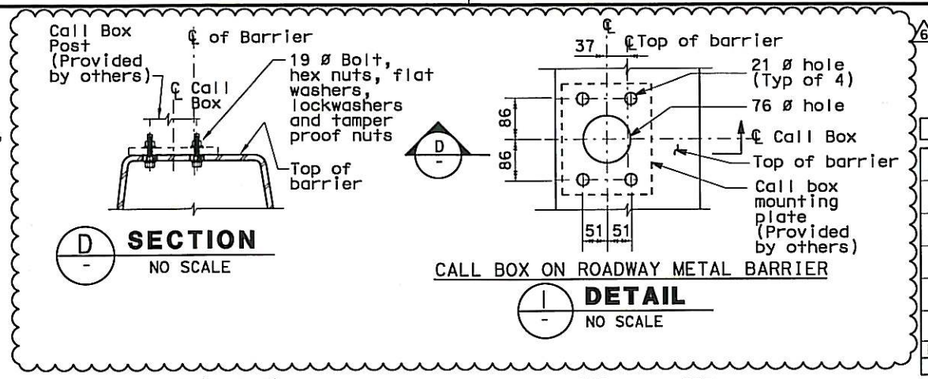
NOTES:

1. The contractor shall verify all controlling field dimensions before ordering or fabricating any material.
2. For structural notes, see sheet AS-1.
3. For electrical panel support locations, see electrical plans.
4. For callbox locations, see electrical sheets, sheet E-397. △6
5. Unless otherwise noted, all framing elements are L76x76x6.4.
6. For electrical enclosure support, use Unistrut P2000 or approved equal. Attach to frame per manufacturer's recommendations. Locate to suit.



MARK	DATE	DESCRIPTIONS	BY	CH'D	CCO#
		REVISIONS			
6	03/07/14	INSTALL CALL BOXES	RG	AM	341S1
5	09/27/13	CALL BOXES	RM	AM	341
4	05/10/10	WEST END BARRIER CONDUIT	NK	MSO	44S1
3	08/03/09	ELECTRICAL WARNING SYSTEMS	GB	MSO	61
2	03/30/09	SERVICE PLATFORM ELECTRICAL CHANGES	NK	MSO	55
1	03/04/08	BARRIER MODIFICATIONS	EL	MI	44

REQUEST FOR INFORMATION NOT ADDRESSED IN THIS CCO REMAIN IN FORCE

Caltrans Metric

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
04	SF	80	13.2/13.9	83R6	1204

REGISTERED CIVIL ENGINEER 4/02/04

12-6-04
PLANS APPROVAL DATE

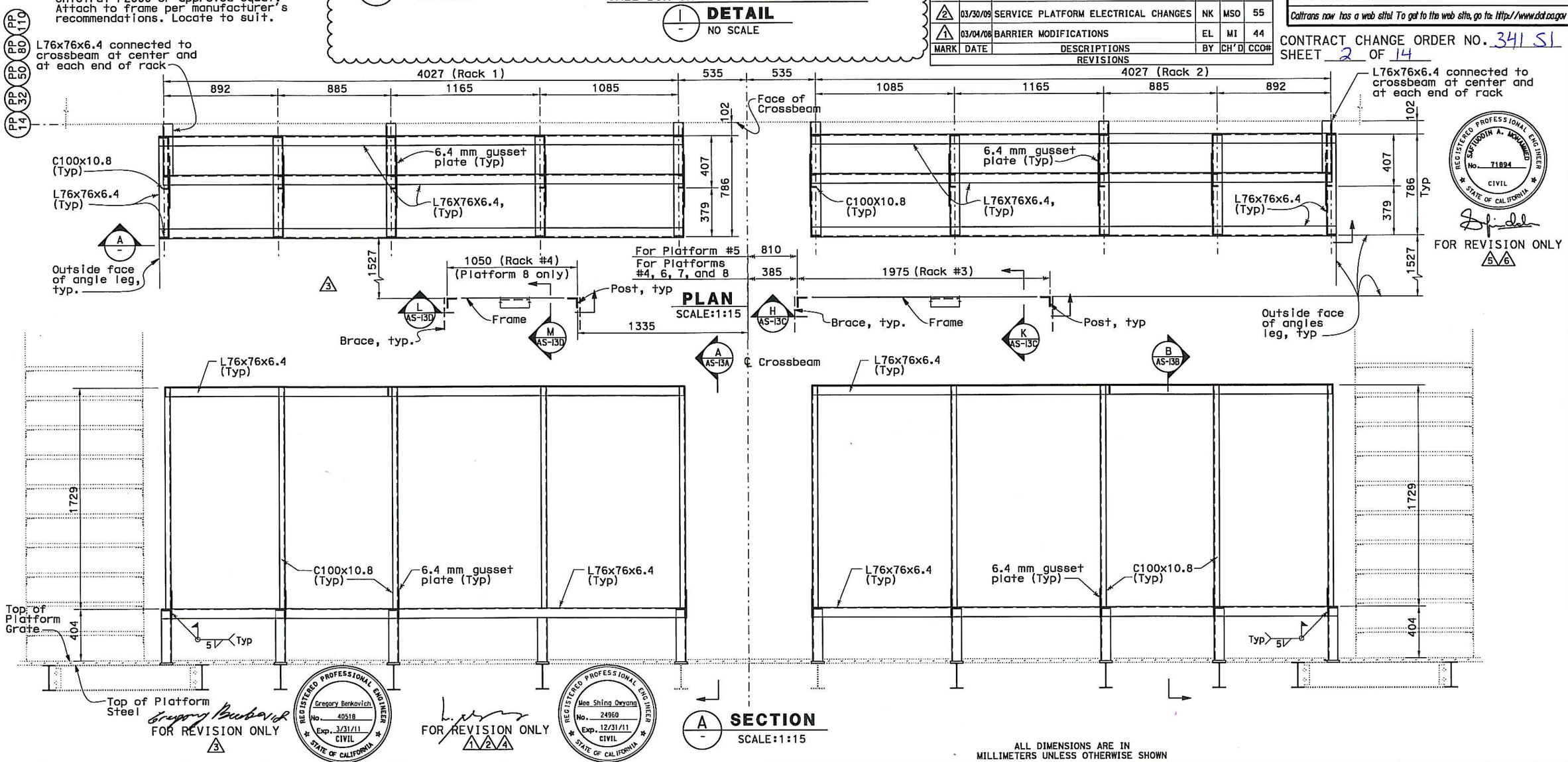
REGISTERED PROFESSIONAL ENGINEER Mee Shing Owyang No. 24960 Exp. 12/31/05 CIVIL STATE OF CALIFORNIA

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.

Parsons Brinckerhoff Quade & Douglas, Inc.
303 Second Street, Suite 700N
San Francisco, CA 94107

Caltrans now has a web site! To get to the web site, go to: http://www.dot.ca.gov

CONTRACT CHANGE ORDER NO. 341 S1
SHEET 2 OF 14



REGISTERED PROFESSIONAL ENGINEER SAIFUDDIN A. MOHAMMED No. 71894 CIVIL STATE OF CALIFORNIA

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

BoB Zandipour
DESIGN OVERSIGHT
SIGN OFF DATE

	BY	CHECKED
DESIGN	N. King	M. S. Owyang
DETAILS	L. Reyes	M. S. Owyang
QUANTITIES		

PREPARED FOR THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

PROJECT ENGINEER

BRIDGE NO. 34-0006
KILOMETER POST 13.2/13.9

SAS SUPERSTRUCTURE
ELECTRICAL PANEL SUPPORT SECTIONS
AS-13

SHEET OF

DESIGN DETAIL SHEET (METRIC) (REV. 3/1/98)

ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS 0 10 20 30 40 50 60 70 80 90 100

CU 04251
EA 0120F1

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES (PRELIMINARY STAGE ONLY)

FILE => 04-0120f1_0083R06.dgn

USERNAME => ReyesL DATE PLOTTED => 07-MAR-2014 TIME PLOTTED => 15:02

T:\13103\WS\pae\SAS Struc\CCO\SAS CCO341S1\04-0120f1_0083R06.dgn

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
04	SF	80	13.2/13.9	120R3	1204

REGISTERED ELECTRICAL ENGINEER 12/19/02 DATE

12-6-04
PLANS APPROVAL DATE

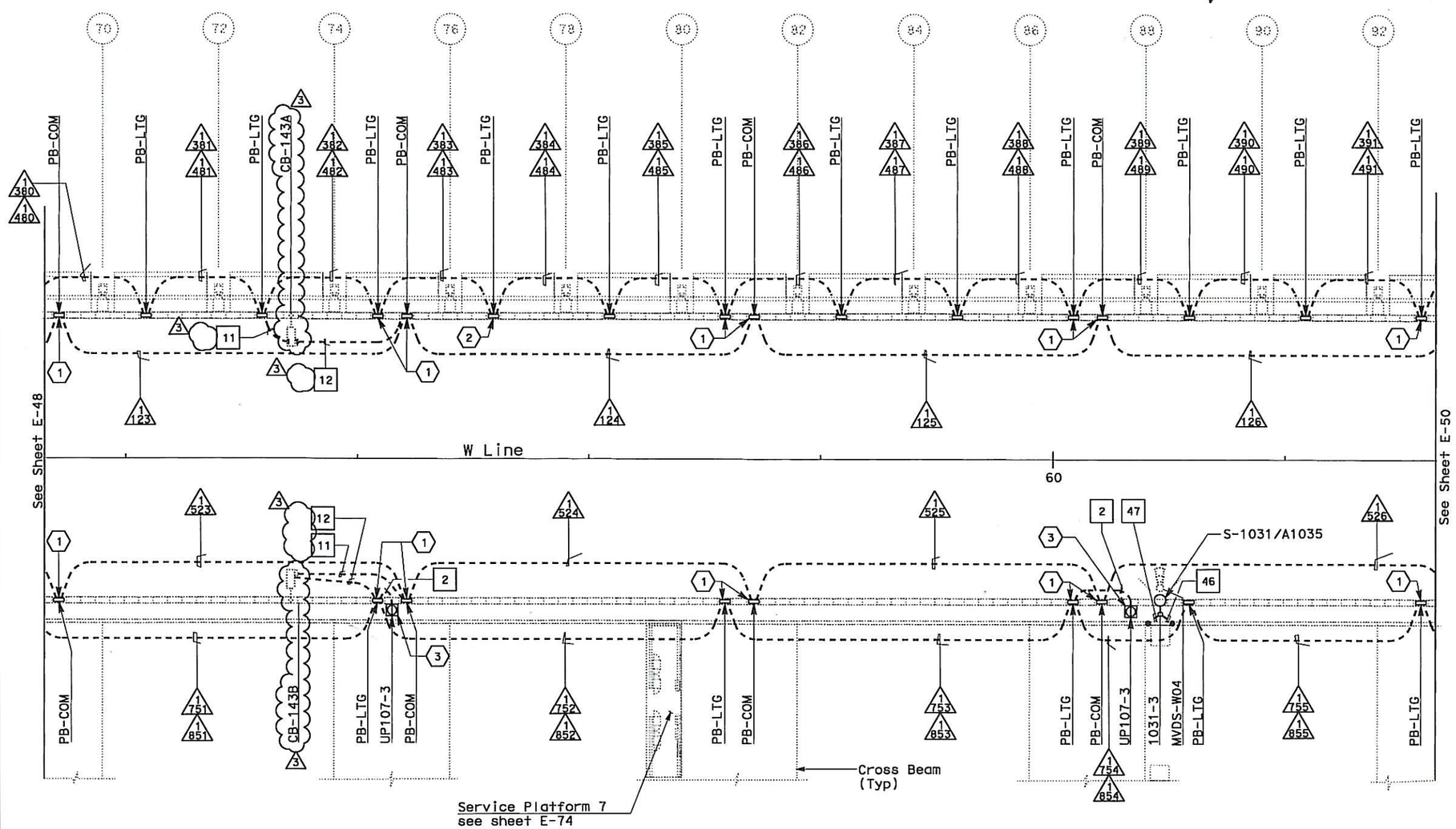
REGISTERED PROFESSIONAL ENGINEER JENS ERLINGSSON No. 8249 Exp. 9/30/06 ELECTRICAL STATE OF CALIFORNIA

PB POWER, Inc.
A Parsons Brinckerhoff Company
303 Second St., Suite 700N
San Francisco, CA 94107-1317

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.

