

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN

FUNCTIONAL SUPERVISOR
 NELSON LEE

CALCULATED/DESIGNED BY
 CHECKED BY

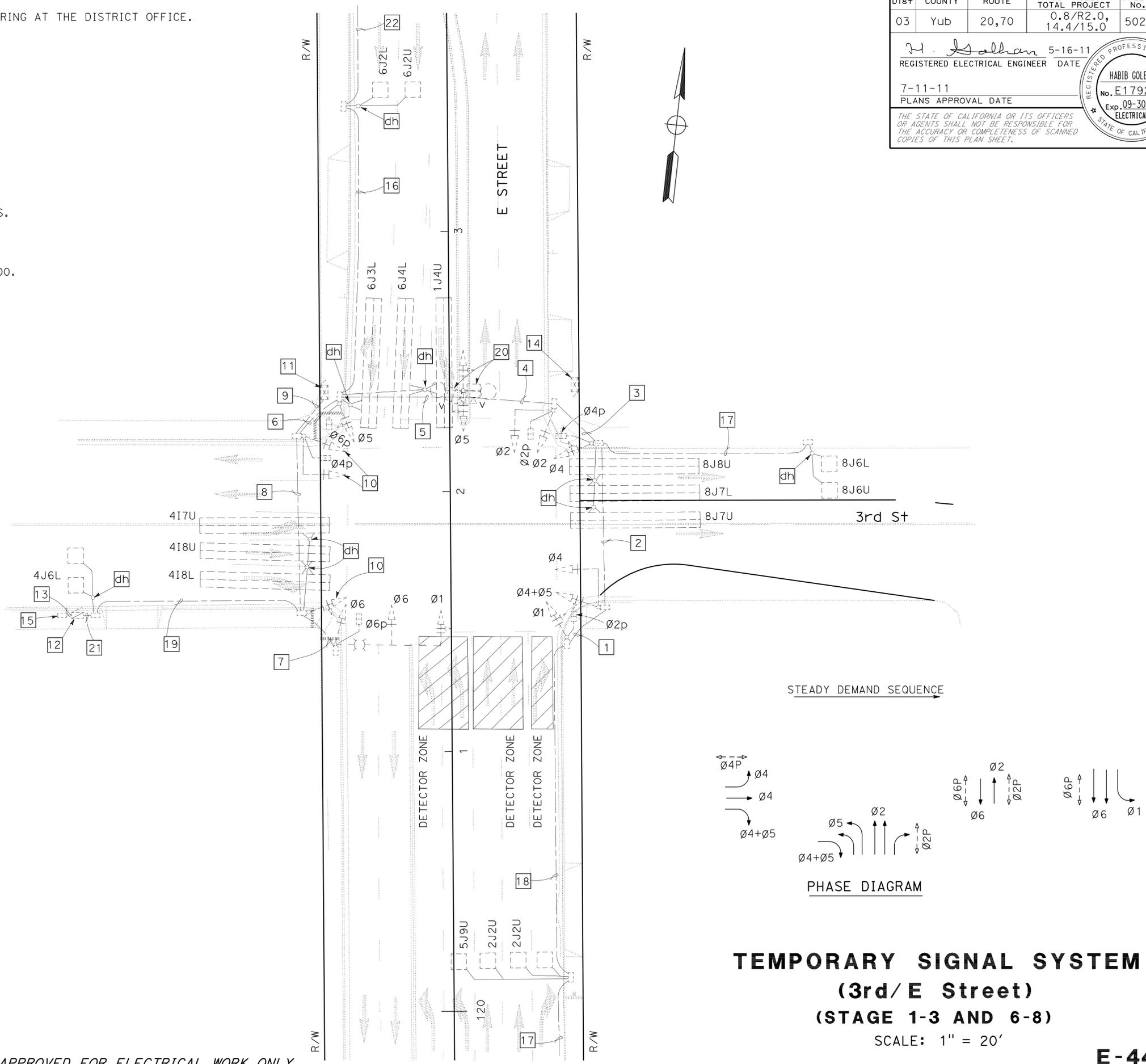
YOUNG TON
 HABIB GOLBAN

REVISED BY
 DATE REVISED

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

NOTES: (FOR THIS SHEET ONLY)

- 1 Exist 2"C, 4#14, 8 dlc.
- 2 Exist 2"C, 15#14, 1#10, 8 dlc.
- 3 Exist 2"C, 17#14, 1#10, 13 dlc.
- 4 Exist 2"C, 21#14, 1#10, 13 dlc.
- 5 Exist 2"C, 27#14, 1#10, 13 dlc, 2 vivds.
- 6 Exist 2"C, 29#14, 1#10, 16 dlc, 1 sic, 2 vivds CABLES.
- 7 Exist 2"C, 13#14, 1#10, 2#10.
- 8 Exist 3"C, 19#14, 1#10, 2#8, 5 dlc.
- 9 Exist 2-3"C, 48#14, 2#10, 2#8, 29 dlc, 1 sic, 2 vivds CABLES.
- 10 COVER SIGNAL HEAD AND PED HEADS.
- 11 Exist MODEL 2070 CONTROLLER ASSEMBLY AND BBS.
- 12 Exist SERVICE EQUIPMENT ENCLOSURE. CTID No. 03160700014200.
- 13 Exist 1½"C, 2#8.
- 14 Exist RED LIGHT CONTROLLER CABINET.
- 15 Exist PG&E UTILITY BOX, 120/240 V.
- 16 Exist 1½"C, 2 dlc, 1 sic.
- 17 Exist 1½"C, 2 dlc.
- 18 Exist 1½"C, 4 dlc.
- 19 Exist 1½"C, 2 dlc, 2#10, 2#8.
- 20 Exist vivds SHALL REMAIN.
- 21 Exist 1½", 2#8, 2#10.
- 22 Exist 1½", 1 sic.



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	502	595

H. Golban 5-16-11
 REGISTERED ELECTRICAL ENGINEER DATE

7-11-11
 PLANS APPROVAL DATE

HABIB GOLBAN
 No. E 17928
 Exp. 09-30-12
 ELECTRICAL
 STATE OF CALIFORNIA

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

**TEMPORARY SIGNAL SYSTEM
 (3rd/ E Street)
 (STAGE 1-3 AND 6-8)**

SCALE: 1" = 20'

E-44

APPROVED FOR ELECTRICAL WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN

FUNCTIONAL SUPERVISOR
 NELSON LEE

CALCULATED/DESIGNED BY
 CHECKED BY

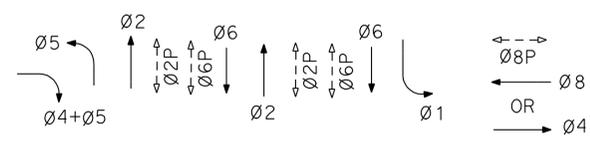
QANH D NGUYEN
 HABIB GOLBAN

REVISED BY
 DATE REVISED

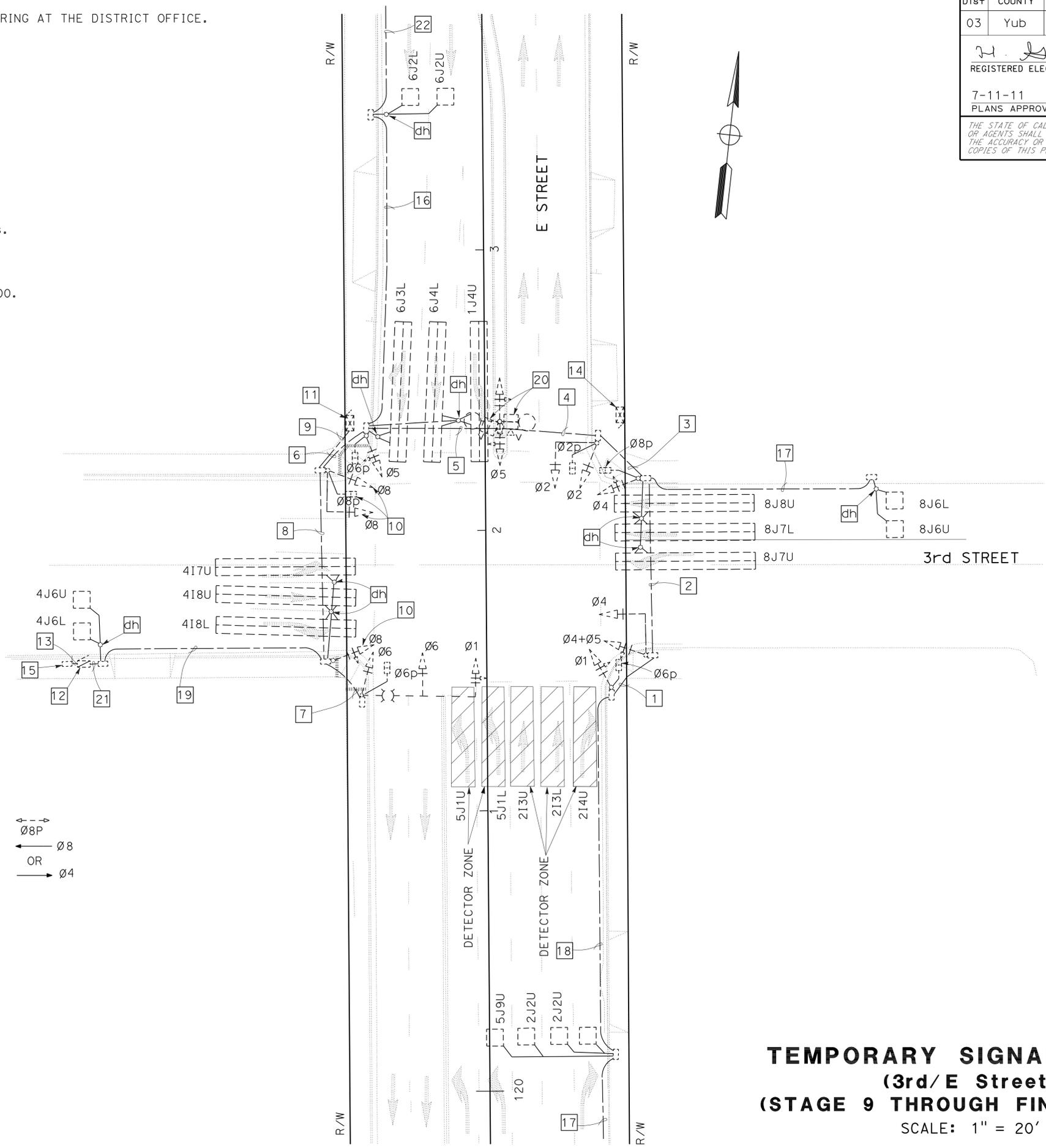
FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

NOTES: (FOR THIS SHEET ONLY)

- 1 Exist 2"C, 4#14, 8 dlc.
- 2 Exist 2"C, 15#14, 1#10, 8 dlc.
- 3 Exist 2"C, 17#14, 1#10, 13 dlc.
- 4 Exist 2"C, 21#14, 1#10, 13 dlc.
- 5 Exist 2"C, 27#14, 1#10, 13 dlc, 2 vivds.
- 6 Exist 2"C, 29#14, 1#10, 16 dlc, 1 sic, 2 vivds cables.
- 7 Exist 2"C, 13#14, 1#10, 2#10.
- 8 Exist 3"C, 19#14, 1#10, 2#8, 5 dlc.
- 9 Exist 2-3"C, 48#14, 2#10, 2#8, 29 dlc, 1 sic, 2 vivds cables.
- 10 UNCOVER SIGNAL AND PED HEADS.
- 11 Exist MODEL 2070 CONTROLLER ASSEMBLY AND BBS.
- 12 Exist SERVICE EQUIPMENT ENCLOSURE. CTID No. 03160700014200.
- 13 Exist 1 1/2"C, 2#8.
- 14 Exist RED LIGHT CONTROLLER CABINET.
- 15 Exist PG&E UTILITY BOX, 120/240 V.
- 16 Exist 1 1/2"C, 2 dlc, 1 sic.
- 17 Exist 1 1/2"C, 2 dlc.
- 18 Exist 1 1/2"C, 4 dlc.
- 19 Exist 1 1/2"C, 2 dlc, 2#10, 2#8.
- 20 Exist vivds SHALL REMAIN.
- 21 Exist 1 1/2", 2#8, 2#10.
- 22 Exist 1 1/2", 1 sic.



PHASE DIAGRAM



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	503	595

H. Golban 5-16-11
 REGISTERED ELECTRICAL ENGINEER DATE

7-11-11
 PLANS APPROVAL DATE

HABIB GOLBAN
 No. E 17928
 Exp. 09-30-12
 ELECTRICAL
 STATE OF CALIFORNIA

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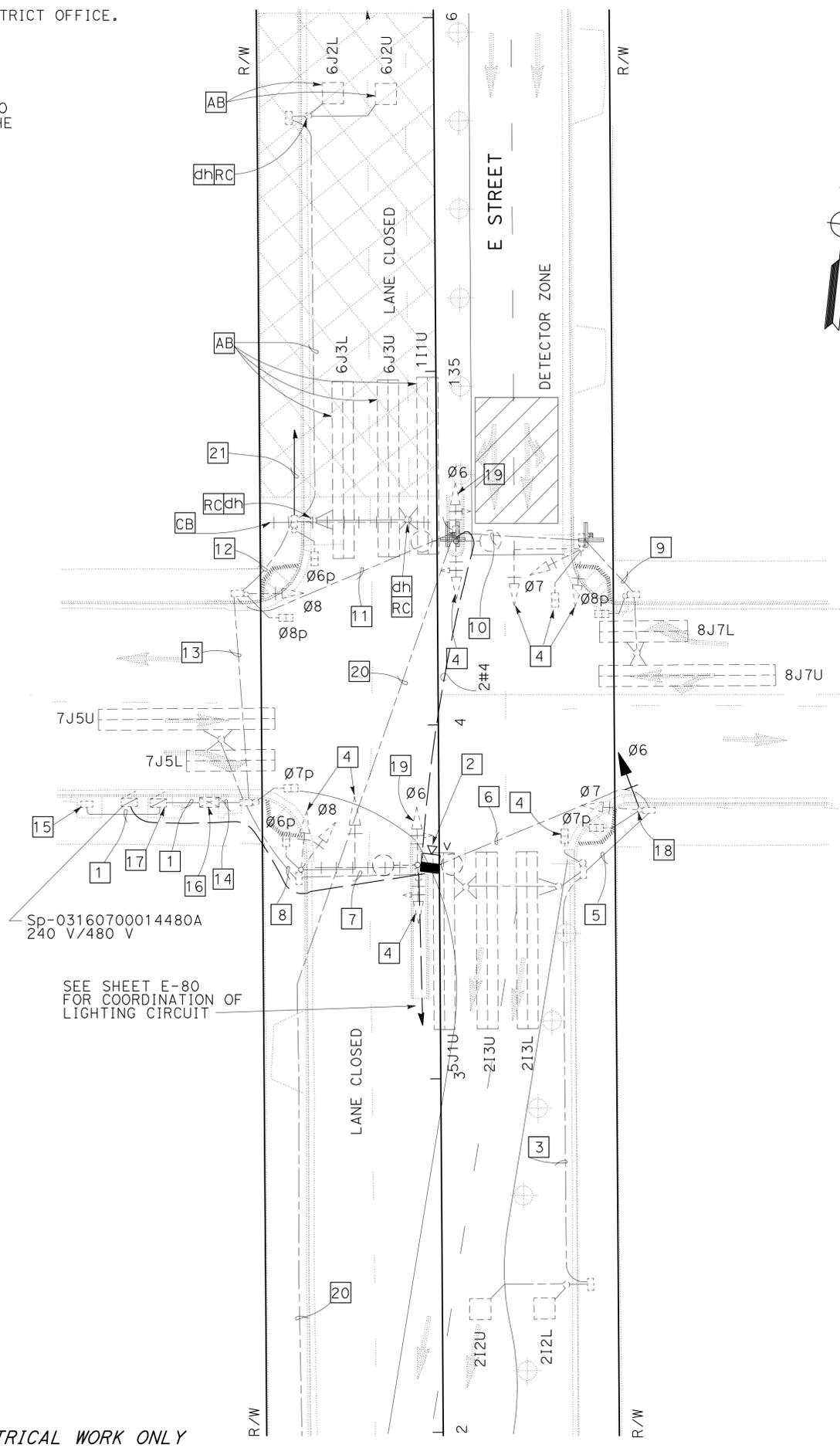
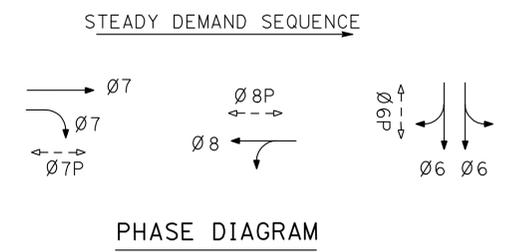
**TEMPORARY SIGNAL SYSTEM
 (3rd/E Street)
 (STAGE 9 THROUGH FINAL STAGE)**
 SCALE: 1" = 20'

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN
 FUNCTIONAL SUPERVISOR: NELSON LEE
 CHECKED BY: YOUNG TON, HABIB GOLBAN
 DESIGNED BY: REVISOR: DATE

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

NOTES: (FOR THIS SHEET ONLY)

- 1 Exist 1 1/2"C, 2#8.
- 2 INSTALL CONTRACTOR-FURNISHED VIVDS, SEE SHEET SES-1, AND 1 VIVDS CABLE TO THE SIGNAL CONTROLLER CABINET. THE VIVDS ANGLE SHALL BE DETERMINED BY THE CONTRACTOR IN THE FIELD.
- 3 Exist 1 1/2"C, 2 dlc.
- 4 COVER SIGNAL AND PED HEADS.
- 5 Exist 2"C, 7#14, 1#10, 5 dlc.
- 6 Exist 2"C, 13#14, 1#10, 5 dlc.
- 7 Exist 2"C, 19#14, 1#10, 5 dlc.
- 8 Exist 2"C, 27#14, 1#10, 5 dlc.
- 9 Exist 2"C, 4#14, 1#10, 2 dlc.
- 10 Exist 2"C, 16#14, 1#10, 2 dlc.
- 11 Exist 2"C, 22#14, 1#10, 2 dlc, 2 sic, RC 1 sic.
- 12 Exist 2"C, 4#14, 1#10, 5 dlc, ADD 1 SIC.
- 13 Exist 2"C, 28#14, 1#10, 7 dlc, 2 sic, RC 1 sic, ADD 1 SIC.
- 14 Exist 2-3"C, 55#14, 2#10, 14 dlc, 2 sic, RC 1 sic, ADD 1 SIC.
- 15 Exist PG&E UTILITY BOX, 120/240 V.
- 16 Exist MODEL 2070 CONTROLLER ASSEMBLY AND BBS. INSTALL ADDITIONAL EQUIPMENT FOR VIVDS.
- 17 Exist SERVICE EQUIPMENT ENCLOSURE. CTID No. 03160700014480.
- 18 MODIFY TOP MOUNTING TV-1 TO TOP MOUNTING TV-2-T.
- 19 CHANGE LEFT ARROWS TO BALLS.
- 20 Exist 1 sic.
- 21 1 SIC. APPROXIMATELY 400' TO SIGNAL CONTROLLER CABINET AT SW CORNER OF 7th AND E STREET, SEE SHEET E-50.



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	504	595

H. Golban 5-16-11
 REGISTERED ELECTRICAL ENGINEER DATE

7-11-11
 PLANS APPROVAL DATE

HABIB GOLBAN
 No. E17928
 Exp. 09-30-12
 ELECTRICAL
 STATE OF CALIFORNIA

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

**TEMPORARY SIGNAL SYSTEM
 (6th/E STREET)
 (STAGE 4)
 SCALE: 1" = 20'**

APPROVED FOR ELECTRICAL WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN

FUNCTIONAL SUPERVISOR
 NELSON LEE

CALCULATED/DESIGNED BY
 CHECKED BY

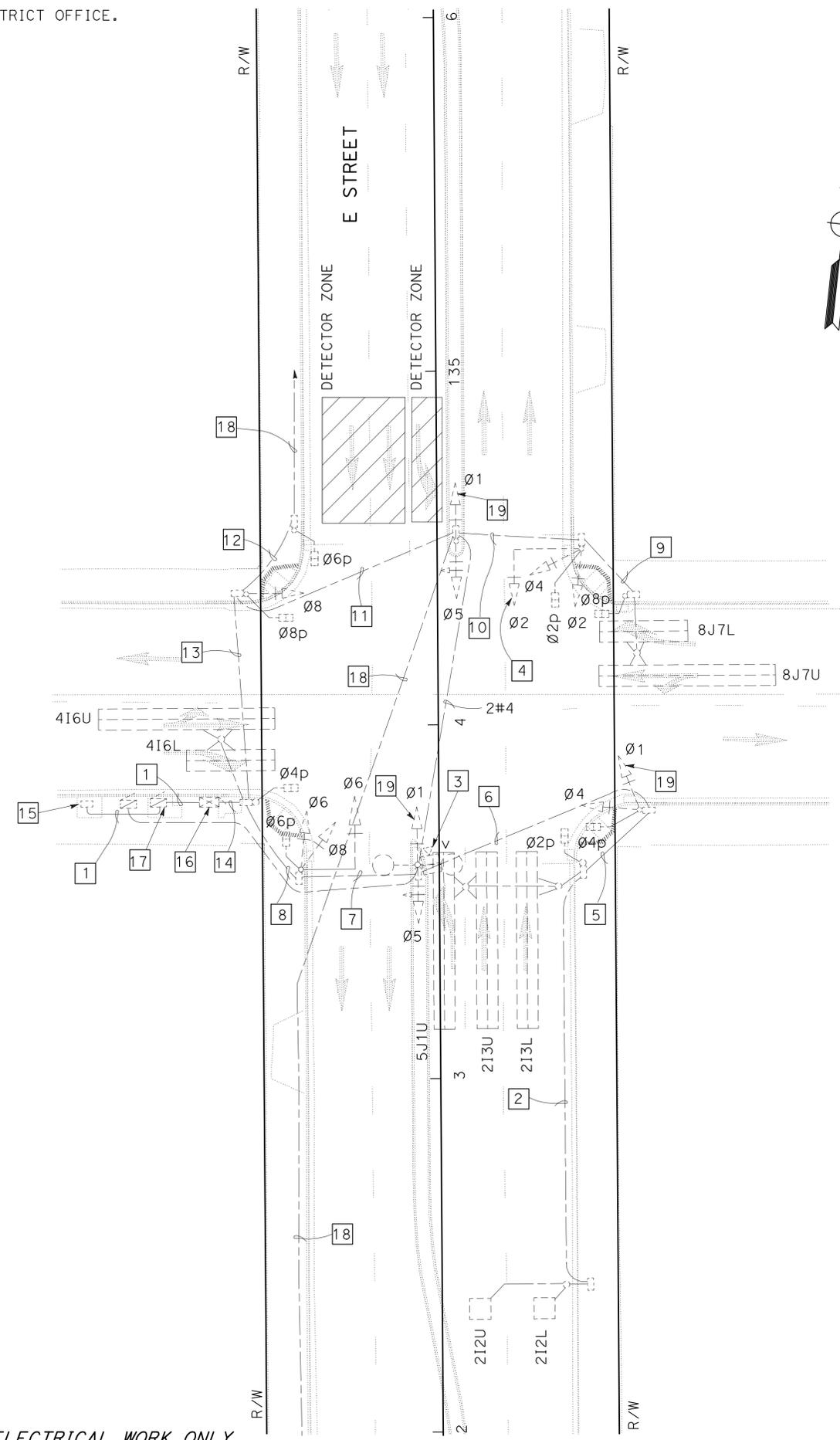
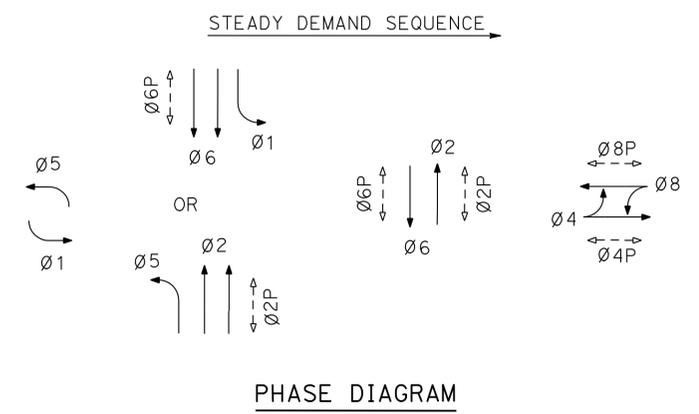
YOUNG TON
 HABIB GOLBAN

REVISED BY
 DATE REVISED

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

NOTES: (FOR THIS SHEET ONLY)

- 1 Exist 1/2"C, 2#8.
- 2 Exist 1/2"C, 2 dlc.
- 3 Exist vivds. ADJUST VIVDS ANGLE TO NEW TRAFFIC LANE CONFIGURATION.
- 4 CHANGE RIGHT G ARROWS TO GREEN BALLS.
- 5 Exist 2"C, 7#14, 1#10, 5 dlc.
- 6 Exist 2"C, 13#14, 1#10, 5 dlc.
- 7 Exist 2"C, 19#14, 1#10, 5 dlc.
- 8 Exist 2"C, 27#14, 1#10, 5 dlc.
- 9 Exist 2"C, 4#14, 1#10, 2 dlc.
- 10 Exist 2"C, 16#14, 1#10, 2 dlc.
- 11 Exist 2"C, 22#14, 1#10, 2 dlc, 1 sic.
- 12 Exist 2"C, 4#14, 1#10, 5 dlc, 1 sic.
- 13 Exist 2"C, 28#14, 1#10, 7 dlc, 2 sic.
- 14 Exist 2-3"C, 55#14, 2#10, 14 dlc, 2 sic.
- 15 Exist PG&E UTILITY BOX, 120/240 V.
- 16 Exist MODEL 2070 CONTROLLER ASSEMBLY AND BBS.
- 17 Exist SERVICE EQUIPMENT ENCLOSURE. CTID No. 03160700014480.
- 18 Exist 1 sic.
- 19 CHANGE BALLS TO LEFT ARROWS.



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	506	595

H. Golban 5-16-11
 REGISTERED ELECTRICAL ENGINEER DATE

7-11-11
 PLANS APPROVAL DATE

HABIB GOLBAN
 No. E 17928
 Exp. 09-30-12
 ELECTRICAL
 STATE OF CALIFORNIA

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

**TEMPORARY SIGNAL SYSTEM
 (6th/E Street)
 (STAGE 6 TO FINAL STAGE)**

SCALE: 1" = 20'

E-49

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN
 FUNCTIONAL SUPERVISOR: NELSON LEE
 CALCULATED/DESIGNED BY: OANH D NGUYEN
 CHECKED BY: HABIB GOLBAN
 REVISED BY: DATE REVISIONS

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

NOTES: (FOR THIS SHEET ONLY)

- 1 SEE SHEETS SES-2 TO SES-5 FOR TEMPORARY WOOD POLE INSTALLATION.
- 2 INSTALL CONTRACTOR-FURNISHED VIVDS, SEE DETAIL B, SHEET SES-1. THE VIVDS ANGLE SHALL BE DETERMINED BY THE CONTRACTOR IN THE FIELD.
- 3 1 SIC, APPROXIMATELY 400' TO SIGNAL CONTROLLER CABINET AT NE CORNER OF 8th AND E STREET.
- 4 6#14, 1#10.
- 5 16#14, 1#10, 2#8, 1 VIVDS.
- 6 19#14, 1#10, 2#8, 1 VIVDS.
- 7 16#14, 1#10, 2#8, 1 VIVDS, 1 SIC.
- 8 19#14, 1#10, 2#8, 1 VIVDS, 1 SIC.
- 9 25#14, 1#10, 2#8, 2 VIVDS, 1 SIC.
- 10 2"C, 3#2 (SERVICE).
- 11 1 SIC. APROXIMATELY 400' TO SIGNAL CONTROLLER CABINET AT SW CORNER OF 6th AND E STREET SEE SHEET E-47.
- 12 2#6 (120 V, TEMP SIGNAL), 2#8 (240 V, LIGHTING).
- 13 INSTALL TYPE E SERVICE EQUIPMENT ENCLOSURE PER STANDARD PLANS ES-2A. PROVIDE ITEMS ① THRU ⑧, ⑮, ⑯, ⑰, ⑳ THRU ㉓ PER RSP ES-2D.
- 14 2-3"C, 31#14, 2#6, 1#10, 4 VIVDS, 2 SIC.
- 15 Exist SERVICE EQUIPMENT ENCLOSURE.
- 16 INSTALL Exist MODEL 2070 CONTROLLER ASSEMBLY AND BBS ON WOOD PALLET FROM Exist LOCATION. SEE DETAIL "A" ON SHEET E-45.
- 17 Exist PG&E UTILITY BOX, 120/240 V.
- 18 Exist TRAFFIC SIGNAL CABINET SHALL BE RELOCATED TO NEW LOCATION ON WOOD PALLET.

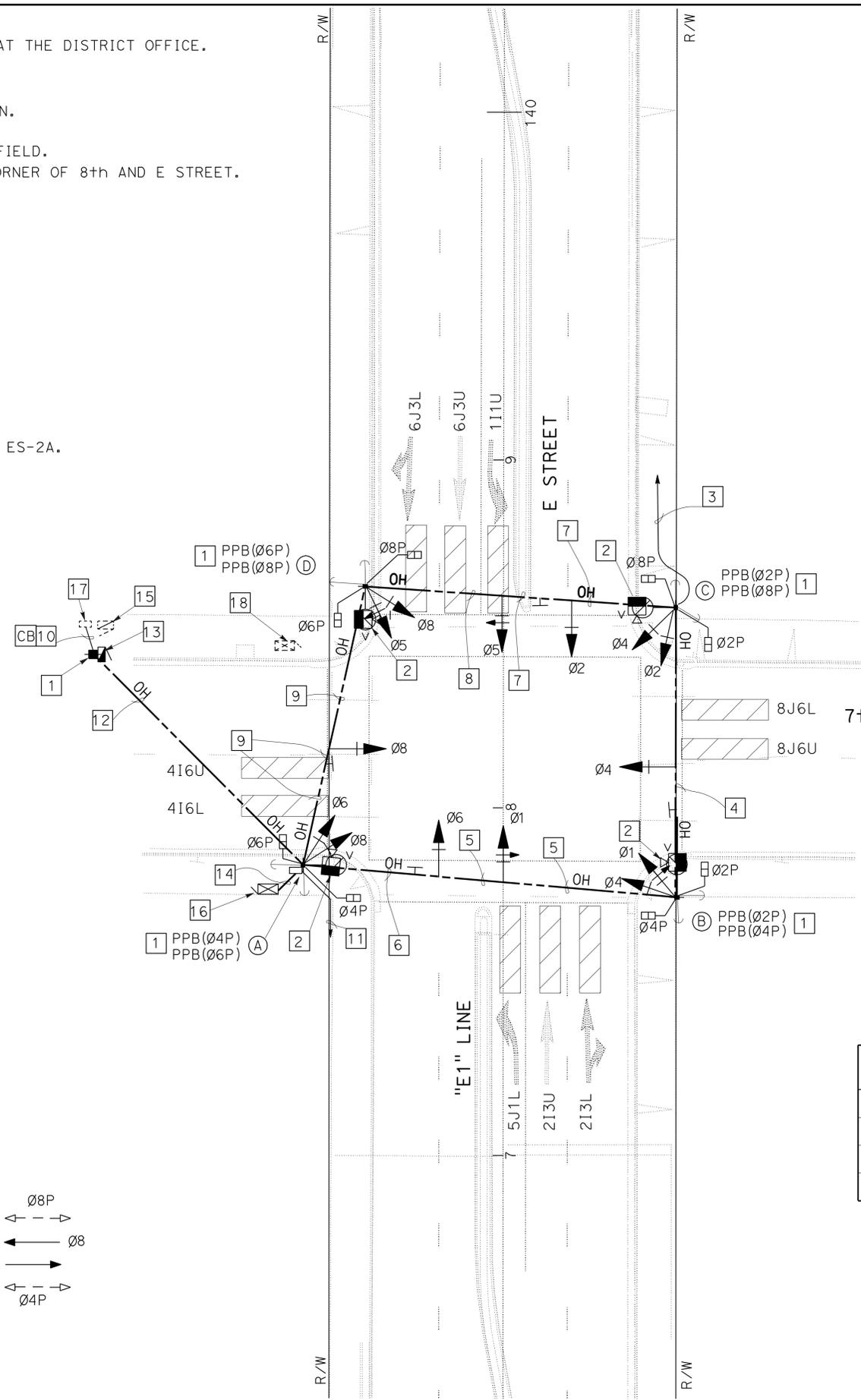
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	507	595

H. Golban 5-16-11
 REGISTERED ELECTRICAL ENGINEER DATE

7-11-11
 PLANS APPROVAL DATE

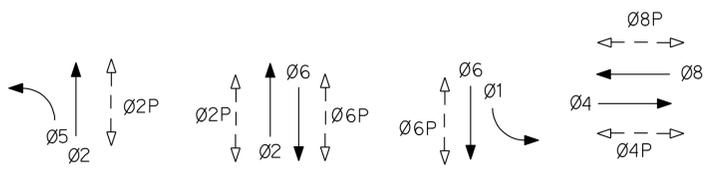
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HABIB GOLBAN
 No. E 17928
 Exp. 09-30-12
 ELECTRICAL



LUMINAIRE SCHEDULE

POLE No.	PROJECTED LMA	HPS LUMINAIRE	MOUNTING HEIGHT
Ⓐ	15'-0"	200 W	34'-0"
Ⓑ	15'-0"	200 W	34'-0"
Ⓒ	15'-0"	200 W	34'-0"
Ⓓ	15'-0"	200 W	34'-0"



PHASE DIAGRAM

**TEMPORARY SIGNAL SYSTEM
 (7th/E STREET)
 (SEASON 1)
 SCALE: 1" = 20'**

E-50

APPROVED FOR ELECTRICAL WORK ONLY

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

NOTES: (FOR THIS SHEET ONLY)

- 1 SEE SHEETS SES-2 TO SES-5 FOR TEMPORARY WOOD POLE INSTALLATION.
- 2 INSTALL CONTRACTOR-FURNISHED VIVDS, SEE DETAIL SHEET SES-1. THE VIVDS ANGLE SHALL BE DETERMINED BY THE CONTRACTOR IN THE FIELD.
- 3 INSTALL TYPE E SERVICE EQUIPMENT ENCLOSURE PER STANDARD PLANS ES-2A, PROVIDE ITEMS ① THRU ⑧, ⑩, ⑫, ⑭, ⑮, ⑰, ⑲ THRU ⑳ PER RSP ES-2D. SEE DETAIL "A" SHEET E-45.
- 4 1 SIC, APPROXIMATELY 500' TO TEMPORARY CONTROLLER CABINET AT NW CORNER OF 9th AND E STREET.
- 5 1 SIC, APPROXIMATELY 500' TO TEMPORARY CONTROLLER CABINET AT NW CORNER OF 7th AND E STREET.
- 6 15#14, 3#14 (SPARE), 2#10 (LIGHTING), 1#10 (SIGNAL COMMON), 1#14 (PPB COMMON), 1 VIVDS CABLE.
- 7 12#14, 3#14 (SPARE), 2#10 (LIGHTING), 1#10 (SIGNAL COMMON), 1#14 (PPB COMMON), 1 VIVDS CABLE.
- 8 3#14, 3#14 (SPARE), 1#10 (SIGNAL COMMON).
- 9 21#14, 3#14 (SPARE), 2#10 (LIGHTING), 1#10 (SIGNAL COMMON), 1#14 (PPB COMMON), 2 VIVDS CABLE.
- 10 18#14, 3#14 (SPARE), 2#10 (LIGHTING), 1#10 (SIGNAL COMMON), 1#14 (PPB COMMON), 2 VIVDS CABLE.
- 11 15#14, 3#14 (SPARE), 2#10 (LIGHTING), 1#10 (SIGNAL COMMON), 1#14 (PPB COMMON), 1 VIVDS CABLE.
- 12 12#14, 3#14 (SPARE), 2#10 (LIGHTING), 1#10 (SIGNAL COMMON), 1#14 (PPB COMMON), 1 VIVDS CABLE.
- 13 30#14, 6#14 (SPARE), 2#10 (LIGHTING), 1#10 (SIGNAL COMMON), 1#14 (PPB COMMON), 4 VIVDS CABLE.
- 14 3"C, 30#14, 6#14 (SPARE), 1#10 (SIGNAL COMMON), 1#14 (PPB COMMON), 4 VIVDS CABLE.
- 15 2-3"C, 30#14, 6#14 (SPARE), 1#10 (SIGNAL COMMON), 1#14 (PPB COMMON), 4 VIVDS CABLE, 2 SIC.
- 16 INSTALL TEMPORARY MODEL 2070 CONTROLLER ASSEMBLY ON WOOD PALLET, SEE DETAIL "A" SHEET E-45.

GENERAL NOTE: (FOR THIS SHEET ONLY)

COVER SIGNAL HEADS IN STAGE 3, 4 AND 5. MAINTAIN LIGHTING.

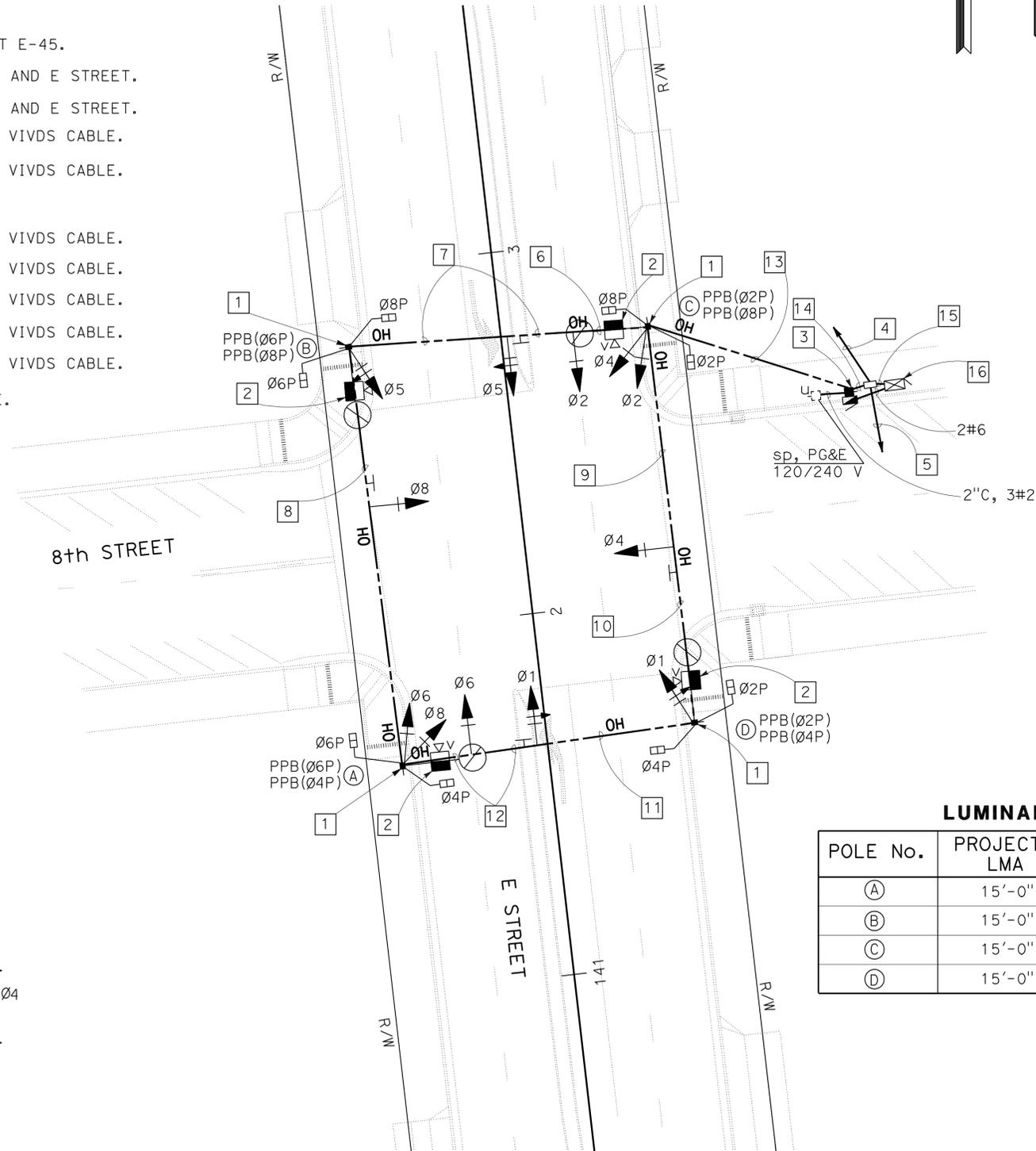
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	510	595

H. Golban 5-16-11
REGISTERED ELECTRICAL ENGINEER DATE

7-11-11
PLANS APPROVAL DATE

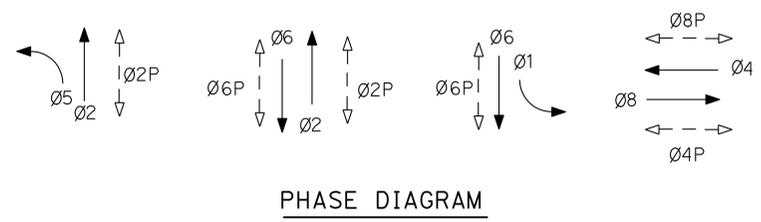
HABIB GOLBAN
No. E17928
Exp. 09-30-12
ELECTRICAL

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LUMINAIRE SCHEDULE

POLE No.	PROJECTED LMA	HPS LUMINAIRE	MOUNTING HEIGHT
Ⓐ	15'-0"	200 W	34'-0"
Ⓑ	15'-0"	200 W	34'-0"
Ⓒ	15'-0"	200 W	34'-0"
Ⓓ	15'-0"	200 W	34'-0"



**TEMPORARY SIGNAL SYSTEM
(8th/ E STREET)
(SEASON 1, STAGE 1 THROUGH FINAL STAGE)**

SCALE: 1" = 20'

E-53

APPROVED FOR ELECTRICAL WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
ELECTRICAL DESIGN
Caltrans

FUNCTIONAL SUPERVISOR
NELSON LEE

CALCULATED/DESIGNED BY
CHECKED BY

JAMIE KOJAK
HABIB GOLBAN

REVISED BY
DATE REVISED

LAST REVISION DATE PLOTTED => 15-JUL-2011 07-05-11 TIME PLOTTED => 12:30

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	511	595

H. Golban 5-16-11
 REGISTERED ELECTRICAL ENGINEER DATE

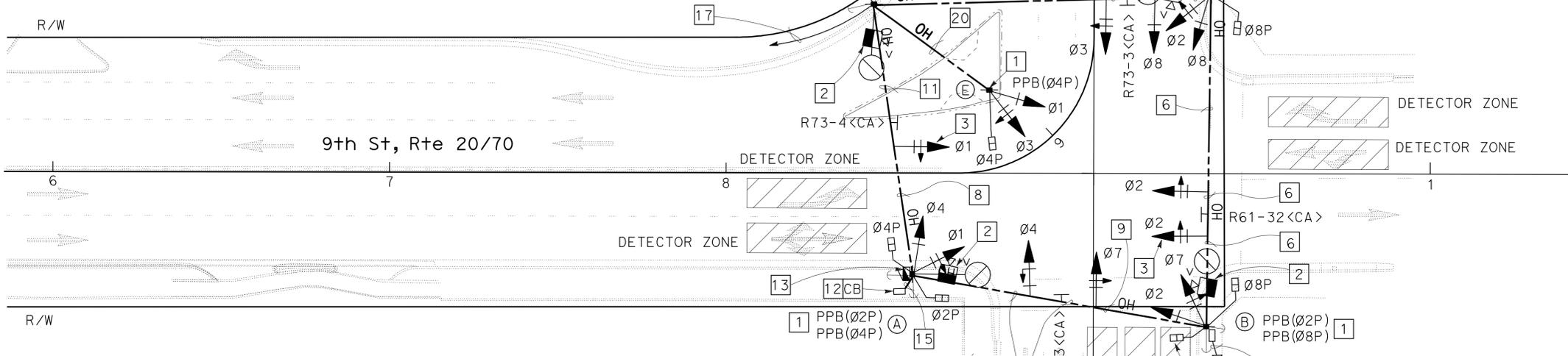
7-11-11
 PLANS APPROVAL DATE

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
 HABIB GOLBAN
 No. E 17928
 Exp. 09-30-12
 ELECTRICAL
 STATE OF CALIFORNIA

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

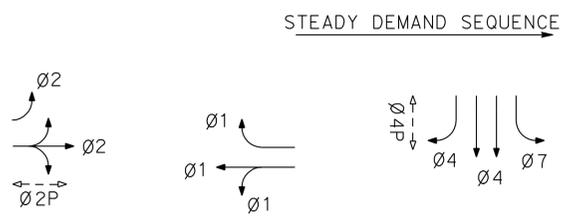
- 1 SEE SHEETS SES-2 TO SES-5 FOR TEMPORARY WOOD POLE INSTALLATION.
- 2 INSTALL CONTRACTOR-FURNISHED VIVDS, SEE DETAIL B, SHEET SES-1. THE VIVDS ANGLE SHALL BE DETERMINED BY THE CONTRACTOR IN THE FIELD.
- 3 INSTALL 4 SECTION SIGNAL HEAD: R-Y-G AND LEFT G ARROW.
- 4 2-3"C, 28#14, 2#6, 1#10, 4 VIVDS, 2 SIC.
- 5 9#14, 1#10.
- 6 16#14, 2#8, 1#10, 1 VIVDS.
- 7 6#14, 1#10.
- 8 13#14, 2#8, 1#10, 1 VIVDS, 2 SIC.
- 9 22#14, 2#8, 2#6, 1#10, 2 VIVDS, 2 SIC.
- 10 19#14, 2#8, 2#6, 1#10, 2 VIVDS, 2 SIC.
- 11 13#14, 2#8, 1#10, 1 VIVDS, 2 SIC.
- 12 APPROXIMATELY NEW PG&E UTILITY BOX, 120/240 V.
- 13 INSTALL TYPE E SERVICE EQUIPMENT ENCLOSURE PER STANDARD PLANS ES-2A. PROVIDE ITEMS ① THRU ⑧, ⑮, ⑯, ⑰, ⑳ THRU ㉓ PER RSP ES-2D. SEE DETAIL "A" ON SHEET E-45.
- 14 30' SLACK 16#14, 2#8, 1#10, 1 VIVDS.
- 15 2"C, 3#2 (SERVICE).



- 16 INSTALL Exist MODEL 2070 CONTROLLER ASSEMBLY AND BBS ON WOOD PALLET FROM Exist LOCATION. SEE DETAIL "A" ON SHEET E-45.
- 17 1 SIC. APPROXIMATELY 760' TO SIGNAL CONTROLLER AT NE CORNER OF 9th AND D STREET.
- 18 Exist TRAFFIC SIGNAL CABINET SHALL BE RELOCATED TO NEW LOCATION ON WOOD PALLET.
- 19 1 SIC. APPROXIMATELY 400' TO SIGNAL CONTROLLER AT NW CORNER OF 10th AND B STREET.
- 20 13#14, 1#10.

LUMINAIRE SCHEDULE

POLE No.	PROJECTED LMA	HPS LUMINAIRE	MOUNTING HEIGHT
(A)	15'-0"	200 W	34'-0"
(B)	15'-0"	200 W	34'-0"
(C)	10'-0"	200 W	34'-0"
(D)	10'-0"	200 W	34'-0"



PHASE DIAGRAM

TEMPORARY SIGNAL SYSTEM
(9th/ B STREET)
(SEASON 1, STAGE 1, 2, 3, 10 THROUGH FINAL STAGE)

SCALE: 1" = 20'

E-54

APPROVED FOR ELECTRICAL WORK ONLY

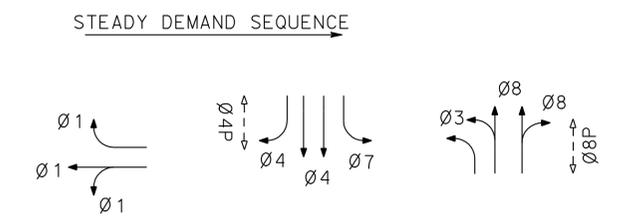
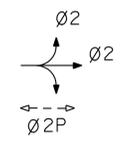
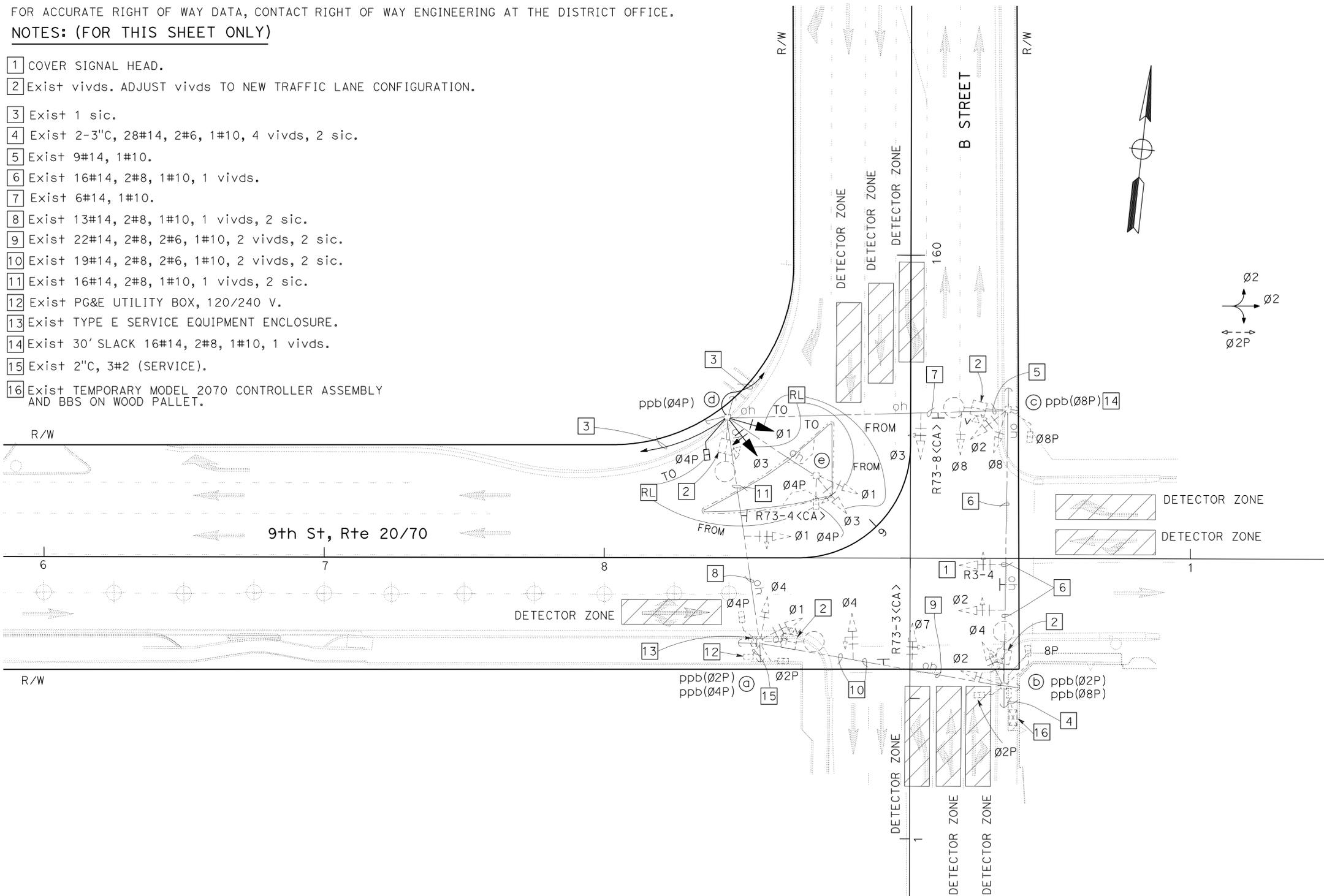
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN
 FUNCTIONAL SUPERVISOR NELSON LEE
 CALCULATED/DESIGNED BY
 CHECKED BY
 YOUNG TON HABIB GOLBAN
 REVISED BY DATE REVISED

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	512	595
H. Golban 5-16-11 REGISTERED ELECTRICAL ENGINEER DATE					
7-11-11			PLANS APPROVAL DATE		
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

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

NOTES: (FOR THIS SHEET ONLY)

- 1 COVER SIGNAL HEAD.
- 2 Exist vivds. ADJUST vivds TO NEW TRAFFIC LANE CONFIGURATION.
- 3 Exist 1 sic.
- 4 Exist 2-3"C, 28#14, 2#6, 1#10, 4 vivds, 2 sic.
- 5 Exist 9#14, 1#10.
- 6 Exist 16#14, 2#8, 1#10, 1 vivds.
- 7 Exist 6#14, 1#10.
- 8 Exist 13#14, 2#8, 1#10, 1 vivds, 2 sic.
- 9 Exist 22#14, 2#8, 2#6, 1#10, 2 vivds, 2 sic.
- 10 Exist 19#14, 2#8, 2#6, 1#10, 2 vivds, 2 sic.
- 11 Exist 16#14, 2#8, 1#10, 1 vivds, 2 sic.
- 12 Exist PG&E UTILITY BOX, 120/240 V.
- 13 Exist TYPE E SERVICE EQUIPMENT ENCLOSURE.
- 14 Exist 30' SLACK 16#14, 2#8, 1#10, 1 vivds.
- 15 Exist 2"C, 3#2 (SERVICE).
- 16 Exist TEMPORARY MODEL 2070 CONTROLLER ASSEMBLY AND BBS ON WOOD PALLET.



PHASE DIAGRAM

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN
 FUNCTIONAL SUPERVISOR: NELSON LEE
 CALCULATED/DESIGNED BY: [blank]
 CHECKED BY: [blank]
 YOUNG TON: HABIB GOLBAN
 REVISED BY: [blank] DATE REVISED: [blank]

TEMPORARY SIGNAL SYSTEM
(9th/B STREET)
(STAGE 4 AND 5)
 SCALE: 1" = 20'

APPROVED FOR ELECTRICAL WORK ONLY

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	513	595

H. Golban 5-16-11
REGISTERED ELECTRICAL ENGINEER DATE
7-11-11
PLANS APPROVAL DATE

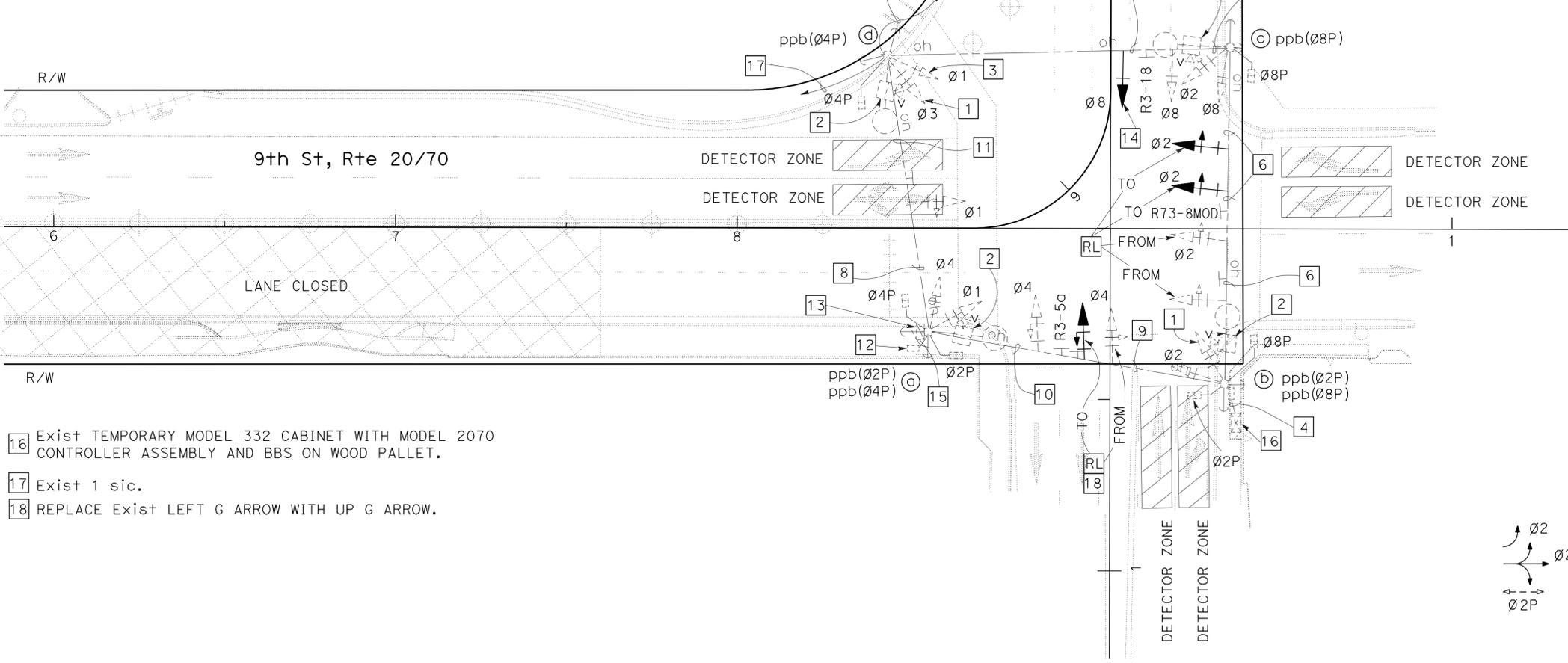
HABIB GOLBAN
No. E 17928
Exp. 09-30-12
ELECTRICAL
STATE OF CALIFORNIA

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

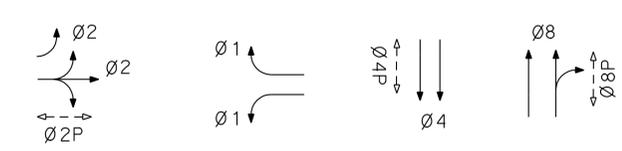
FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

NOTES: (FOR THIS SHEET ONLY)

- 1 COVER SIGNAL HEAD.
- 2 Exist vivds. AJUST vivds ANGLE TO NEW TRAFFIC LANE CONFIGURATION.
- 3 REPLACE Exist BALLS WITH RIGHT ARROWS.
- 4 Exist 2-3"C 28#14, 2#6, 1#10, 4 vivds, 2 sic.
- 5 Exist 9#14, 1#10.
- 6 Exist 16#14, 2#8, 1#10, 1 vivds.
- 7 Exist 6#14, 1#10.
- 8 Exist 13#14, 2#8, 1#10, 1 vivds, 2 sic.
- 9 Exist 22#14, 2#8, 2#6, 1#10, 2 vivds, 2 sic.
- 10 Exist 19#14, 2#8, 2#6, 1#10, 2 vivds, 2 sic.
- 11 Exist 13#14, 2#8, 1#10, 1 vivds, 2 sic.
- 12 Exist PG&E UTILITY BOX, 120/240 V.
- 13 Exist TYPE E SERVICE EQUIPMENT ENCLOSURE.
- 14 REPLACE Exist LEFT G ARROW WITH GREEN BALL.
- 15 Exist 2"C, 3#2 (SERVICE).



STEADY DEMAND SEQUENCE



PHASE DIAGRAM

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN
FUNCTIONAL SUPERVISOR: NELSON LEE
CALCULATED/DESIGNED BY: CHECKED BY:
YOUNG TON: HABIB GOLBAN
REVISED BY: DATE REVISED:

- 16 Exist TEMPORARY MODEL 332 CABINET WITH MODEL 2070 CONTROLLER ASSEMBLY AND BBS ON WOOD PALLET.
- 17 Exist 1 sic.
- 18 REPLACE Exist LEFT G ARROW WITH UP G ARROW.

**TEMPORARY SIGNAL SYSTEM
(9th/B STREET)
(STAGE 6)
SCALE: 1" = 20'**

APPROVED FOR ELECTRICAL WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN

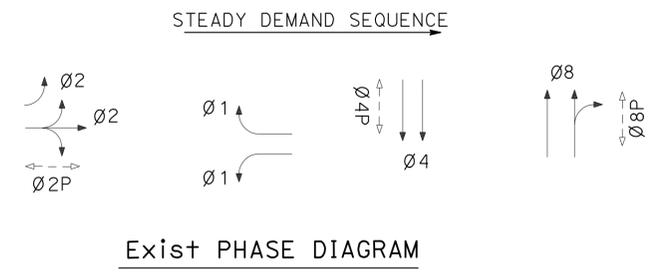
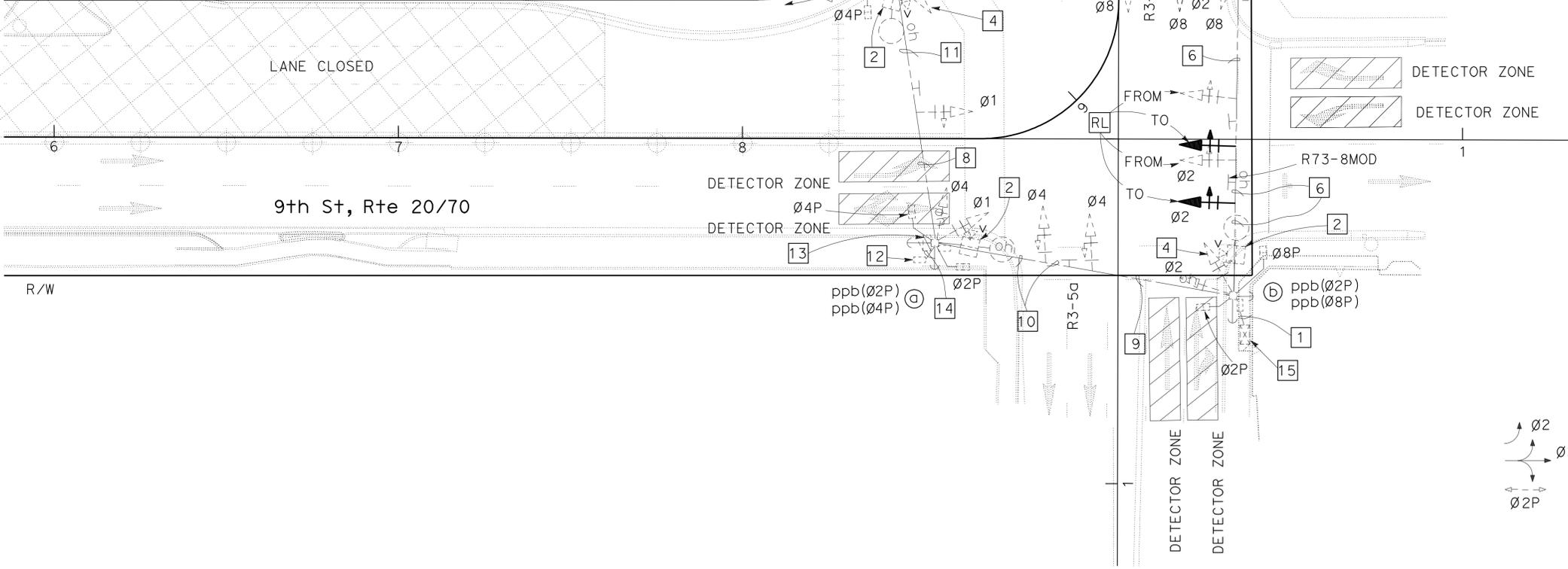
FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

NOTES: (FOR THIS SHEET ONLY)

- 1 Exist 2-3"C, 28#14, 2#6, 2#10, 4 vivds, 2 sic.
- 2 Exist vivds. AJUST vivds ANGLE TO NEW TRAFFIC LANE CONFIGURATION.
- 3 Exist 1 sic.
- 4 Exist COVERED SIGNAL HEAD.
- 5 Exist 9#14, 1#10.
- 6 Exist 16#14, 2#8, 1#10, 1 vivds.
- 7 Exist 6#14, 1#10.
- 8 Exist 13#14, 2#8, 1#10, 1 vivds, 2 sic.
- 9 Exist 22#14, 2#8, 2#6, 1#10, 2 vivds, 2 sic.
- 10 Exist 19#14, 2#8, 2#6, 1#10, 2 vivds, 2 sic.
- 11 Exist 13#14, 2#8, 1#10, 1 vivds, 2 sic.
- 12 Exist PG&E UTILITY BOX, 120/240 V.
- 13 Exist TYPE E SERVICE EQUIPMENT ENCLOSURE.
- 14 Exist 2"C, 3#2 (SERVICE).
- 15 Exist TEMPORARY MODEL 332 CABINET WITH MODEL 2070 CONTROLLER ASSEMBLY AND BBS ON WOOD PALLET. STAGES 8 AND 9, COVER TEMPORARY SIGNAL AND PED HEADS. MAINTAIN LIGHTING.

GENERAL NOTE: (FOR THIS SHEET ONLY)

STAGES 8 AND 9, COVER TEMPORARY SIGNAL AND PED HEADS. MAINTAIN LIGHTING.



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	514	595

H. Golban 5-16-11
REGISTERED ELECTRICAL ENGINEER DATE

7-11-11
PLANS APPROVAL DATE

HABIB GOLBAN
No. E 17928
Exp. 09-30-12
ELECTRICAL

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



**TEMPORARY SIGNAL SYSTEM
(9th/B STREET)
(STAGE 7)
SCALE: 1" = 20'**

APPROVED FOR ELECTRICAL WORK ONLY

E-57

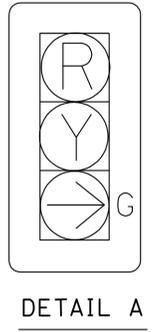
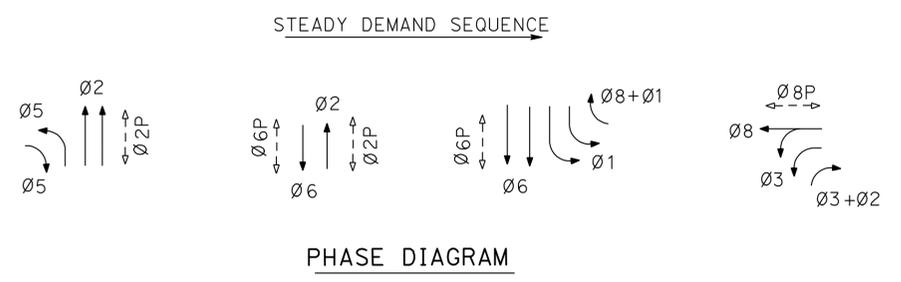
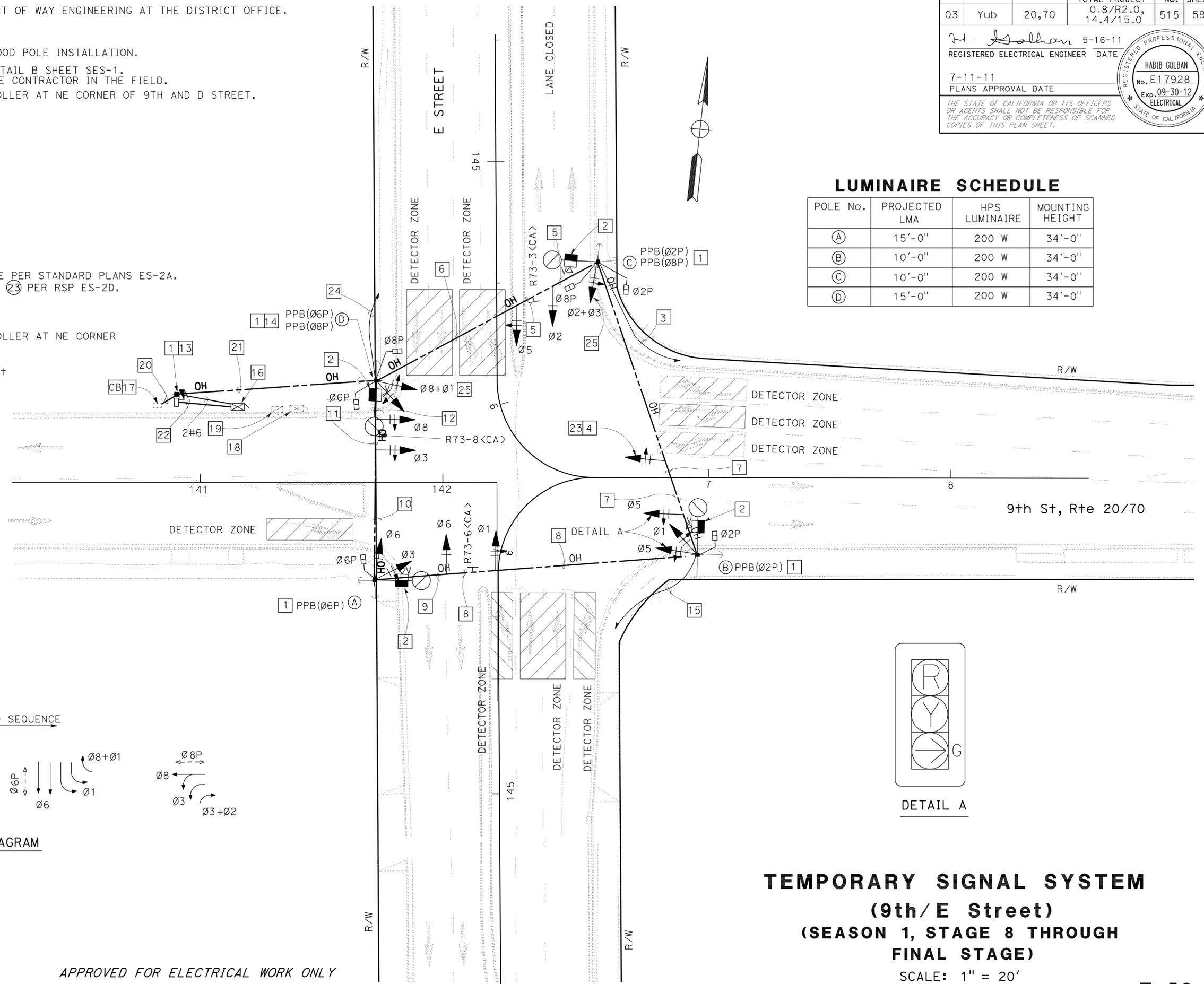
FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

NOTES: (FOR THIS SHEET ONLY)

- 1 SEE SHEET SES-2 TO SES-5 FOR TEMPORARY WOOD POLE INSTALLATION.
- 2 INSTALL CONTRACTOR-FURNISHED VIVDS, SEE DETAIL B SHEET SES-1. THE VIVDS ANGLE SHALL BE DETERMINED BY THE CONTRACTOR IN THE FIELD.
- 3 1 SIC. APPROXIMATELY 450' TO SIGNAL CONTROLLER AT NE CORNER OF 9TH AND D STREET.
- 4 COVER SIGNAL HEAD.
- 5 15#14, 2#8, 1#10, 1 VIVDS, 1 SIC.
- 6 18#14, 2#8, 1#10, 1 VIVDS, 1 SIC.
- 7 6#14, 1#10.
- 8 18#14, 2#8, 1#10, 1 VIVDS, 1 SIC.
- 9 21#14, 2#8, 1#10, 1 VIVDS, 1 SIC.
- 10 27#14, 2#8, 1#10, 2 VIVDS, 1 SIC.
- 11 27#14, 2#8, 1#10, 2 VIVDS, 1 SIC.
- 12 30#14, 2#8, 1#10, 2 VIVDS, 1 SIC.
- 13 INSTALL TYPE E SERVICE EQUIPMENT ENCLOSURE PER STANDARD PLANS ES-2A. PROVIDE ITEMS 1 THRU 8, 15, 16, 17, 20 THRU 23 PER RSP ES-2D. SEE DETAIL "A" ON SHEET E-45.
- 14 50' SLACK 18#14, 2#8, 1#10, 1 VIVDS.
- 15 1 SIC. APPROXIMATELY 360' TO SIGNAL CONTROLLER AT NE CORNER OF 8TH AND E STREET.
- 16 INSTALL Exist MODEL 2070 CONTROLLER ASSEMBLY AND BBS ON WOOD PALLET FROM Exist LOCATION. SEE DETAIL "A" ON SHEET E-45.
- 17 Exist PG&E UTILITY BOX, 120/240 V.
- 18 Exist TRAFFIC SIGNAL CABINET SHALL BE RELOCATED TO NEW LOCATION ON WOOD PALLET.
- 19 Exist SERVICE ENCLOSURE CABINET.
- 20 2"C, 3#2 (SERVICE).
- 21 40#14, 2#8, 1#10, 4 VIVDS, 3 SIC.
- 22 2-3"C, 40#14, 1#10, 4 VIVDS, 3 SIC.
- 23 INSTALL 4 SECTION SIGNAL HEAD: R-Y-G AND LEFT G ARROW.
- 24 INSTALL 1 SIC TO THE SIGNAL CABINET AT F STREET AND 10th STREET.
- 25 INSTALL 5 SECTION SIGNAL HEAD: R-Y-G AND RIGHT Y-G ARROW.

LUMINAIRE SCHEDULE

POLE No.	PROJECTED LMA	HPS LUMINAIRE	MOUNTING HEIGHT
(A)	15'-0"	200 W	34'-0"
(B)	10'-0"	200 W	34'-0"
(C)	10'-0"	200 W	34'-0"
(D)	15'-0"	200 W	34'-0"



**TEMPORARY SIGNAL SYSTEM
(9th/ E Street)
(SEASON 1, STAGE 8 THROUGH
FINAL STAGE)**

SCALE: 1" = 20'

APPROVED FOR ELECTRICAL WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN

FUNCTIONAL SUPERVISOR: NELSON LEE
CALCULATED/DESIGNED BY: [Blank]
CHECKED BY: [Blank]
YOUNG TON: HABIB GOLBAN
REVISED BY: [Blank] DATE REVISED: [Blank]

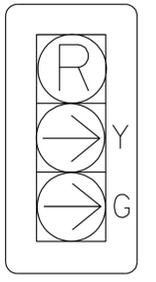
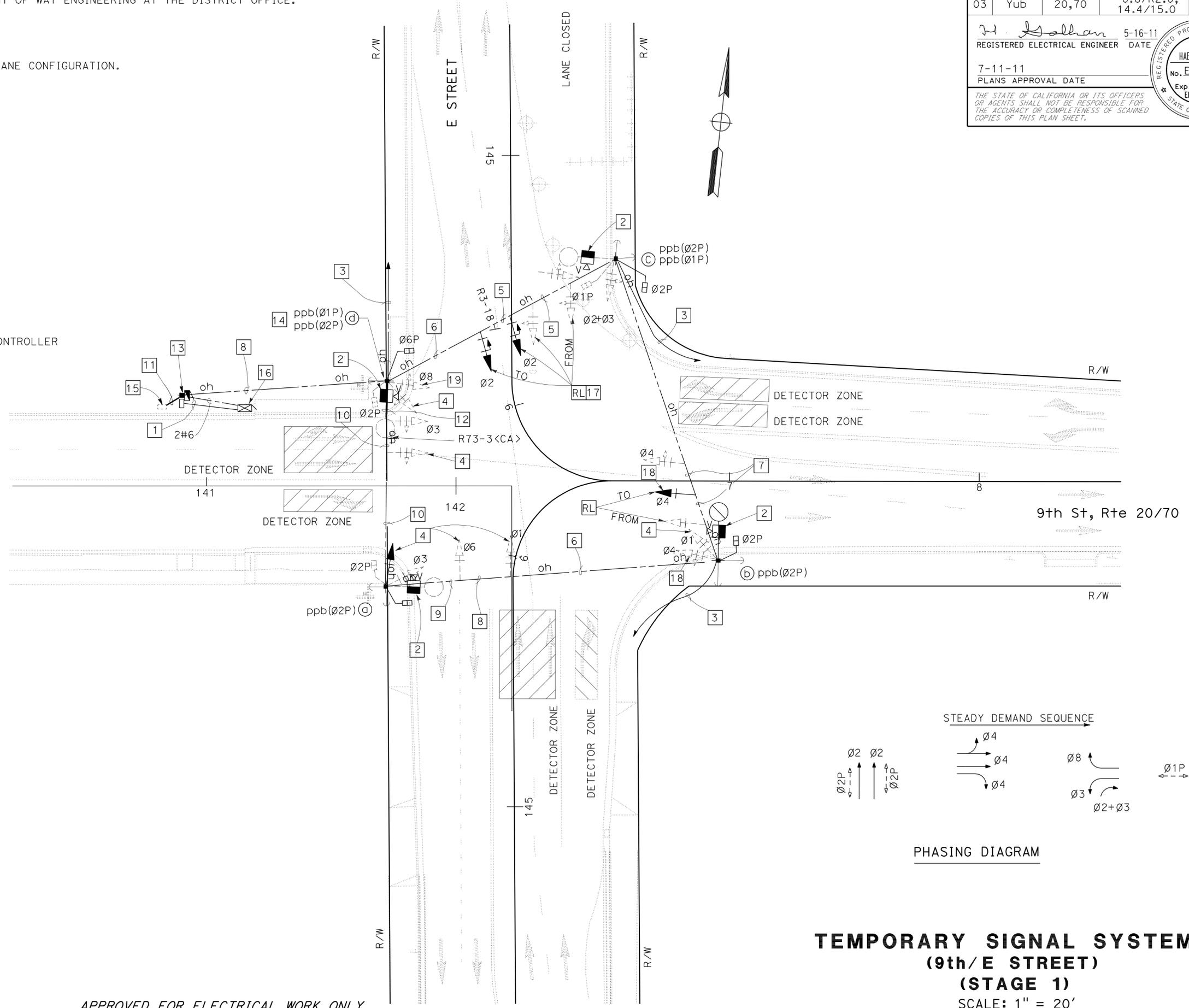
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	516	595

H. Golban 5-16-11
 REGISTERED ELECTRICAL ENGINEER DATE
 7-11-11
 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.

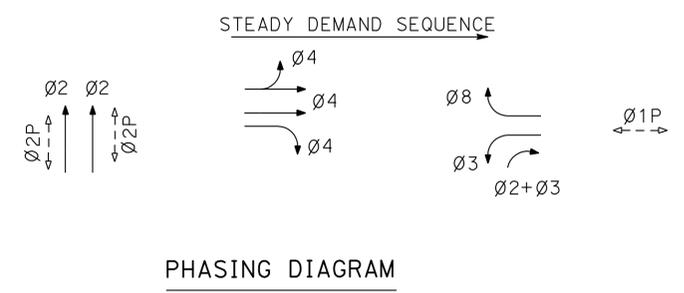
FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

NOTES: (FOR THIS SHEET ONLY)

- 1 Exist 2-3"C, 40#14, 1#10, 4 vivds, 3 sic.
- 2 Exist vivds. ADJUST vivds TO NEW TRAFFIC LANE CONFIGURATION.
- 3 Exist 1 sic.
- 4 COVER SIGNAL AND PED HEAD.
- 5 Exist 15#14, 2#8, 1#10, 1 vivds, 1 sic.
- 6 Exist 18#14, 2#8, 1#10, 1 vivds, 1 sic.
- 7 Exist 6#14, 1#10.
- 8 Exist 40#14, 2#8, 1#10, 4 vivds, 3 sic.
- 9 Exist 21#14, 2#8, 1#10, 1 vivds, 1 sic.
- 10 Exist 27#14, 2#8, 1#10, 2 vivds, 1 sic.
- 11 Exist 2"C, 3#2 (SERVICE).
- 12 Exist 30#14, 2#8, 1#10, 2 vivds, 1 sic.
- 13 Exist TYPE E SERVICE EQUIPMENT ENCLOSURE.
- 14 Exist 50' SLACK 18#14, 2#8, 1#10, 1 vivds.
- 15 Exist PG&E UTILITY BOX, 120/240 V.
- 16 Exist MODEL 332 CABINET WITH MODEL 2070 CONTROLLER ASSEMBLY AND BBS ON WOOD PALLET.
- 17 REPLACE Exist GREEN AND LEFT INDICATIONS WITH UP GREEN ARROWS.
- 18 CHANGE GREEN RIGHT ARROWS TO BALLS.
- 19 REPLACE Exist 5 SECTION HEAD WITH RIGHT ARROW, SEE DETAIL A.



DETAIL A



**TEMPORARY SIGNAL SYSTEM
(9th/ E STREET)
(STAGE 1)
SCALE: 1" = 20'**

APPROVED FOR ELECTRICAL WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN
 FUNCTIONAL SUPERVISOR: NELSON LEE
 YOUNG TON: HABIB GOLBAN
 REVISIONS: REVISOR, DATE, REVISION; CALCULATED/DESIGNED BY; CHECKED BY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN

FUNCTIONAL SUPERVISOR: NELSON LEE
 CALCULATED/DESIGNED BY: [blank]
 CHECKED BY: [blank]
 YOUNG TON: HABIB GOLBAN
 REVISED BY: [blank] DATE REVISED: [blank]

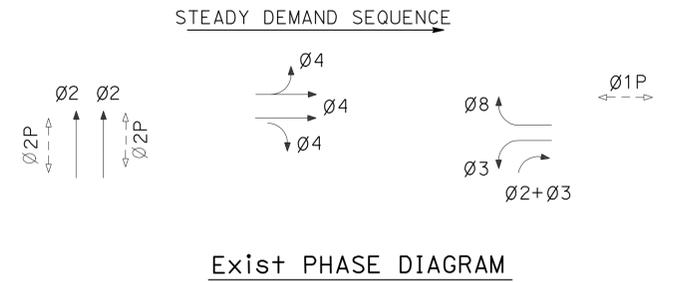
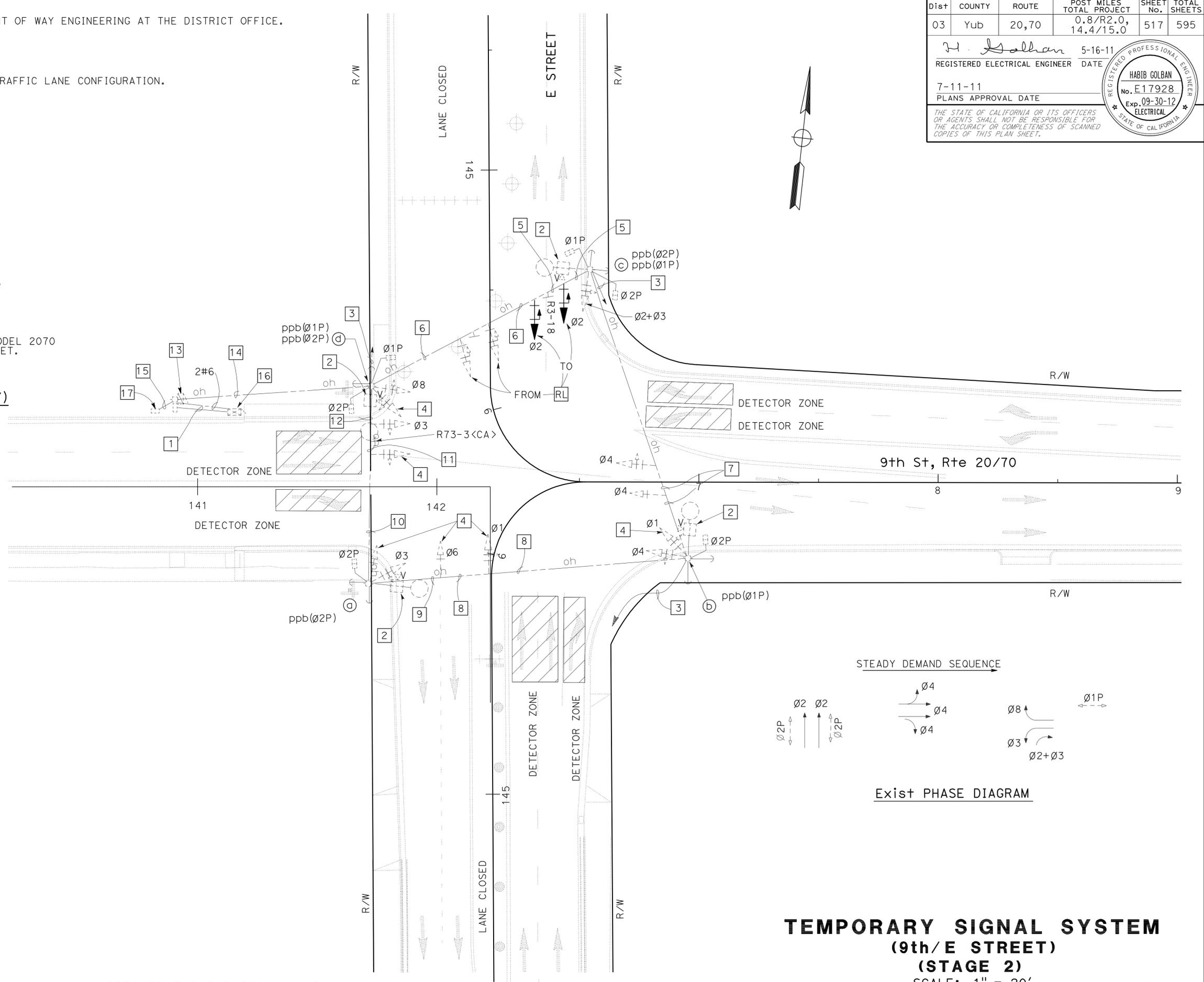
FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

NOTES: (FOR THIS SHEET ONLY)

- 1 Exist 2-3"C, 40#14, 1#10, 4 vivds, 3 sic.
- 2 Exist vivds. ADJUST vivds ANGLE TO NEW TRAFFIC LANE CONFIGURATION.
- 3 Exist 1 sic.
- 4 Exist COVERED SIGNAL AND PED HEAD.
- 5 Exist 15#14, 2#8, 1#10, 1 vivds, 1 sic.
- 6 Exist 18#14, 2#8, 1#10, 1 vivds, 1 sic.
- 7 Exist 6#14, 1#10.
- 8 Exist 18#14, 2#8, 1#10, 1 vivds, 1 sic.
- 9 Exist 21#14, 2#8, 1#10, 1 vivds, 1 sic.
- 10 Exist 27#14, 2#8, 1#10, 2 vivds, 1 sic.
- 11 Exist 27#14, 2#8, 1#10, 2 vivds, 1 sic.
- 12 Exist 30#14, 2#8, 1#10, 2 vivds, 1 sic.
- 13 Exist TYPE E SERVICE EQUIPMENT ENCLOSURE.
- 14 Exist 40#14, 2#8, 1#10, 4 vivds, 3 sic.
- 15 Exist 2"C, 3#2 (SERVICE).
- 16 Exist TEMPORARY MODEL 332 CABINET WITH MODEL 2070 CONTROLLER ASSEMBLY AND BBS ON WOOD PALLET.
- 17 Exist PG&E UTILITY BOX, 120/240 V.

