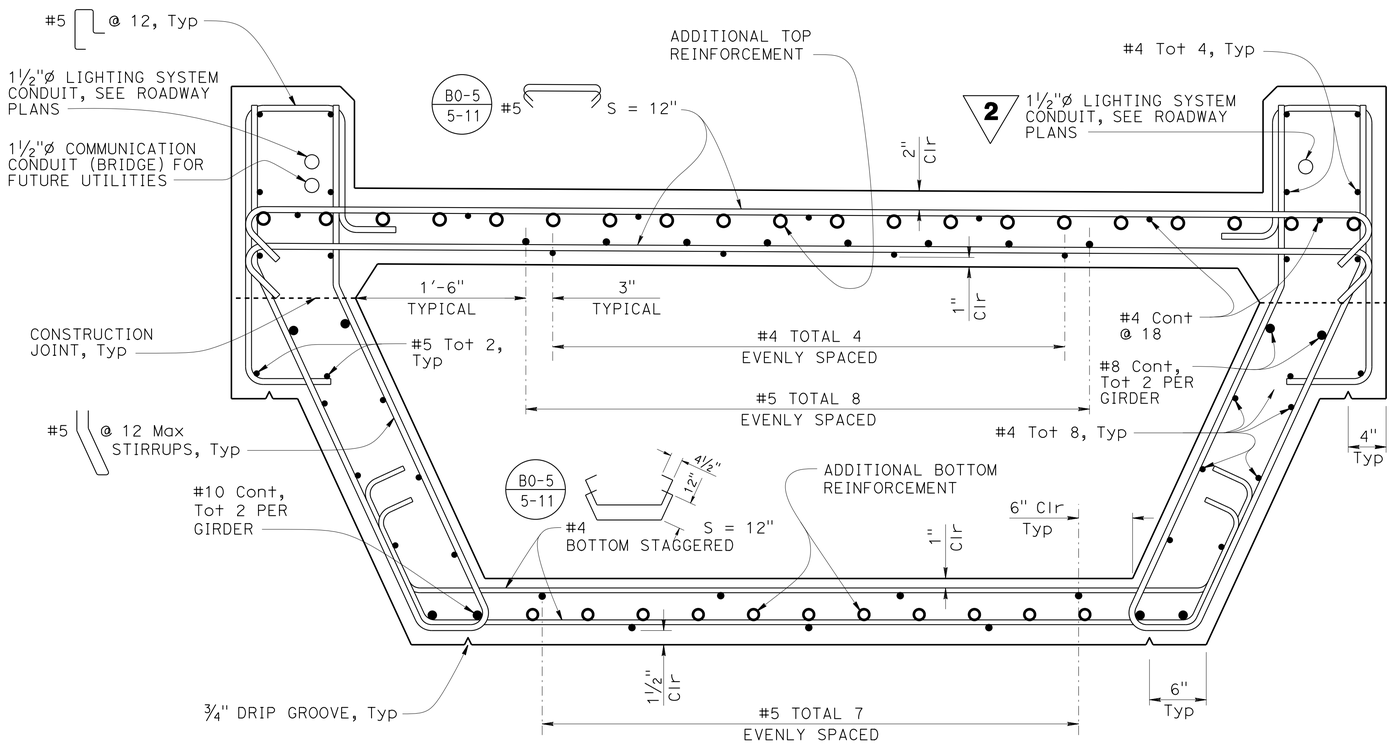


TYPICAL SECTION

½" = 1'-0"

Notes:

1. For additional top and bottom reinforcement, see "ADDITIONAL TOP REINFORCEMENT" and "ADDITIONAL BOTTOM REINFORCEMENT" details.
2. For clarity, chain link railing and lighting pedestal not shown.