Caltrans now has a web site! To get to the web site, go to http://www.dot.ca.gov

Caltrans Metric



CONDUIT PLAN

SHEET NOTES:

1. Conduit from barrier pullbox or other equipment down into Girder, See sheet E-99.
2. For conduit to Suspend Lighting, See sheet E-229. Typ for all PB-LTG located on the north side of the roadway.
3. Roadway Barrier Receptacle, see Detail 1, sheet E-68
4. Deleted

NOTES:

1. References:
   - For typical details and locations of conduit connections to light poles, barrier outlet boxes, call boxes, overhead sign lighting, CCTV and MVDS, see E-66, E-67 and E-68.
   - TOS equipment is shown for conduit routing only. For typical details of TOS controller and devices, see sheet E-344 through E-357.
   - For types of pullboxes, splice boxes and enclosures, see sheet E-83.
   - For circuit and conduit/cable tray schedules, see sheets starting at E-401.
2. For Roadway Call Boxes refer to sheet E-396.
3. For Roadway Level Lighting Pole Schedules, see sheet E-82.
4. For Roadway Level Call Box Schedule, see sheet E-397.
5. For number of lighting fixtures (main tower lights), see lighting schedule sheets E-271 and E-272.
6. See sheets E-66 thru E-68 for conduit locations.

REGISTERED PROFESSIONAL ENGINEER MARCELL FUMIO TAKAKI No. E 8651 Exp. 9/30/2008 ELECTRICAL STATE OF CALIFORNIA

FOR REVISION ONLY

REQUEST FOR INFORMATION NOT ADDRESSED IN THIS CCO REMAIN IN FORCE

MARK	DATE	DESCRIPTIONS	BY	CH'D	CCO#
3	03/07/14	INSTALL CALL BOXES	EL	RG	341S1
2	10/01/13	CALL BOXES	RR RSB	RG	341
1	02/19/08	ELECTRICAL MODIFICATIONS	MP EL	RR	42

REVISIONS

CONTRACT CHANGE ORDER NO. 341 S1
SHEET 3 OF 14

REGISTERED PROFESSIONAL ENGINEER DAVID H. OTO No. 10699 Exp. 06/30/2015 ELECTRICAL STATE OF CALIFORNIA

FOR REVISION ONLY

SAS SUPERSTRUCTURE ROADWAY WESTBOUND
LIGHTING AND ELECTRICAL SYSTEMS
SCALE 1:200

E-49

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

DESIGN OVERSIGHT: BEHZAD GOLEMOHAMMADI
CALCULATED/DESIGNED BY: FK DATE 8/02
CHECKED BY: IAH 8/02
REVISED BY / DATE REVISED

LAST REVISION 03-07-14
DATE PLOTTED => 07-MAR-2014
TIME PLOTTED => 15:02

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80
DGN FILE =>04-0120f1_0120R03.dgn
USERNAME =>ReyesL
CU 04251
EA 0120F1

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
04	SF	80	13.2/13.9	130 R5	1204

REGISTERED ELECTRICAL ENGINEER 12/19/02 DATE

12-6-04
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER JENS ERLINGSSON No. 8249 Exp. 9/30/06 ELECTRICAL STATE OF CALIFORNIA

PB POWER, Inc.
A Parsons Brinckerhoff Company
303 Second St., Suite 700N
San Francisco, CA 94107-1317

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.

Caltrans now has a web site! To get to the web site, go to http://www.dot.ca.gov

Caltrans Metric

UTILITY PANEL UP-108 (CKT #1099)

Location: SAS SUPERSTRUCTURE SERVICE PLATFORM 8

LOAD DESCRIPTION	LTG	REC	OTH.	CB		CB	LTG	REC	OTH.	LOAD DESCRIPTION
Recept (1) Westbound North Barrier		180		20/1	1 A 2	20/1			10	CB-143A (5)
Recept (3) Westbound South Barrier		540		20/1	3 B 4	20/1			10	CB-143B
Recept (2) Service Platform #8		360		20/1	5 C 6	20/1				Spare
Recept (7) Girder		1260		20/1	7 A 8	20/1	984			Girder Ltg. (24)
Recept (5) Crossbeams		900		20/1	9 B 10	20/1	738			Crossbeam Ltg (20)
RTU #11W (Lighting & Receptacle)	105	180	150	20/1	11 C 12	20/1	1066			Girder Wing and Crossbeam Ltg (26)
Spare				20/1	13 A 14	20/1				Spare
Spare				20/1	15 B 16	20/1				Spare
RTU #11W (PLC Power Supply)			100	20/1	17 C 18	20/1				
Spare				20/1	19 A 20	20/1				
				20/1	21 B 22	20/1				
				20/1	23 C 24	20/1				
TOTAL VA	105	3420	250				2788		(5) 20	TOTAL VA

LOAD SUMMARY (INCLUDES .90 PF) (VA)

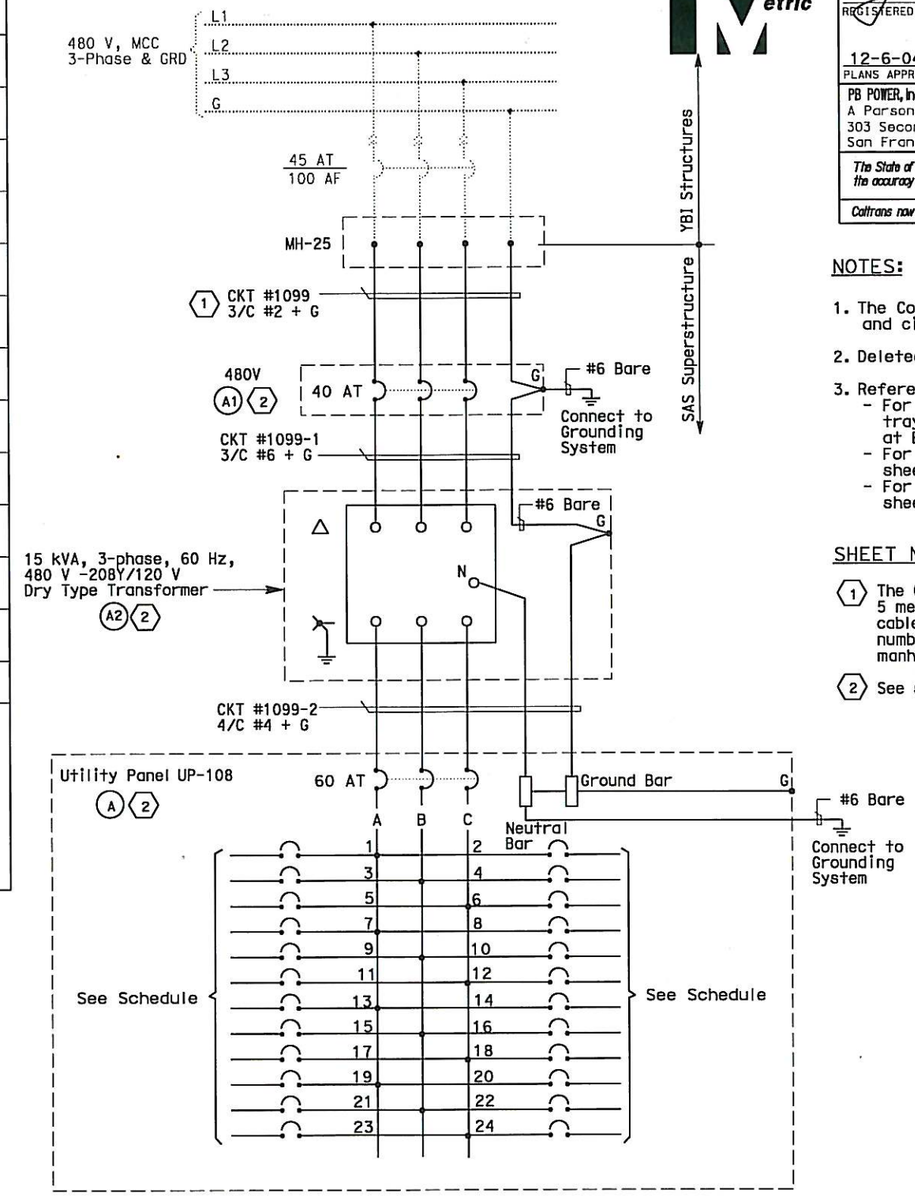
Lighting (At 100%): 2893
Gen Use (1st 10 kVA AT 100% Plus 50% of remainder): 3690 (5)

TOTAL kVA: 6.583 (5)

BALANCE (kVA)

Phase A - 2.434 (5)
Phase B - 2.188
Phase C - 1.961

VOLTAGE: 208Y/120 V
PHASE/WIRES: 3-phase, 4-wire
BUS RATING: 100 A
MAIN: 60 A
MOUNTING: Surface
K.A.I.C.: 10



NOTES:

1. The Contractor shall provide nameplates and circuit schedules as shown.
2. Deleted.
3. References:
   - For circuit and conduit/cable tray schedules, see sheets starting at E-401.
   - For pull box schedule, see sheet E-83.
   - For crossbeam lighting plan, see sheet E-119.

SHEET NOTES:

(1) The Contractor shall extend and coil 5 meters of cable in manhole 25. All cables shall be tagged with circuit numbers as shown. For location of manhole 25, see sheet E-11.

(2) See sheet E-75 for Equipment Schedule.

REQUEST FOR INFORMATION NOT ADDRESSED IN THIS CCO REMAIN IN FORCE					
5	03/07/14	INSTALL CALL BOXES	EL	RG	341S1
4	09/27/13	CALL BOXES	RR RSB	RG	341
3	02/08/13	ADDITIONAL SAS/SKYWAY MISCELLANEOUS ELECTRICAL CHANGES	RR RSB	RG	191S1
2	03/30/09	SERVICE PLATFORM ELECTRICAL CHANGES	RR MP	RG FW	55
1	03/04/08	BARRIER MODIFICATIONS	JS BM	RG SE	44
MARK	DATE	DESCRIPTIONS	BY	CH'D	CCO#
		REVISIONS			

CONTRACT CHANGE ORDER NO. 341 S1
SHEET 4 OF 14

REGISTERED PROFESSIONAL ENGINEER S. A. ESTOQUE, JR. No. E-10151 Exp. 12/31/2008 ELECTRICAL STATE OF CALIFORNIA
FOR REVISION ONLY (1)

REGISTERED PROFESSIONAL ENGINEER FADI WALIEDDINE No. 11465 Exp. 12/31/2009 ELECTRICAL STATE OF CALIFORNIA
FOR REVISION ONLY (2)

REGISTERED PROFESSIONAL ENGINEER DAVID H. OTO No. 10699 Exp. 06/30/2015 ELECTRICAL STATE OF CALIFORNIA
FOR REVISION ONLY (3)(4)(5)

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

DETAILS
SAS SUPERSTRUCTURE ROADWAY WESTBOUND
PANEL UP-108 SCHEDULE
NO SCALE

E-63

EJL	2/04		
REVISED BY	DATE REVISED		
DATE 08/01	11/01		
JP	BL		
CALCULATED/DESIGNED BY	CHECKED BY		
DESIGN OVERSIGHT	BEHZAD GOLEMOHAMMADI		

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION 03-07-14
DATE PLOTTED => 07-MAR-2014
TIME PLOTTED => 15:02

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

DGN FILE =>04-0120f1_0130R05.dgn
USERNAME =>ReyesL

CU 04251 | EA 0120F1

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
04	SF	80	13.2/13.9	131 R3	1204

REGISTERED ELECTRICAL ENGINEER 12/19/02 DATE

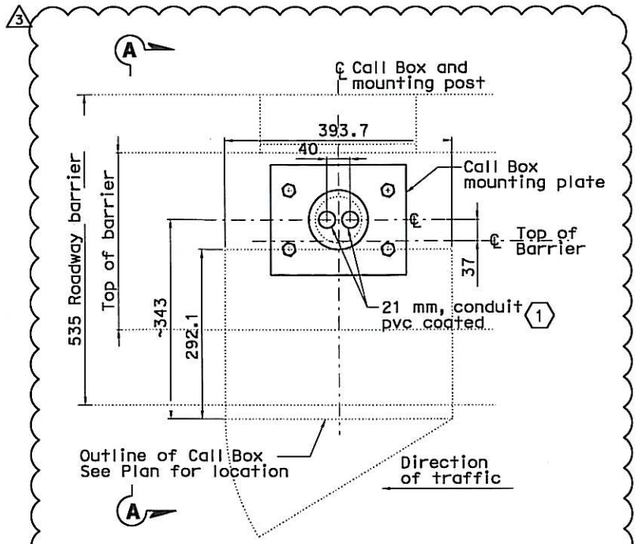
12-6-04
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER JENS ERLINGSSON No. 8249 Exp. 9/30/06 ELECTRICAL STATE OF CALIFORNIA

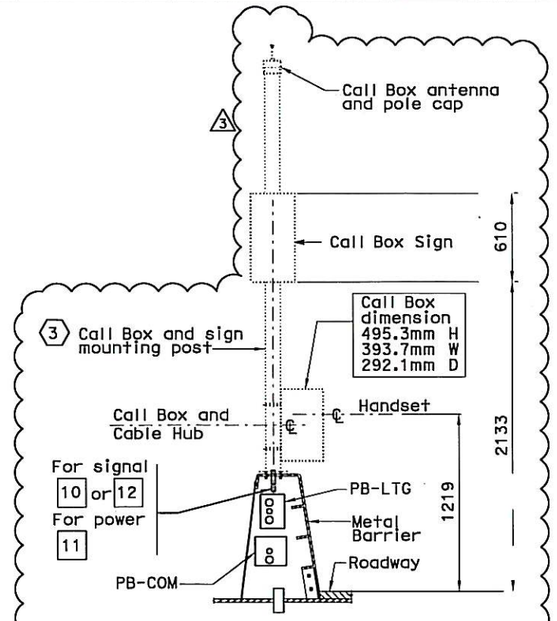
PB POWER, Inc.
A Parsons Brinckerhoff Company
303 Second St., Suite 700N
San Francisco, CA 94107-1317

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.