GENERAL NOTE: (FOR THIS SHEET ONLY)

STAGE 3, COVER TEMPORARY SIGNAL HEAD AND PED HEAD. MAINTAIN LIGHTING.



**TEMPORARY SIGNAL SYSTEM
 (9th/E STREET)
 (STAGE 2)
 SCALE: 1" = 20'**

E-60

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	517	595

H. Golban 5-16-11
 REGISTERED ELECTRICAL ENGINEER DATE

7-11-11
 PLANS APPROVAL DATE

HABIB GOLBAN
 No. E 17928
 Exp. 09-30-12
 ELECTRICAL

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

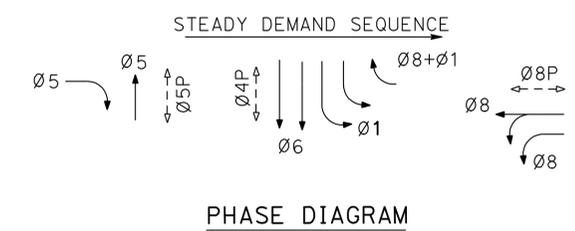
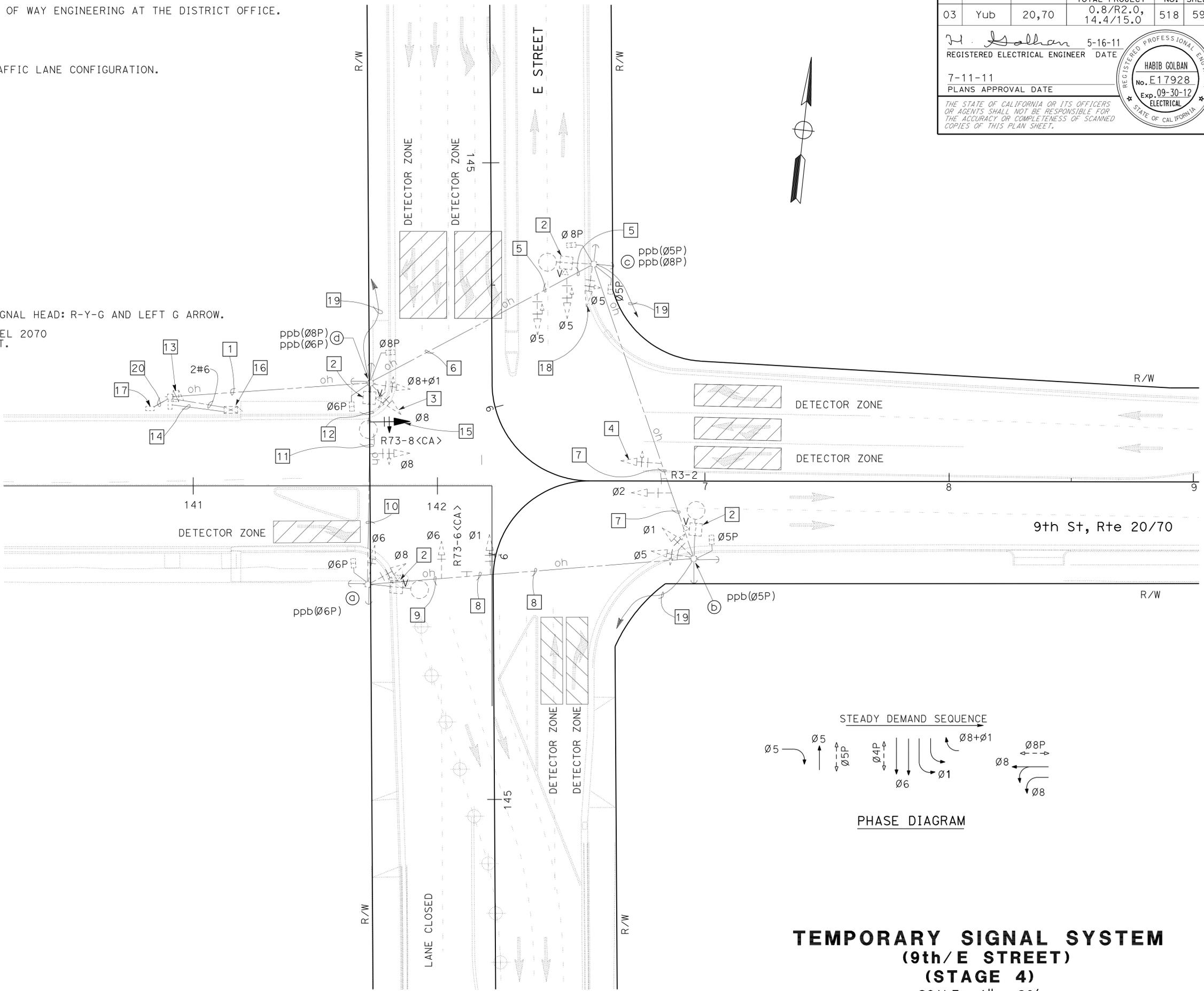
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN

FUNCTIONAL SUPERVISOR: NELSON LEE
 CALCULATED/DESIGNED BY: [blank]
 CHECKED BY: [blank]
 YOUNG TON: HABIB GOLBAN
 REVISED BY: [blank] DATE REVISED: [blank]

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

NOTES: (FOR THIS SHEET ONLY)

- 1 Exist 40#14, 2#8, 1#10, 4 vivds, 3 sic.
- 2 Exist vivds. ADJUST vivds ANGLE TO NEW TRAFFIC LANE CONFIGURATION.
- 3 Exist COVERED SIGNAL AND PED HEAD.
- 4 COVER SIGNAL AND PED HEAD.
- 5 Exist 15#14, 2#8, 1#10, 1 vivds, 1 sic.
- 6 Exist 18#14, 2#8, 1#10, 1 vivds, 1 sic.
- 7 Exist 6#14, 1#10.
- 8 Exist 18#14, 2#8, 1#10, 1 vivds, 1 sic.
- 9 Exist 21#14, 2#8, 1#10, 1 vivds, 1 sic.
- 10 Exist 27#14, 2#8, 1#10, 2 vivds, 1 sic.
- 11 Exist 27#14, 2#8, 1#10, 2 vivds, 1 sic.
- 12 Exist 30#14, 2#8, 1#10, 2 vivds, 1 sic.
- 13 Exist TYPE E SERVICE EQUIPMENT ENCLOSURE.
- 14 Exist 2-3"C, 40#14, 1#10, 4 vivds, 3 sic.
- 15 CHANGE Exist SIGNAL HEAD WITH 4 SECTION SIGNAL HEAD: R-Y-G AND LEFT G ARROW.
- 16 Exist TEMPORARY MODEL 332 CABINET WITH MODEL 2070 CONTROLLER ASSEMBLY AND BBS ON WOOD PALLET.
- 17 Exist PG&E UTILITY BOX, 120/240 V.
- 18 COVER Exist RIGHT Y-G ARROWS.
- 19 Exist 1 sic.
- 20 Exist 2"C, 3#2 (SERVICE).



**TEMPORARY SIGNAL SYSTEM
 (9th/E STREET)
 (STAGE 4)**
 SCALE: 1" = 20'

APPROVED FOR ELECTRICAL WORK ONLY

E-61

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	518	595

H. Salhan 5-16-11
 REGISTERED ELECTRICAL ENGINEER DATE

7-11-11
 PLANS APPROVAL DATE

HABIB GOLBAN
 No. E 17928
 Exp. 09-30-12
 ELECTRICAL

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

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN

FUNCTIONAL SUPERVISOR
 NELSON LEE

CALCULATED/DESIGNED BY
 CHECKED BY

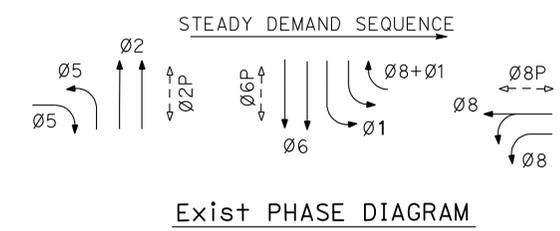
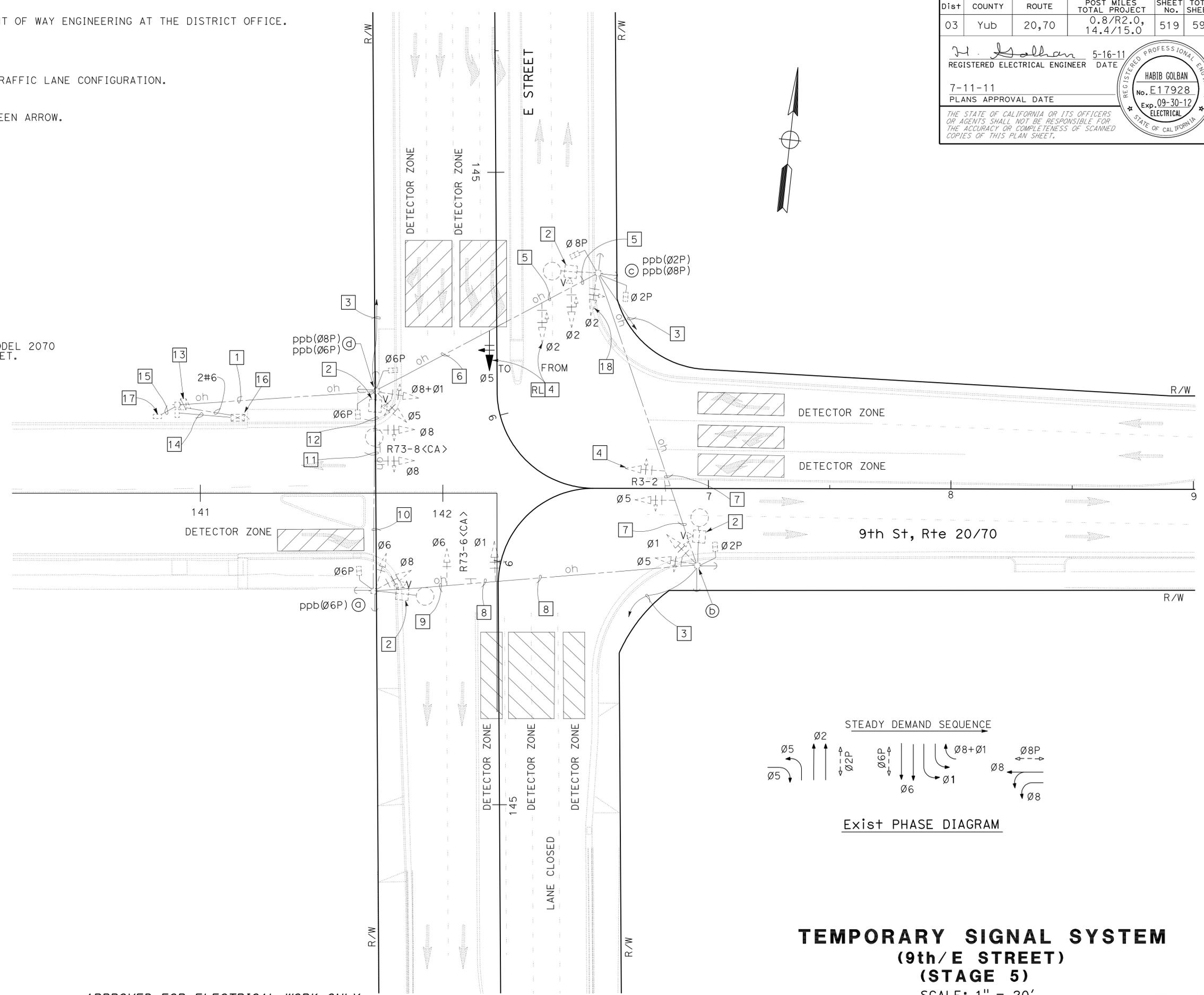
YOUNG TON
 HABIB GOLBAN

REVISED BY
 DATE REVISED

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

NOTES: (FOR THIS SHEET ONLY)

- 1 Exist 40#14, 2#8, 1#10, 4 vivds, 3 sic.
- 2 Exist vivds. ADJUST vivds ANGLE TO NEW TRAFFIC LANE CONFIGURATION.
- 3 Exist 1 sic.
- 4 CHANGE Exist UP GREEN ARROW WITH LEFT GREEN ARROW.
- 5 Exist 15#14, 2#8, 1#10, 1 vivds, 1 sic.
- 6 Exist 18#14, 2#8, 1#10, 1 vivds, 1 sic.
- 7 Exist 6#14, 1#10.
- 8 Exist 18#14, 2#8, 1#10, 1 vivds, 1 sic.
- 9 Exist 21#14, 2#8, 1#10, 1 vivds, 1 sic.
- 10 Exist 27#14, 2#8, 1#10, 2 vivds, 1 sic.
- 11 Exist 27#14, 2#8, 1#10, 2 vivds, 1 sic.
- 12 Exist 30#14, 2#8, 1#10, 2 vivds, 1 sic.
- 13 Exist TYPE E SERVICE EQUIPMENT ENCLOSURE.
- 14 Exist 2-3"C, 40#14, 1#10, 4 vivds, 3 sic.
- 15 Exist 2"C, 3#2 (SERVICE).
- 16 Exist TEMPORARY MODEL 332 CABINET WITH MODEL 2070 CONTROLLER ASSEMBLY AND BBS ON WOOD PALLET.
- 17 Exist PG&E UTILITY BOX, 120/240 V.
- 18 Exist COVERED RIGHT Y-G ARROWS.



**TEMPORARY SIGNAL SYSTEM
 (9th/E STREET)
 (STAGE 5)
 SCALE: 1" = 20'**

APPROVED FOR ELECTRICAL WORK ONLY

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	519	595

HABIB GOLBAN
 REGISTERED ELECTRICAL ENGINEER
 No. E 17928
 Exp. 09-30-12
 ELECTRICAL

5-16-11
 DATE

7-11-11
 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.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN

FUNCTIONAL SUPERVISOR: NELSON LEE
 CALCULATED/DESIGNED BY: [blank]
 CHECKED BY: [blank]
 YOUNG TON: HABIB GOLBAN
 REVISED BY: [blank] DATE REVISED: [blank]

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

NOTES: (FOR THIS SHEET ONLY)

- 1 Exist 40#14, 2#8, 1#10, 4 vivds, 3 sic.
- 2 Exist vivds. ADJUST vivds ANGLE TO NEW TRAFFIC LANE CONFIGURATION.
- 3 Exist 1 sic.
- 4 COVER Exist SIGNAL AND PED HEAD.
- 5 Exist 15#14, 2#8, 1#10, 1 vivds, 1 sic.
- 6 Exist 18#14, 2#8, 1#10, 1 vivds, 1 sic.
- 7 Exist 6#14, 1#10.
- 8 Exist 18#14, 2#8, 1#10, 1 vivds, 1 sic.
- 9 Exist 21#14, 2#8, 1#10, 1 vivds, 1 sic.
- 10 Exist 27#14, 2#8, 1#10, 2 vivds, 1 sic.
- 11 Exist 27#14, 2#8, 1#10, 2 vivds, 1 sic.
- 12 Exist 30#14, 2#8, 1#10, 2 vivds, 1 sic.
- 13 Exist TYPE E SERVICE EQUIPMENT ENCLOSURE.
- 14 Exist 2-3"C, 40#14, 1#10, 4 vivds, 3 sic.
- 15 UNCOVER Exist RIGHT YELLOW-GREEN ARROW.
- 16 Exist TEMPORARY MODEL 332 CABINET WITH MODEL 2070 CONTROLLER ASSEMBLY AND BBS ON WOOD PALLET.
- 17 Exist PG&E UTILITY BOX, 120/240 V.
- 18 Exist 2"C, 3#2 (SERVICE).
- 19 Exist COVERED SIGNAL HEAD.

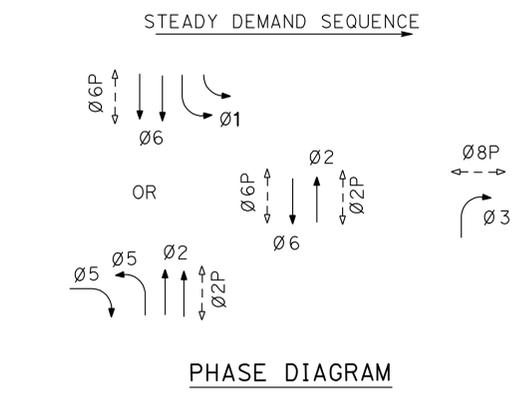
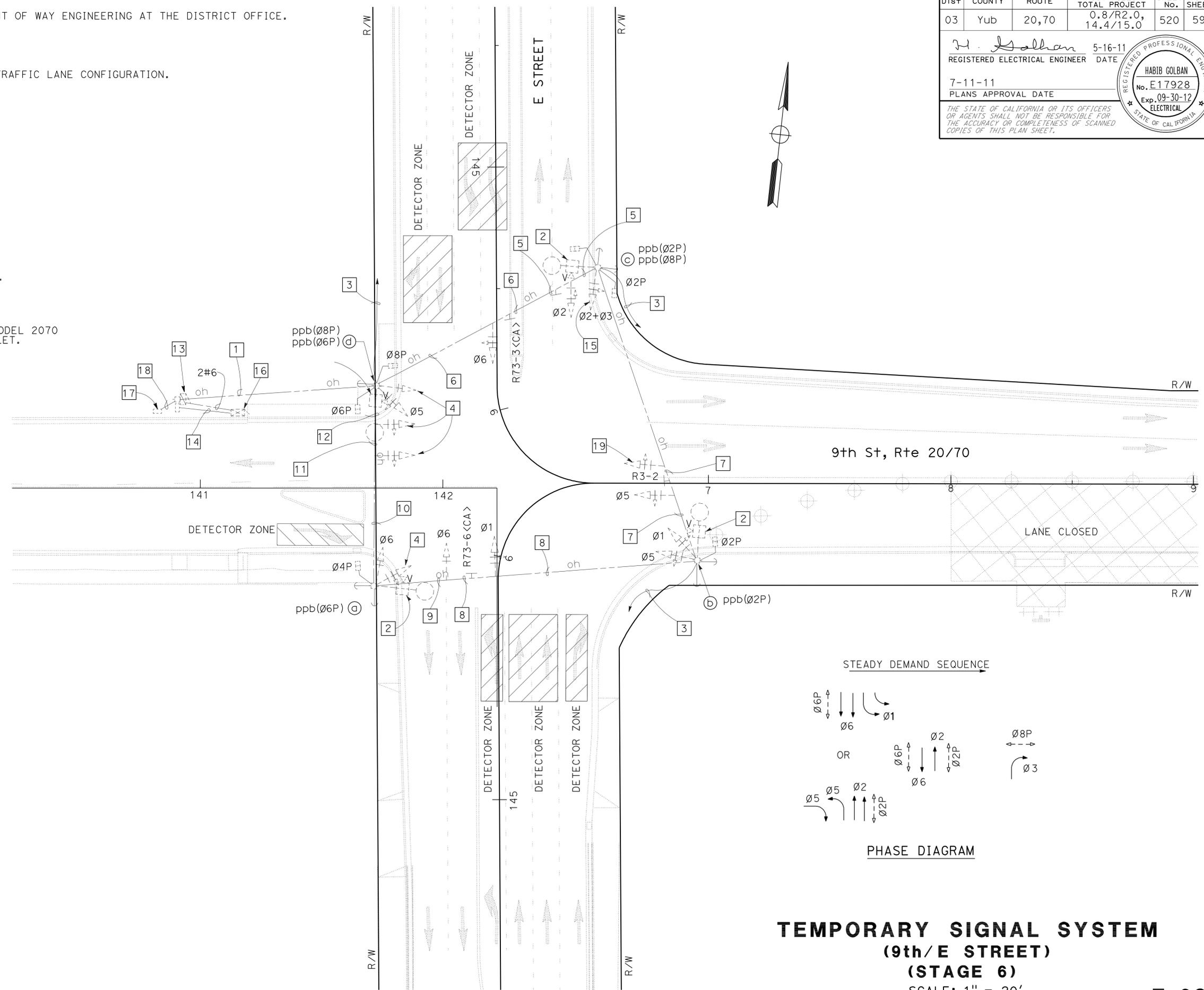
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	520	595

H. Golban 5-16-11
 REGISTERED ELECTRICAL ENGINEER DATE

7-11-11
 PLANS APPROVAL DATE

HABIB GOLBAN
 No. E 17928
 Exp. 09-30-12
 ELECTRICAL

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



**TEMPORARY SIGNAL SYSTEM
 (9th/E STREET)
 (STAGE 6)
 SCALE: 1" = 20'**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN

FUNCTIONAL SUPERVISOR: NELSON LEE
 CALCULATED/DESIGNED BY: [blank]
 CHECKED BY: [blank]
 YOUNG TON: HABIB GOLBAN
 REVISED BY: [blank] DATE REVISED: [blank]

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

NOTES: (FOR THIS SHEET ONLY)

- 1 Exist 40#14, 2#8, 1#10, 4 vids, 3 sic.
- 2 Exist vids. ADJUST vids ANGLE TO NEW TRAFFIC LANE CONFIGURATION.
- 3 Exist 2"C, 3#2 (SERVICE).
- 4 Exist COVERED SIGNAL AND PED HEAD.
- 5 Exist 15#14, 2#8, 1#10, 1 vids, 1 sic.
- 6 Exist 18#14, 2#8, 1#10, 1 vids, 1 sic.
- 7 Exist 6#14, 1#10.
- 8 Exist 18#14, 2#8, 1#10, 1 vids, 1 sic.
- 9 Exist 21#14, 2#8, 1#10, 1 vids, 1 sic.
- 10 Exist 27#14, 2#8, 1#10, 2 vids, 1 sic.
- 11 Exist 27#14, 2#8, 1#10, 2 vids, 1 sic.
- 12 Exist 30#14, 2#8, 1#10, 2 vids, 1 sic.
- 13 Exist TYPE E SERVICE EQUIPMENT ENCLOSURE.
- 14 Exist 2-3"C, 40#14, 1#10, 4 vids, 3 sic.
- 15 Exist 1 sic.
- 16 Exist TEMPORARY MODEL 332 CABINET WITH MODEL 2070 CONTROLLER ASSEMBLY AND BBS ON WOOD PALLET.
 RS AT THE END OF THE STAGE.
- 17 Exist PG&E UTILITY BOX, 120/240 V.

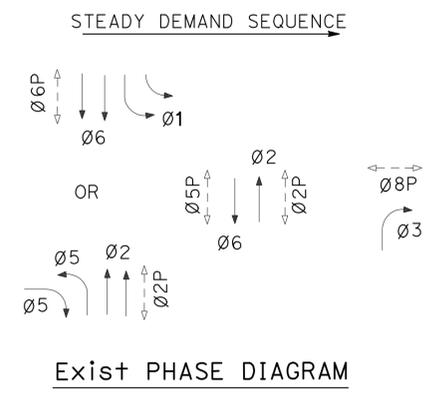
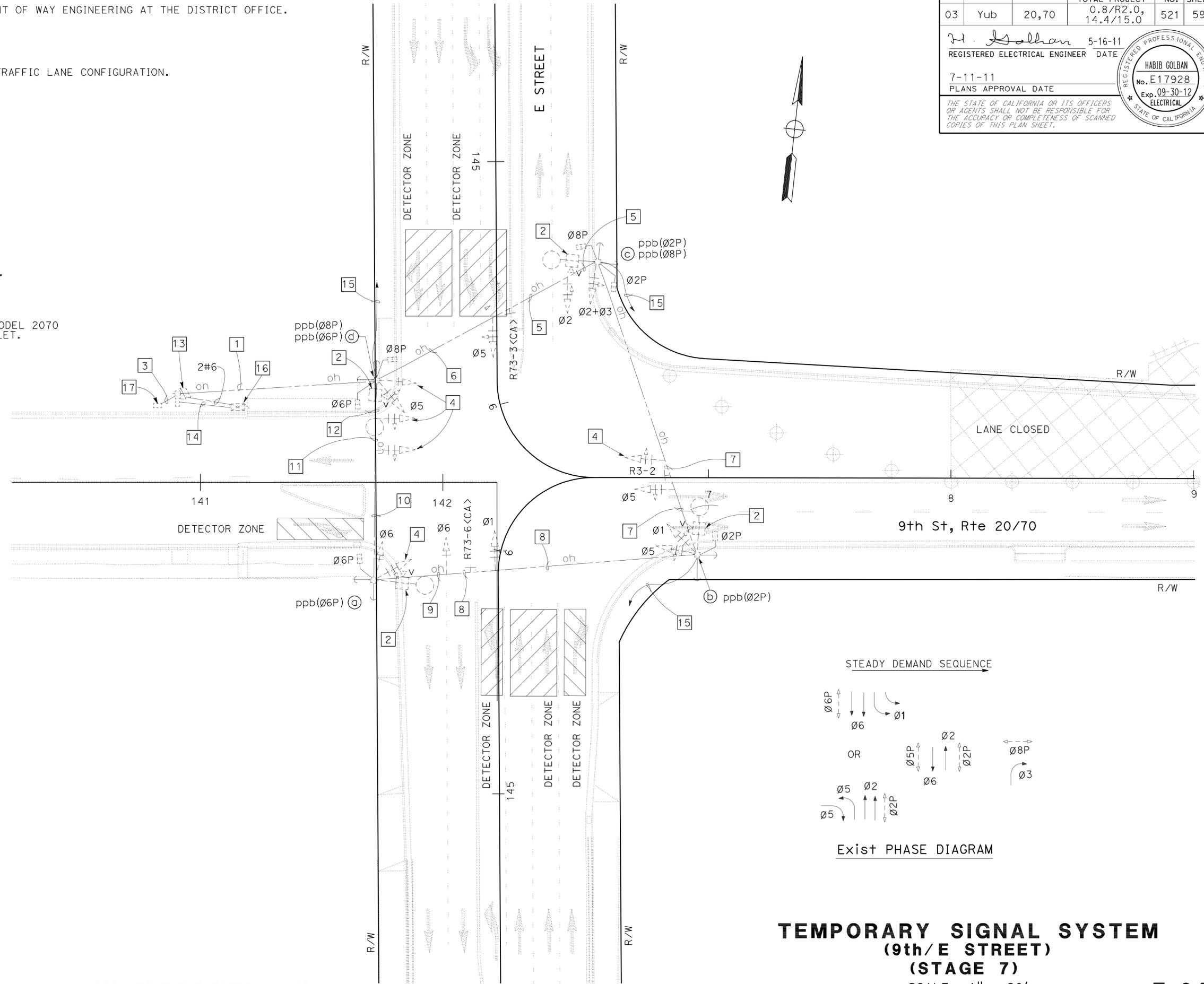
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	521	595

H. Golban 5-16-11
 REGISTERED ELECTRICAL ENGINEER DATE

7-11-11
 PLANS APPROVAL DATE

HABIB GOLBAN
 No. E 17928
 Exp. 09-30-12
 ELECTRICAL

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



**TEMPORARY SIGNAL SYSTEM
 (9th/E STREET)
 (STAGE 7)**

SCALE: 1" = 20'

APPROVED FOR ELECTRICAL WORK ONLY

E-64

LAST REVISION DATE PLOTTED => 15-JUL-2011 05-13-11 TIME PLOTTED => 13:22

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	522	595

H. Golban 5-16-11
REGISTERED ELECTRICAL ENGINEER DATE
7-11-11
PLANS APPROVAL DATE

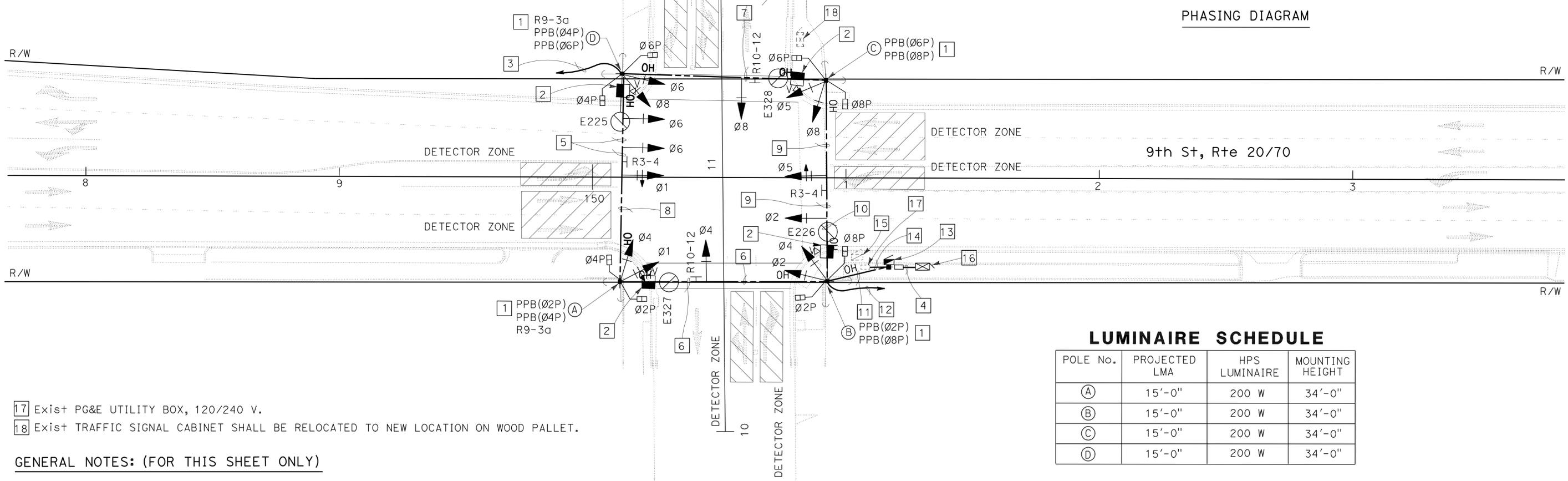
HABIB GOLBAN
No. E 17928
Exp. 09-30-12
ELECTRICAL

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

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

NOTES: (FOR THIS SHEET ONLY)

- 1 SEE SHEET SES-2 TO SES-5 FOR TEMPORARY WOOD POLE INSTALLATION.
- 2 INSTALL CONTRACTOR-FURNISHED VIVDS, SEE DETAIL B SHEET SES-1. THE VIVDS ANGLE SHALL BE DETERMINED BY THE CONTRACTOR IN THE FIELD.
- 3 1 SIC. APPROXIMATELY 450' TO SIGNAL CONTROLLER AT NW CORNER OF 9th AND E STREET.
- 4 2-3"C, 33#14, 1#10, 2#6, 4 VIVDS, 2 SIC.
- 5 16#14, 2#8, 1#10, 1 VIVDS, 1 SIC.
- 6 25#14, 2#8, 1#10, 2 VIVDS, 1 SIC.
- 7 6#14, 1#10.
- 8 19#14, 2#8, 1#10, 1 VIVDS, 1 SIC.
- 9 16#14, 2#8, 1#10, 1 VIVDS.
- 10 19#14, 2#8, 1#10, 1 VIVDS.
- 11 31#14, 1#10, 2#8, 4 VIVDS, 2 SIC.
- 12 1 SIC. APPROXIMATELY 800' TO SIGNAL CONTROLLER AT SE CORNER OF 9TH AND B STREET.
- 13 INSTALL TYPE E SERVICE EQUIPMENT ENCLOSURE PER STANDARD PLANS ES-2A. PROVIDE ITEMS 1 THRU 3, 15, 16, 17, 20 THRU 23 PER RSP ES-2D. SEE DETAIL "A" ON SHEET E-45.
- 14 2"C, 3#2 (SERVICE).
- 15 Exist SERVICE EQUIPMENT ENCLOSURE CABINET.
- 16 INSTALL Exist MODEL 2070 CONTROLLER ASSEMBLY AND BBS ON WOOD PALLET FROM Exist LOCATION. SEE DETAIL "A" ON SHEET E-45.



LUMINAIRE SCHEDULE

POLE No.	PROJECTED LMA	HPS LUMINAIRE	MOUNTING HEIGHT
(A)	15'-0"	200 W	34'-0"
(B)	15'-0"	200 W	34'-0"
(C)	15'-0"	200 W	34'-0"
(D)	15'-0"	200 W	34'-0"

- 17 Exist PG&E UTILITY BOX, 120/240 V.
- 18 Exist TRAFFIC SIGNAL CABINET SHALL BE RELOCATED TO NEW LOCATION ON WOOD PALLET.

GENERAL NOTES: (FOR THIS SHEET ONLY)

1. STAGE 3: COVER ALL SIGNAL AND PED HEADS, TEMPORARY SIGNAL SYSTEM IS OFF. MAINTAIN LIGHTING.
2. STAGE 4 AND 5: UNCOVER ALL SIGNAL AND PED HEADS, TEMPORARY SIGNAL SYSTEM IS ON.
3. STAGE 6 AND 7: COVER ALL SIGNAL AND PED HEADS, TEMPORARY SIGNAL SYSTEM IS OFF. MAINTAIN LIGHTING.
4. STAGE 8 THROUGH FINAL STAGE CONSTRUCTION: UNCOVER ALL SIGNAL AND PED HEADS, TEMPORARY SIGNAL SYSTEM IS ON.

**TEMPORARY SIGNAL SYSTEM
(9th/ D Street)
(SEASON 1, STAGE 1 THROUGH
FINAL STAGE)**

SCALE: 1" = 20'

APPROVED FOR ELECTRICAL WORK ONLY

E-65

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
CALTRANS® ELECTRICAL DESIGN
FUNCTIONAL SUPERVISOR: NELSON LEE
CALCULATED/DESIGNED BY: [blank]
CHECKED BY: [blank]
YOUNG TON: HABIB GOLBAN
REVISED BY: [blank] DATE REVISED: [blank]

LAST REVISION: DATE PLOTTED => 15-JUL-2011
07-08-11 TIME PLOTTED => 11:53

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	523	595

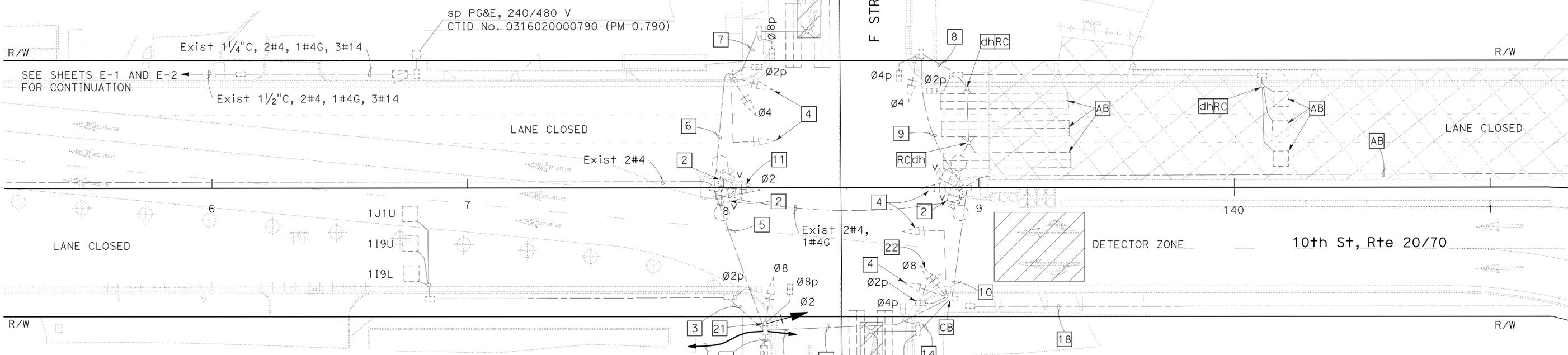
H. Galban 5-16-11	
REGISTERED ELECTRICAL ENGINEER	DATE
7-11-11	
PLANS APPROVAL DATE	

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.

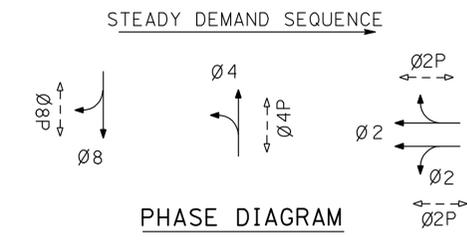
FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

NOTES: (FOR THIS SHEET ONLY)

- 1 Exist 2-3"C, 42#14, 2#8, 1#10, 16 dlc, 4 vivds, 2 sic. RC 2 sic. ADD 2 SIC.
- 2 Exist vivds. ADJUST VIVDS ANGLE TO NEW TRAFFIC LANE CONFIGURATION.
- 3 Exist 2"C, 4#14, 1#10, 6 dlc.
- 4 COVER SIGNAL AND PED HEAD.
- 5 Exist 2"C, 16#14, 1#10, 2 dlc, 1 sic, 2 vivds CABLES. RC 1 sic.
- 6 Exist 2"C, 16#14, 1#10, 2 dlc.
- 7 Exist 2"C, 4#14, 1#10, 2 dlc.
- 8 Exist 2"C, 4#14, 1#10, 6 dlc.
- 9 Exist 2"C, 13#14, 1#10, 6 dlc.
- 10 Exist 2"C, 16#14, 1#10, 6 dlc, 2 vivds CABLES, 1 sic, RC 1 sic.
- 11 Exist 4 SECTION SIGNAL HEAD. MODIFY TO R-Y-G BALL.
- 12 INSTALL 1 SIC TO SIGNAL CABINET AT 9th AND E STREET.
- 13 INSTALL 1 SIC TO SIGNAL CABINET AT THE NE QUADRANT LOCATED AT G STREET AND 10th STREET.
- 14 Exist 2"C, 4#14, 1#10, 2 dlc, 2#8.



- 15 Exist 2"C, 22#14, 1#10, 8 dlc, 2#8, 2 vivds, 1 sic, RC 1 sic.
- 16 Exist MODEL 2070 CONTROLLER ASSEMBLY AND BBS.
- 17 Exist PG&E UTILITY BOX, 120 V.
- 18 Exist 2"C mt.
- 19 Exist SERVICE EQUIPMENT ENCLOSURE. CTID No. 0316020000830.
- 20 Exist 1/2"C, 2#8.
- 21 MODIFY TOP MOUNTING TV-1 TO TOP MOUNTING TV-2-T.
- 22 REMOVE LEFT G ARROW AND REPACE WITH ROUND G BALL.



**TEMPORARY SIGNAL SYSTEM
(10th/F STREET)
(STAGE 1)
SCALE: 1" = 20'**

E-66

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN
 FUNCTIONAL SUPERVISOR: NELSON LEE
 CALCULATED/DESIGNED BY: [blank]
 CHECKED BY: [blank]
 YOUNG TON: HABIB GOLBAN
 REVISED BY: [blank] DATE REVISED: [blank]

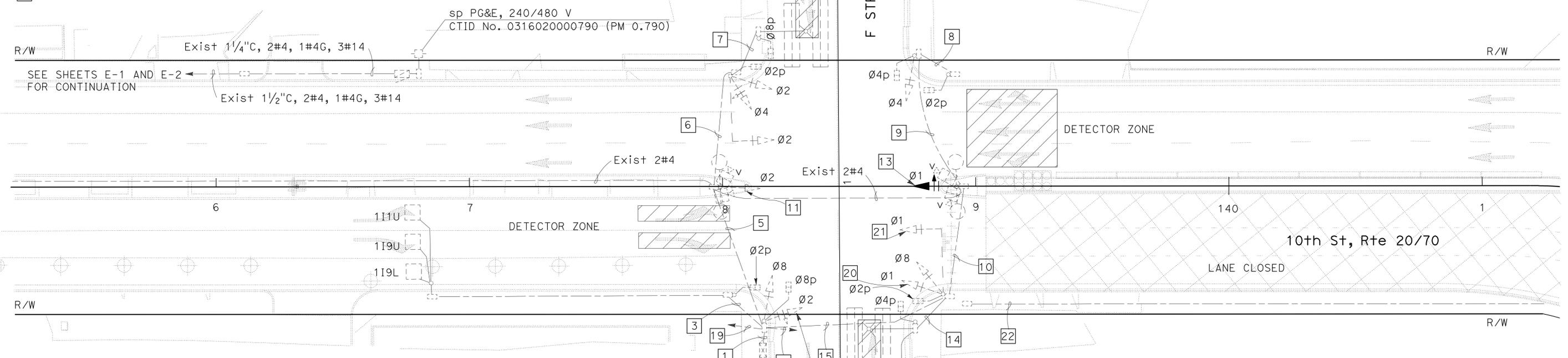
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	524	595
H. Golban REGISTERED ELECTRICAL ENGINEER			5-16-11	DATE	
7-11-11 PLANS APPROVAL DATE					
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.					



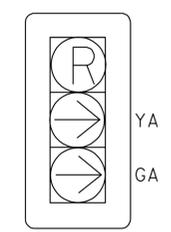
FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

NOTES: (FOR THIS SHEET ONLY)

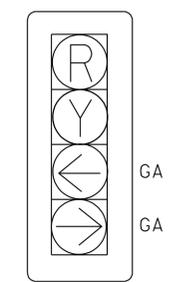
- 1 Exist 2-3"C, 42#14, 2#8, 1#10, 16 dlc, 2 sic, 4 vivds CABLES.
- 2 Exist SERVICE EQUIPMENT ENCLOSURE. CTID No. 0316020000830.
- 3 Exist 2"C, 4#14, 1#10, 6 dlc.
- 4 Exist 1 1/2"C, 2#8.
- 5 Exist 2"C, 16#14, 1#10, 2 dlc, 2 vivds CABLES.
- 6 Exist 2"C, 16#14, 1#10, 2 dlc.
- 7 Exist 2"C, 4#14, 1#10, 2 dlc.
- 8 Exist 2"C, 4#14, 1#10, 6 dlc.
- 9 Exist 2"C, 13#14, 1#10, 6 dlc.
- 10 Exist 2"C, 16#14, 1#10, 6 dlc, 2 vivds CABLES.
- 11 Exist R-Y-G SIGNAL HEAD.
- 12 COVER SIGNAL HEAD.
- 13 REPLACE Exist SIGNAL HEAD.
- 14 Exist 2"C, 4#14, 1#10, 2 dlc, 2#8.



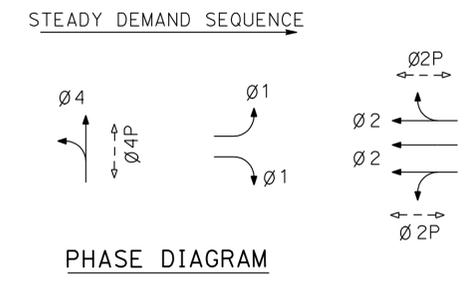
- 15 Exist 2"C, 22#14, 1#10, 8 dlc, 2#8, 2 vivds CABLES.
- 16 Exist MODEL 2070 CONTROLLER ASSEMBLY AND BBS.
- 17 Exist PG&E UTILITY BOX, 120 V.
- 18 Exist 1 1/2"C, 2#8 (SERVICE).
- 19 Exist 1 sic.
- 20 REPLACE Exist SIGNAL HEAD. SEE DETAIL A.
- 21 REPLACE Exist SIGNAL HEAD. SEE DETAIL B.
- 22 Exist 2"cm mt.



DETAIL A



DETAIL B



GENERAL NOTE: (FOR THIS SHEET ONLY)

STAGE 4 TO FINAL STAGE. SEE E-2.

**TEMPORARY SIGNAL SYSTEM
(10th/F STREET)
(STAGE 2 AND 3)
SCALE: 1" = 20'**

E-67

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - ELECTRICAL DESIGN
 FUNCTIONAL SUPERVISOR: NELSON LEE
 CALCULATED/DESIGNED BY: [blank]
 CHECKED BY: [blank]
 YOUNG TON: HABIB GOLBAN
 REVISED BY: [blank] DATE: [blank]
 REVISIONS: [blank]

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	525	595

H. Golban 5-16-11
REGISTERED ELECTRICAL ENGINEER DATE

7-11-11
PLANS APPROVAL DATE

HABIB GOLBAN
No. E17928
Exp. 09-30-12
ELECTRICAL

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

LUMINAIRE SCHEDULE

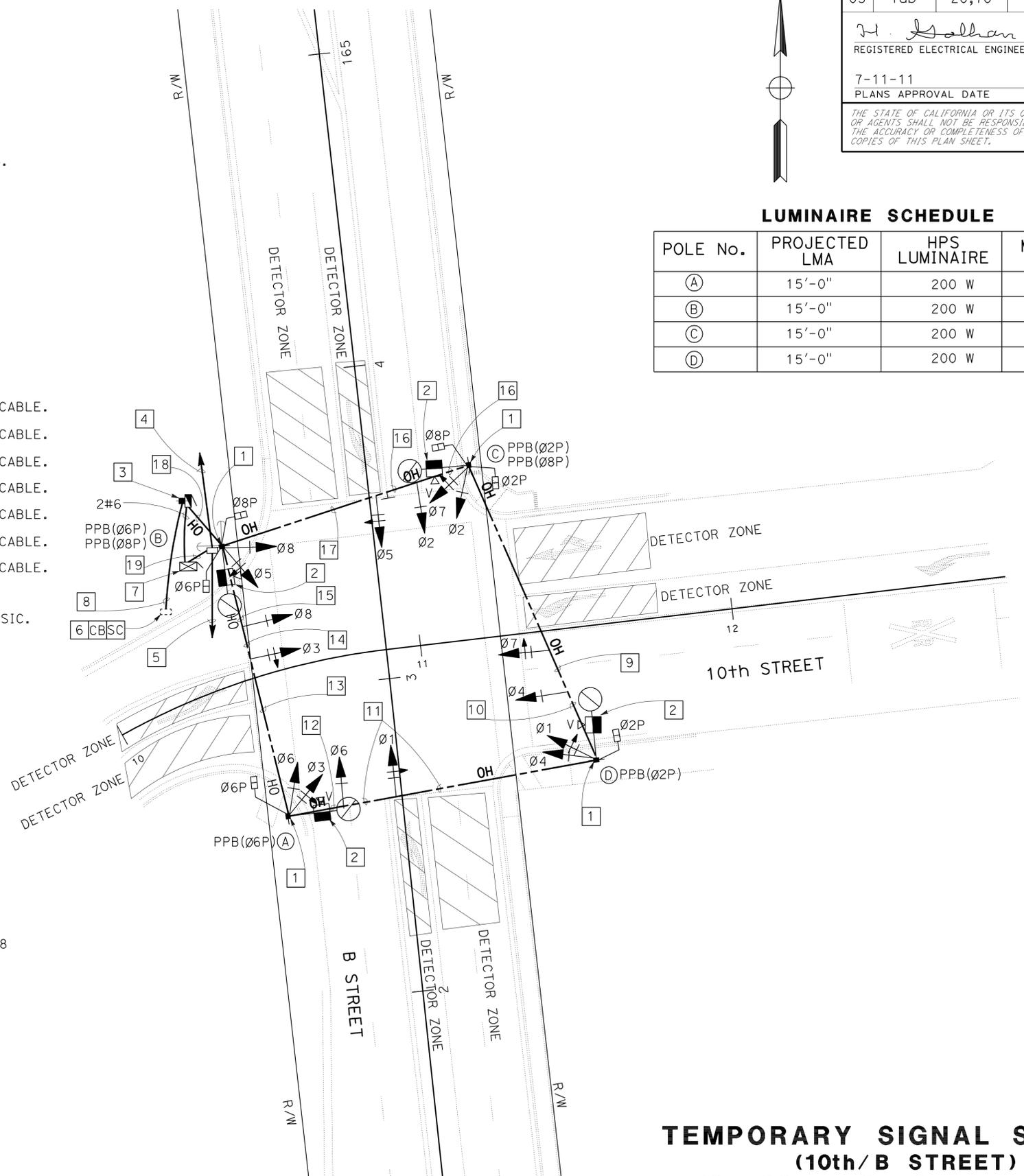
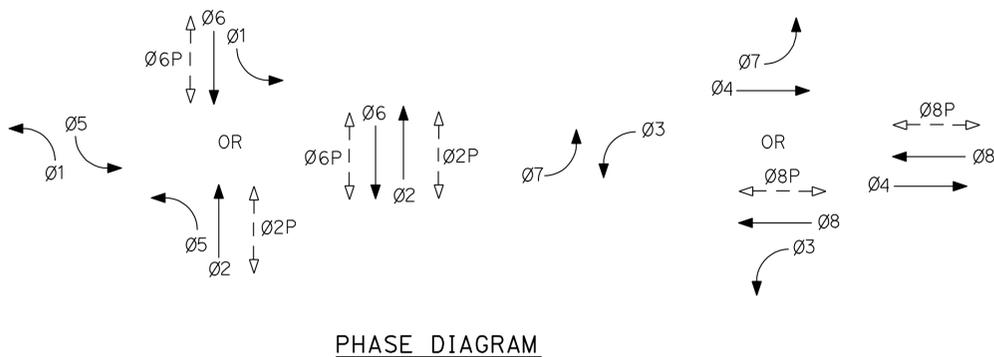
POLE No.	PROJECTED LMA	HPS LUMINAIRE	MOUNTING HEIGHT
(A)	15'-0"	200 W	34'-0"
(B)	15'-0"	200 W	34'-0"
(C)	15'-0"	200 W	34'-0"
(D)	15'-0"	200 W	34'-0"

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

NOTES: (FOR THIS SHEET ONLY)

- 1 SEE SHEET SES-2 TO SES-5 FOR TEMPORARY WOOD POLE INSTALLATION.
- 2 INSTALL CONTRACTOR-FURNISHED VIVDS, SEE DETAIL SHEET SES-1. THE VIVDS ANGLE SHALL BE DETERMINED BY THE CONTRACTOR IN THE FIELD.
- 3 INSTALL TYPE E SERVICE EQUIPMENT ENCLOSURE PER STANDARD PLANS ES-2A, PROVIDE ITEMS ① THRU ⑧, ⑮, ⑯, ⑰, ⑳ THRU ㉓ PER RSP ES-2D. SEE DETAIL "A" SHEET E-45.
- 4 1 SIC, APPROXIMATELY 810' TO TEMPORARY CONTROLLER CABINET AT 12th AND B STREET. TRENCHING OR DIGGING NEXT TO TREES AND TREE ROOTS SHALL BE AVOIDED, BIOLOGIST AND ENVIRONMENTAL LIAISON SHALL BE PRESENT AT THE TIME OF INSTALLATION.
- 5 1 SIC, APPROXIMATELY 510' TO TEMPORARY CONTROLLER CABINET AT 9th AND B STREET.
- 6 Exist PG&E UTILITY PULL BOX.
- 7 INSTALL TEMPORARY MODEL 2070 CONTROLLER ASSEMBLY ON WOOD PALLET, SEE DETAIL "A" SHEET E-45.
- 8 2"C, 3#2 (SERVICE).
- 9 3#14, 3#14 (SPARE), 1#8 (SIGNAL COMMON).
- 10 6#14, 3#14 (SPARE), 1#8 (SIGNAL COMMON).
- 11 12#14, 3#14 (SPARE), 2#8 (LIGHTING), 1#10 (SIGNAL COMMON), 1#14 (PPB COMMON), 1 VIVDS CABLE.
- 12 15#14, 3#14 (SPARE), 2#8 (LIGHTING), 1#10 (SIGNAL COMMON), 1#14 (PPB COMMON), 1 VIVDS CABLE.
- 13 21#14, 3#14 (SPARE), 2#8 (LIGHTING), 1#10 (SIGNAL COMMON), 1#14 (PPB COMMON), 2 VIVDS CABLE.
- 14 24#14, 3#14 (SPARE), 2#8 (LIGHTING), 1#10 (SIGNAL COMMON), 1#14 (PPB COMMON), 2 VIVDS CABLE.
- 15 27#14, 3#14 (SPARE), 2#8 (LIGHTING), 1#10 (SIGNAL COMMON), 1#14 (PPB COMMON), 2 VIVDS CABLE.
- 16 12#14, 3#14 (SPARE), 2#8 (LIGHTING), 1#10 (SIGNAL COMMON), 1#14 (PPB COMMON), 1 VIVDS CABLE.
- 17 15#14, 3#14 (SPARE), 2#8 (LIGHTING), 1#10 (SIGNAL COMMON), 1#14 (PPB COMMON), 1 VIVDS CABLE.
- 18 2#8 (240 V LIGHTING).
- 19 2-3"C, 33#14, 6#14 (SPARE), 1#10 (SIGNAL COMMON), 1#14 (PPB COMMON), 4 VIVDS CABLE, 2 SIC.

GENERAL NOTE: (FOR THIS SHEET ONLY)
COVER SIGNAL HEADS DURING STAGES 8 AND 9. MAINTAIN LIGHTING.



**TEMPORARY SIGNAL SYSTEM
(10th/ B STREET)
(SEASON 1, STAGE 1 THROUGH
STAGE 9 AND FINAL STAGE)**

SCALE: 1" = 20'

E-68

APPROVED FOR ELECTRICAL WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
ELECTRICAL DESIGN

FUNCTIONAL SUPERVISOR
SEVEN BLOCK

CALCULATED/DESIGNED BY
CHECKED BY

JAMIE KOJAK
HABIB GOLBAN

REVISOR BY
DATE REVISED

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	526	595

<i>H. Golban</i> 5-16-11 REGISTERED ELECTRICAL ENGINEER DATE	
7-11-11 PLANS APPROVAL DATE	

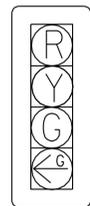
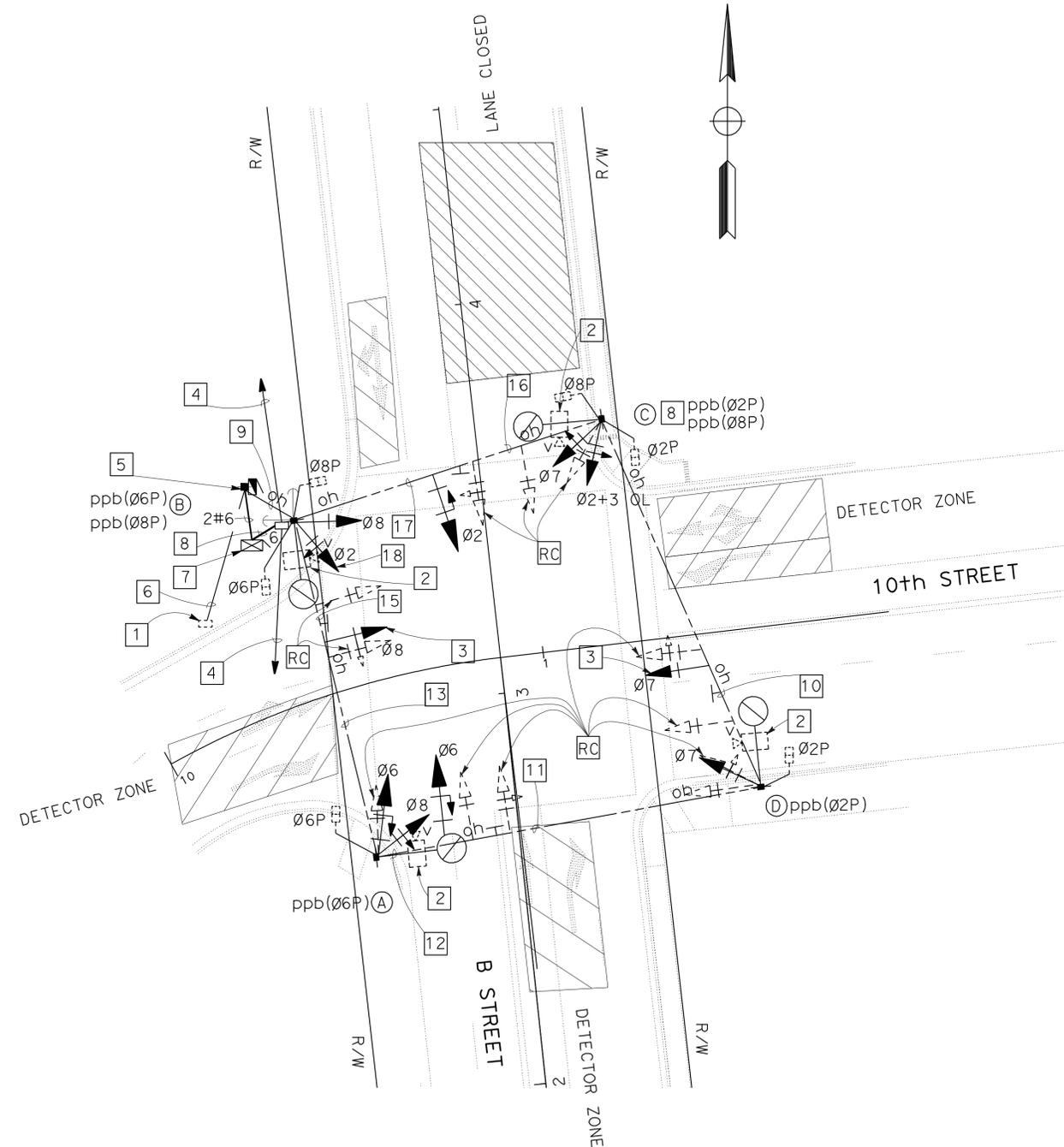
REGISTERED PROFESSIONAL ENGINEER HABIB GOLBAN No. E17928 Exp. 09-30-12 ELECTRICAL STATE OF CALIFORNIA

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

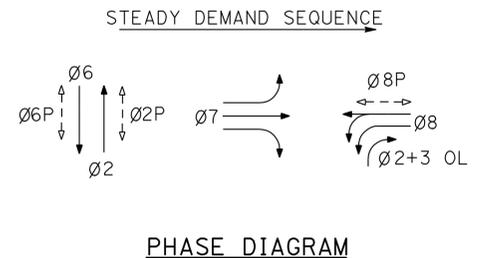
FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

NOTES: (FOR THIS SHEET ONLY)

- 1 Exist PG&E UTILITY PULL BOX.
- 2 Exist vivds, ADJUST vivds ANGLE TO NEW TRAFFIC LANE CONFIGURATION.
- 3 SEE 4-SECTION SIGNAL HEAD DETAIL THIS SHEET.
- 4 Exist 1 sic.
- 5 Exist TYPE E SERVICE EQUIPMENT ENCLOSURE,
- 6 2"C, 3#2 (SERVICE).
- 7 Exist MODEL CONTROLLER ASSEMBLY.
- 8 2-3"C, 33#14, 6#14 (SPARE), 1#10 (SIGNAL COMMON), 1#14 (PPB COMMON), 4 vivds, 2 sic.
- 9 2#8 (240 V, LIGHTING).
- 10 Exist 3#14, 3#14 (SPARE), 1#10 (SIGNAL COMMON).
- 11 Exist 12#14, 3#14 (SPARE), 2#10 (LIGHTING), 1#10 (SIGNAL COMMON), 1#14 (ppb COMMON), 1 vivds CABLE.
- 12 Exist 15#14, 3#14 (SPARE), 2#10 (LIGHTING), 1#10 (SIGNAL COMMON), 1#14 (ppb COMMON), 1 vivds CABLE.
- 13 Exist 21#14, 3#14 (SPARE), 2#10 (LIGHTING), 1#10 (SIGNAL COMMON), 1#14 (ppb COMMON), 2 vivds CABLE.
- 14 Exist 24#14, 3#14 (SPARE), 2#10 (LIGHTING), 1#10 (SIGNAL COMMON), 1#14 (PPG COMMON), 2 vivds CABLE.
- 15 Exist 27#14, 3#14 (SPARE), 2#10 (LIGHTING), 1#10 (SIGNAL COMMON), 1#14 (ppb COMMON), 2 vivds CABLE.
- 16 Exist 12#14, 3#14 (SPARE), 2#10 (LIGHTING), 1#10 (SIGNAL COMMON), 1#14 (ppb COMMON), 1 vivds CABLE.
- 17 Exist 15#14, 3#14 (SPARE), 2#10 (LIGHTING), 1#10 (SIGNAL COMMON), 1#14 (ppb COMMON), 1 vivds CABLE.
- 18 REMOVE SIGNAL HEAD.



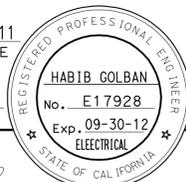
4-SECTION SIGNAL HEAD



**TEMPORARY SIGNAL SYSTEM
(10th/B STREET)
(STAGE 10)
SCALE: 1" = 20'**

APPROVED FOR ELECTRICAL WORK ONLY

E-69

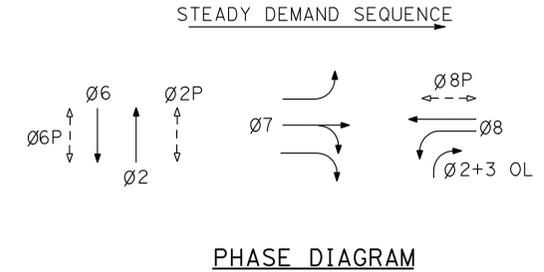
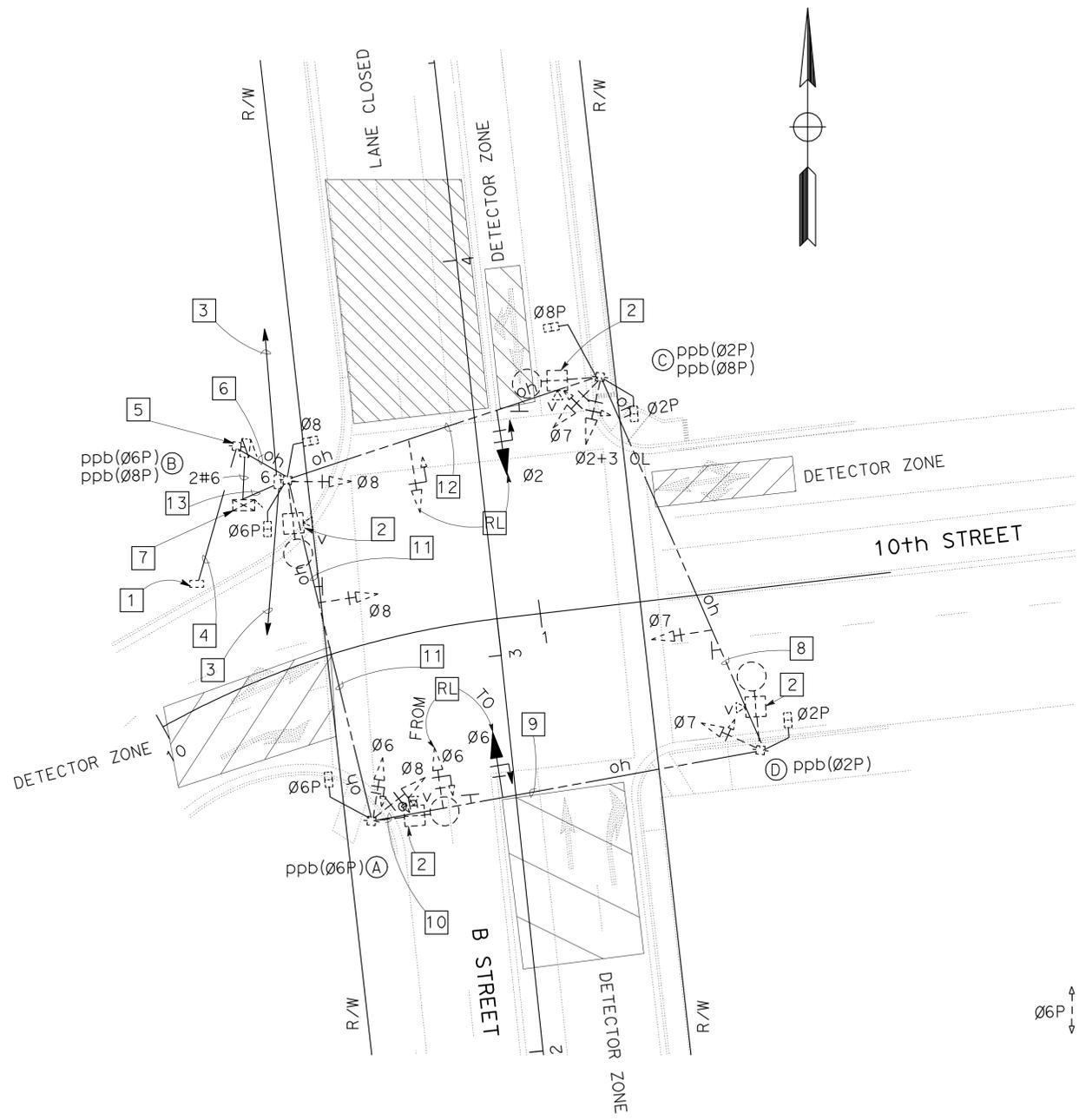
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	527	595
H. Golban 5-16-11 REGISTERED ELECTRICAL ENGINEER DATE					
7-11-11			PLANS APPROVAL DATE		
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

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

NOTES: (FOR THIS SHEET ONLY)

- 1 sp, Exist PG&E UTILITY PULL BOX.
- 2 Exist vivds. ADJUST VIVDS ANGLE TO NEW TRAFFIC LANE CONFIGURATION.
- 3 Exist 1 sic.
- 4 Exist 2"C, 3#2 (SERVICE).
- 5 Exist TYPE E SERVICE EQUIPMENT ENCLOSURE ON Exist WOOD POLE.
- 6 Exist 2#8 (240 V, LIGHTING).
- 7 Exist SIGNAL CONTROLLER CABINET.
- 8 3#14, 3#14 (SPARE), 1#10 (SIGNAL COMMON).
- 9 6#14, 3#14 (SPARE), 2#10 (LIGHTING), 1#10 (SIGNAL COMMON), 1#14 (PPB COMMON), 1 vivds CABLE.
- 10 9#14, 3#14 (SPARE), 2#10 (LIGHTING), 1#10 (SIGNAL COMMON), 1#14 (PPB COMMON), 1 vivds CABLE.
- 11 15#14, 3#14 (SPARE), 2#10 (LIGHTING), 1#10 (SIGNAL COMMON), 1#14 (PPB COMMON), 2 vivds CABLE.
- 12 Exist 14#14, 3#14 (SPARE), 2#10 (LIGHTING), 1#10 (SIGNAL COMMON), 1#14 (PPB COMMON), 1 vivds CABLE.
- 13 Exist 2-3"C, 21#14, 6#14 (SPARE), 1#10 (SIGNAL COMMON), 1#14 (PPB COMMON), 4 vivds CABLE, 2 sic.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN
 FUNCTIONAL SUPERVISOR: NELSON LEE
 CALCULATED/DESIGNED BY: [blank] CHECKED BY: [blank]
 JAMIE KOJAK HABIB GOLBAN
 REVISED BY: [blank] DATE REVISED: [blank]



**TEMPORARY SIGNAL SYSTEM
(10th/B STREET)
(STAGE 11)**
SCALE: 1" = 20'

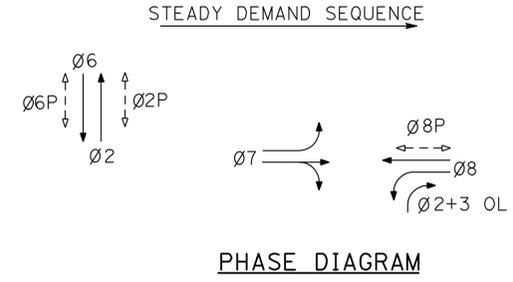
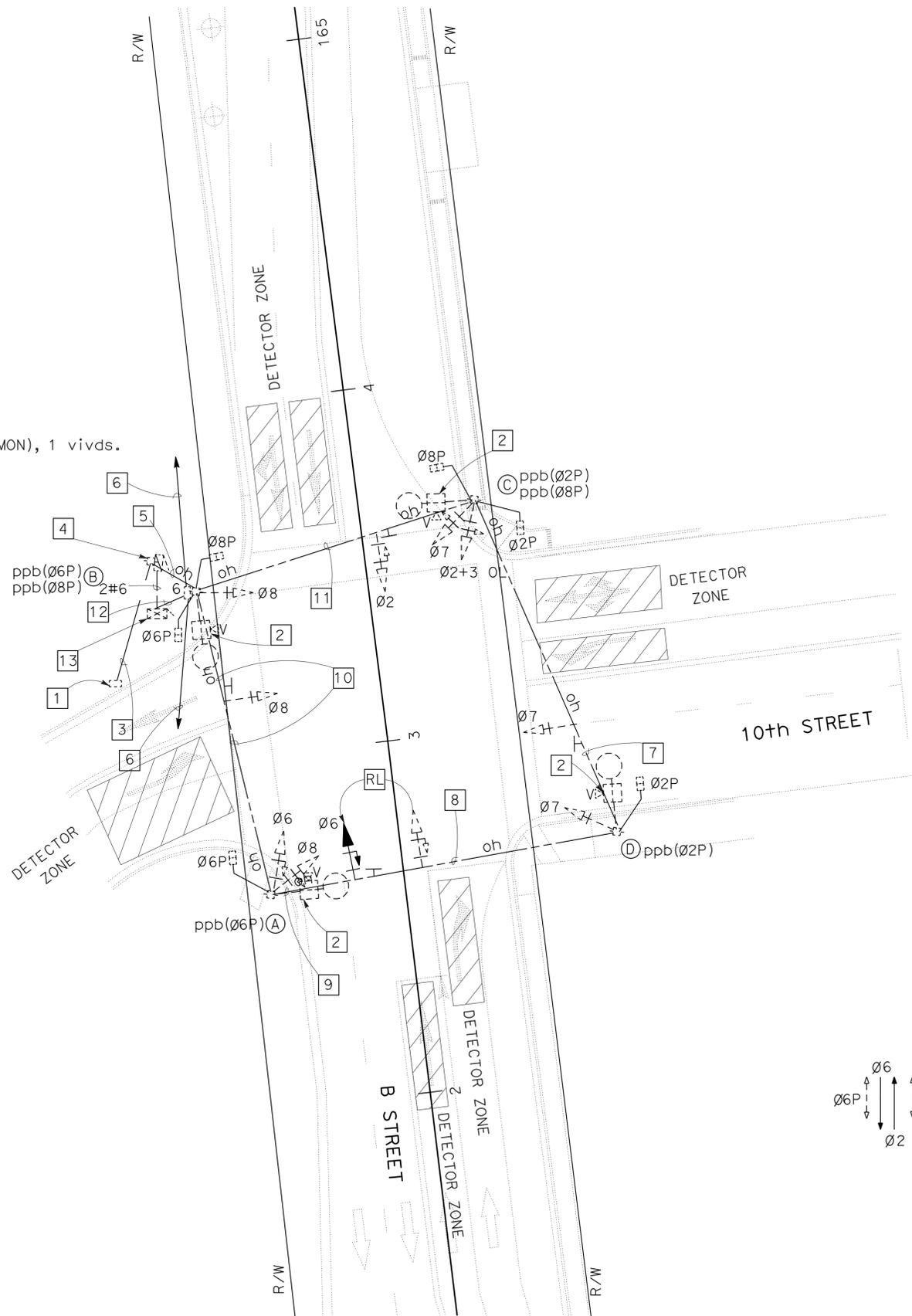
APPROVED FOR ELECTRICAL WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 FUNCTIONAL SUPERVISOR: SEVEN BLOCK
 ELECTRICAL DESIGN
 CALCULATED/DESIGNED BY: [] CHECKED BY: []
 JAMIE KOJAK HABIB GOLBAN
 REVISED BY: [] DATE REVISED: []

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

NOTES: (FOR THIS SHEET ONLY)

- 1 sp, Exist PG&E UTILITY PULL BOX.
- 2 Exist vivds. ADJUST vivds ANGLE TO NEW TRAFFIC LANE CONFIGURATION.
- 3 Exist 2"C, 3#2 (SERVICE).
- 4 Exist TYPE E SERVICE EQUIPMENT ENCLOSURE.
- 5 Exist 2#8 (240 V, LIGHTING).
- 6 Exist 1 sic.
- 7 Exist 3#14, 3#14 (SPARE), 1#10 (SIGNAL COMMON).
- 8 Exist 6#14, 3#14 (SPARE), 2#10 (LIGHTING), 1#10 (SIGNAL COMMON), 1#14 (ppb COMMON), 1 vivds CABLE.
- 9 Exist 9#14, 3#14 (SPARE), 2#10 (LIGHTING), 1#10 (SIGNAL COMMON), 1#14 (ppb COMMON), 1 vivds CABLE.
- 10 Exist 15#14, 3#14 (SPARE), 2#10 (LIGHTING), 1#10 (SIGNAL COMMON), 1#14 (ppb COMMON), 2 vivds CABLE.
- 11 Exist 14#14, 3#14 (SPARE), 2#10 (LIGHTING), 1#10 (SIGNAL COMMON), 1#14 (ppb COMMON), 1 vivds.
- 12 Exist 2-1"C, 23#14, 6#14 (SPARE), 1#10 (SIGNAL COMMON), 1#14 (ppb COMMON), 4 vivds CABLE, 2 sic.
- 13 Exist SIGNAL CONTROLLER CABINET.



**TEMPORARY SIGNAL SYSTEM
 (10th/ B STREET)
 (STAGE 12)
 SCALE: 1" = 20'**

APPROVED FOR ELECTRICAL WORK ONLY

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	528	595

H. Golban 5-16-11
 REGISTERED ELECTRICAL ENGINEER DATE

7-11-11
 PLANS APPROVAL DATE

HABIB GOLBAN
 No. E17928
 Exp. 09-30-12
 ELECTRICAL
 STATE OF CALIFORNIA

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



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	529	595

H. Galban 5-16-11
REGISTERED ELECTRICAL ENGINEER DATE

7-11-11
PLANS APPROVAL DATE

HABIB GOLBAN
No. E17928
Exp. 09-30-12
ELECTRICAL

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

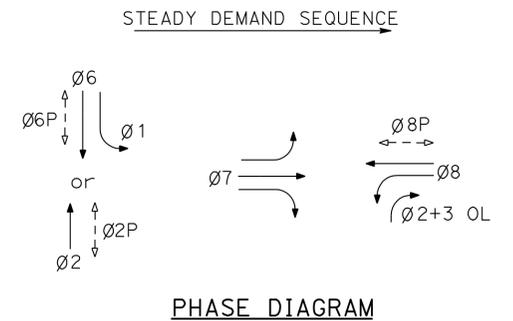
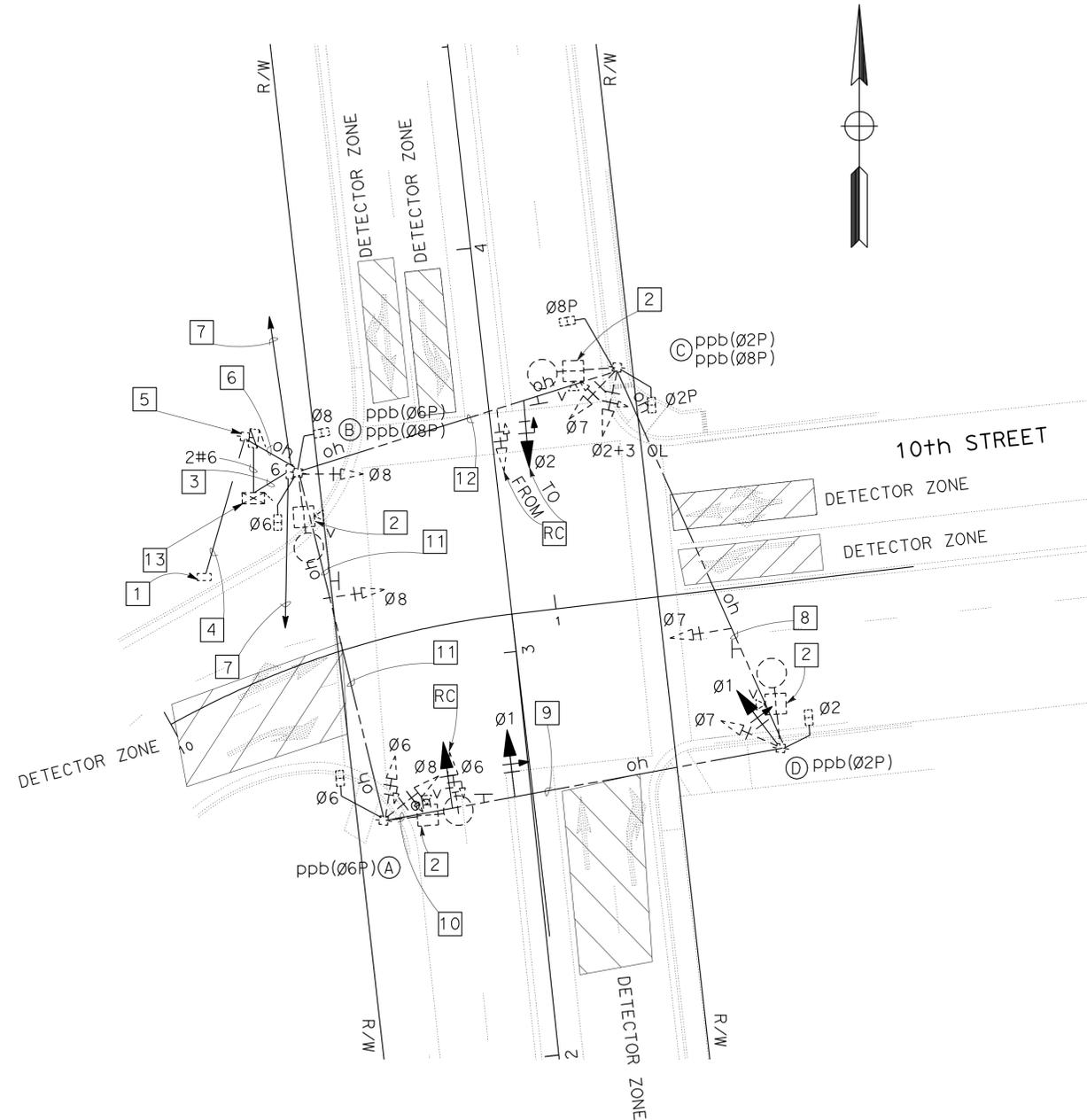
FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

NOTES: (FOR THIS SHEET ONLY)

- 1 sp, Exist PG&E UTILITY PULL BOX.
- 2 Exist vids. ADJUST vids ANGLE TO NEW TRAFFIC LANE CONFIGURATION.
- 3 Exist 2-3"C, 21#14, 6#14 (SPARE), 1#10 (SIGNAL COMMON), 1#14 (ppb COMMON), 4 vids CABLE, 2 sic. ADD 3#14.
- 4 Exist 2"C, 3#2 (SERVICE).
- 5 Exist TYPE E SERVICE EQUIPMENT ENCLOSURE.
- 6 Exist 2#8 (240 V, LIGHTING).
- 7 Exist 1 sic.
- 8 Exist 3#14, 3#14 (SPARE), 1#10 (SIGNAL COMMON).
- 9 Exist 6#14, 3#14 (SPARE), 2#10 (LIGHTING), 1#10 (SIGNAL COMMON), 1#14 (ppb COMMON), 1 vids CABLE. ADD 3#14.
- 10 Exist 9#14, 3#14 (SPARE), 2#10 (LIGHTING), 1#10 (SIGNAL COMMON), 1#14 (ppb COMMON), 1 vids CABLE. ADD 3#14.
- 11 Exist 15#14, 3#14 (SPARE), 2#10 (LIGHTING), 1#10 (SIGNAL COMMON), 1#14 (ppb COMMON), 2 vids CABLE. ADD 3#14.
- 12 Exist 14#14, 3#14 (SPARE), 2#10 (LIGHTING), 1#10 (SIGNAL COMMON), 1#14 (ppb COMMON), 1 vids CABLE.
- 13 Exist SIGNAL CONTROLLER CABINET.

GENERAL NOTE: (FOR THIS SHEET ONLY)

RC ALL TEMPORARY SIGNAL EQUIPMENT AT THE END OF STAGE 13 DETOUR.