PART TYPICAL SECTION

1½" = 1'-0"

B7-1

2 REPLACED PER ADDENDUM No. 2 DATED AUGUST 26, 2016

	BY	CHECKED
DESIGN	DAVID ALVAREZ	MIKE CULLEN
DETAILS	SUSAN NG	DON NGUYEN-TAN
QUANTITIES	GLORIA REYES-GUTIERREZ	DAVID ALVAREZ

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 6

BRIDGE NO. 50-0518
POST MILE 49.6

KERN AVENUE POC (REPLACE)
TYPICAL SECTION

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3591
PROJECT NUMBER & PHASE: 06 1400 0266 1 CONTRACT NO.: 06-0H6424

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
06-01-13		06-17-16	10-26-16	29	42

FILE => 50-0518-k-ts-01.dgn

USERNAME => s119704 DATE PLOTTED => 23-AUG-2016 TIME PLOTTED => 11:07

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	99	49.6	94	106

REGISTERED CIVIL ENGINEER — 10-20-15 DATE

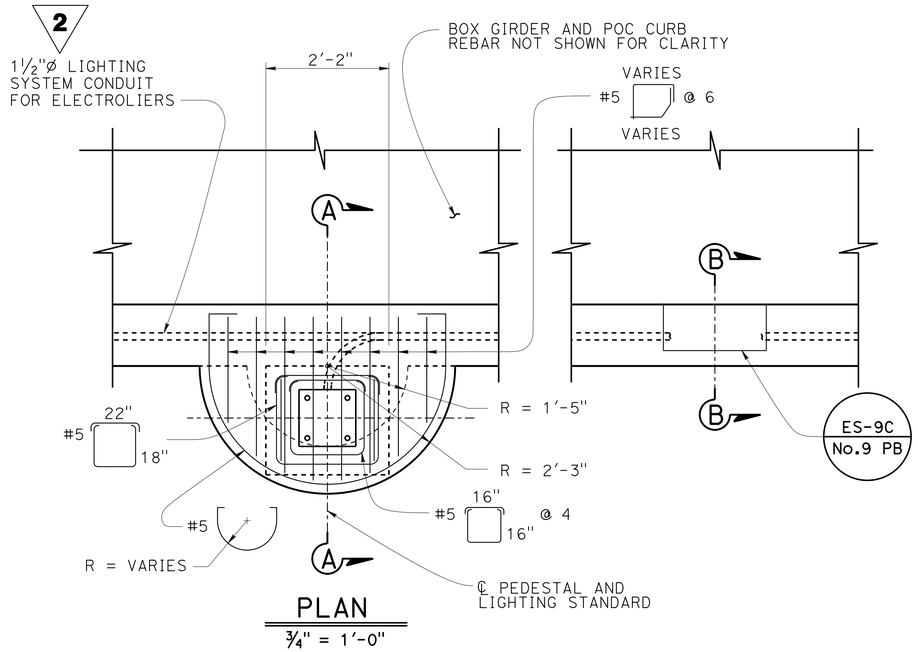
11-16-15
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — DON NGUYEN-TAN — No. C 57510 — Exp. 12-31-15 — CIVIL — STATE OF CALIFORNIA

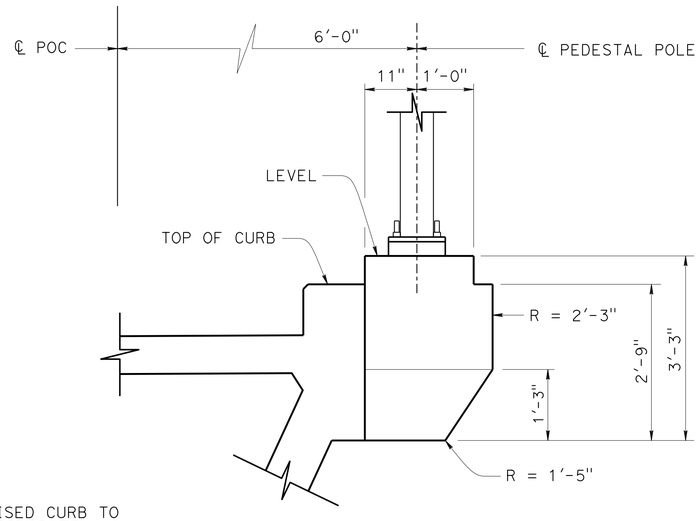
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.