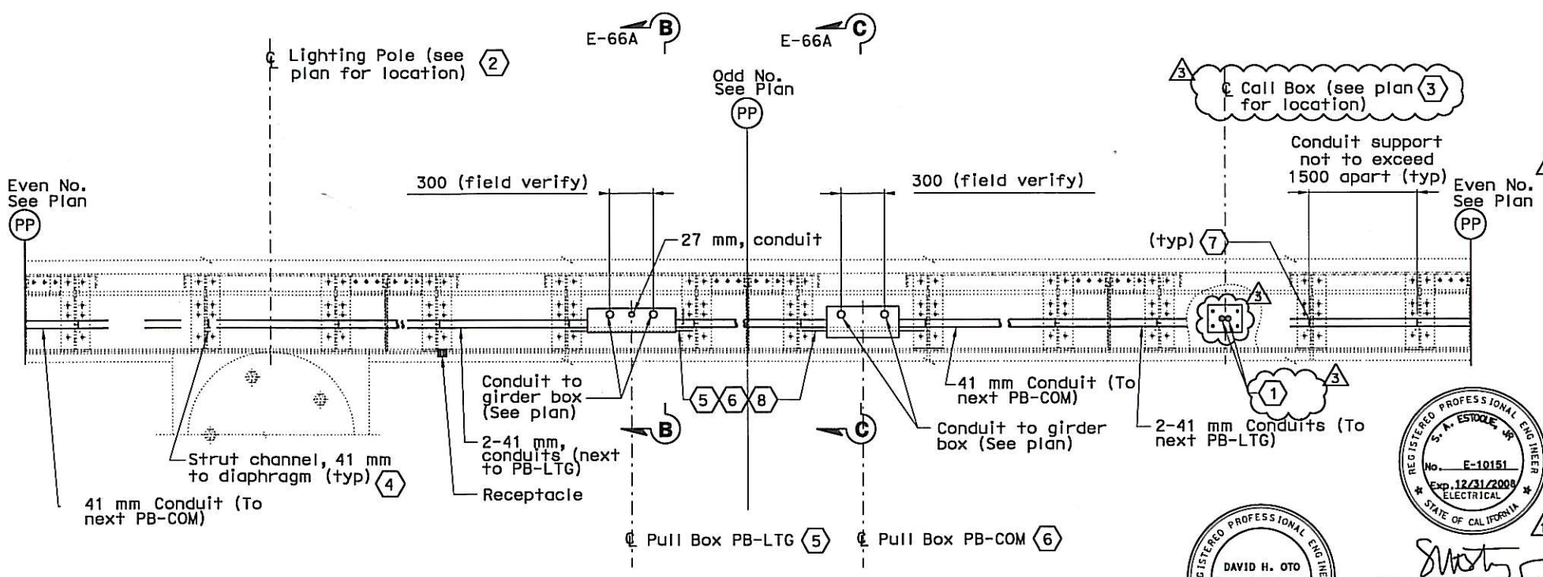
Caltrans now has a web site! To get to the web site, go to http://www.dot.ca.gov



PLAN
CONDUIT STUB AND MOUNTING OF CALL BOX AT BARRIER
SCALE 1:4



SECTION A-A
SCALE 1:20



PLAN-TYPICAL PULL BOX AND CONDUIT LOCATIONS
(CONDUITS INSIDE STEEL BARRIER TYPE 732 MODIFIED)
SCALE 1:20

NOTES:

1. References:
   - For pull box schedule, see Sheet E-83.
   - For light pole schedule, see Sheet E-82.
   - For call box schedule, see Sheet E-397
2. For location of pull boxes inside girder, see Sheet E-96 through E-101.
3. For mounting hole detail of call box on roadway metal barrier, see sheet AS-13. 3

SHEET NOTES:

1. Bond grounding bushing to pole ground lug with #6 bare copper wire. 3
2. For conduit location inside lighting pole, see Sheet E-68.
3. For call box mounting detail, see AS Sheets. 3
4. For typical conduit support locations inside barrier diaphragm, see Details 1, 2, and 3 of Sheet E-66A.
5. Locate Pull Box at approximate center of diaphragm. For typical PB-LTG and conduit support inside barrier diaphragm, see Details 4 and 6 sheet E-66A.
6. Locate Pull Box at approximate center of diaphragm. For typical PB-COM and conduit support inside barrier diaphragm, see Detail 5 sheet E-66A.
7. Provide conduit clamp for each conduit.
8. Strut channel, 41 mm. support for pull box and installed by Contractor.
9. Deleted. 3

REGISTERED PROFESSIONAL ENGINEER S. A. ESTOQUE, JR. No. E-10151 Exp. 12/31/2008 ELECTRICAL STATE OF CALIFORNIA 1

FOR REVISION ONLY

REGISTERED PROFESSIONAL ENGINEER DAVID H. OTO No. 10699 Exp. 06/30/2015 ELECTRICAL STATE OF CALIFORNIA 2 3

FOR REVISION ONLY

REQUEST FOR INFORMATION NOT ADDRESSED IN THIS CCO REMAIN IN FORCE

MARK	DATE	DESCRIPTIONS	BY	CH'D	CCO#
3	03/07/14	INSTALL CALL BOXES	EL	RG	341S1
2	10/01/13	CALL BOXES	RR RSB	RG	341
1	03/04/08	BARRIER MODIFICATIONS	JS BM	RG SE	44

REVISIONS

CONTRACT CHANGE ORDER NO. 341 S1
SHEET 5 OF 14

DETAILS
SAS SUPERSTRUCTURE ROADWAY CONDUIT AND PULL BOX LOCATIONS
SCALE AS NOTED

E-66

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

DGN FILE =>04-0120F1_0131R03.dgn
USERNAME =>ReyesL

CU 04251 | EA 0120F1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

DESIGN OVERSIGHT: BEHZAD GOLEMOHAMMADI

CALCULATED/DESIGNED BY: FK | DATE 11/02 | REVISED BY
CHECKED BY: IAH | 11/02 | DATE REVISED

LAST REVISION 03-07-14 | DATE PLOTTED => 07-MAR-2014 | TIME PLOTTED => 15:02

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
04	SF	80	13.2/13.9	191 R6	1204

12/19/02
REGISTERED ELECTRICAL ENGINEER DATE

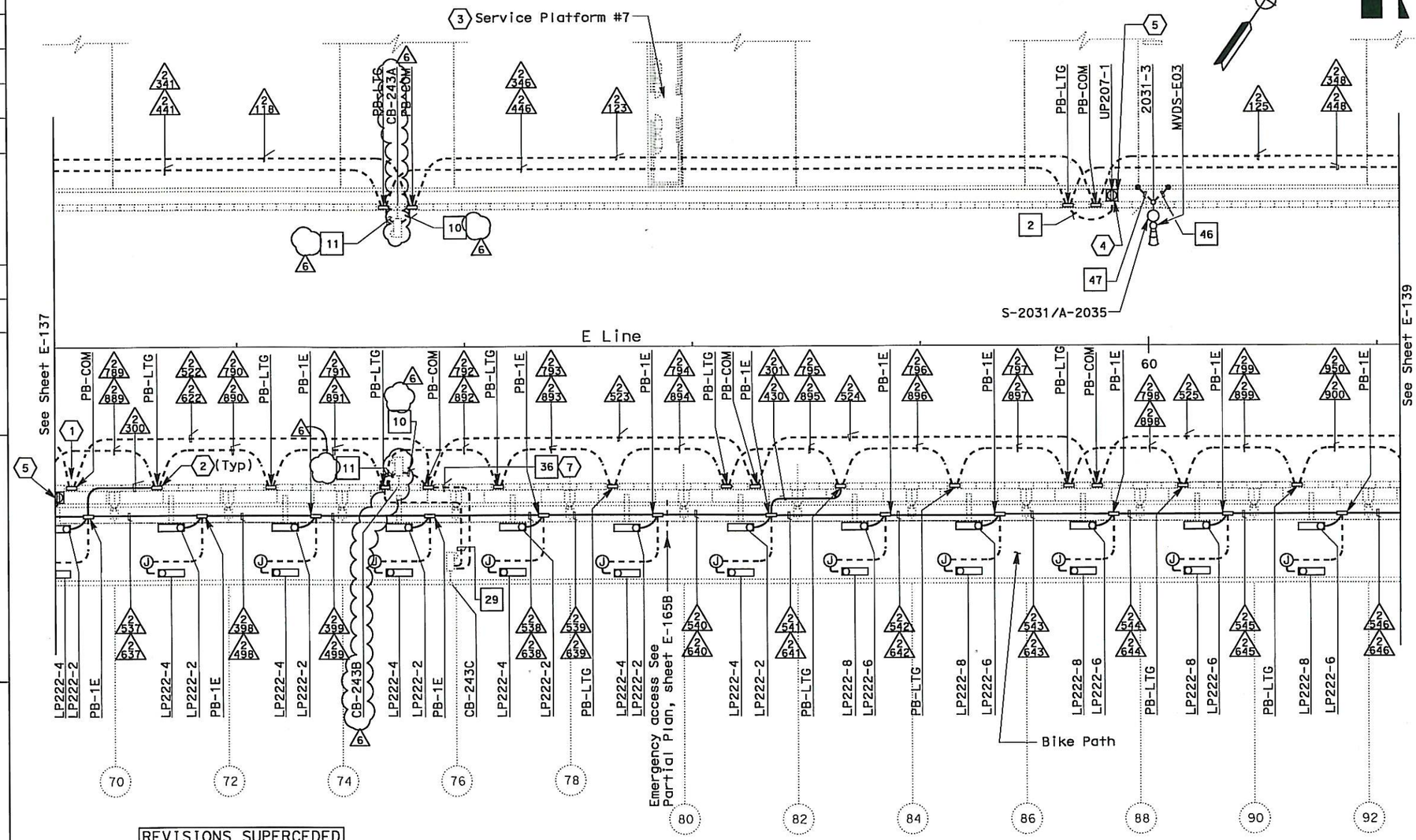
12-6-04
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER JENS ERLINGSSON No. 8249 Exp. 9/30/06 ELECTRICAL STATE OF CALIFORNIA

PB POWER, Inc.
A Parsons Brinckerhoff Company
303 Second St., Suite 700N
San Francisco, CA 94107-1317

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.

Caltrans now has a web site! To get to the web site, go to: http://www.dot.ca.gov



SHEET NOTES:

1. Conduit from barrier pullbox or other equipment down into Girder Box, see sheet E-184.
2. For conduit to tower and suspension cable lighting, see sheet E-229.
3. Contractor shall furnish and install UP-207 and LP-222 per sheet E-74. For complete scope of work on platform and other related work not shown on this sheet, see Electrical Special Provisions.
4. Conduit down to girder for MVDS, see sheet E-184.
5. Roadway Barrier Receptacle, see Detail 1, sheet E-162.
6. Deleted.
7. Bike path call box is wireless. Communication cable shall be unterminated, coiled and taped inside call box for future use, if installed.

NOTES:

1. References:
   - For typical details and locations of conduit connections to light poles, barrier outlet boxes, call boxes, overhead sign lighting, CMS, CCTV and MVDS, see sheets E-160 thru E-162 and E-169.
   - TOS equipment is shown for conduit routing only. For typical details of TOS controller and devices, see sheets E-344 through E-357.
   - For types of pull boxes, splice boxes and enclosures, see sheet E-169.
   - For circuit and conduit/cable tray schedules, see sheets starting at E-401.
2. For Roadway Level Call Boxes, refer to sheet E-396.

   For Roadway level, Bike Path and Belvedere Lighting Fixture Schedules, see sheets E-146, E-147 and E-165.
4. For Roadway Level and Bike Path Call Box Schedule, see sheet E-397.
5. For number of lighting fixtures (main tower lights) see lighting schedule sheets E-271 and E-272.
6. All conduits and fittings routed exposed between the Bike Path and the roadway shall be galvanized rigid steel, PVC coated.
7. See sheets E-160 thru E-165 for conduit locations.