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	REVISOR	DATE
Caltrans ELECTRICAL DESIGN	NELSON LEE	JAMIE KOJAK	
		HABIB GOLBAN	

**TEMPORARY SIGNAL SYSTEM
(10th/B STREET)
(STAGE 13)**
SCALE: 1" = 20'

APPROVED FOR ELECTRICAL WORK ONLY

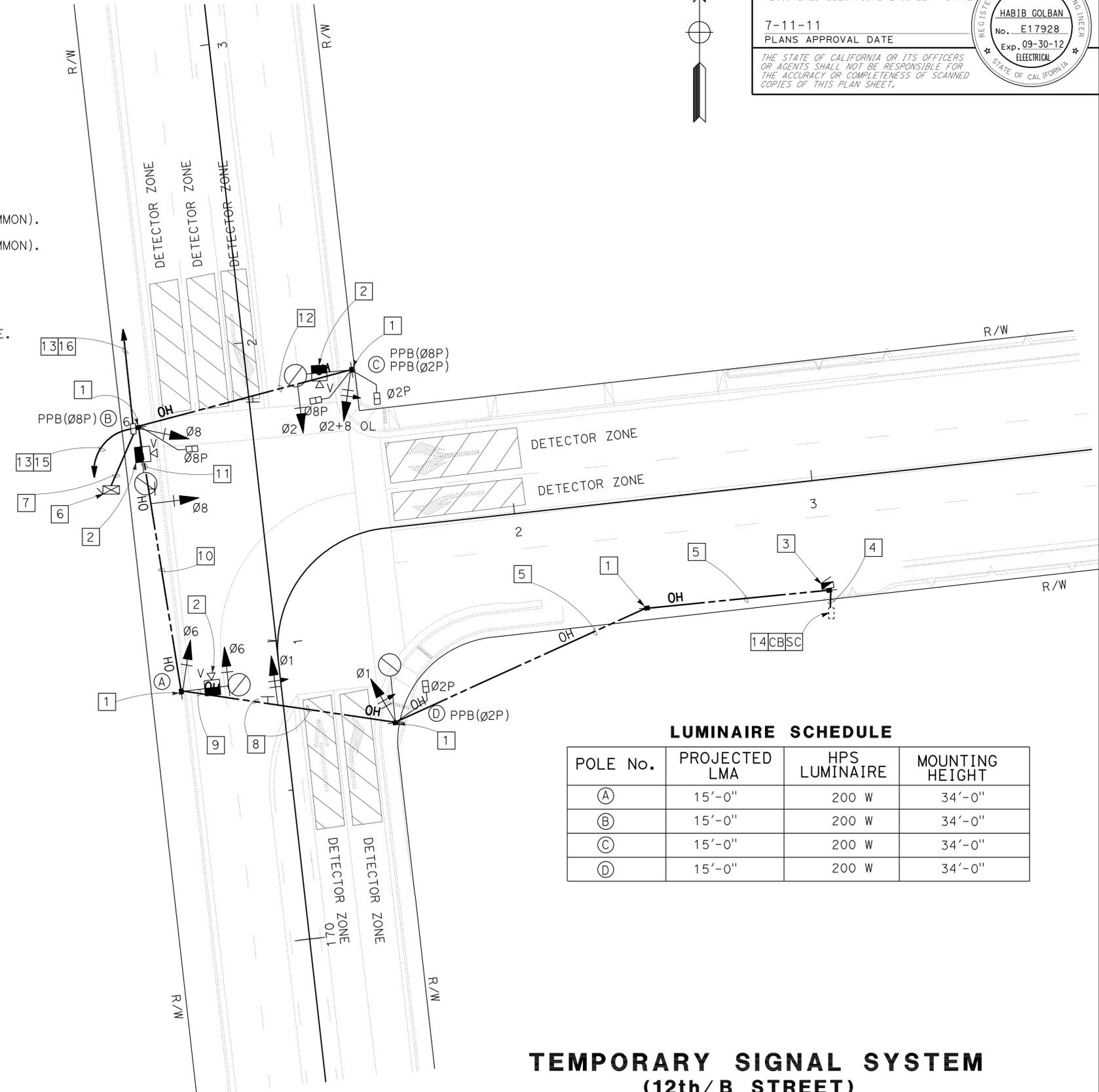
E-72



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

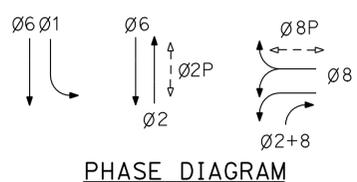
NOTES: (FOR THIS SHEET ONLY)

- 1 SEE SHEET SES-2 TO SES-5 FOR TEMPORARY WOOD POLE INSTALLATION.
- 2 INSTALL CONTRACTOR-FURNISHED VIVDS, SEE DETAIL B SHEET SES-1. THE VIVDS ANGLE WILL BE DETERMINED BY THE CONTRACTOR/VENDOR IN THE FIELD.
- 3 INSTALL TYPE E SERVICE EQUIPMENT ENCLOSURE PER STANDARD PLANS ES-2A. PROVIDE ITEMS ① THRU ⑧, ⑮, ⑯, ⑰, ⑳ THRU ㉓ PER RSP ES-2D. SEE DETAIL "A" SHEET E-45.
- 4 2"C, 3#2 (SERVICE).
- 5 2#6 (120V, Temp SIGNAL), 2#10 (208 V, LIGHTING), SPAN WIRES SHALL HAVE Min 17' VERTICAL CLEARANCE.
- 6 INSTALL TEMPORARY MODEL 2070 CONTROLLER ASSEMBLY ON WOOD PALLET, SEE DETAIL "A" SHEET E-45.
- 7 2-3"C, 21#14, 6#14 (SPARE), 2#6 (332 CABINET), 1#10 (SIGNAL COMMON), 1#14 (PPB COMMON), 3 VIVDS CABLE, 2 SIC.
- 8 6#14, 3#14 (SPARE), 2#10 (LIGHTING), 2#6 (332 CABINET), 1#10 (SIGNAL COMMON), 1#14 (PPB COMMON).
- 9 9#14, 3#14 (SPARE), 2#10 (LIGHTING), 2#6 (332 CABINET), 1#10 (SIGNAL COMMON), 1#14 (PPB COMMON).
- 10 9#14, 3#14 (SPARE), 2#10 (LIGHTING), 2#6 (332 CABINET), 1#10 (SIGNAL COMMON), 1#14 (PPB COMMON), 1 VIVDS CABLE.
- 11 12#14, 3#14 (SPARE), 2#10 (LIGHTING), 2#6 (332 CABINET), 1#10 (SIGNAL COMMON), 1#14 (PPB COMMON), 1 VIVDS CABLE.
- 12 9#14, 3#14 (SPARE), 2#10 (LIGHTING), 1#10 (SIGNAL COMMON), 1#14 (PPB COMMON), 1 VIVDS CABLE.
- 13 TRENCHING OR DIGGING SHALL BE AVOIDED NEXT TO TREES AND TREE ROOTS, BIOLOGIST AND ENVIROMENTAL LIASON SHALL BE PRESENT AT THE TIME OF INSTALLATION.
- 14 sp, Exist PG&E UTILITY PULL BOX.
- 15 1 SIC, APPROXIMATELY 810' TO Temp CONTROLLER CABINET AT 10th AND B STREET.
- 16 1 SIC, APPROXIMATELY 820' TO Temp CONTROLLER CABINET AT 14th AND B STREET.



LUMINAIRE SCHEDULE

POLE No.	PROJECTED LMA	HPS LUMINAIRE	MOUNTING HEIGHT
(A)	15'-0"	200 W	34'-0"
(B)	15'-0"	200 W	34'-0"
(C)	15'-0"	200 W	34'-0"
(D)	15'-0"	200 W	34'-0"



PHASE DIAGRAM

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
ELECTRICAL DESIGN

FUNCTIONAL SUPERVISOR
NELSON LEE

CALCULATED/DESIGNED BY
CHECKED BY

JAMIE KOJAK
HABIB GOLBAN

REVISED BY
DATE REVISED

APPROVED FOR ELECTRICAL WORK ONLY

TEMPORARY SIGNAL SYSTEM
(12th/B STREET)
(SEASON 1, STAGE 1 THROUGH STAGE 9 AND FINAL STAGE)
SCALE: 1" = 20'
E-73

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	531	595

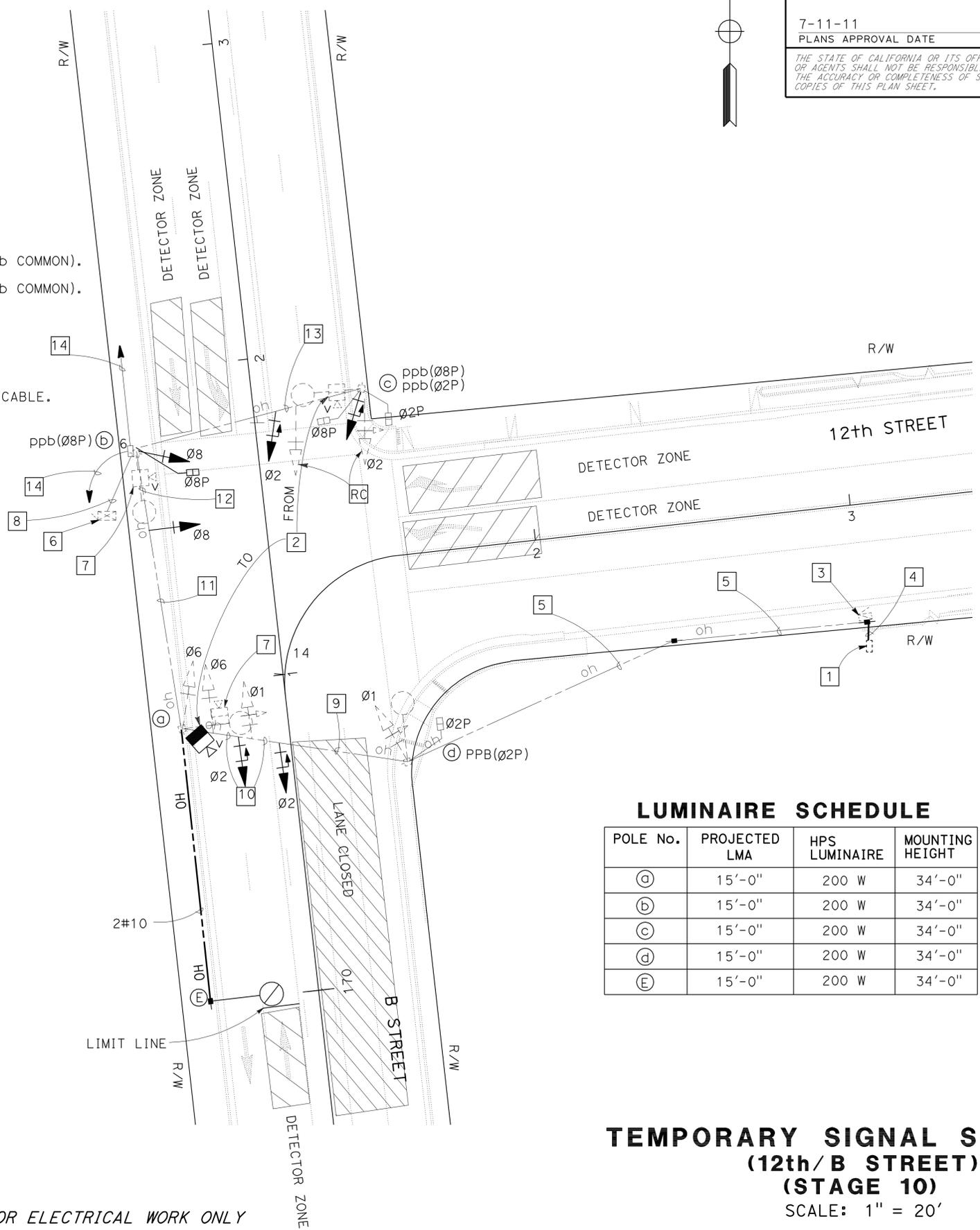
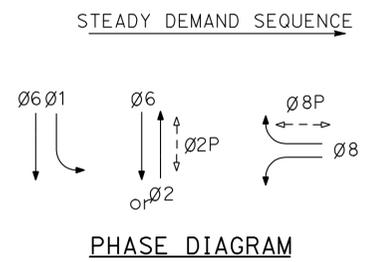
H. Golban 5-16-11
 REGISTERED ELECTRICAL ENGINEER DATE
 7-11-11
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

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

NOTES: (FOR THIS SHEET ONLY)

- 1 sp, Exist PG&E UTILITY PULL BOX.
- 2 RELOCATE CONTRACTOR-FURNISHED VIVDS, SEE DETAIL B, SHEET SES-1. THE VIVDS ANGLE SHALL BE DETERMINED BY THE CONTRACTOR IN THE FIELD.
- 3 Exist TYPE E SERVICE EQUIPMENT ENCLOSURE.
- 4 Exist 2"C, 3#2 (SERVICE).
- 5 Exist 2#6 (120 V, Temp SIGNAL), 2#10 (208 V, LIGHTING).
- 6 Exist CONTROLLER ASSEMBLY. INSTALL ON WOOD PALLET, SEE DETAIL "A" SHEET E-45.
- 7 Exist vivds. ADJUST vivds ANGLE TO NEW TRAFFIC LANE CONFIGURATION.
- 8 Exist 2-3"C, 21#14, 6#14 (SPARE), 2#6 (332 CABINET), 1#10 (SIGNAL COMMON), 1#14 (ppb COMMON), 3 vivds CABLE, 2 sic. ADD 1 VIVDS CABLE, 3#14.
- 9 Exist 6#14, 3#14 (SPARE), 2#10 (LIGHTING), 2#6 (332 CABINET), 1#10 (SIGNAL COMMON), 1#14 (ppb COMMON).
- 10 Exist 9#14, 3#14 (SPARE), 2#10 (LIGHTING), 2#6 (332 CABINET), 1#10 (SIGNAL COMMON), 1#14 (ppb COMMON). ADD 3#14.
- 11 Exist 9#14, 3#14 (SPARE), 2#10 (LIGHTING), 2#6 (332 CABINET), 1#10 (SIGNAL COMMON), 1#14 (ppb COMMON), 1 vivds CABLE, 3#14.
- 12 Exist 12#14, 3#14 (SPARE), 2#10 (LIGHTING), 2#6 (332 CABINET), 1#10 (SIGNAL COMMON), 1#14 (ppd COMMON), 1 vivds CABLE. ADD 1 VIVDS CABLE, 3#14.
- 13 Exist 9#14, 3#14 (SPARE), 2#10 (LIGHTING), 1#10 (SIGNAL COMMON), 1#14 (ppb COMMON), 1 vivds CABLE.
- 14 Exist 1 sic.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN
 FUNCTIONAL SUPERVISOR: NELSON LEE
 CALCULATED/DESIGNED BY: [blank]
 CHECKED BY: [blank]
 REVISIONS: [blank]
 DESIGNED BY: [blank]
 DATE REVISION: [blank]
 DESIGNED BY: [blank]
 DATE REVISION: [blank]



LUMINAIRE SCHEDULE

POLE No.	PROJECTED LMA	HPS LUMINAIRE	MOUNTING HEIGHT
(a)	15'-0"	200 W	34'-0"
(b)	15'-0"	200 W	34'-0"
(c)	15'-0"	200 W	34'-0"
(d)	15'-0"	200 W	34'-0"
(e)	15'-0"	200 W	34'-0"

**TEMPORARY SIGNAL SYSTEM
(12th/B STREET)
(STAGE 10)
SCALE: 1" = 20'**

APPROVED FOR ELECTRICAL WORK ONLY

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	532	595

<i>H. Golban</i> 5-16-11 REGISTERED ELECTRICAL ENGINEER DATE	
7-11-11 PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER HABIB GOLBAN No. E17928 Exp. 09-30-12 ELECTRICAL STATE OF CALIFORNIA

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



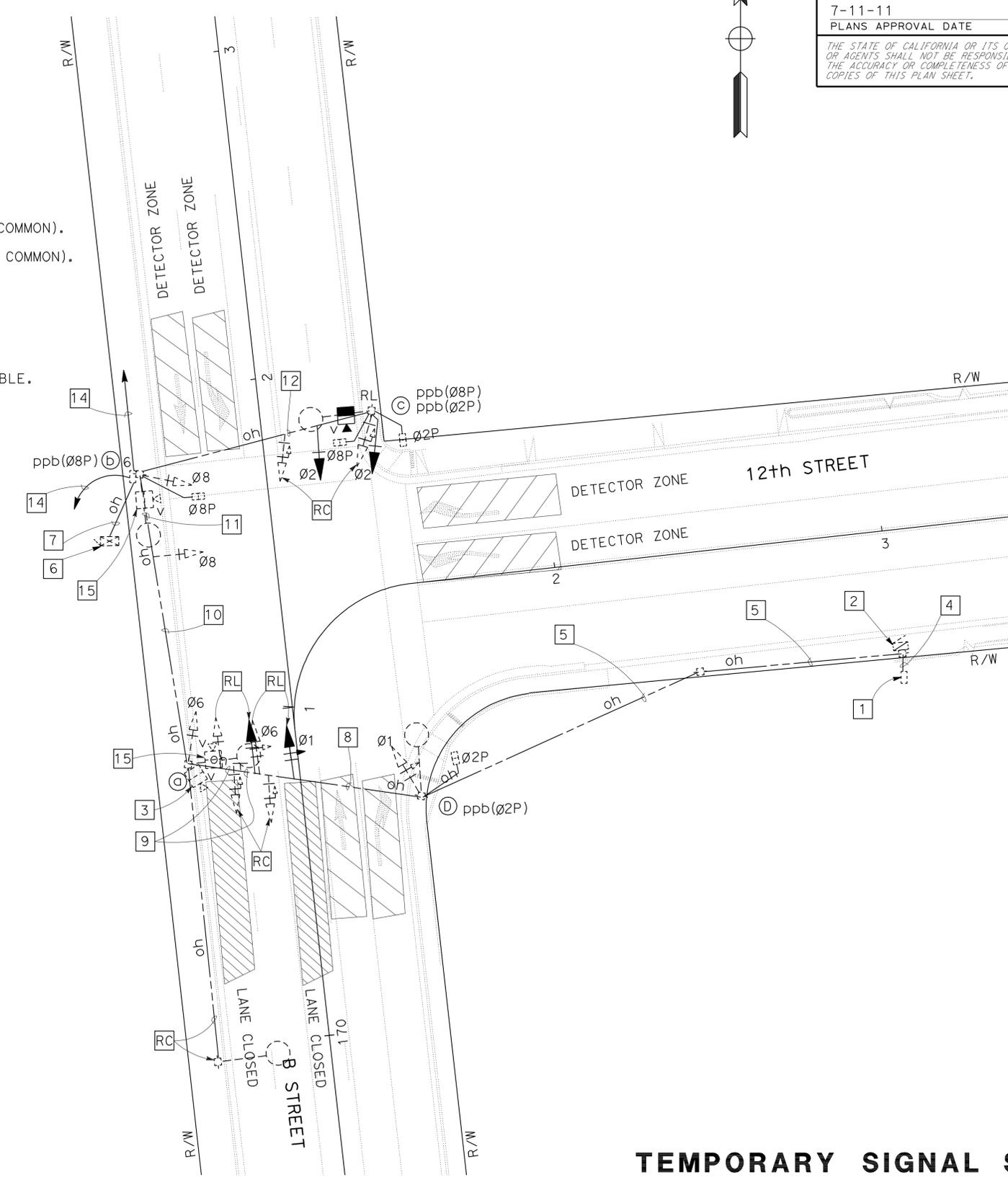
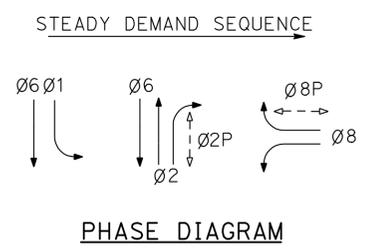
FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

GENERAL NOTE: (FOR THIS SHEET ONLY)

COVER SIGNAL HEADS DURING STAGES 12 AND 13. MAINTAIN LIGHTING.

NOTES: (FOR THIS SHEET ONLY)

- 1 sp, Exist PG&E UTILITY PULL BOX.
- 2 Exist TYPE E SERVICE EQUIPMENT ENCLOSURE ON Exist WOOD POLE.
- 3 RELOCATE CONTRACTOR-FURNISHED VIVDS TO Exist WOOD POLE (C). SEE DETAIL B, SHEET SES-1. THE VIVDS ANGLE SHALL BE DETERMINED BY THE CONTRACTOR IN THE FIELD.
- 4 Exist 2"C, 3#2 (SERVICE).
- 5 Exist 2#6 (120 V, Temp SIGNAL), 2#10 (208 V, LIGHTING)
- 6 Exist SIGNAL CONTROLLER CABINET.
- 7 Exist 2-3"C, 24#14, 6#14 (SPARE), 2#6 (332 CABINET), 1#10 (SIGNAL COMMON), 1#14 (ppb COMMON), 4 vivds CABLES, 2 sic. RC 1 vivds, 3#14.
- 8 Exist 6#14, 3#14 (SPARE), 2#10 (LIGHTING), 2#6 (332 CABINET), 1#10 (SIGNAL COMMON), 1#14 (ppb COMMON).
- 9 Exist 12#14, 3#14 (SPARE), 2#10 (LIGHTING), 2#6 (332 CABINET), 1#10 (SIGNAL COMMON), 1#14 (ppb COMMON). RC 3#14.
- 10 Exist 12#14, 3#14 (SPARE), 2#10 (LIGHTING), 2#6 (332 CABINET), 1#10 (SIGNAL COMMON), 1#14 (PPB COMMON), 2 vivds CABLE. RC 1 vivds, 3#14.
- 11 Exist 15#14, 3#14 (SPARE), 2#10 (LIGHTING), 2#6 (332 CABINET), 1#10 (SIGNAL COMMON), 1#14 (ppb COMMON), 2 vivds CABLE. RC 1 vivds, 3#14.
- 12 Exist 9#14, 3#14 (SPARE), 2#10 (LIGHTING), 1#10 (SIGNAL COMMON), 1#14 (ppb COMMON), 1 vivds CABLE.
- 14 Exist 1 sic.
- 15 Exist vivds. ADJUST VIVDS ANGLE TO NEW TRAFFIC LANE CONFIGURATION.



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN
 FUNCTIONAL SUPERVISOR: NELSON LEE
 CALCULATED/DESIGNED BY: [blank]
 CHECKED BY: [blank]
 JAMIE KOJAK
 HABIB GOLBAN
 REVISED BY: [blank]
 DATE REVISED: [blank]

**TEMPORARY SIGNAL SYSTEM
(12th/B STREET)
(STAGE 11)
SCALE: 1" = 20'**

APPROVED FOR ELECTRICAL WORK ONLY

E-75

LAST REVISION: [blank] DATE PLOTTED => 15-JUL-2011 TIME PLOTTED => 13:43



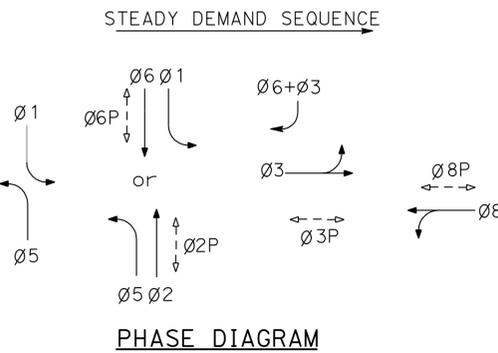
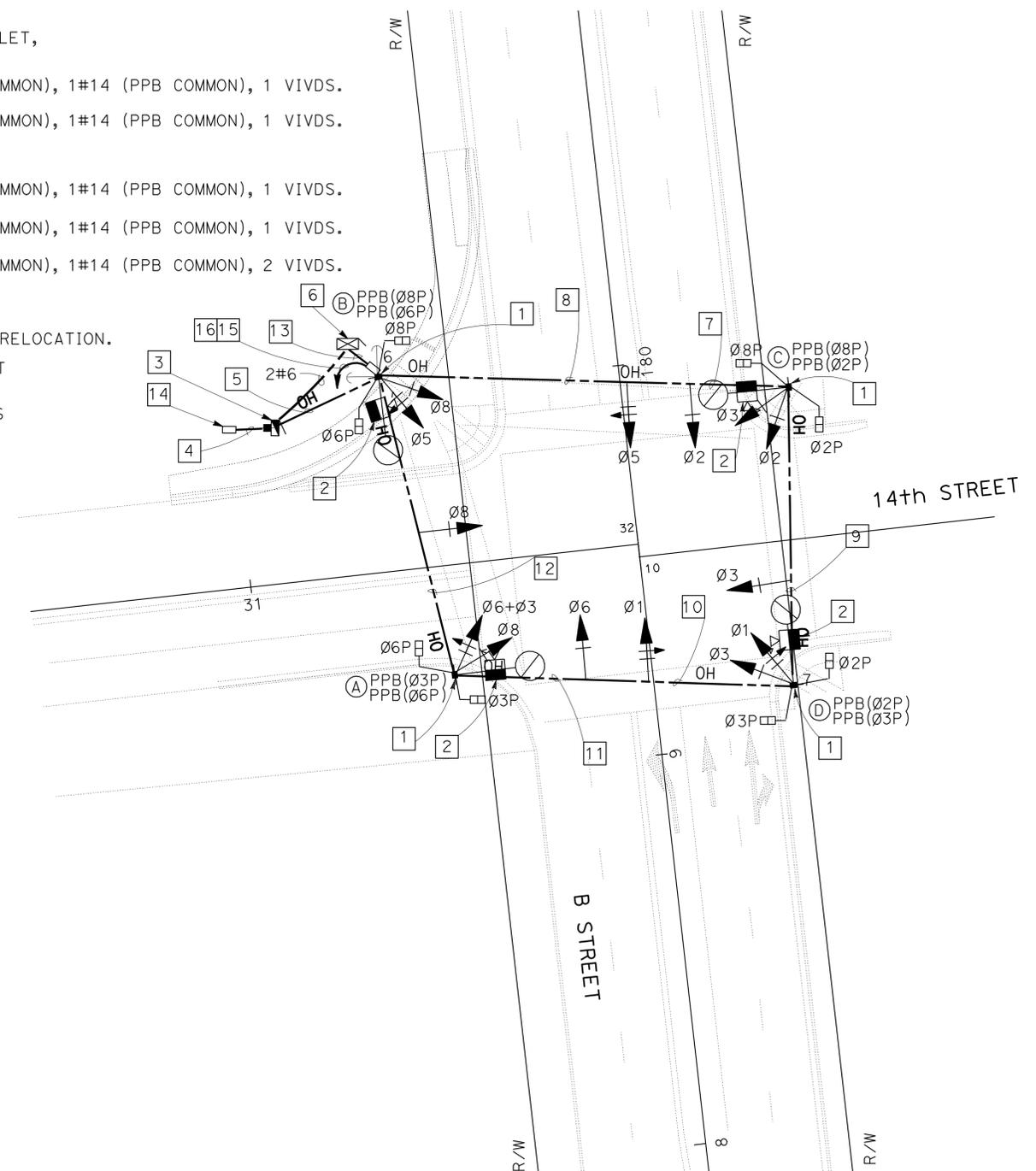
FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

NOTES: (FOR THIS SHEET ONLY)

- 1 SEE SHEETS SES-2 TO SES-5 FOR TEMPORARY WOOD POLE INSTALLATION.
- 2 INSTALL CONTRACTOR-FURNISHED VIVDS, SEE DETAIL B SHEET SES-1. THE VIVDS ANGLE SHALL BE DETERMINED BY THE CONTRACTOR IN THE FIELD.
- 3 INSTALL TYPE E SERVICE EQUIPMENT ENCLOSURE PER STANDARD PLANS ES-2A. PROVIDE ITEMS 1 THRU 8, 15, 16, 17, 20 THRU 23 PER RSP ES-2D. SEE DETAIL "A" ON E-45.
- 4 2"C, 3#2 (SERVICE).
- 5 2#10 (240 V, LIGHTING).
- 6 INSTALL MODEL 2070 CONTROLLER ASSEMBLY ON WOOD PALLET, SEE DETAIL "A" SHEET E-43.
- 7 12#14, 3#14 (SPARE), 2#10 (LIGHTING), 1#10 (SIGNAL COMMON), 1#14 (PPB COMMON), 1 VIVDS.
- 8 15#14, 3#14 (SPARE), 2#10 (LIGHTING), 1#10 (SIGNAL COMMON), 1#14 (PPB COMMON), 1 VIVDS.
- 9 3#14, 3#14 (SPARE), 1#10 (SIGNAL COMMON).
- 10 12#14, 3#14 (SPARE), 2#10 (LIGHTING), 1#10 (SIGNAL COMMON), 1#14 (PPB COMMON), 1 VIVDS.
- 11 15#14, 3#14 (SPARE), 2#10 (LIGHTING), 1#10 (SIGNAL COMMON), 1#14 (PPB COMMON), 1 VIVDS.
- 12 20#14, 3#14 (SPARE), 2#10 (LIGHTING), 1#10 (SIGNAL COMMON), 1#14 (PPB COMMON), 2 VIVDS.
- 13 2-3"C, 30#14, 6#14 (SPARE), 1#10 (SIGNAL COMMON), 1#14 (PPB COMMON), 4 VIVDS, 1 SIC.
- 14 PG&E SERVICE POINT TO BE DETERMINED DURING UTILITY RELOCATION.
- 15 1 SIC, APPROXIMATELY 820' TO Temp CONTROLLER CABINET AT 12th AND B STREET.
- 16 TRENCHING OR DIGGING SHALL BE AVOIDED NEXT TO TREES AND TREE ROOTS, BIOLOGIST AND ENVIRONMENTAL LIASON SHALL BE PRESENT AT THE TIME OF INSTALLATION.

LUMINAIRE SCHEDULE

POLE No.	PROJECTED LMA	HPS LUMINAIRE	MOUNTING HEIGHT
(A)	15'-0"	200 W	34'-0"
(B)	15'-0"	200 W	34'-0"
(C)	15'-0"	200 W	34'-0"
(D)	15'-0"	200 W	34'-0"



**TEMPORARY SIGNAL SYSTEM
(14th/ B STREET)
(SEASON 1, STAGE 1 THROUGH FINAL STAGE)**

SCALE: 1" = 20'

APPROVED FOR ELECTRICAL WORK ONLY

E-76

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
CALTRANS® ELECTRICAL DESIGN

FUNCTIONAL SUPERVISOR: NELSON LEE
DESIGNED BY: JAMIE KOJAK
CHECKED BY: HABIB GOLBAN
REVISED BY: DATE

CONDUCTOR TABLE

AWG	CIRCUIT	△1	△2	△3	△4	RUN				
		2-3"	3"	3"	2 1/2"	2 1/2"	1 1/2"	2 1/2"	2"	2"
No. 14	Ø1	3	3	3	3	3				
	Ø2	6	3	3	3	3			3	3
	Ø3	3	3	3						
	Ø4	3	3	3	3	3	3			
	Ø5	3						3	3	
	Ø6	6	3	3	3					
	Ø7	6	3	3	3	3	3	3	3	3
	Ø8	6	3					3	3	3
	Ø2P	4	2	2	2	2	2	2	2	2
	Ø4P	2	2	2	2	2				
	Ø6P	2	2	2						
	Ø8P	2						2	2	
	Ø2PPB	2	1	1	1	1	1	1	1	1
	Ø4PPB	1	1	1	1	1				
	Ø6PPB	1	1	1						
	Ø8PPB	1						1	1	
	PEU		3							
	PPB COMMON	2	1	1	1	1	1	1	1	1
	SPARE	6	3	3	3	3	3	3	3	3
TOTAL		59	37	31	25	22	13	22	22	13
No. 10	LUMINAIRES-240 V		2	2	2	2	2	2	2	
	SIGNAL COMMON	2	1	1	1	1	1	1	1	1
	SIGNAL POWER	2								
	TOTAL		4	3	3	3	3	3	3	3
DLC 2#16	1I1U	1						1		
	2I2U	1	1	1	1	1				
	2I4U	1	1	1	1	1				
	3I5U	1						1	1	1
	4I8U	1	1	1	1	1				
	5J1U	1	1	1	1	1				
	6J2U	1						1		
	6J4U	1						1		
	7J5U	1	1	1						
	8J8U	1						1	1	1
TOTAL		10	5	5	3	3	5	2	2	

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

NOTES: (FOR THIS SHEET ONLY)

1 Exist CITY STREET SIGN.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	534	595

H. Golban 5-16-11
REGISTERED ELECTRICAL ENGINEER DATE

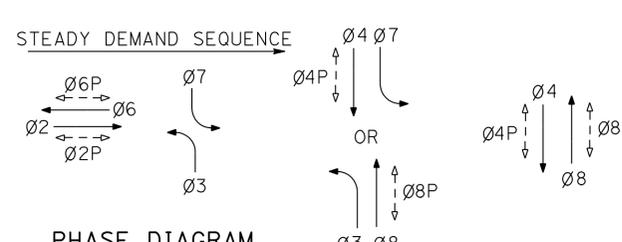
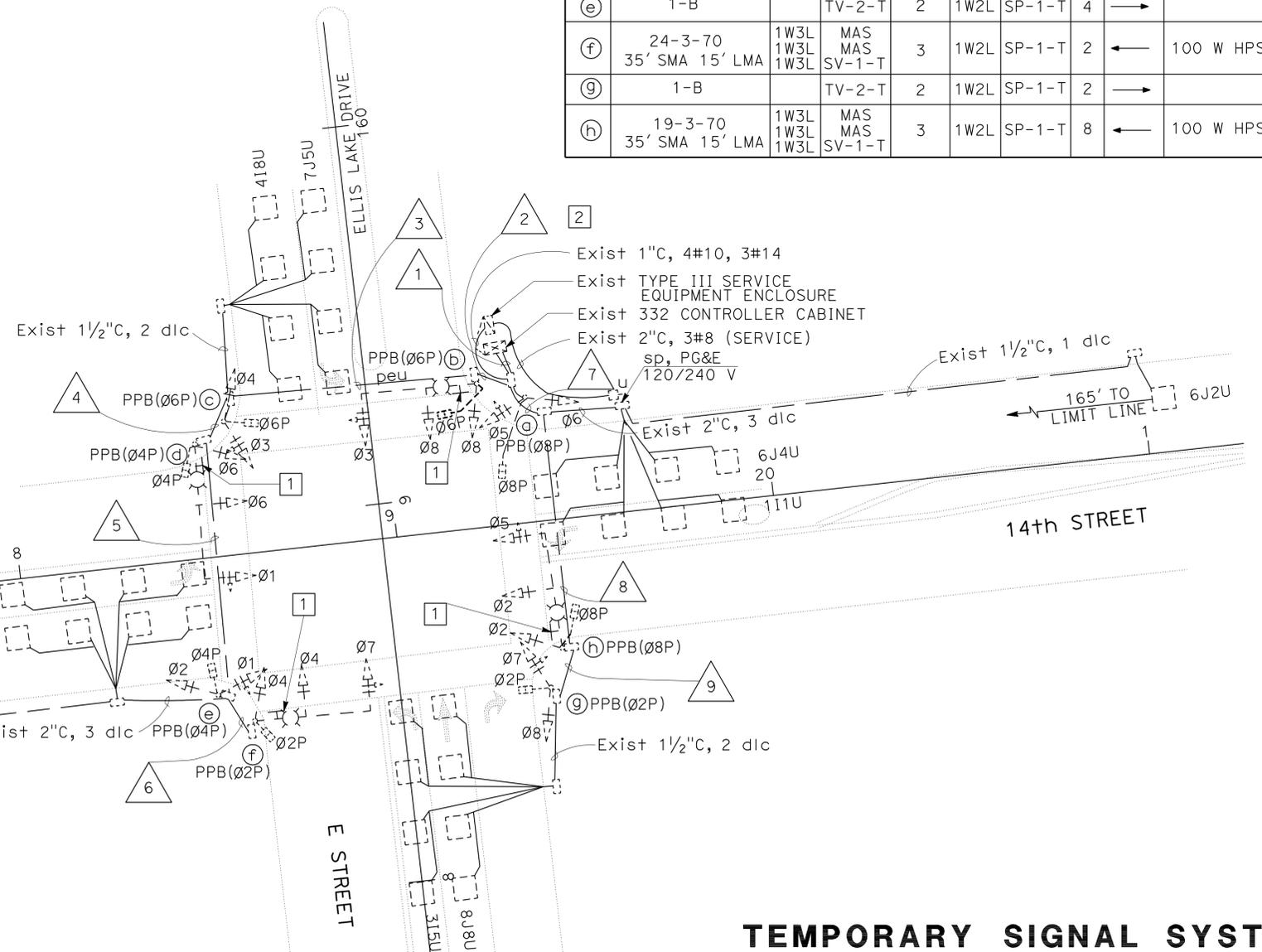
7-11-11
PLANS APPROVAL DATE

HABIB GOLBAN
No. 17928
Exp. 9-30-12
ELECTRICAL

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

EXISTING EQUIPMENT SCHEDULE

POLE	STANDARD	VEHICLE SIGNALS			PED SIGNALS		PPB		LUMINAIRE	NOTES
		TYPE	MTG	BACK-PLATE	TYPE	MTG	Ø	ARROW	WATTAGE	
Ⓐ	1-B	2W3L	TV-2-T	2	1W2L	SP-1-T	8	→		
Ⓑ	24-3-70 35' SMA 15' LMA	1W3L 1W3L 1W3L	MAS MAS SV-1-T	3	1W2L	SP-1-T	6	←	100 W HPS	
Ⓒ	1-B		TV-2-T	2	1W2L	SP-1-T	6	→		
Ⓓ	24-3-70 35' SMA 15' LMA	1W3L 1W3L 1W3L	MAS MAS SV-1-T	3	1W2L	SP-1-T	4	←	100 W HPS	
Ⓔ	1-B		TV-2-T	2	1W2L	SP-1-T	4	→		
Ⓕ	24-3-70 35' SMA 15' LMA	1W3L 1W3L 1W3L	MAS MAS SV-1-T	3	1W2L	SP-1-T	2	←	100 W HPS	
Ⓖ	1-B		TV-2-T	2	1W2L	SP-1-T	2	→		
Ⓗ	19-3-70 35' SMA 15' LMA	1W3L 1W3L 1W3L	MAS MAS SV-1-T	3	1W2L	SP-1-T	8	←	100 W HPS	



TEMPORARY SIGNAL SYSTEM (14th/E STREET) EXISTING

APPROVED FOR ELECTRICAL WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - ELECTRICAL DESIGN

FUNCTIONAL SUPERVISOR: NELSON LEE

YOUNG TON: HABIB GOLBAN

REVISOR: YOUNG TON, DATE: [REVISOR]

CALCULATED/DESIGNED BY: [REVISOR], CHECKED BY: [REVISOR]

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	535	595

H. Golban 5-16-11	
REGISTERED ELECTRICAL ENGINEER	DATE
7-11-11	
PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER	
HABIB GOLBAN	
No. E17928	
Exp. 09-30-12	
ELECTRICAL	

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



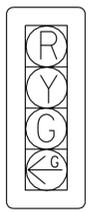
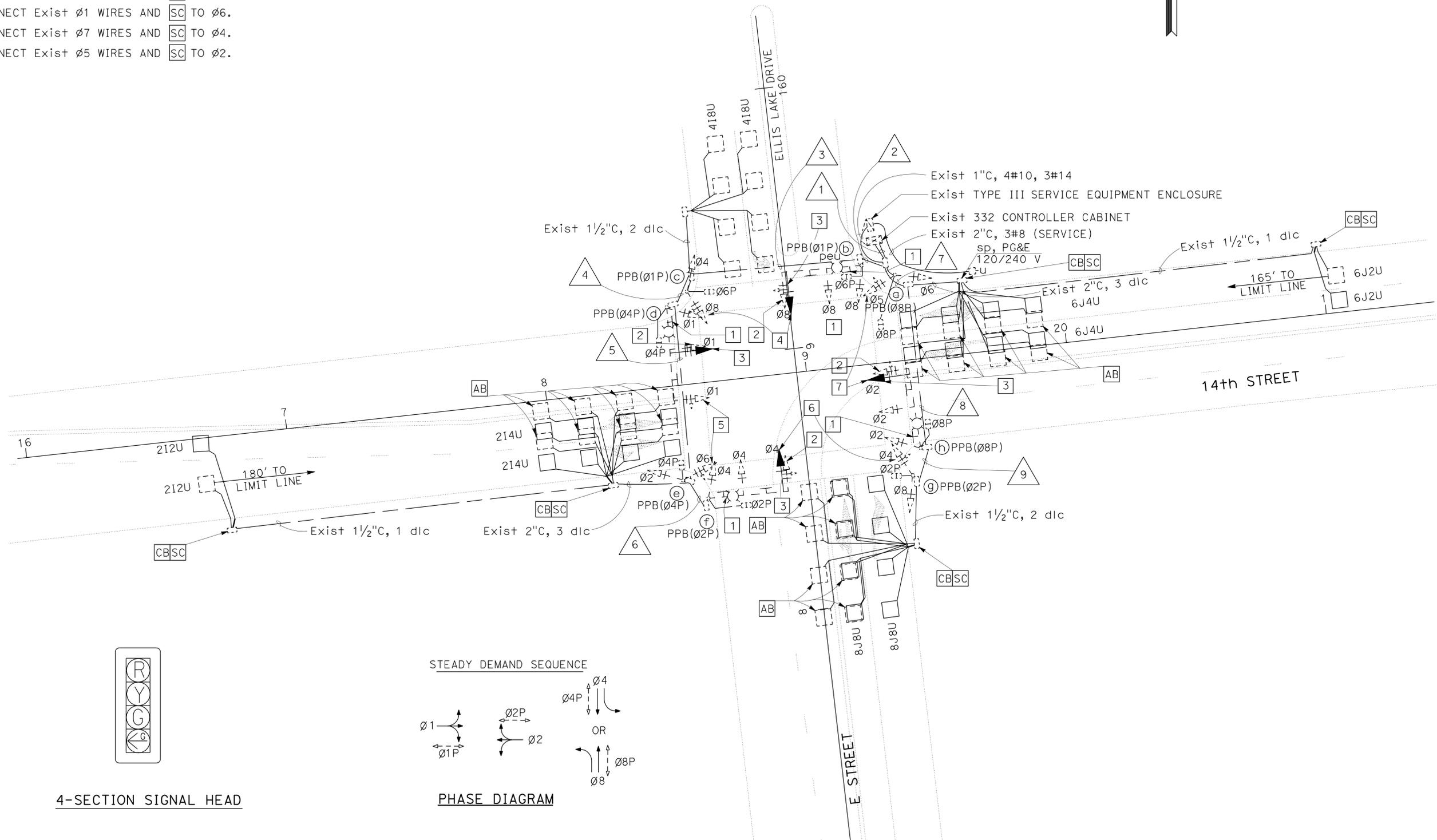
FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

NOTES: (FOR THIS SHEET ONLY)

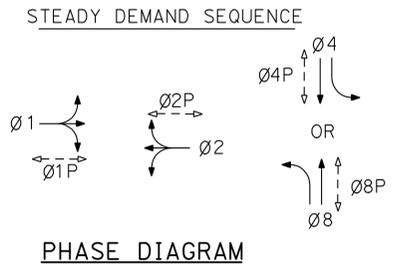
- 1 Exist CITY STREET SIGN.
- 2 RR SEE NOTE 2 SHEET E-79.
- 3 SEE 4-SECTION SIGNAL HEAD DETAIL THIS SHEET.
- 4 DISCONNECT Exist $\phi 3$ WIRES AND SC TO $\phi 8$.
- 5 DISCONNECT Exist $\phi 1$ WIRES AND SC TO $\phi 6$.
- 6 DISCONNECT Exist $\phi 7$ WIRES AND SC TO $\phi 4$.
- 7 DISCONNECT Exist $\phi 5$ WIRES AND SC TO $\phi 2$.

GENERAL NOTE: (FOR THIS SHEET ONLY)

FOR CONDUCTOR AND EQUIPMENT SCHEDULES SEE SHEET E-77.



4-SECTION SIGNAL HEAD



PHASE DIAGRAM

**TEMPORARY SIGNAL SYSTEM
(14th/E STREET)
(STAGE 3 THRU 13)
SCALE: 1" = 20'**

APPROVED FOR ELECTRICAL WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISOR
Caltrans ELECTRICAL DESIGN	NELSON LEE	JAMIE KOJAK HABIB GOLBAN	JAMIE KOJAK HABIB GOLBAN

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	536	595

H. Golban 5-16-11
REGISTERED ELECTRICAL ENGINEER DATE

7-11-11
PLANS APPROVAL DATE

HABIB GOLBAN
No. 17928
Exp. 9-30-12
ELECTRICAL

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

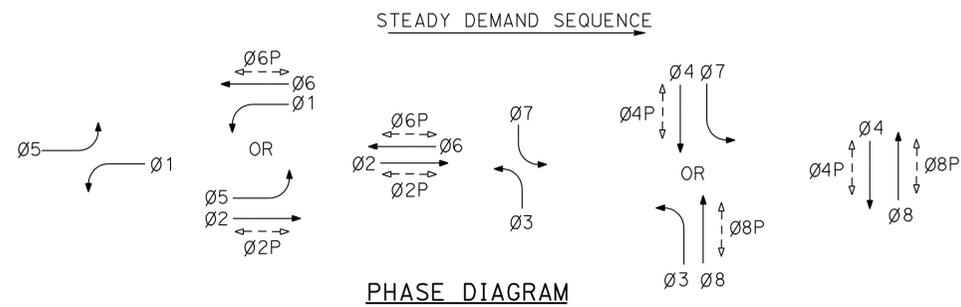
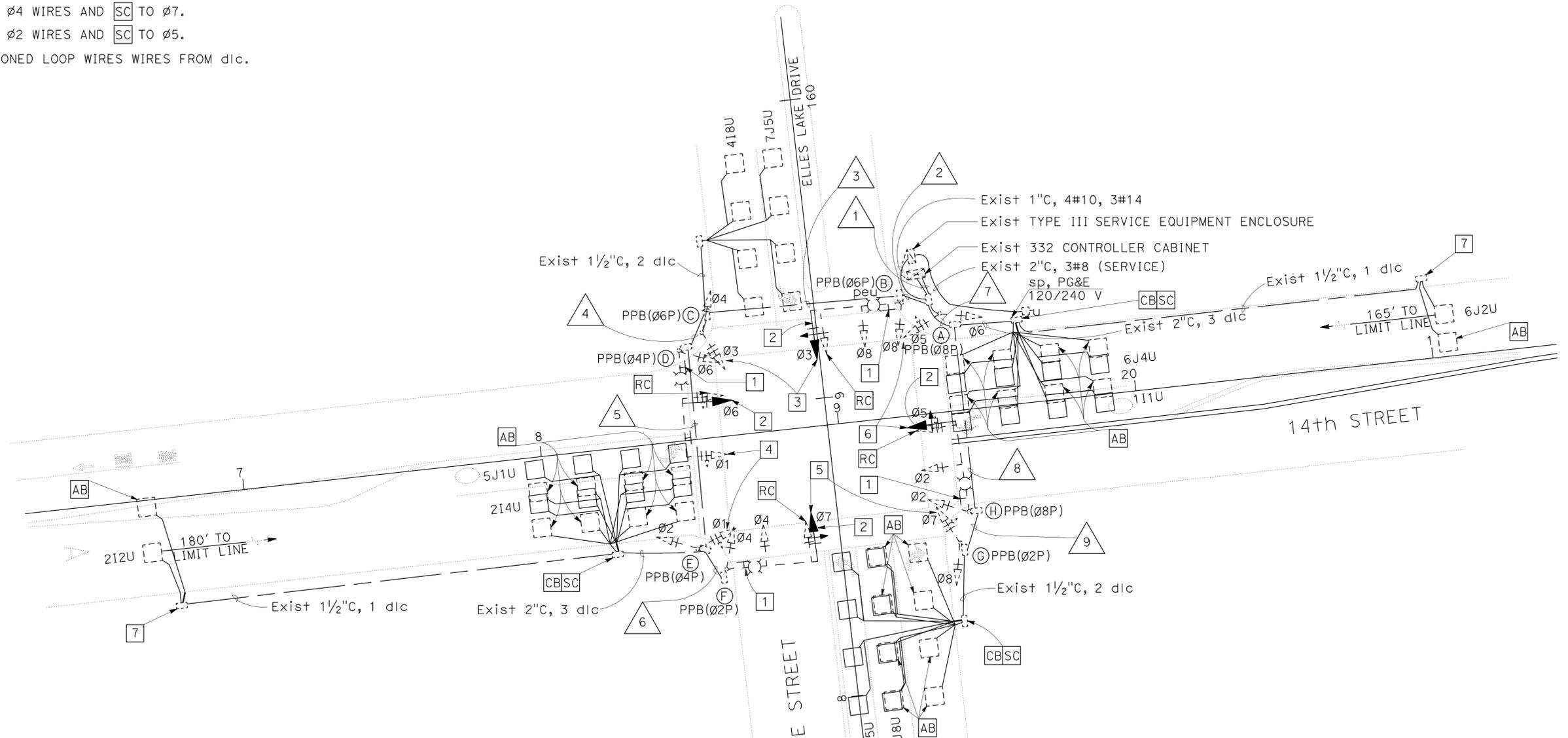
FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

NOTES: (FOR THIS SHEET ONLY)

- 1 Exist CITY STREET SIGN.
- 2 INSTALL ORIGINAL SIGNAL HEAD, SEE NOTE 2 SHEET E-78.
- 3 DISCONNECT Exist $\emptyset 8$ WIRES AND SC TO $\emptyset 3$.
- 4 DISCONNECT Exist $\emptyset 6$ WIRES AND SC TO $\emptyset 1$.
- 5 DISCONNECT Exist $\emptyset 4$ WIRES AND SC TO $\emptyset 7$.
- 6 DISCONNECT Exist $\emptyset 2$ WIRES AND SC TO $\emptyset 5$.
- 7 DISCONNECT ABANDONED LOOP WIRES WIRES FROM dlc.

GENERAL NOTES: (FOR THIS SHEET ONLY)

1. FOR CONDUCTOR AND EQUIPMENT SCHEDULES SEE SHEET E-77.
2. RC ALL DETOUR SIGNS INSTALLED ON SIGNAL MAST ARMS.



**TEMPORARY SIGNAL SYSTEM
(14th / E STREET)**

SCALE: 1" = 20'

APPROVED FOR ELECTRICAL WORK ONLY

E-79

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISOR
Caltrans ELECTRICAL DESIGN	NELSON LEE	JAMIE KOJAK HABIB GOLBAN	JAMIE KOJAK HABIB GOLBAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN

FUNCTIONAL SUPERVISOR
 NELSON LEE

CALCULATED, DESIGNED BY
 CHECKED BY

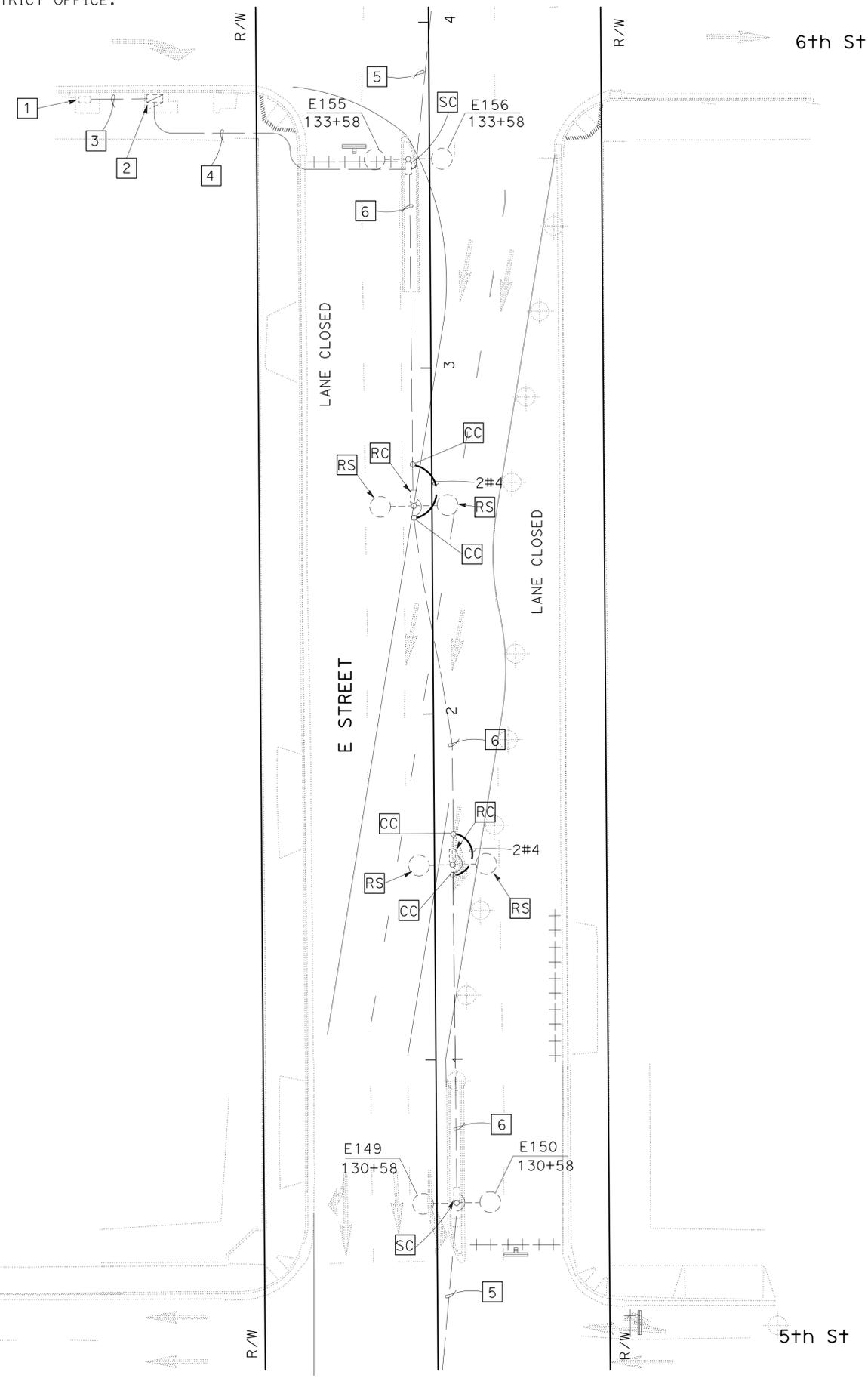
YOUNG TON
 HABIB GOLBAN

REVISOR
 DATE

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

NOTES: (FOR THIS SHEET ONLY)

- 1 Exist PG&E UTILITY BOX.
- 2 Exist TYPE III-AF SERVICE EQUIPMENT ENCLOSURE, 240/480 V.
- 3 Exist 2"C, 3#4 (SERVICE).
- 4 Exist 1½"C, 2#4, 3#14.
- 5 Exist 1½"C, 2#4.
- 6 Exist 1½"C, RC 2#4. ADD 2#4.



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	537	595

H. Golban 5-16-11
 REGISTERED ELECTRICAL ENGINEER DATE

7-11-11
 PLANS APPROVAL DATE

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REGISTERED PROFESSIONAL ENGINEER
 HABIB GOLBAN
 No. E17928
 Exp. 09-30-12
 ELECTRICAL
 STATE OF CALIFORNIA

**TEMPORARY SIGNAL SYSTEM
 (5th AND 6th/E STREET)
 (STAGE 4)**
 SCALE: 1" = 20'
E-80

APPROVED FOR ELECTRICAL WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN

FUNCTIONAL SUPERVISOR
 NELSON LEE

CALCULATED, DESIGNED BY
 CHECKED BY

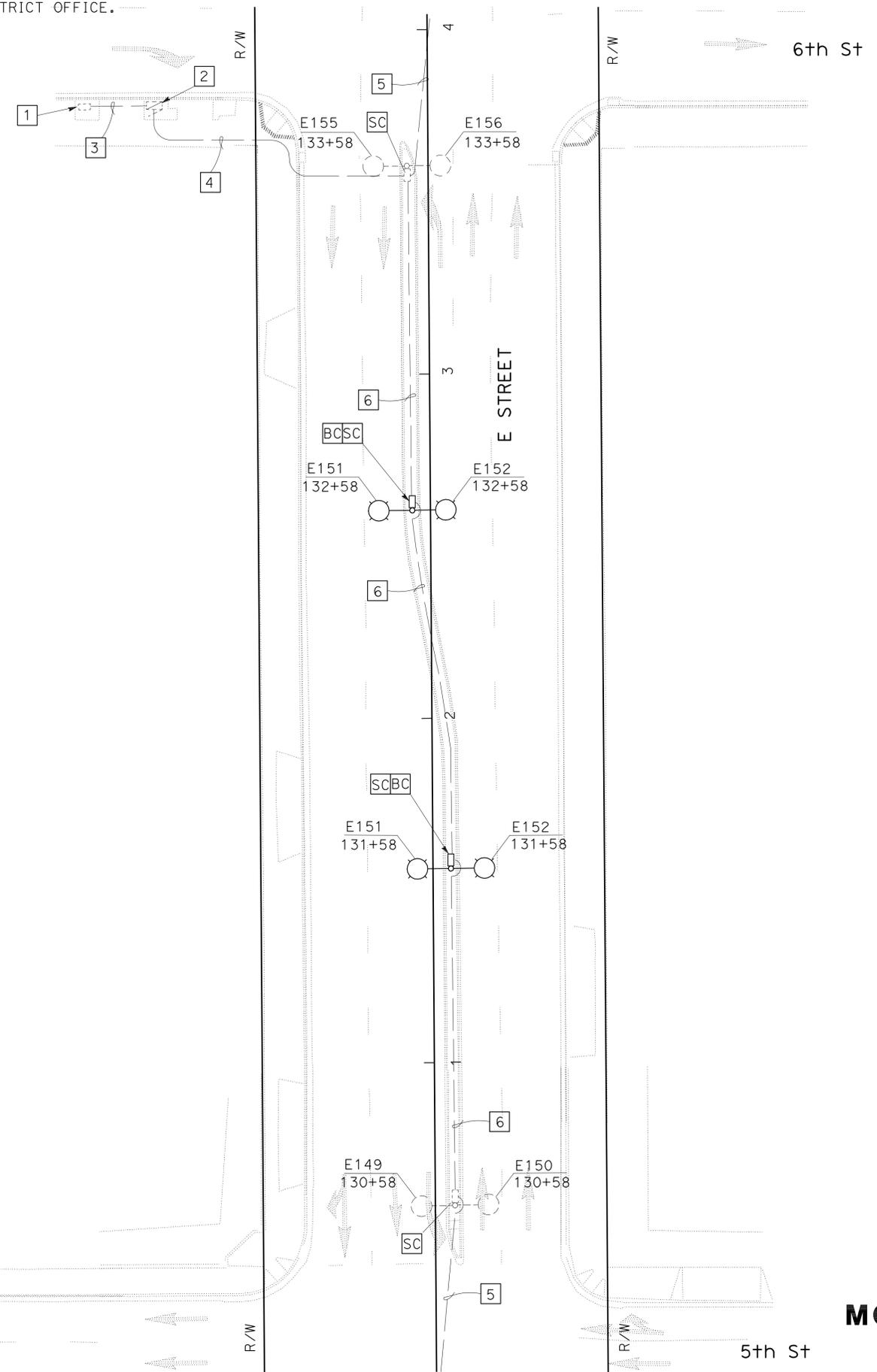
YOUNG TON
 HABIB GOLBAN

REVISOR
 DATE

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

NOTES: (FOR THIS SHEET ONLY)

- 1 Exist PG&E UTILITY BOX.
- 2 Exist TYPE III-AF SERVICE EQUIPMENT ENCLOSURE, 240/480 V.
- 3 Exist 2"C, 3#4 (SERVICE).
- 4 Exist 1½"C, 2#4, 3#14.
- 5 Exist 1½"C, 2#4.
- 6 Exist 1½"C, RC 2#4. ADD 2#4.



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	538	595

H. Golban 5-16-11
 REGISTERED ELECTRICAL ENGINEER DATE

7-11-11
 PLANS APPROVAL DATE

HABIB GOLBAN
 No. E17928
 Exp. 09-30-12
 ELECTRICAL

REGISTERED PROFESSIONAL ENGINEER
 STATE OF CALIFORNIA

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**MODIFY SIGNAL AND LIGHTING
 (5th AND 6th/E STREET)
 (STAGE 5)**

SCALE: 1" = 20'

E-81

APPROVED FOR ELECTRICAL WORK ONLY

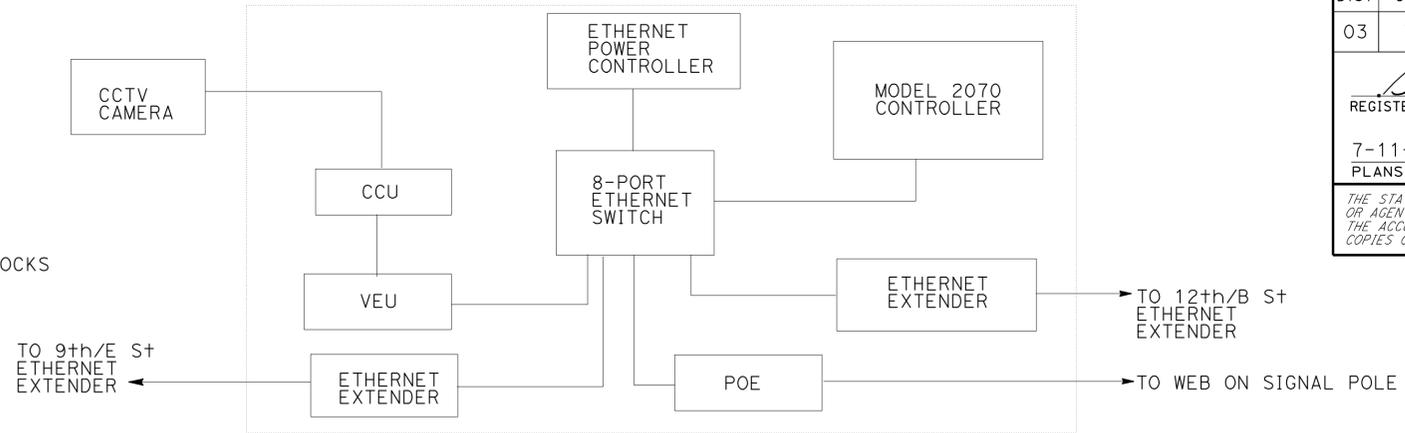
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	539	595

5-16-11
 REGISTERED ELECTRICAL ENGINEER DATE
 7-11-11
 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.

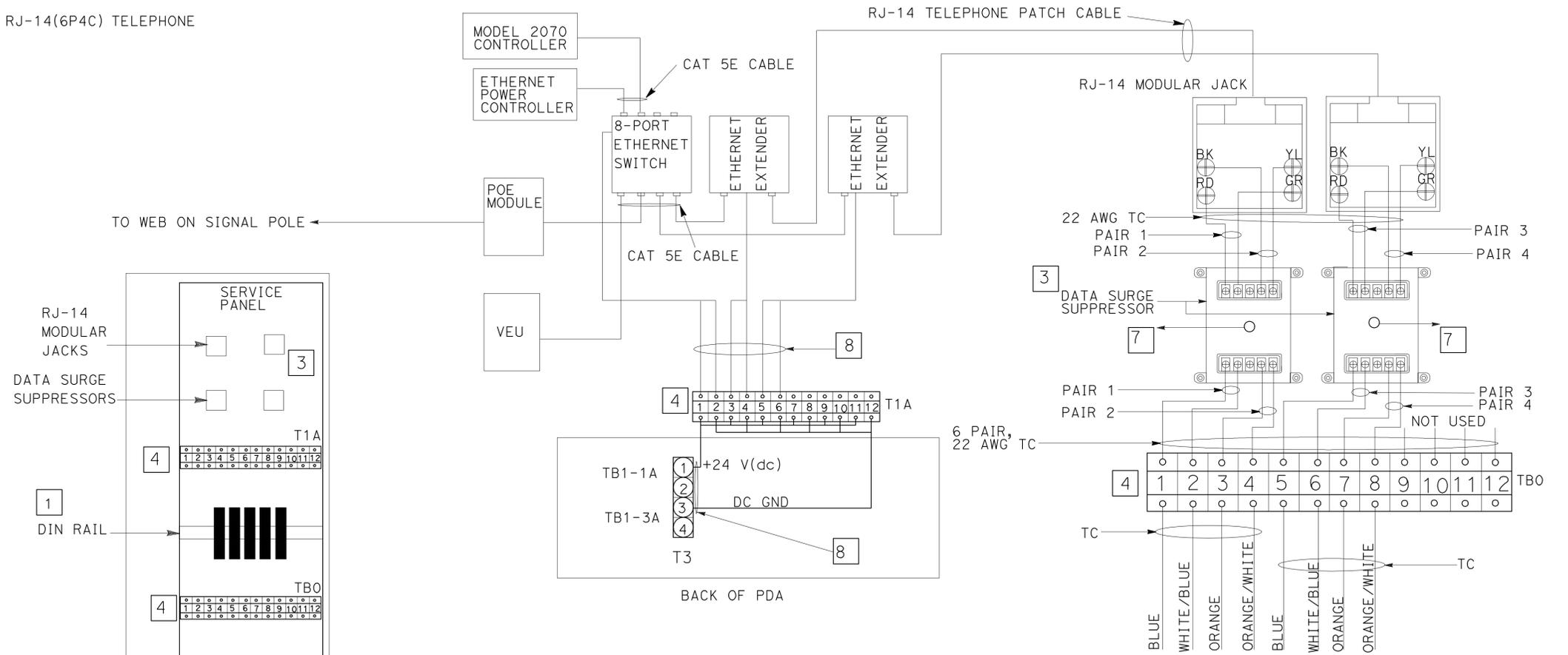
REGISTERED PROFESSIONAL ENGINEER
 BRIAN R. SIMI
 No. 14553
 Exp. 6-30-12
 ELECTRICAL
 STATE OF CALIFORNIA

NOTES: (FOR THIS SHEET ONLY)

1. INSTALL 8-PORT ETHERNET SWITCH AND ETHERNET EXTENDERS ON DIN RAIL AS SHOWN IN DETAIL "B".
2. INSTALL HALF SHELVES AS SHOWN.
3. INSTALL SURGE SUPPRESSORS AND RJ-14(6P4C) MODULAR JACKS AS SHOWN.
4. INSTALL 2-12 POSITION TERMINAL BLOCKS ON DIN RAIL. LABEL TERMINAL BLOCKS AS SHOWN ON A PERMANENT LABEL.
5. INSTALL ETHERNET POWER CONTROLLER.
6. INSTALL POWER STRIP.
7. CONNECT SOLID #10 GROUND WIRE TO EQUIPMENT GROUND.
8. USE 2 PAIR, 22 AWG, STRANDED AND TINNED COPPER WIRES WITH PVC JACKET TYPE INSULATION.
9. PROVIDE 8-3' LONG CAT5E CABLES, AND 2-3' LONG RJ-14(6P4C) TELEPHONE PATCH CABLES IN EACH CABINET.
10. THE CABINET DRAWING IS FOR REFERENCE ONLY.



SYSTEM INTERCONNECTION



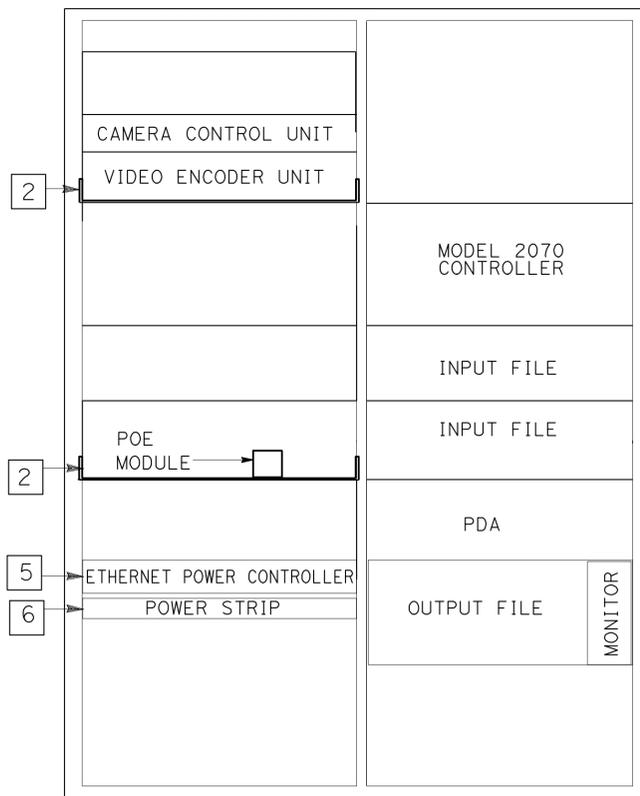
EQUIPMENT INTERCONNECTION (TYPICAL)

DETAIL "C"

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SHOWN

INTELLIGENT TRANSPORTATION SYSTEM (INTERCONNECT DETAILS) (ITS CABINET LAYOUT DETAILS)

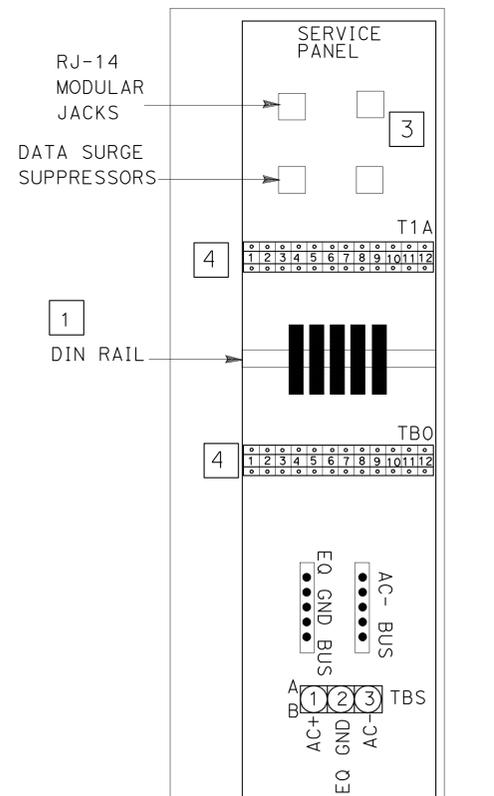
NO SCALE



DETAIL "A" ITS CABINET LAYOUT DETAIL

(FRONT VIEW)

332D CONTROLLER CABINET



DETAIL "B" ITS CABINET ASSEMBLY LAYOUT

LEFT SIDE

332D CONTROLLER CABINET

APPROVED FOR ELECTRICAL WORK ONLY

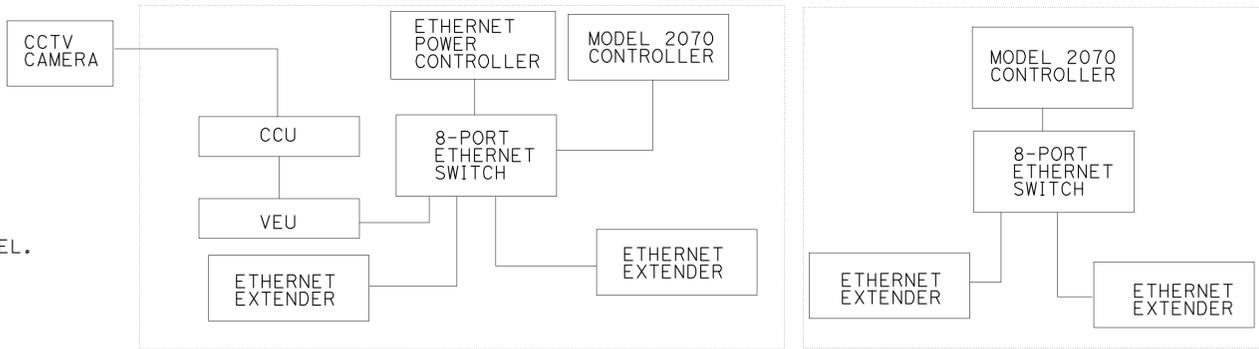
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	540	595

5-16-11
 REGISTERED ELECTRICAL ENGINEER DATE
 7-11-11
 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
 BRIAN R. SIMI
 No. 14553
 Exp. 6-30-12
 ELECTRICAL
 STATE OF CALIFORNIA

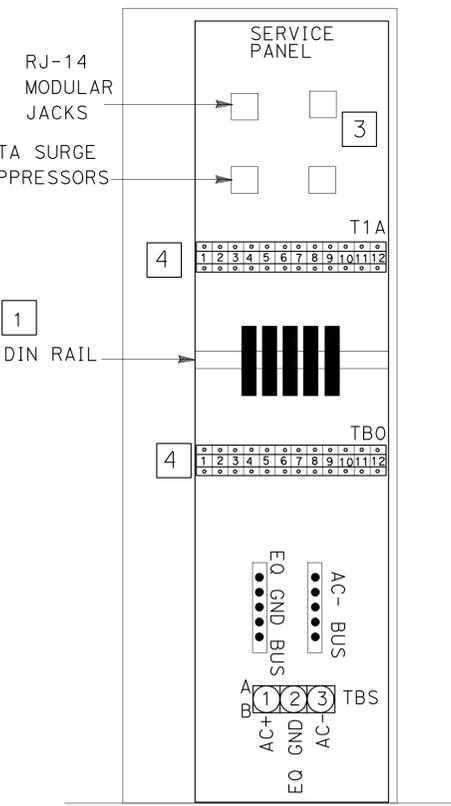
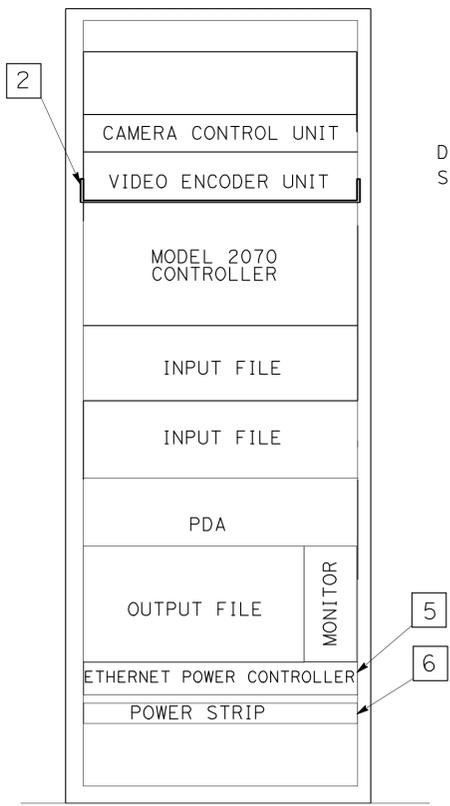
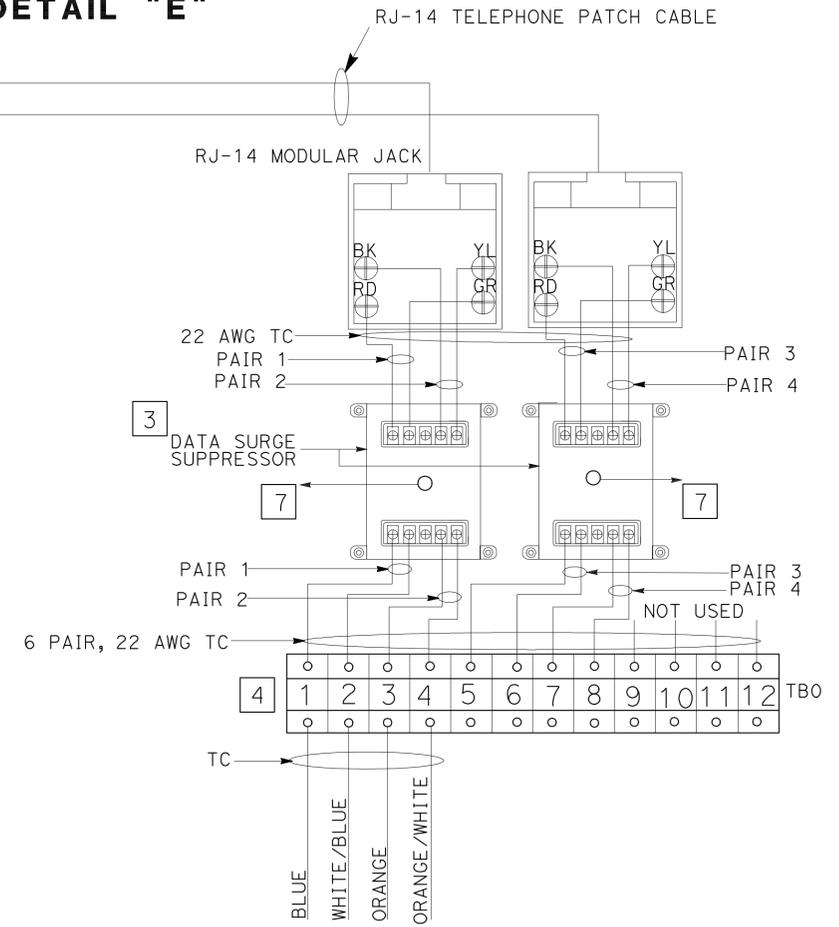
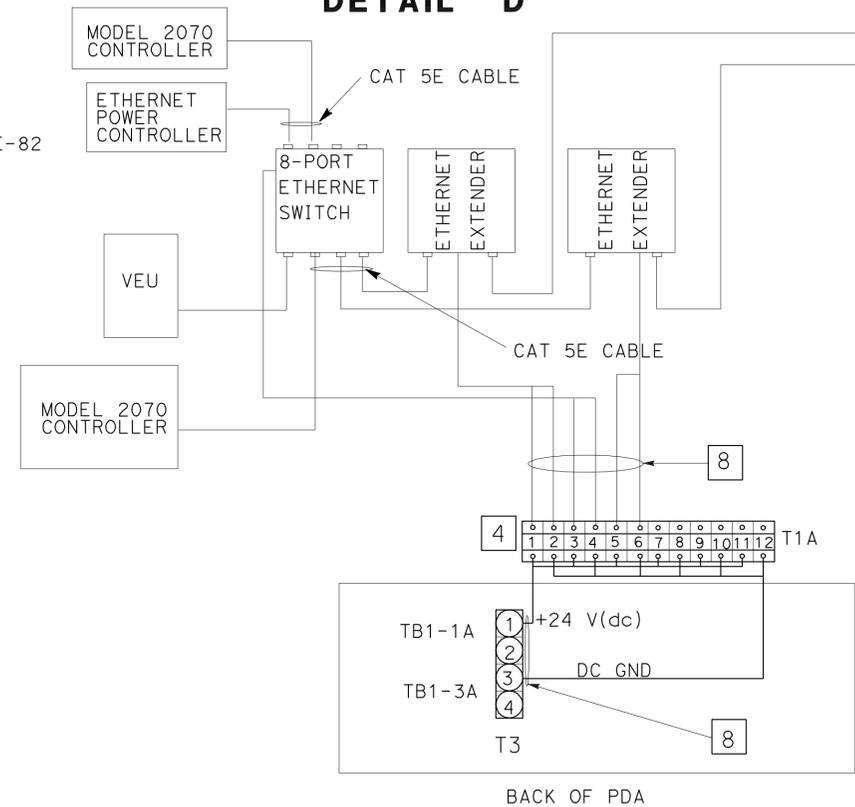
NOTES: (FOR THIS SHEET ONLY)

1. INSTALL 8-PORT ETHERNET SWITCH AND ETHERNET EXTENDERS ON DIN RAIL AS SHOWN IN DETAILS "B".
2. INSTALL HALF SHELVES AS SHOWN.
3. INSTALL SURGE SUPPRESSORS AND RJ-14(6P4C) MODULAR JACKS AS SHOWN.
4. REMOVE EXISTING TERMINAL BLOCK TBO. INSTALL 2-12 POSITION TERMINAL BLOCKS ON DIN RAIL. LABEL TERMINAL BLOCKS AS SHOWN ON A PERMANENT LABEL.
5. INSTALL ETHERNET POWER CONTROLLER.
6. INSTALL POWER STRIP.
7. CONNECT SOLID #10 GROUND WIRE TO EQUIPMENT GROUND.
8. USE 2 PAIR, 22 AWG, STRANDED AND TINNED COPPER WIRES WITH PVC JACKET TYPE INSULATION.
9. PROVIDE 8-3' LONG CAT5E CABLES, AND 2-3' LONG RJ-14(6P4C) TELEPHONE PATCH CABLES IN EACH CABINET.
10. THE CABINET DRAWING IS FOR REFERENCE ONLY.
11. TERMINATE TELEPHONE CABLE WIRES TO MATCH COLOR OF WIRES AS SHOWN ON SHEET E-82 DETAIL "C".



SYSTEM INTERCONNECTION (TYPICAL) DETAIL "D"

SYSTEM INTERCONNECTION (TYPICAL) DETAIL "E"



DETAIL "A" ITS CABINET LAYOUT TYPICAL DETAIL
(FRONT VIEW)

DETAIL "B" ITS CABINET ASSEMBLY TYPICAL LAYOUT
LEFT SIDE

EQUIPMENT INTERCONNECTION (TYPICAL) DETAIL "C"

INTELLIGENT TRANSPORTATION SYSTEM (INTERCONNECT DETAILS) (CABINET LAYOUT DETAILS)

NO SCALE

APPROVED FOR ELECTRICAL WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 ELECTRICAL DESIGN
 FUNCTIONAL SUPERVISOR: BRIAN R. SIMI
 CALCULATED/DESIGNED BY: BERHANU ZERCAW
 CHECKED BY: BRIAN R. SIMI
 REVISED BY: DATE
 REVISIONS:

LAST REVISION: 06-23-11
 DATE PLOTTED => 15-JUL-2011
 TIME PLOTTED => 07:06

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	541	595

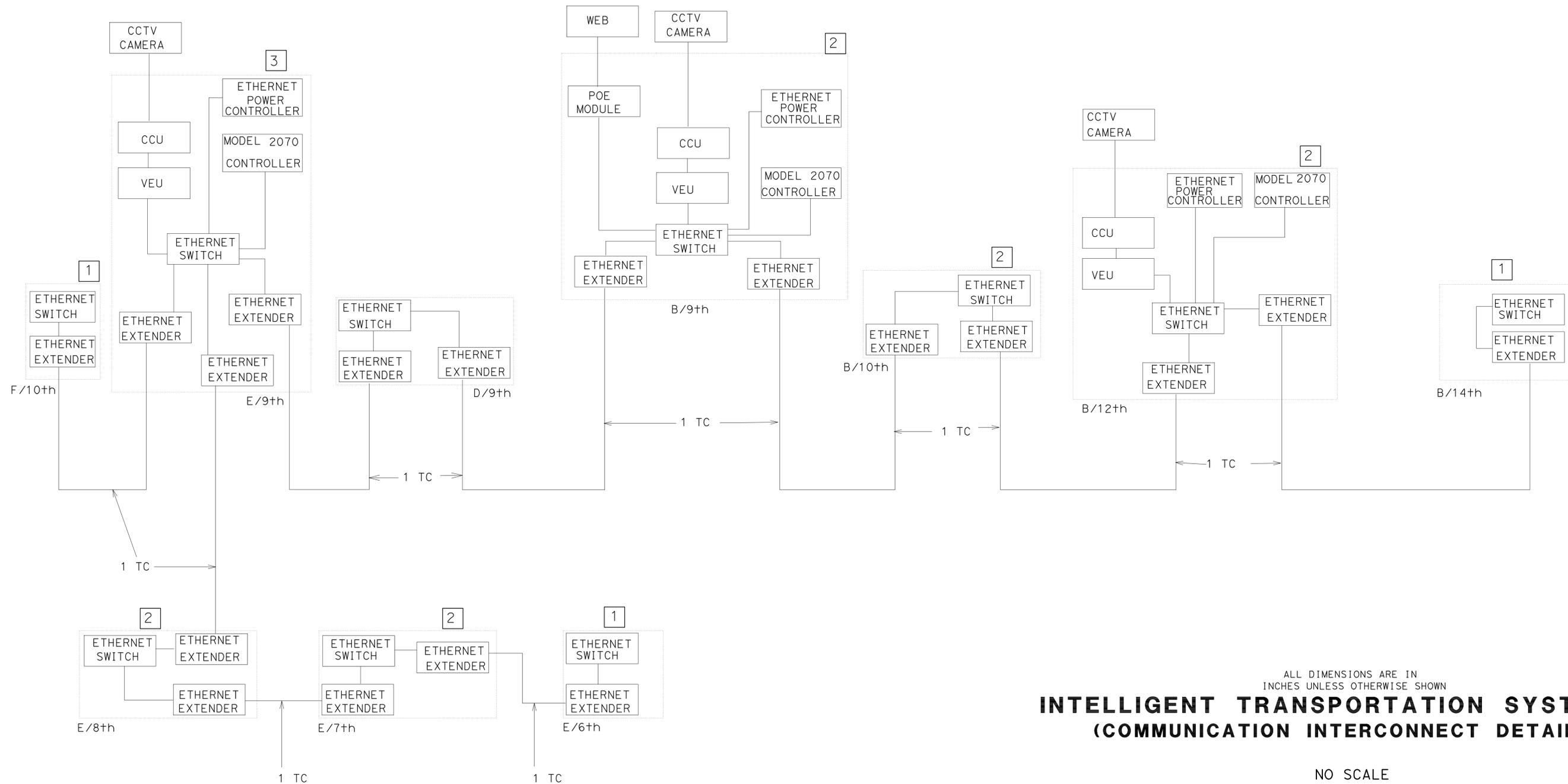
<i>Brian R. Simi</i>	5-16-11
REGISTERED ELECTRICAL ENGINEER	DATE
7-11-11	
PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER
BRIAN R. SIMI
No. 14553
Exp. 6-30-12
ELECTRICAL
STATE OF CALIFORNIA

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

NOTES: (FOR THIS SHEET ONLY)

- 1 SEE SHEET E-85 DETAIL "F" FOR INTERCONNECTION.
- 2 SEE SHEET E-85 DETAIL "G" FOR INTERCONNECTION.
- 3 SEE SHEET E-85 DETAIL "H" FOR INTERCONNECTION.



ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SHOWN

INTELLIGENT TRANSPORTATION SYSTEM

(COMMUNICATION INTERCONNECT DETAIL)

NO SCALE

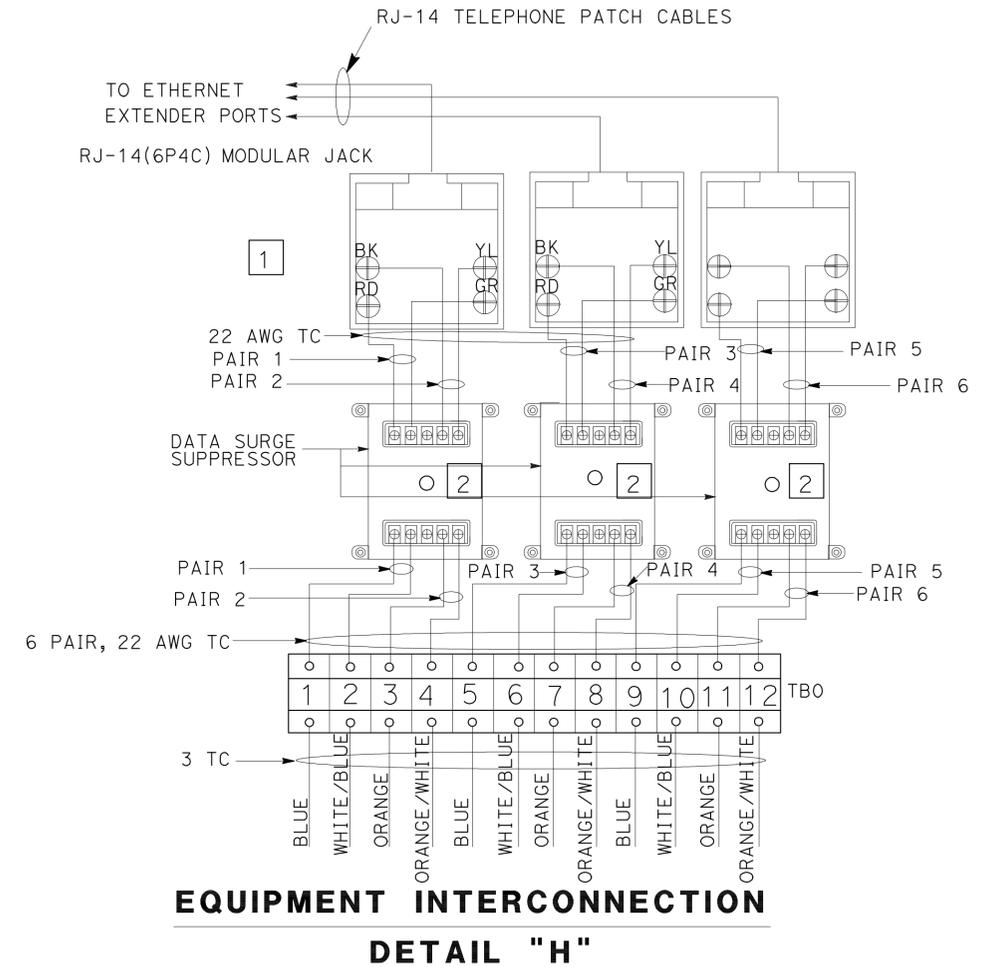
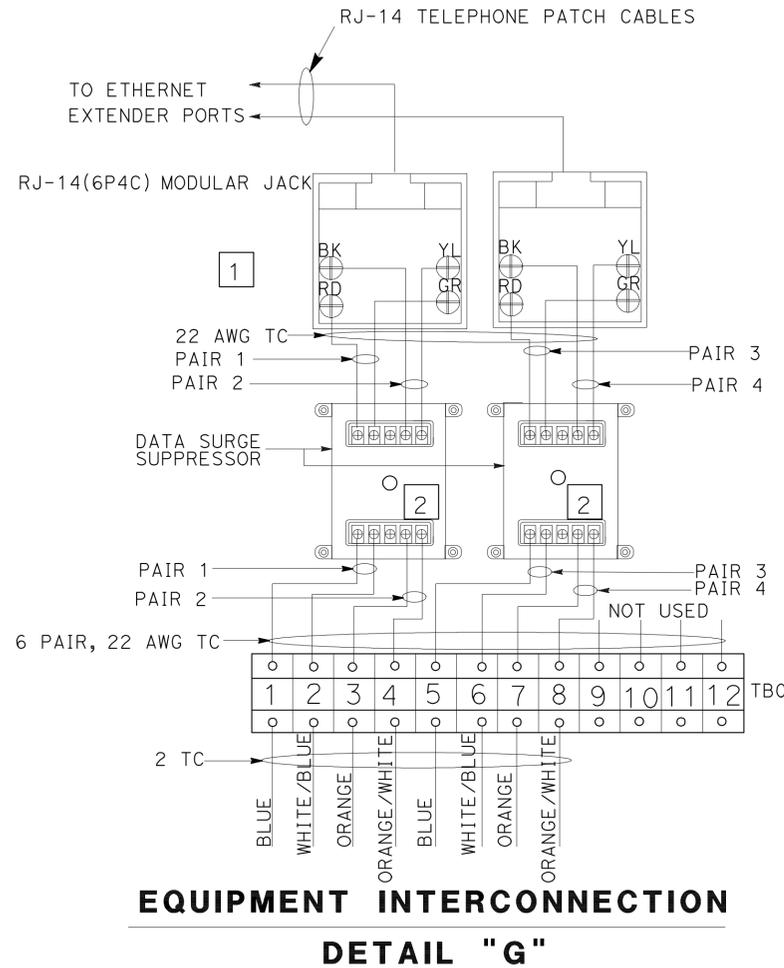
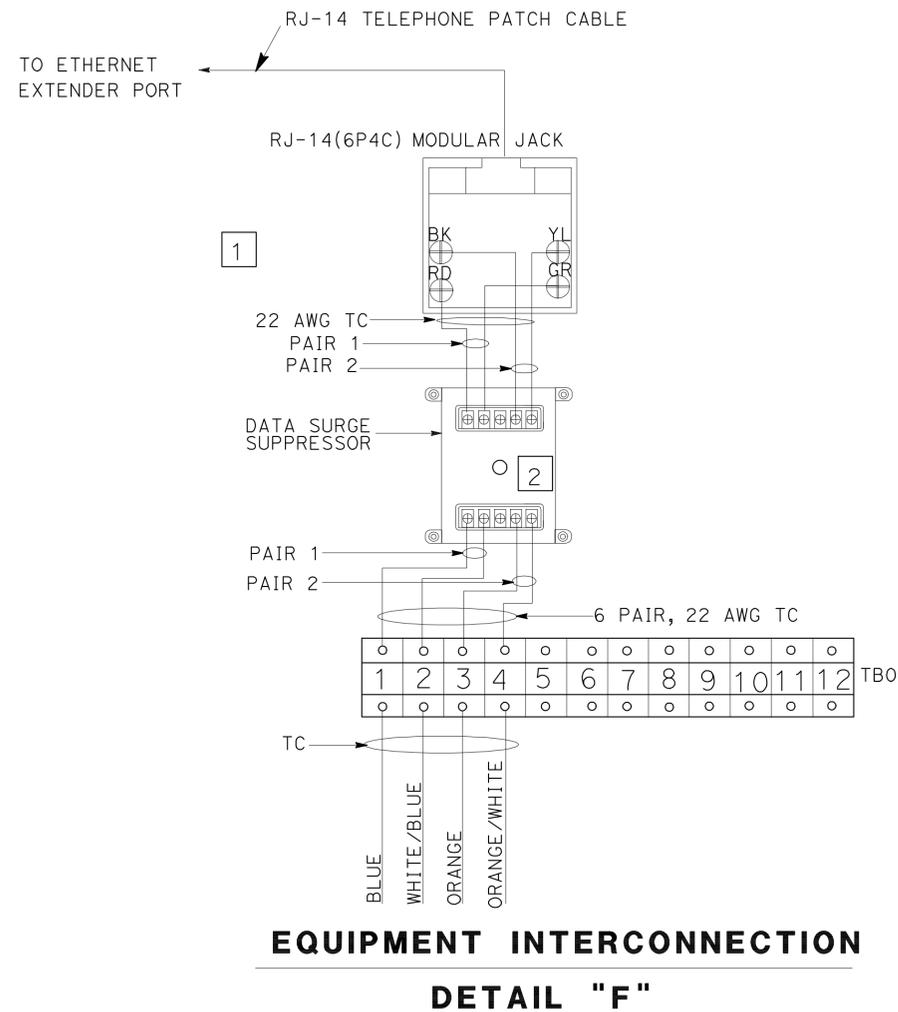
APPROVED FOR ELECTRICAL WORK ONLY

E-84

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN
 FUNCTIONAL SUPERVISOR: BRIAN R. SIMI
 CALCULATED/DESIGNED BY: BERHANU ZERGAW
 CHECKED BY: BRIAN R. SIMI
 REVISED BY: DATE
 REVISIONS:

NOTES: (FOR THIS SHEET ONLY)

- 1 INSTALL SURGE SUPPRESSORS AND RJ-14(6P4C) MODULAR JACKS AS SHOWN.
- 2 CONNECT SOLID #10 GROUND WIRE TO EQUIPMENT GROUND.



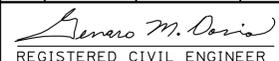
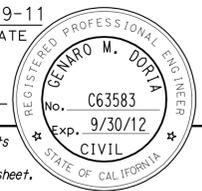
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SHOWN

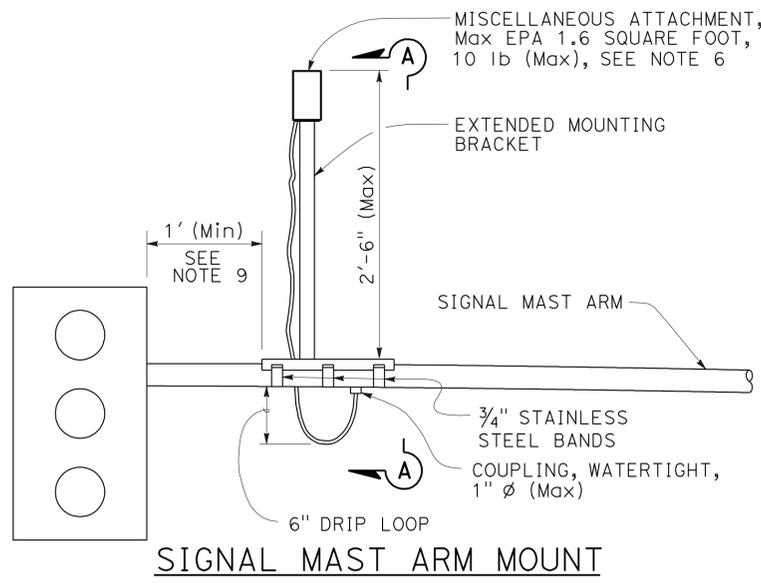
**INTELLIGENT TRANSPORTATION SYSTEM
(COMMUNICATION INTERCONNECT DETAIL)**

NO SCALE

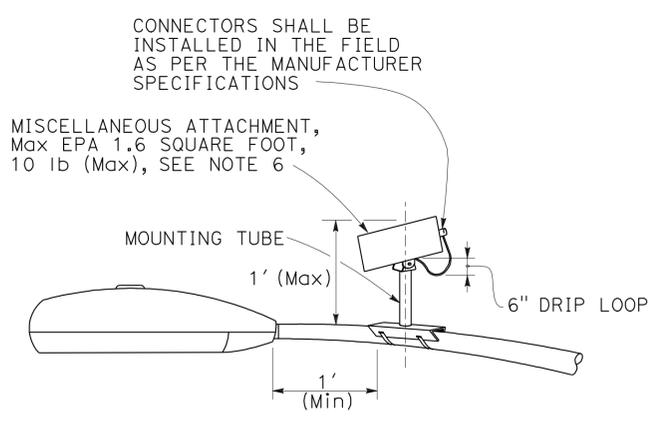
APPROVED FOR ELECTRICAL WORK ONLY

E-85

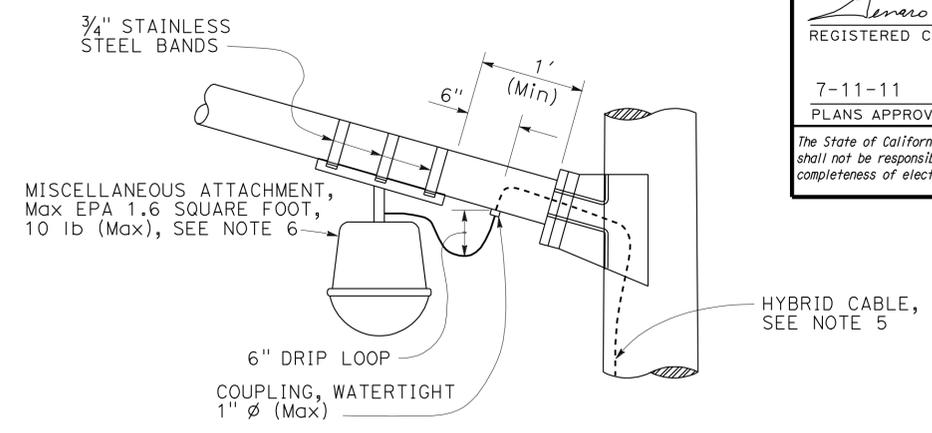
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	543	595
 REGISTERED CIVIL ENGINEER			6-9-11	DATE	
7-11-11			PLANS APPROVAL DATE		
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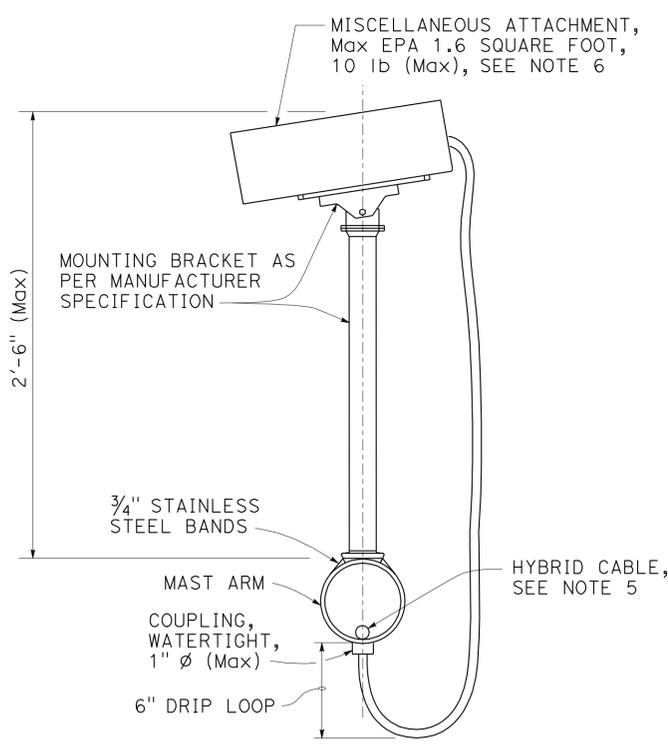
SIGNAL MAST ARM MOUNT
DETAIL A
NO SCALE



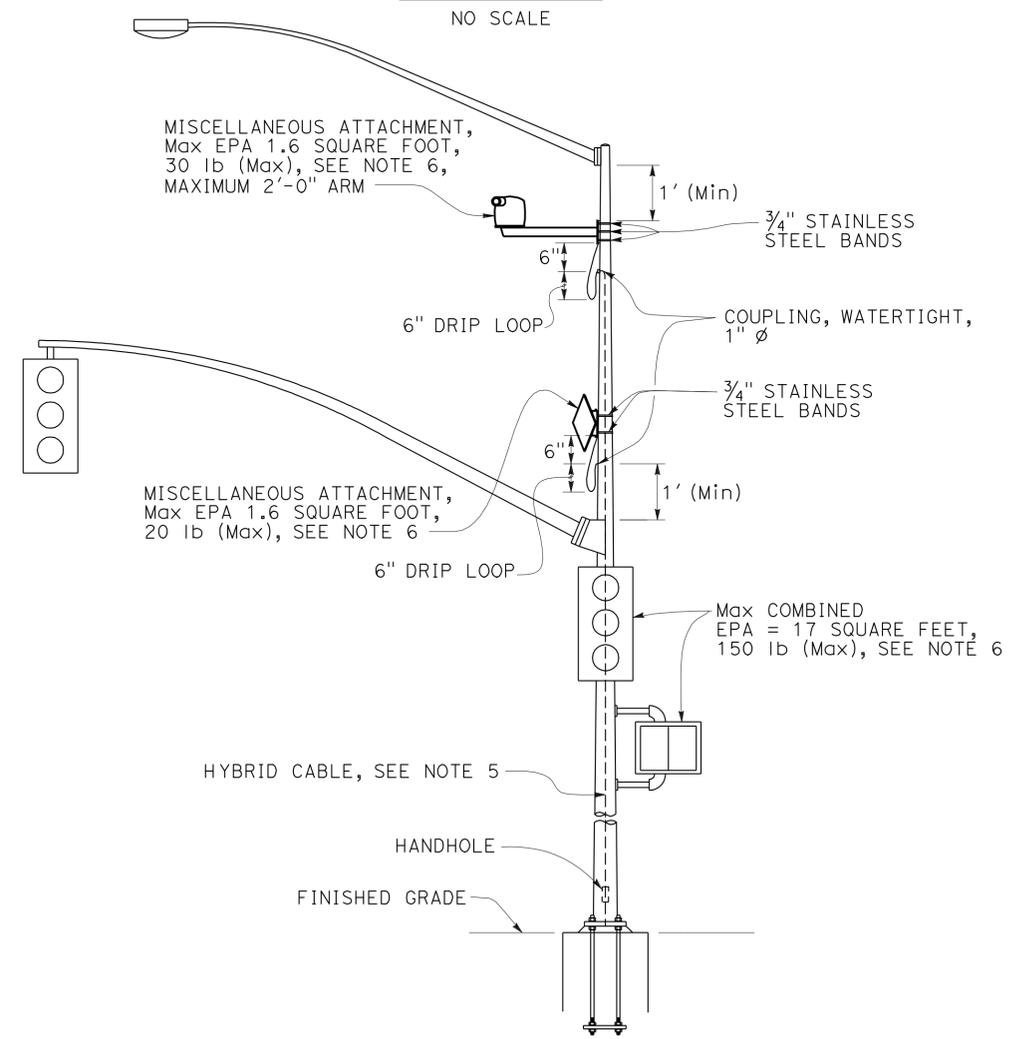
LUMINAIRE MAST ARM MOUNT
DETAIL B
NO SCALE



LUMINAIRE MAST ARM MOUNT
DETAIL C
NO SCALE



SECTION A-A
NO SCALE



SIGNAL POLE MOUNT
DETAIL D
NO SCALE

NOTES:

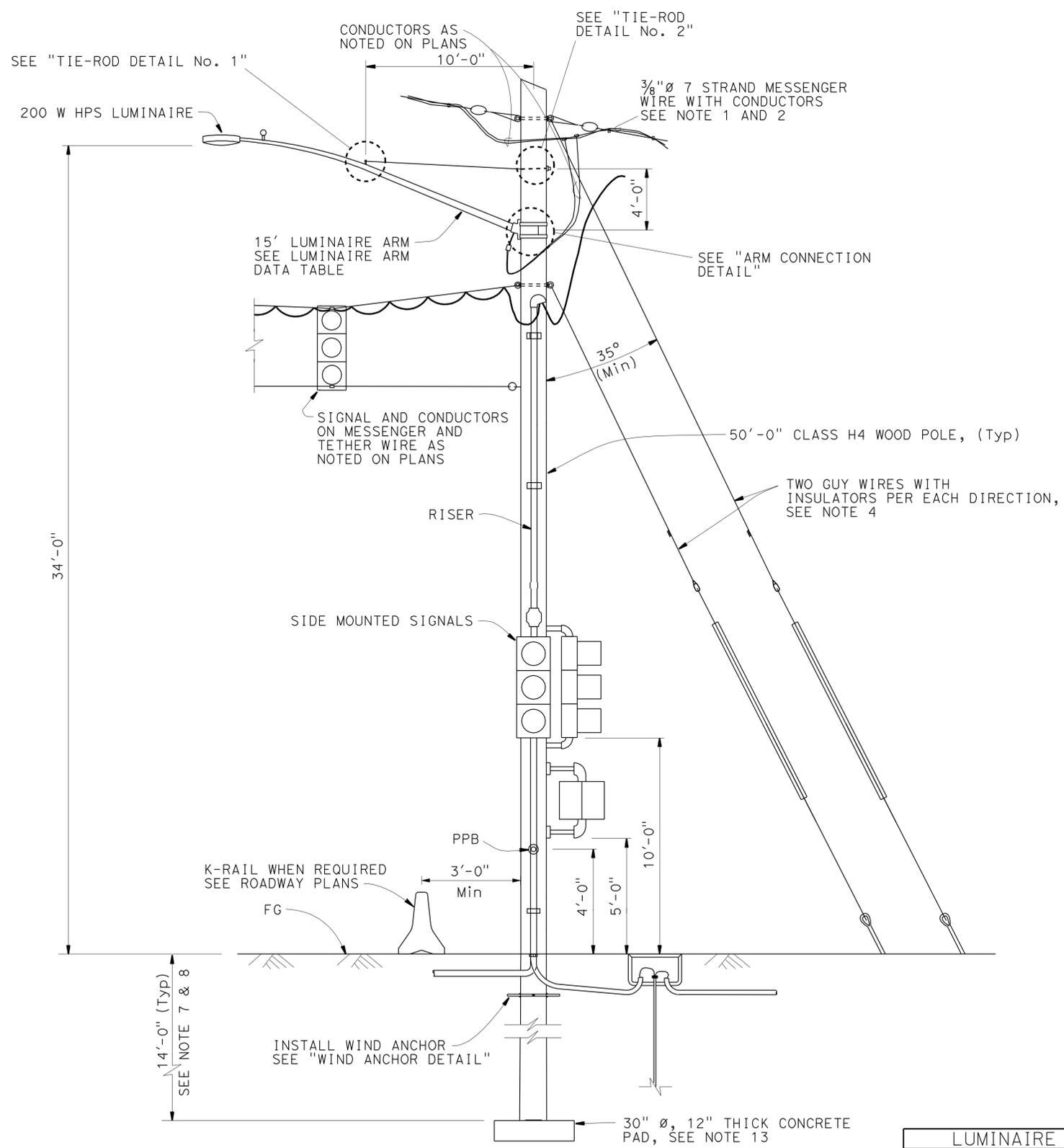
1. Exact mounting location of miscellaneous attachment and bracket shall be approved by the Engineer per manufacturer's recommendation.
2. Location of cable entrances on signal pole shall be a minimum of 1' from any flange or base plate.
3. Hybrid cable entrances on signal pole shall be drilled for weathertight coupling as required.
4. Hybrid cable shall have a drip loop at the entrance into signal pole, luminaire mast arm and signal mast arm.
5. A single hybrid cable shall run continuous and shall not be twisted from the miscellaneous attachment to the controller cabinet. No splices shall be allowed.
6. Use the manufacturer's Effective Projected Area (EPA) for miscellaneous attachment. The maximum EPA for each miscellaneous attachment shall be 1.6 square feet.
7. Maximum of one miscellaneous attachment per mast arm.
8. Miscellaneous attachment shall be mounted using clamping devices.
9. Miscellaneous attachment shall be mounted using a minimum sign distance as called out on the 2006 Standard Plans.
10. Maximum of four miscellaneous attachments per traffic signal structure.
11. This camera mounting detail is for new signal and lighting poles, not existing poles.

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

BRANCH CHIEF <u>JAMES SAGAR</u>	DESIGN	BY G DORIA	CHECKED J MAGANA	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN SPECIAL DESIGN BRANCH	BRIDGE NO.	N/A	MODIFY SIGNAL AND LIGHTING CAMERA MOUNTING DETAILS	SES-1
	DETAILS	BY D W JUSTICE Jr	CHECKED G DORIA			POST MILE	X		
	QUANTITIES	BY X	CHECKED X						

USERNAME => s124496 DATE PLOTTED => 15-JUL-2011 TIME PLOTTED => 07:43

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0 14.4/15.0	544	595
			6-9-11	REGISTERED CIVIL ENGINEER DATE	
			7-11-11	PLANS APPROVAL DATE	
			REGISTERED PROFESSIONAL ENGINEER TAMARA S. MARCHENKO No. C76837 Exp. 12/31/12 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.					



TYPICAL WOOD POLE SUPPORT WITH LUMINAIRE

NO SCALE See DETAIL (B) for Guy Wire

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

Refer to RSP ES-6A for Luminaire arm details

GENERAL NOTES:

SPECIFICATIONS

Design: AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals dated 2001.

LOADING

Wind Loadings: 85 MPH

UNIT STRESSES

Timber Poles: Fb = 1850 Tapered treated round pole
Fv = 110 psi ASTM D2899 Standard
E = 1500 x 10³ psi

To conform with Section 86 Standard Specifications

SPECIFICATIONS

Caltrans Standard Specifications May 2006
ANSI Wood Poles
Utility Grade Wires

NOTES:

- All overhead cables shall be slack spanned with 17'-0" minimum overhead clearance.
- Conductors shall be suspended from span-wire as follows:
A) Main run 3/8" span-wire with 4.5% sag and 1/4" tether wire with 2% sag where required. No spare conductors allowed except as noted.
- Overhead line construction not specifically covered here shall conform with the provisions of General Order No. 95 of Public Utilities Commission.
- Wood poles shall be stabilized using guy wires, breast blocks or rakes at each dead end, corner, drop or line deviation more than 15° from straight line. The direction of the guy shall counteract the resultant of unbalanced force applied to pole. Where space or conflict prevent guy installation, a diagonal brace shall be used. The brace shall be wood and shall be connected to the pole by means to satisfy structural and electrical requirements. The direction of the brace shall counteract the resultant of unbalanced horizontal force of 4000 pounds (Min) applied to the pole.
- Guy shall be attached to pole as nearly as practical to the center of conductors load, or 3'-0" Max otherwise, See Note 4.
- All attachments shall be mounted with stainless steel straps or other manufacturers methods without drilling holes in pole, except as shown. Drilling through pole will require the Engineer's approval.
- Foundation design is based on AASHTO 2001 article 13.6 Broms' approximate procedure assuming a cohesionless material. The angle of Internal friction used is 30° and unit weight of soil used is 120 lb/ft³. The Contractor to verify actual soil condition.
- If pole is located on a steep slope add 2 feet extra for embedment.
- See Sheets SES-3 to SES-5 for details.
- For details not shown, see "2006 STANDARD PLANS" and "2006 REVISED STANDARD PLANS"
- All temporary poles support OH Conductors. Attach luminaire arm and/or combination of attachments as specified at locations where indicated on Electrical Sheets.
- Attachments shown on pole apply as noted on Plans.
- For wood poles to carry 20 or more conductors use 12" thick concrete pad.

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

BRANCH CHIEF	DESIGN	BY T MARCHENKO	CHECKED A MALAK
	DETAILS	BY H NGUYEN	CHECKED A MALAK
	QUANTITIES	BY	CHECKED

JAMES SAGAR

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
DESIGN AND TECHNICAL SERVICES
SPECIAL DESIGNS BRANCH

BRIDGE NO.	N/A
POST MILE	0.5/R2.0 14.1/15.2

TEMPORARY SIGNAL SYSTEM
TEMPORARY WOOD POLE

SES-2

(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: 0300020139

CONTRACT NO.: 03-0A5801

DISREGARD PRINTS BEARING EARLIER REVISION DATES

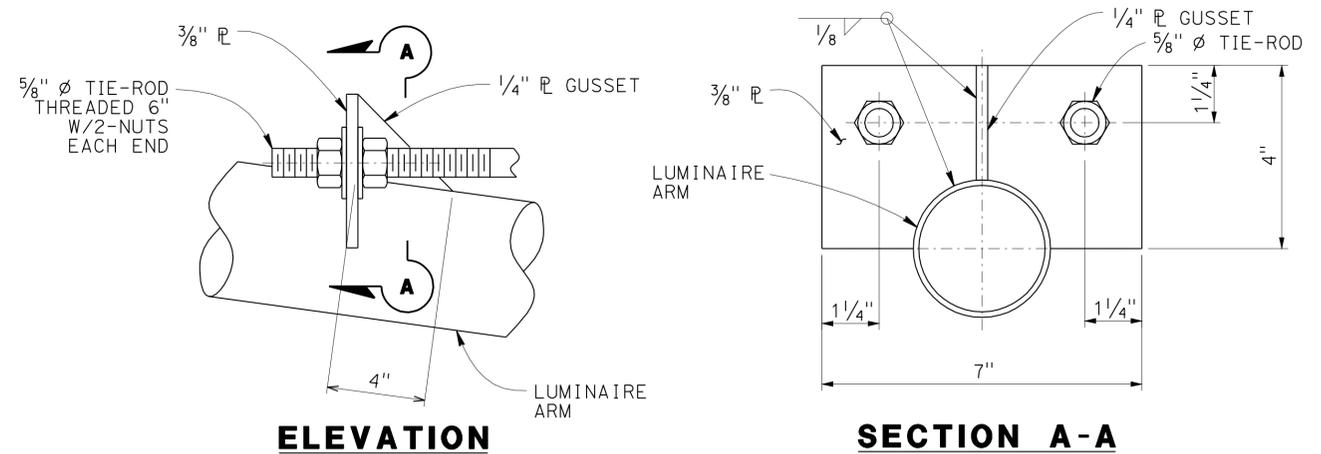
REVISION DATES	SHEET	OF
6-1-11		

USERNAME => s124496 DATE PLOTTED => 15-JUL-2011 TIME PLOTTED => 13:54

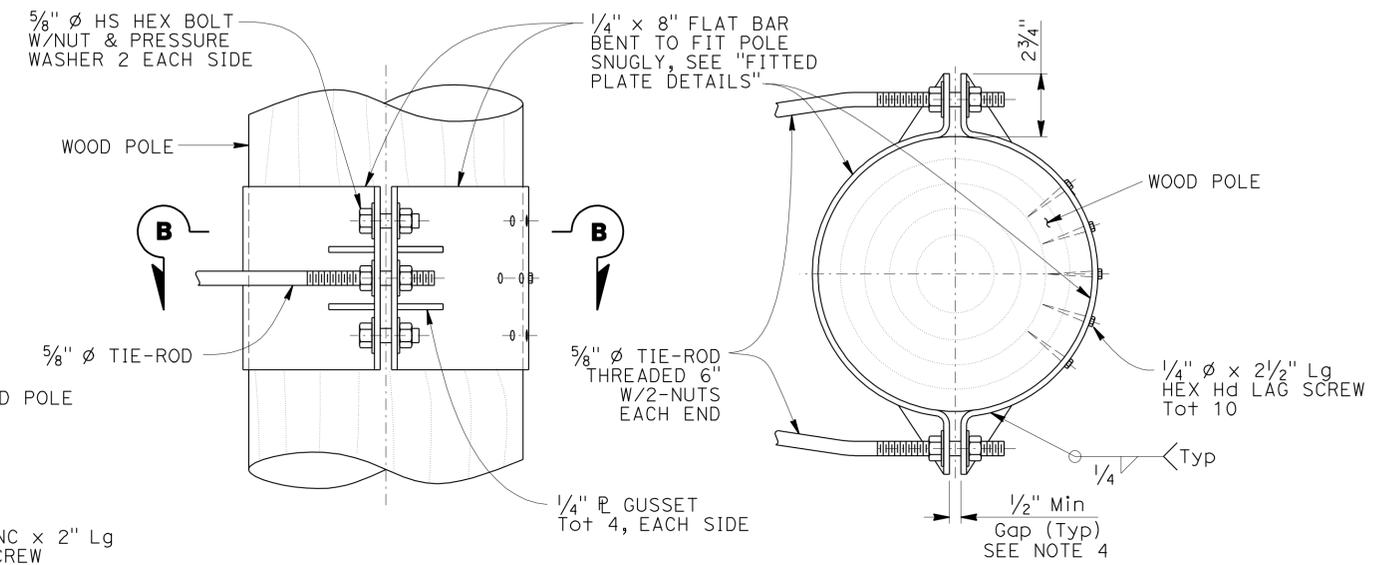
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0 14.4/15.0	545	595
			6-9-11		
			REGISTERED CIVIL ENGINEER DATE		
			7-11-11		
			PLANS APPROVAL DATE		
REGISTERED PROFESSIONAL ENGINEER TAMARA S. MARCHENKO No. C76837 Exp. 12/31/12 CIVIL STATE OF CALIFORNIA					
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.					

NOTES:

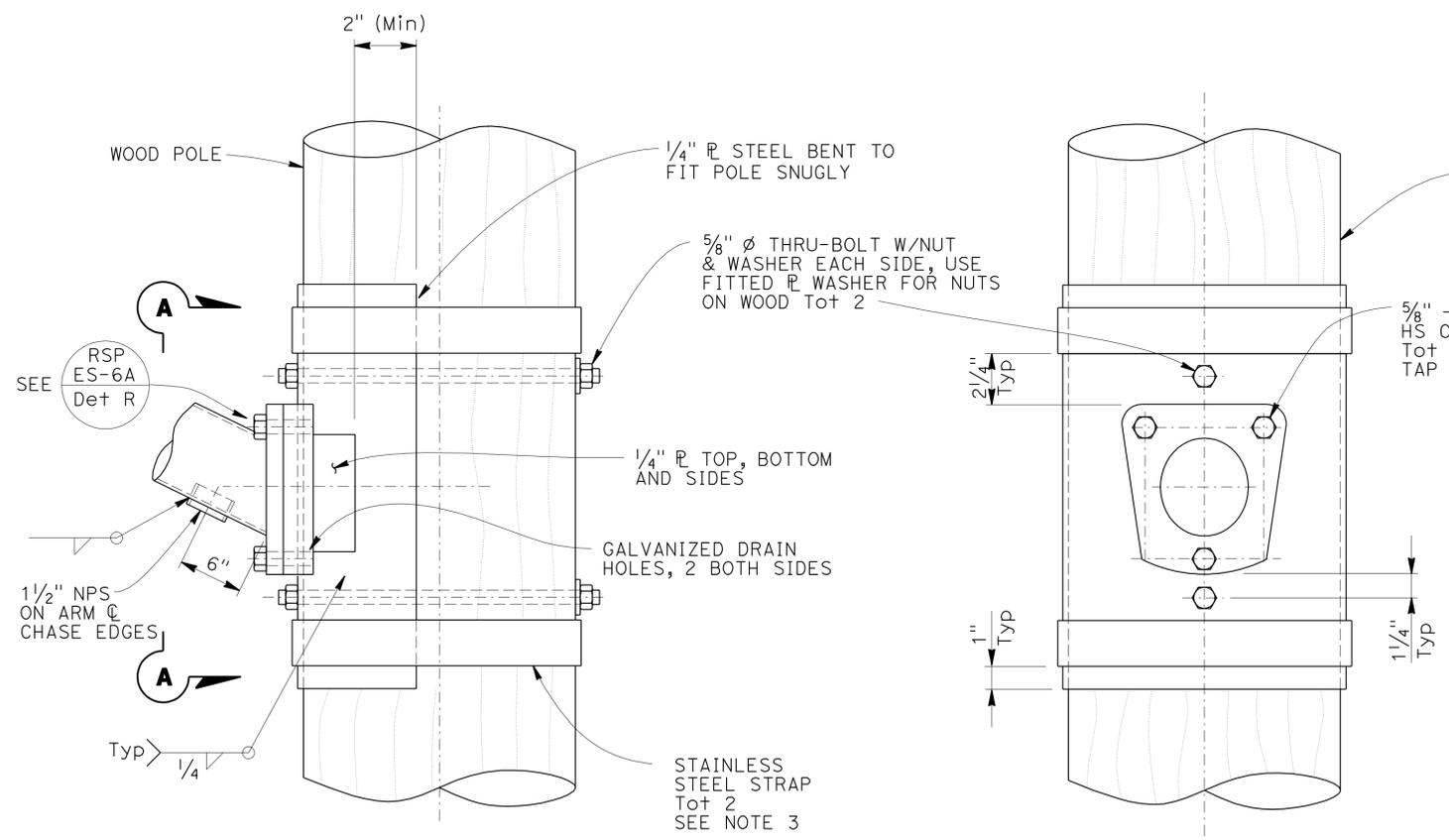
1. All hardware and steel shall be galvanized after fabrication.
2. Arm Base connection details shall be in compliance with Standard Plans Detail Sheet ES-6D with noted modifications.
3. 3500 lb Min capacity strap system shall be used for top and bottom of plate.
4. The Contractor to verify pole dimensions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



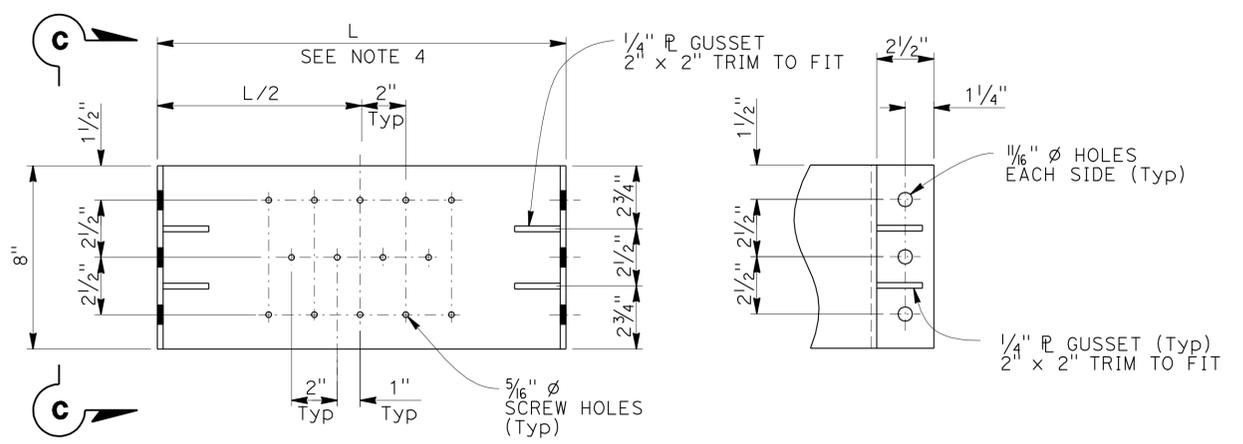
TIE-ROD DETAIL No. 1



TIE-ROD DETAIL No. 2



ARM CONNECTION DETAILS



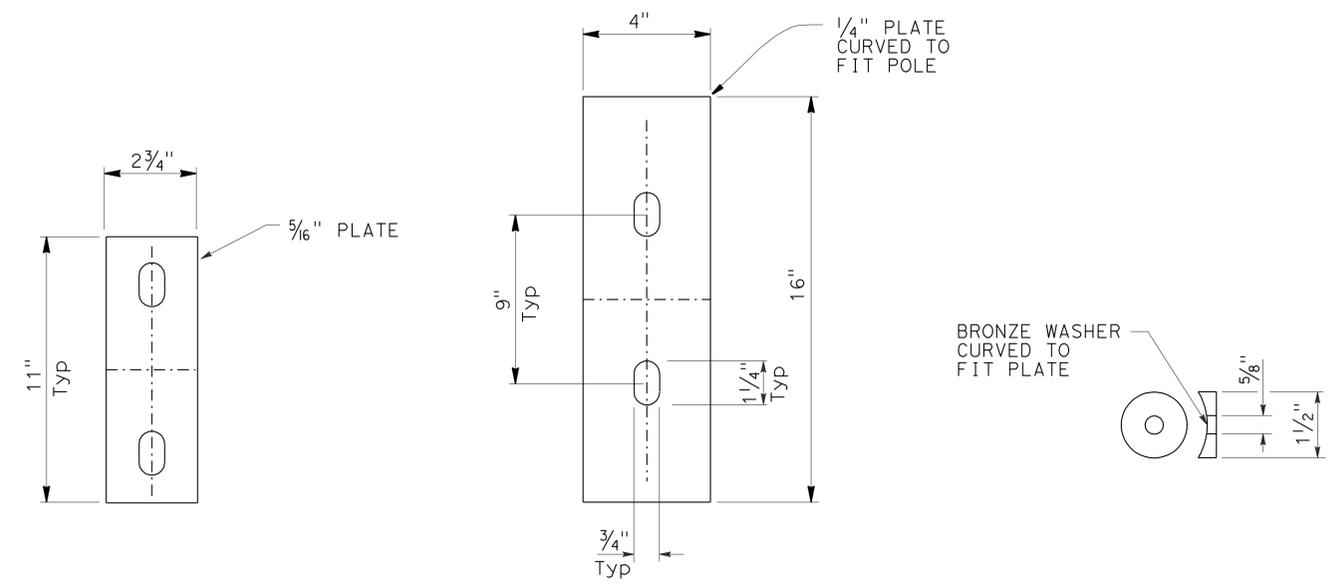
FITTED PLATE DETAILS

Note: 2 Required (1 w/screw holes, 1 without)

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

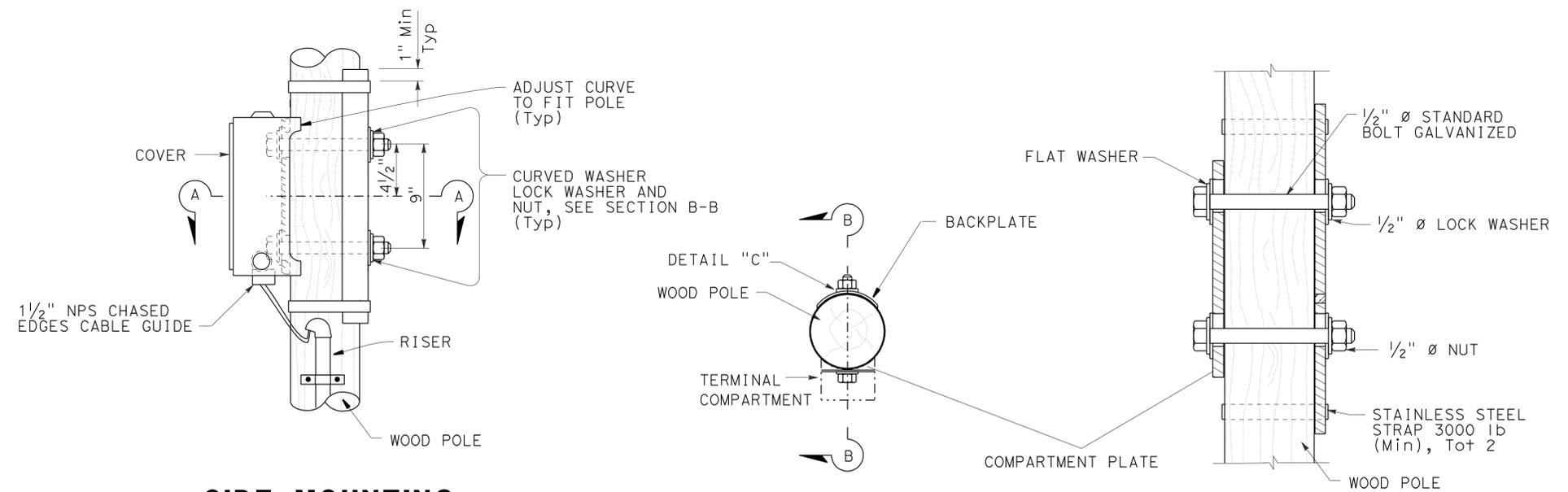
BRANCH CHIEF JAMES SAGAR	DESIGN	BY T MARCHENKO	CHECKED A MALAK	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES DESIGN AND TECHNICAL SERVICES SPECIAL DESIGNS BRANCH	BRIDGE NO.	N/A	TEMPORARY SIGNAL SYSTEM WOOD POLE MOUNTING DETAILS	SES-3
	DETAILS	BY H NGUYEN	CHECKED A MALAK			POST MILE	0.5/R2.0 14.1/15.2		
	QUANTITIES	BY	CHECKED						

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0 14.4/15.0	546	595
			REGISTERED CIVIL ENGINEER	DATE	6-9-11
			PLANS APPROVAL DATE	7-11-11	
REGISTERED PROFESSIONAL ENGINEER TAMARA S. MARCHENKO No. C76837 Exp. 12/31/12 CIVIL STATE OF CALIFORNIA					
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COMPARTMENT PLATE (MOD) BACK PLATE DETAIL "C"

NOTE:
 1. The Contractor to verify soil condition, slope, and adjust anchoring to satisfy basic design requirements Note 7 SES-2



SIDE MOUNTING TERMINAL COMPARTMENT SECTION A-A SECTION B-B

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

SIGNAL HEADS AND MOUNTINGS

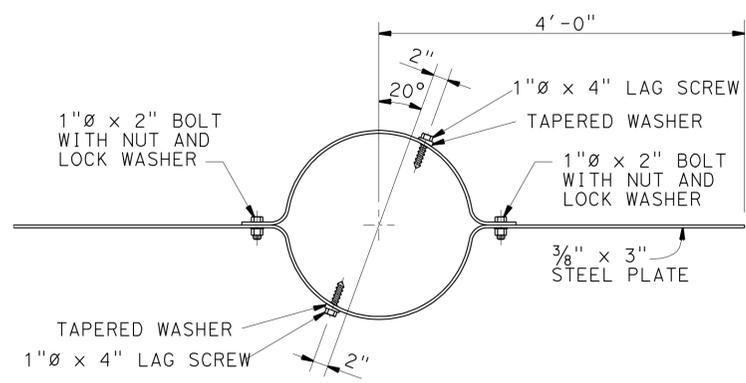
For Details Not Shown See RSP-ES-4D Sheet

NO SCALE

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	DETAILS	BY HUNG NGUYEN	CHECKED A MALAK			N/A		
	QUANTITIES	BY	CHECKED			POST MILE 0.5/R2.0 14.1/15.2		

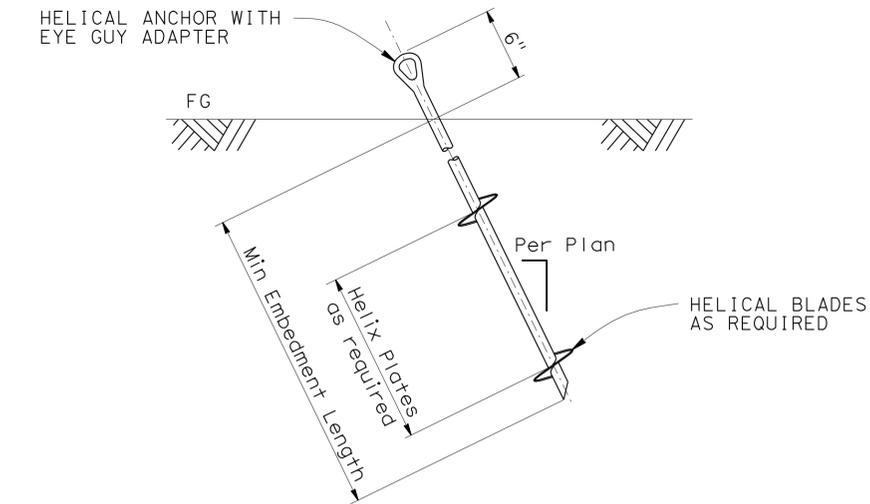
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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0 14.4/15.0	547	595
			REGISTERED CIVIL ENGINEER DATE	6-9-11	
			PLANS APPROVAL DATE	7-11-11	
<small>The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.</small>					



WIND ANCHOR

To be installed perpendicular to mast arms and 2'-0" Min below grade



ALTERNATIVE GUY WIRE INSTALLATION DETAIL

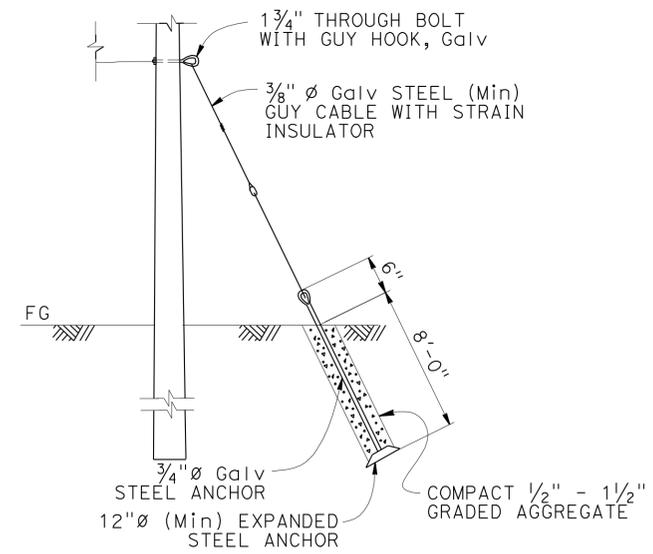
(See Helical Anchor Specifications Table)

HELICAL ANCHOR SPECIFICATIONS					
Anchor Location	Type	Helix Plate Diameter*	Allowable Min Tension Cap., "Q _a "	Embedment Length (Min)	Installation Torque (Min)**, "T"
Typical	Tension	10"	1900 lb	7'-0"	400 Ft-lb

SPECIFICATION NOTES:

- During installation the torque will be continuously monitored and recorded. If a drop in torque is recorded, the anchor must then continue to be inserted past the soft soil layer until Minimum Installation Torque is achieved.
- Anchors and Hardware to be installed per the manufacturers specifications.

* Number of helical plates is not specified; Contractors choice.
 ** Adjust accordingly if required, See Note 3.



GUY WIRE INSTALLATION DETAIL

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

- NOTES:**
- The Contractor to verify soil condition, slope, and adjust anchoring to satisfy basic design requirements per Note 7 on SES-2 sheet.
 - Use of alternative Guy Wire Installation Detail requires that the soil bearing capacity be verified by the Contractor.
 - The Contractor shall determine the most appropriate value for k_t based on soil conditions and shall adjust the Min Installation Torque based on the revised k_t. A k_t value of 10 was assumed for the Min Installation Torque shown in the table.
- The Helical Installation torque Formula is Q_u = k_t*T where,
- Q_u = Q_a*FS = Ultimate Helical Anchor Capacity (lb)
 FS = Factor of Safety = 2.0
 Q_a = Allowable Helical Anchor Capacity (lb)
 k_t = Empirical Torque Factor (ft⁻¹)
 T = Min Installation Torque (ft-lb)
- Requests made by the Contractor to reduce the minimum embedment length and/or Helix R diameter require the Engineer's approval.
 - The Contractor shall locate and mark all of the substructures and utilities. Installation of anchors underneath utilities or subsurface structures is prohibited. Horizontal clearances of anchors shall be determined by the Contractor during construction.

NO SCALE

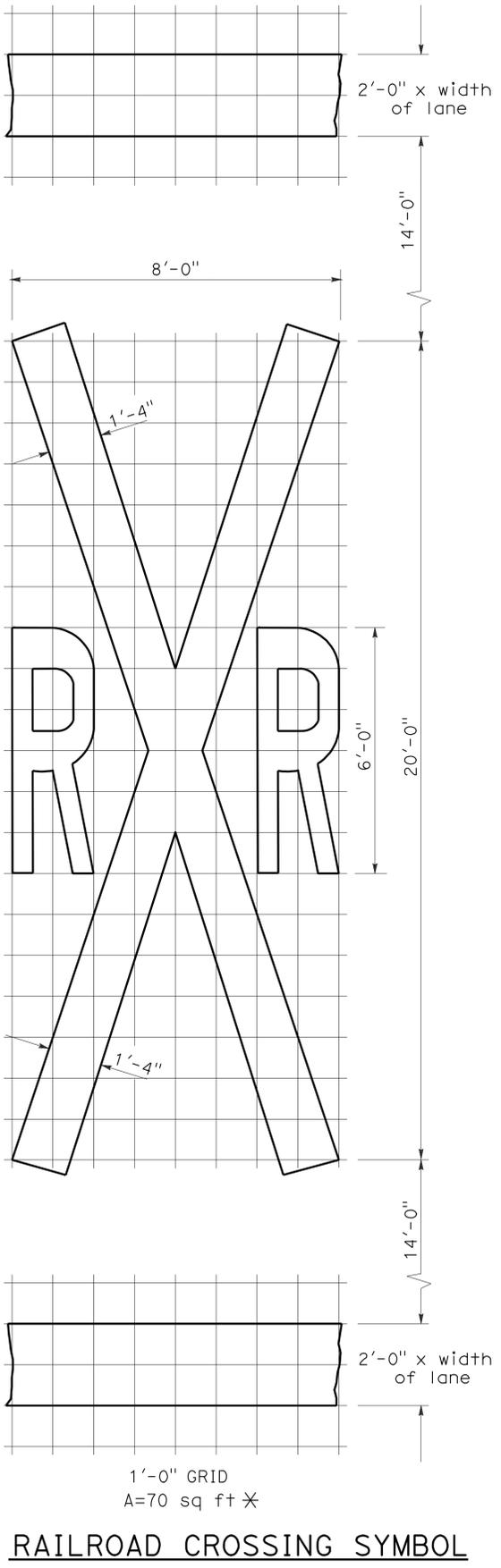
BRANCH CHIEF <u>JAMES SAGAR</u>	DESIGN	BY T MARCHENKO	CHECKED A MALAK	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES DESIGN AND TECHNICAL SERVICES SPECIAL DESIGNS BRANCH B	BRIDGE NO.	N/A	TEMPORARY SIGNAL SYSTEM WOOD POLE DETAILS	SES-5
	DETAILS	BY H NGUYEN	CHECKED A MALAK			POST MILE	0.5/R2.0 14.1/15.2		
	QUANTITIES	BY	CHECKED						

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	548	595

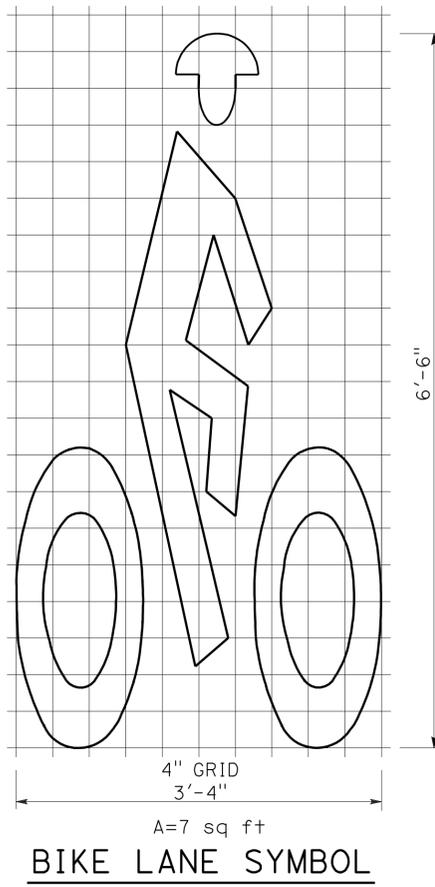
Donald E. Howe
 REGISTERED CIVIL ENGINEER
 June 6, 2008
 PLANS APPROVAL DATE
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REGISTERED PROFESSIONAL ENGINEER
 Donald E. Howe
 No. C46402
 Exp. 3-31-09
 CIVIL
 STATE OF CALIFORNIA

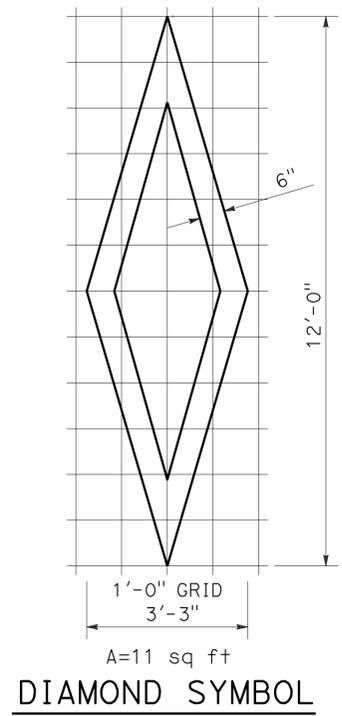
To accompany plans dated 7-11-11



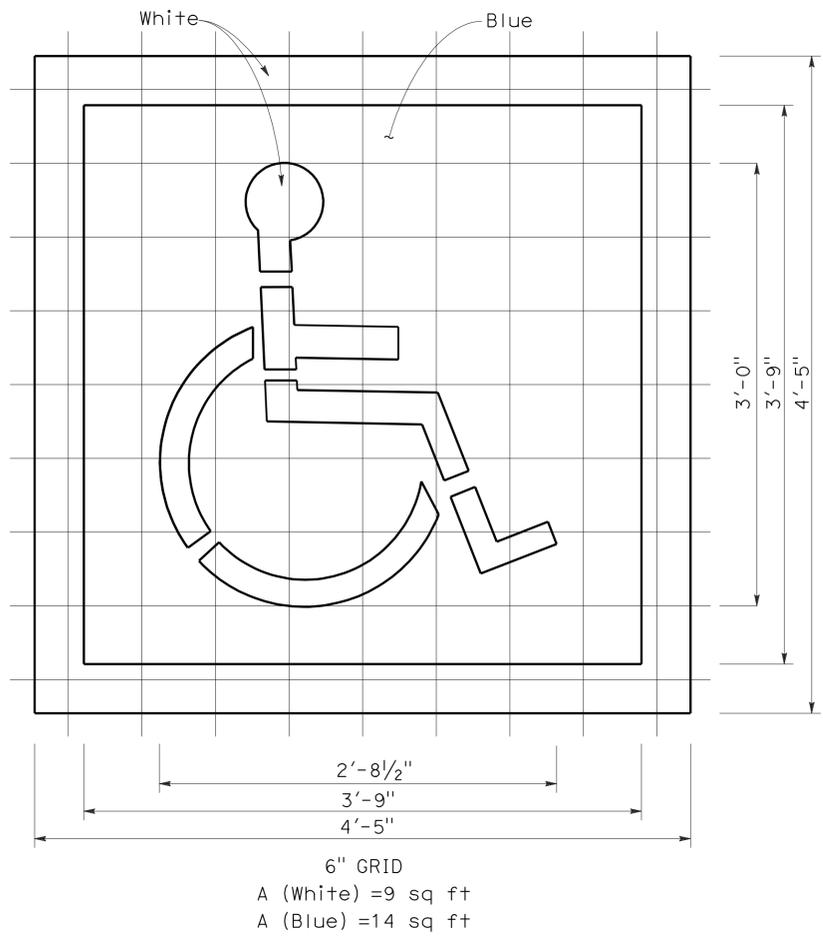
RAILROAD CROSSING SYMBOL
 *70 sq ft DOES NOT INCLUDE THE 2'-0" x VARIABLE WIDTH TRANSVERSE LINES.



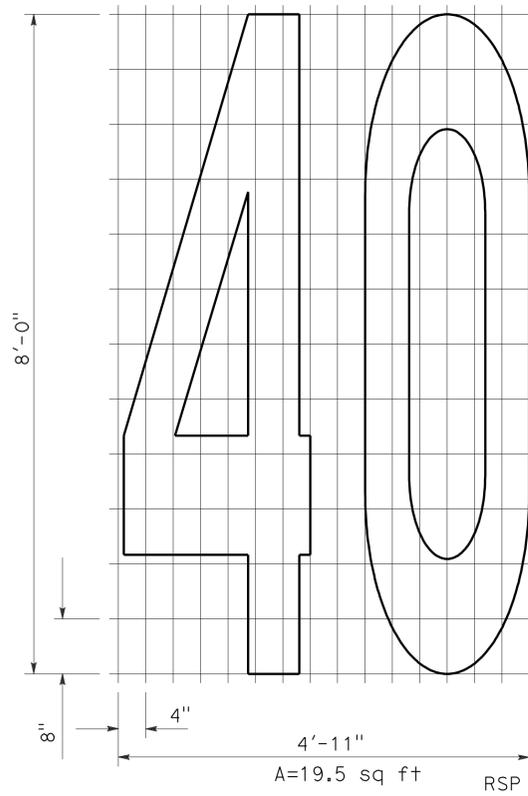
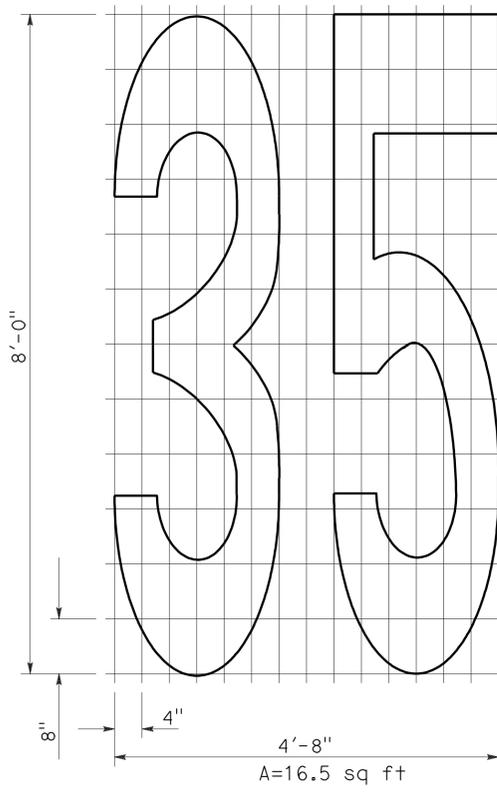
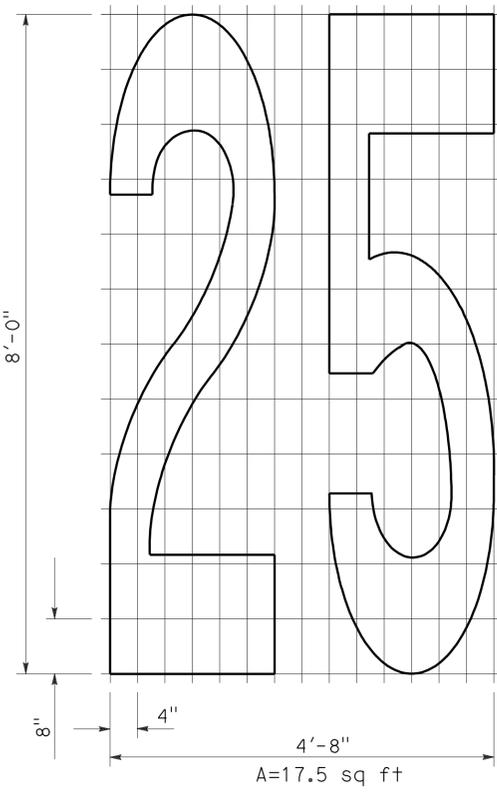
BIKE LANE SYMBOL



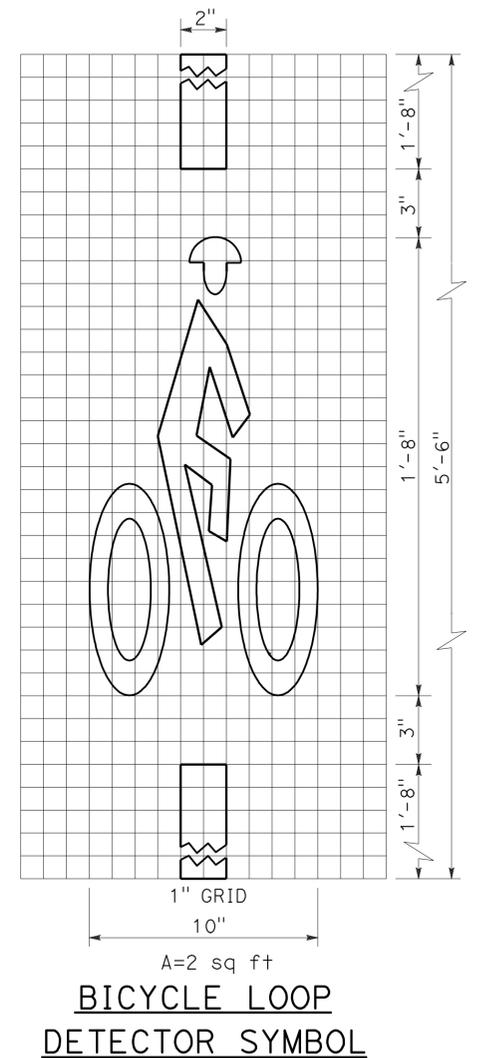
DIAMOND SYMBOL



INTERNATIONAL SYMBOL OF ACCESSIBILITY MARKING



NUMERALS



BICYCLE LOOP DETECTOR SYMBOL

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

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
PAVEMENT MARKINGS SYMBOLS AND NUMERALS

NO SCALE

2006 REVISED STANDARD PLAN RSP A24C

RSP A24C DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN A24C DATED MAY 1, 2006 - PAGE 11 OF THE STANDARD PLANS BOOK DATED MAY 2006.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	549	595

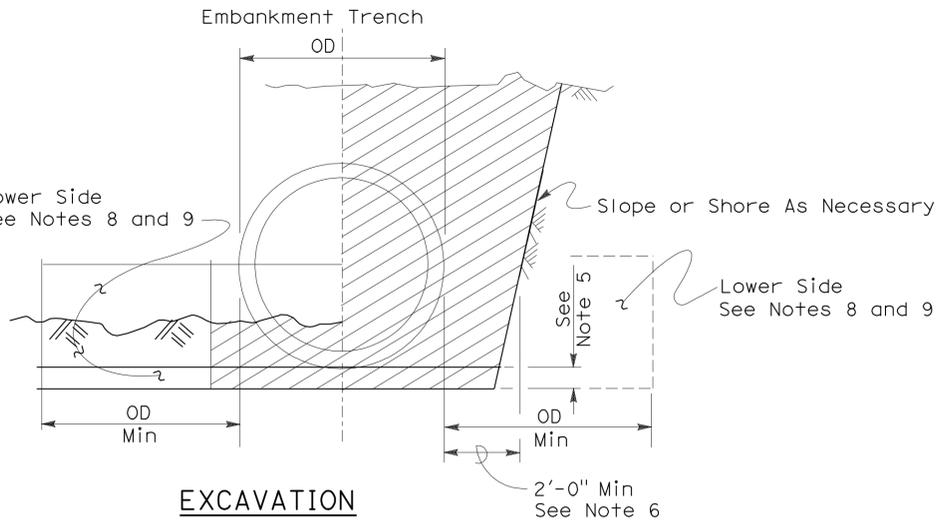
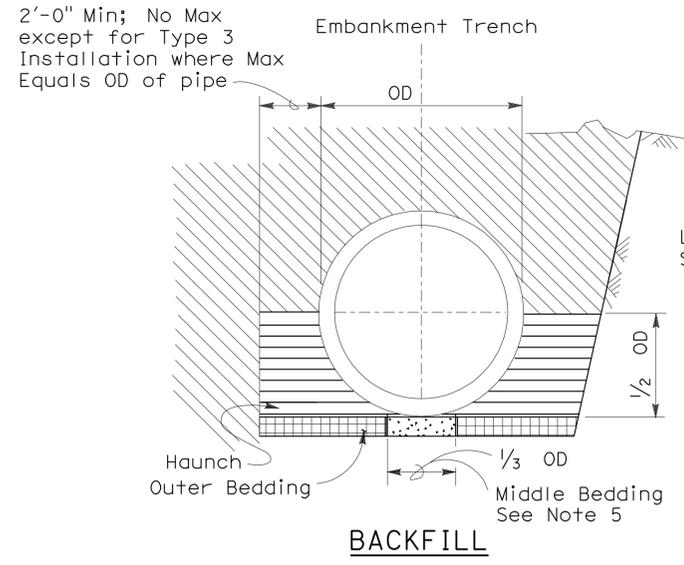
Dallas Forester
REGISTERED CIVIL ENGINEER

November 17, 2006
PLANS APPROVAL DATE

Dallas Forester
REGISTERED PROFESSIONAL ENGINEER
No. C37765
Exp. 12-31-06
CIVIL
STATE OF CALIFORNIA

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To accompany plans dated 7-11-11



	Roadway Embankment		Excavation Structure (Culvert)
	Structure Backfill (Culvert) See Note 6		
	Structure Backfill (Culvert) See Note 6		
	Loose Backfill		

TYPE 1 INSTALLATION:

The haunch and outer bedding shall be compacted to a minimum 90 percent relative compaction. In addition, the minimum sand equivalent in these areas shall be 30 and the maximum percentage passing the 75 μm sieve size shall be 12.

TYPE 2 INSTALLATION:

The haunch and outer bedding shall be compacted to a minimum 90 percent relative compaction. In addition, the minimum sand equivalent in these areas shall be 25.

TYPE 3 INSTALLATION:

The haunch and outer bedding shall be compacted to a minimum 85 percent relative compaction. 90 percent relative compaction will be required where the fill over the pipe is less than 4'-0" or 1/2 OD.

NOTES:

- Unless otherwise shown on the plans or specified in the special provision, the Contractor shall have the option of selecting the class of RCP and the type of installation to be used, provided the height of cover does not exceed the value shown for the RCP selected.
Example: 24" RCP culvert with maximum cover of 19'-0" the options are:
a) Class III or stronger with Installation Type 1.
b) Class III Special or stronger with Installation Type 2.
c) Class IV Special or stronger with Installation Type 3.
Cover is defined as the maximum vertical distance from top of the pipe to finished grade within the length of any given culvert.
- The class of RCP and Installation Type selected shall be the same throughout the length of any given culvert.
- The "length of any culvert" is defined as the culvert between:
a) Successive drainage structure (inlets, junction boxes, headwalls, etc.).
b) A drainage structure and the inlet or outlet end of the culvert.
c) The inlet and outlet end of the culvert when there are no intervening drainage structures.
- Oval and arch shaped RCP shall not be used.
- 1/25 OD Min, not less than 3".
- Slurry cement backfill may be substituted for backfill in the outer bedding and haunch areas. If slurry is used the outer and middle beddings shall be omitted. Prior to installation the soil under the middle 1/3 of the outside diameter of the pipe shall be softened by scarifying or other means to a minimum depth of 1/25 OD, but not less than 3". Where slurry cement backfill is used clear distance to trench wall may be reduced as set forth in Section 19-3.062 of the Standard Specifications.
- Backfill shall be placed full width of excavation except where dimensions are shown for backfill width or thickness. Dimensions shown are minimums.
- Lower side shall be suitable material as determined by the Engineer. Otherwise it shall be considered unsuitable as set forth in Section 19-2.02 of the Standard Specifications. See Note 9.
- Where the pipe is placed in a trench, if the trench walls are sloped at 5 vertical to 1 horizontal or steeper for at least 90 percent of the trench height or up to not less than 12" from the grading plane, the firmness of the soil in the lower side need not be considered.
- Non-reinforced precast concrete pipe sizes 3'-0" or smaller may be placed under installation Types 1, 2 or 3.

INSTALLATION TYPE 1

MINIMUM CLASS AND D-LOAD	COVER	
	108" Dia AND SMALLER	OVER 108" Dia
Class II 1000D	14.9'	12.9'
Class III 1350D	15.0' - 20.9'	13.0' - 18.9'
Class III Special 1700D	21.0' - 26.9'	19.0' - 24.9'
Class IV 2000D	27.0' - 31.9'	25.0' - 29.9'
Class IV Special 2500D	32.0' - 40.9'	30.0' - 38.9'
Class V 3000D	41.0' - 49.9'	39.0' - 46.9'
Class V Special 3600D	50.0' - 59.0'	47.0' - 58.0'

INSTALLATION TYPE 2

MINIMUM CLASS AND D-LOAD	COVER
Class II 1000D	9.9'
Class III 1350D	10.0' - 14.9'
Class III Special 1700D	15.0' - 19.9'
Class IV 2000D	20.0' - 24.9'
Class IV Special 2500D	25.0' - 31.9'
Class V 3000D	32.0' - 38.9'
Class V Special 3600D	39.0' - 47.0'

INSTALLATION TYPE 3

MINIMUM CLASS AND D-LOAD	COVER	
	48" Dia AND SMALLER	OVER 48" Dia
Class II 1000D	7.9'	5.9'
Class III 1350D	8.0' - 10.9'	6.0' - 8.9'
Class III Special 1700D	11.0' - 14.9'	9.0' - 12.9'
Class IV 2000D	15.0' - 17.9'	13.0' - 15.9'
Class IV Special 2500D	18.0' - 21.9'	16.0' - 19.9'
Class V 3000D	22.0' - 26.9'	20.0' - 24.9'
Class V Special 3600D	30.0' - 33.0'	25.0' - 31.0'

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

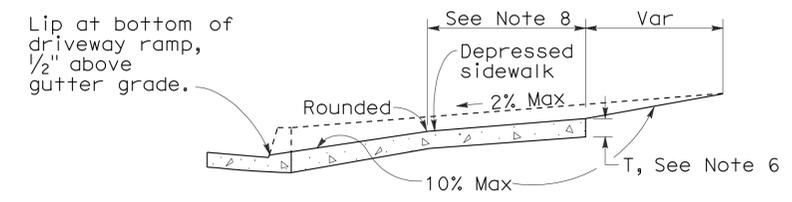
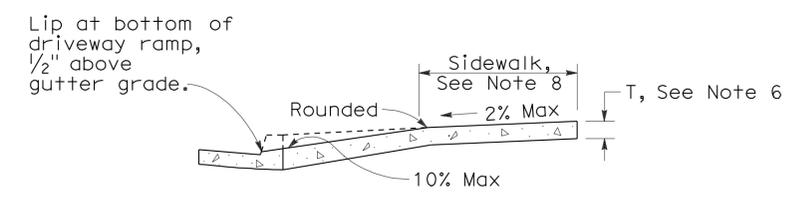
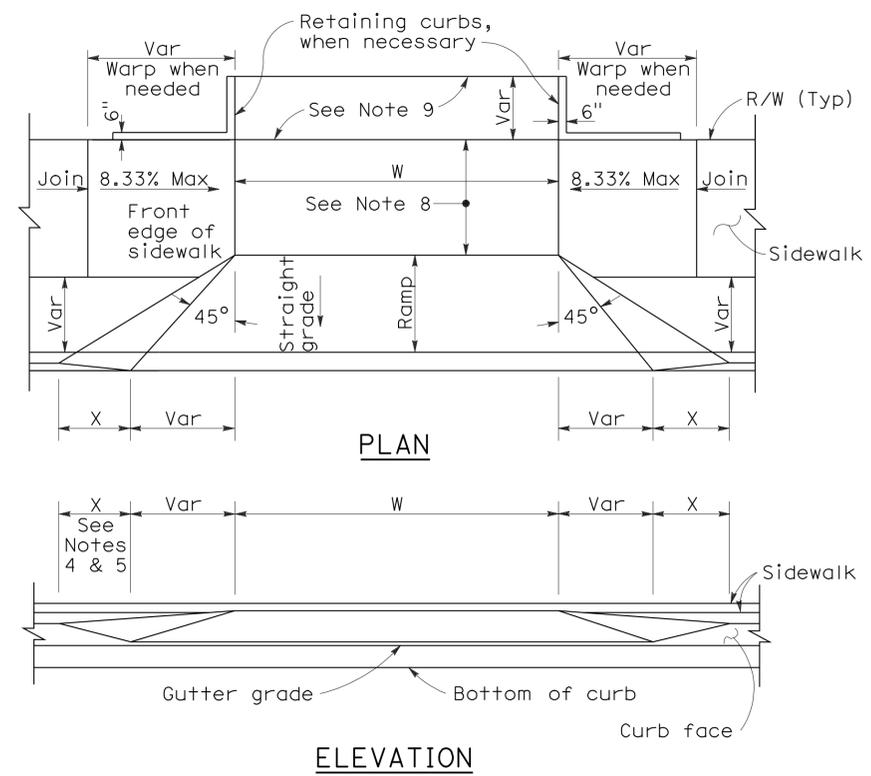
**EXCAVATION AND BACKFILL
CONCRETE PIPE CULVERTS**

NO SCALE

RSP A62DA DATED NOVEMBER 17, 2006 SUPERSEDES STANDARD PLAN A62DA
DATED MAY 1, 2006 - PAGE 20 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP A62DA

2006 REVISED STANDARD PLAN RSP A62DA



CASE A

Typical driveway, sidewalk not depressed

CASE B

Driveway with depressed sidewalk

SECTIONS

CURB QUANTITIES

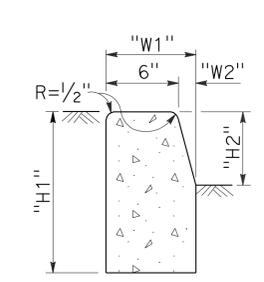
TYPE	CUBIC YARDS PER LINEAR FOOT
A1-6	0.02585
A1-8	0.03084
A2-6	0.05903
A2-8	0.06379
A3-6	0.01036
A3-8	0.01435
B1-4	0.02185
B1-6	0.02930
B2-4	0.05515
B2-6	0.06171
B3-4	0.00641
B3-6	0.01074
B4	0.05709
D-4	0.04083
D-6	0.06804
E	0.06661

TABLE A

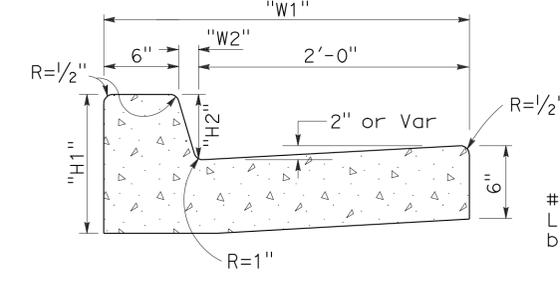
CURB TYPE	DIMENSIONS			
	"H1"	"H2"	"W1"	"W2"
A1-6	1'-2"	6"	7 1/2"	1 1/2"
A1-8	1'-4"	8"	8"	2"
A2-6	1'-0"	6"	2'-7 1/2"	1 1/2"
A2-8	1'-2"	8"	2'-8"	2"
A3-6	6"	5"	7 1/4"	1 1/4"
A3-8	8"	7"	7 3/4"	1 3/4"
B1-4	1'-0"	4"	7 1/2"	2 1/2"
B1-6	1'-2"	6"	9"	4"
B2-4	10"	4"	2'-7 1/2"	2 1/2"
B2-6	1'-0"	6"	2'-9"	4"
B3-4	4"	3"	7"	2"
B3-6	6"	5"	8 1/2"	3 1/2"
D-4	10"	4"	1'-6"	1'-1"
D-6	1'-0"	6"	2'-2"	1'-8"

To accompany plans dated 7-11-11

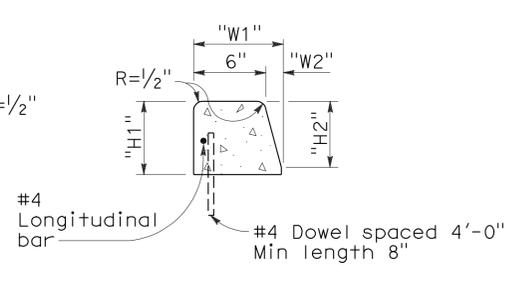
DRIVEWAYS



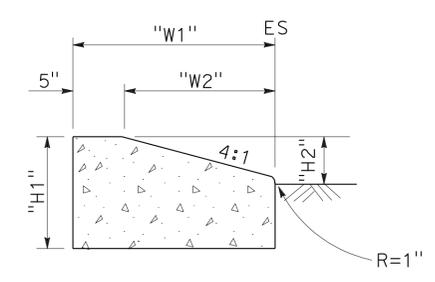
TYPE A1 CURBS
See Table A



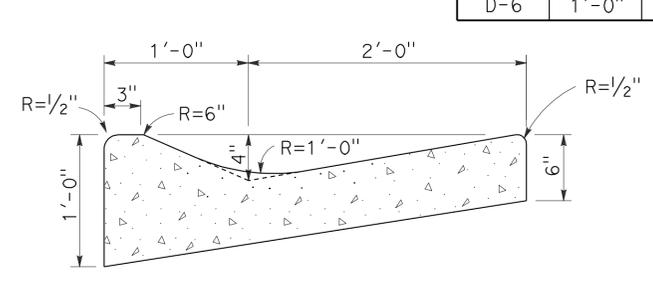
TYPE A2 CURBS
See Table A



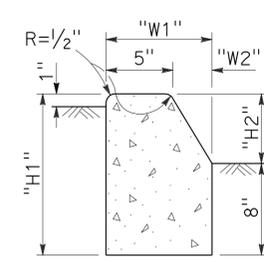
TYPE A3 CURBS
Superimposed on existing pavement
See Table A



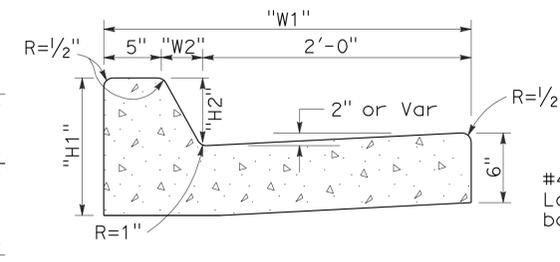
TYPE D CURBS
See Table A



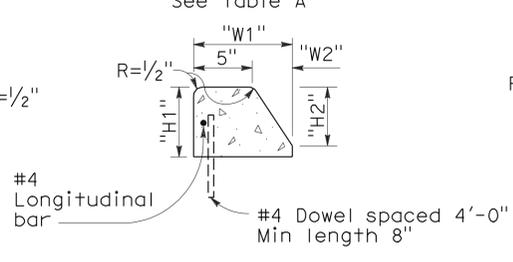
TYPE E CURB



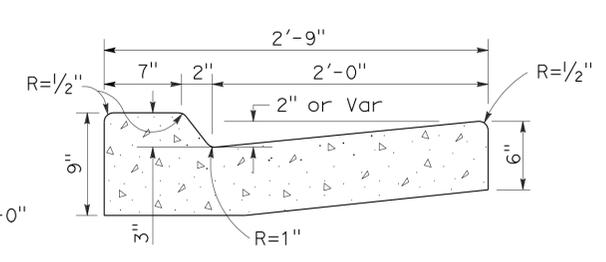
TYPE B1 CURBS
See Table A



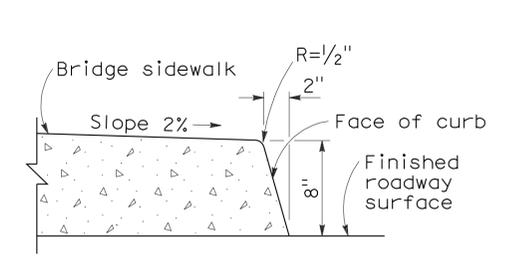
TYPE B2 CURBS
See Table A



TYPE B3 CURBS
Superimposed on existing pavement
See Table A



TYPE B4 CURBS



TYPE H CURB
On Bridges

NOTES:

- Case A driveway section typically applies.
- Use Case B driveway section when ramp slopes would exceed 10% in Case A.
- Use Case B driveway section when sidewalk cross slope would exceed 2% in Case A.
- X=3'-0" except for curb heights over 10" where 4:1 slopes shall be used on curb slope.
- X is a variable when sidewalk is located where wheelchairs may traverse the surface. Slopes shall not exceed 8.33%.
- Sidewalk and ramp thickness "T" at driveway shall be 4" for residential and 6" for commercial.
- Difference in slope of the driveway ramp and the slope of a line between the gutter and a point on the roadway 5'-0" from gutter line shall not exceed 15%. Reduce driveway ramp slope, not gutter slope, where required.
- Minimum width of clear passageway for sidewalk shall be 4'-0".
- Retaining curbs and acquisition of construction easement may be necessary for narrow sidewalks or curb heights in excess of 6".
- Across the pedestrian route at curb ramp locations, the gutter pan slope shall not exceed 1" of depth for each 2'-0" of width.

CURBS

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

CURBS AND DRIVEWAYS

NO SCALE

RSP A87A DATED NOVEMBER 17, 2006 SUPERSEDES STANDARD PLAN A87A
DATED MAY 1, 2006 - PAGE 113 OF THE STANDARD PLANS BOOK DATED MAY 2006.