NOTES:

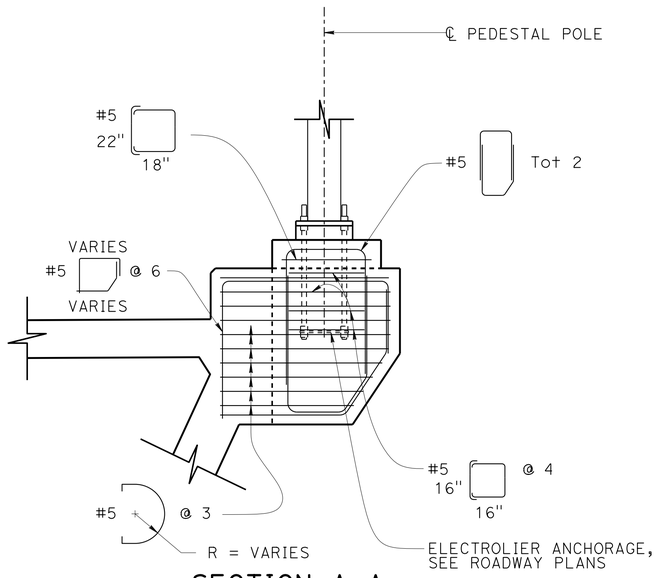
1. Pedestal shall have a minimum of 2" concrete cover over rebar.
2. For clarity, curb-mounted fence not shown.
3. For clarity, box girder and POC curb reinforcement not shown.



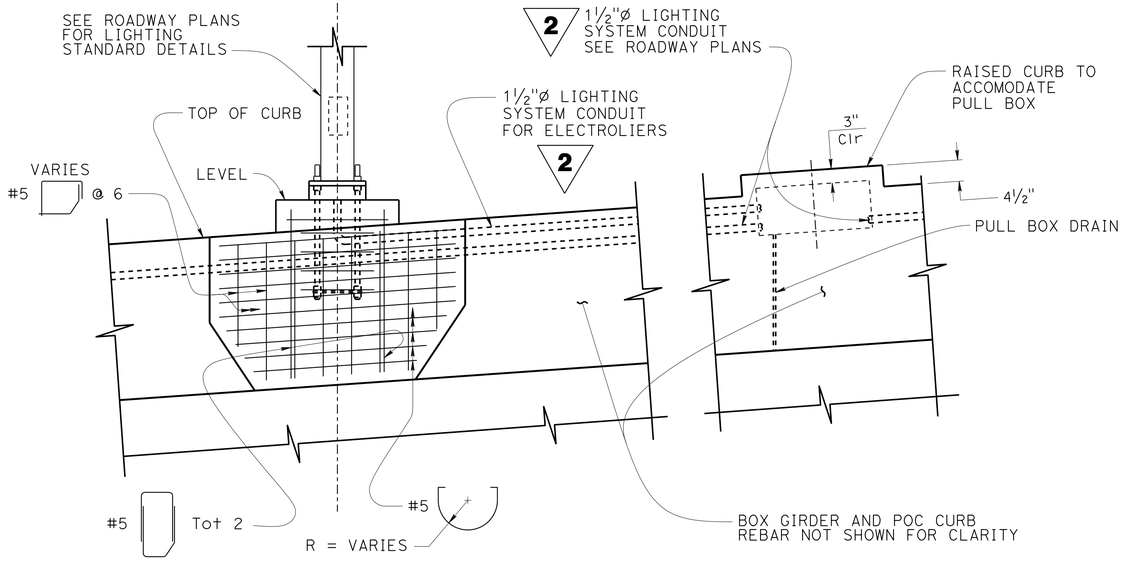
PLAN
¾" = 1'-0"



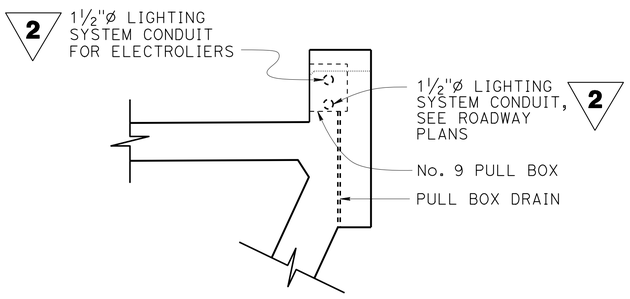
PROFILE VIEW
¾" = 1'-0"



SECTION A-A
¾"= 1'-0"



ELEVATION
¾" = 1'-0"



SECTION B-B
¾"= 1'-0"