REVISIONS SUPERCEDED

REQUEST FOR INFORMATION NOT ADDRESSED IN THIS CCO REMAIN IN FORCE

MARK	DATE	DESCRIPTIONS	BY	CH'D	CCO#
6	03/07/14	INSTALL CALL BOXES	EL	RG	341S1
5	10/01/13	CALL BOXES	RR RSB	RG	341
4	04/15/11	BIKE PATH CONDUIT	TW	RG	73
3	06/11/10	BIKE PATH CONDUIT	TW	RG	73
2	12/15/08	BIKE PATH DETAILS	TW	RG FW	99
1	02/19/08	ELECTRICAL MODIFICATIONS	MP EL	RR	42

REVISIONS

CONTRACT CHANGE ORDER NO. 341 S1
SHEET 6 OF 14

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.

SAS SUPERSTRUCTURE - CONDUIT PLAN

REGISTERED PROFESSIONAL ENGINEER HARRELL FUNIO TARKET No. E 8651 Exp. 9/30/2008 ELECTRICAL STATE OF CALIFORNIA
FOR REVISION ONLY 1

REGISTERED PROFESSIONAL ENGINEER FADI WALIEDDINE No. 11465 Exp. 12/31/2009 ELECTRICAL STATE OF CALIFORNIA
FOR REVISION ONLY 2

REGISTERED PROFESSIONAL ENGINEER SYN YEE CHIN No. 18186 Exp. 09/30/2011 ELECTRICAL STATE OF CALIFORNIA
FOR REVISION ONLY 3 4

REGISTERED PROFESSIONAL ENGINEER DAVID H. OTO No. 10699 Exp. 06/30/2015 ELECTRICAL STATE OF CALIFORNIA
FOR REVISION ONLY 5 6

SAS SUPERSTRUCTURE ROADWAY EASTBOUND
LIGHTING AND ELECTRICAL SYSTEMS

SCALE 1:200

E-138

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

DESIGN OVERSIGHT: BEHZAD GOLEMOHAMMADI

CALCULATED/DESIGNED BY: EDC — DATE 08/02 — REVISED BY
CHECKED BY: CYF — 08/02 — DATE REVISED

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

DGN FILE =>04-0120f1_0191R06.dgn
USERNAME =>ReyesL

CU 04251 | EA 0120F1

LAST REVISION 03-07-14 | DATE PLOTTED => 07-MAR-2014 | TIME PLOTTED => 15:03

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
04	SF	80	13.2/13.9	203 R6	1204

REGISTERED ELECTRICAL ENGINEER 12/19/02 DATE

12-6-04
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER JENS ERLINGSSON No. 8249 Exp. 9/30/06 ELECTRICAL STATE OF CALIFORNIA

PB POWER, Inc.
A Parsons Brinckerhoff Company
303 Second St., Suite 700N
San Francisco, CA 94107-1317

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.

Caltrans now has a web site! To get to the web site, go to http://www.dot.ca.gov

Caltrans Metric

UTILITY PANEL UP-208 (CKT #2099)

Location: SAS SUPERSTRUCTURE SERVICE PLATFORM #8

LOAD DESCRIPTION	LTG	REC	OTH.	CB		CB	LTG	REC	OTH.	LOAD DESCRIPTION
Recept (3) Eastbound North Barrier		540		20/1	1 A 2	20/1			10	CB-243A (6)
Spare				20/1	3 B 4	20/1			10	CB-243B
Recept (2) Service Platform #8		360		20/1	5 C 6	20/1			20	CB-243C, CB-244C
Recept (5) Girder		900		20/1	7 A 8	20/1	984			Girder Lighting (24)
RTU-#11E (PLC Power Supply)			100	20/1	9 B 10	20/1				
RTU-#11E (Lighting & Receptacle)	105	180	150	20/1	11 C 12	30/1			2880	Fog Detection Panel FDP-6
Spare				20/1	13 A 14	20/1				Spare
Navigation Relay Cabinet # NAP-8			600	20/1	15 B 16	20/1				
Spare				20/1	17 C 18	20/1				
				20/1	19 A 20	20/1				
				20/1	21 B 22	20/1				
				20/1	23 C 24	20/1				
TOTAL VA	105	1980	850				984		(6) 2920	TOTAL VA

LOAD SUMMARY (INCLUDES .90 PF) (VA)

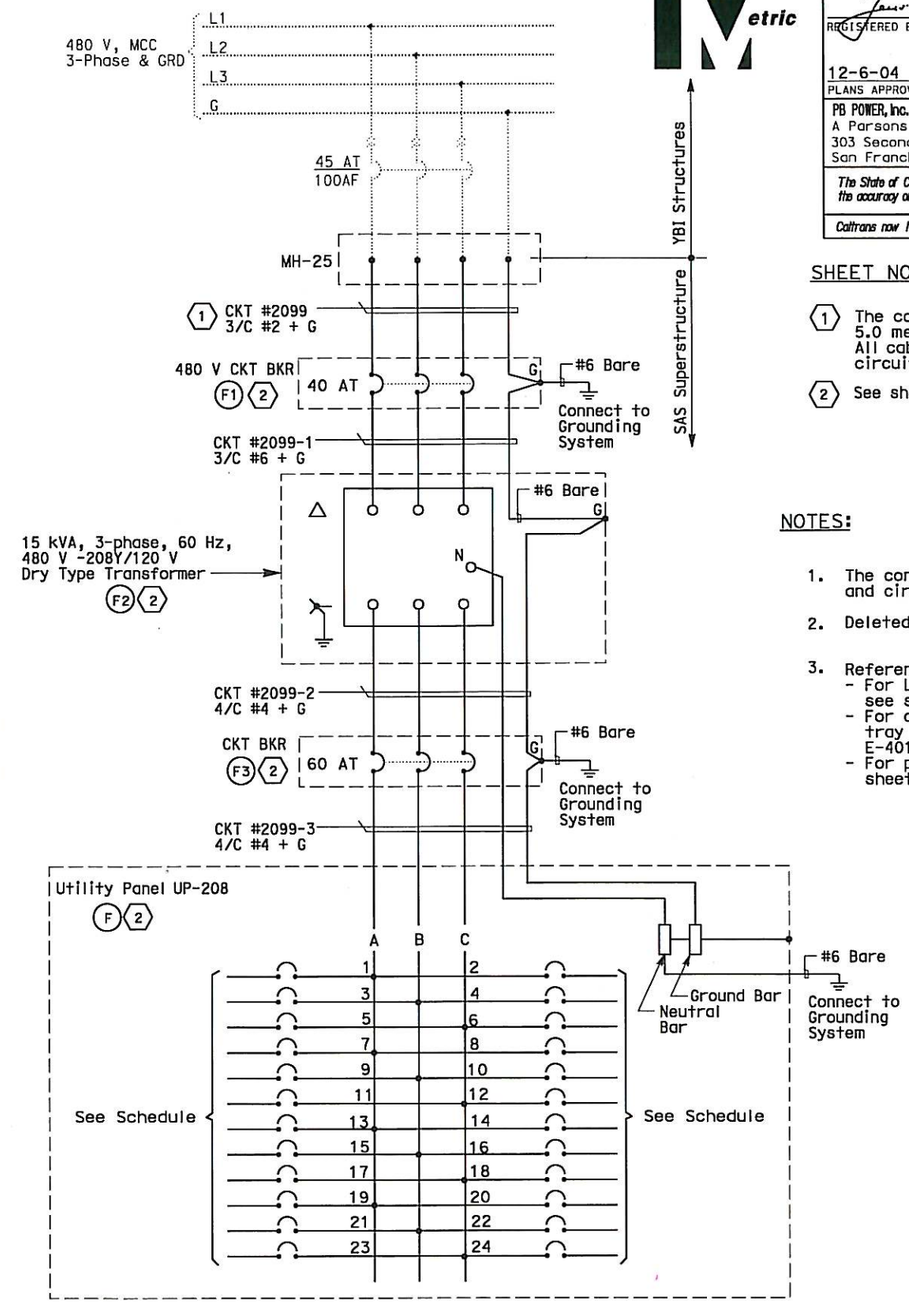
Lighting (At 100%): 1089
Gen Use (1st 10 kVA at 100% Plus 50% of remainder): 5750 (6)

TOTAL kVA: 6.839 (6)

BALANCE (kVA)

Phase A - 2.434
Phase B - 0.710 (6)
Phase C - 3.695

VOLTAGE: 208Y/120 V
PHASE/WIRES: 3-phase, 4-wire
BUS RATING: 100 A
MAIN: MAIN LUGS ONLY
MOUNTING: Surface
K.A.I.C.: 10



SHEET NOTES:

(1) The contractor shall extend and coil 5.0 meters of cable in manhole 25 All cables shall be tagged with circuit numbers as shown.

(2) See sheet E-75 for Equipment Schedule.

NOTES:

1. The contractor shall provide nameplates and circuit schedules as shown.
2. Deleted.
3. References:
   - For LVCC-B single line diagram, see sheets E-32 thru E-34.
   - For circuit and conduit/cable tray schedules, see sheets starting at E-401.
   - For pull box schedule, see sheet E-169.

REGISTERED PROFESSIONAL ENGINEER DAVID H. OTO No. 10699 Exp. 06/30/2015 ELECTRICAL STATE OF CALIFORNIA

(4)(5)(6)

FOR REVISION ONLY

REGISTERED PROFESSIONAL ENGINEER S. A. ESTOQUE, JR. No. E-10151 Exp. 12/31/2008 ELECTRICAL STATE OF CALIFORNIA

FOR REVISION ONLY (1)

REGISTERED PROFESSIONAL ENGINEER FADI WALIEDDINE No. 11465 Exp. 12/31/2009 ELECTRICAL STATE OF CALIFORNIA

FOR REVISION ONLY (2)(3)

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

REQUEST FOR INFORMATION NOT ADDRESSED IN THIS CCO REMAIN IN FORCE

MARK	DATE	DESCRIPTIONS	BY	CH'D	CCO#
(6)	03/07/14	INSTALL CALL BOXES	EL	RG	341S1
(5)	09/27/13	CALL BOXES	RR RSB	RG	341
(4)	02/08/13	ADDITIONAL SAS/SKYWAY MISCELLANEOUS ELECTRICAL CHANGES	RR	RG	191S1
(3)	04/10/09	ELECTRICAL WARNING SYSTEMS	RY RR	RG FW	61
(2)	03/30/09	SERVICE PLATFORM ELECTRICAL CHANGES	RR MP	RG FW	55
(1)	03/04/08	BARRIER MODIFICATIONS	JS BM	RG SE	44

REVISIONS

CONTRACT CHANGE ORDER NO. 341 S1
SHEET 7 OF 14

DETAILS
SAS SUPERSTRUCTURE ROADWAY EASTBOUND PANEL UP-208 SCHEDULE
NO SCALE

E-154

DATE	REVISED BY	DATE REVISED
	EJL	2/04

CALCULATED/DESIGNED BY — CHECKED BY

DESIGN OVERSIGHT — BEHZAD GOLEMOHAMMADI

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION — Caltrans

LAST REVISION 03-07-14 — DATE PLOTTED => 07-MAR-2014 TIME PLOTTED => 15:03

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

DGN FILE =>04-0120f1_0203R06.dgn
USERNAME =>ReyesL

CU 04251 | EA 0120F1

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
04	SF	80	13.2/13.9	207 R3	1204

REGISTERED ELECTRICAL ENGINEER 12/19/02 DATE

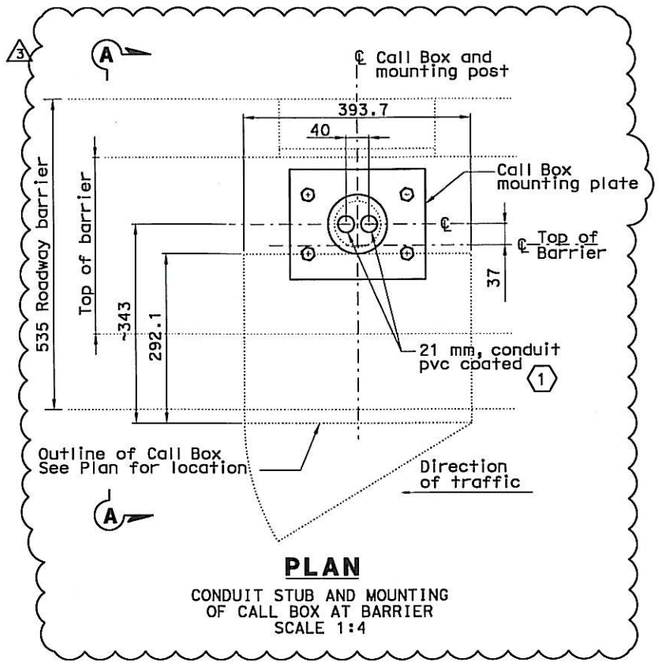
12-6-04
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER JENS ERLINGSSON No. 8249 Exp. 9/30/06 ELECTRICAL STATE OF CALIFORNIA