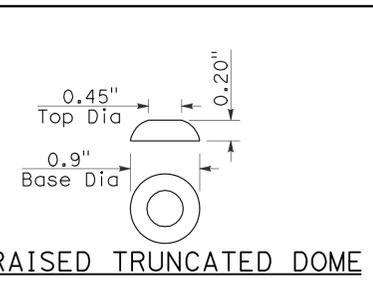
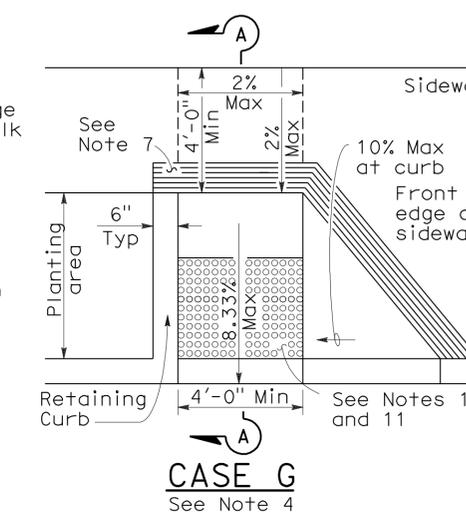
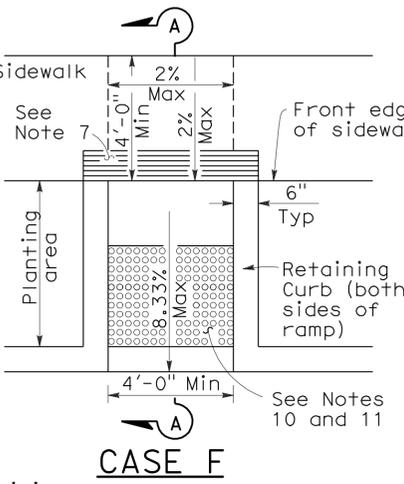
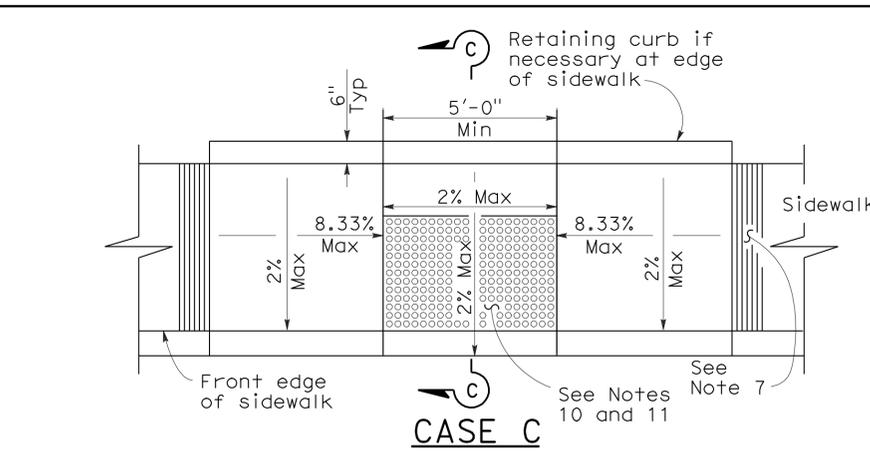
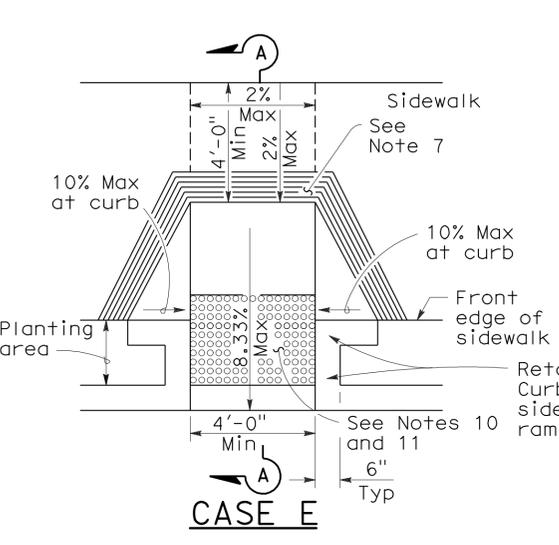
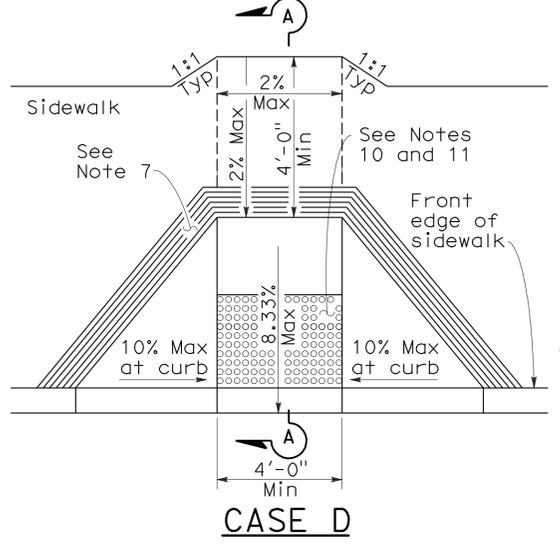
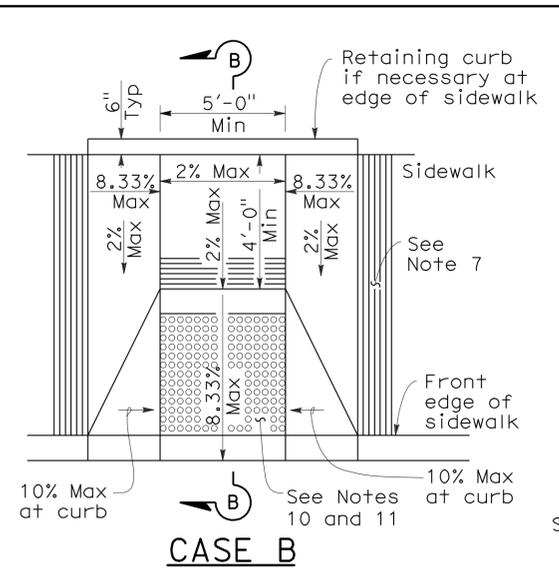
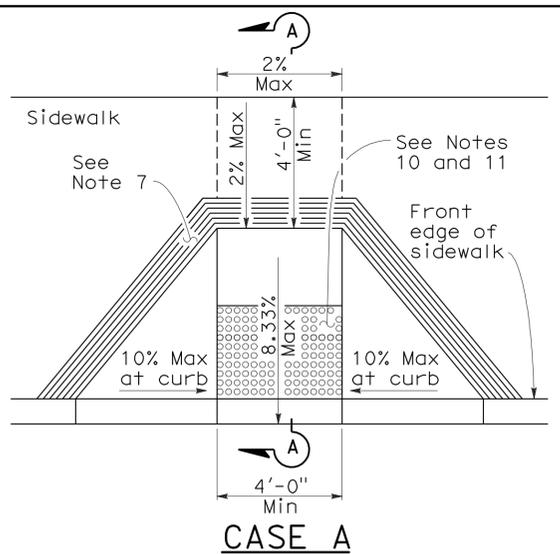
REVISED STANDARD PLAN RSP A87A

2006 REVISED STANDARD PLAN RSP A87A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	551	595

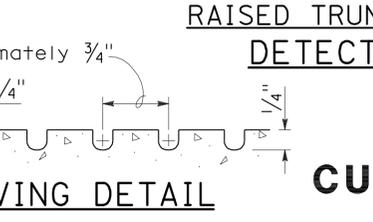
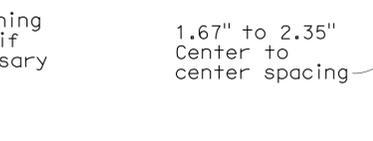
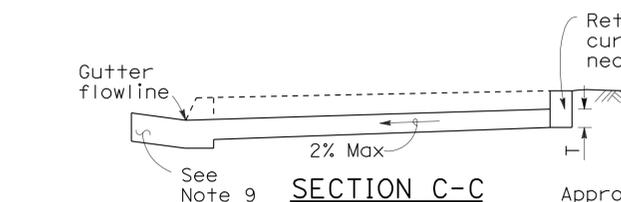
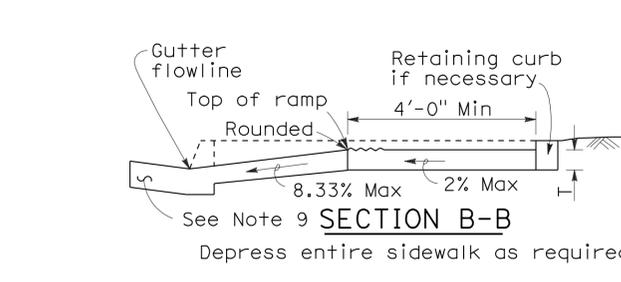
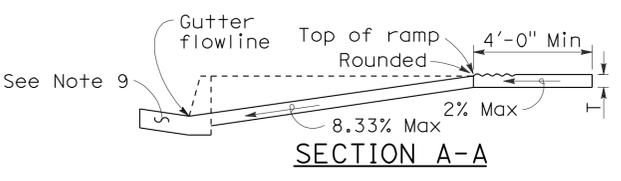
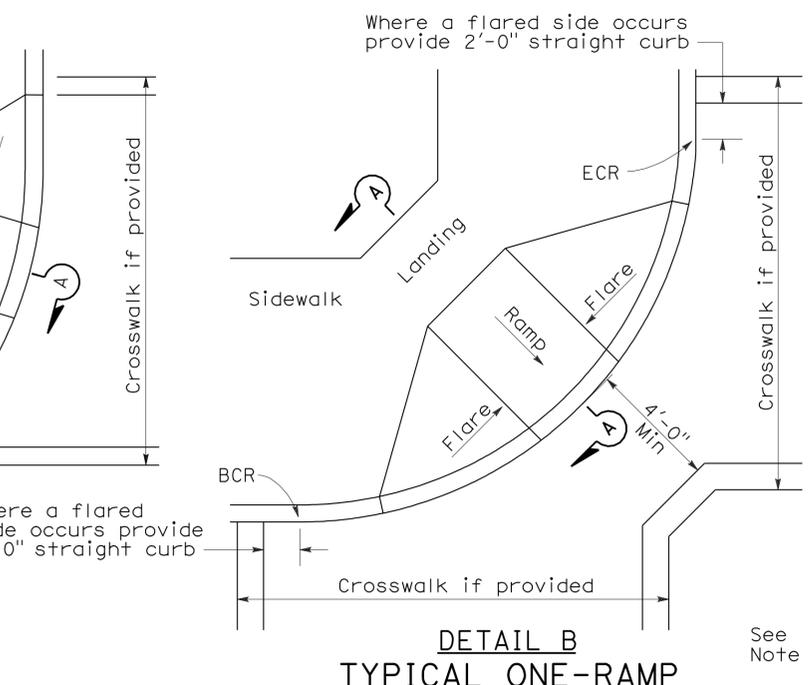
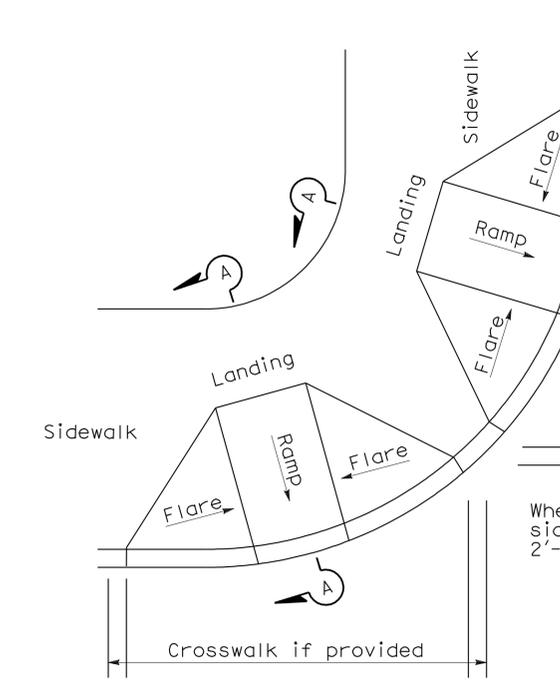
H. David Cordova
 REGISTERED CIVIL ENGINEER
 September 1, 2006
 PLANS APPROVAL DATE
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REGISTERED PROFESSIONAL ENGINEER
 Hector David Cordova
 No. C41957
 Exp. 3-31-08
 CIVIL
 STATE OF CALIFORNIA



NOTES:

- As site conditions dictate, Case A through Case G curb ramps may be used for corner installations similar to those shown in Detail A and Detail B. The case of curb ramps used in Detail A do not have to be the same. Case A through Case G curb ramps also may be used at mid block locations, as site conditions dictate.
- If distance from curb to back of sidewalk is too short to accommodate ramp and 4'-0" platform (landing) as shown in Case A, the sidewalk may be depressed longitudinally as in Case B, or C or may be widened as in Case D.
- When ramp is located in center of curb return, crosswalk configuration must be similar to that shown for Detail B.
- As site conditions dictate, the retaining curb side and the flared side of the Case G ramp shall be constructed in reversed position.
- If located on a curve, the sides of the ramp need not be parallel, but the minimum width of the ramp shall be 4'-0".
- Side slope of ramp flares vary uniformly from a maximum of 10% at curb to conform with longitudinal sidewalk slope adjacent to top of the ramp, except in Case C and Case F.
- The curb ramp shall be outlined, as shown, with a 1'-0" wide border with 1/4" grooves approximately 3/4" on center. See grooving detail.
- Transitions from ramps and landing to walks, gutters or streets shall be flush and free of abrupt changes.
- Maximum slopes of adjoining gutters, the road surface immediately adjacent to the curb ramp or accessible route shall not exceed 5 percent within 4'-0" of the top and bottom of the curb ramp.
- Curb ramps shall have a detectable warning surface that extends the full width and 3'-0" depth of the ramp. Detectable Warning Surfaces shall conform to the details on this plan and the requirements in the Special Provisions.
- The edge of the detectable warning surface nearest the street shall be between 6" and 8" from the gutter flowline.
- Sidewalk and ramp thickness, "T", shall be 3/2" minimum.
- Utility pull boxes, manholes, vaults and all other utility facilities within the boundaries of the curb ramp will be relocated or adjusted to grade by the owner prior to, or in conjunction with, curb ramp construction.
- For retrofit conditions, removal and replacement of curb apron will be at the Contractor's option, unless otherwise shown on project plans.



RAISED TRUNCATED DOME PATTERN (IN-LINE) DETECTABLE WARNING SURFACE

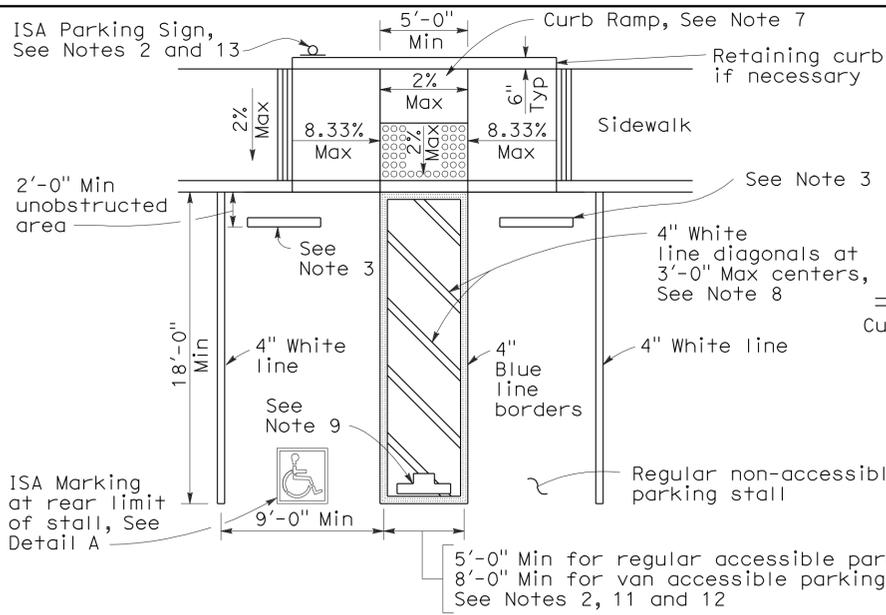
See Note 10
 STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
CURB RAMP DETAILS
 NO SCALE

TYPICAL TWO-RAMP CORNER INSTALLATION
 See Note 1

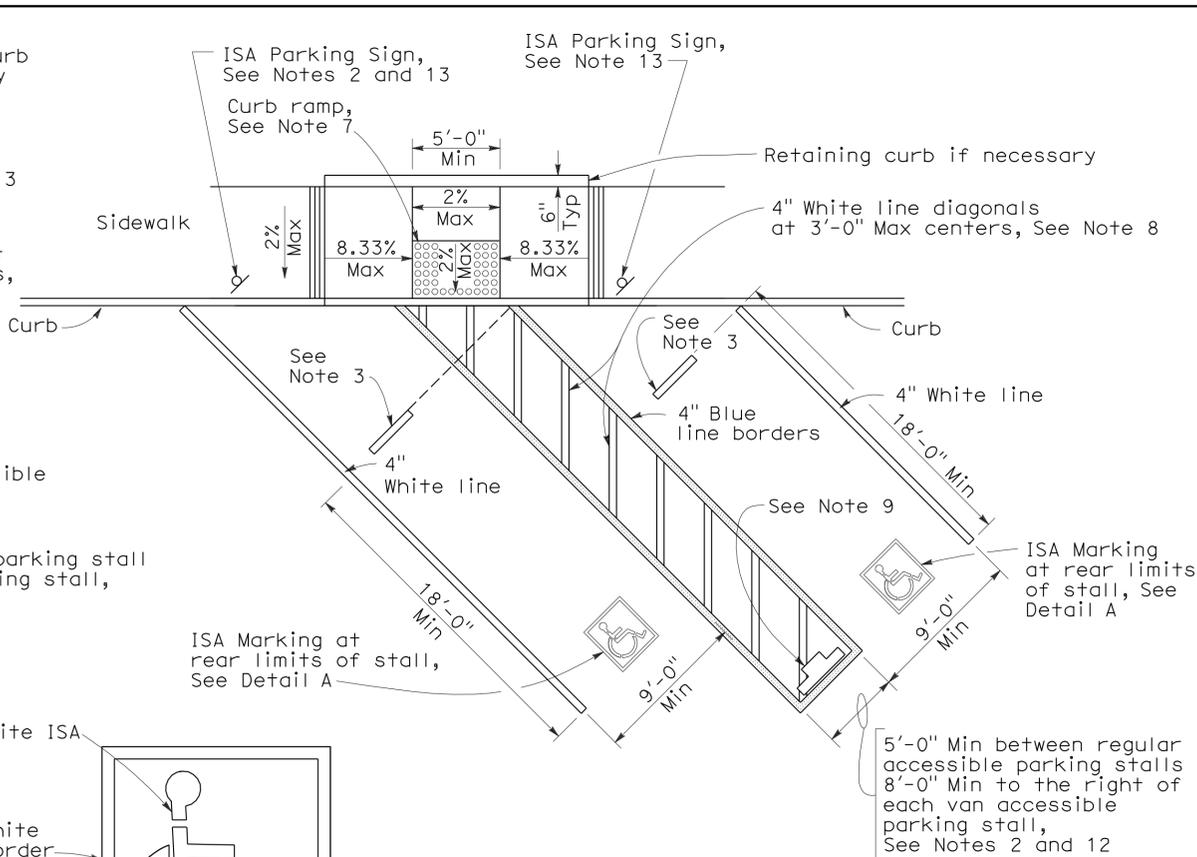
TYPICAL ONE-RAMP CORNER INSTALLATION
 See Notes 1 and 3

RETROFIT DETAIL
 Existing curb and sidewalk

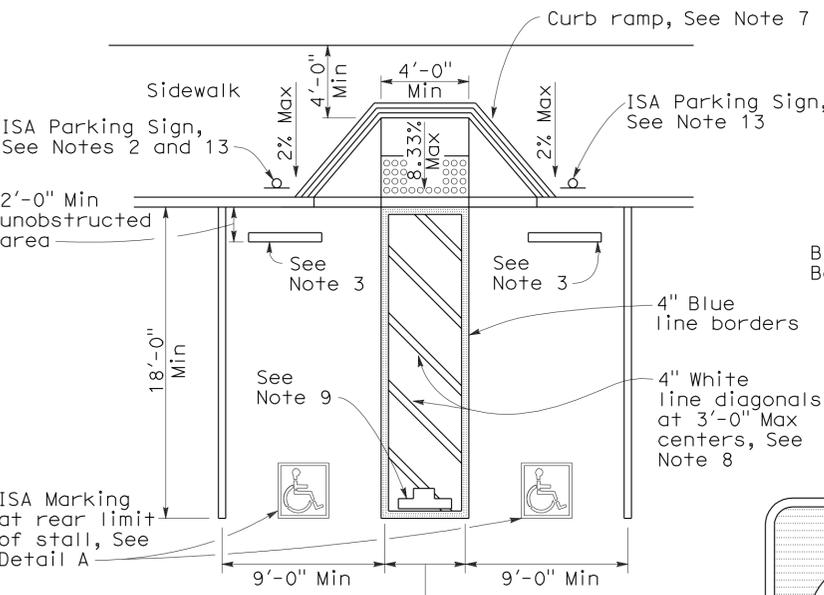
2006 REVISED STANDARD PLAN RSP A88A



SINGLE PARKING STALL



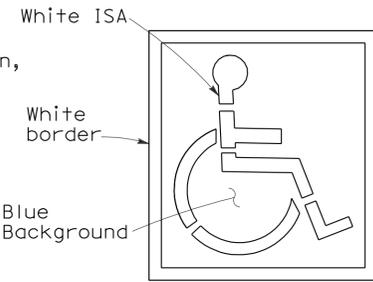
DIAGONAL DOUBLE PARKING STALLS



DOUBLE PARKING STALL

TABLE A

Total Number of Parking Spaces or Stalls	Minimum Number of Disabled Accessible Parking Spaces or Stalls
1-25	1
26-50	2
51-75	3
76-100	4
101-150	5
151-200	6
201-300	7
301-400	8
401-500	9
501-1000	2 percent of total
Greater than 1001	20 plus 1 for each 100 or fraction thereof over 1001



DETAIL A
ISA MARKING
See Revised Std Plan RSP A24C



SIGN R99 (CA)



SIGN R99C (CA)
See Note 6



SIGN R100B (CA)
See Note 10



PLAQUE R99B (CA)
See Note 6

SIGN R99 (CA) with PLAQUE R99B (CA)
See Note 6

OFF-STREET PARKING SIGNS

(Parking lot or garage)
See Note 6

NOTES:

1. Accessible parking spaces serving a particular building shall be located on the shortest accessible route of travel from adjacent parking to an accessible entrance. In parking facilities that do not serve a particular building, accessible parking shall be located on the shortest accessible route of travel to an accessible pedestrian entrance of the parking facility.
2. One in every eight accessible off-street parking stalls, but not less than one, shall be served by an accessible aisle of 8'-0" minimum width and shall be signed (van accessible). The R7-8b sign shall be mounted below the R99B (CA) plaque or the R99C (CA) sign.
3. In each parking stall, a curb or bumper shall be provided and located to prevent encroachment of vehicles over the required width of walkways. Parking stalls shall be so located that persons with disabilities are not compelled to wheel or walk behind parked cars other than their own.
4. Surface slopes of accessible off-street parking stalls shall be the minimum possible and shall not exceed 2 percent in any direction.
5. Table A shall be used to determine the required number of accessible parking stalls in each parking lot or garage.
6. Where Plaque R99B (CA), Sign R99C (CA) or Sign R7-8b are installed, the bottom of the sign or plaque panel shall be a minimum of 7'-0" above the surrounding surface.
7. Curb ramps shall conform to the details shown on Revised Standard Plan RSP A88A.
8. Blue paint, instead of white may be used for marking accessibility aisles in areas where snow may cause white markings to not be visible.
9. The words "NO PARKING", shall be painted in white letters no less than 1'-0" high and located so that it is visible to traffic enforcement officials. See Revised Standard Plan RSP A90B for details of the "NO PARKING" pavement marking.
10. A R100B (CA) sign shall be posted in a conspicuous place at each entrance to off-street parking facilities or immediately adjacent to and visible from each stall. The sign shall include the address where the towed vehicle may be reclaimed and the telephone number of the local traffic law enforcement agency.
11. Where a single (non-van) accessible parking space is provided, the loading and unloading access aisle shall be on the passenger side of the vehicle as the vehicle is going forward into the parking space.
12. Where a van accessible parking space is provided, the loading and unloading access aisle shall be 8'-0" wide minimum, and shall be on the passenger side of the vehicle as the vehicle is going forward into the parking space.
13. Accessible Parking Only Sign shall be Sign R99C (CA) or Sign R99 (CA) with Plaque R99B (CA).

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ACCESSIBLE PARKING OFF-STREET

NO SCALE

RSP A90A DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN A90A
DATED MAY 1, 2006 - PAGE 117 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP A90A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	553	595

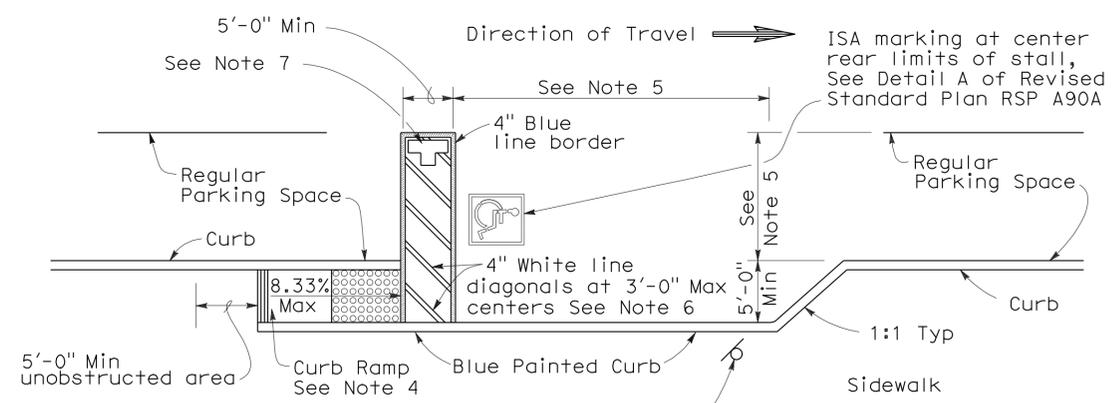
H. David Cordova
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

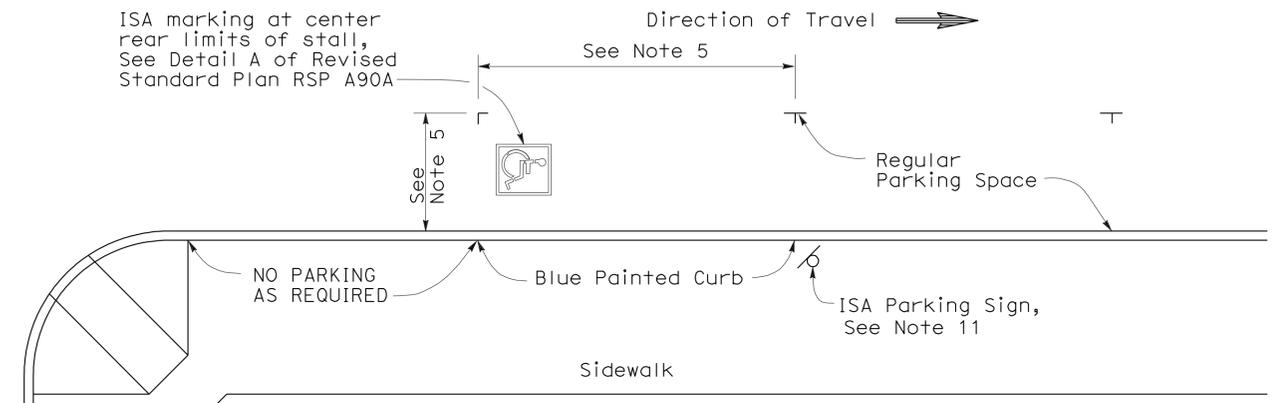
Hector David Cordova
REGISTERED PROFESSIONAL ENGINEER
No. C41957
Exp. 3-31-10
CIVIL
STATE OF CALIFORNIA

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To accompany plans dated 7-11-11



CONVENTIONAL
(See Note 9)



RESTRICTED RIGHT OF WAY WIDTH
ON-STREET PARKING
(Parallel parking)
(See Note 10)

**NO
PARKING**

PAVEMENT MARKING
See Note 7



SIGN R99 (CA)



SIGN R99C (CA)
See Note 3



PLAQUE R99B (CA)
SIGN R99 (CA) with PLAQUE R99B (CA)
See Note 3

NOTES:

1. Parking spaces shall be so located that persons with disabilities are not compelled to wheel or walk behind parked cars other than their own.
2. Surface slopes of accessible on-street parking spaces shall be the minimum feasible.
3. Where Plaque R99B (CA) or Sign R99C (CA) are installed, the bottom of the sign or plaque panel shall be a minimum of 7'-0" above the surrounding surface.
4. Curb ramps shall conform to the details shown on Revised Standard Plan RSP A88A.
5. Accessible on-street parking spaces shall not be smaller in length or width than that specified by the local jurisdiction for other parking spaces, but not less than 20'-0" in length and not less than 8'-0" in width.
6. Blue paint, instead of white may be used for marking accessibility aisles in areas where snow may cause white markings to not be visible.
7. The words "NO PARKING", shall be painted in white letters no less than 1'-0" high on a contrasting background and located so that it is visible to traffic enforcement officials. See Standard Plan A24E for square foot area for painting the words "NO PARKING".
8. There shall be no obstructions on the sidewalk adjacent to and for the full length of the parking space, except for the ISA parking sign shown.
9. The Conventional detail should be the primary choice of accessible on-street parking. However, if the sidewalk lacks adequate space to construct a standard curb ramp, the Restricted Right of Way detail should be used.
10. If the Restricted Right of Way width detail is selected and it conflicts with a bus stop or other uses, this detail may apply to the other end of the block.
11. Accessible Parking Only Sign shall be Sign R99C (CA) or Sign R99 (CA) with Plaque R99B (CA).

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**ACCESSIBLE PARKING
ON-STREET**

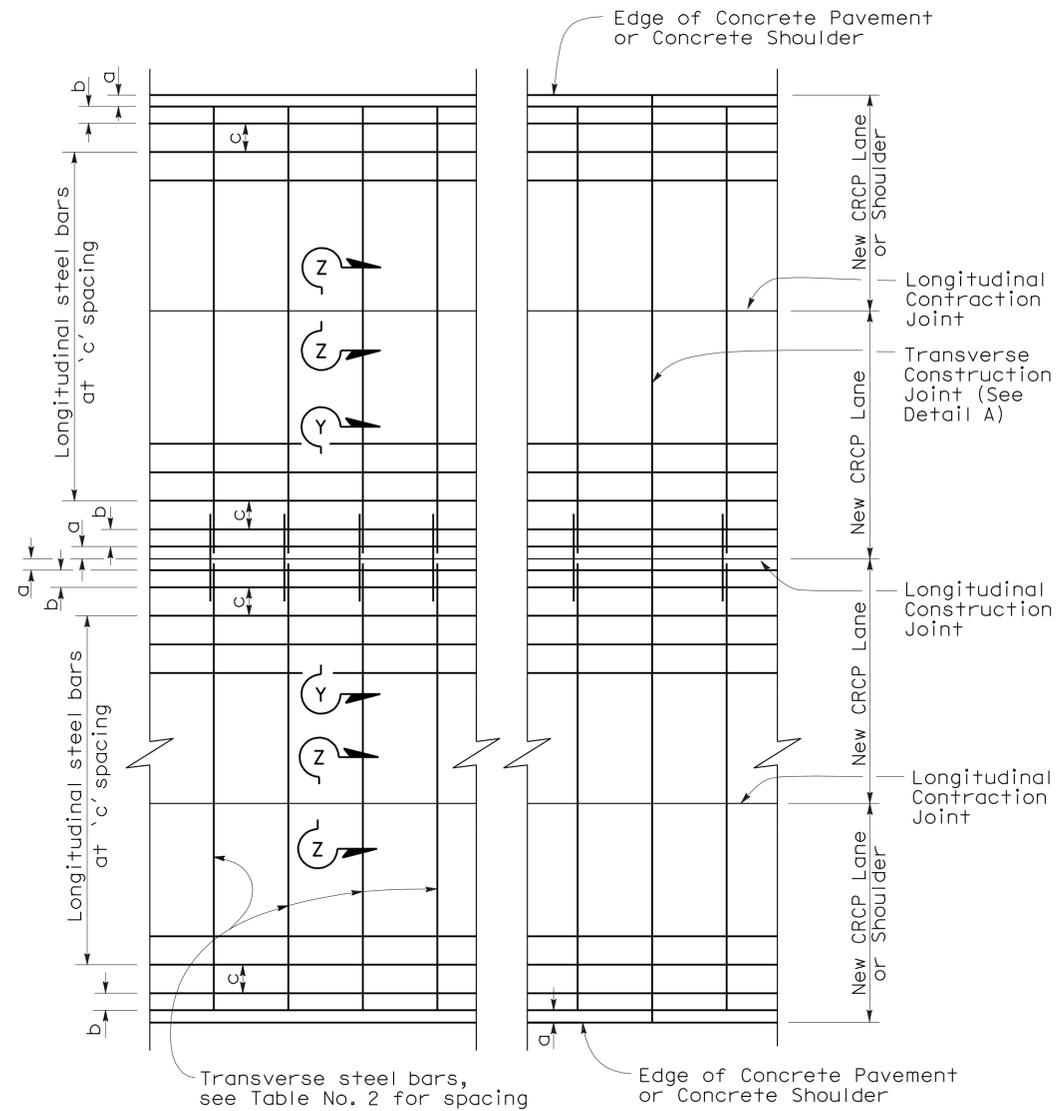
NO SCALE

RSP A90B DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN A90B
DATED MAY 1, 2006 - PAGE 118 OF THE STANDARD PLANS BOOK DATED MAY 2006.

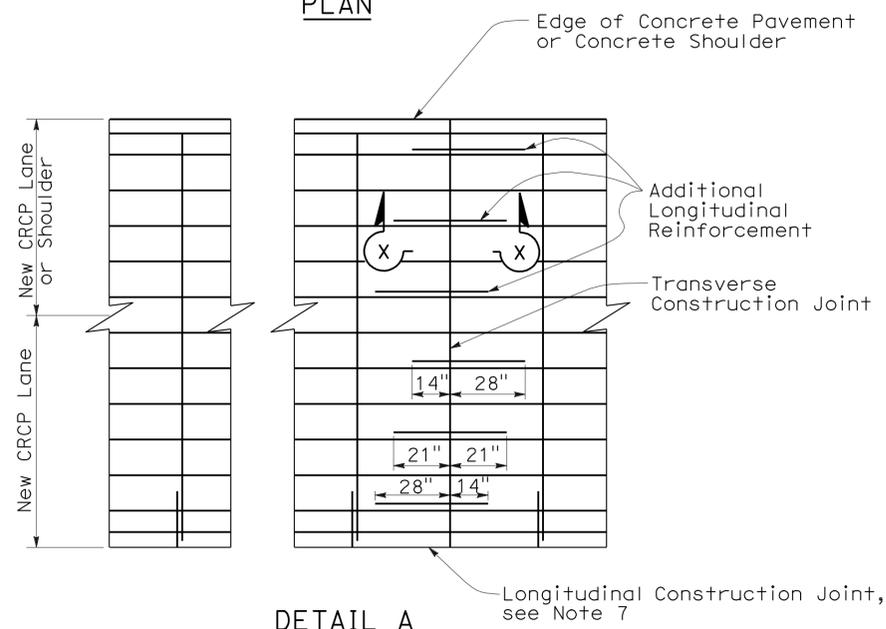
REVISED STANDARD PLAN RSP A90B

ISA = International Symbol of Accessibility

2006 REVISED STANDARD PLAN RSP A90B



PLAN



DETAIL A

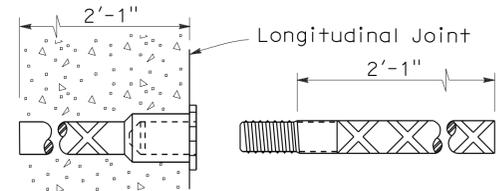
ADDITIONAL LONGITUDINAL REINFORCEMENT AT TRANSVERSE CONSTRUCTION JOINT

TABLE No. 1 LONGITUDINAL STEEL

Slab Thickness and Bar Size	First Spacing at Edge or Joint	Second Spacing from Edge or Joint	Regular Steel Bars	Additional Reinforcement at Transverse Construction Joint	Cir		
D	Bar Size	Spacing a	Spacing b	Spacing c	Spacing $2 \times c$	Length L	X
.80'	#6	3" TO 4"	3" TO 8"	8"	16"	42"	4"
.85'	#6	3" TO 4"	3" TO 7"	7"	14"	42"	4"
.90'	#6	3" TO 4"	3" TO 6.5"	6.5"	13"	42"	4"
.95'	#6	3" TO 4"	3" TO 6"	6.5"	13"	42"	4"
1.00'	#6	3" TO 4"	3" TO 6"	6"	12"	42"	4.25"
1.05'	#6	3" TO 4"	3" TO 5.5"	6"	12"	42"	4.5"
1.10'	#6	3" TO 4"	3" TO 5.5"	5.5"	11"	42"	4.75"

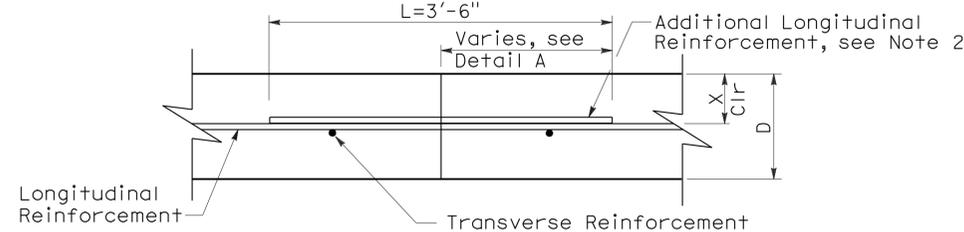
TABLE No. 2 TRANSVERSE STEEL

Slab Thickness and Bar Size	Pvmt Width (From Edge of Conc Pvmt or Conc Shld to Nearest Edge of Conc Pvmt or Conc Shld)							
	$\leq 48'$	$\leq 60'$	$\leq 72'$	$\leq 84'$	$\leq 96'$	$\leq 108'$	$\leq 120'$	
D	Bar Size	Spacing	Spacing	Spacing	Spacing	Spacing	Spacing	Spacing
.80'	#6	3'	3'	3'	2.5'	2'	2'	1.5'
.85'	#6	3'	3'	2.5'	2.5'	2'	1.5'	1.5'
.90'	#6	3'	2.5'	2.5'	2'	2'	1.5'	1.5'
.95'	#6	3'	2.5'	2'	2'	1.5'	1.5'	1'
1.00'	#6	3'	2.5'	2'	2'	1.5'	1.5'	1'
1.05'	#6	2.5'	2.5'	2'	1.5'	1.5'	1.5'	1'
1.10'	#6	2.5'	2.5'	2'	1.5'	1.5'	1.5'	1'



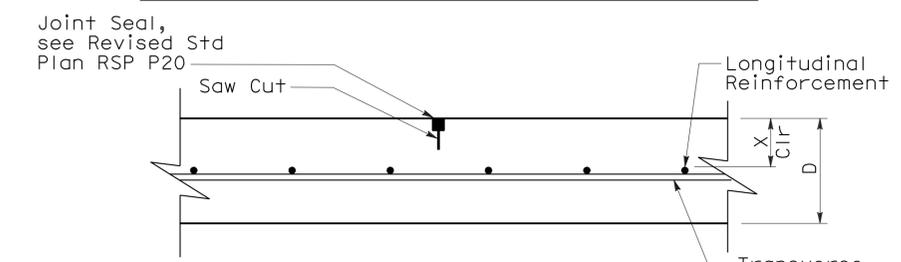
TIE BAR SPLICE DETAIL

(Splice Coupler)



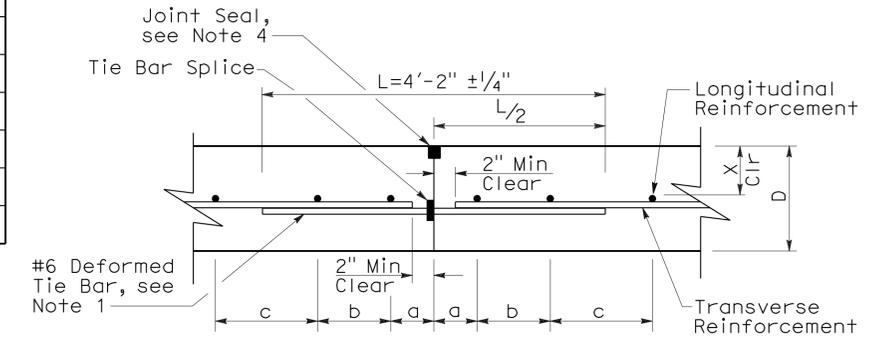
SECTION X-X

TRANSVERSE CONSTRUCTION JOINT

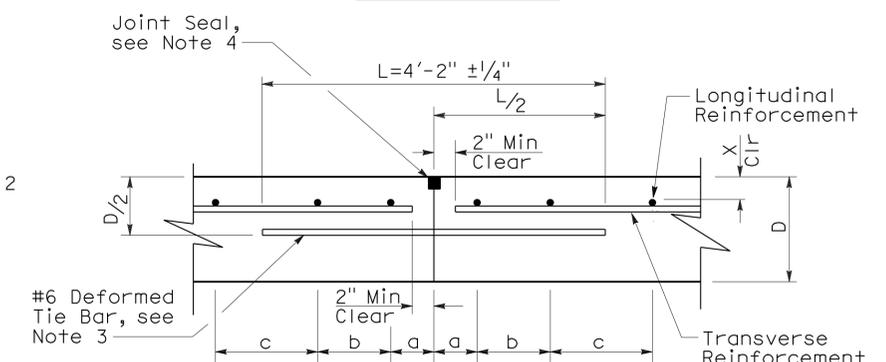


SECTION Z-Z

LONGITUDINAL CONTRACTION JOINT



SECTION Y-Y



ALTERNATE

LONGITUDINAL CONSTRUCTION JOINT

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**CONTINUOUSLY REINFORCED
 CONCRETE PAVEMENT**
 NO SCALE

RNSP P4 DATED JUNE 5, 2009 SUPERSEDES NSP P4 DATED MAY 15, 2009 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED MAY 2006.

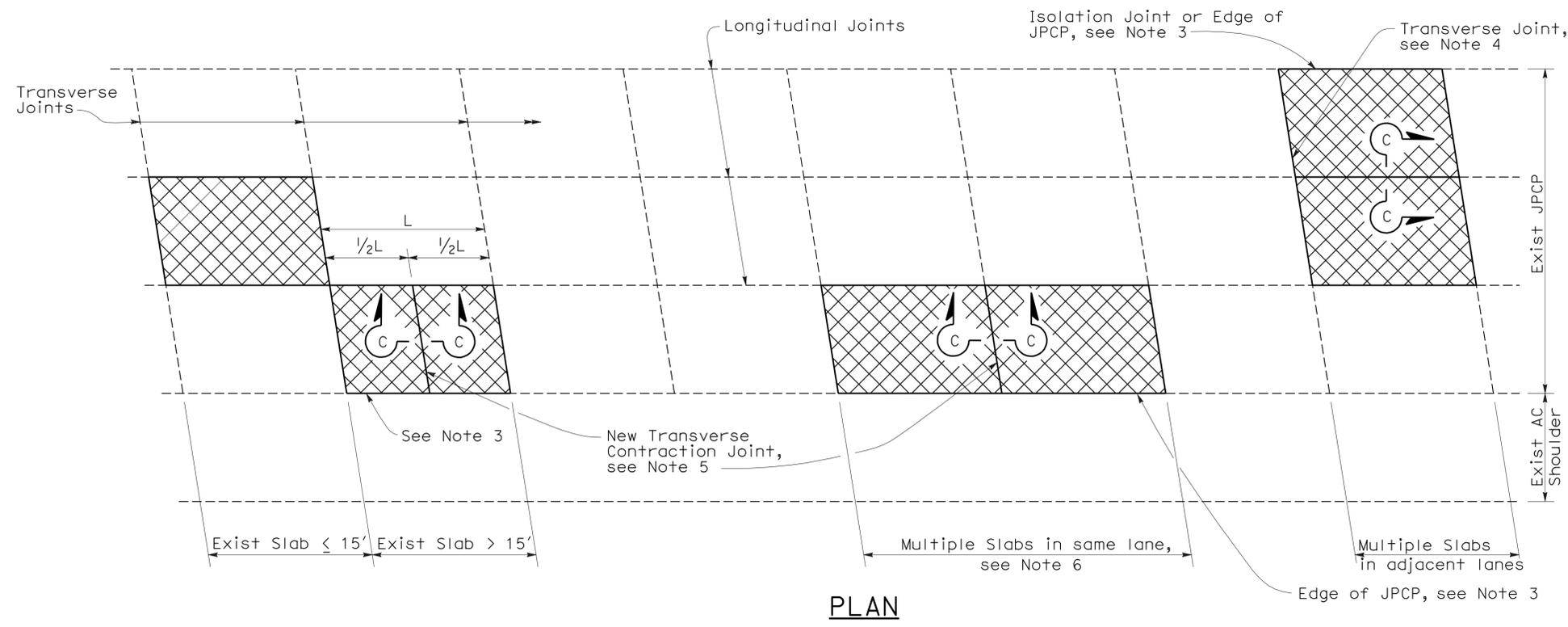
2006 REVISED NEW STANDARD PLAN RNSP P4

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	555	595

William K. Farnbach
 REGISTERED CIVIL ENGINEER
 May 15, 2009
 PLANS APPROVAL DATE
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 William K. Farnbach
 No. C49042
 Exp. 9-30-10
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 STATE OF CALIFORNIA

To accompany plans dated 7-11-11

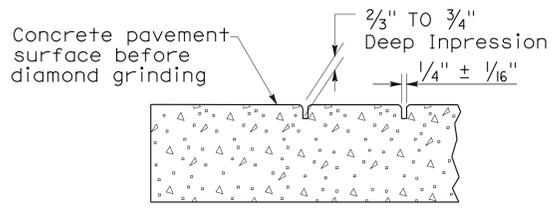
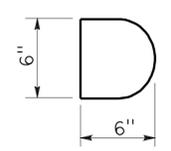
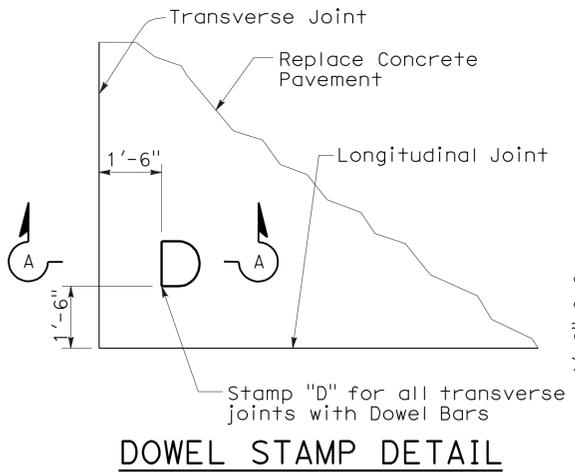


PLAN

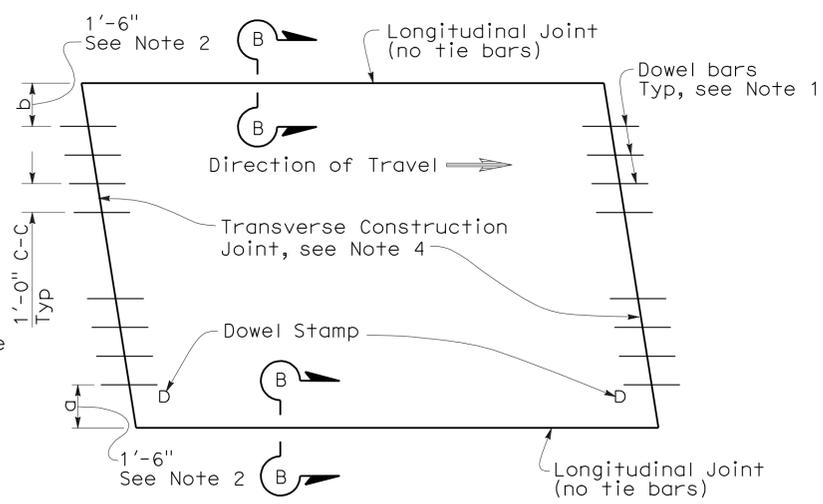
NOTES:

- For details not shown, see Revised Standard Plan RSP P10.
- Where the existing outer shoulder pavement is asphalt concrete pavement, the "a" dimension shall be 1'-0" and the "b" dimension shall be 2'-0".
- Side forms shall be used where edge of pavement is adjacent to asphalt concrete.
- For detail, see Transverse Construction Joint for existing concrete pavement detail on Revised Standard Plan RSP P10.
- Transverse joint to match skew of existing joint. Omit dowel bars.
- This Standard Plan only applicable when replacing multiple slabs in the same lane is less than 100'.

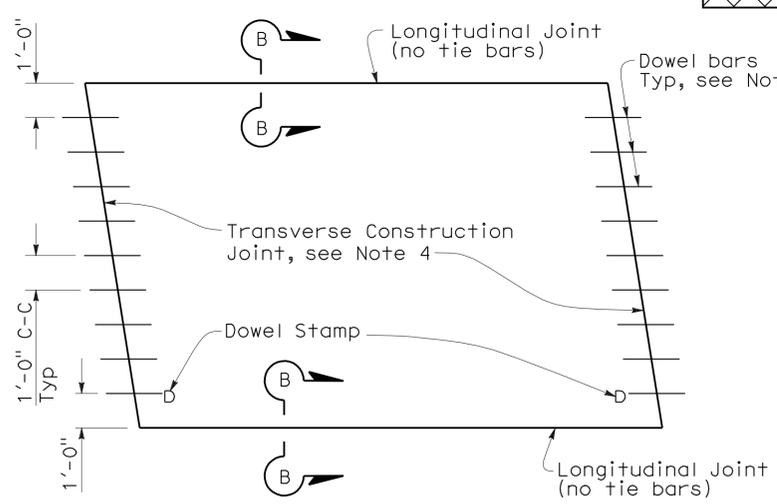
LEGEND



SECTION A-A

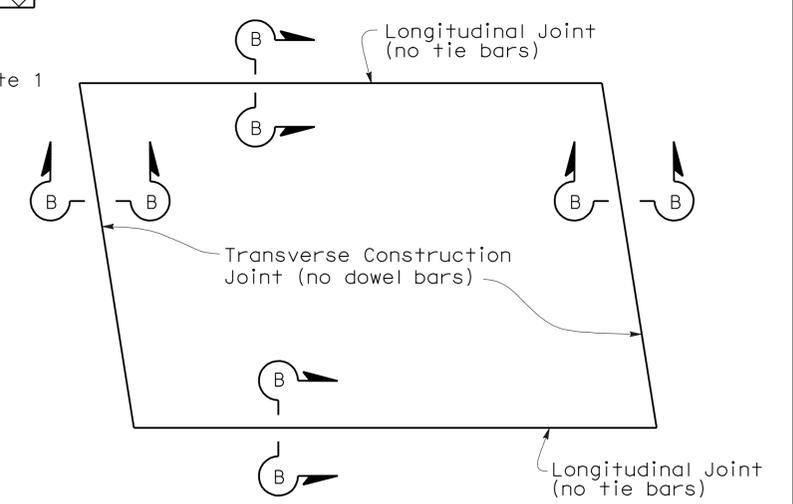


TYPE I
(traffic lane lines match longitudinal joints)

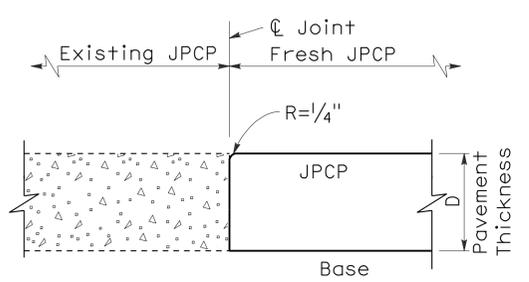


TYPE II
(traffic lane lines do not match longitudinal joints)

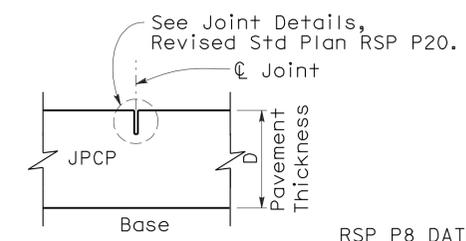
SLAB LAYOUT



TYPE III
(for short term repairs < 5 yrs design life or for slab replacements with a cracking and seating operation)



SECTION B-B



SECTION C-C

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

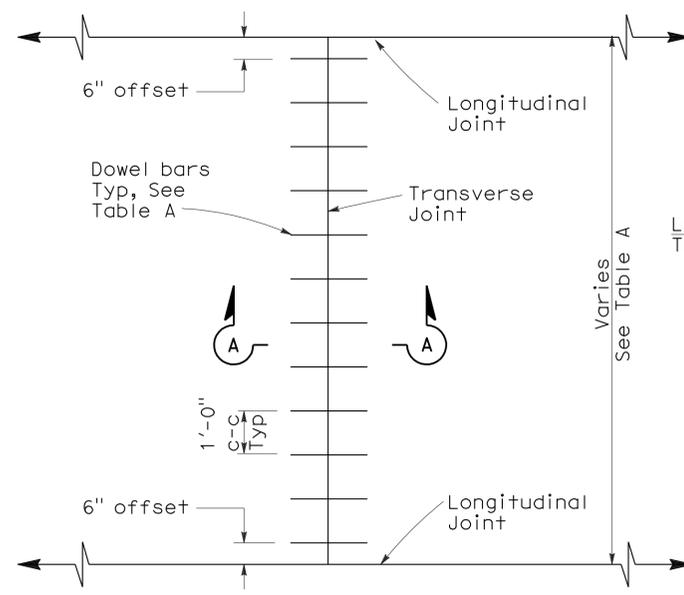
JOINTED PLAIN CONCRETE PAVEMENT-INDIVIDUAL SLAB REPLACEMENT

NO SCALE

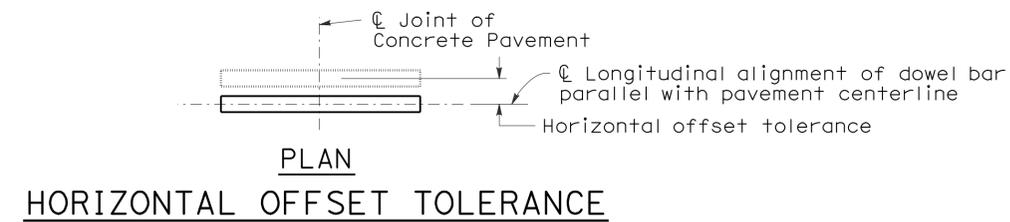
RSP P8 DATED MAY 15, 2009 SUPERSEDES RSP P8 DATED SEPTEMBER 1, 2006 AND STANDARD PLAN P8 DATED MAY 1, 2006 - PAGE 123 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP P8

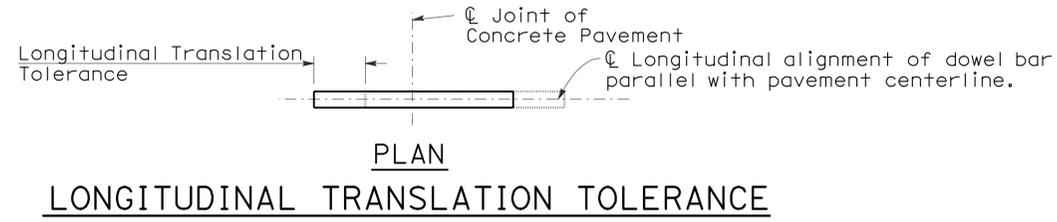
2006 REVISED STANDARD PLAN RSP P8



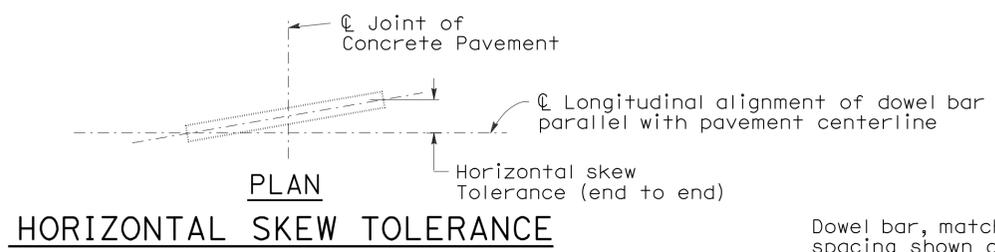
TRANSVERSE JOINT DOWEL BAR LAYOUT



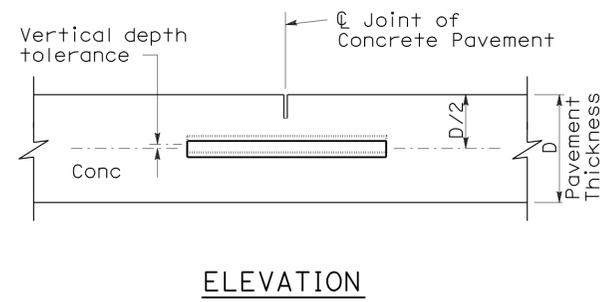
HORIZONTAL OFFSET TOLERANCE



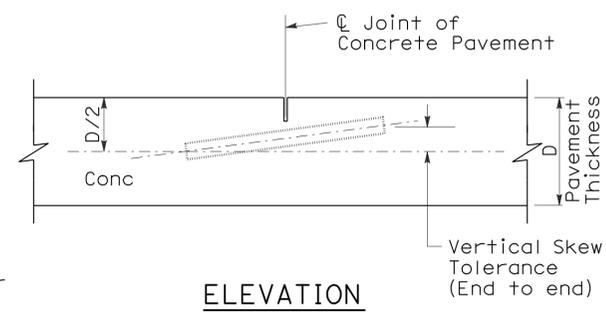
LONGITUDINAL TRANSLATION TOLERANCE



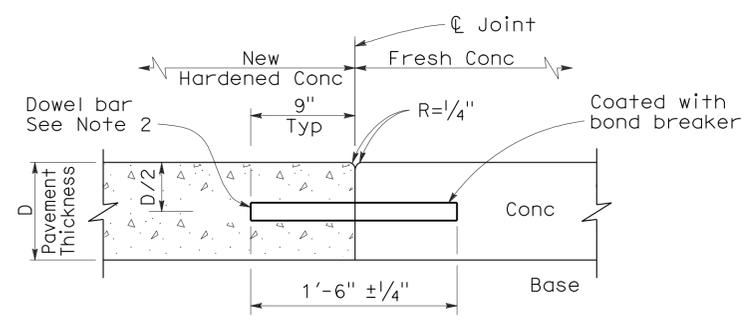
HORIZONTAL SKEW TOLERANCE



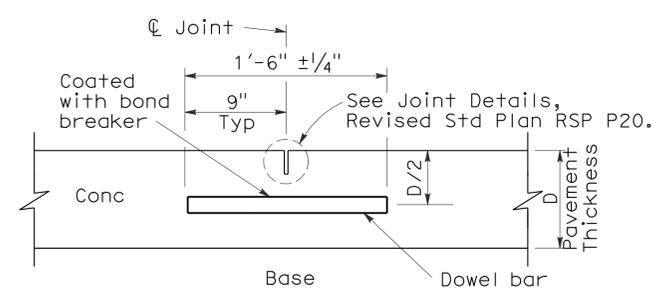
VERTICAL DEPTH TOLERANCE



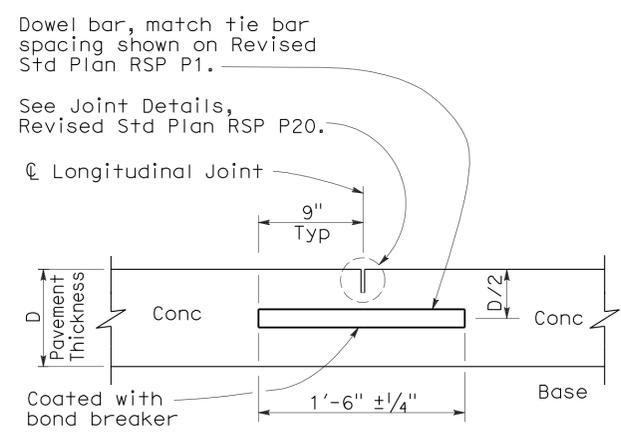
VERTICAL SKEW TOLERANCE



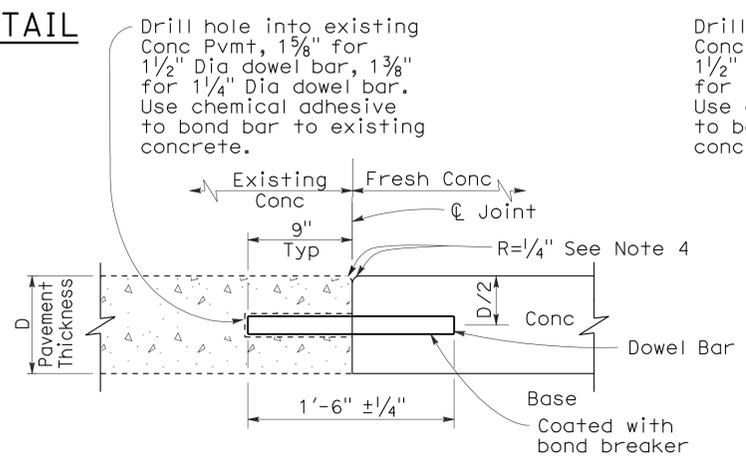
SECTION A-A TRANSVERSE CONSTRUCTION JOINT DETAIL



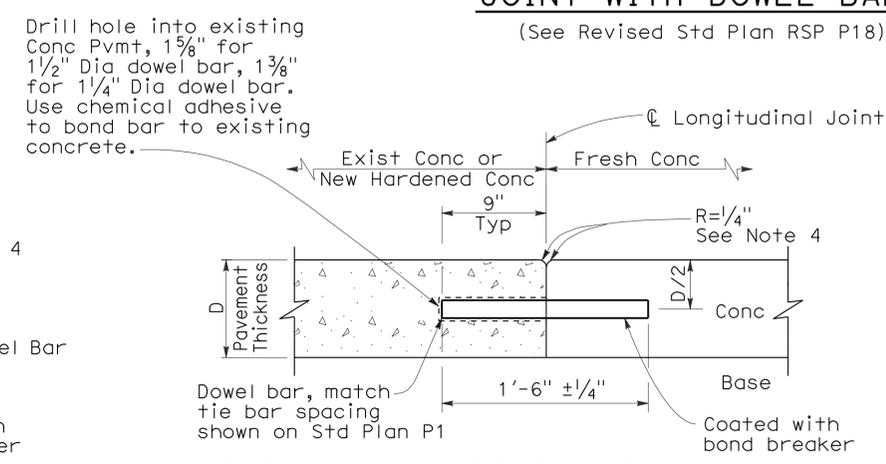
TRANSVERSE CONTRACTION JOINT



LONGITUDINAL CONTRACTION JOINT WITH DOWEL BARS



TRANSVERSE CONSTRUCTION JOINT FOR EXISTING CONCRETE PAVEMENT
(Drill and bond locations)



LONGITUDINAL CONSTRUCTION JOINT WITH DOWEL BARS
(See Revised Std Plan RSP P18)

TABLE A (See Note 3)
Dowel Bar Transverse Spacing Table

Width between Longitudinal Joints	Number of Dowels between Longitudinal Joints
14'-0"	14
13'-0"	13
12'-0"	12
11'-0"	11
10'-0"	10
8'-0"	8
5'-0"	5
4'-0"	4

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

RSP P10 DATED MAY 15, 2009 SUPERSEDES STANDARD PLAN P10 DATED MAY 1, 2006 - PAGE 124 OF THE STANDARD PLANS BOOK DATED MAY 2006.

2006 REVISED STANDARD PLAN RSP P10

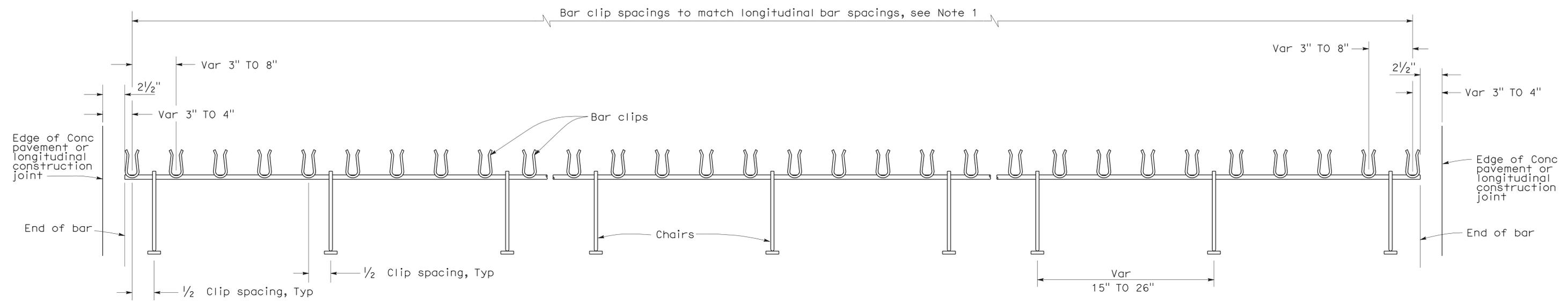
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	557	595

William K. Farnbach
 REGISTERED CIVIL ENGINEER
 June 5, 2009
 PLANS APPROVAL DATE

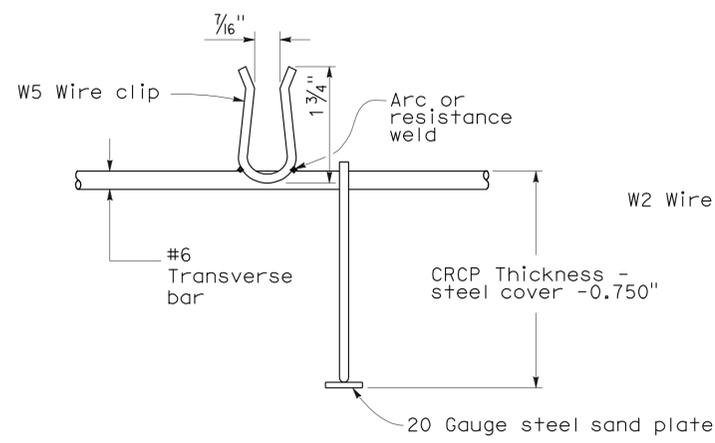
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 STATE OF CALIFORNIA

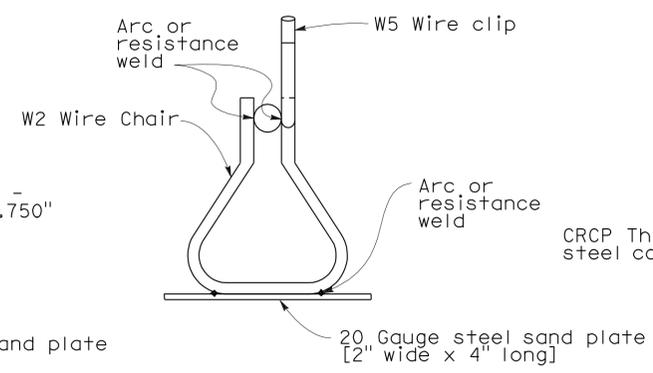
To accompany plans dated 7-11-11



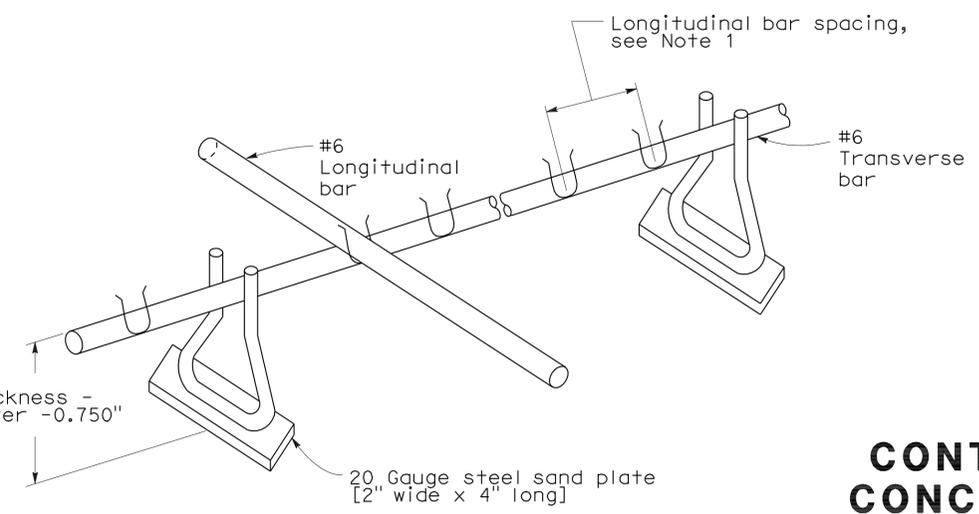
TRANSVERSE BAR ASSEMBLY



#6 BAR CLIP DETAIL



CHAIR DETAIL



ISOMETRIC VIEW OF CHAIR ASSEMBLY

- NOTES:**
1. See New Standard Plan NSP P4 for spacing of longitudinal bars.
 2. Tensile strength of chair shall be at least 50,000 psi.
 3. Wire sizes shown are minimum required.

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**CONTINUOUSLY REINFORCED
 CONCRETE PAVEMENT-SINGLE
 PIECE TRANSVERSE BAR
 ASSEMBLY**
 NO SCALE

NSP P13 DATED JUNE 5, 2009 SUPPLEMENTS THE STANDARD PLANS BOOK DATED MAY 2006.

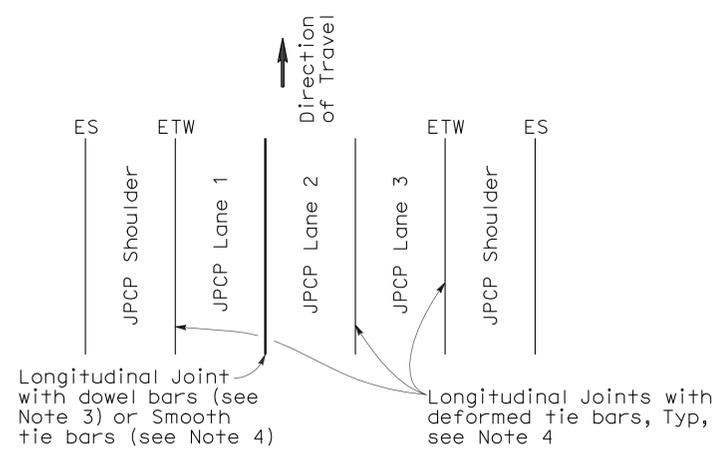
2006 NEW STANDARD PLAN NSP P13

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	558	595

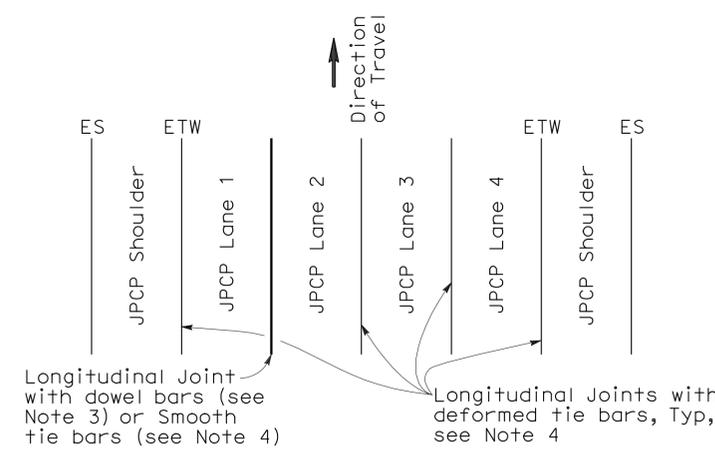
William K. Farnbach
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 June 5, 2009
 PLANS APPROVAL DATE
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 STATE OF CALIFORNIA

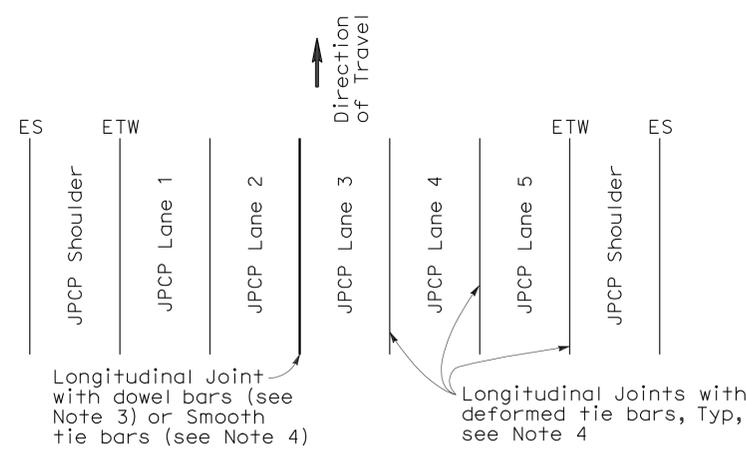
To accompany plans dated 7-11-11



3 LANES WITH TIED CONCRETE SHOULDERS
PLAN



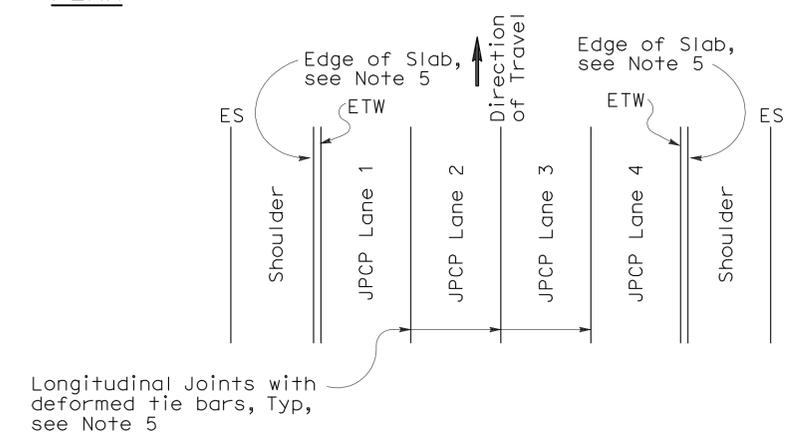
4 LANES WITH TIED CONCRETE SHOULDERS
PLAN



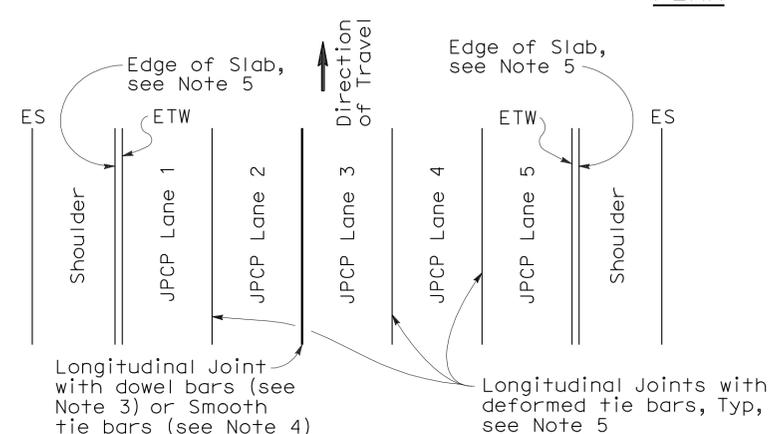
5 LANES WITH TIED CONCRETE SHOULDERS
PLAN

NOTES:

- Where Lean Concrete Base is not used as base material, the joint filler material used for the longitudinal isolation joint shall only extend to the bottom of the new concrete slab. See Detail A.
- Use 5/8" ± 1/16" dimension for silicone sealant.
- See Revised Standard Plan RSP P10 for longitudinal joint with dowel bars.
- See Revised Standard Plan RSP P1.
- See Revised Standard Plan RSP P2.

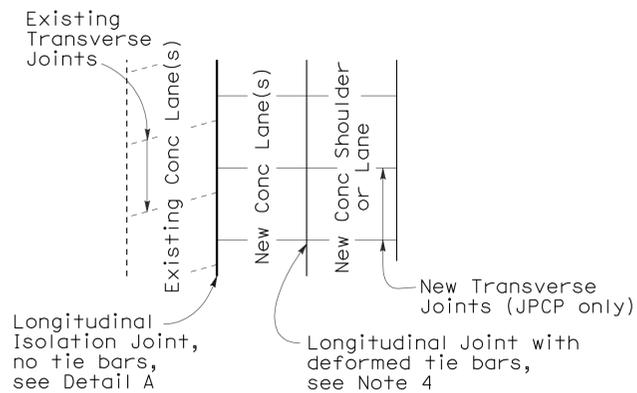


4 LANES OR LESS WITH WIDENED SLAB
PLAN



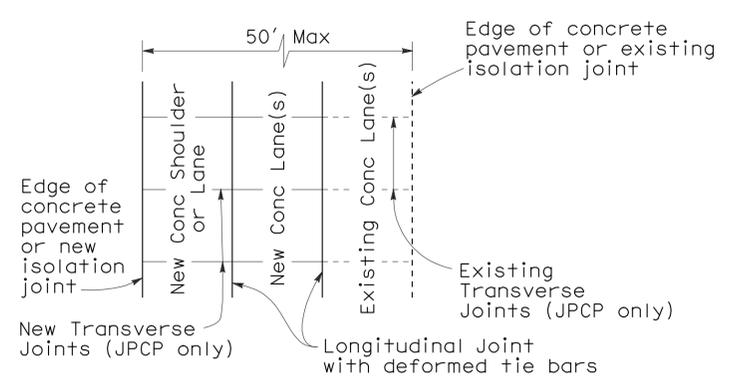
5 LANES WITH WIDENED SLAB
PLAN

NEW CONSTRUCTION
Location of Longitudinal Joints
(For JPCP)



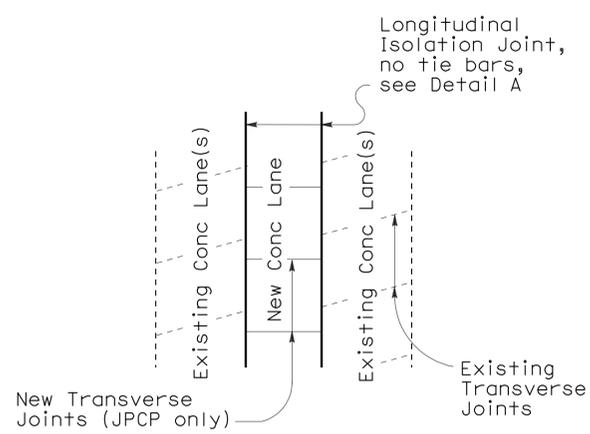
CASE 1
PLAN

Transverse Joints do not align between new and existing



CASE 2
PLAN

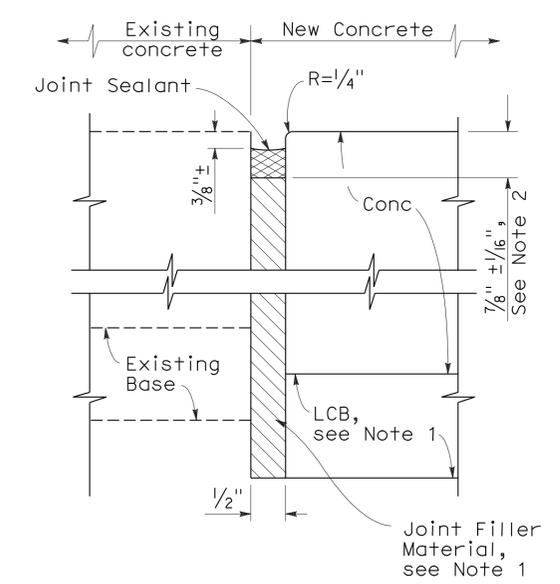
Transverse Joints align between new and existing



CASE 3 (INTERIOR LANE REPLACEMENT)
PLAN

Transverse Joints do not align between new and existing

LANE/SHOULDER ADDITION OR RECONSTRUCTION
(For JPCP and CRCP)



DETAIL A
ISOLATION JOINT

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**CONCRETE PAVEMENT-
LANE SCHEMATICS
AND ISOLATION JOINT DETAIL**

NO SCALE

RSP P18 DATED JUNE 5, 2009 SUPERSEDES RSP P18 DATED MAY 15, 2009, RSP P18 DATED NOVEMBER 17, 2006 AND STANDARD PLAN P18 DATED MAY 1, 2006 - PAGE 127 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP P18

2006 REVISED STANDARD PLAN RSP P18

NOTE:

1. Tie bars, dowel bars, and reinforcement are not shown in joint seal details, see Revised Standard Plans RSP P1, RSP P3, RSP P10, RSP P35, RSP P45, or RSP P46 as applicable.

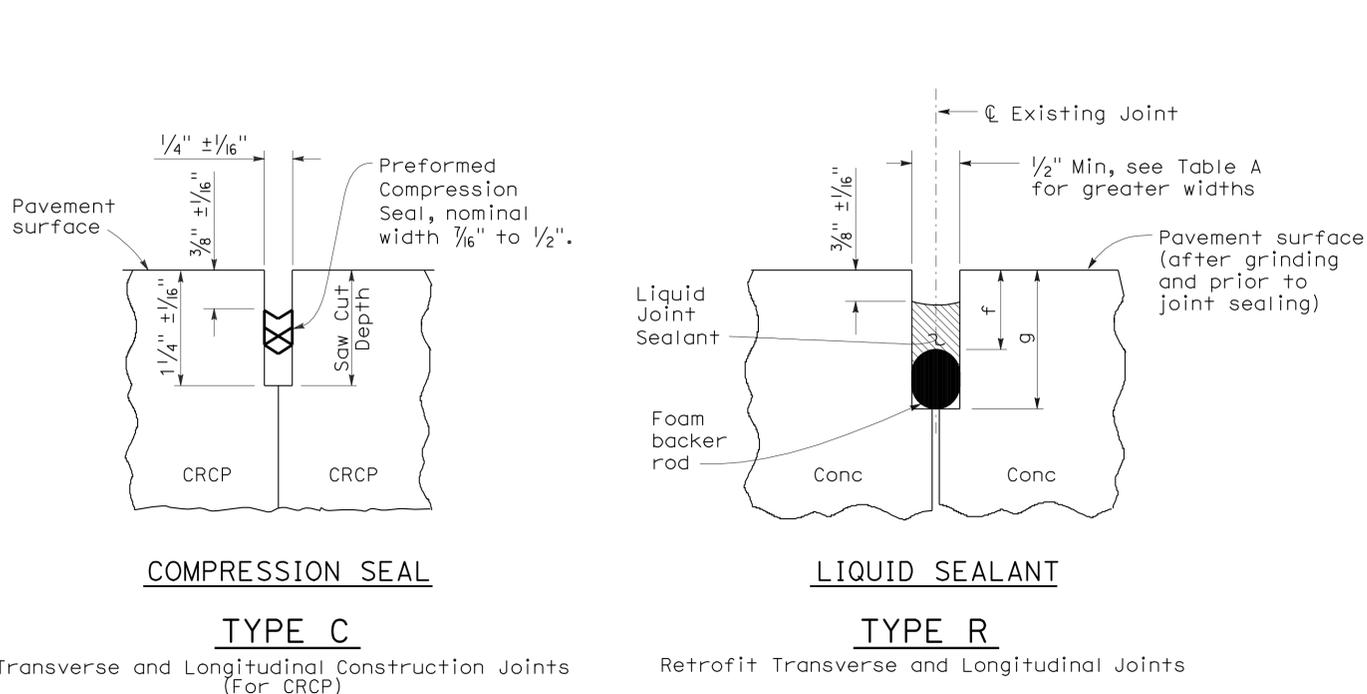
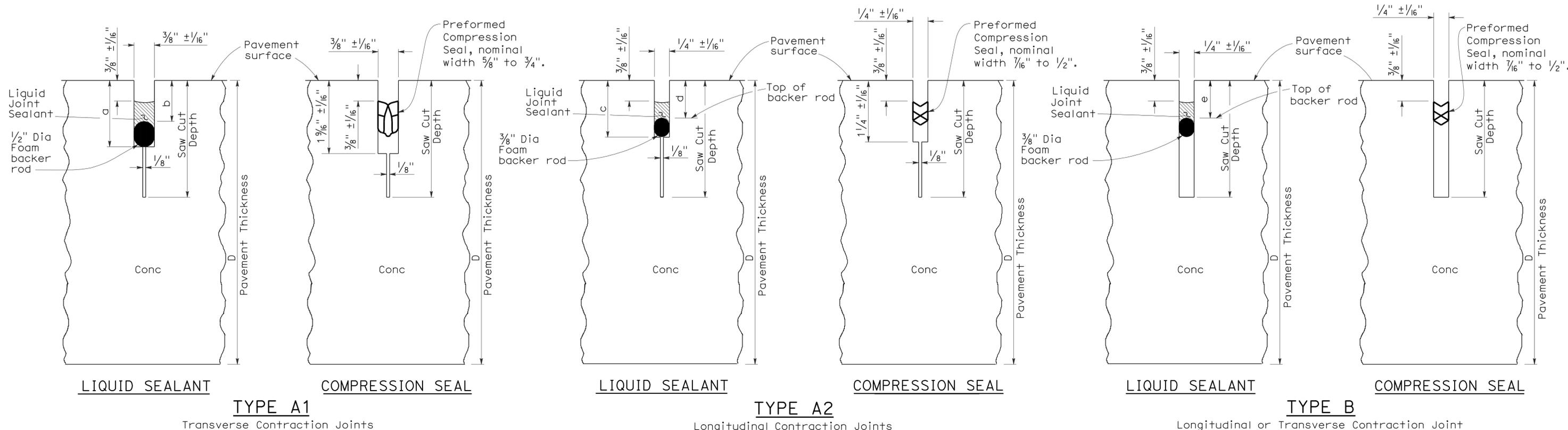
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	559	595

William K. Farnbach
 REGISTERED CIVIL ENGINEER
 No. C49042
 Exp. 9-30-10
 STATE OF CALIFORNIA

May 15, 2009
 PLANS APPROVAL DATE

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To accompany plans dated 7-11-11



LIQUID SEALANT RESERVOIR DEPTH

LIQUID SEALANT MATERIAL	3/8" Joint Width Type A1		1/4" Joint Width Type A2		1/4" Joint Width Type B
	DIMENSION		DIMENSION		DIMENSION
	a	b	c	d	e
SILICONE	1" ± 1/16"	5/8" ± 1/16"	15/16" ± 1/16"	9/16" ± 1/16"	9/16" ± 1/16"
ASPHALT RUBBER	1 3/16" ± 1/16"	3/4" ± 1/16"	1 1/16" ± 1/16"	11/16" ± 1/16"	11/16" ± 1/16"

TABLE A (TYPE R JOINT)

Sawn Joint Width	Backer Rod Diameter ± 1/16"	DIMENSION "f"	DIMENSION "g"
1"	1 5/16"	7/8"	2 1/4"
7/8"	1 3/16"	13/16"	2"
3/4"	1"	3/4"	1 3/4"
5/8"	7/8"	11/16"	1 1/2"
1/2"	11/16"	5/8"	1 1/4"

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
CONCRETE PAVEMENT-JOINT DETAILS

NO SCALE

RSP P20 DATED MAY 15, 2009 SUPERSEDES STANDARD PLAN P20 DATED MAY 1, 2006 - PAGE 128 OF THE STANDARD PLANS BOOK DATED MAY 2006.