2 **REPLACED PER ADDENDUM No. 2 DATED AUGUST 26, 2016**

DESIGN	BY DAVID ALVAREZ	CHECKED MIKE CULLEN	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 6	BRIDGE NO. 50-0518
DETAILS	BY DAVID ELLIOTT/SUSAN NG	CHECKED DON NGUYEN-TAN			POST MILE 49.6
QUANTITIES	BY GLORIA REYES-GUTIERREZ	CHECKED DAVID ALVAREZ			

KERN AVENUE POC (REPLACE)
LIGHTING PEDESTAL DETAILS

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3591
PROJECT NUMBER & PHASE: 06 1400 0266 1 CONTRACT NO.: 06-0H6424

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
10-9-13		06-20-16	10-16-15	30	42

FILE => 50-0518-K-ts-ltg-ped.dgn

USERNAME => s1119704 DATE PLOTTED => 23-AUG-2016 TIME PLOTTED => 11:10

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	99	49.6	104	106

REGISTERED CIVIL ENGINEER — DATE 10-20-15

11-16-15
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — DON NGUYEN-TAN — No. C 57510 — Exp. 12-31-15 — CIVIL — STATE OF CALIFORNIA

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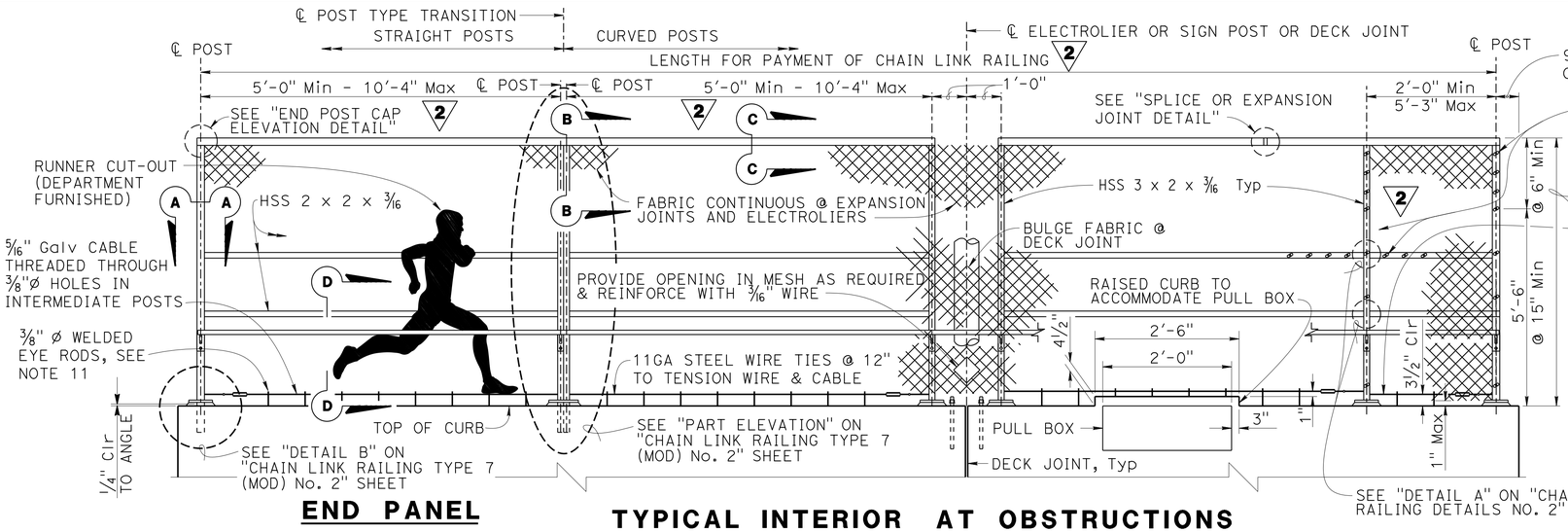
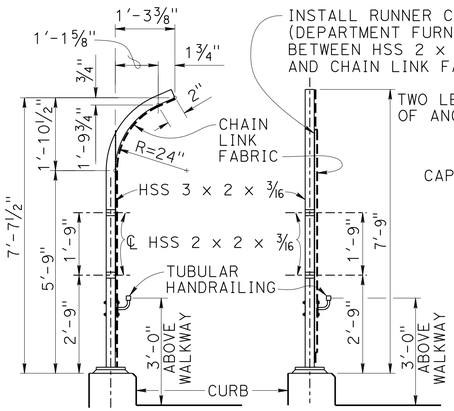