PB POWER, Inc.
A Parsons Brinckerhoff Company
303 Second St., Suite 700N
San Francisco, CA 94107-1317

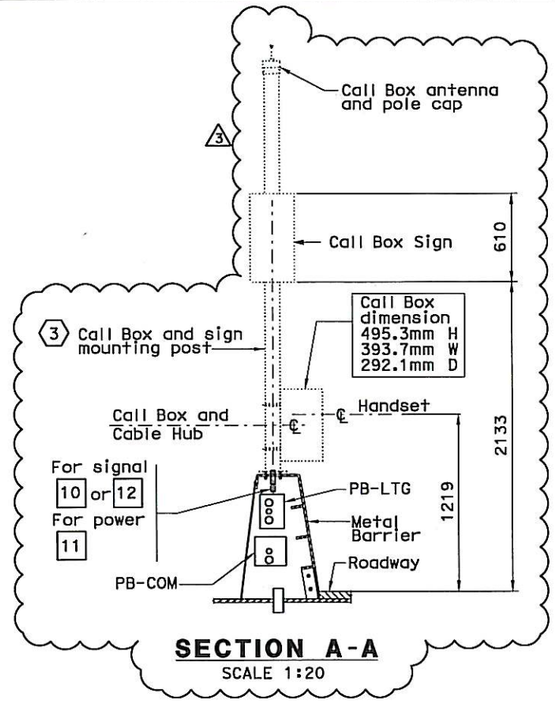
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Caltrans now has a web site! To get to the web site, go to http://www.dot.ca.gov



PLAN

CONDUIT STUB AND MOUNTING OF CALL BOX AT BARRIER
SCALE 1:4



SECTION A-A

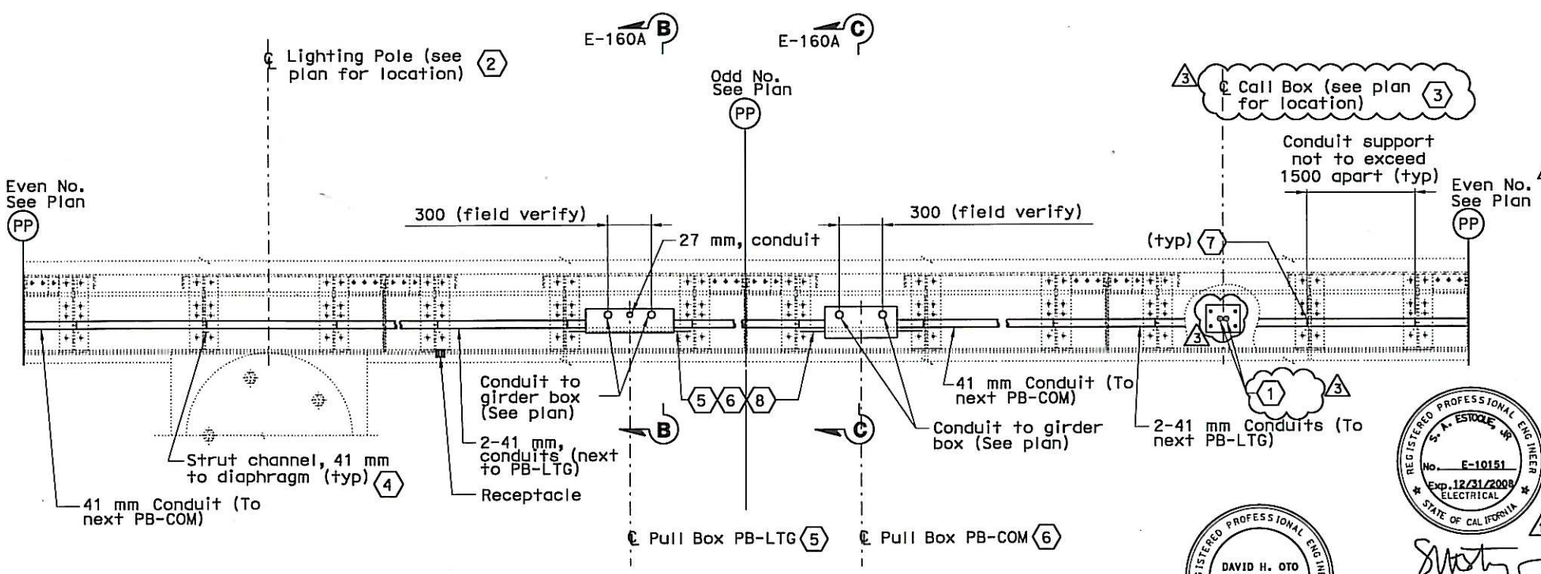
SCALE 1:20

NOTES:

1. References:
   - For pull box schedule, see Sheet E-169.
   - For light pole schedule, see Sheet E-166.
   - For call box schedule, see Sheet E-397
2. For location of pull boxes inside girder, see Sheet E-35 through E-140.
3. For mounting hole detail for call box on roadway metal barrier, see sheet AS-13. (3)

SHEET NOTES:

1. Bond grounding bushing to pole ground lug with #6 bare copper wire. (3)
2. For conduit location inside lighting pole, see Sheet E-161.
3. For call box mounting detail, see AS Sheets. (3)
4. For typical conduit support locations inside barrier diaphragm, see Details 1, 2, and 3 of Sheet E-160A.
5. Locate Pull Box at approximate center of diaphragm. For typical PB-LTG and conduit support inside barrier diaphragm, see Details 4 and 6 sheet E-160A.
6. Locate Pull Box at approximate center of diaphragm. For typical PB-COM and conduit support inside barrier diaphragm, see Detail 5 sheet E-160A.
7. Provide conduit clamp for each conduit.
8. Strut channel, 41 mm. support for pull box and installed by Contractor.
9. Deleted. (3)



PLAN-TYPICAL PULL BOX AND CONDUIT LOCATIONS

(CONDUITS INSIDE STEEL BARRIER TYPE 732 MODIFIED)
SCALE 1:20

REGISTERED PROFESSIONAL ENGINEER DAVID H. OTO No. 10699 Exp. 06/30/2015 ELECTRICAL STATE OF CALIFORNIA

FOR REVISION ONLY 2 3

REGISTERED PROFESSIONAL ENGINEER S. A. ESTOQUE, JR. No. E-10151 Exp. 12/31/2008 ELECTRICAL STATE OF CALIFORNIA

FOR REVISION ONLY 1

REQUEST FOR INFORMATION NOT ADDRESSED IN THIS CCO REMAIN IN FORCE					
3	03/07/14	INSTALL CALL BOXES	EL	RG	341S1
2	10/01/13	CALL BOXES	RR RSB	RG	341
1	03/04/08	BARRIER MODIFICATIONS	JS BM	RG SE	44
MARK	DATE	DESCRIPTIONS	BY	CH'D	CCO#
		REVISIONS			

CONTRACT CHANGE ORDER NO. 341 S1
SHEET 8 OF 14

DETAILS
SAS SUPERSTRUCTURE ROADWAY
CONDUIT AND PULL BOX LOCATIONS
SCALE AS NOTED

E-160

DESIGN OVERSIGHT	BEHZAD GOLEMOHAMMADI	CALCULATED/DESIGNED BY	FK
		CHECKED BY	IAH
		REVISED BY	DATE 11/02
		DATE REVISED	11/02

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

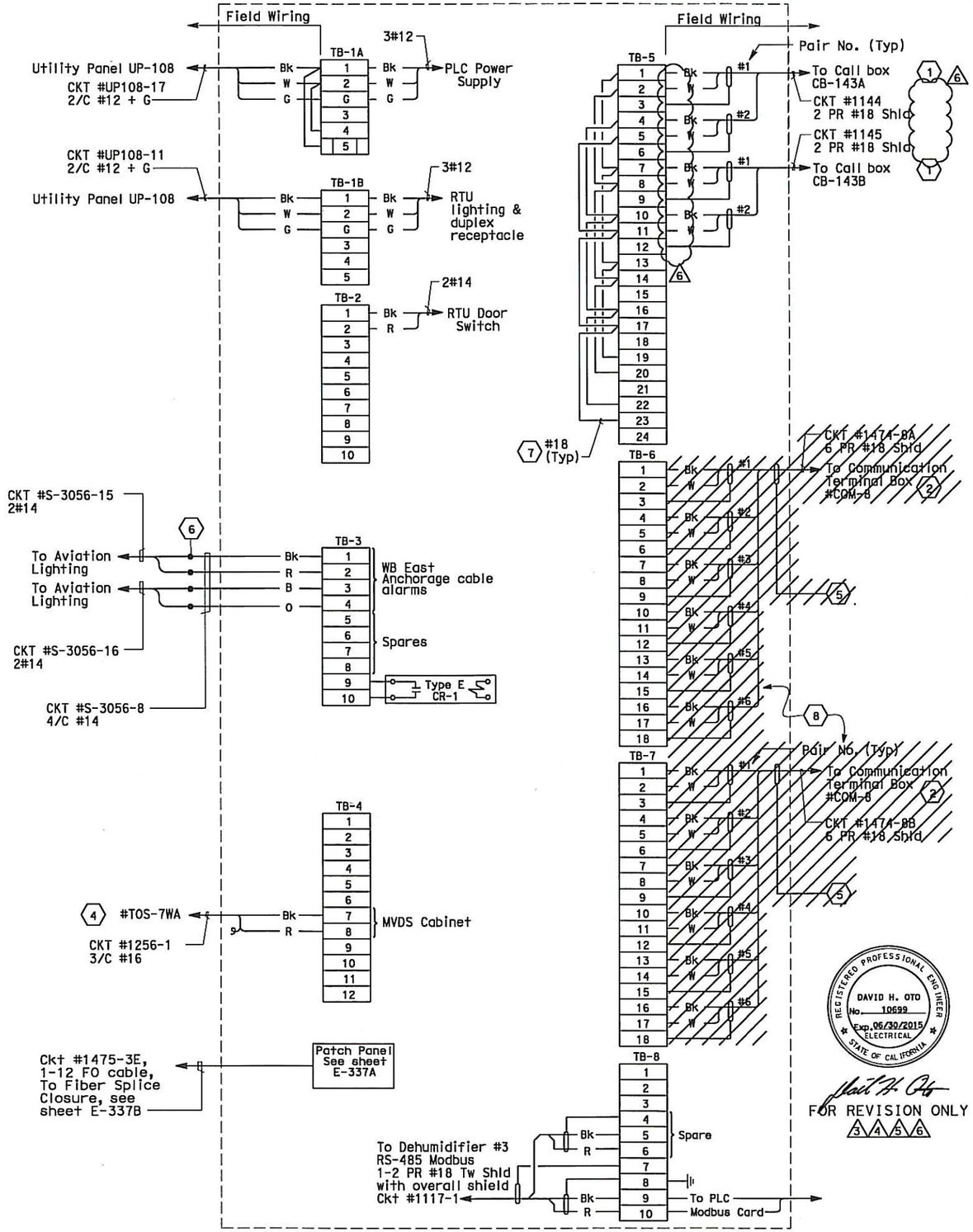
LAST REVISION 03-07-14
DATE PLOTTED => 10-MAR-2014
TIME PLOTTED => 11:31

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

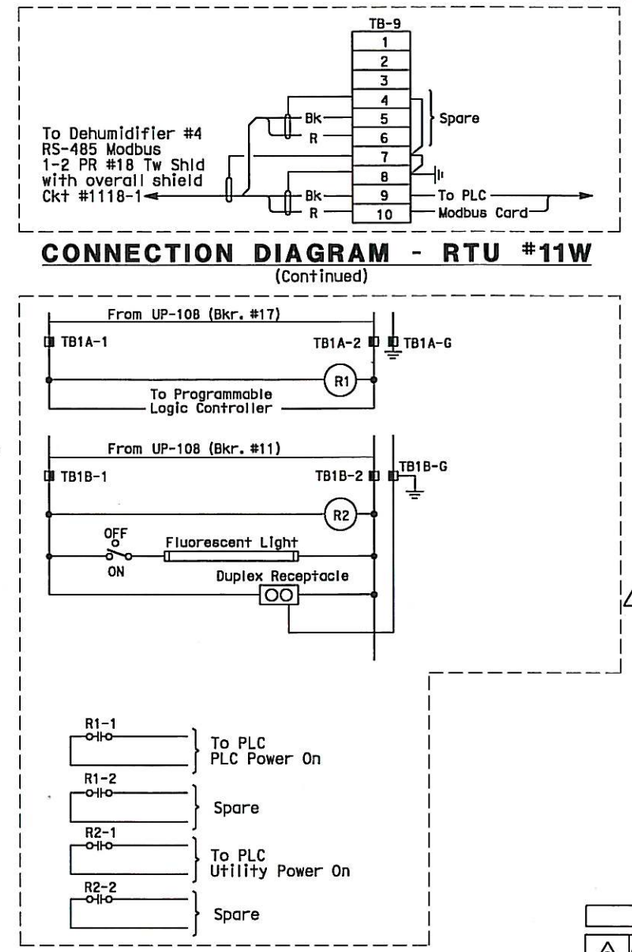
FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

DGN FILE =>04-0120f1_0207R03.dgn
USERNAME =>Liorico

CU 04251 | EA 0120F1



CONNECTION DIAGRAM - RTU #11W



ELEMENTARY DIAGRAM - RTU #11W

(Continued)

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
04	SF	80	13.2/13.9	313 R6	1204

12/19/02
REGISTERED ELECTRICAL ENGINEER DATE

12-6-04
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER JENS ERLINGSSON No. 8249 Exp. 9/30/06 ELECTRICAL STATE OF CALIFORNIA

PB POWER, Inc.
A Parsons Brinckerhoff Company
303 Second St., Suite 700N
San Francisco, CA 94107-1317

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.