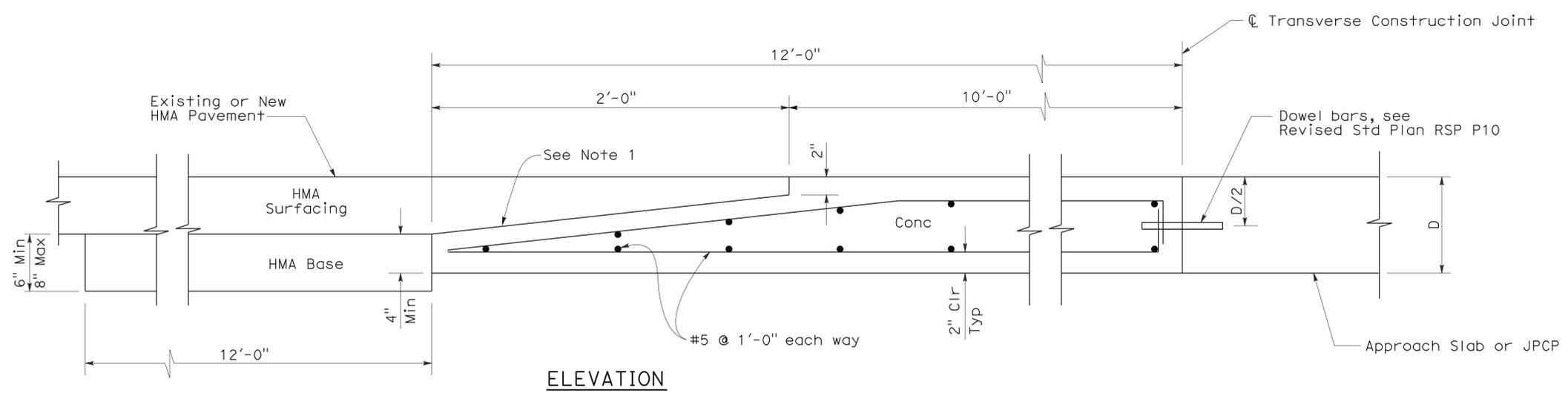
REVISED STANDARD PLAN RSP P20

2006 REVISED STANDARD PLAN RSP P20

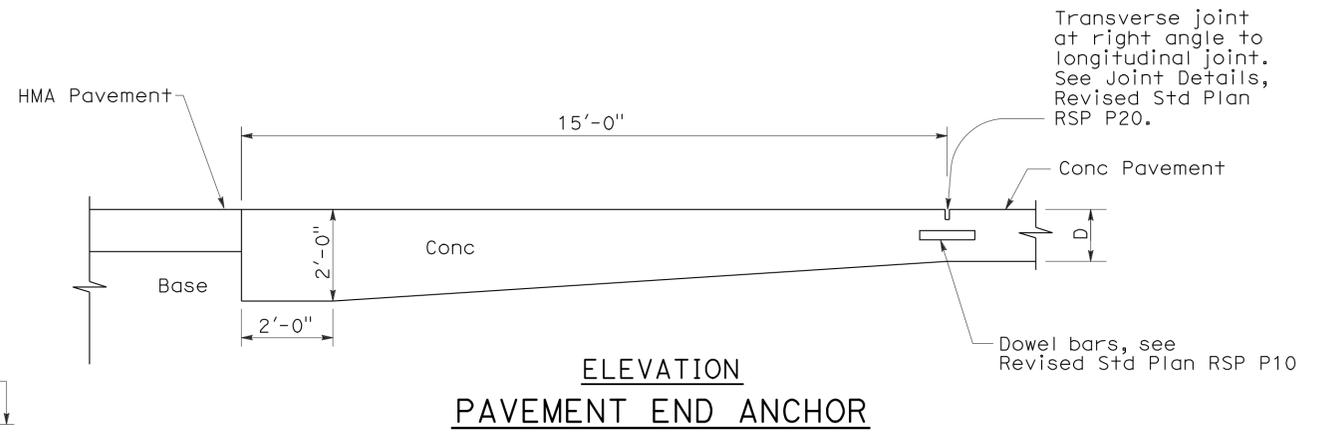
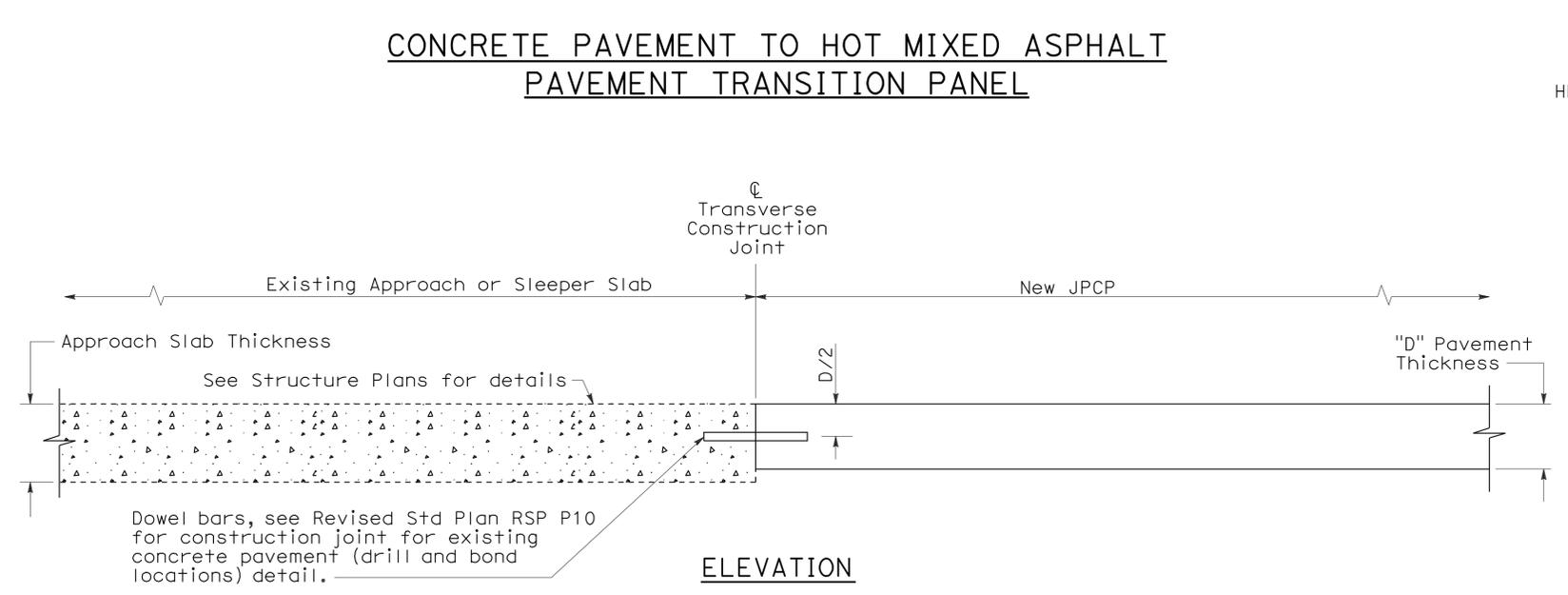
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	560	595

William K. Farnbach
 REGISTERED CIVIL ENGINEER
 May 15, 2009
 PLANS APPROVAL DATE
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To accompany plans dated 7-11-11

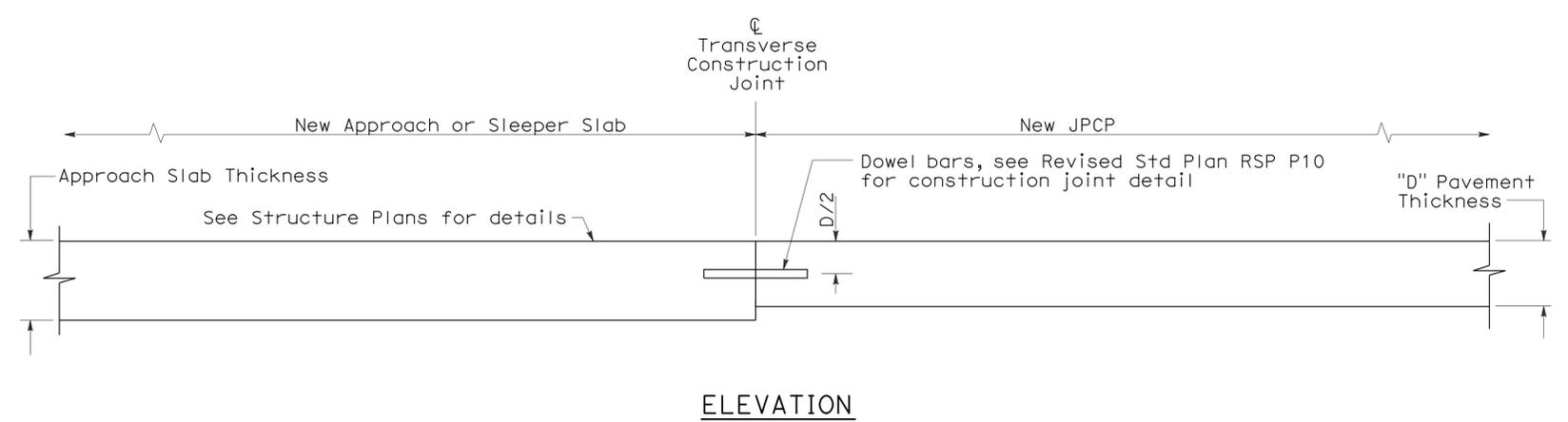


CONCRETE PAVEMENT TO HOT MIXED ASPHALT PAVEMENT TRANSITION PANEL



PAVEMENT END ANCHOR

NOTE:
1. Heavy broom finish.



CONCRETE PAVEMENT TRANSITION TO APPROACH OR SLEEPER SLAB

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**JOINTED PLAIN CONCRETE PAVEMENT-
END PANEL
PAVEMENT TRANSITIONS**
NO SCALE

RSP P30 DATED MAY 15, 2009 SUPERSEDES STANDARD PLAN P30
DATED MAY 1, 2006 - PAGE 129 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP P30

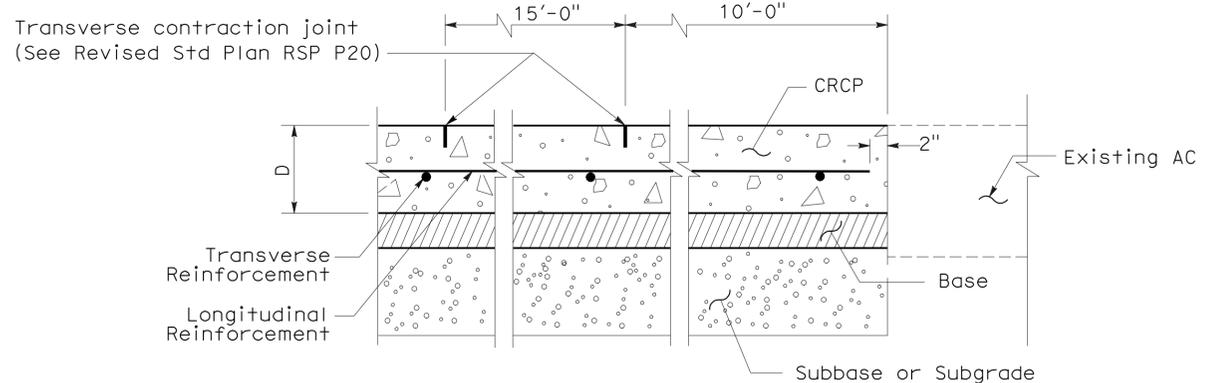
2006 REVISED STANDARD PLAN RSP P30

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	561	595

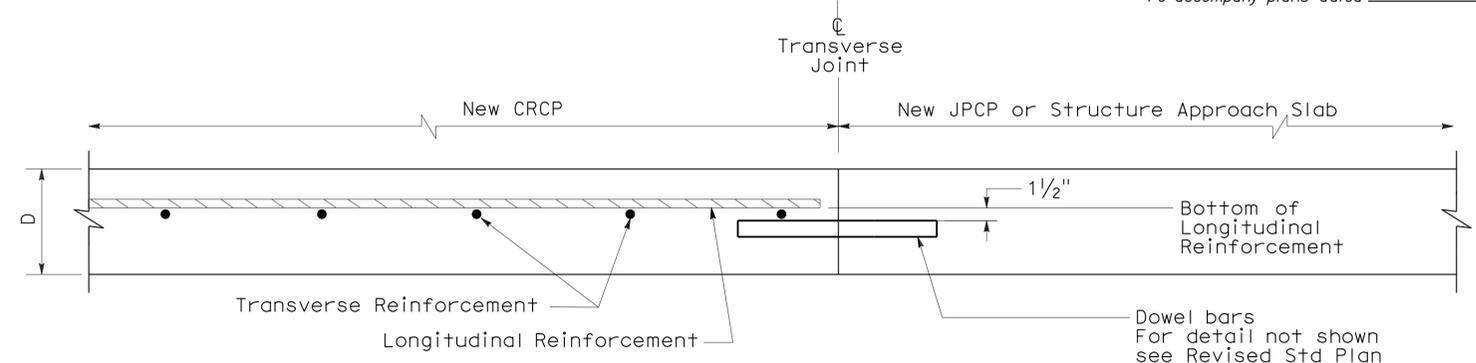
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 June 5, 2009
 PLANS APPROVAL DATE
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REGISTERED PROFESSIONAL ENGINEER
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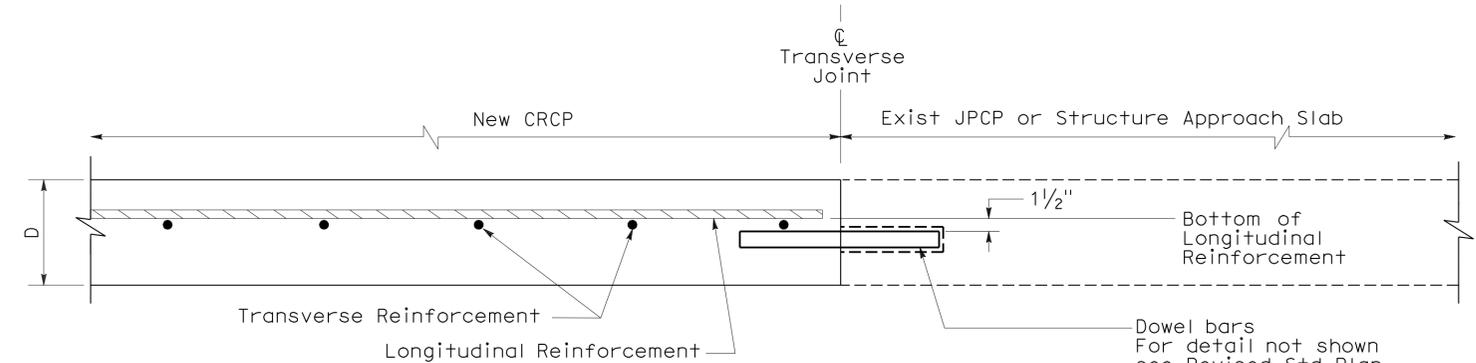
To accompany plans dated 7-11-11



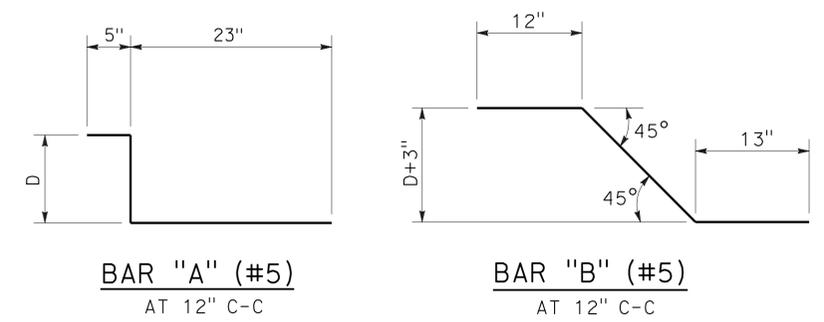
TERMINAL JOINT TYPE A
(For Existing AC)



TERMINAL JOINT TYPE E
(For New JPCP or Structure Approach Slabs)

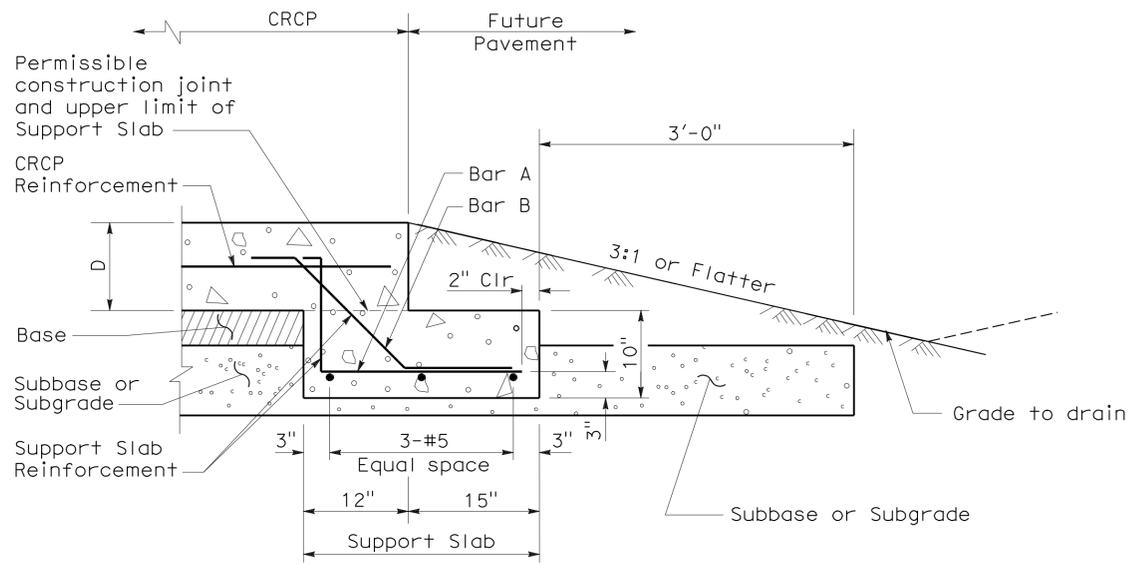


TERMINAL JOINT TYPE D
(For Existing JPCP or Structure Approach Slabs)

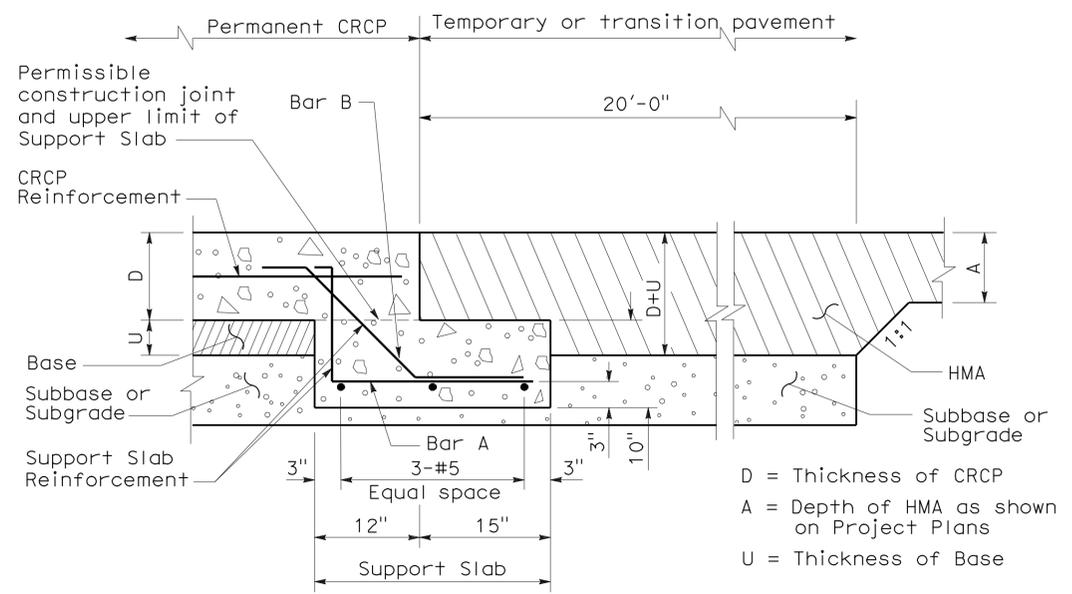


BAR "A" (#5)
AT 12" C-C

BAR "B" (#5)
AT 12" C-C



TERMINAL JOINT TYPE B
(For Future Pavement)



TERMINAL JOINT TYPE C
(For Temporary HMA Pavement)

D = Thickness of CRCP
 A = Depth of HMA as shown on Project Plans
 U = Thickness of Base

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**CONTINUOUSLY REINFORCED
 CONCRETE PAVEMENT -
 TERMINAL JOINT DETAILS**

NO SCALE
 NSP P31A DATED JUNE 5, 2009 SUPPLEMENTS THE
 STANDARD PLANS BOOK DATED MAY 2006.

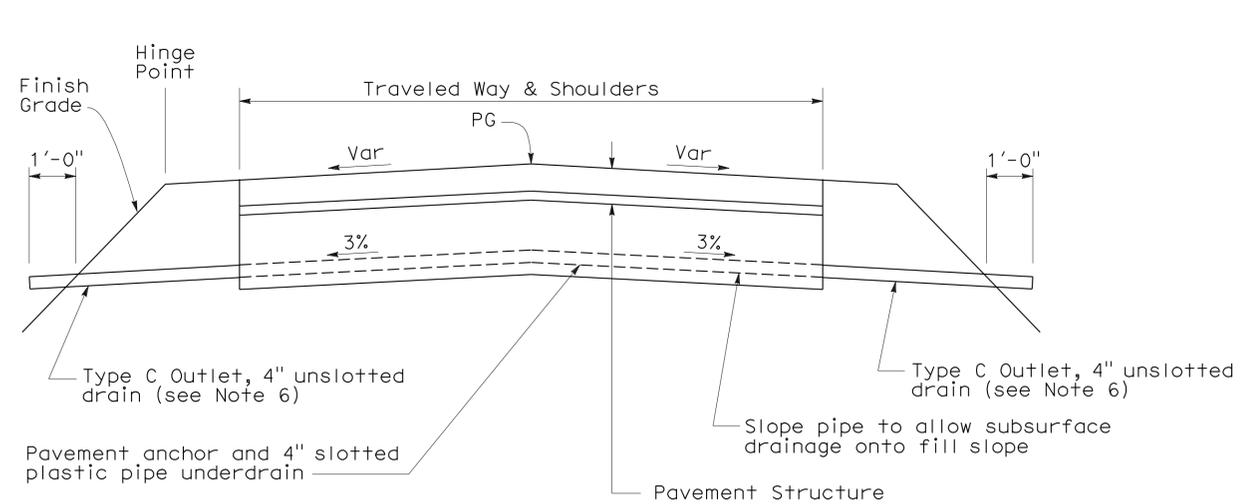
NEW STANDARD PLAN NSP P31A

2006 NEW STANDARD PLAN NSP P31A

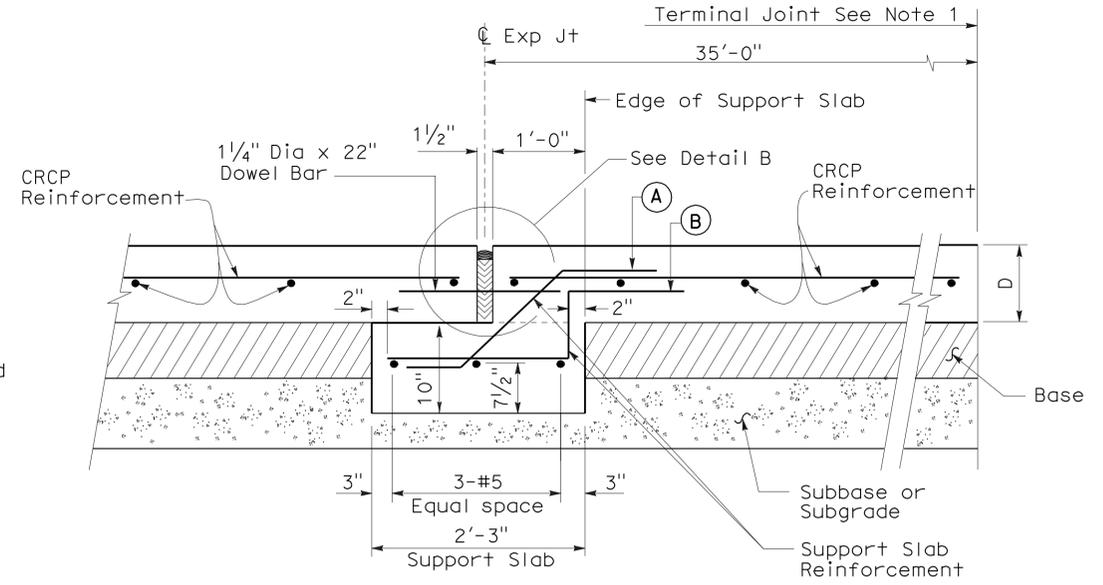
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	562	595

William K. Farnbach
 REGISTERED CIVIL ENGINEER
 June 5, 2009
 PLANS APPROVAL DATE
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 William K. Farnbach
 No. 49042
 Exp. 09-30-10
 STATE OF CALIFORNIA

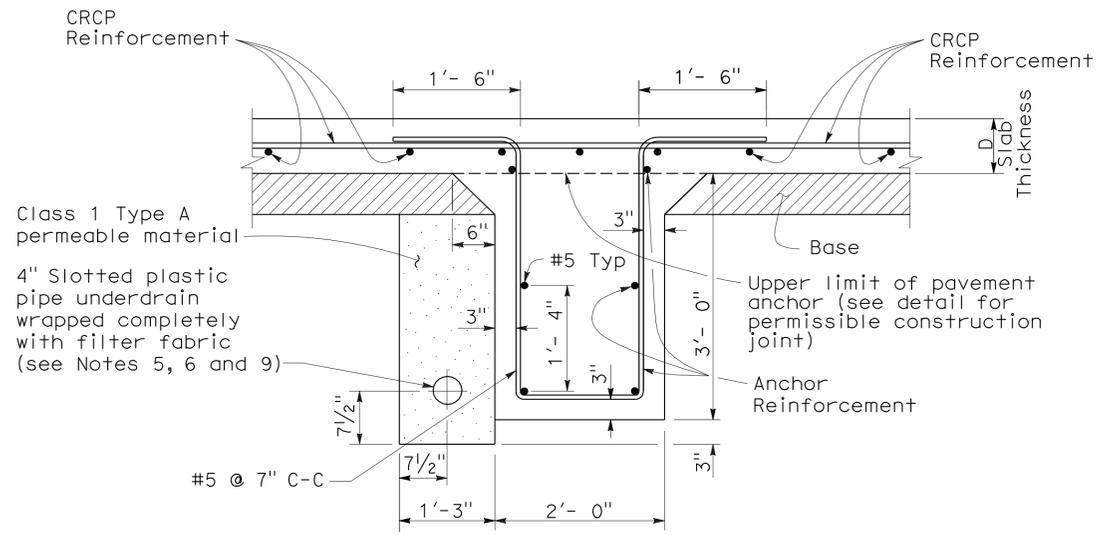
To accompany plans dated 7-11-11



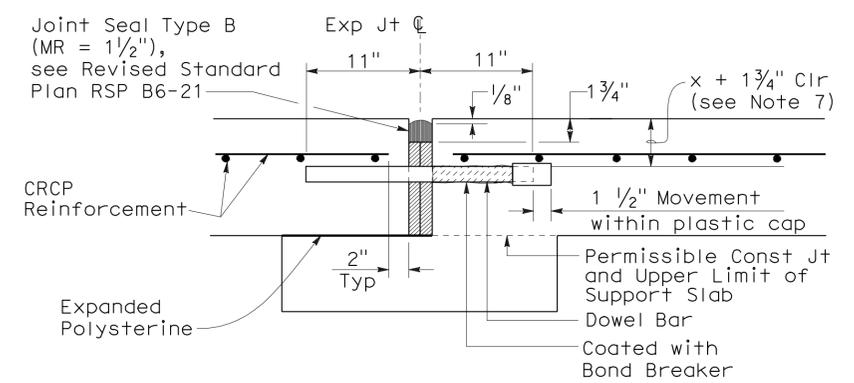
PAVEMENT ANCHOR PROFILE



EXPANSION JOINT TYPE AN



PAVEMENT ANCHOR

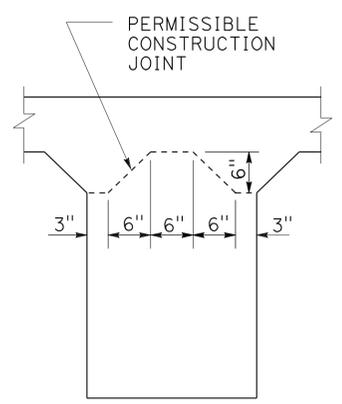


DETAIL B

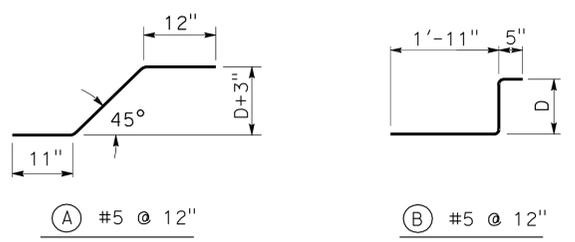
(For layout, tolerances, and other details not shown, see Revised Standard Plan RSP P10.)

NOTES:

- For the locations of the terminal joints, expansion joints and pavement anchors, see project plans.
- The CRCP shall continue across the pavement anchor and expansion joints as shown.
- Details of reinforcement, tie bars, and longitudinal joints (and if necessary, transverse construction joints) are shown on New Standard Plan NSP P4.
- Transverse construction joints are not allowed within 20'-0" of the pavement anchor.
- When placing pipe through concrete barrier, use 4" unslotted plastic pipe wrapped completely with 3/8" polystyrene.
- See Standard Plan D99B for details not shown.
- See New Standard Plan NSP P4 for "x".
- D = thickness of CRCP
- Place the 4" Slotted Plastic Pipe on the high side of the longitudinal grade.



PAVEMENT ANCHOR DETAIL SHOWING PERMISSIBLE CONSTRUCTION JOINT



REINFORCEMENT DETAIL

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
CONTINUOUSLY REINFORCED CONCRETE PAVEMENT - EXPANSION JOINT AND ANCHOR DETAILS
 NO SCALE

NSP P31B DATED JUNE 5, 2009 SUPPLEMENTS THE STANDARD PLANS BOOK DATED MAY 2006.

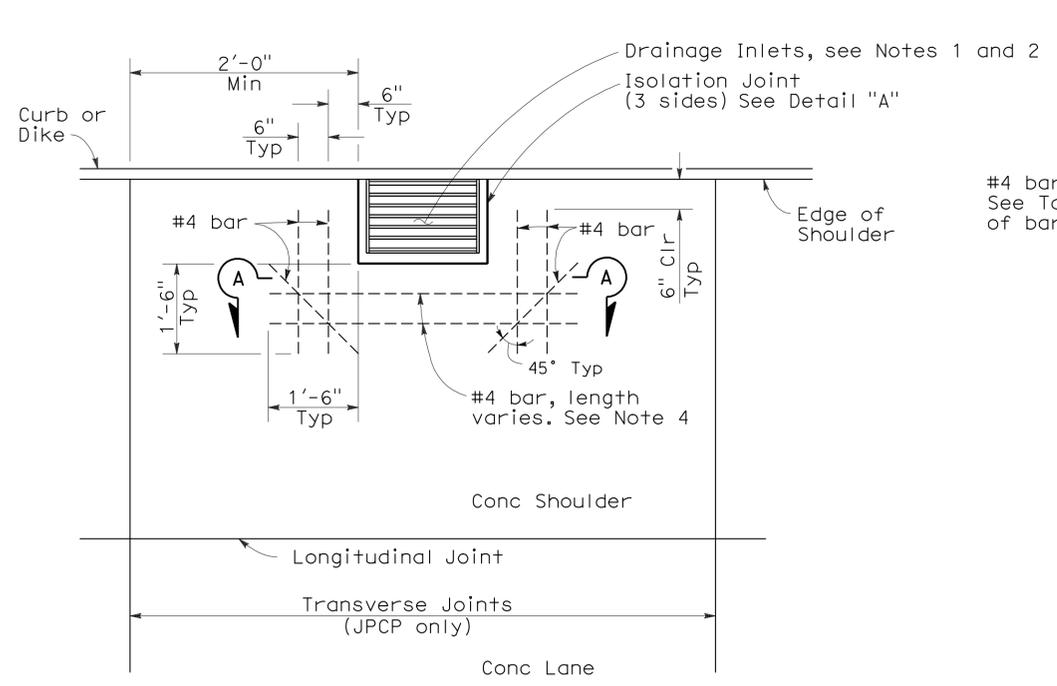
NEW STANDARD PLAN NSP P31B

2006 NEW STANDARD PLAN NSP P31B

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	563	595

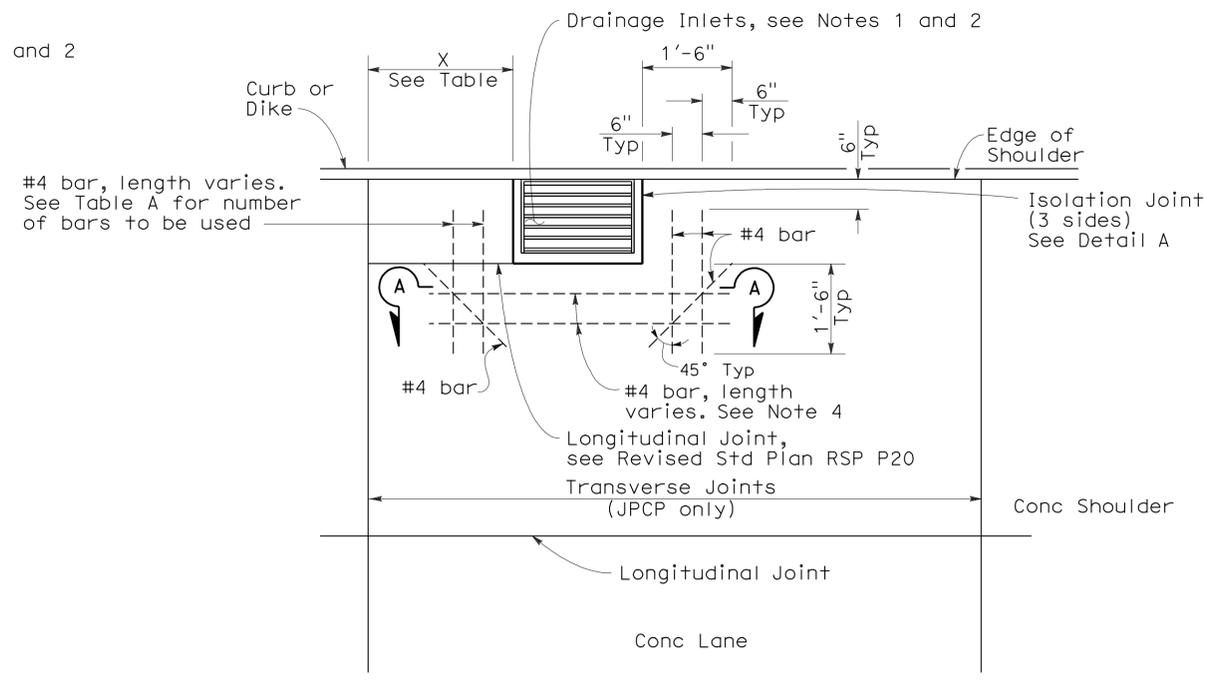
William K. Farnbach
 REGISTERED CIVIL ENGINEER
 May 15, 2009
 PLANS APPROVAL DATE
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2006 REVISED STANDARD PLAN RSP P45



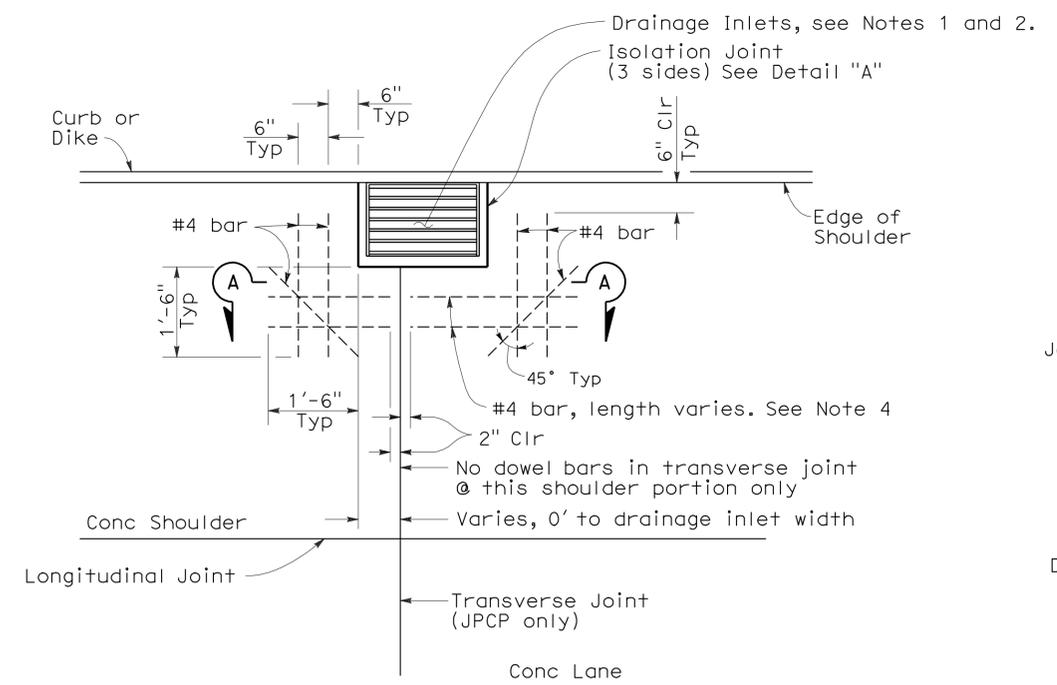
CASE 1

Transverse joint more than 2'-0" clear of drainage inlet wall or no transverse joint



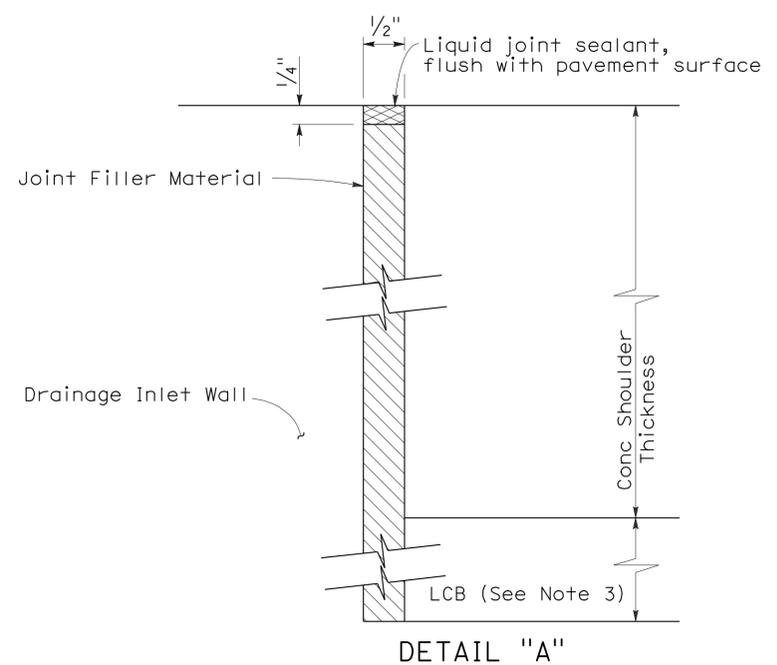
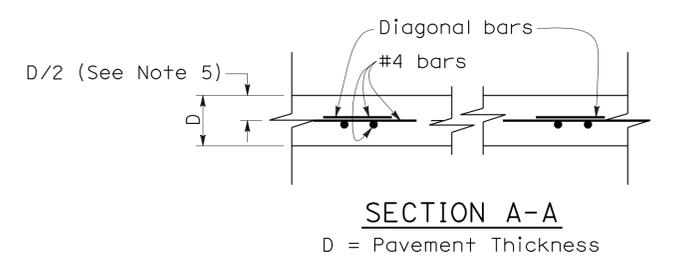
CASE 3

Transverse joint within 2'-0" of drainage inlet wall, or matches drainage inlet wall.



CASE 2

Transverse joint intersects drainage inlet, or matches drainage inlet wall.



NOTES:

- Refer to Project Plans for location and Type of drainage inlets.
- Top of inlet shall be flush with shoulder surface.
- Extend joint filler material to bottom of Lean Concrete Base. Where Lean Concrete Base is not used as base material, the joint filler material shall only extend to the bottom of the new concrete pavement.
- For Jointed Plain Concrete Pavement only. For Continuously Reinforced Concrete Pavement, terminate pavement steel reinforcement 2" clear from all outside edges of isolation joint.
- For Jointed Plain Concrete Pavement only. For Continuously Reinforced Concrete Pavement, see New Standard Plan NSP P4.
- Dowel and tie bars not shown, see Revised Standard Plan RSP P1.

TABLE A

DISTANCE X	BARS REQUIRED
2'-0" to 1'-6"	2
1'-6" to 9"	1 @ X/2
9" or less	None

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**CONCRETE PAVEMENT-
DRAINAGE INLET
DETAILS No. 1**
NO SCALE

ISOLATION JOINT AROUND DRAINAGE INLET

RSP P45 DATED MAY 15, 2009 SUPERSEDES STANDARD PLAN P45
DATED MAY 1, 2006 - PAGE 132 OF THE STANDARD PLANS BOOK DATED MAY 2006.

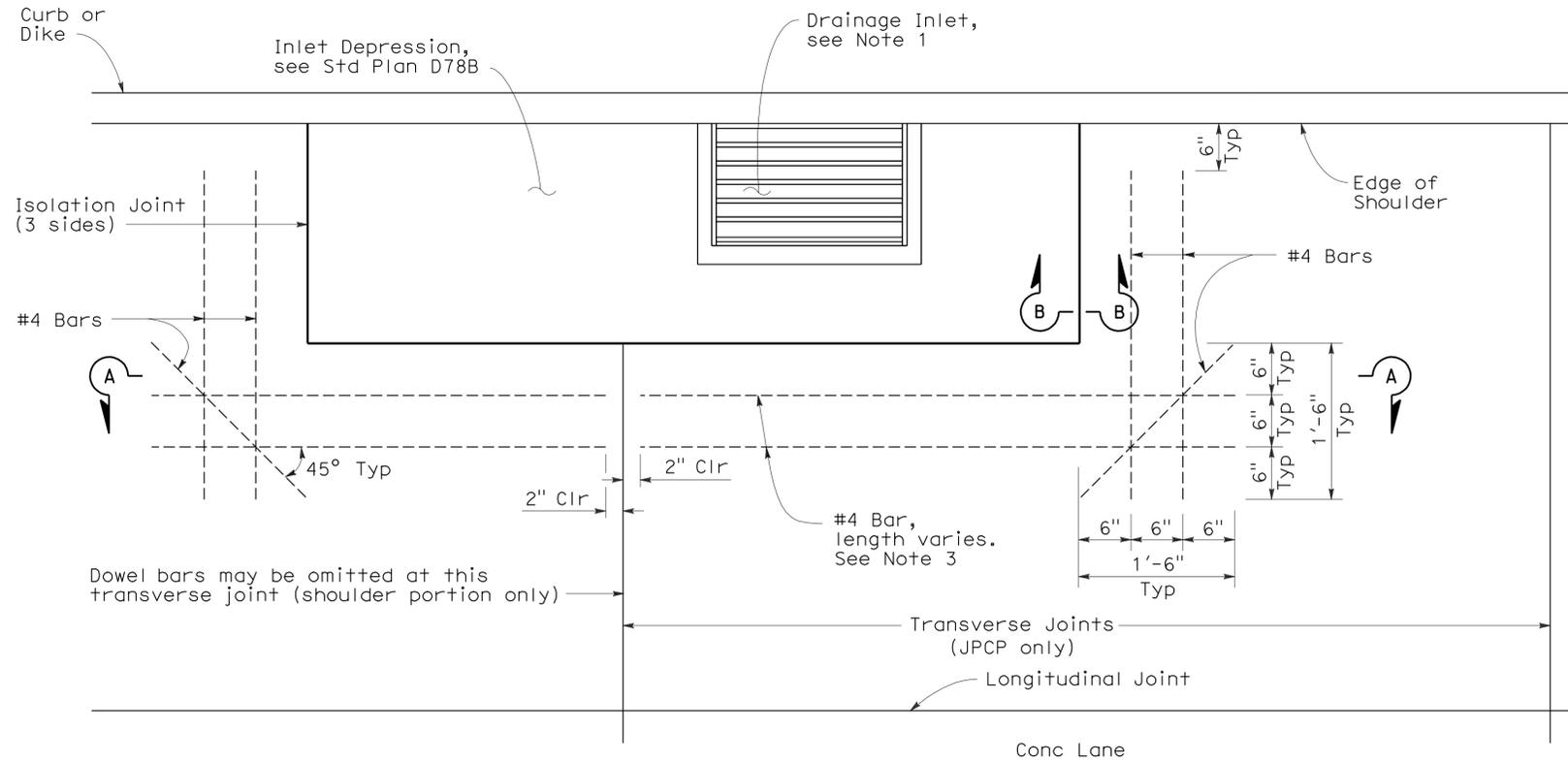
REVISED STANDARD PLAN RSP P45

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	564	595

William K. Farnbach
 REGISTERED CIVIL ENGINEER
 May 15, 2009
 PLANS APPROVAL DATE

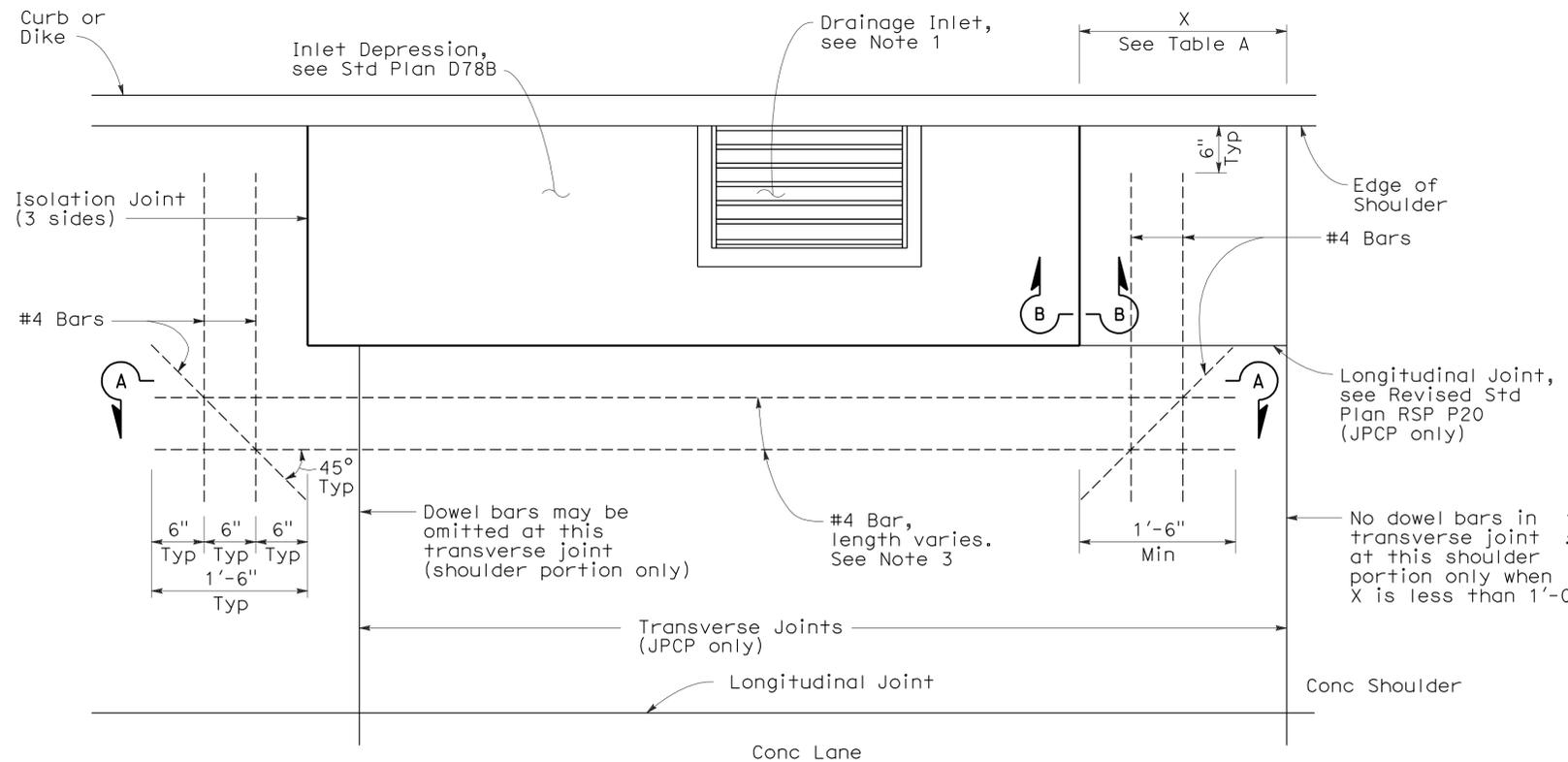
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To accompany plans dated 7-11-11



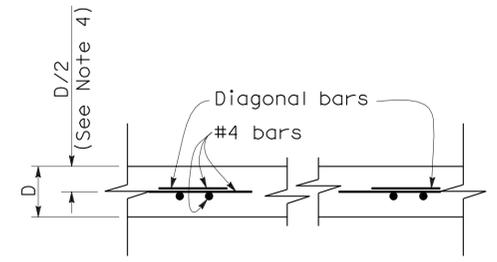
CASE A

Transverse Joint intersects inlet depression or no transverse joints.



CASE B

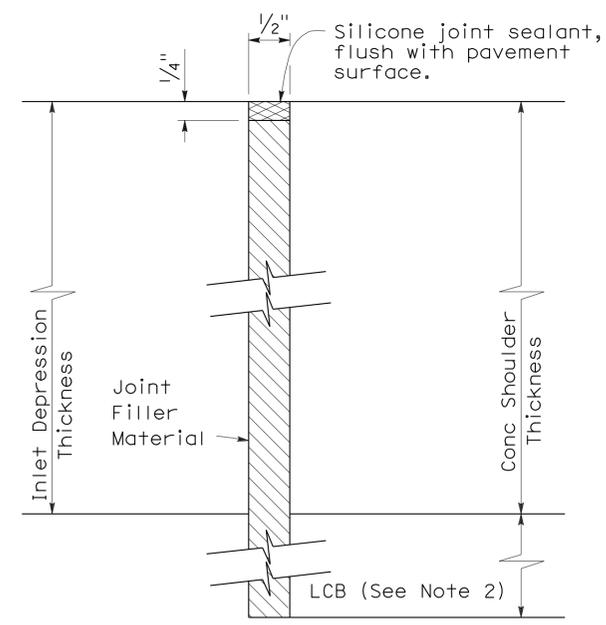
Transverse Joint within 2'-0" of edge of inlet depression.



SECTION A-A
D = Pavement Thickness

TABLE A

DISTANCE X	BARS REQUIRED
2'-0" to 1'-6"	2
1'-6" to 1'-0"	1
1'-0" or less	None



SECTION B-B

ISOLATION JOINT AROUND INLET DEPRESSION

NOTES:

1. Refer to Project Plans for location and type of drainage inlets.
2. Extend joint filler material to bottom of Lean Concrete Base. Where Lean Concrete Base is not used as base material, the joint filler material shall only extend to the bottom of the new concrete pavement.
3. For Jointed Plain Concrete Pavement only. For Continuously Reinforced Concrete Pavement, terminate pavement steel reinforcement 2" clear from all outside edges of isolation joint.
4. For Jointed Plain Concrete Pavement only. For Continuously Reinforced Concrete Pavement, see New Standard Plan NSP P4.

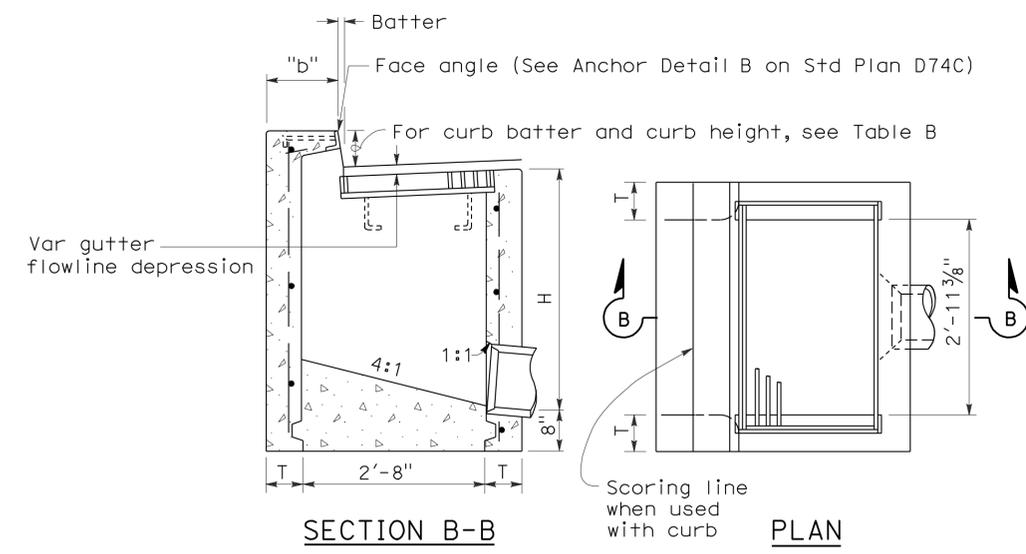
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**CONCRETE PAVEMENT-
 DRAINAGE INLET
 DETAILS No. 2**
 NO SCALE

RSP P46 DATED MAY 15, 2009 SUPERSEDES STANDARD PLAN P46
 DATED MAY 1, 2006 - PAGE 133 OF THE STANDARD PLANS BOOK DATED MAY 2006.

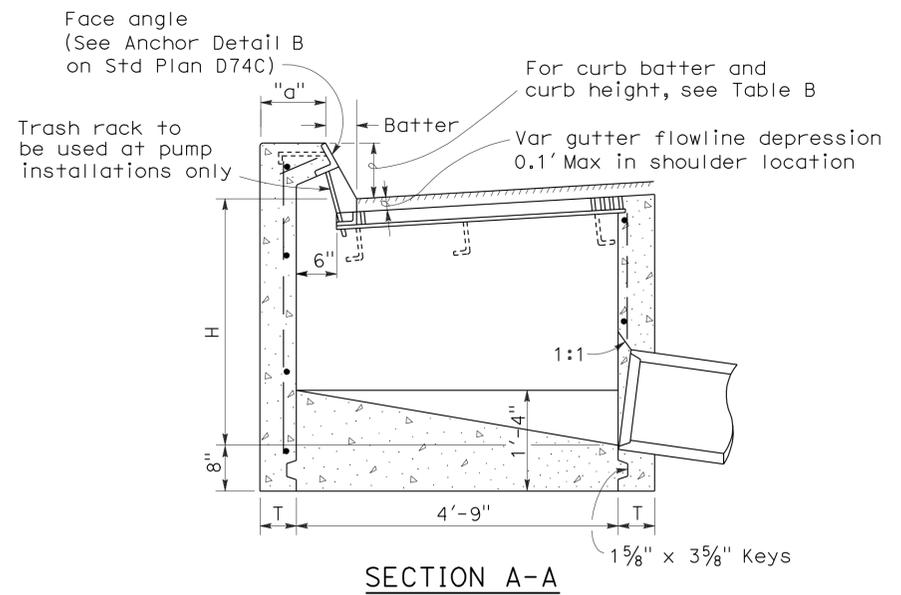
REVISED STANDARD PLAN RSP P46

2006 REVISED STANDARD PLAN RSP P46

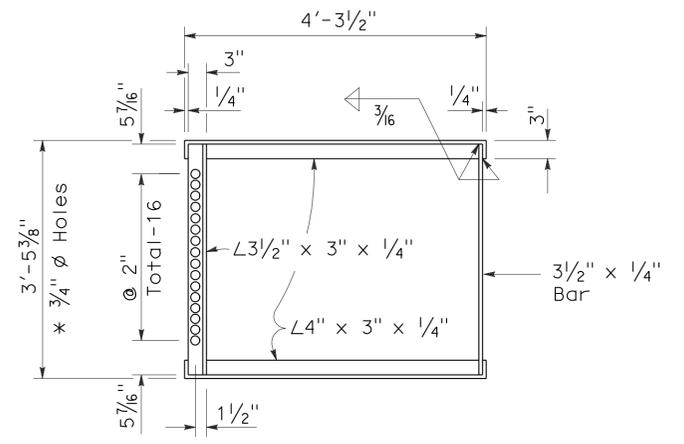
To accompany plans dated 7-11-11



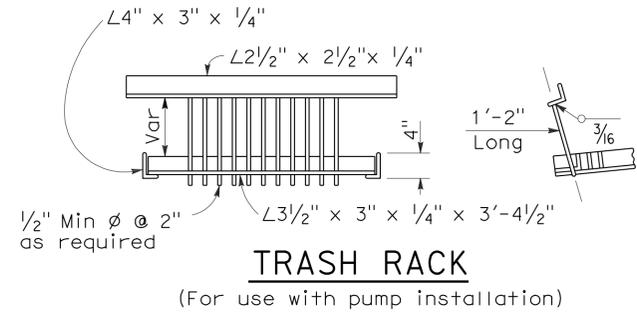
TYPE GO



SECTION A-A



GRATE FRAME FOR TYPE GDO INLET

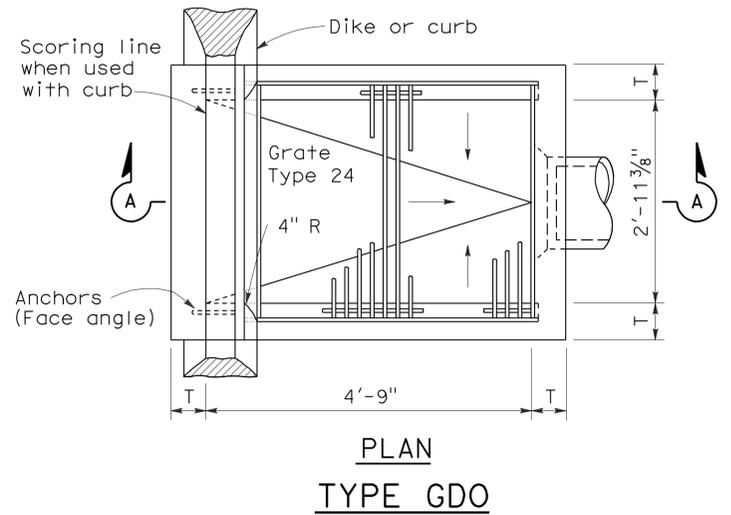


TRASH RACK
(For use with pump installation)

TABLE A
CONCRETE QUANTITIES

TYPE	H=3'-0" TO 8'-0" (T=6")	H=8'-1" TO 20'-0" (T=8")		
	ADDITIONAL PCC PER FOOT (CY)	H=8'-1" (CY)	ADDITIONAL PCC PER FOOT (CY)	
GO	1.24	0.245	3.39	0.346
GDO	1.62	0.322	4.36	0.446

Table based on 8" floor slab, no deduction for pipe openings, and curb type giving highest quantity of concrete. No deductions or adjustments are to be made to these quantities because of pipe openings, different floor alternatives or different curb type.



PLAN
TYPE GDO

TABLE B

CURB TYPE	NORMAL CURB HEIGHT	CURB BATTER	"a" DIMENSION	"b" DIMENSION
A1-6	6"	1 1/2"	T+7 1/2"	T+6 1/2"
A1-8	8"	2"	T+7"	T+6"
B1-6	6"	4"	T+5"	T+4"
Type A Dike	6"	3"	T+6"	T+5"

NOTES:

- "H" is the difference in elevation between the outlet pipe flow line and the normal gutter grade line undepressed.
- For "T" wall thickness, see Table A below.
- Wall reinforcing not required when "H" is 8'-0" or less and the unsupported width or length is 7'-0" or less. Walls exceeding these limits shall be reinforced with #4 @ 18"± centers placed 1/2" clear to inside of box unless otherwise shown.
- Inlet bottom reinforcing not required. See Standard Plan D74C for alternative reinforced bottom.
- Steps - None required where "H" is less than 2'-6". Where "H" is 2'-6" or more, install steps with lowest rung 1'-0" above the floor and highest rung not more than 6" below top of inlet. The distance between steps shall not exceed 1'-0" and shall be uniform throughout the length of the wall. Place steps in the wall without an opening. Step inserts may be substituted for the bar steps. Step Inserts shall comply with State Industrial Safety requirements. See Standard Plan D74C for step details.
- When shown on the project plans, place a 3/4" plain round protection bar horizontally across the length of the opening and bend back 4" into the inlet wall on each side.
- Pipe(s) can be placed in any wall.
- Curb section shall match adjacent curb.
- Basin floors shall have wood trowel finish and shall slope toward the outlet pipe as shown.
- Galvanizing - See Standard Specifications or Special Provisions.
- See Standard Plan D77A and D77B for grate and frame details and weights of miscellaneous iron and Steel.
- See Standard Plan D78A for gutter depression details.
- Full penetration butt welds may be substituted for the fillet welds on all anchors.
- Standard square, hexagon, round or equivalent headed anchors may be substituted for the right angle hooks on the anchors shown on this plan.
- Cast-in-place or precast alternative is optional with contractor. See Standard Specifications.
- Cast-in-place inlets to be formed around all pipes/stubs intersecting the inlet and concrete poured in one continuous operation. Precast inlets shall have mortared pipe connections conforming to details for Type GCP inlets on Standard Plan D75B. See Standard Specifications for mortar composition.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
DRAINAGE INLETS
NO SCALE

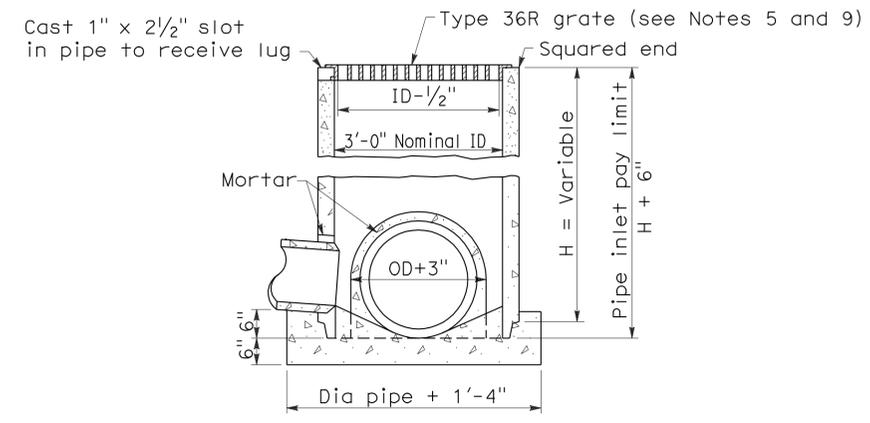
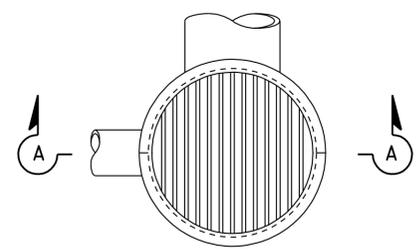
2006 REVISED STANDARD PLAN RSP D74B

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	566	595

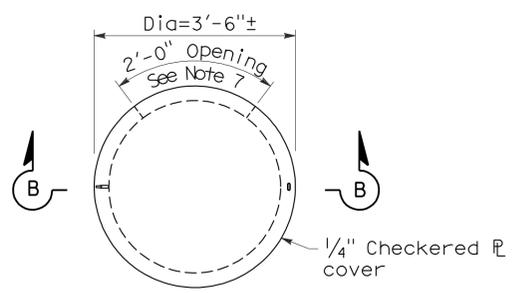
Raymond Don Tsztso
 REGISTERED CIVIL ENGINEER
 June 6, 2008
 PLANS APPROVAL DATE
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.
 REGISTERED PROFESSIONAL ENGINEER
 Raymond Don Tsztso
 No. C37332
 Exp. 6-30-08
 CIVIL
 STATE OF CALIFORNIA

To accompany plans dated 7-11-11

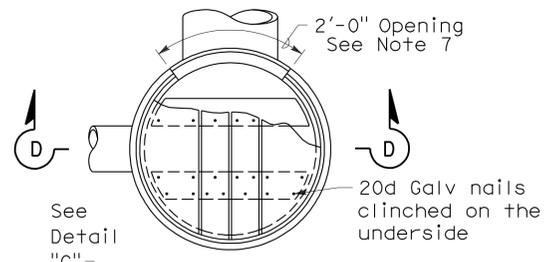
2006 REVISED STANDARD PLAN RSP D75B



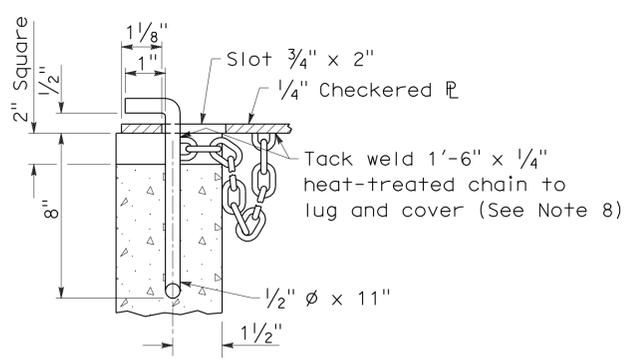
SECTION A-A
TYPE GCP
CONCRETE PIPE INLET WITH GRATE



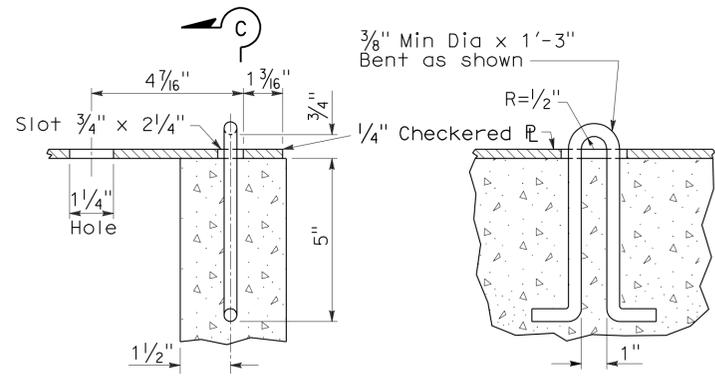
SECTION B-B
TYPE OCP or OCPI
CONCRETE PIPE INLET WITH STEEL COVER
(See Note 6)



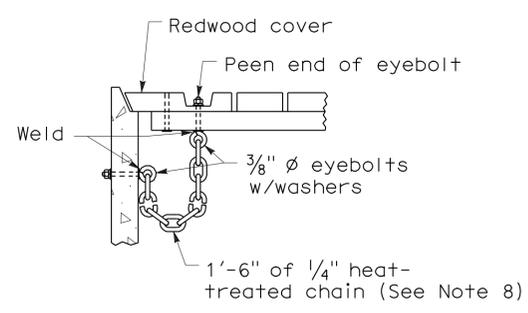
SECTION D-D
TYPE OCP or OCPI
CONCRETE PIPE INLET WITH REDWOOD COVER
(See Notes 6 and 10)



DETAIL 'E'



SECTION C-C
DETAIL 'F'



DETAIL 'G'

NOTES:

- For details of steel pipe inlets, see Standard Plan D75A.
- For details of ladder and steps and when ladder or steps are required, see Standard Plan D75C.
- Inlet pipes shall not protrude into basin.
- Except for inlets used for junction boxes, basin floors shall have minimum slope of 4:1 from all directions toward outlet pipe, and a wood trowel finish.
- See Revised Standard Plan RSP D77A and Standard Plan D77B for Grate and Frame Details and Weights of Miscellaneous Iron and Steel.
- Designation of Type OCPI pipe inlets on plans indicates trash racks are to be furnished and installed on all side openings. See Standard Plan D75C for Trash Rack details.
- More than one side opening may be required. Location and number as ordered by the Engineer. Opening may be cast in pipe.
- Chain to be provided when specified.
- Place pipe so bars of grate will be parallel with main surface flow.
- Redwood covers shall only be placed at locations designated on the plans.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

CONCRETE PIPE INLETS

NO SCALE

RSP D75B DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN D75B
DATED MAY 1, 2006 - PAGE 153 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP D75B

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	567	595

Gregory A. Balzer
 LICENSED LANDSCAPE ARCHITECT
 June 5, 2009
 PLANS APPROVAL DATE
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To accompany plans dated 7-11-11

2006 REVISED STANDARD PLAN RSP H1

A

AB aggregate base
 ABS acrylonitrile-butadiene-styrene
 AC asphalt concrete
 Adj adjacent/adjustable
 AIC auxiliary irrigation controller
 Alt alternative
 AMEND amendment
 ARV air release valve
 AUTO automatic
 AUX auxiliary
 AVB atmospheric vacuum breaker

B

B&B balled and burlapped
 B/B brass/bronze
 B/B/PL brass/bronze/plastic
 B/PL brass/plastic
 BFM bonded fiber matrix
 Bit Ctd bituminous coated
 BP booster pump
 BPA backflow preventer assembly
 BPAE backflow preventer assembly in enclosure
 BPE backflow preventer enclosure
 BV ball valve

C

CAP corrugated aluminum pipe
 CARV combination air release valve
 CCA cam coupler assembly
 CEC controller enclosure cabinet
 CHDPE corrugated high density polyethylene
 CL chain link
 CNC control and neutral conductors
 Conc concrete
 Cond conduit
 CSP corrugated steel pipe
 CST center strip
 CV check valve

D

Dia diameter
 DIP ductile iron pipe
 DN diameter nominal

E

EA each
 Elect electric/electrical
 Elev elevation
 ENCL enclosure
 EP edge of pavement
 ES edge of shoulder
 EST end strip
 ESTB establishment
 ETW edge of traveled way

F

F full circle
 F/P full/part circle
 FAU filter assembly unit
 FCV flow control valve
 FERT fertilizer
 FG finished grade
 FIPT female iron pipe thread
 FIS fertilizer injector system
 FL flow line
 FM flow monitor
 FS flow sensor
 Ft foot/feet
 FV flush valve

G

GAL Gallon(s)
 Galv galvanized
 GARV garden valve
 GPH gallons per hour
 GPM gallons per minute
 GSP galvanized steel pipe
 GV gate valve

H

H half circle
 HB hose bib
 HDPE high density polyethylene
 HP horsepower/hinge point
 HPL high pressure line
 Hwy highway

I

IC irrigation controller
 ICC irrigation controller(s) in controller enclosure cabinet
 ID inside diameter
 In inches
 IFS irrigation filtration system
 IPS iron pipe size
 IPT iron pipe thread
 Irr irrigation

L

L length
 LF linear foot

M

Max maximum
 MBGR metal beam guard railing
 MCV manual control valve
 MIC master irrigation controller
 Min minimum
 MIPT male iron pipe thread
 Misc miscellaneous
 Mtl material
 MVP maintenance vehicle pullout

N

NCN no common name
 NL nozzle line
 No. number
 NPT national pipe thread

O

O/C on center
 OD outside diameter
 Oz ounce

P

P part circle
 PB pull box
 PCC portland cement concrete
 PE polyethylene
 Pkt packet
 PL plastic
 PLT plant/planting
 PLT ESTB plant establishment
 PM post mile
 PR pressure rated
 PRLV pressure relief valve
 PSFM polymer stabilized fiber matrix
 PSI pounds per square inch
 PRV pressure reducing valve
 PVC polyvinyl chloride
 Pvmnt pavement

Q

Q quarter circle
 QCV quick coupling valve

R

R radius
 RCP reinforced concrete pipe
 RCV remote control valve
 RCVM remote control valve (master)
 RCVMF remote control valve (master) w/ flow meter
 RCW recycled/reclaimed water
 RECP rolled erosion control product
 REQ required
 R/W right of way

S

S slip
 SCC sprinkler control conduit
 SCH schedule
 SF state-furnished
 Shld shoulder
 SQFT square foot/feet
 SQYD square yard(s)
 SST side strip
 Sta station
 Std standard
 SW sidewalk/sound wall

T

T third circle/thread
 TLS truck loading standpipe
 TQ three quarter circle
 TRM turf reinforcement mat
 TRVD traveled
 TT two third circle
 Typ typical

U

UG underground

V

VAU valve assembly unit

W

W width
 W/ with
 WM water meter
 WS wye strainer
 WSP welded steel pipe
 WWM welded wire mesh

NOTE:
 FOR ADDITIONAL ABBREVIATIONS,
 SEE STANDARD PLANS A10A AND A10B.