END PANEL

TYPICAL INTERIOR PANEL AT OBSTRUCTIONS & DECK JOINTS

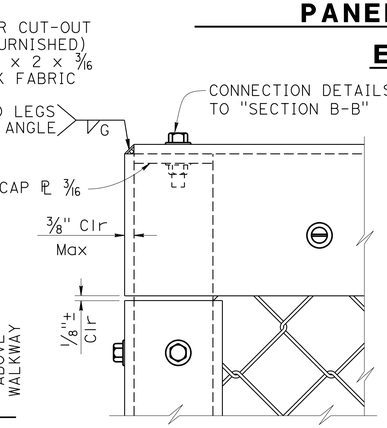
ALTERNATE END PANEL

ELEVATION

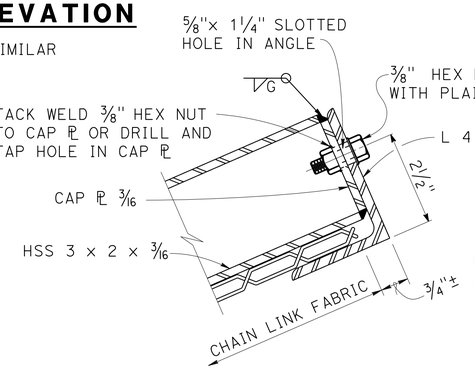


CURVED POST — STRAIGHT POST

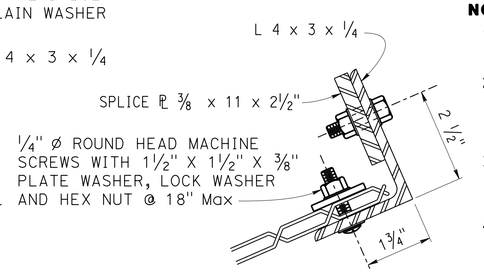
TYPICAL SECTION



END POST CAP ELEVATION



SECTION B-B

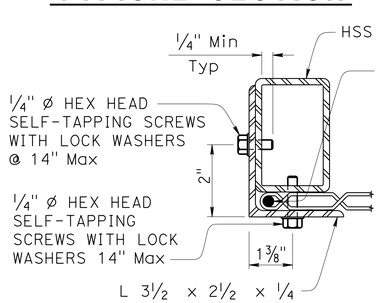


SECTION C-C

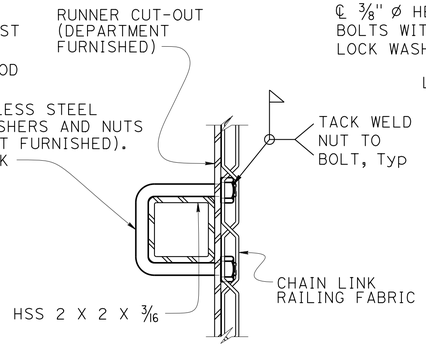
REPLACED PER ADDENDUM No. 2 DATED AUGUST 26, 2016

NOTES:

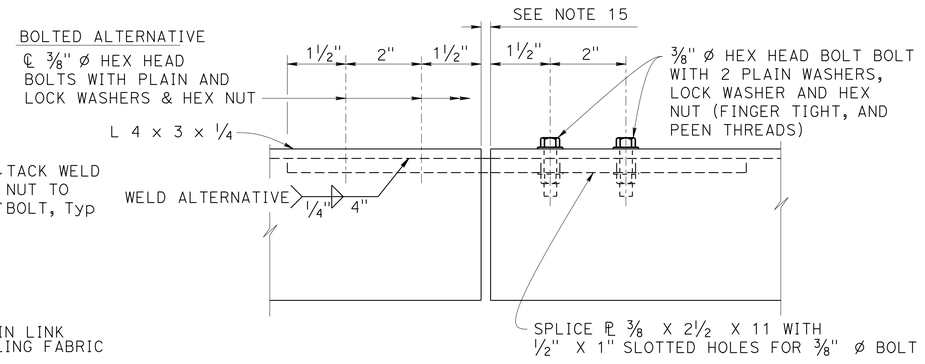
1. Vinyl coat railing assembly and chain link fabric, black, after fabrication.
2. Horizontal angle shall be continuous over not less than two intermediate posts except that a shorter length is permitted at expansion joints, electroliers, and other rail discontinuities.
3. Except for posts adjacent to electroliers, install straight posts and straight portions of curved posts normal to bridge profile grade. At electroliers install posts vertical.
4. Fabricate and install top horizontal angle parallel to bridge profile grade. Shop bend top horizontal angle to fit horizontal curves and grade breaks.
5. When railing is on slope, place fabric parallel to the slope.
6. Alternative details may be submitted for Engineer's approval.
7. For details and reinforcement not shown, see "TYPICAL SECTION" sheet.
8. See "STRUCTURE PLAN" sheets for limits of Chain Link Railing.
9. Provide thimbles at all cable loops.
10. Chain link fabric to be 96" wide with 1" mesh and with knuckled selvage top and bottom.
11. When railing is placed on a horizontal alignment with a radius of 150'-0" or less, thread 5/16" cable through 3/8"ø welded eye embedded rods 4" into the top of the concrete curb and equally spaced to limit the middle ordinate distance between the 5/16" cable and the curve to 1" max.
12. Holes in posts for 5/16" cable and its anchorages may be field drilled and painted with zinc rich paint.
13. For fencing panels at locations containing pull boxes, adjust location of 5/16" cable and height of 3/8" ø welded eye rods.
14. Bend horizontal components to conform to curve.
15. At expansion joint, provide gap dimension equal to gap for deck joint. Increase slotted hole length and splice ℙ length accordingly.



SECTION A-A



SECTION D-D



SPLICE OR EXPANSION JOINT DETAIL

DESIGN	BY DON NGUYEN-TAN	CHECKED MIKE CULLEN	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 6	BRIDGE NO. 50-0518
DETAILS	BY D. ELLIOTT/G. DICKERSON	CHECKED DON NGUYEN-TAN			POST MILE 49.6
QUANTITIES	BY GLORIA REYES-GUTIERREZ	CHECKED DAVID ALVAREZ			

KERN AVENUE POC (REPLACE)

CHAIN LINK RAILING TYPE 7 (MOD) No. 1

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3591
PROJECT NUMBER & PHASE: 06 1400 0266 1 CONTRACT NO.: 06-0H6424

DISREGARD PRINTS BEARING EARLIER REVISION DATES → REVISION DATES 05-06-15 08-26-15 10-06-15

SHEET 40 OF 42

USERNAME => s1119704 DATE PLOTTED => 23-AUG-2016 TIME PLOTTED => 11:07

FILE => 50-0518-u-clr_01.add

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Ker	99	49.6	105	106

REGISTERED CIVIL ENGINEER — 10-20-15 DATE

11-16-15
PLANS APPROVAL DATE

DON NGUYEN-TAN No. C 57510 Exp. 12-31-15 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