Caltrans now has a web site! To get to the web site, go to http://www.dot.ca.gov

SHEET NOTES:

1. For connection diagram to call boxes, see sheet E-398.
2. ~~For connection diagram to scada system, see Table A, sheet E-325.~~
3. For connection diagram to dehumification controllers, see sheets E-79.
4. Connections to panel door switch. For remote alarm status to RTU.
5. ~~Field to tape cable overall shield wire.~~
6. Conductors spliced inside junction box PB-2A located inside the girder.
7. The Contractor shall install resistors, approximately equal to the impedance (Zo) of the twised pairs, at the extreme ends of the multidrop network.
8. Abandon in place (hatched items) if installed.
9. Deleted.

NOTES:

1. All spare conductors shall be coiled and taped at conductor ends unless terminated.
2. Terminate cable shields to low level ground bus.
3. References:
   - For UP-108 panel schedule, see sheet E-63.
   - For RTU #11W panel layout, see sheet E-320.
   - For circuit and conduit/cable tray schedules, see sheets starting at E-401.

REQUEST FOR INFORMATION NOT ADDRESSED IN THIS CCO REMAIN IN FORCE

MARK	DATE	DESCRIPTIONS	BY	CH'D	CCO#
6	03/07/14	INSTALL CALL BOXES	EL	RG	341S1
5	09/27/13	CALL BOXES	RR RSB	RG	341
4	07/12/13	MISCELLANEOUS SCADA CHANGES	RR RSB	RG	305
3	05/13/13	MISCELLANEOUS SCADA CHANGES	RR RSB	RG	305
2	02/01/10	DEHUMIDIFIER SCADA INTERFACE	JE FW	RG	130
1	03/04/08	BARRIER MODIFICATIONS	JS BM	RG SE	44

REVISIONS

REGISTERED PROFESSIONAL ENGINEER DAVID H. OTO No. 10699 Exp. 06/30/2015 ELECTRICAL STATE OF CALIFORNIA
FOR REVISION ONLY 3 4 5 6

REGISTERED PROFESSIONAL ENGINEER S. A. ESTOOLE, JR. No. E-10151 Exp. 12/31/2008 ELECTRICAL STATE OF CALIFORNIA
FOR REVISION ONLY 1

REGISTERED PROFESSIONAL ENGINEER FADI WALIEDDINE No. 11465 Exp. 12/31/2011 ELECTRICAL STATE OF CALIFORNIA
FOR REVISION ONLY 2

CONTRACT CHANGE ORDER NO. 341 S1
SHEET 9 OF 14

DETAILS
SCADA REMOTE TERMINAL UNIT SYSTEM
RTU #11W ELEMENTARY AND CONNECTION DIAGRAM

NO SCALE

E-332

REVISED BY	DATE REVISED
EDC	10/01
JL	12/01

CALCULATED/DESIGNED BY
CHECKED BY

DESIGN OVERSIGHT
BEHZAD GOLEMOHAMMADI

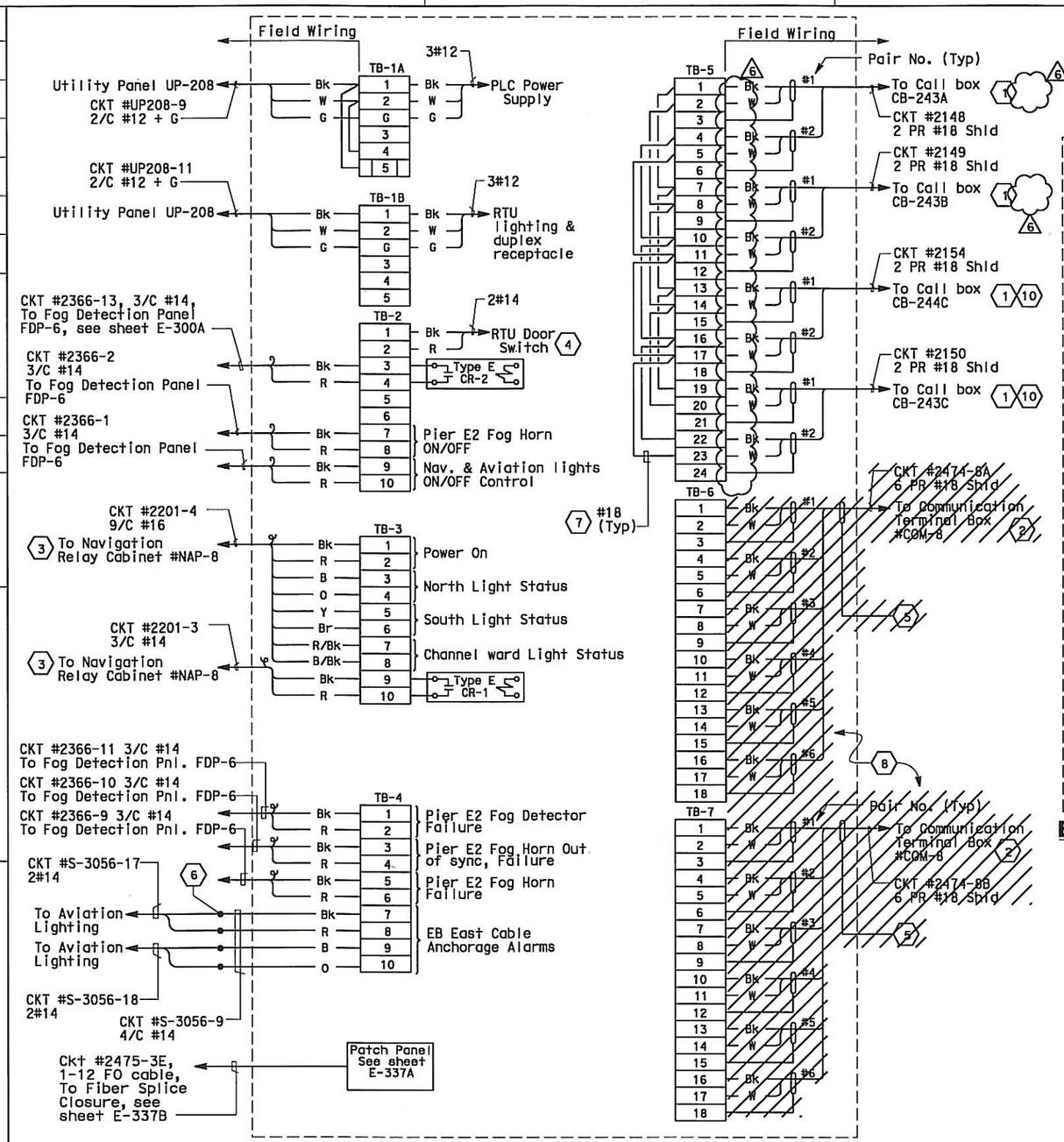
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

LAST REVISION 03-07-14
DATE PLOTTED => 07-MAR-2014
TIME PLOTTED => 15:03

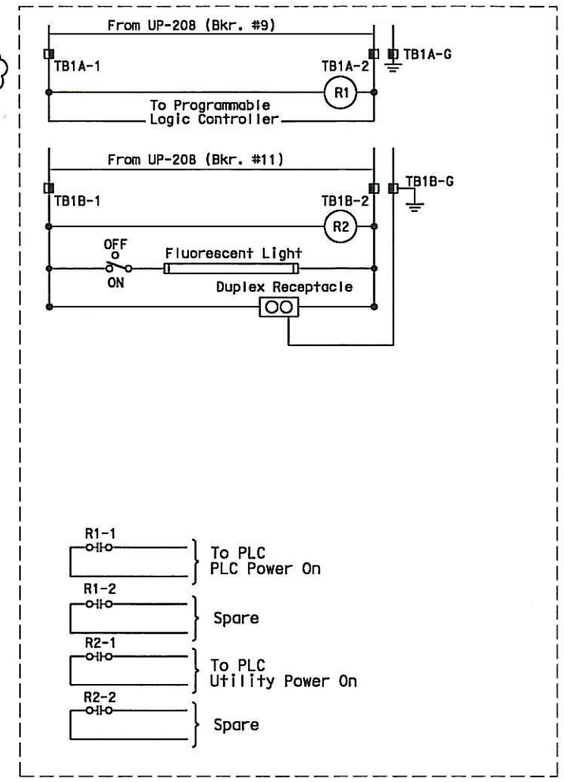
FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

DGN FILE =>04-0120F1_0313R06.dgn
USERNAME =>ReyesL

CU 04251
EA 0120F1



CONNECTION DIAGRAM - RTU #11E



ELEMENTARY DIAGRAM - RTU #11E

REQUEST FOR INFORMATION NOT ADDRESSED IN THIS CCO REMAIN IN FORCE					
6	03/07/14	INSTALL CALL BOXES	EL	RG	341S1
5	09/27/13	CALL BOXES	RR RSB	RG	341
4	07/12/13	MISCELLANEOUS SCADA CHANGES	RR RSB	RG	305
3	05/13/13	MISCELLANEOUS SCADA CHANGES	RR RSB	RG	305
2	08/03/09	ELECTRICAL WARNING SYSTEMS	RG	JE FW	61
1	03/04/08	BARRIER MODIFICATIONS	JS BM	RG SE	44
MARK	DATE	DESCRIPTIONS	BY	CH'D	CCO#
		REVISIONS			

CONTRACT CHANGE ORDER NO. 341 S1
SHEET 10 OF 14

Caltrans Metric

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
04	SF	80	13.2/13.9	314 R6	1204

12/19/02
REGISTERED ELECTRICAL ENGINEER DATE

12-6-04
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER JENS ERLINGSSON No. 8249 Exp. 9/30/06 ELECTRICAL STATE OF CALIFORNIA

PB POWER, Inc.
A Parsons Brinckerhoff Company
303 Second St., Suite 700N
San Francisco, CA 94107-1317

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.

Caltrans now has a web site! To get to the web site, go to http://www.dot.ca.gov

SHEET NOTES:

1. For connection diagram to call boxes, see sheet E-400.
2. ~~For connection diagram to scada system, see table A, sheet E-325.~~
3. For connection diagram to navigation system, see sheet E-303.
4. Connections to panel door switch. For remote alarm status to RTU.
5. ~~Field to tape cable overall shield wire.~~
6. Conductors spliced inside junction box PB-2A located inside the girder.
7. The Contractor shall install resistors, approximately equal to the impedance (Zo) of the twisted pairs, at the extreme ends of the multidrop network.
8. Abandon in place (hatched items) if installed.
9. Deleted.
10. Bike path call box is wireless. Communication cable shall be unterminated, coiled and taped inside RTU cabinet for future use, if installed.

NOTES:

1. All spare conductors shall be coiled and taped at conductor ends unless terminated.
2. Terminate cable shields to low level ground bus.
3. References:
   - For Up-208 panel schedule, see sheet E-154.
   - For navigation system elementary diagram, see sheet E-298.
   - For RTU #11E panel layout, see sheet E-320.
   - For circuit and conduit/cable tray schedules, see sheets starting at E-401.