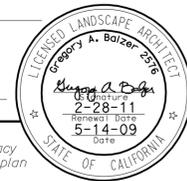
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**PLANTING AND IRRIGATION
 ABBREVIATIONS**

NO SCALE
 RSP H1 DATED JUNE 5, 2009 SUPERSEDES STANDARD PLAN H1
 DATED MAY 1, 2006 - PAGE 201 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP H1

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	568	595

Gregory A. Balzer
 LICENSED LANDSCAPE ARCHITECT
 June 5, 2009
 PLANS APPROVAL DATE
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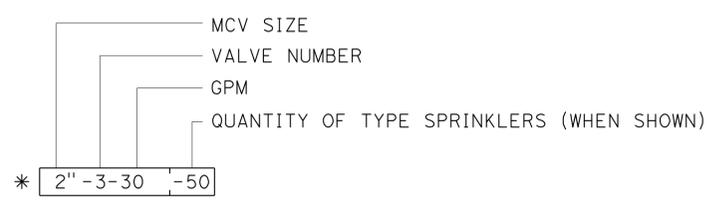
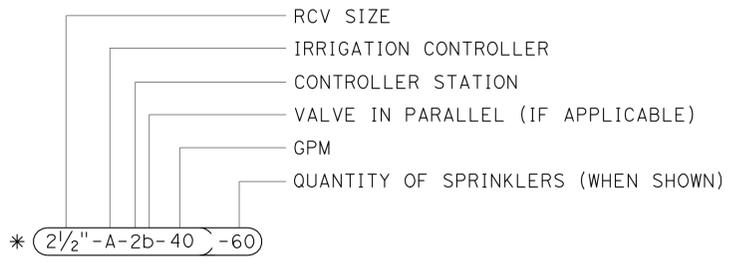


To accompany plans dated 7-11-11

EXISTING	PROPOSED	ITEM DESCRIPTION
		WATER METER (WM)
		BACKFLOW PREVENTER ASSEMBLY (BPA)
		BACKFLOW PREVENTER ASSEMBLY IN ENCLOSURE (BPAE)
		BACKFLOW PREVENTER ENCLOSURE (BPE)
		BOOSTER PUMP (BP)
		TRUCK LOADING STANDPIPE (TLS)
		FLOW SENSOR (FS)
		MASTER IRRIGATION CONTROLLER (MIC)
		AUXILIARY IRRIGATION CONTROLLER (AIC)
		IRRIGATION CONTROLLER (IC)/ IRRIGATION CONTROLLER (IC) (BATTERY) IRRIGATION CONTROLLER (IC) (SOLAR)
		IRRIGATION CONTROLLER(S) IN CONTROLLER ENCLOSURE CABINET (ICC)
		CONTROL AND NEUTRAL CONDUCTORS (CNC)
		SPRINKLER CONTROL CONDUIT (SCC)
		IRRIGATION CROSSOVER
		EXTEND IRRIGATION CROSSOVER
		IRRIGATION SLEEVE
		DUCTILE IRON PIPE (SUPPLY LINE) (MAIN) (DIP)
		GALVANIZED STEEL PIPE (SUPPLY LINE) (MAIN) (GSP)
		GALVANIZED STEEL PIPE (SUPPLY LINE) (LATERAL) (GSP)
		PLASTIC PIPE (PR 200) (SUPPLY LINE) (MAIN)
		PLASTIC PIPE (PR 200) (SUPPLY LINE) (LATERAL)
		PLASTIC PIPE (IRRIGATION LINE)
		REMOTE CONTROL VALVE (RCV) REMOTE CONTROL VALVE (MASTER) (RCVM) REMOTE CONTROL VALVE (MASTER) W/FLOW METER (RCVMF)
		MANUAL CONTROL VALVE (MCV)
		VALVE ASSEMBLY UNIT (VAU)
		WYE STRAINER (WS)
		FILTER ASSEMBLY UNIT (FAU)
		GATE VALVE (GV)
		BALL VALVE (BV)

EXISTING	PROPOSED	ITEM DESCRIPTION
		QUICK COUPLING VALVE (QCV)
		CAM COUPLER ASSEMBLY (CCA)
		PRESSURE REDUCING VALVE (PRV)
		PRESSURE RELIEF VALVE (PRLV)
		FLOW CONTROL VALVE (FCV)
		COMBINATION AIR RELEASE VALVE (CARV)
		CHECK VALVE (CV)
		FLUSH VALVE (FV)
		NOZZLE LINE W/TURNING UNION
		IRRIGATION SYSTEM
		IRRIGATION SYSTEM TO BE REMOVED
		CHAIN LINK GATE
		QUICK COUPLING VALVE W/SPRINKLER PROTECTOR
		SPRINKLER W/SPRINKLER PROTECTOR
		CONNECT TO EXISTING SYSTEM
		CAP
		CAP EXISTING

VALVE CODE



* VALVE CODES FOR EXISTING VALVES ARE SHOWN IN A DASHED ENCLOSURE.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
PLANTING AND IRRIGATION SYMBOLS
NO SCALE

RSP H2 DATED JUNE 5, 2009 SUPERSEDES RSP H2 DATED MARCH 7, 2008 AND STANDARD PLAN H2 DATED MAY 1, 2006 - PAGE 202 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP H2

2006 REVISED STANDARD PLAN RSP H2

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	569	595

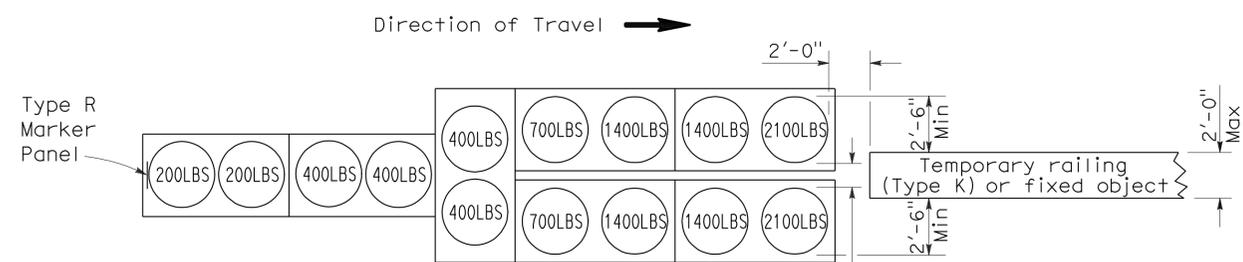
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

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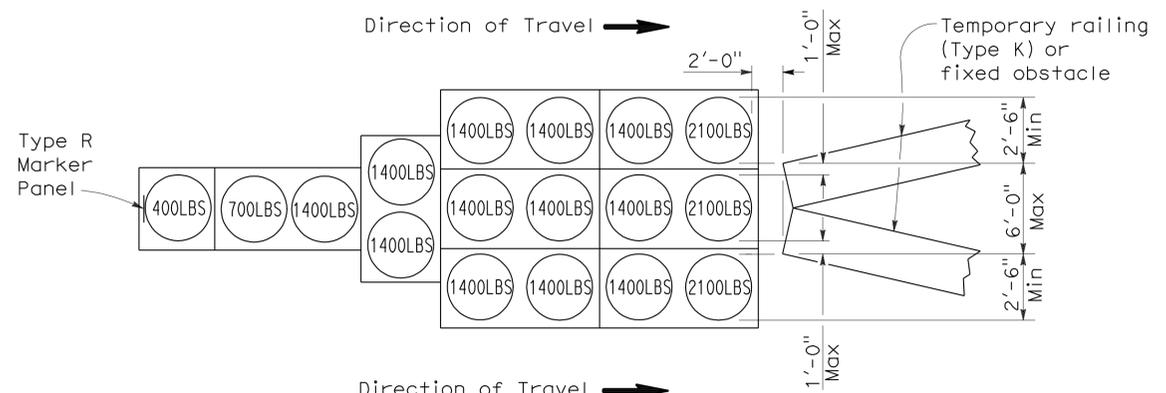
REGISTERED PROFESSIONAL ENGINEER
Randell D. Hiatt
No. C50200
Exp. 6-30-09
CIVIL
STATE OF CALIFORNIA

To accompany plans dated 7-11-11



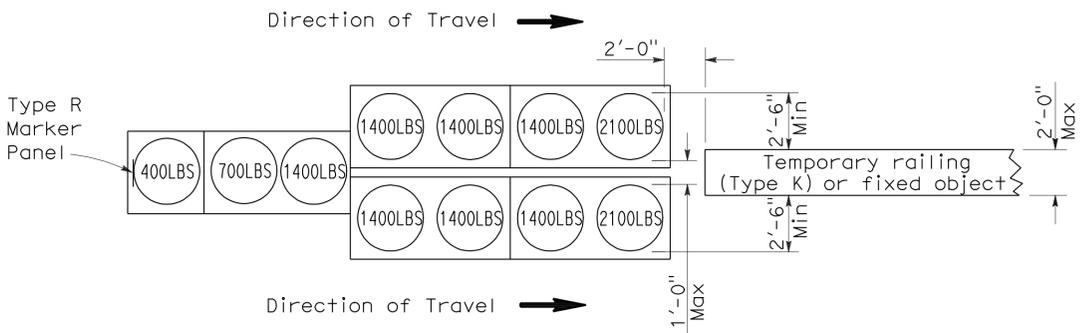
ARRAY 'TU14'

Approach speed 45 mph or more



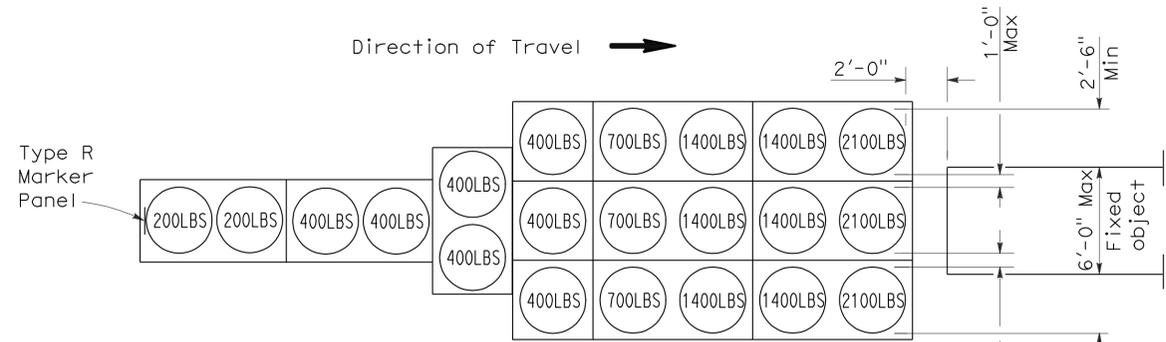
ARRAY 'TU17'

Approach speed less than 45 mph



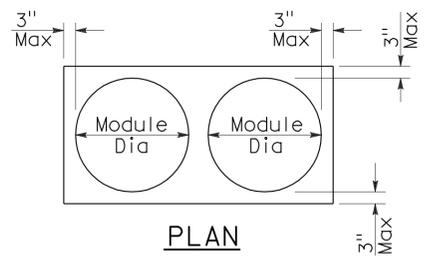
ARRAY 'TU11'

Approach speed less than 45 mph

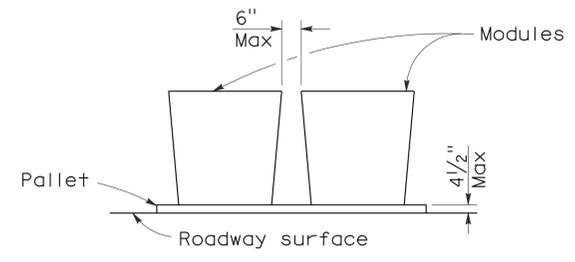


ARRAY 'TU21'

Approach speed 45 mph or more



PLAN



ELEVATION

CRASH CUSHION PALLET DETAIL

See Note 7

NOTES:

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

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

NO SCALE

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

REVISED STANDARD PLAN RSP T1A

2006 REVISED STANDARD PLAN RSP T1A

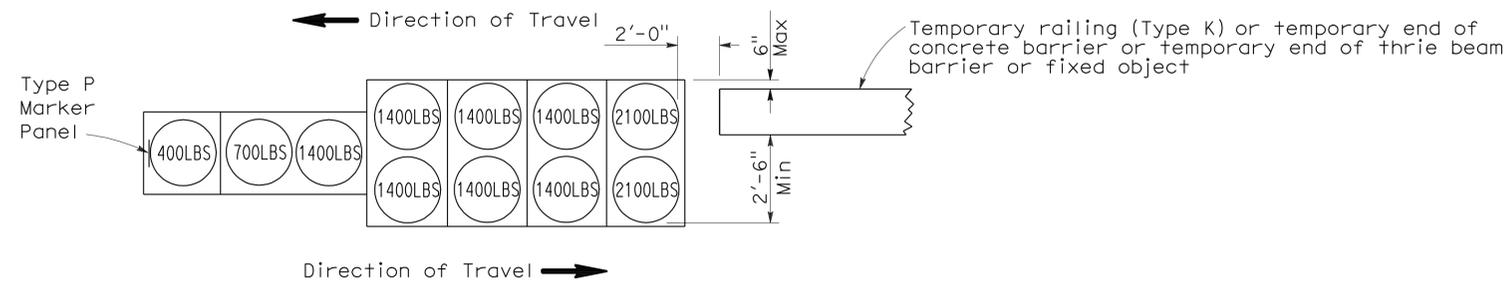
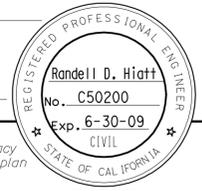
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	570	595

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

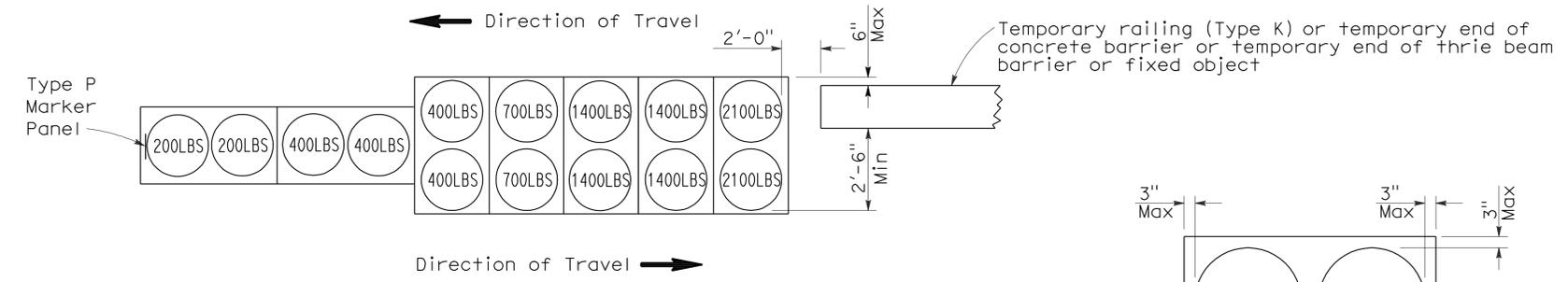
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To accompany plans dated 7-11-11



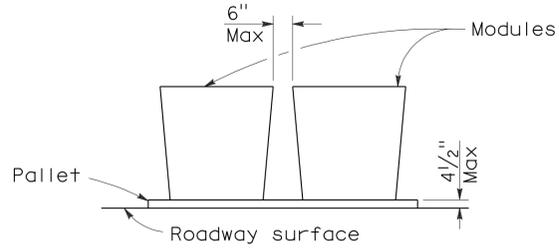
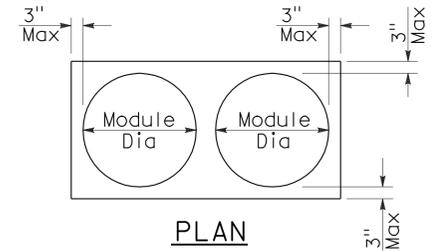
ARRAY 'TB11'

Approach speed less than 45 mph



ARRAY 'TB14'

Approach speed 45 mph or more



CRASH CUSHION PALLET DETAIL
See Note 7

NOTES:

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**TEMPORARY CRASH CUSHION,
SAND FILLED
(BIDIRECTIONAL)**
NO SCALE

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

REVISED STANDARD PLAN RSP T1B

2006 REVISED STANDARD PLAN RSP T1B

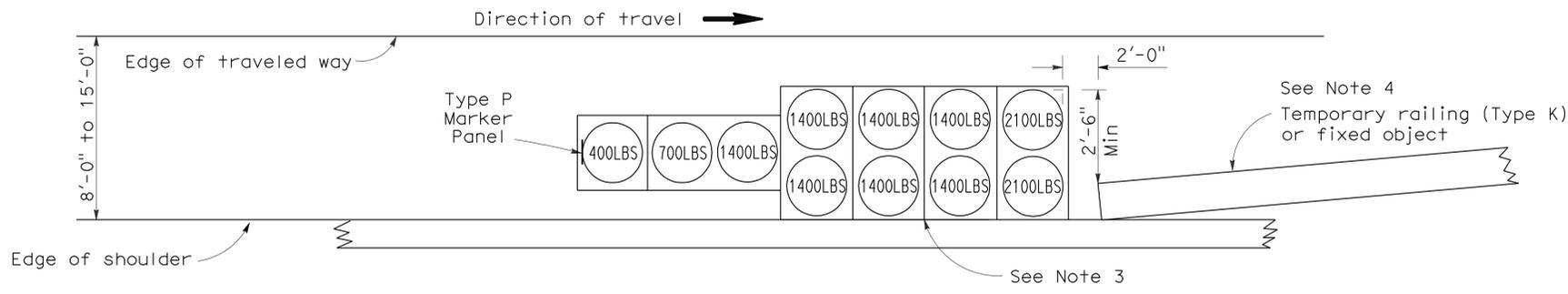
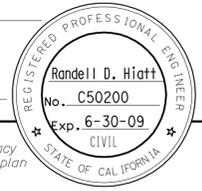
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	571	595

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

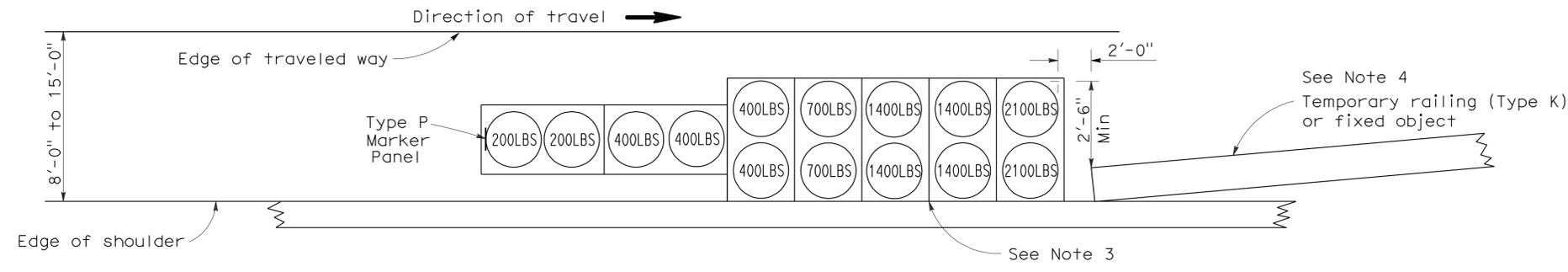
June 6, 2008
PLANS APPROVAL DATE

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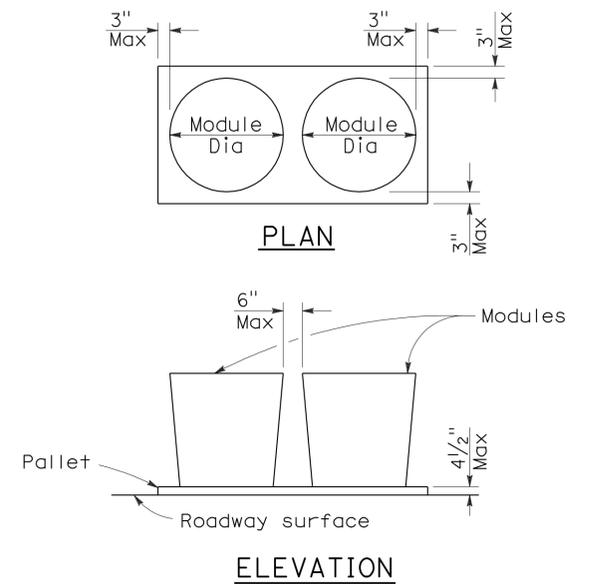
To accompany plans dated 7-11-11



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



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



CRASH CUSHION PALLET DETAIL
See Note 11

NOTES:

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**TEMPORARY CRASH CUSHION,
SAND FILLED
(SHOULDER INSTALLATIONS)**

NO SCALE
RSP T2 DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN T2
DATED MAY 1, 2006 - PAGE 213 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP T2

2006 REVISED STANDARD PLAN RSP T2

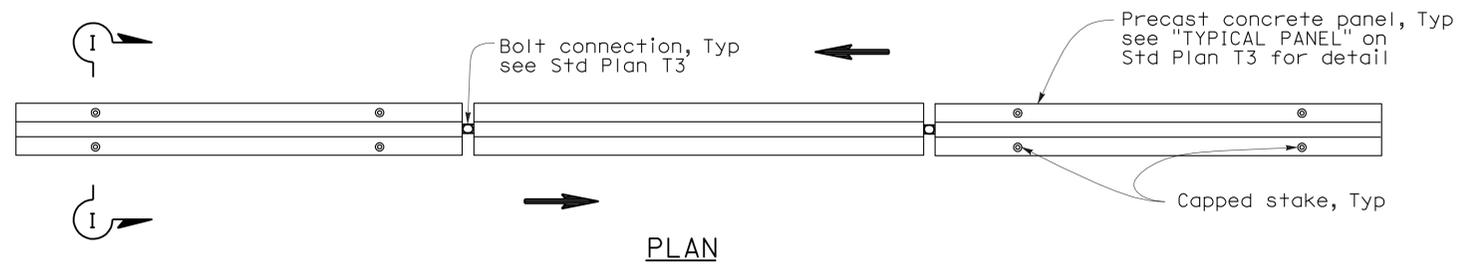
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	572	595

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

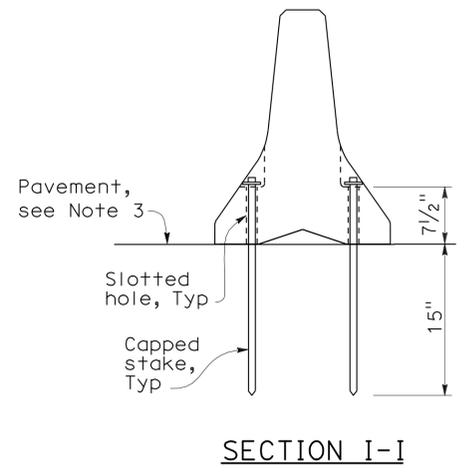
May 20, 2011
PLANS APPROVAL DATE

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

To accompany plans dated 7-11-11

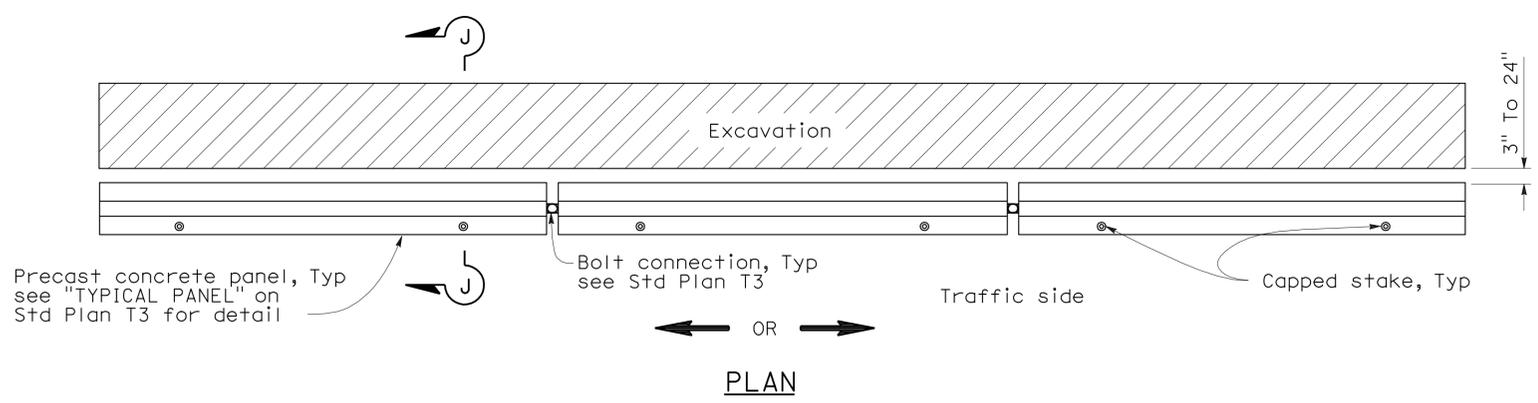


RAILING STAKING CONFIGURATION FOR TWO-WAY TRAFFIC
See Note 1

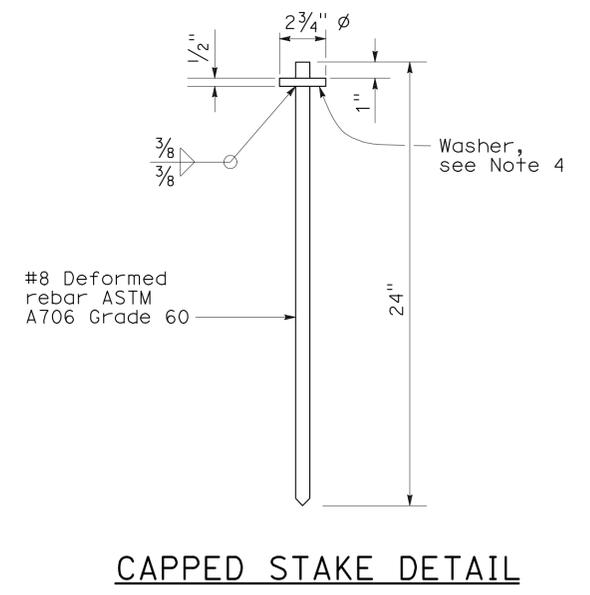
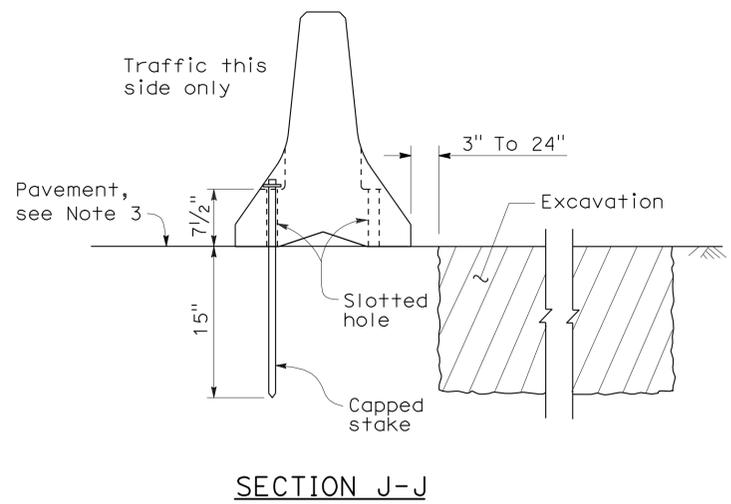


NOTES:

1. Where Type K Temporary Railing is placed as a temporary or long term barrier in two-way traffic on highways with less than 24" from the edge of traveled way, use four capped stakes per every other panel with end panels staked.
2. Where Type K Temporary Railing is placed 3" to 24" from the edge of an excavation on highways, use two capped stakes per panel along the traffic side.
3. Staked Type K Temporary Railing must be supported by at least 4" thick concrete, hot mix asphalt or existing asphalt concrete pavement.
4. The minimum yield strength for the washer must be 60,000 psi.
5. Direction of adjacent traffic indicated by \Rightarrow .



RAILING STAKING CONFIGURATION ADJACENT TO AN EXCAVATION
See Note 2



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**TEMPORARY RAILING
(TYPE K)**

NO SCALE

NSP T3A DATED MAY 20, 2011 SUPPLEMENTS
THE STANDARD PLANS BOOK DATED MAY 2006.

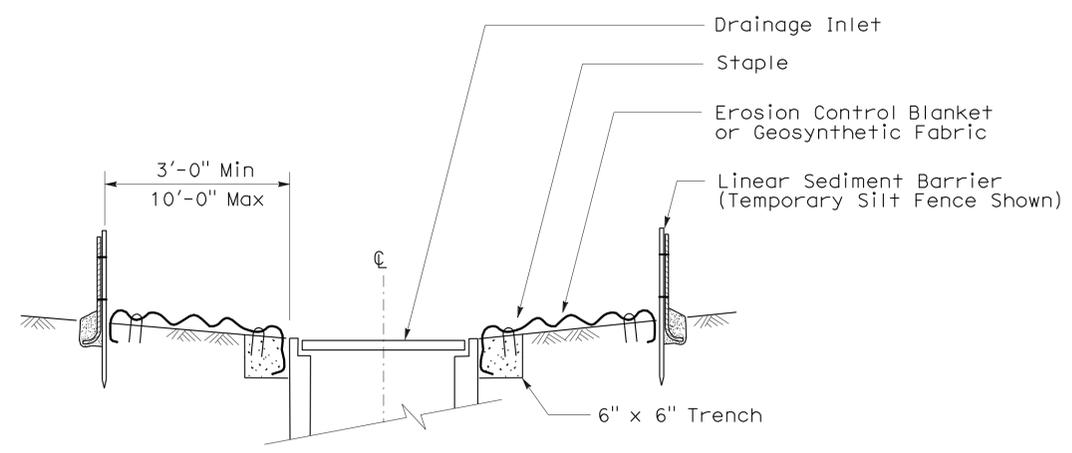
2006 NEW STANDARD PLAN NSP T3A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	573	595

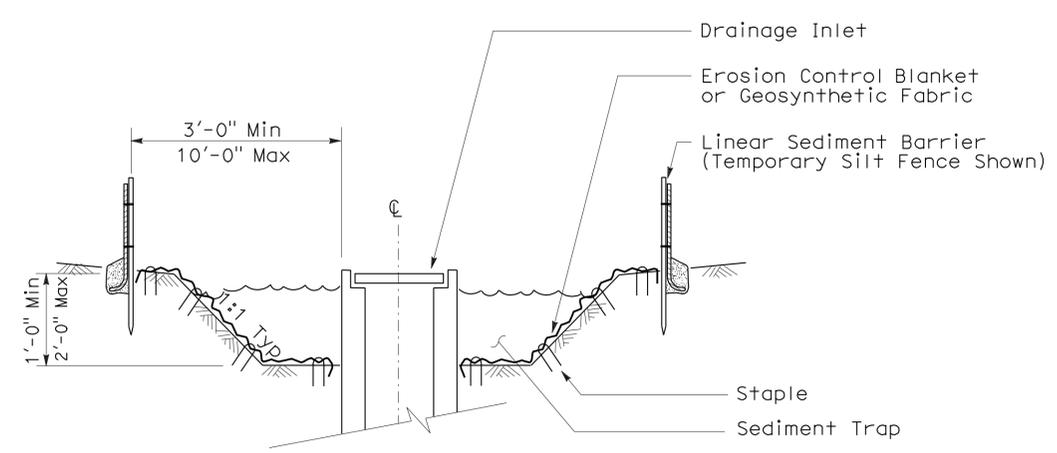
Robert B. Schott
 LICENSED LANDSCAPE ARCHITECT
 August 15, 2008
 PLANS Approval DATE
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

To accompany plans dated 7-11-11

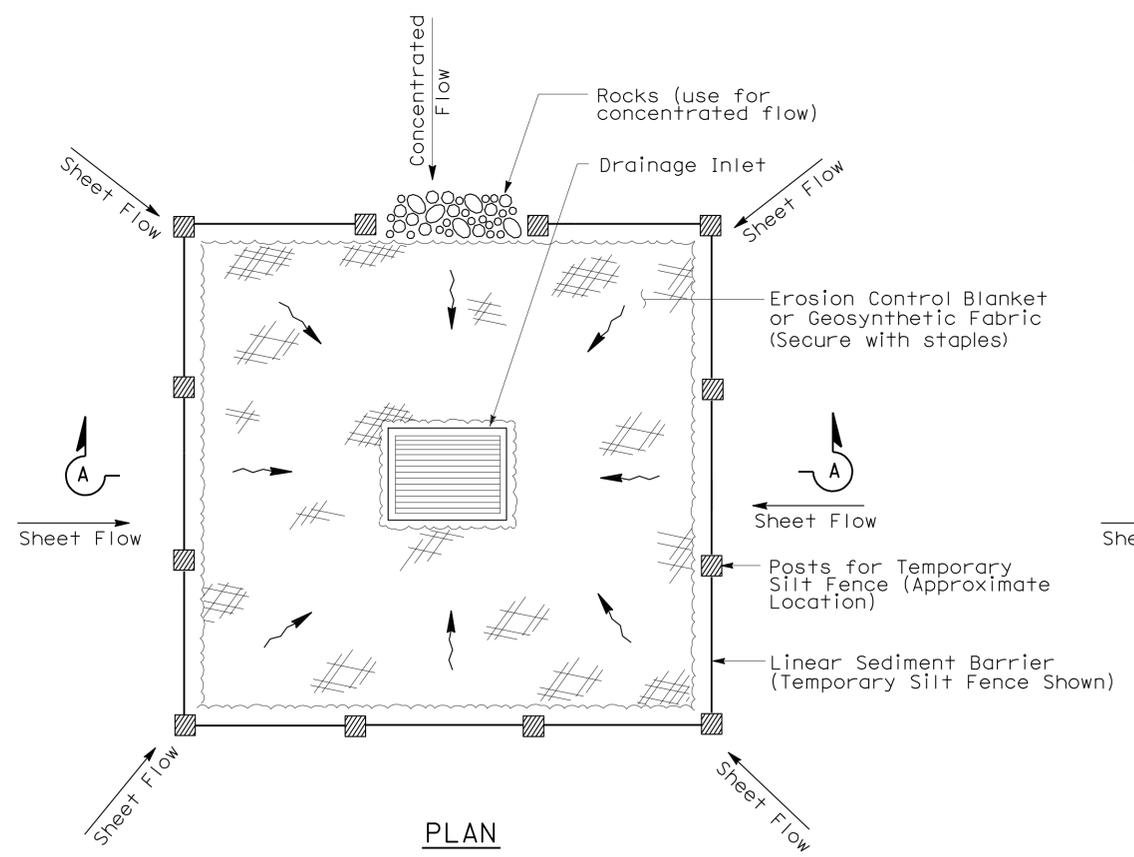
- NOTES:**
- See Standard Plan T51 for Temporary Silt Fence.
 - Dimensions may vary to fit field conditions.



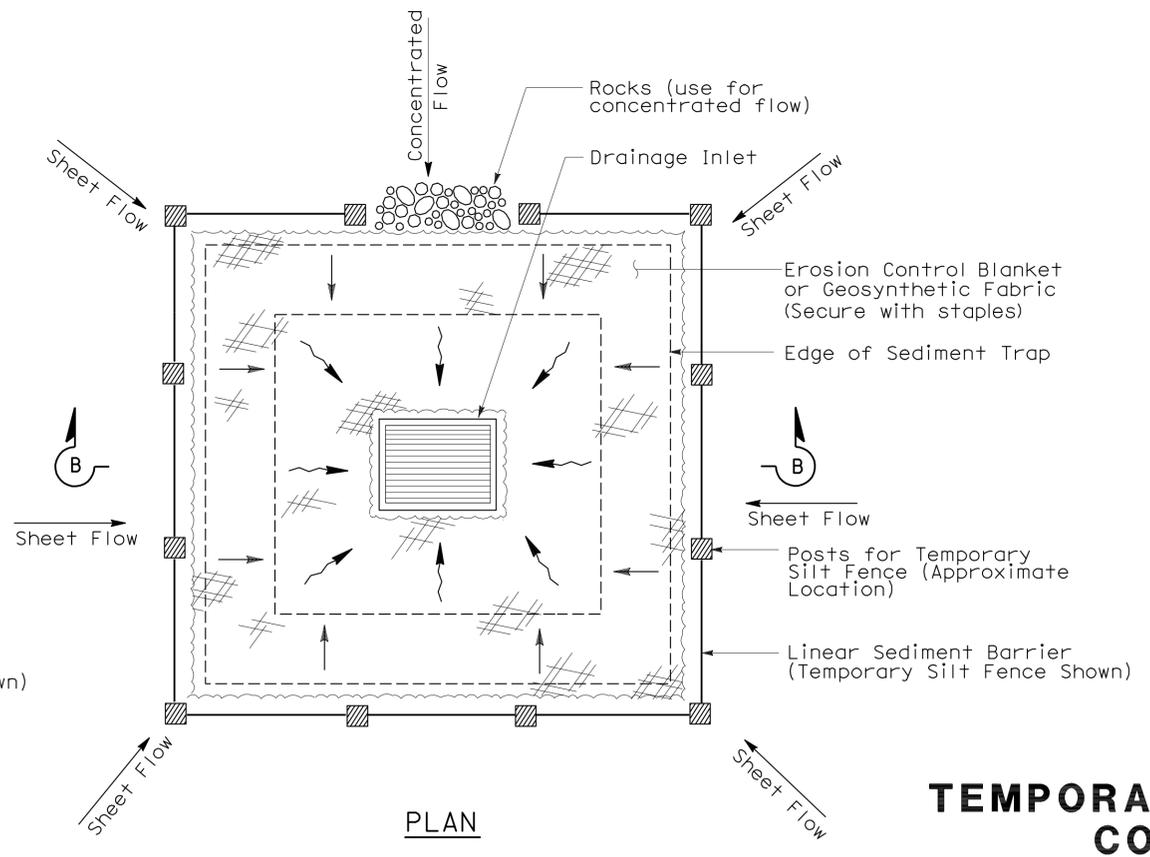
SECTION A-A



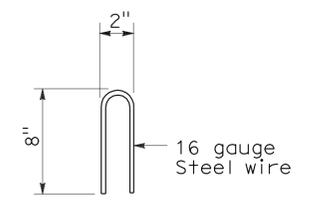
SECTION B-B



TEMPORARY DRAINAGE INLET PROTECTION (TYPE 1)



TEMPORARY DRAINAGE INLET PROTECTION (TYPE 2) (EXCAVATED SEDIMENT TRAP)



STAPLE DETAIL

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
TEMPORARY WATER POLLUTION CONTROL DETAILS (TEMPORARY DRAINAGE INLET PROTECTION)
 NO SCALE

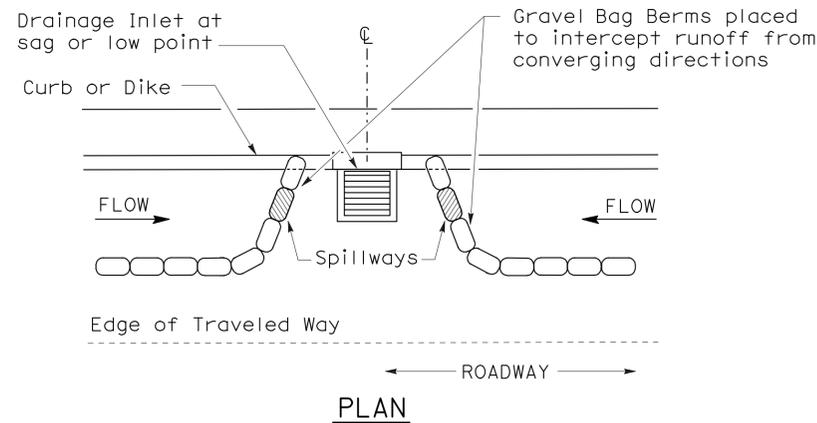
NSP T61 DATED AUGUST 15, 2008 SUPPLEMENTS THE STANDARD PLANS BOOK DATED MAY 2006.

2006 NEW STANDARD PLAN NSP T61

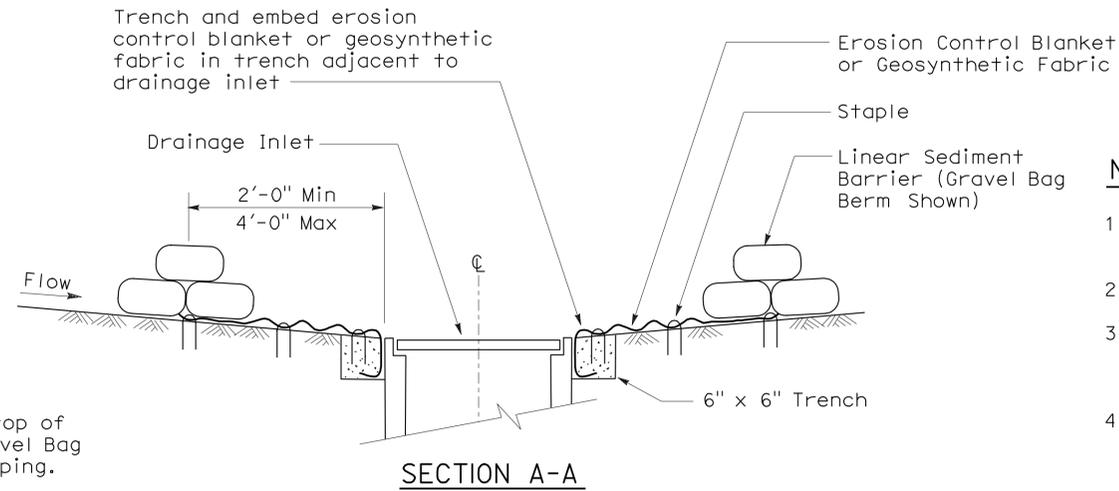
GRAVEL BAG BERM (TYPE 3A) SPACING TABLE

SLOPE OF ROADWAY (PERCENT)	1 to 3.9	4 to 5.9	6 to 7.9	8 to 10	10+
INTERVAL BETWEEN BERM	100'	75'	50'	25'	12'

For slope of less than 1%, install barriers only if erosion/sediment is prevalent



PLAN
CONFIGURATION FOR SAG POINT INLET (GRAVEL BAG BERM)

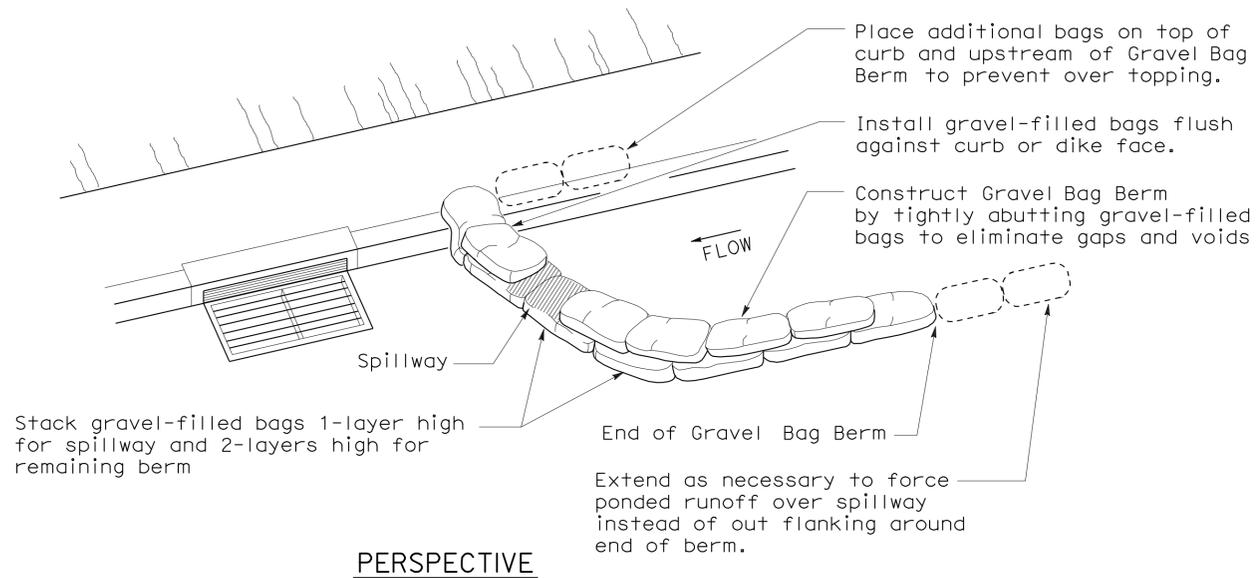


SECTION A-A

NOTES:

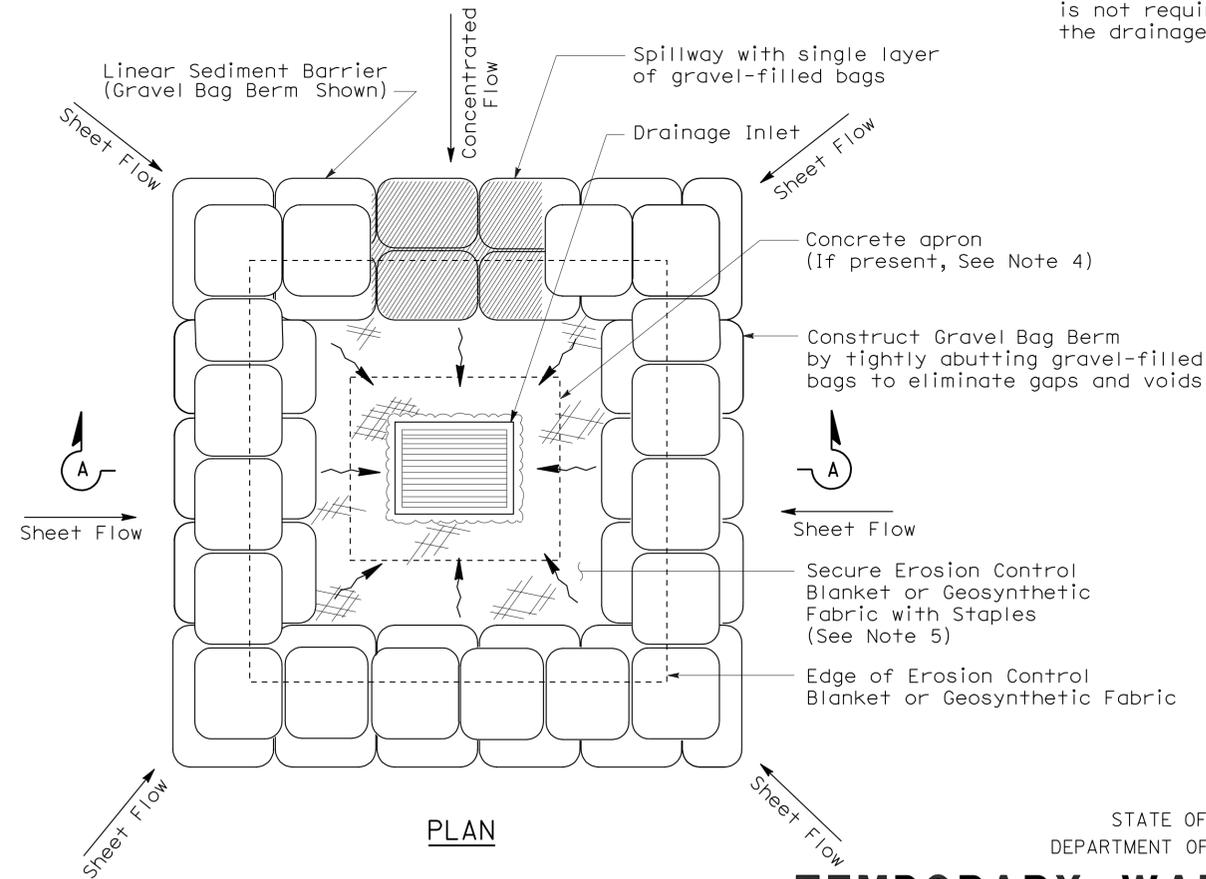
1. Place safety cones adjacent to drainage inlet protection.
2. Dimensions may vary to fit field conditions.
3. Install a minimum of 3 gravel bag berms upstream of each drainage inlet to be protected.
4. Position erosion control blanket or geosynthetic fabric at edge of concrete apron and secure in trench.
5. Erosion control blanket or geosynthetic fabric is not required if the area adjacent to the drainage inlet is vegetated or paved.

To accompany plans dated 7-11-11



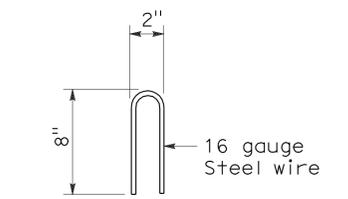
PERSPECTIVE

Stack gravel-filled bags 1-layer high for spillway and 2-layers high for remaining berm

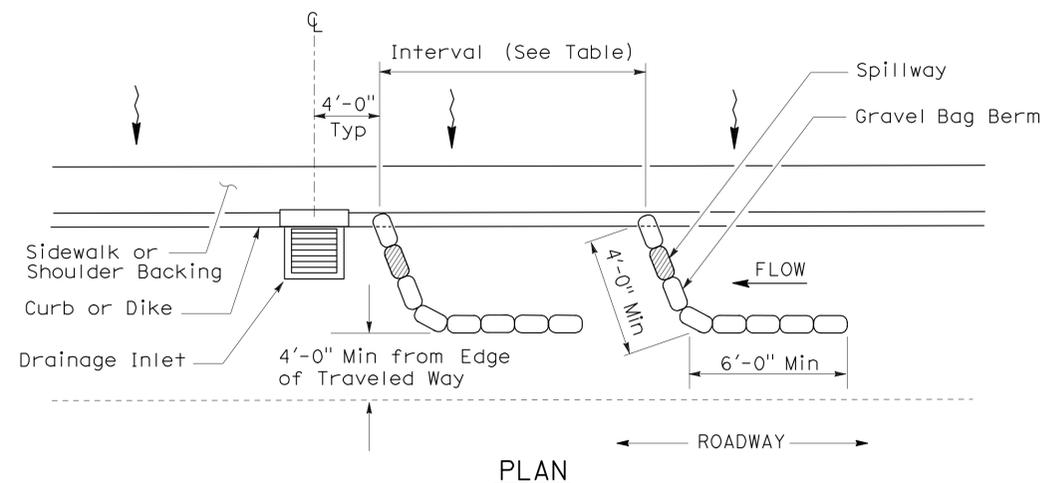


PLAN

TEMPORARY DRAINAGE INLET PROTECTION (TYPE 3B)



STAPLE DETAIL



PLAN

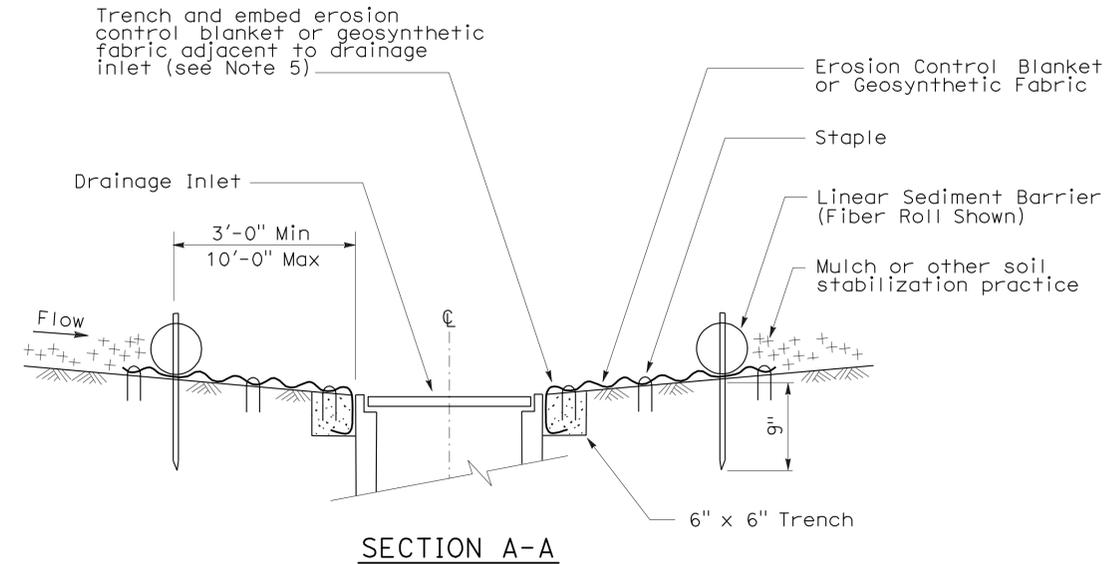
TEMPORARY DRAINAGE INLET PROTECTION (TYPE 3A) (GRAVEL BAG BERM)

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
TEMPORARY WATER POLLUTION CONTROL DETAILS (TEMPORARY DRAINAGE INLET PROTECTION)

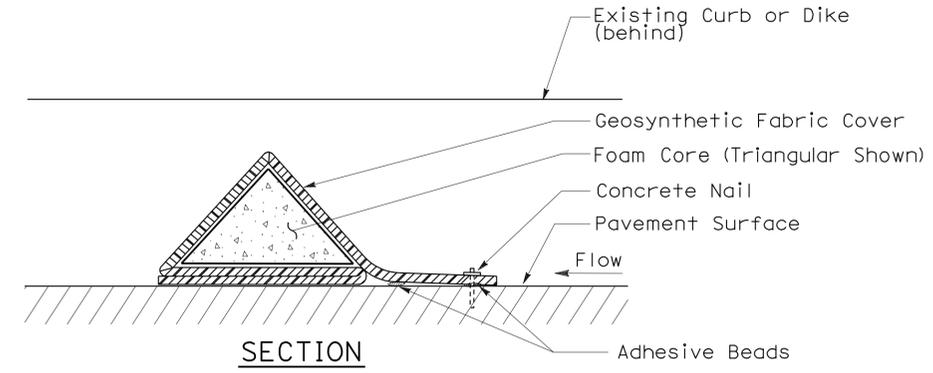
NO SCALE
NSP T62 DATED AUGUST 15, 2008 SUPPLEMENTS THE STANDARD PLANS BOOK DATED MAY 2006.

FLEXIBLE SEDIMENT BARRIER SPACING TABLE

SLOPE OF ROADWAY (PERCENT)	0 to 0.9	1 to 1.9	2 to 2.9	3 to 4	5+
INTERVAL BETWEEN BARRIERS	50'	35'	30'	25'	20'
ANGLE FROM FACE OF CURB	70°	70°	70°	45°	45°
SUGGESTED BARRIER LENGTH	6'	6'	6'	6'	6'



SECTION A-A

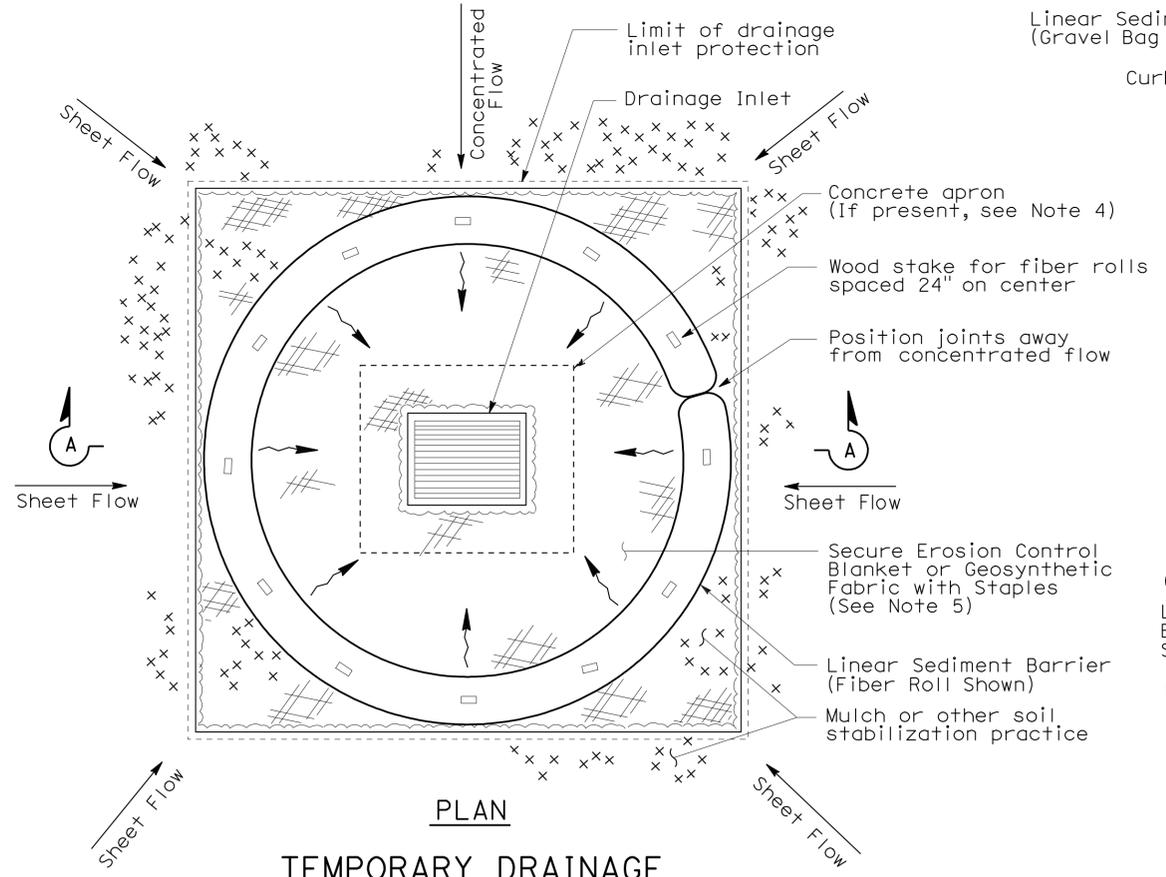


SECTION FLEXIBLE SEDIMENT BARRIER DETAIL (FOAM BARRIER SHOWN)

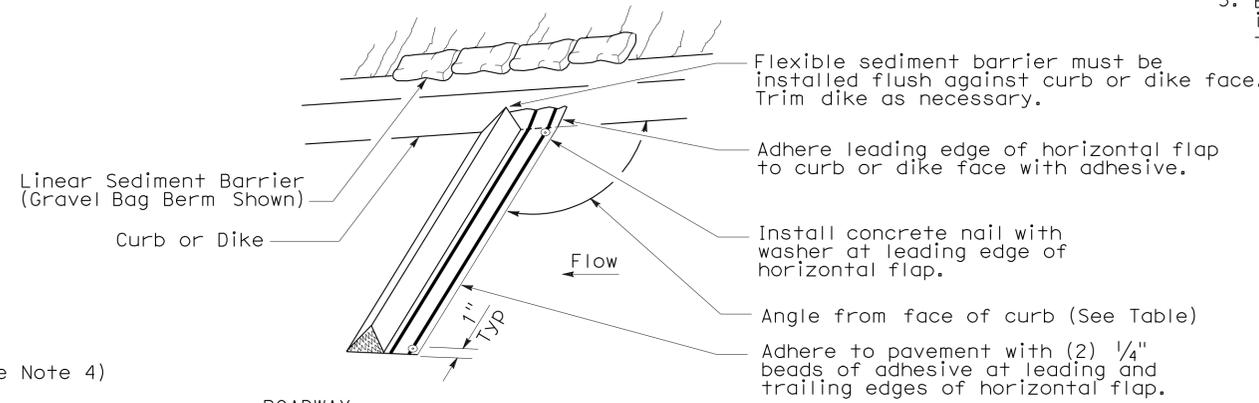
NOTES:

1. See Standard Plan T51 for Temporary Silt Fence.
2. Dimensions may vary to fit field conditions.
3. Install a minimum of 3 flexible sediment barriers upstream of each drainage inlet to be protected.
4. Position erosion control blanket or geosynthetic fabric at edge of concrete apron and secure in trench.
5. Erosion control blanket or geosynthetic fabric is not required if the area adjacent to the drainage inlet is vegetated.

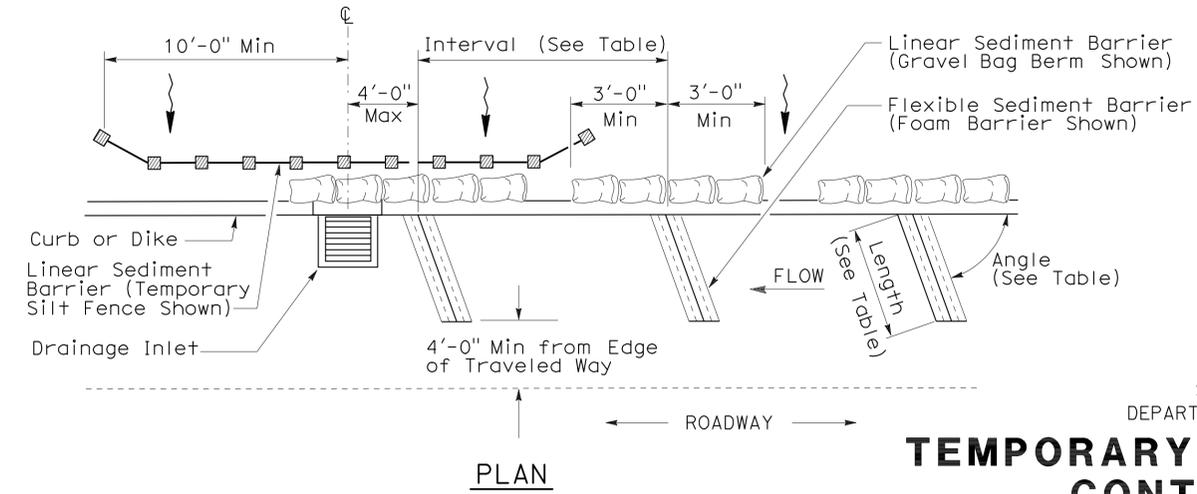
To accompany plans dated 7-11-11



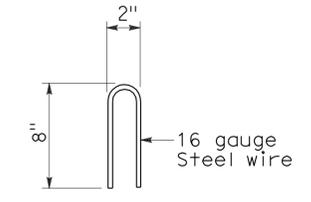
PLAN TEMPORARY DRAINAGE INLET PROTECTION (TYPE 4A)



PERSPECTIVE



PLAN TEMPORARY DRAINAGE INLET PROTECTION (TYPE 4B) FLEXIBLE SEDIMENT BARRIER



STAPLE DETAIL

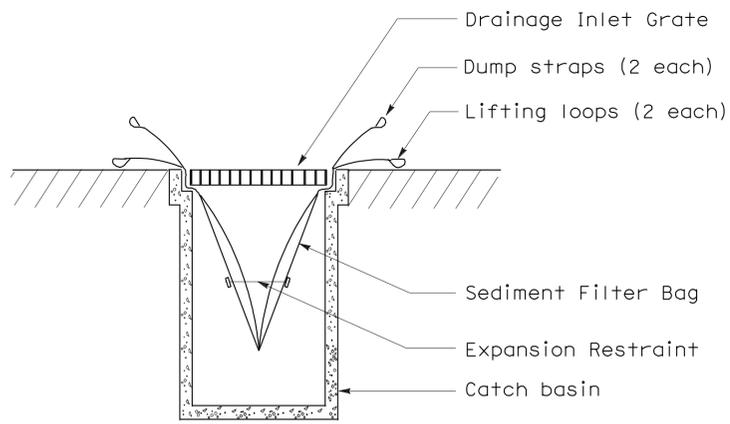
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
TEMPORARY WATER POLLUTION CONTROL DETAILS (TEMPORARY DRAINAGE INLET PROTECTION)

NO SCALE
NSP T63 DATED AUGUST 15, 2008 SUPPLEMENTS THE STANDARD PLANS BOOK DATED MAY 2006.

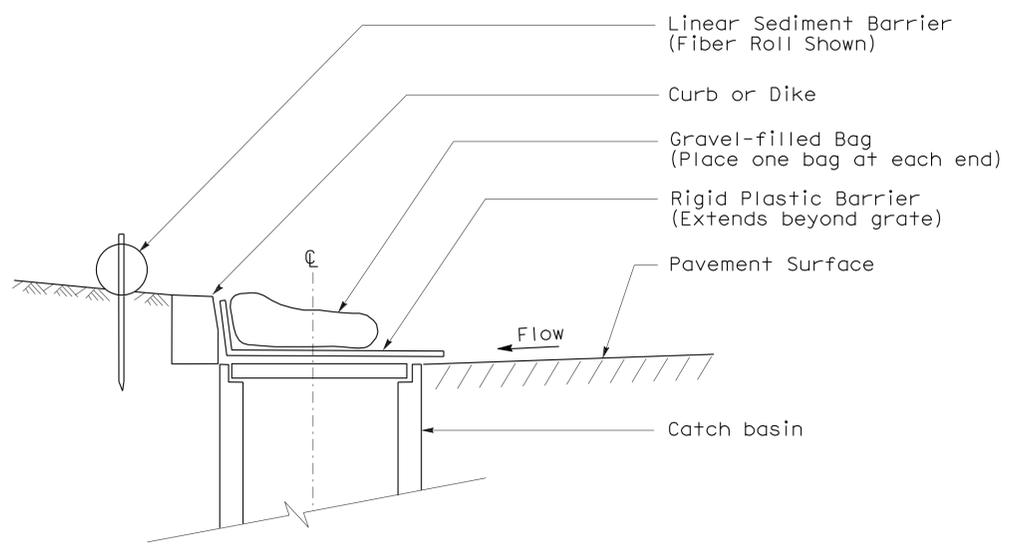
2006 NEW STANDARD PLAN NSP T63

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	576	595

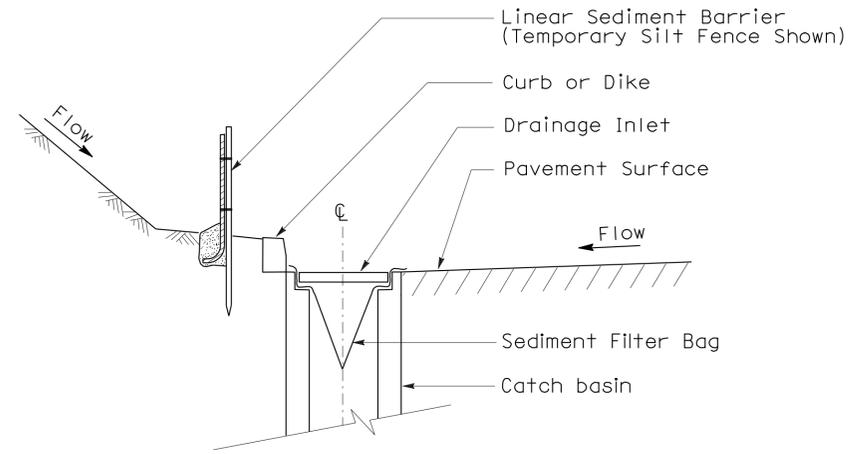
Robert B. Schott
 LICENSED LANDSCAPE ARCHITECT
 August 15, 2008
 PLANS APPROVAL DATE
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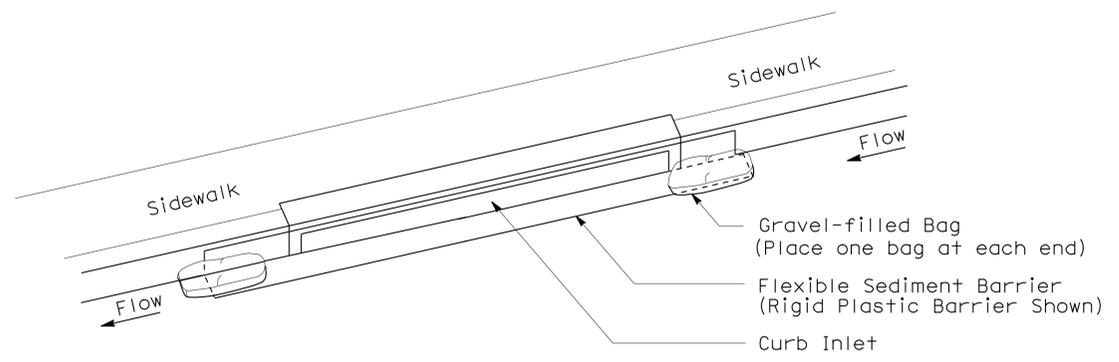
SECTION B-B
SEDIMENT FILTER BAG DETAIL



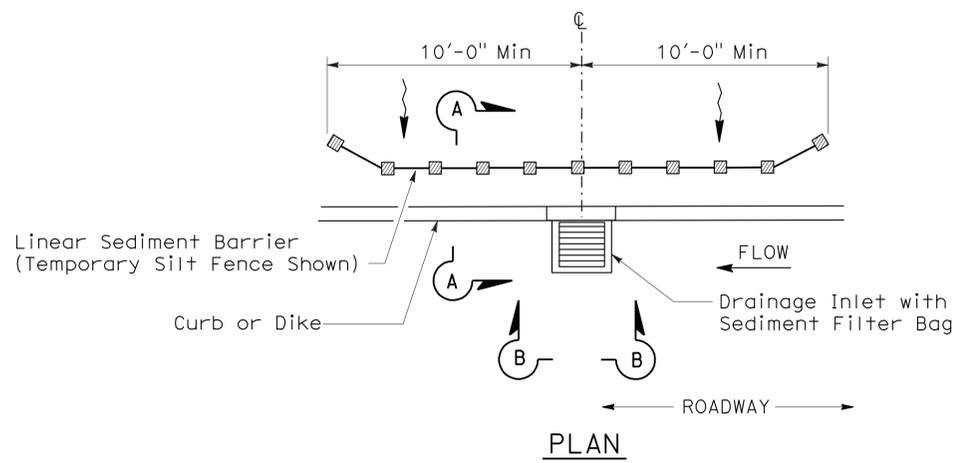
SECTION
TEMPORARY DRAINAGE INLET PROTECTION (TYPE 6A) (CATCH BASIN WITH GRATE)



SECTION A-A



PERSPECTIVE
TEMPORARY DRAINAGE INLET PROTECTION (TYPE 6B) (CURB INLET WITHOUT GRATE)



PLAN
TEMPORARY DRAINAGE INLET PROTECTION (TYPE 5) (SEDIMENT FILTER BAG)

- NOTES:**
1. See Standard Plan T51 for Temporary Silt Fence.
 2. Dimensions may vary to fit field conditions.

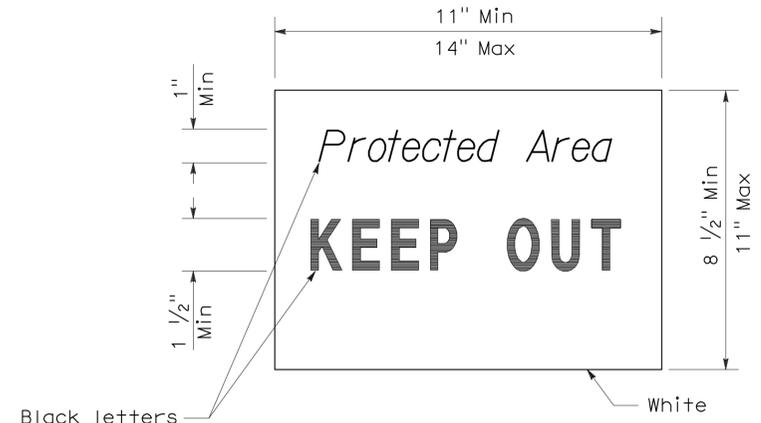
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
TEMPORARY WATER POLLUTION CONTROL DETAILS (TEMPORARY DRAINAGE INLET PROTECTION)

NO SCALE
NSP T64 DATED AUGUST 15, 2008 SUPPLEMENTS THE STANDARD PLANS BOOK DATED MAY 2006.

2006 NEW STANDARD PLAN NSP T64

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	577	595

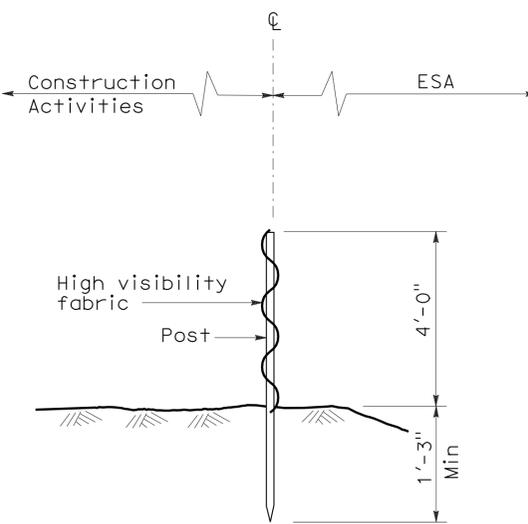
Robert B. Schott
 LICENSED LANDSCAPE ARCHITECT
 April 3, 2009
 PLANS APPROVAL DATE
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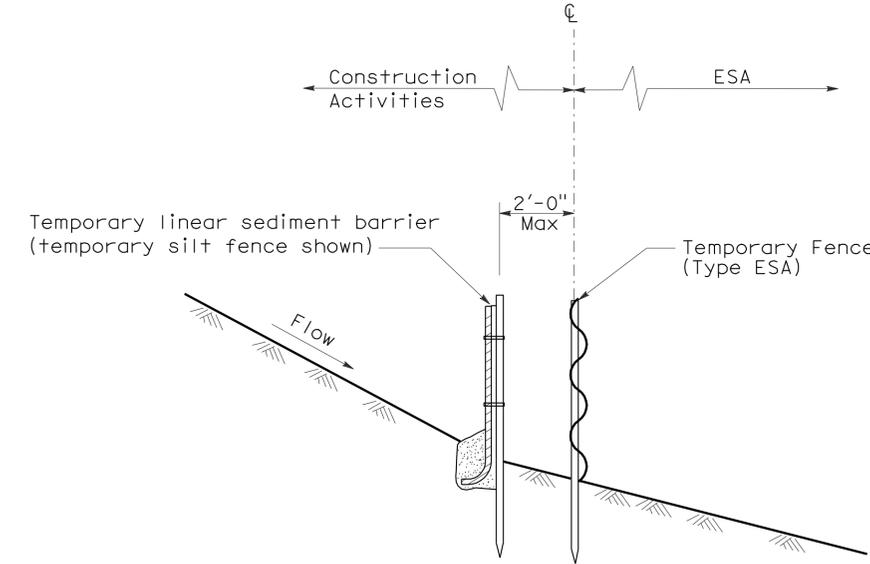
SIGN DETAIL

NOTE:
 1. Temporary silt fence and temporary straw bale barrier shown for reference purposes only.

To accompany plans dated 7-11-11

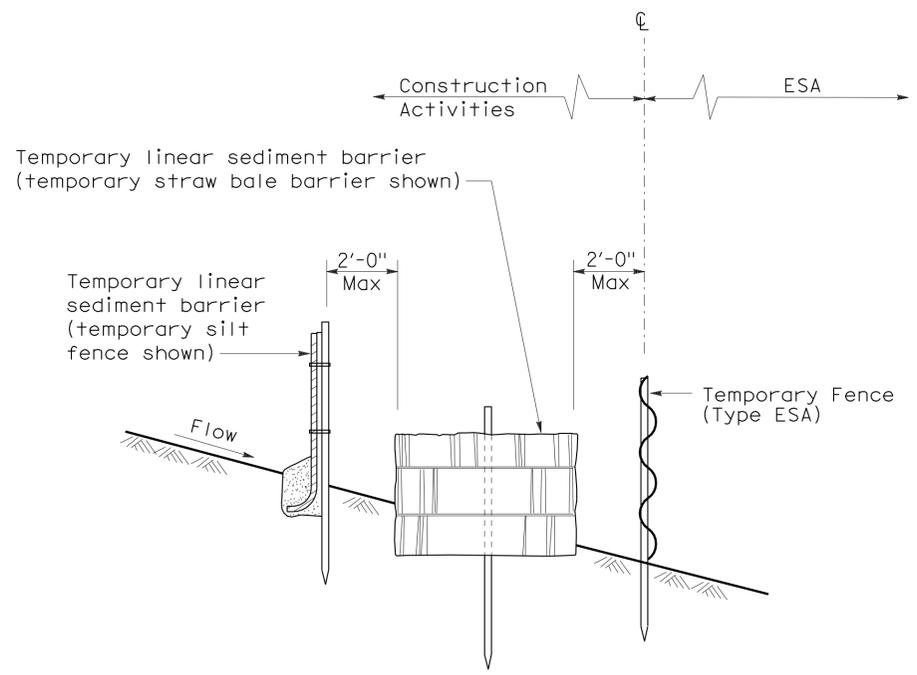


**SECTION
TEMPORARY FENCE (TYPE ESA)**



**SECTION
PLACEMENT DETAIL
FOR TEMPORARY LINEAR SEDIMENT BARRIER
USED WITH TEMPORARY
FENCE (TYPE ESA)**

(See Note 1)



**SECTION
PLACEMENT DETAIL
FOR TEMPORARY SILT FENCE
AND TEMPORARY STRAW BALE BARRIER
USED WITH TEMPORARY FENCE (TYPE ESA)**

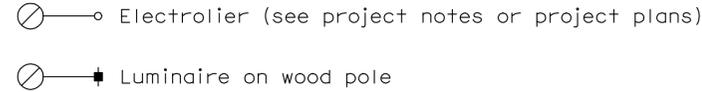
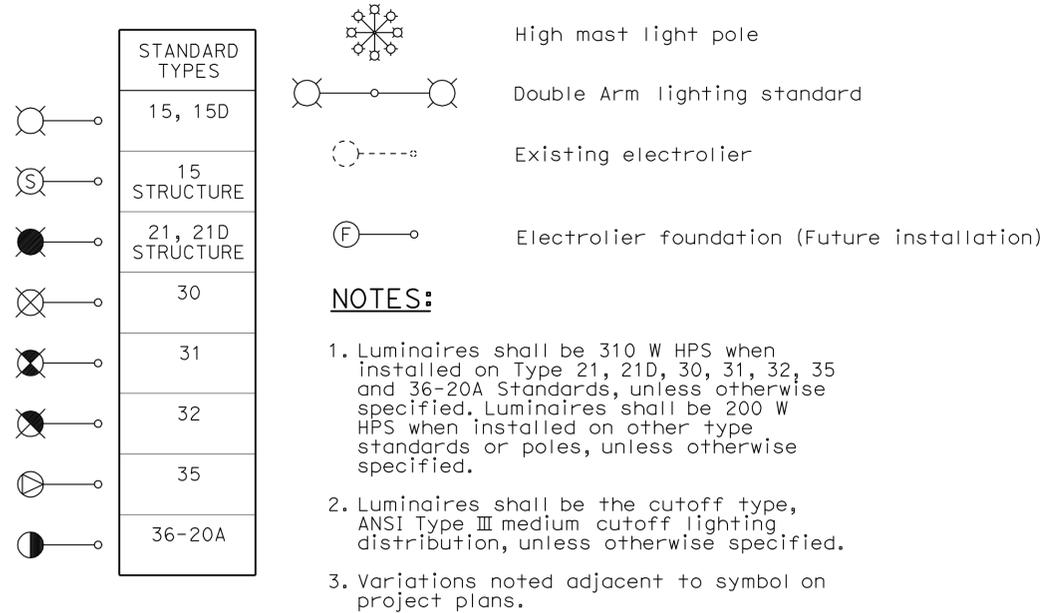
(See Note 1)

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**TEMPORARY WATER POLLUTION
 CONTROL DETAILS
 [TEMPORARY FENCE (TYPE ESA)]**
 NO SCALE

NSP T65 DATED APRIL 3, 2009 SUPPLEMENTS
 THE STANDARD PLANS BOOK DATED MAY 2006.

2006 NEW STANDARD PLAN NSP T65

ELECTROLIERS



STANDARD NOTES:

- AB** Abandon. If applied to conduit, remove conductors.
- BC** Install pull box in existing conduit run.
- BP** Pedestrian barricade, type as indicated on plan.
- CB** Install conduit into existing pull box.
- CC** Connect new and existing conduit. Remove existing conductors and install conductors as indicated.
- CF** Conduit to remain for future use. Remove conductors. Install pull wire or rope.
- DH** Detector handhole.
- FA** Foundation to be abandoned.
- IS** Install sign on signal mast arm.
- NS** No slip base on standard.
- PEC** Photoelectric control.
- PEU** Photoelectric unit.
- RC** Equipment or material to be removed and become the property of the Contractor.
- RE** Remove electrolier, fuses and ballast. Tape ends of conductors.
- RL** Relocate equipment.
- RR** Remove and reuse equipment.
- RS** Remove and salvage equipment.
- SC** Splice new to existing conductors.
- SD** Service disconnect.
- SF** Standard to remain for future use. Remove luminaire, pole conductors, fuses and ballast.
- TSP** Telephone service point.

ABBREVIATIONS AND EQUIPMENT DESIGNATIONS

PROPOSED EXISTING

PROPOSED	EXISTING	DESCRIPTION
BBS	bbs	Battery backup system
BC	bc	Bolt circle
C	C	Conduit
CCTV	cctv	Closed circuit television
CKT	ckt	Circuit
CMS	cms	Changeable message sign
DLC	dlc	Loop detector lead-in cable
EMS	ems	Extinguishable message sign
EVC	evc	Emergency vehicle cable
EVD	evd	Emergency vehicle detector
FB	fb	Flashing beacon
FBCA	fbca	Flashing beacon control assembly
FBS	fbs	Flashing beacon with slip base
FO	fo	Fiber optic
G	G	Ground (Equipment Grounding Conductor)
GFCI	GFCI	Ground fault circuit interrupt
HAR	har	Highway advisory radio
HEX	hex	Hexagonal
HPS	hps	High pressure sodium
IISNS	iisns	Internally illuminated street name sign
ISL	isl	Induction sign lighting
LED	led	Light emitting diode
LMA	lma	Luminaire mast arm
LPS	lps	Low pressure sodium
LTG	ltg	Lighting
LUM	lum	Luminaire
MAT	mat	Mast arm mounting vehicle signal faces, top attachment
MAS	mas	Mast arm mounting vehicle signal faces, side attachment
MAS-4A	mas-4A	Mast arm mounting vehicle signal faces, side attachment - 4 signal section
MAS-4B	mas-4B	Mast arm mounting vehicle signal faces, side attachment - 4 signal section
MAS-4C	mas-4C	Mast arm mounting vehicle signal faces, side attachment - 4 signal section
MAS-5A	mas-5A	Mast arm mounting vehicle signal faces, side attachment - 5 signal section
MAS-5B	mas-5B	Mast arm mounting vehicle signal faces, side attachment - 5 signal section
MC	mc	Mercury contactor
M/M	m/m	Multiple to multiple transformer
MT	mt	Conduit with pull wire or rope only
MTG	mtg	Mounting
	mv	Mercury vapor lighting fixture
N	N	Neutral (Grounded Conductor)
NC	NC	Normally closed
NO	NO	Normally open
PB	pb	Pull box
PEC	pec	Photoelectric control (Type I, II, III, IV or V as shown)
PED	ped	Pedestrian
PEU	peu	Photoelectric unit
PPB	ppb	Pedestrian push button
RL		Relocated equipment
RM	rm	Ramp metering
SB	sb	Slip base
SIC	sic	Signal interconnect cable
SIG	sig	Signal
SMA	sma	Signal mast arm
SNS	sns	Street name sign
SP	sp	Service point
TDC	tdc	Telephone demarcation cabinet
TMS	tms	Traffic monitoring station
TOS	tos	Traffic Operations System
VEH	veh	Vehicle
XFMR	xfmr	Transformer
COMM	comm	Communication
RWIS	rwis	Roadway weather information system

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	578	595

Jeffrey G. McRae
REGISTERED ELECTRICAL ENGINEER

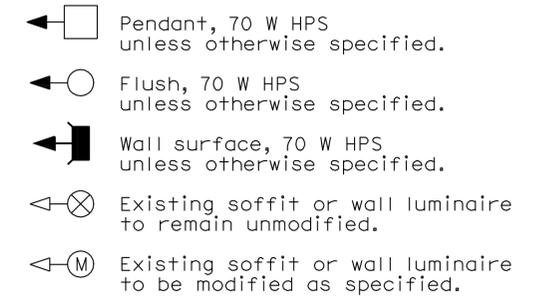
October 5, 2007
PLANS APPROVAL DATE

Jeffrey G. McRae
No. E14512
Exp. 6-30-08
ELECTRICAL
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.

To accompany plans dated 7-11-11

SOFFIT AND WALL MOUNTED LUMINAIRES



NOTE:

Arrow indicates "street side" of luminaire.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
(SYMBOLS AND ABBREVIATIONS)**

NO SCALE

RSP ES-1A DATED OCTOBER 5, 2007 SUPERSEDES STANDARD PLAN ES-1A DATED MAY 1, 2006 - PAGE 400 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-1A

2006 REVISED STANDARD PLAN RSP ES-1A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	579	595

Jeffery G. McRae
 REGISTERED ELECTRICAL ENGINEER
 No. E14512
 Exp. 6-30-08
 ELECTRICAL
 STATE OF CALIFORNIA

October 5, 2007
 PLANS APPROVAL DATE

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

To accompany plans dated 7-11-11

CONDUIT

PROPOSED	EXISTING	
		Lighting Conduit, unless otherwise indicated or noted
		Traffic signal conduit
		Communication conduit
		Telephone conduit
		Fire alarm conduit
		Fiber optic conduit
		Conduit termination
		Conduit riser in/on structure or service pole

SIGNAL EQUIPMENT

PROPOSED	EXISTING	
		Pedestrian signal face
		Pedestrian push button post
		Pedestrian barricade
		Vehicle signal face (with backplate, 3-Section: red, yellow and green)
		Vehicle signal face with angle visors
		Modifications of basic symbols: "L" indicates all non-arrow sections lowered "LG" indicates lowered green section only "PV" indicates 12" programmed visibility sections "8" indicates all 8" sections (only when specified)
		Type 15TS and Vehicle signal face
		Vehicle signal face with red, yellow and green left arrow sections
		Vehicle signal face with red and yellow sections and up green arrow
		Vehicle signal face (5 Section) with red, yellow and green sections and yellow and green right arrows
		Type 1 Standard and attached vehicle signal faces
		Standard with signal mast arm only and attached vehicle signal faces and internally illuminated street name sign
		Type 33 Standard, Left-turn vehicle signal face and sign
		Standard with luminaire and signal mast arms and attached vehicle signal faces
		Cantilever flashing beacon Type 9 Frame, with a sign unless otherwise specified or indicated
		Type 15-FBS Standard with two vehicle signal face sections with lens, backplate and visor with a sign
		Flashing beacon. One vehicle signal face section with lens, backplate and visor. "R" indicates red indication, "Y" indicates yellow indication
		Controller assembly. Door indicates front of cabinet

SERVICE EQUIPMENT

PROPOSED	EXISTING	
		Overhead lines
		Wood pole "U" indicates utility owned
		Pole guy with anchor
		Utility transformer - ground mounted
		Service equipment enclosure type
		Service equipment enclosure door indicates front of enclosure
		Telephone demarcation cabinet

POLE-MOUNTED SERVICE DESIGNATION



ILLUMINATED OVERHEAD SIGN

PROPOSED	EXISTING	
		Overhead sign - Single post
		Overhead sign - Two post
		Overhead sign - Mounted on structure
		Overhead sign with electrolier

SIGNAL EQUIPMENT Cont

PROPOSED	EXISTING	
		Guard post
		Type 1 Standard with "Meter On" sign
		Emergency Vehicle detector

NOTES:

- All signal sections shall be 12" unless shown otherwise.
- Signal heads shall be provided with backplates unless shown otherwise.
- Signal indication shall be LED.