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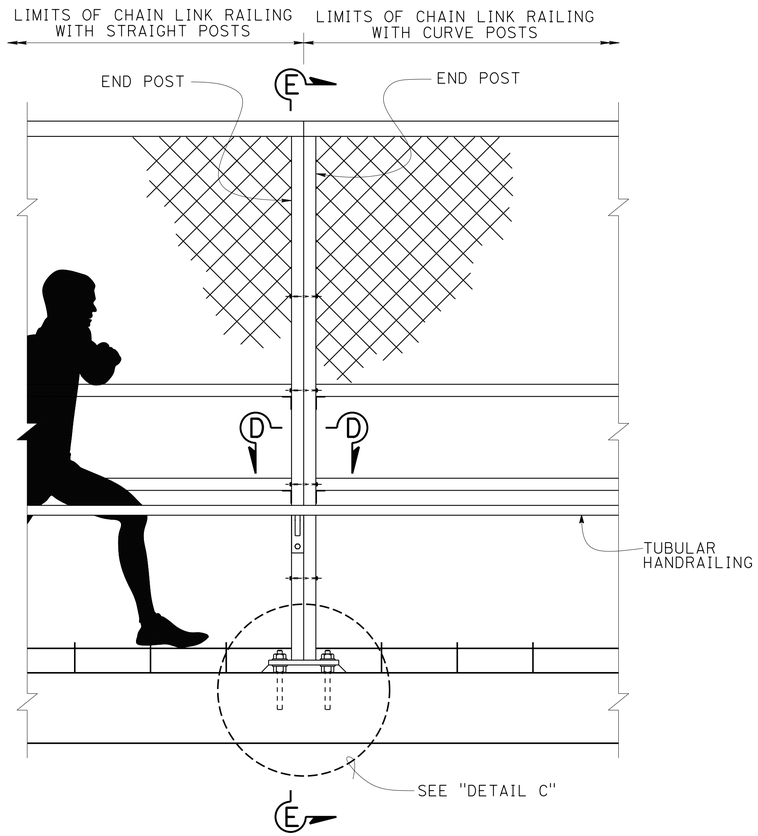
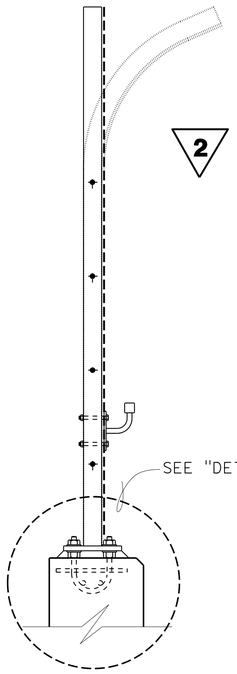
2 REPLACED PER ADDENDUM No. 2 DATED AUGUST 26, 2016



PART ELEVATION
NO SCALE



SECTION E-E
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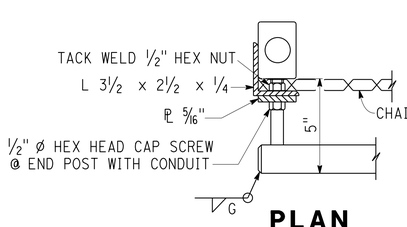
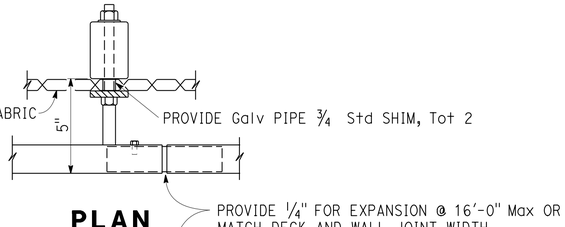
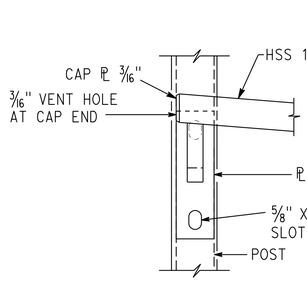