REGISTERED PROFESSIONAL ENGINEER S. A. ESTOQUE, JR. No. E-10151 Exp. 12/31/2008 ELECTRICAL STATE OF CALIFORNIA

FOR REVISION ONLY

REGISTERED PROFESSIONAL ENGINEER DAVID H. OTO No. 10699 Exp. 06/30/2015 ELECTRICAL STATE OF CALIFORNIA

FOR REVISION ONLY

REGISTERED PROFESSIONAL ENGINEER FADI WALIEDDINE No. 11465 Exp. 12/31/2009 ELECTRICAL STATE OF CALIFORNIA

FOR REVISION ONLY

DETAILS
SCADA REMOTE TERMINAL UNIT SYSTEM
RTU #11E ELEMENTARY AND CONNECTION DIAGRAM
NO SCALE

E-333

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
DESIGN OVERSIGHT
BEHZAD GOLEMOHAMMADI

CALCULATED/ DESIGNED BY	CHECKED BY	REVISED BY	DATE REVISED
EDC	JL	JL	10/01

DATE PLOTTED => 07-MAR-2014
TIME PLOTTED => 15:03
LAST REVISION 03-07-14

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80
DGN FILE =>04-0120f1_0314R06.dgn
USERNAME =>ReyesL
CU 04251
EA 0120F1

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
04	SF	80	13.2/13.9	351 R4	1204

Caltrans Metric

12/19/02
REGISTERED ELECTRICAL ENGINEER DATE

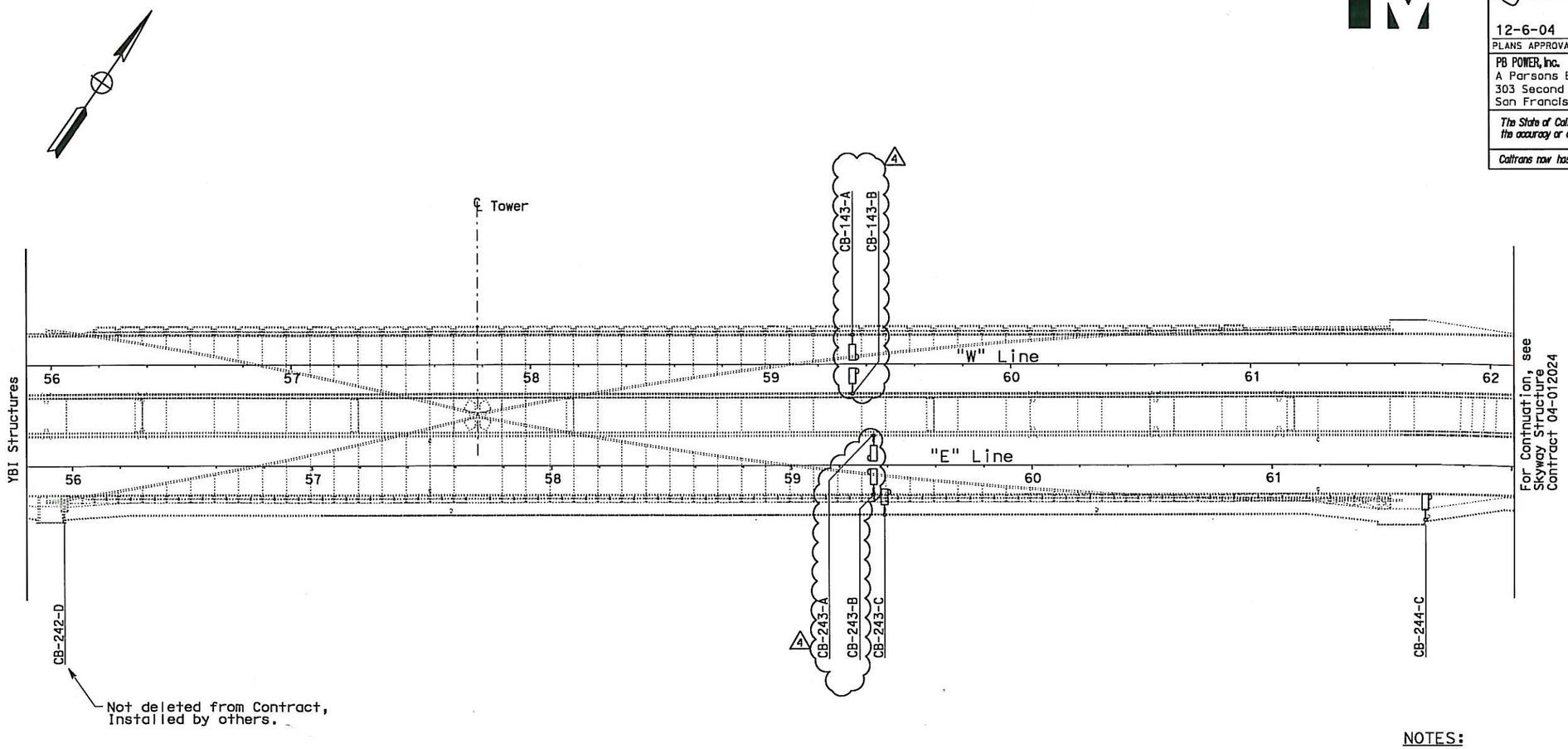
12-6-04
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER JENS ERLINGSSON No. 8249 Exp. 9/30/06 ELECTRICAL STATE OF CALIFORNIA

PB POWER, Inc.
A Parsons Brinckerhoff Company
303 Second St., Suite 700N
San Francisco, CA 94107-1317

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.

Caltrans now has a web site! To get to the web site, go to http://www.dot.ca.gov



PLAN

NOTES:

1. References:
   - For call box conduit routing see sheets E-46 thru E-51 (WB), and sheets E-135 thru E-140 (EB).
   - For call box schedule, see sheet E-397.
   - For call box wiring diagrams, see sheet E-398 (WB), and sheets E-399 and E-400 (EB).
   - Call box are State-furnished and Contractor installed.

REGISTERED PROFESSIONAL ENGINEER DAVID H. OTO No. 10699 Exp. 06/30/2015 ELECTRICAL STATE OF CALIFORNIA 3 4

FOR REVISION ONLY

REGISTERED PROFESSIONAL ENGINEER S. A. ESTOQUE, JR. No. E-10151 Exp. 12/31/2008 ELECTRICAL STATE OF CALIFORNIA 1 2

FOR REVISION ONLY

REQUEST FOR INFORMATION NOT ADDRESSED IN THIS CCO REMAIN IN FORCE

MARK	DATE	DESCRIPTIONS	BY	CH'D	CCO#
4	03/07/14	INSTALL CALL BOXES	EL	RG	341S1
3	09/27/13	CALL BOXES	RR RSB	RG	341
2	03/04/08	BARRIER MODIFICATIONS	JS BM	RG SE	44
1	02/19/08	ELECTRICAL MODIFICATIONS	MP EL	RR	42

REVISIONS

CONTRACT CHANGE ORDER NO. 341 S1
SHEET 11 OF 14

CALL BOX SYSTEM
SAS SUPERSTRUCTURE LOCATIONS
SCALE 1:1000

E-396

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

DESIGN OVERSIGHT: BEHZAD GOLEMOHAMMADI
CALCULATED/DESIGNED BY: KG | DATE 11/01 | REVISED BY
CHECKED BY: EDC | 11/01 | DATE REVISED

LAST REVISION 03-07-14
DATE PLOTTED => 07-MAR-2014
TIME PLOTTED => 15:03

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

DGN FILE =>04-0120f1_0351R04.dgn
USERNAME =>ReyesL

CU 04251 | EA 0120F1

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
04	SF	80	13.2/13.9	352 R5	1204

12/19/02
REGISTERED ELECTRICAL ENGINEER DATE

12-6-04
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER JENS ERLINGSSON No. 8249 Exp. 9/30/08 ELECTRICAL STATE OF CALIFORNIA

PB POWER, Inc.
A Parsons Brinckerhoff Company
303 Second St., Suite 700N
San Francisco, CA 94107-1317

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.

Caltrans now has a web site! To get to the web site, go to http://www.dot.ca.gov

CALL BOX SCHEDULE - WESTBOUND

Call Box Number	Station Number	Mounting Type	Location: Roadway Location	RTU Connection	Remarks
CB-143A	59 + 33.80	Steel Barrier	Westbound North	RTU #11W	
CB-143B	59 + 33.80	Steel Barrier	Westbound South	RTU #11W	

CALL BOX SCHEDULE - EASTBOUND

Call Box Number	Station Number	Mounting Type	Location: Roadway Side	RTU Connection	Remarks
CB-242D	55 + 96	Bike Path Railing	Bike Path	Wireless	Installed By Others
~~See Note 3~~	~~57 + 80~~	~~Steel Barrier~~	~~Eastbound South~~	~~See Note 3~~	Near T1
CB-243A	59 + 35	Steel Barrier	Eastbound North	RTU #11E	
CB-243B	59 + 35	Steel Barrier	Eastbound South	RTU #11E	
CB-243C	59 + 39	Bike Path Railing	Bike Path	Wireless	
CB-244C	61 + 64	Bike Path Railing	Bike Path	Wireless	At Pier E2E

NOTES:

1. Call boxes will be State-furnished.
2. References:
   - For RTU #10W, #11W, #10E #11E panel layout, see sheet E-320.
3. Call box mount at 57 + 80 is for future use.
4. For mounting detail of call box on bike path, see sheet AS-2.
5. For mounting detail of call box on steel barrier, see sheet AS-13.

REGISTERED PROFESSIONAL ENGINEER DAVID H. OTO No. 10699 Exp. 06/30/2015 ELECTRICAL STATE OF CALIFORNIA
FOR REVISION ONLY 4 5

REGISTERED PROFESSIONAL ENGINEER SYN YEE CHIN No. 18186 Exp. 09/30/2011 ELECTRICAL STATE OF CALIFORNIA
FOR REVISION ONLY 3

REGISTERED PROFESSIONAL ENGINEER S. A. ESTOQUE, JR. No. E-10151 Exp. 12/31/2008 ELECTRICAL STATE OF CALIFORNIA
FOR REVISION ONLY 2

REGISTERED PROFESSIONAL ENGINEER WARREN FUMIO TAKATA No. E 8651 Exp. 9/30/2008 ELECTRICAL STATE OF CALIFORNIA
FOR REVISION ONLY 1

REQUEST FOR INFORMATION NOT ADDRESSED IN THIS CCO REMAIN IN FORCE

MARK	DATE	DESCRIPTIONS	BY	CH'D	CCO#
5	03/07/14	INSTALL CALL BOXES	EL	RG	341S1
4	09/27/13	CALL BOXES	RR RSB	RG	341
3	05/10/10	WEST END BARRIER CONDUIT	NK	RG SYC	44S1
2	03/04/08	BARRIER MODIFICATIONS	JS BM	RG SE	44
1	02/19/08	ELECTRICAL MODIFICATIONS	MP EL	RR	42

REVISIONS

CONTRACT CHANGE ORDER NO. 341 S1
SHEET 12 OF 14

DETAILS
CALL BOX SYSTEM
CALL BOX SCHEDULES
NO SCALE

E-397

REVISED BY	DATE REVISED
EJL	9/01
EDC	11/01

CALCULATED/DESIGNED BY — BY

DESIGN OVERSIGHT — BEHZAD GOLEMOHAMMADI

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

DGN FILE =>04-0120f1_0352R05.dgn
USERNAME =>ReyesL

CU 04251 | EA 0120F1

LAST REVISION 03-07-14 | DATE PLOTTED => 07-MAR-2014 TIME PLOTTED => 15:03

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
04	SF	80	13.2/13.9	353 R3	1204

12/19/02
REGISTERED ELECTRICAL ENGINEER DATE

12-6-04
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER JENS ERLINGSSON No. 8249 Exp. 9/30/06 ELECTRICAL STATE OF CALIFORNIA

PB POWER, Inc.
A Parsons Brinckerhoff Company
303 Second St., Suite 700N
San Francisco, CA 94107-1317

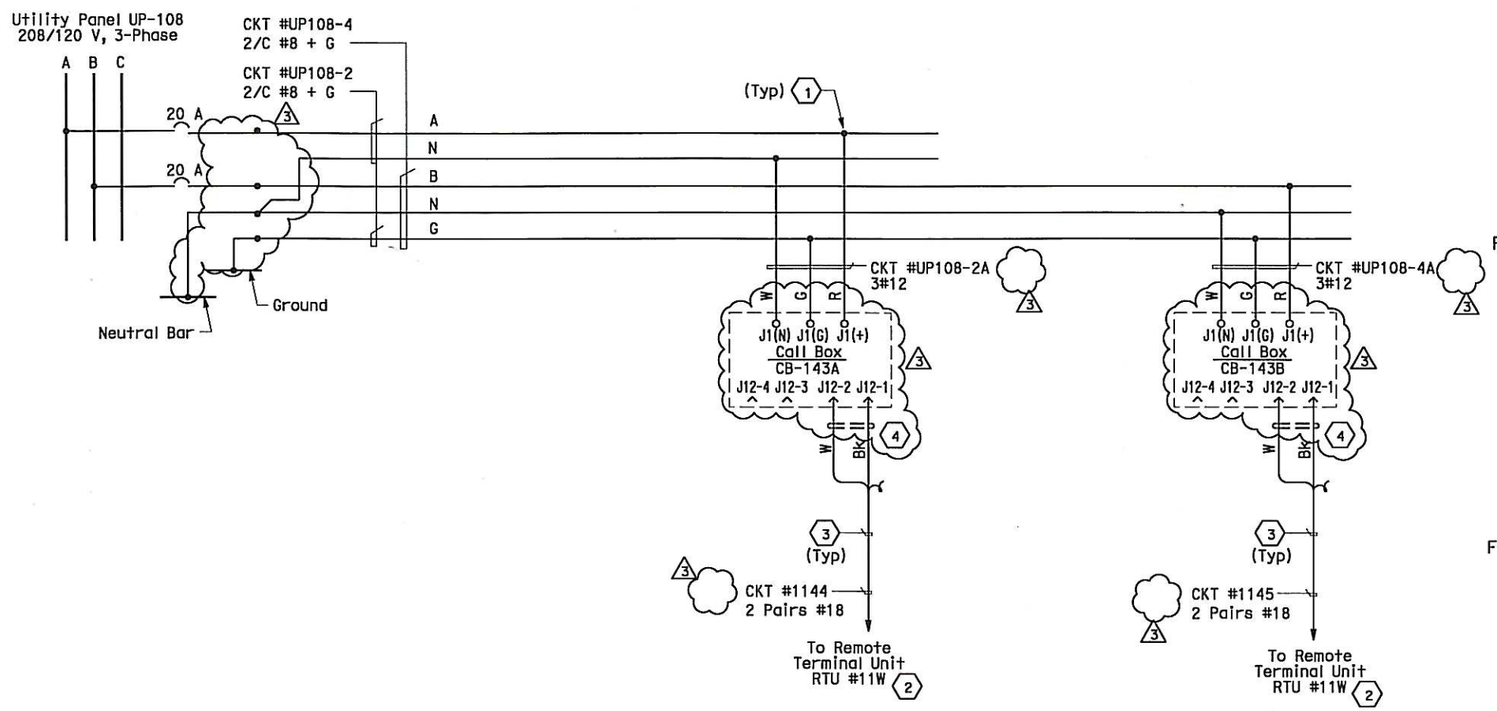
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Caltrans now has a web site! To get to the web site, go to http://www.dot.ca.gov

Caltrans Metric

SHEET NOTES:

1. Conductors spliced inside PB-Ltg.
2. For continuation, see RTU 11W connection diagram sheet E-332.
3. Data cable 1-2 pairs #18 shielded with overall shield. Coil and tape end of pair #2 inside Call Box.
4. The Contractor shall install resistors, approximately equal to the impedance (Zo) of the twised pairs, at the extreme ends of the multidrop network. (3)
5. Deleted.
6. Deleted.



WESTBOUND SAS SUPERSTRUCTURE

REGISTERED PROFESSIONAL ENGINEER DAVID H. OTO No. 10699 Exp. 06/30/2015 ELECTRICAL STATE OF CALIFORNIA 2 3
FOR REVISION ONLY

REGISTERED PROFESSIONAL ENGINEER S. A. ESTOQUE, JR. No. E-10151 Exp. 12/31/2008 ELECTRICAL STATE OF CALIFORNIA 1
FOR REVISION ONLY

NOTE:

1. References:
   - For panel schedules, see sheets E-60 and E-63.
   - For circuit and conduit/cable tray schedules, see sheets starting at E-401.
   - For call Boxes schedule, see sheet E-397.

REQUEST FOR INFORMATION NOT ADDRESSED IN THIS CCO REMAIN IN FORCE

MARK	DATE	DESCRIPTIONS	BY	CH'D	CCO#
3	03/07/14	INSTALL CALL BOXES	EL	RG	341S1
2	09/27/13	CALL BOXES	RR RSB	RG	341
1	03/04/08	BARRIER MODIFICATIONS	JS BM	RG SE	44

REVISIONS

CONTRACT CHANGE ORDER NO. 341 S1
SHEET 13 OF 14

DETAILS
CALL BOX SYSTEM
CALL BOX WIRING DIAGRAM
NO SCALE

E-398

DATE	REVISED BY
09/01	EJL
11/01	EDC
DATE REVISED	CHECKED BY

CALCULATED/DESIGNED BY

DESIGN OVERSIGHT
BEHZAD GOLEMOHAMMADI

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

DGN FILE =>04-0120f1_0353R03.dgn
USERNAME =>ReyesL

CU 04251 | EA 0120F1

LAST REVISION 03-07-14
DATE PLOTTED => 07-MAR-2014
TIME PLOTTED => 15:03

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
04	SF	80	13.2/13.9	355 R5	1204

REGISTERED ELECTRICAL ENGINEER 12/19/02 DATE

12-6-04
PLANS APPROVAL DATE

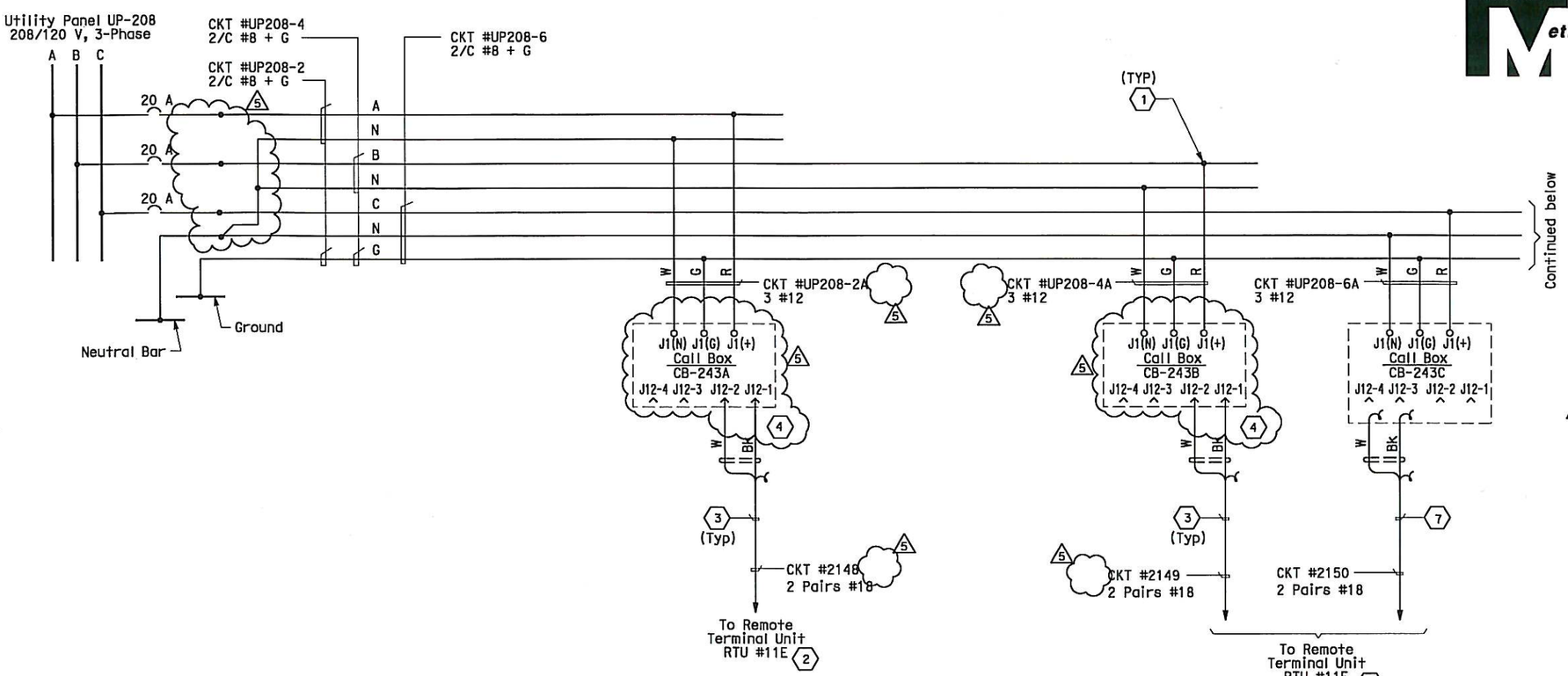
REGISTERED PROFESSIONAL ENGINEER JENS ERLINGSSON No. 8249 Exp. 9/30/06 ELECTRICAL STATE OF CALIFORNIA

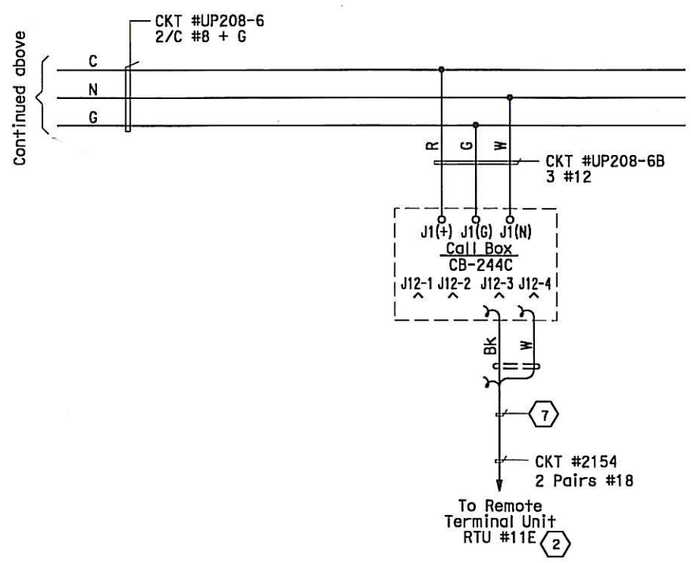
PB POWER, Inc.
A Parsons Brinckerhoff Company
303 Second St., Suite 700N
San Francisco, CA 94107-1317

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.

Caltrans now has a web site! To get to the web site, go to http://www.dot.ca.gov

Caltrans Metric





EASTBOUND SAS SUPERSTRUCTURE

SHEET NOTES:

1. Conductors spliced inside PB-Ltg.
2. For continuation, see RTU #11E connection diagrams sheet E-333.
3. Data cable 1-2 pairs #18 shielded with overall shield. Coil and tape end of pair #2 inside Call Box.
4. The Contractor shall install resistors, approximately equal to the impedance (Zo) of the twised pairs, at the extreme ends of the multidrop network.
5. Deleted.
6. Deleted.
7. Bike path call box is wireless. Communication cable shall be unterminated, coiled and taped inside call box for future use, if installed.

NOTE:

1. References:
   - For panel schedules, see sheets E-154.
   - For circuit and conduit/cable tray schedules, see sheets starting at E-401.
   - For call boxes schedule, see sheet E-397.

REGISTERED PROFESSIONAL ENGINEER SYN YEE CHIN No. 18186 Exp. 09/30/2011 ELECTRICAL STATE OF CALIFORNIA

Syn Yee Chin
FOR REVISION ONLY 2 3

REGISTERED PROFESSIONAL ENGINEER S. A. ESTOQUE No. E-10151 Exp. 12/31/2008 ELECTRICAL STATE OF CALIFORNIA

FOR REVISION ONLY 1

REGISTERED PROFESSIONAL ENGINEER DAVID H. OTO No. 10699 Exp. 06/30/2015 ELECTRICAL STATE OF CALIFORNIA

FOR REVISION ONLY 4 5

REVISIONS SUPERCEDED

REQUEST FOR INFORMATION NOT ADDRESSED IN THIS CCO REMAIN IN FORCE

MARK	DATE	DESCRIPTIONS	BY	CH'D	CCO#
5	03/07/14	INSTALL CALL BOXES	EL	RG	341S1
4	09/27/13	CALL BOXES	RR RSB	RG	341
3	03/24/11	BIKE PATH CONDUIT	TW	RG	73
2	06/11/10	BIKE PATH CONDUIT	TW	RG	73
1	03/04/08	BARRIER MODIFICATIONS	JS BM	RG SE	44

REVISIONS

CONTRACT CHANGE ORDER NO. 341 S1
SHEET 14 OF 14

DETAILS
CALL BOX SYSTEM
CALL BOX WIRING DIAGRAM
NO SCALE

E-400

DATE	BY	DESCRIPTION
09/01	EJL	REVISED BY
11/01	EDC	DATE REVISED

CALCULATED/DESIGNED BY
CHECKED BY

DESIGN OVERSIGHT
BEHZAD GOLEMOHAMMADI

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

DGN FILE =>04-0120f1_0355R05.dgn
USERNAME =>ReyesL

CU 04251 | EA 0120F1

LAST REVISION 03-07-14
DATE PLOTTED => 07-MAR-2014
TIME PLOTTED => 15:04