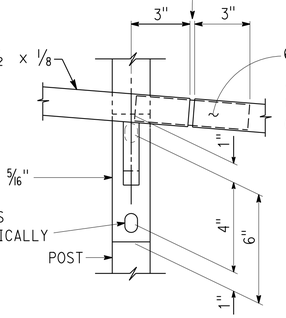
PLAN



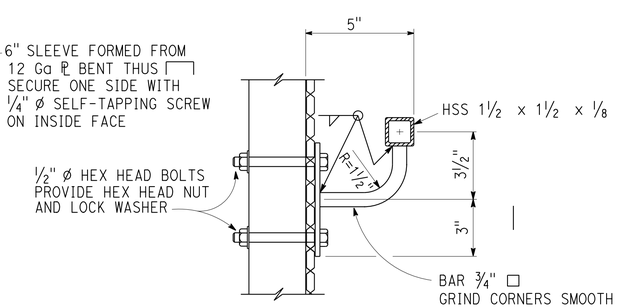
PLAN



ELEVATION END POST

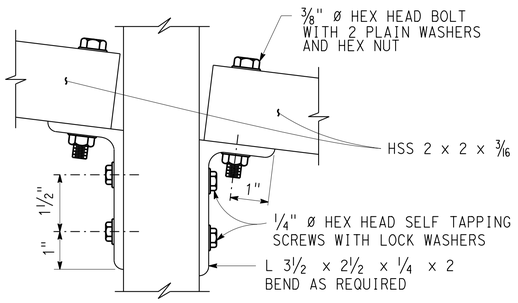


ELEVATION INTERMEDIATE POST



SIDE VIEW
END POST NOT SHOWN

TUBULAR HANDRAILING BRACKET DETAILS
NO SCALE



DETAIL A
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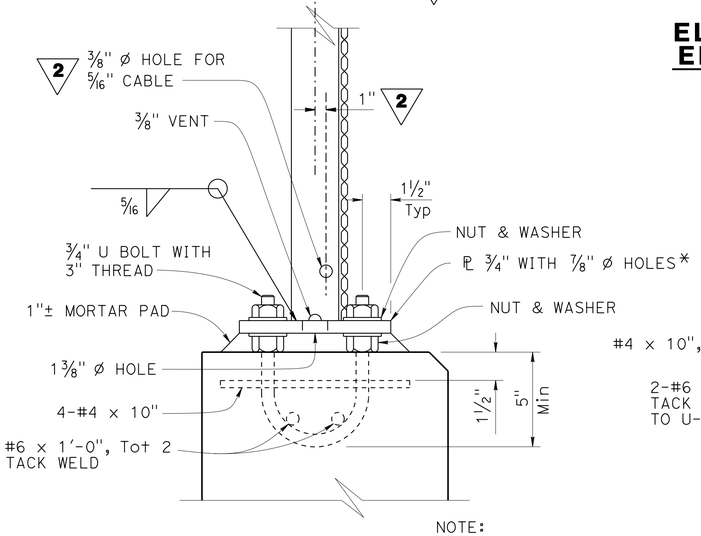
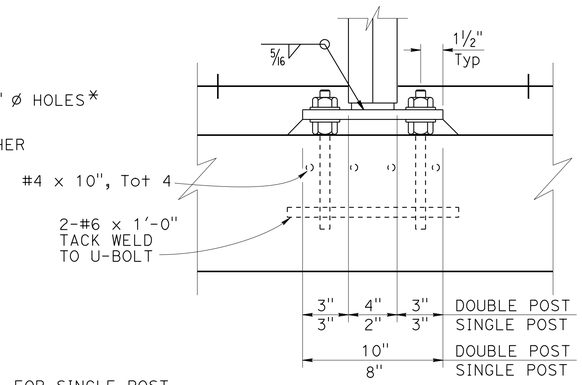
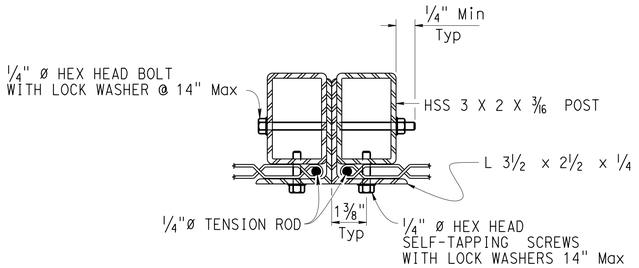


DETAIL B
NO SCALE

NOTE:
* ℄ 8 x 8 x ¾", FOR SINGLE POST
℄ 8 x 10 x ¾", FOR DOUBLE POST



DETAIL C
NO SCALE



SECTION D-D
NO SCALE

DESIGN	BY DON NGUYEN-TAN	CHECKED MIKE CULLEN	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION
DETAILS	BY D. ELLIOTT/G. DICKERSON	CHECKED DON NGUYEN-TAN	
QUANTITIES	BY GLORIA REYES-GUTIERREZ	CHECKED DAVID ALVAREZ	

DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN
DESIGN BRANCH 6

BRIDGE NO. 50-0518
POST MILE 49.6

KERN AVENUE POC (REPLACE)
CHAIN LINK RAILING TYPE 7 (MOD) No. 2

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3591
PROJECT NUMBER & PHASE: 06 1400 0266 1 CONTRACT NO.: 06-0H6424

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
05-08-15	08-20-15	10-06-15		41	42

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USERNAME => s1119704 DATE PLOTTED => 23-AUG-2016 TIME PLOTTED => 11:10:07