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
ELECTRICAL SYSTEMS
(SYMBOLS AND ABBREVIATIONS)
 NO SCALE

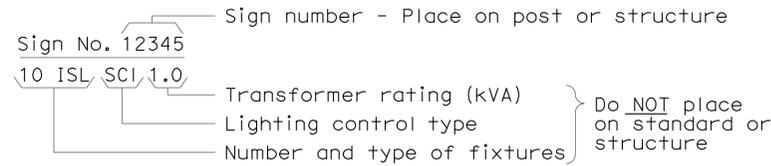
RSP ES-1B DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-1B
 DATED MAY 1, 2006 - PAGE 401 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-1B

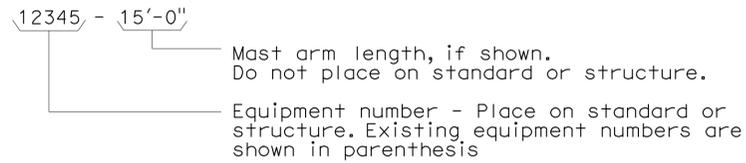
2006 REVISED STANDARD PLAN RSP ES-1B

EQUIPMENT IDENTIFICATION

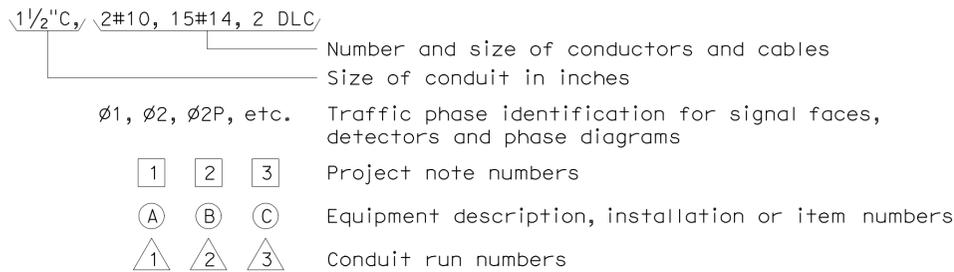
ILLUMINATED SIGN IDENTIFICATION NUMBER:



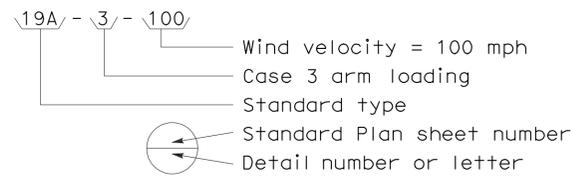
ELECTROLIER OR EQUIPMENT IDENTIFICATION NUMBER:



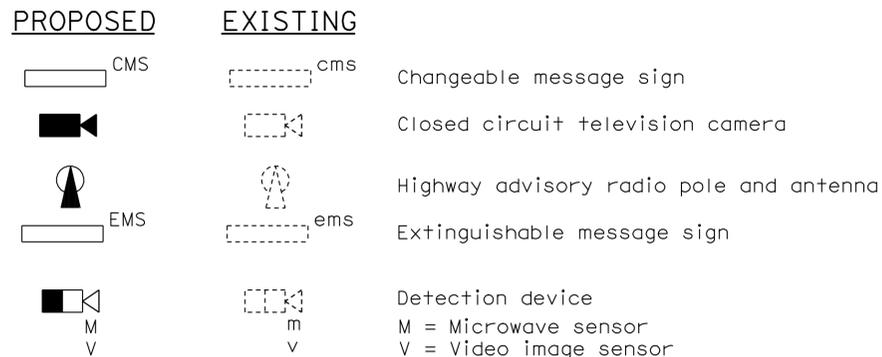
CONDUIT AND CONDUCTOR IDENTIFICATION:



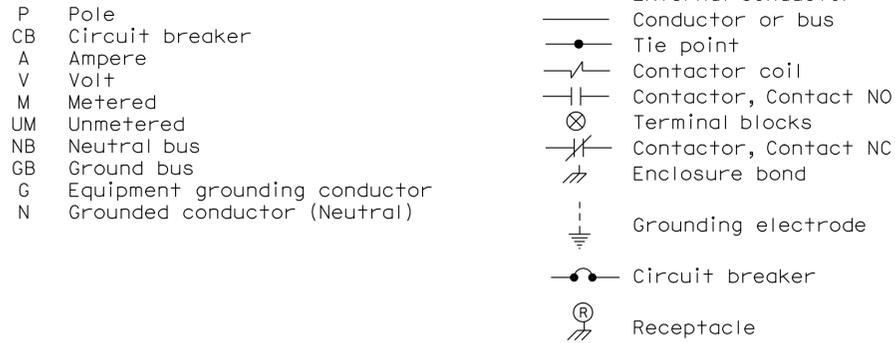
SIGNAL AND LIGHTING STANDARD (TYPICAL DESIGNATION):



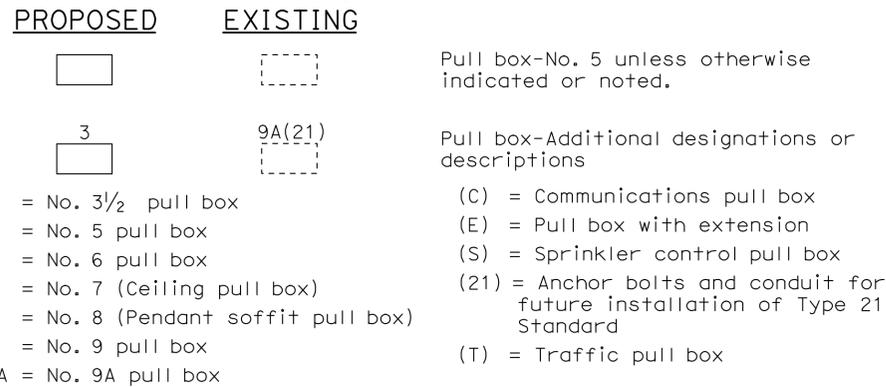
MISCELLANEOUS EQUIPMENT



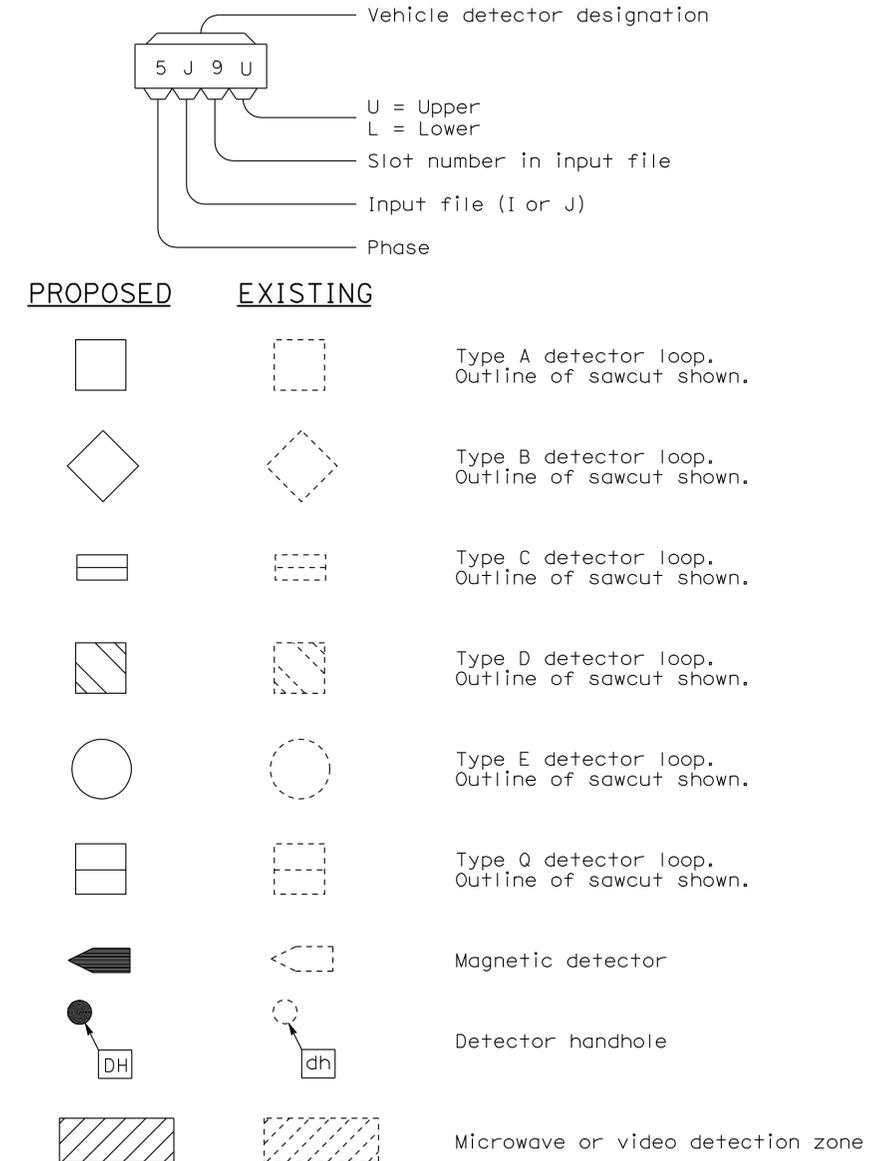
WIRING DIAGRAM LEGEND



PULL BOXES



VEHICLE DETECTORS



STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (SYMBOLS AND ABBREVIATIONS)

NO SCALE

RSP ES-1C DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-1C
 DATED MAY 1, 2006 - PAGE 402 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-1C

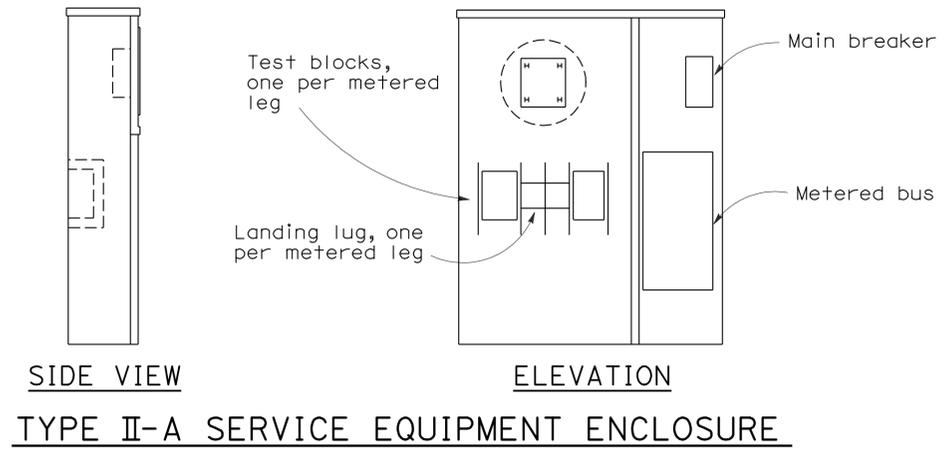
2006 REVISED STANDARD PLAN RSP ES-1C

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	581	595

Jeffery G. McRae
 REGISTERED ELECTRICAL ENGINEER
 October 5, 2007
 PLANS APPROVAL DATE

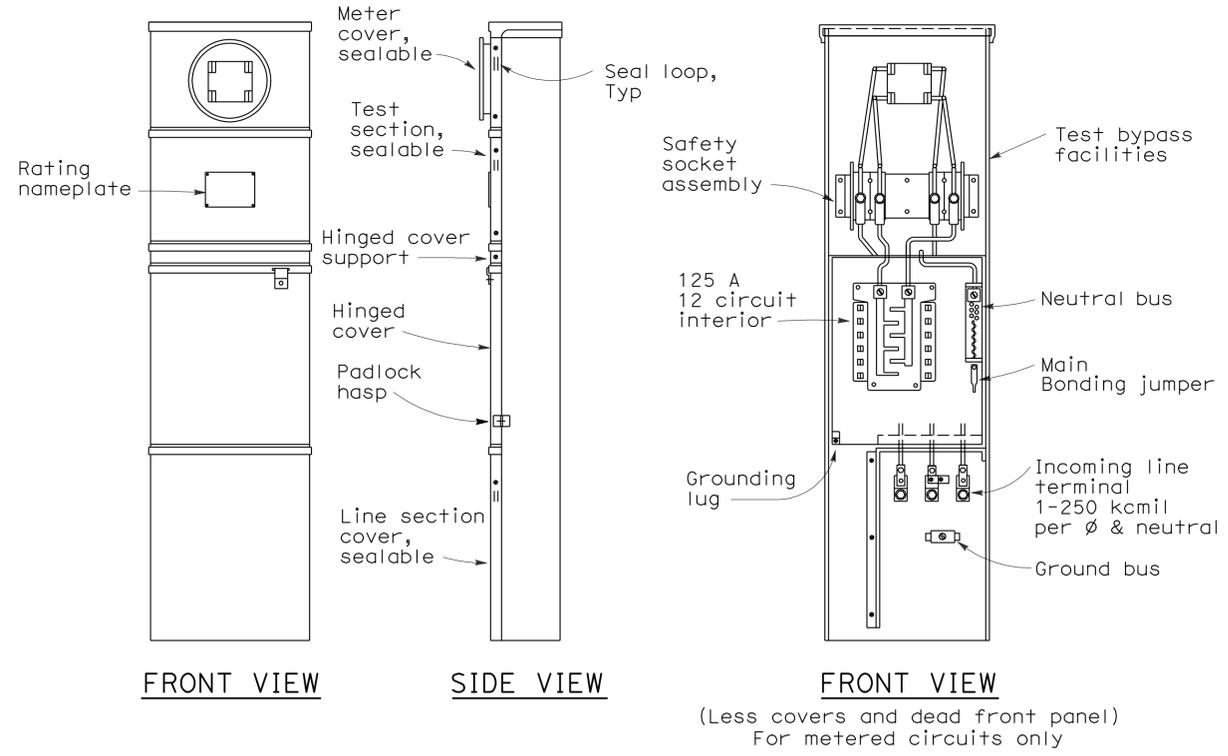
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

To accompany plans dated 7-11-11



NOTES-TYPE II SERVICE EQUIPMENT ENCLOSURES:

1. Service equipment enclosures and metering equipment shall meet the requirements of the service utility.
2. Service equipment enclosures shall be factory wired NEMA 3R construction and shall be provided with dead front panel and provisions for padlocking.
3. Control wiring shall be 600 V, No. 14 AWG stranded (THHN) machine tool wire. Where subject to flexing, 19 strand wire shall be used.
4. Main bus shall be rated for 125 A and shall be tin-plated copper.
5. An engraved phenolic nameplate on the dead front panel indicating the function of each circuit or device shall be installed with stainless steel rivets or stainless steel screws:
 - a) Adjacent to the breaker or device with character size a minimum of 1/8".
 - b) At the top of the exterior door panel indicating system number, voltage level and number of phases with character size a minimum of 3/16".
6. A plastic laminated wiring diagram shall be provided and attached to the inside of the front door.
7. In unpaved areas, a raised portland cement concrete pad of 2'-0" x 4" x width of service equipment enclosure foundation or controller cabinet foundation shall be constructed in front of Type II service equipment enclosure.
8. Internal bus, where shown, is typical only. Alternative designs of proposed service equipment enclosure shall be submitted to the Engineer for approval.
9. Circuit breakers may be mounted in the vertical or horizontal position.
10. Dimensions of service equipment enclosures shall meet the requirements of the service utility.
11. Minimum clearance shall be required for front and back of service equipment enclosures per National Electrical Code, Article 110.26, "Spaces About Electrical Equipment (600 Volts, Nominal, or Less)."



STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
 (SERVICE EQUIPMENT
 TYPE II SERIES)**

NO SCALE

RSP ES-2B DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-2B
DATED MAY 1, 2006 - PAGE 404 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-2B

2006 REVISED STANDARD PLAN RSP ES-2B

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	582	595

Jeffery G. McRae
 REGISTERED ELECTRICAL ENGINEER

October 5, 2007
 PLANS APPROVAL DATE

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

To accompany plans dated 7-11-11

NOTES-TYPE III SERVICE EQUIPMENT ENCLOSURES:

1. Service equipment enclosure and metering equipment shall meet the requirements of the service utility. The meter area shall have a sealable, lockable, weathertight cover that can be removed without the use of tools.
2. Service equipment enclosures shall be factory wired and conform to NEMA standards.
3. Dimensions of service equipment enclosures shall meet the requirements of the service utility.
4. The dead front panels on Type III service equipment enclosures shall have a continuous stainless steel or aluminum piano hinge. The panel in front of the breakers shall be secured with a latch or captive screws. No live parts shall be mounted on the dead front panel.
5. The exterior door shall have provisions for padlocking. The padlock hole shall be a minimum diameter of $\frac{7}{16}$ ".
6. Enclosures housing transformers of more than one kVA shall have effective screened ventilation louver of not less than 50 square inches. Screen shall be stainless steel No. 304, with a No. 10 size mesh. Framed screen shall be secured with at least four bolts.
7. Fasteners on the exterior of the enclosure shall be vandal-resistant and shall not be removable from the exterior. Exterior screws, nuts, bolts and washers shall be stainless steel.
8. Landing lugs for incoming service conductors shall be compatible with either copper or aluminum conductors sized to suit the conductors shown on the plan. Landing lugs shall be copper or tin-plated aluminum. Neutral bus shall be rated for 125 A and be suitable for copper or aluminum conductors unless otherwise specified. The terminal shall include but not be limited to:
 - a) Incoming terminals (landing lugs)
 - b) Neutral lugs
 - c) Solid neutral terminal strip
9. At least 6 standard single pole circuit breaker spaces, $\frac{3}{4}$ " nominal, shall be provided for branch circuits. Circuit breaker interiors shall be copper. Interiors of enclosure shall accept plug-in or cable-in/cable-out circuit breakers.
10. Control wiring shall be 600 V, 14 stranded machine tool wire. Where subject to flexing, 19 strand wire shall be used.
11. Main bus shall be rated for 125 A and shall be tin-plated copper.
12. A plastic laminated wiring diagram shall be provided with brass mounting eyelets and attached to the inside of the enclosure and the wiring diagram shall be affixed to the interior with a UL or ETL approved method.

13. An engraved phenolic nameplate on the dead front panel indicating the function of each circuit or device shall be installed with stainless steel rivets or stainless steel screws:
 - a) Adjacent to the breaker or device with character size a minimum of $\frac{1}{8}$ ".
 - b) At the top of the exterior door panel indicating State system number, voltage level and number of phases with character size a minimum of $\frac{3}{16}$ ".
14. The plan shows the approximate location of devices within the enclosure. Components may be rearranged, however, the "working" clearances within the service equipment enclosure shall be maintained.
15. In unpaved areas a raised portland cement concrete pad 2'-0" x 4" x width of foundation shall be constructed in front of new service equipment enclosure installation. Pad shall be set to elevation of foundation.
16. Foundation shall extend 2" minimum beyond edge of service equipment enclosure.
17. Internal bus, where shown, is typical only. Alternative design of proposed service equipment enclosure shall be submitted to the Engineer for approval.
18. Plug-in circuit breakers may be mounted in the vertical or horizontal position. Cable-in/cable-out circuit breakers shall be mounted in the vertical position.
19. Type III-AF and Type III-BF service equipment enclosures shall have the meter viewing windows located on the front side of the service equipment enclosures.
20. Type III-AR and Type III-BR service equipment enclosures shall be similarly constructed as Type III-AF and Type III-BF respectively, except the meter viewing windows shall be located on the back side of the service equipment enclosures.
21. Minimum clearance shall be required for front and back of service equipment enclosure per National Electrical Code, Article 110.26, "Spaces About Electric Equipment (600 Volts, Nominal, or Less)."

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**ELECTRICAL SYSTEMS
(SERVICE EQUIPMENT NOTES
TYPE III SERIES)**

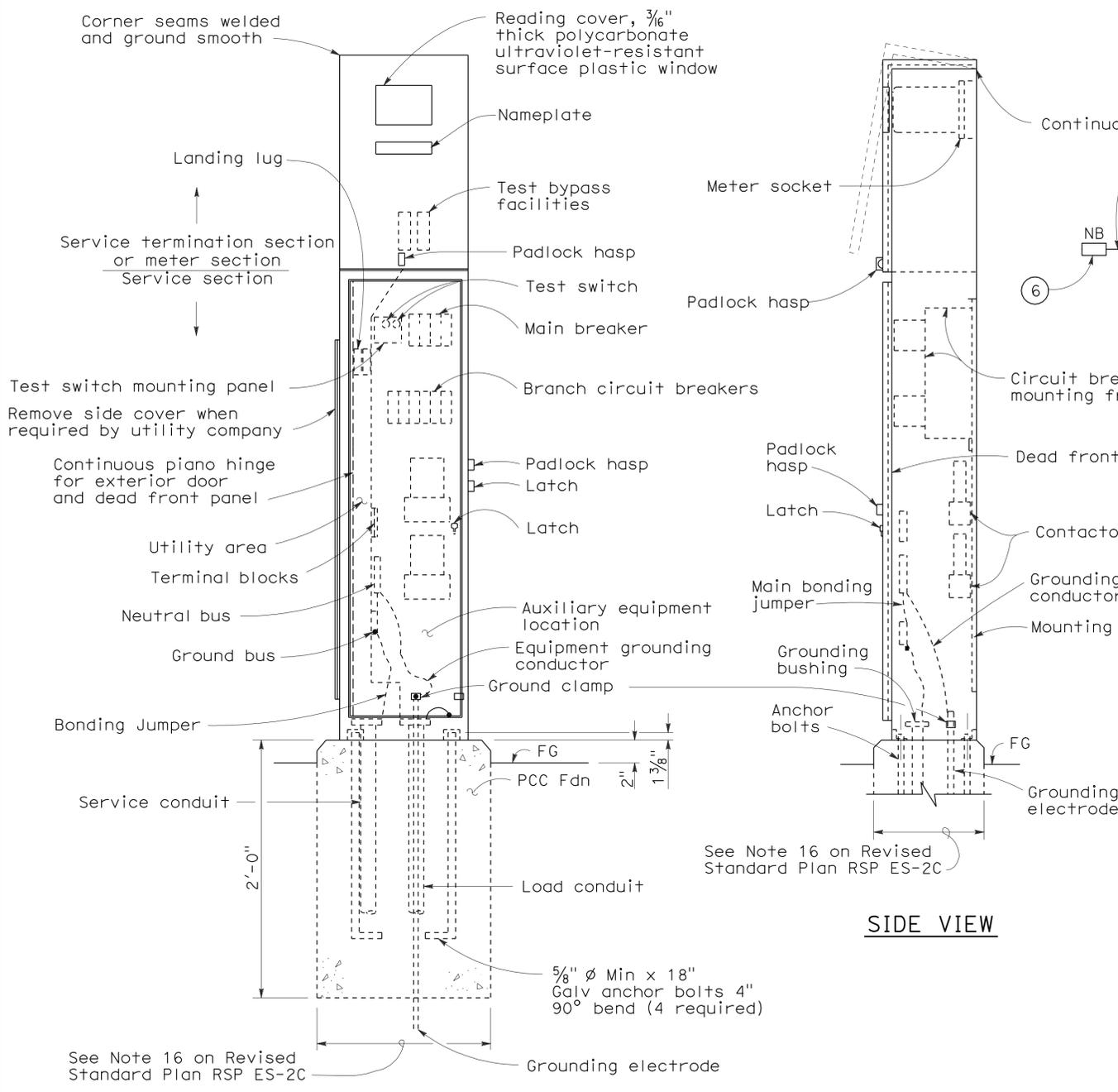
NO SCALE

RSP ES-2C DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-2C
DATED MAY 1, 2006 - PAGE 405 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-2C

2006 REVISED STANDARD PLAN RSP ES-2C

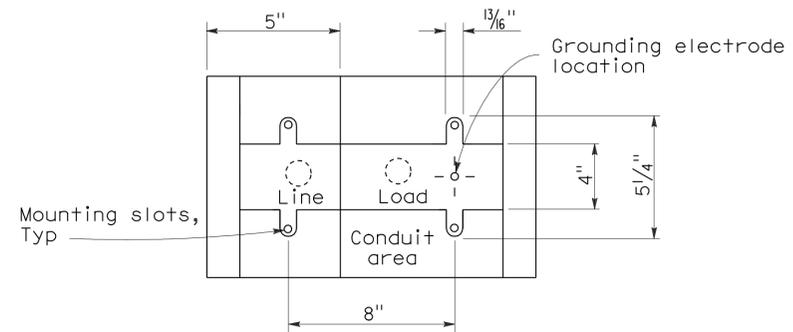
2006 REVISED STANDARD PLAN RSP ES-2D



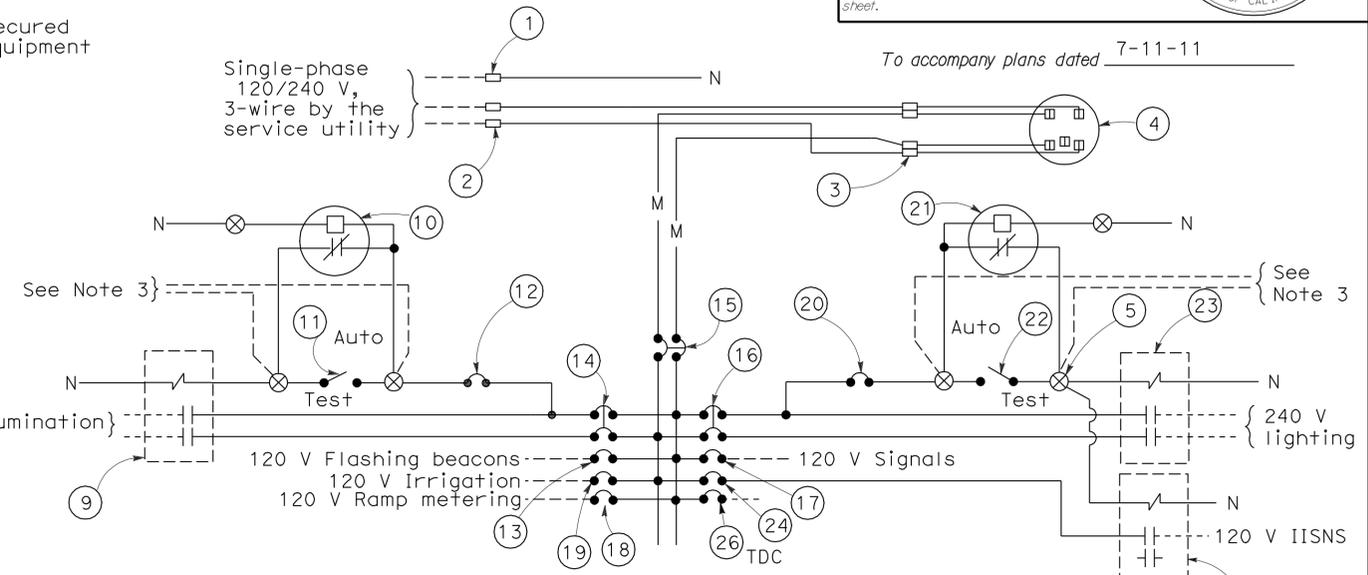
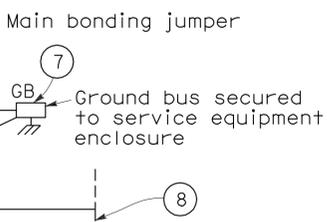
TYPE III-AF SERVICE EQUIPMENT ENCLOSURE (TYPICAL)

FRONT VIEW

SIDE VIEW



BASE FOR TYPE III-A SERVICE EQUIPMENT ENCLOSURE



120/240 V SERVICE WIRING DIAGRAM (TYPICAL)

TYPE III-A SERVICE (120/240 V) EQUIPMENT LEGEND					
ITEM No.	COMPONENT	NAME PLATE DESCRIPTION	ITEM No.	COMPONENT	NAME PLATE DESCRIPTION
1	Neutral lug		14	30 A, 240 V, 2P, CB	Sign Illumination
2	Landing lug (Note 6)		15	100 A, 240 V, 2P, CB	Main Breaker
3	Test bypass facility		16	30 A, 240 V, 2P, CB	Lighting
4	Meter socket and support		17	50 A, 120 V, 1P, CB	Signals
5	Terminal blocks		18	30 A, 120 V, 1P, CB	Ramp Metering
6	Neutral bus		19	20 A, 120 V, 1P, CB	Irrigation
7	Ground bus		20	15 A, 120 V, 1P, CB	Lighting Control
8	Grounding electrode		21	Photoelectric unit (Note 7)	
9	30 A, 2PNO Contactor	Sign Illumination	22	15 A, 1P, Test switch	Lighting Test Switch
10	Photoelectric unit (Note 7)		23	60 A, 2PNO Contactor	Lighting
11	15 A, 1P, Test switch	Sign Illumination Test Switch	24	15 A, 120 V, 1P, CB	IISNS
12	15 A, 120 V, 1P, CB	Sign Illumination Control	25	30 A, 2PNO Contactor	IISNS
13	15 A, 120 V, 1P, CB	Flashing Beacon	26	20 A, 120 V, 1P, CB	Telephone Demarcation Cabinet

NOTES: (FOR SERVICE EQUIPMENT ENCLOSURE)

- Voltage ratings of service equipment shall conform to the service voltages indicated on the plans.
- Unless otherwise indicated on the plans, service equipment items shall be provided for each service equipment enclosure as shown.
- Connect to remote test switch mounted on lighting standards, sign post or structure when required.
- Items No. 1 and 6 shall be isolated from the service equipment enclosure.
- Meter sockets shall be 5 clip type.
- The landing lug shall be suitable for multiple conductors.
- Type I photoelectric control shall be used unless otherwise indicated on the plans.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (SERVICE EQUIPMENT AND TYPICAL WIRING DIAGRAM, TYPE III - A SERIES)

NO SCALE

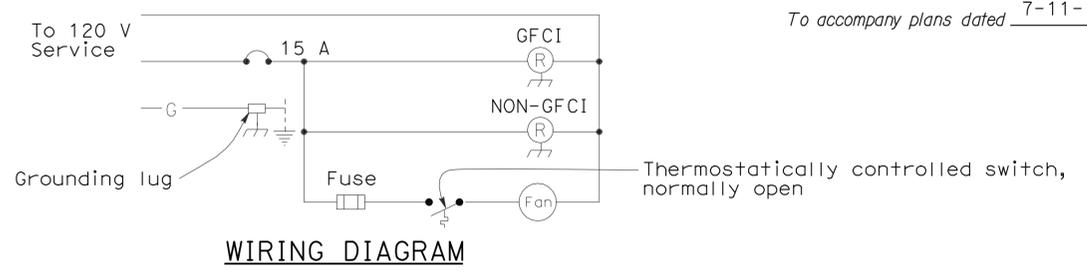
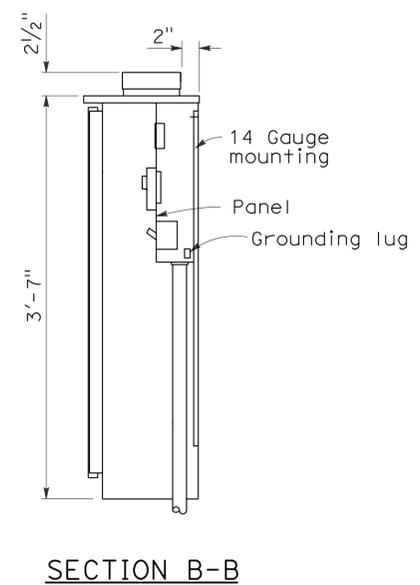
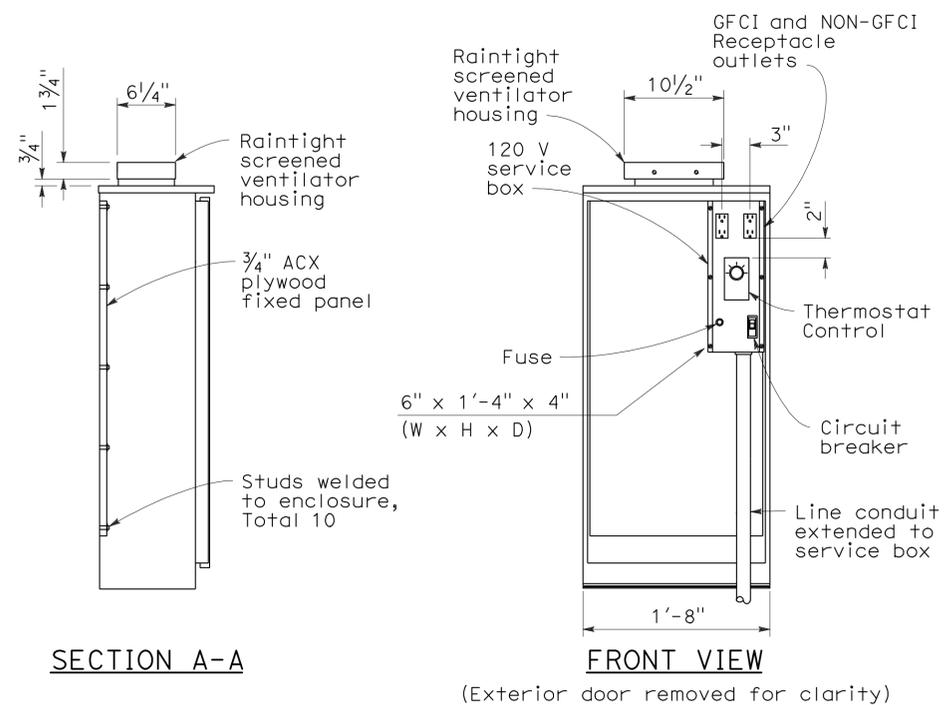
RSP ES-2D DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-2D DATED MAY 1, 2006 - PAGE 406 OF THE STANDARD PLANS BOOK DATED MAY 2006.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	584	595

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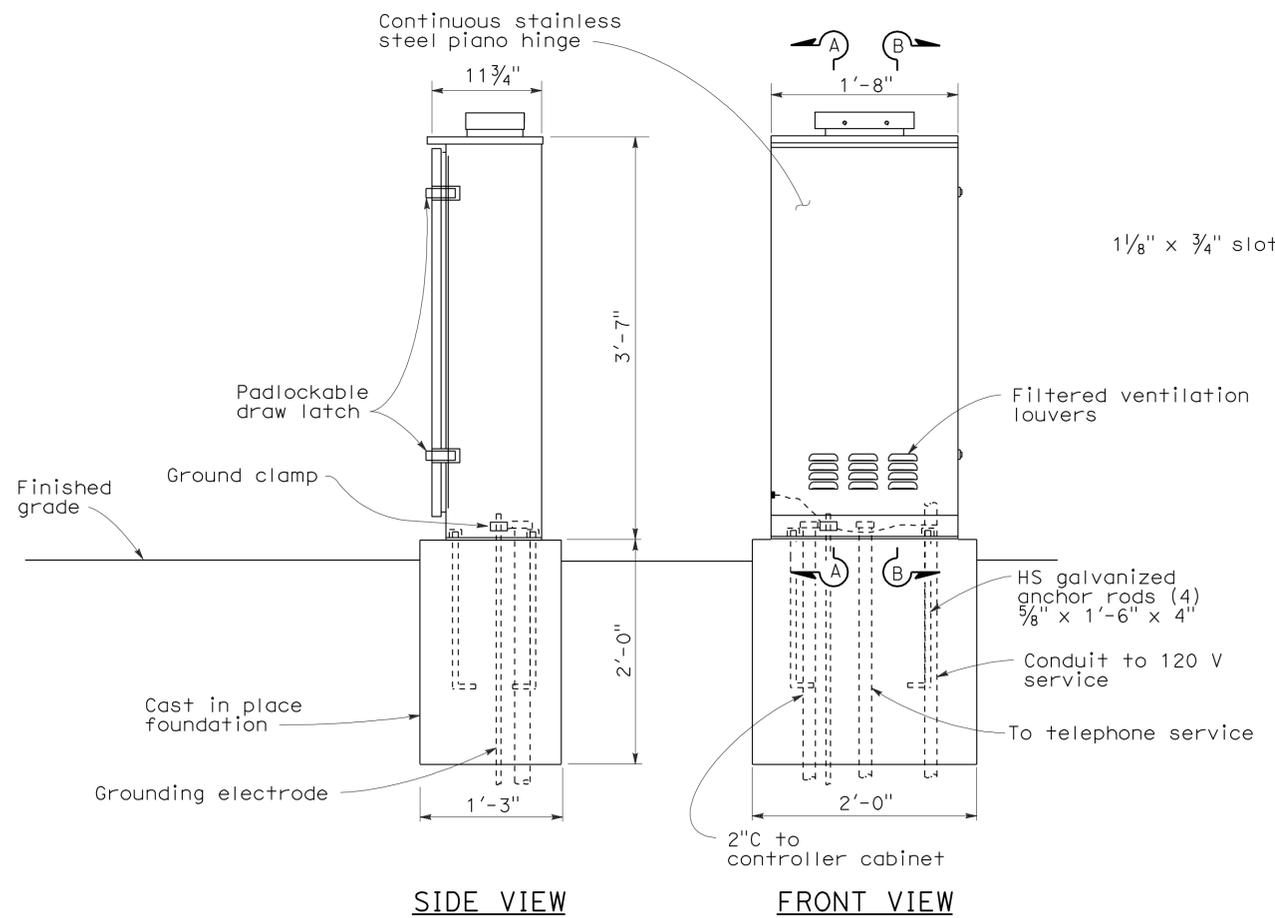
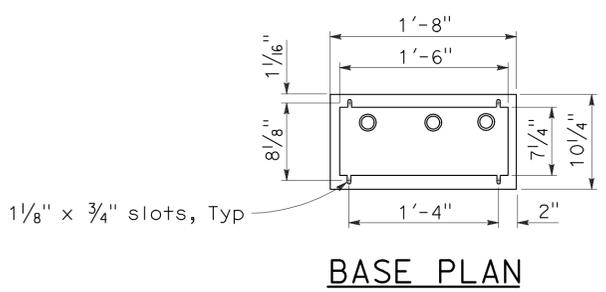
October 5, 2007
 PLANS APPROVAL DATE

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NOTES:

- Telephone demarcation cabinet shall be furnished with a mounting panel, outlets, circuit breaker and deadfront plates in place. Dimensions are nominal.
- An approved mastic or caulking compound shall be placed on the foundation prior to placing the cabinet to seal openings between the bottom of the cabinet and the foundation.
- In unpaved areas, a raised PCC pad shall be placed in front of the telephone demarcation cabinet. Pad shall be 2'-0" x 1'-10" x 4" thick, with 2" above the finished grade.
- All conduits shall be bonded to the enclosure.
- Telephone demarcation cabinet:
 - Material shall be anodized aluminum (1/8" thick).
 - Fabrication shall conform to the requirements of the Standard Specifications.
 - The exterior door shall be side hung and secured with a padlockable draw latch, the padlock hole shall be a minimum diameter of 7/16" to receive a padlock.
 - Ventilation louvers shall be located on the door.
 - Fan shall be mounted in a ventilator housing.
 - Fan shall be thermostatically controlled and adjustable to turn on between 80°F and 130°F.
 - Fan circuit shall be fused at 175 percent of the fan motor capacity.
 - Fan capacity shall be at least 25 cubic feet per minute.
 - Fasten fixed mounting panels with nuts, lock and flat washers to 3/16" ø x 1" studs welded to enclosure.



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**ELECTRICAL SYSTEMS
(TELEPHONE DEMARICATION
CABINET, TYPE B)**

NO SCALE

RSP ES-3E DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-3E
DATED MAY 1, 2006 - PAGE 414 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-3E

2006 REVISED STANDARD PLAN RSP ES-3E

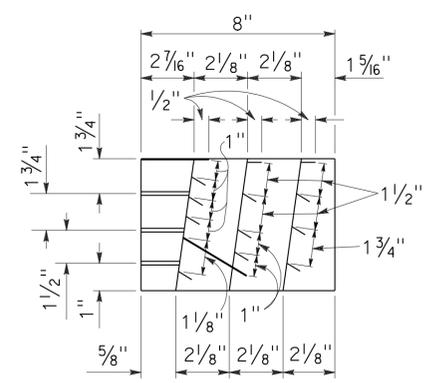
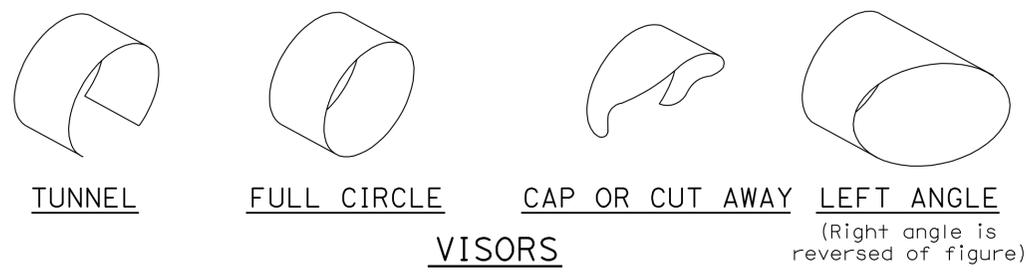
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	585	595

Jeffrey G. McRae
 REGISTERED ELECTRICAL ENGINEER
 No. E14512
 Exp. 6-30-10
 ELECTRICAL
 STATE OF CALIFORNIA

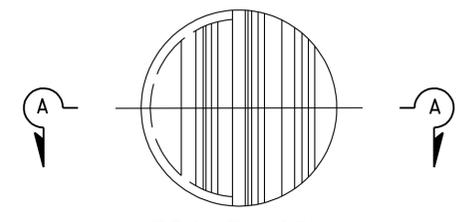
June 6, 2008
 PLANS APPROVAL DATE

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To accompany plans dated 7-11-11



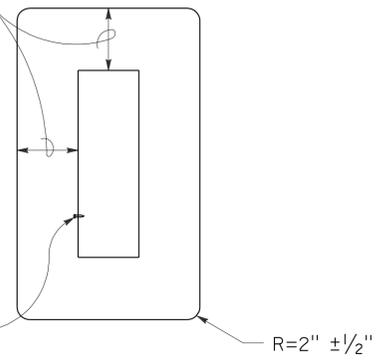
SECTION A-A



FRONT VIEW
DIRECTIONAL LOUVER

Directional louvers shall be oriented as directed by the Engineer and secured in place with one plated brass machine screw and nut.

8" ± 1/2" for 8" sections
 5 1/2" ± 1/2" for 12" sections

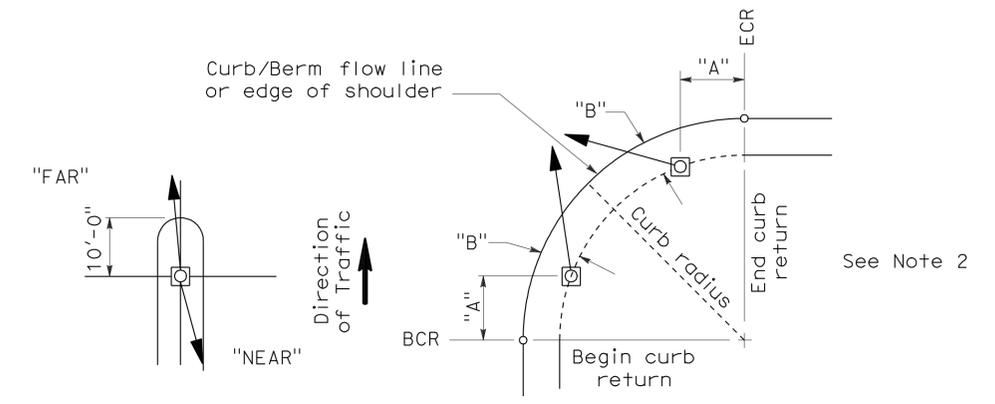


Drill signal face and attach backplate with six 10-24 or 10-32 self-tapping and locking stainless steel machine screws and flat washers

8" AND 12" SECTIONS

BACKPLATE

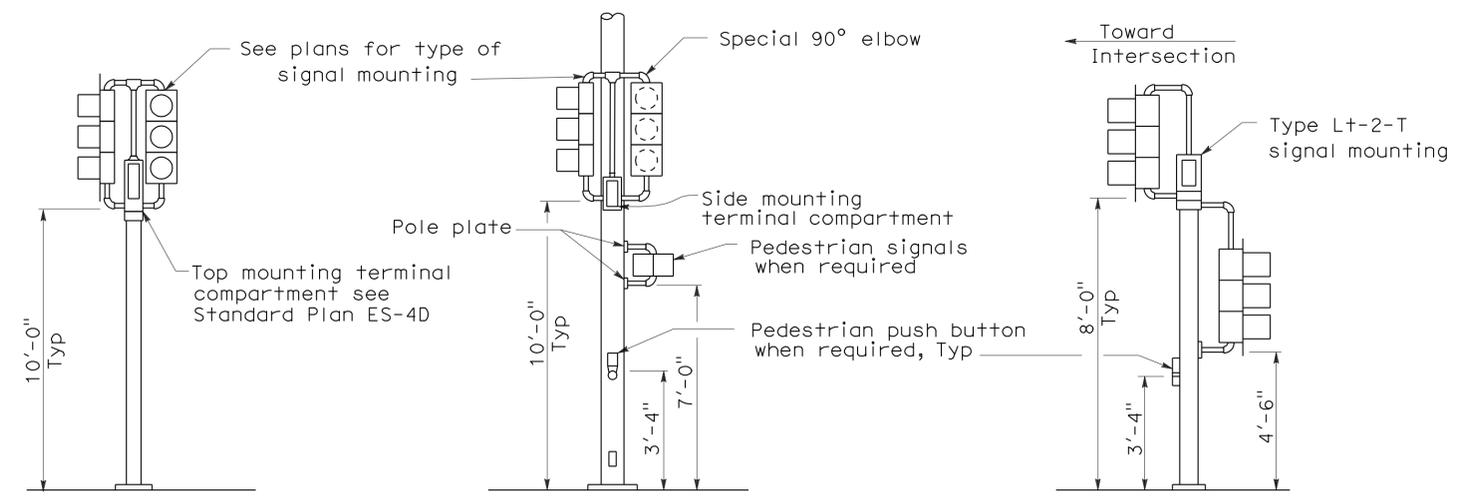
1/16" minimum thickness
 3001-14 aluminum, or plastic when specified



NOTES:

1. Typical signal pole placement unless dimensioned on plans.
2. For "A" and "B" dimensions, see Pole Schedule, or as directed by the Engineer.

SIGNAL STANDARD PLACEMENT DIMENSIONS AND EQUIPMENT LOCATIONS



TOP MOUNTED SIGNALS (TV)

Type 1-A, 1-B, 1-C and 1-D standard as indicated on the plans

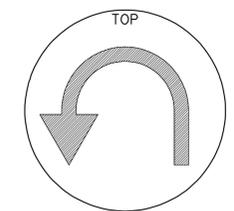
SIDE MOUNTED SIGNALS (SV AND SP)

Normally used on standards with luminaire or signal mast arm

LEFT TURN LANE SIGNAL

Type 1-A, 1-B, 1-C and 1-D standard as indicated on plans

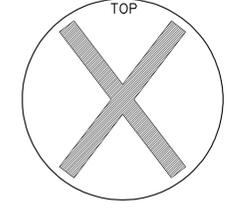
TYPICAL SIGNAL INSTALLATIONS



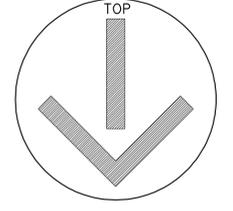
U-TURN SIGNAL FACE



BICYCLE SIGNAL FACE



LANE CONTROL SIGNAL FACE



LANE CONTROL SIGNAL FACE

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
ELECTRICAL SYSTEMS (SIGNAL HEADS AND MOUNTINGS)

NO SCALE

RSP ES-4C DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN ES-4C DATED MAY 1, 2006 - PAGE 420 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-4C

2006 REVISED STANDARD PLAN RSP ES-4C

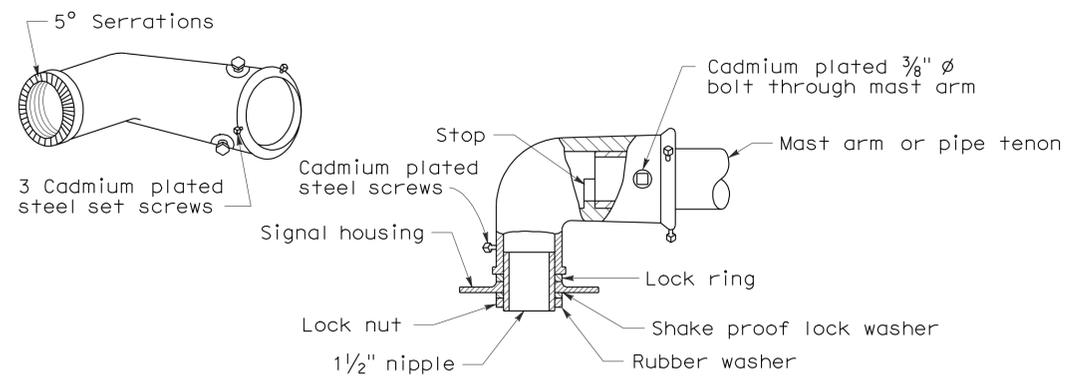
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	586	595

Jeffrey G. McRae
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 No. E14512
 Exp. 6-30-10
 STATE OF CALIFORNIA

June 6, 2008
 PLANS APPROVAL DATE

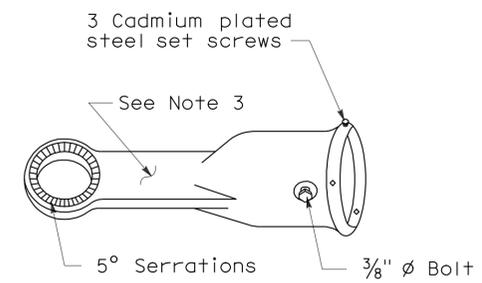
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

To accompany plans dated 7-11-11



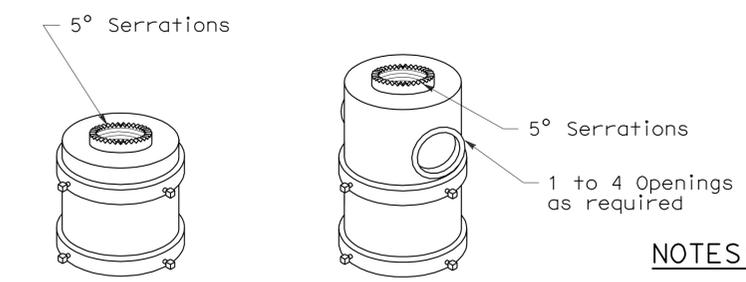
MAST ARM MOUNTING - TYPE "MAT"

For 2 NPS pipe, see Note 1.



MAST ARM MOUNTING - TYPE "MAS"

For 2 NPS pipe. See Note 1.



For one mounting For multiple mountings

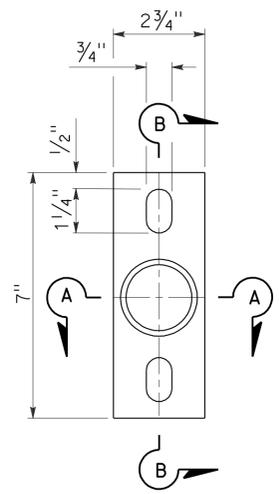
TOP MOUNTINGS

For 4 NPS pipe, see Note 2.

NOTES:

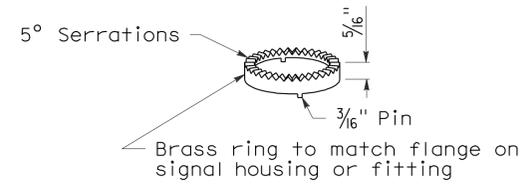
- After mast arm signal has been plumbed and secured, drill 7/16" hole through mast arm tenon in line with slip fitter hole. Place a cadmium plated 3/8" diameter galvanized bolt with washer under bolt head through hole and secure with washer, nut, and locknut. Seal openings between mast arm mountings and mast arm with mastic.
- (a) Threaded top mounted slip fitter openings shall be 1/2 NPS.
(b) Serrations in fittings shall match those on bottom of signal heads or in lock ring.
(c) Top opening shall be offset when backplate is used.
- Wireway shall have a cross section area of 0.95 square inch minimum. Minimum width of 1/2".

SIGNAL SLIP FITTERS



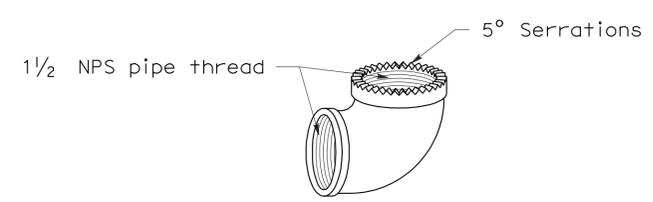
POLE PLATE

For side mountings



LOCK RING

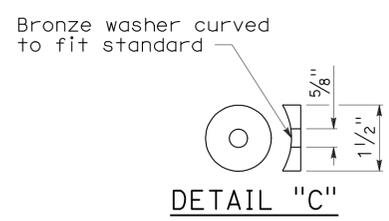
Use where locking ring is not integral with signal housing or fitting.



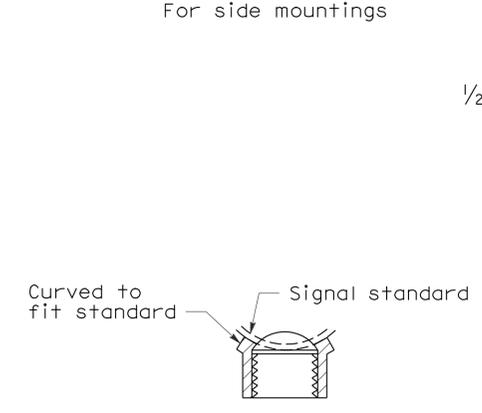
SPECIAL 90° ELBOW

One for each signal head, except those with special slip fitter mounting

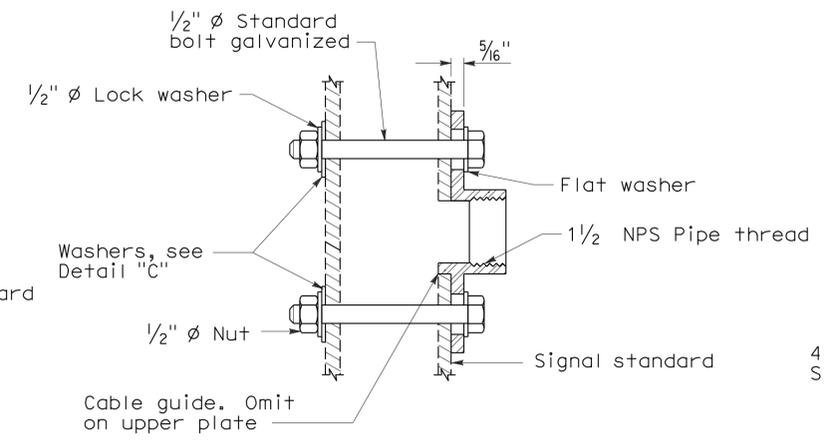
MISCELLANEOUS MOUNTING HARDWARE



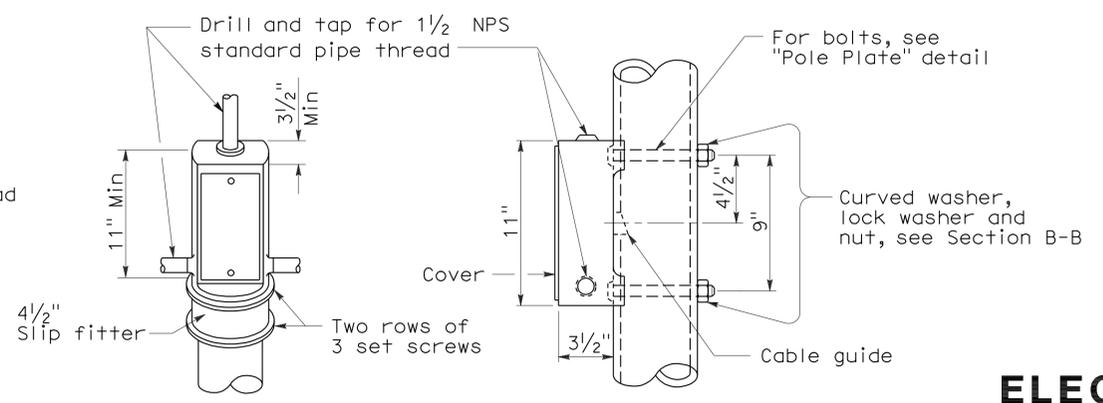
DETAIL "C"



SECTION A-A



SECTION B-B



TOP MOUNTING

SIDE MOUNTING

TERMINAL COMPARTMENTS

ELECTRICAL SYSTEMS (SIGNAL HEADS AND MOUNTINGS)

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

NO SCALE

RSP ES-4D DATED June 6, 2008 SUPERSEDES STANDARD PLAN ES-4D DATED MAY 1, 2006 - PAGE 421 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-4D

2006 REVISED STANDARD PLAN RSP ES-4D

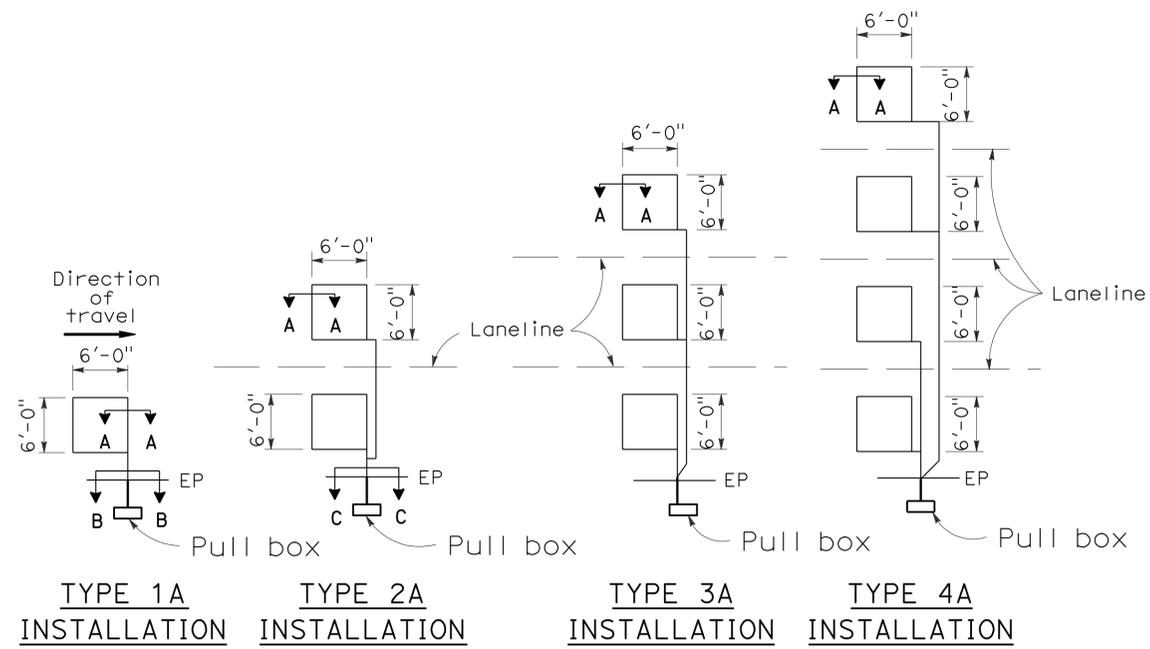
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	587	595

REGISTERED ELECTRICAL ENGINEER
 October 5, 2007
 PLANS APPROVAL DATE
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

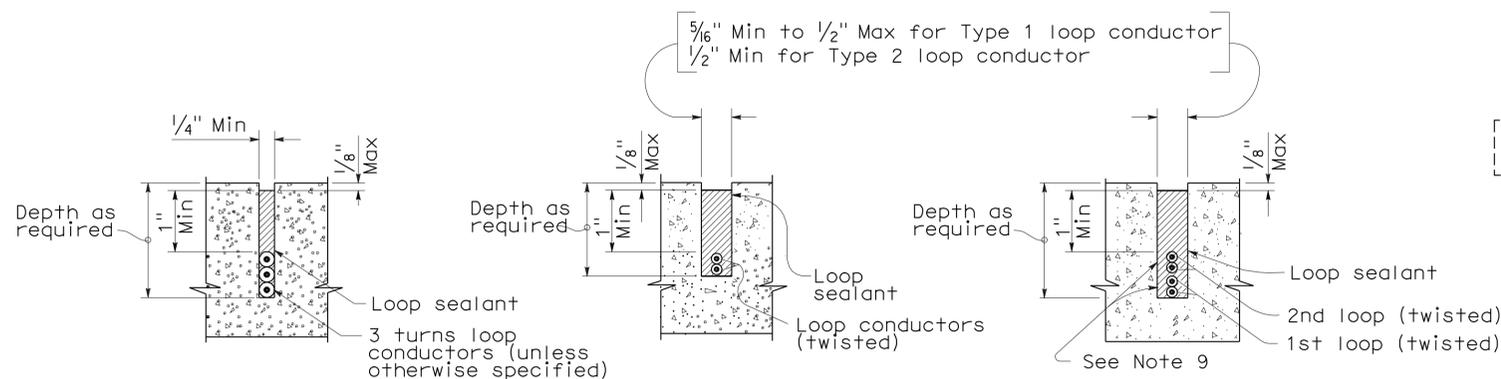
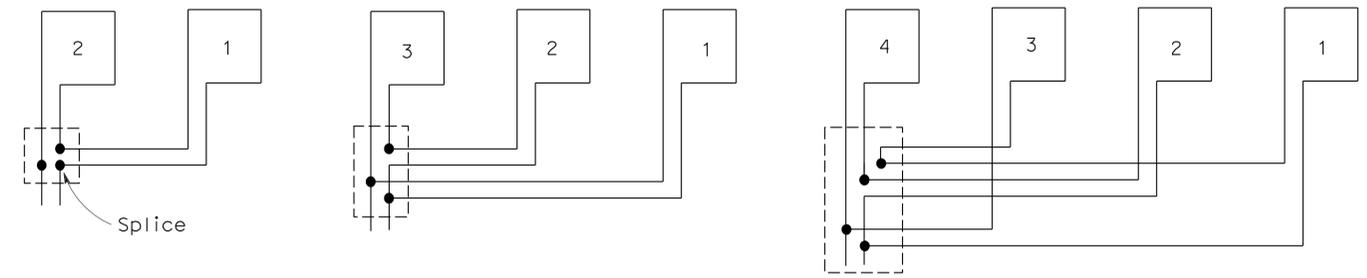
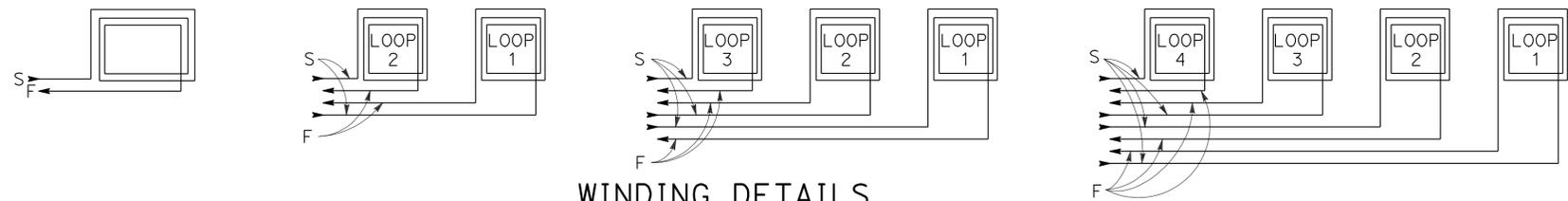
REGISTERED PROFESSIONAL ENGINEER
 Jeffrey G. McRae
 No. E14512
 Exp. 6-30-08
 ELECTRICAL
 STATE OF CALIFORNIA

LOOP INSTALLATION PROCEDURE

- Loops shall be centered in lanes.
- Saw slots in pavement for loop conductors as shown in details.
- Distance between side of loop and a lead-in saw cut from adjacent detectors shall be 2'-0" minimum. Distance between lead-in saw cuts shall be 6" minimum.
- Bottom of saw slot shall be smooth with no sharp edges.
- Slots shall be washed until clean, blown out and thoroughly dried before installing loop conductors.
- Adjacent loops on the same sensor unit channel shall be wound in opposite directions.
- Identify and tag loop circuit pairs in the pull box with loop number, start (S) and finish (F) of conductor. Identify and tag lead-in-cable with sensor number and phase.
- Install loop conductor in slot using a 3/16" to 1/4" thick wood paddle. Hold loop conductors with wood paddles (at the bottom of the sawed slot) during sealant placement.
- No more than 2 twisted pairs shall be installed in one sawed slot.
- Allow additional 5'-0" of slack length of conductor for the lead-in run to pull box.
- The additional length of each conductor for each loop shall be twisted together into a pair (6 turns per 3'-4" minimum) before being placed in the slot and conduit leading to pull box.
- Test each loop circuit for continuity, circuit resistance and insulation resistance at the pull box before filling slots.
- Fill slots as shown in details.
- Splice loop conductors to lead-in-cable. Splices shall be soldered.
- End of lead-in-cable and Type 2 loop conductor shall be waterproofed prior to installing in conduit to prevent moisture from entering the cable.
- Lead-in-cable shall not be spliced between the pull box and the controller cabinet terminals.
- Test each loop circuit for continuity, circuit resistance and insulation resistance at the controller cabinet location.
- Where loop conductors are not to be spliced to a lead-in-cable, the ends of the conductors shall be taped and waterproofed with electrical insulating coating.



- 1A thru 4A = 1 Type A loop configuration in each lane.
- 1B thru 4B = 1 Type B loop configuration in each lane.
- 1C = 1 Type C loop configuration entering lanes as required.
- 1D thru 4D = 1 Type D loop configuration in each lane.
- 1E thru 4E = 1 Type E loop configuration in each lane.
- 1Q thru 4Q = 1 Type Q loop configuration in each lane.
(Use Type A, B, C, D, E or Q loop detector configurations only when specified or shown on plans)



ELECTRICAL SYSTEMS (DETECTORS)

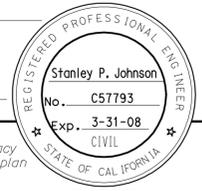
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

NO SCALE

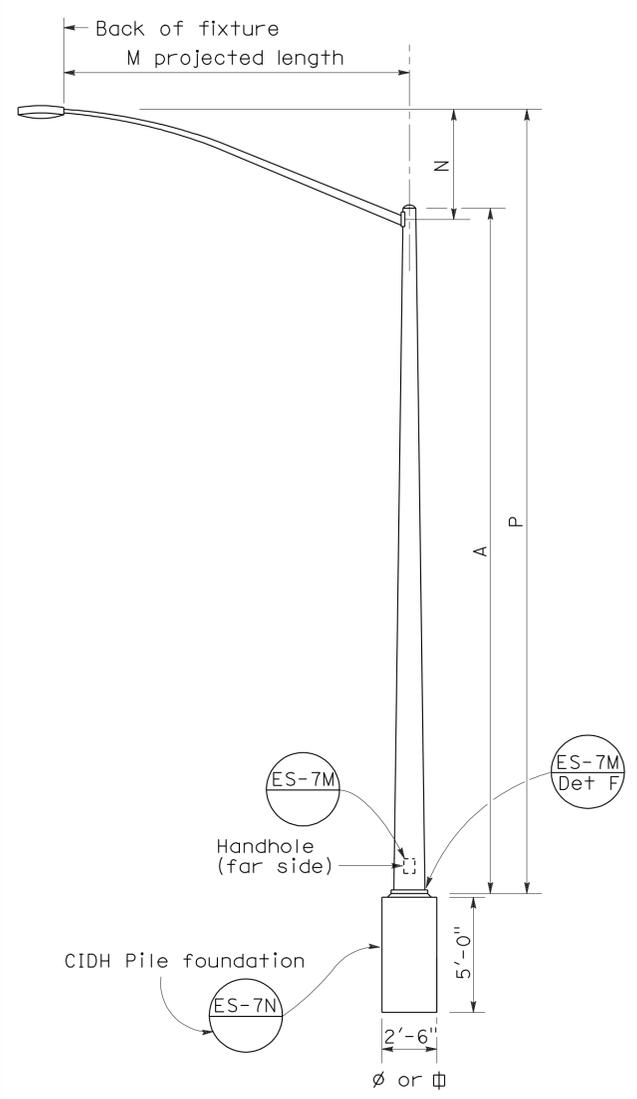
RSP ES-5A DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-5A
DATED MAY 1, 2006 - PAGE 423 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-5A

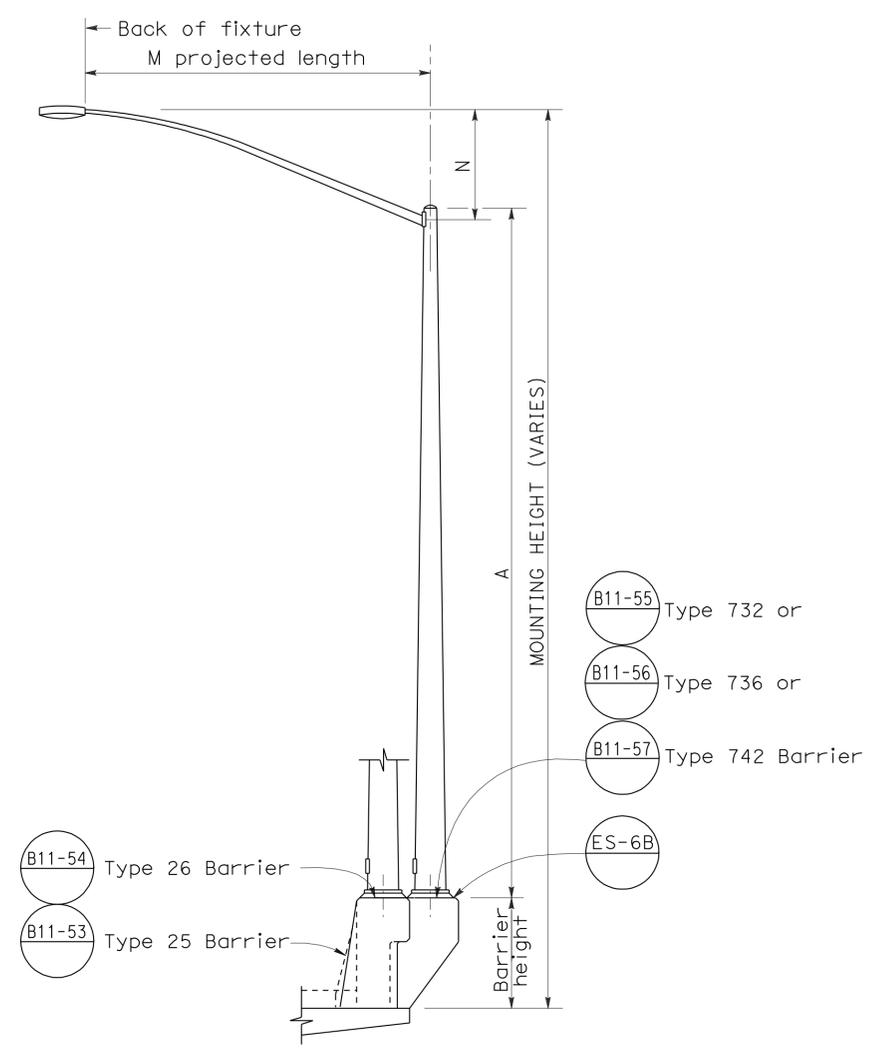
2006 REVISED STANDARD PLAN RSP ES-5A



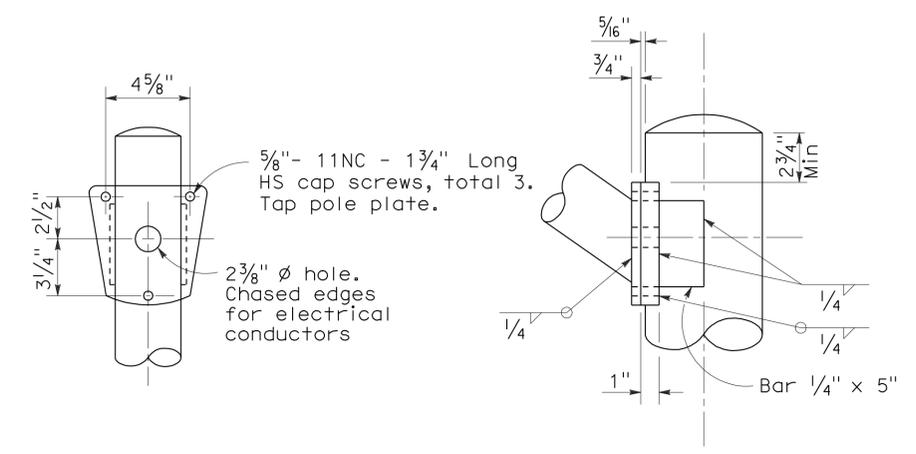
To accompany plans dated 7-11-11



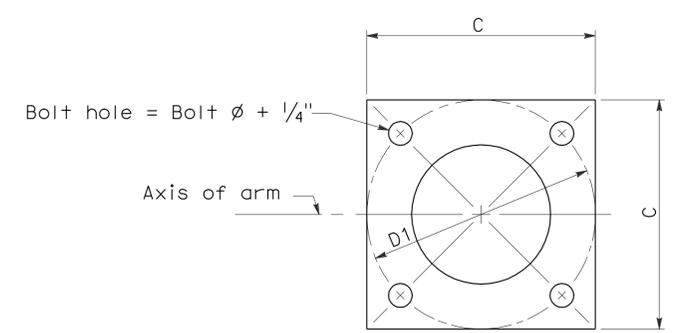
ELEVATION
TYPE 15 AND TYPE 21



ELEVATION
TYPE 15 AND TYPE 21 BARRIER RAIL MOUNTED



DETAIL R
LUMINAIRE ARM CONNECTION



BASE PLATE

POLE TYPE	POLE DATA				BASE PLATE DATA				LUMINAIRE ARM
	A Height	Min OD Base	Min OD Top	Wall Thickness	C	D1 Bolt Circle	Thick-ness	Anchor Bolts Size	
15	30'	8"	3 7/8"	0.1196"	1'-0"	1'-0"	1"	1" ø x 3'-0" x 4"*	6' - 15' 12'
21	35'	8 5/8"	3 7/8"	0.1196"	1'-0"	1'-0"	1"	1 1/4" ø x 3'-0" x 4"*	6' - 15' 12'

* For barrier rail bolts, see Standard Plan ES-6B.

M Projected Length	N Rise	Min OD At Pole	Nominal Thickness	LUMINAIRE ARM DATA	
				Type 15	Type 21
6'-0"	2'-0"±	3/4"	0.1196"	31'-6"±	36'-6"±
8'-0"	2'-6"±	3/2"	0.1196"	32'-0"±	37'-0"±
10'-0"	3'-3"±	3 7/8"	0.1196"	32'-9"±	37'-9"±
12'-0"	4'-3"±	3 7/8"	0.1196"	33'-9"±	38'-9"±
15'-0"	4'-9"±	4 1/4"	0.1196"	34'-3"±	39'-3"±

NOTES:

- Indicates arm length to be used unless otherwise noted on the plans.
- For Type 15-SB, use Type 15 standard with Type 30 slip base plate details, see Standard Plan ES-6F.
- For additional notes, see Standard Plan ES-7M and ES-7N.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
ELECTRICAL SYSTEMS
(LIGHTING STANDARD
TYPES 15 AND 21)

NO SCALE

RSP ES-6A DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-6A DATED MAY 1, 2006 - PAGE 427 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-6A

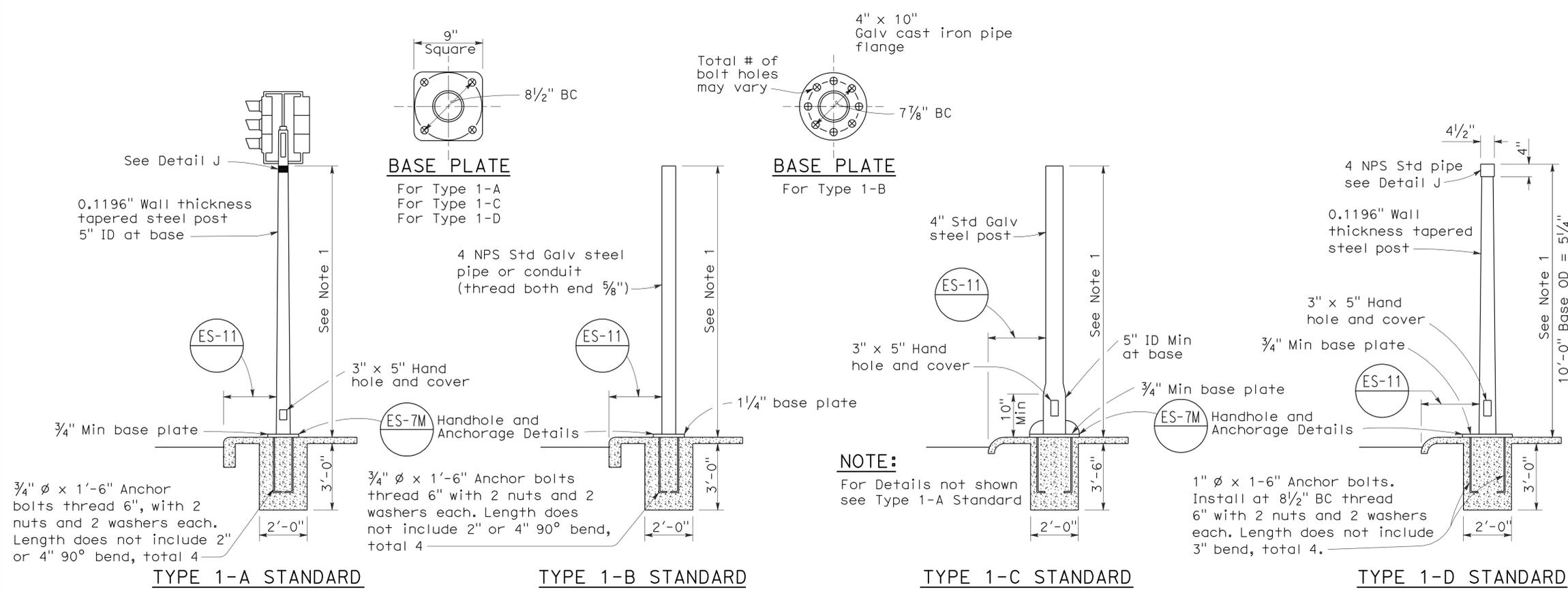
2006 REVISED STANDARD PLAN RSP ES-6A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	589	595

Stanley P. Johnson
 REGISTERED CIVIL ENGINEER
 October 5, 2007
 PLANS APPROVAL DATE
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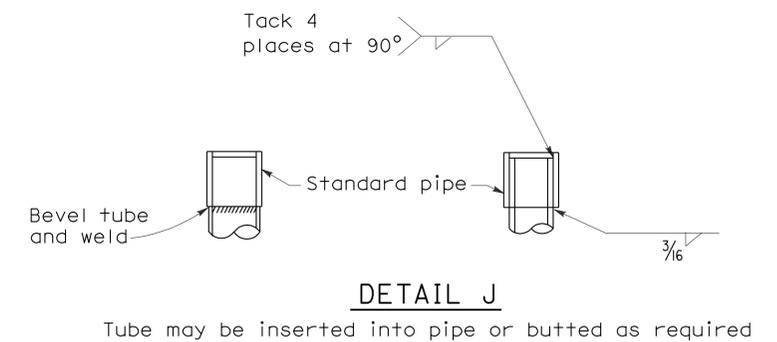
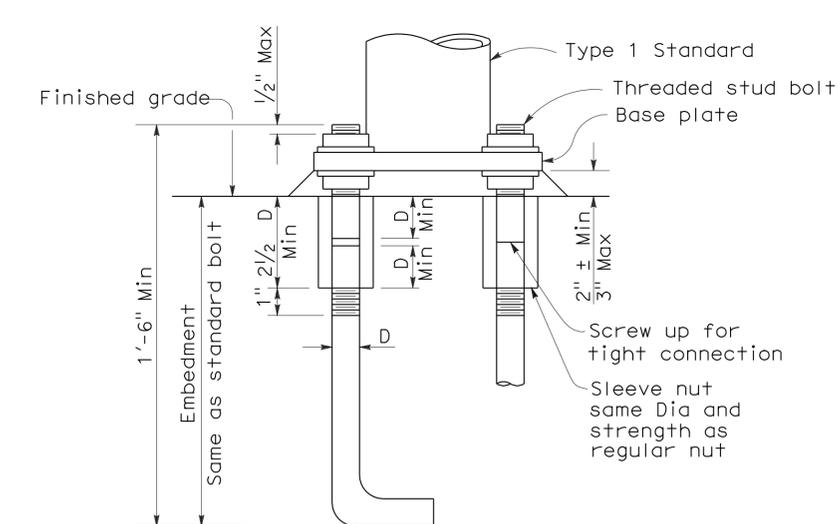
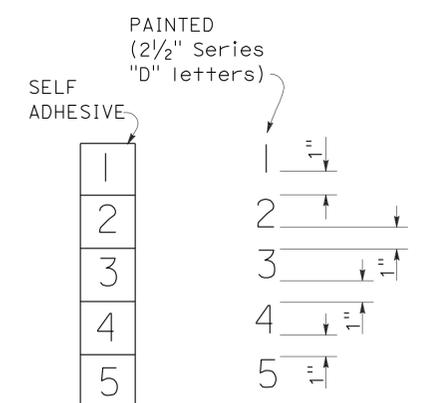
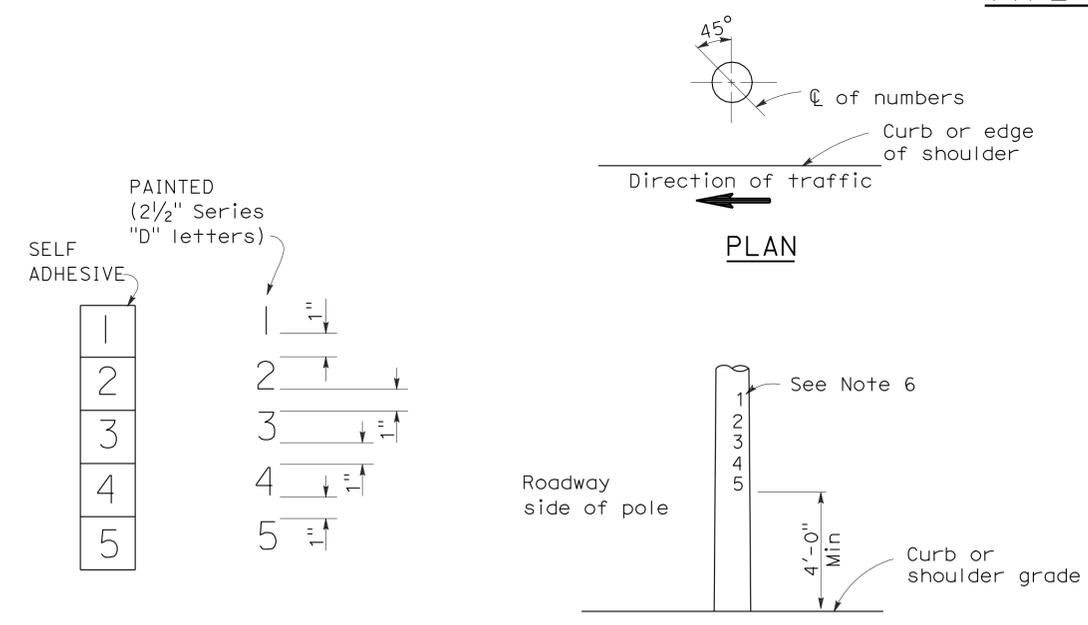
Stanley P. Johnson
 REGISTERED PROFESSIONAL ENGINEER
 No. C57793
 Exp. 3-31-08
 CIVIL
 STATE OF CALIFORNIA

To accompany plans dated 7-11-11



- NOTES:**
- Standards shall be 10'-0" \pm 2" for vehicle signals and 7'-0" \pm 2" for pedestrian signals unless otherwise noted on plans.
 - Top of standards shall be 4 1/2" OD.
 - Conduits shall extend 2" maximum above finished surface of foundation and for Types 1-A, 1-C and 1-D shall be sloped toward handhole.
 - Anchor bolts shall be bonded to conduit or grounding conductor.
 - Conduit between standard and adjacent pull box shall be 2" minimum.
 - Paint numbers on roadway side facing traffic when electrolier or post is left of direction of traffic.

TYPE 1 SIGNAL STANDARDS



LOCATION OF EQUIPMENT NUMBERS ON STANDARDS AND POSTS

ANCHOR BOLTS WITH SLEEVE NUTS

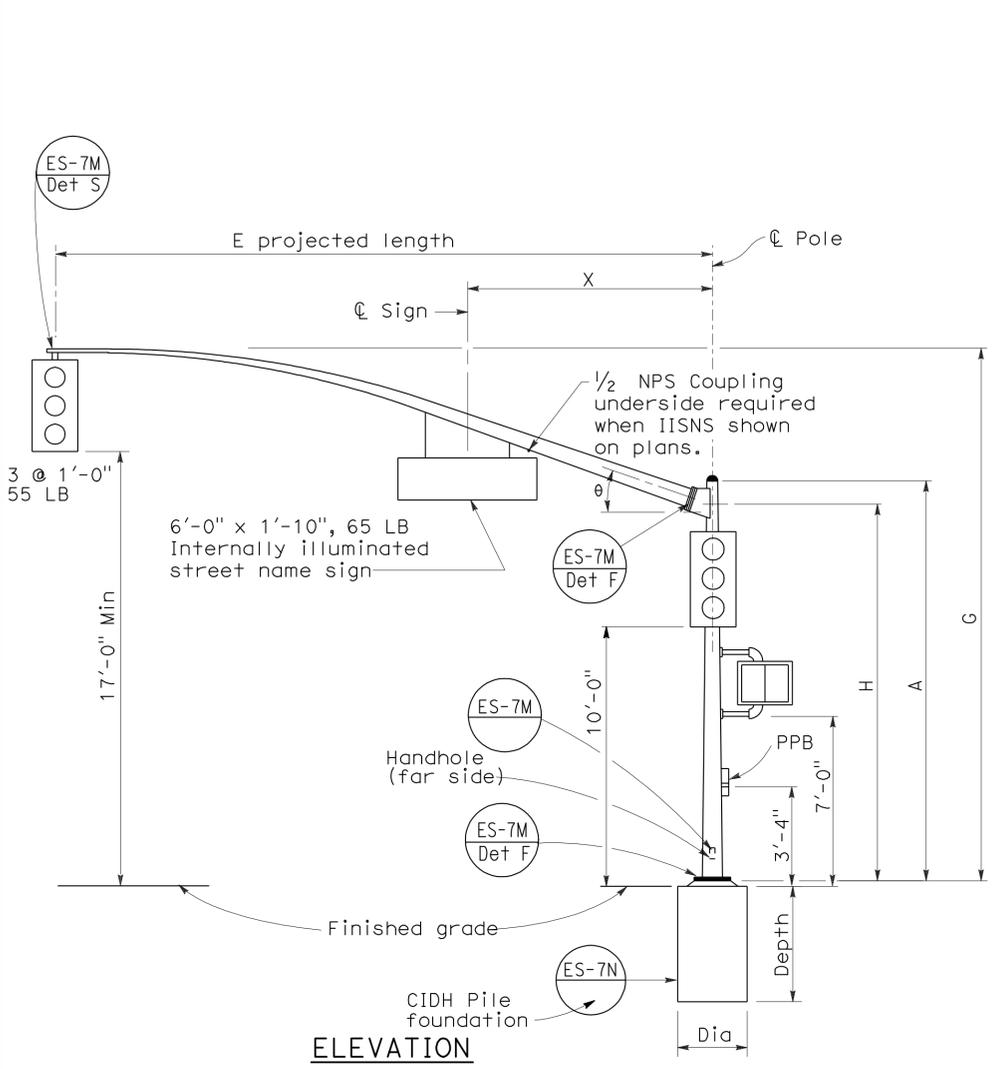
Sleeve nuts to be used only when shown or specified on Project Plans
D = Diameter of anchor bolt

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
ELECTRICAL SYSTEMS (SIGNAL AND LIGHTING STANDARD TYPE 1 STANDARD AND EQUIPMENT NUMBERING)
NO SCALE

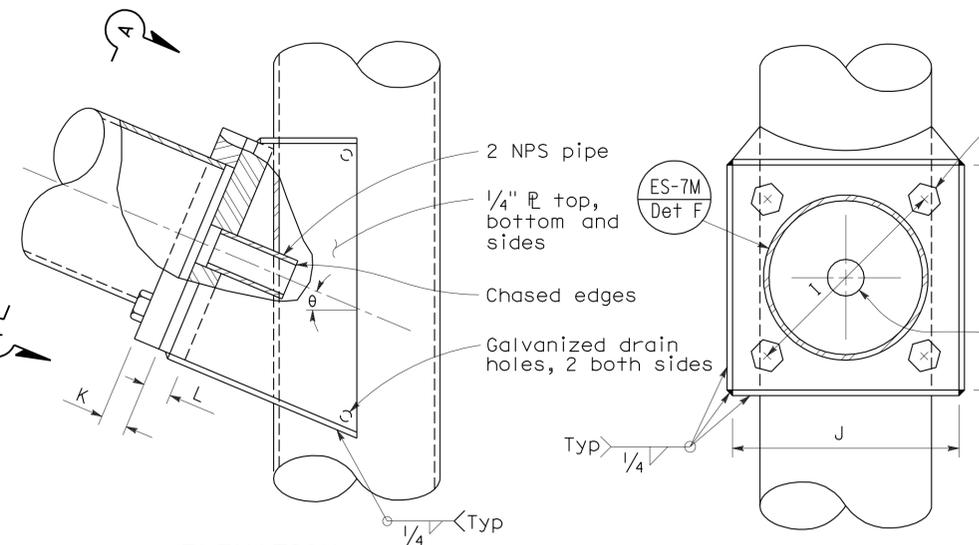
RSP ES-7B DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-7B DATED MAY 1, 2006 - PAGE 438 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-7B

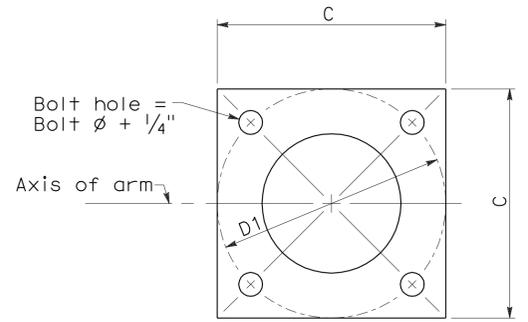
2006 REVISED STANDARD PLAN RSP ES-7B



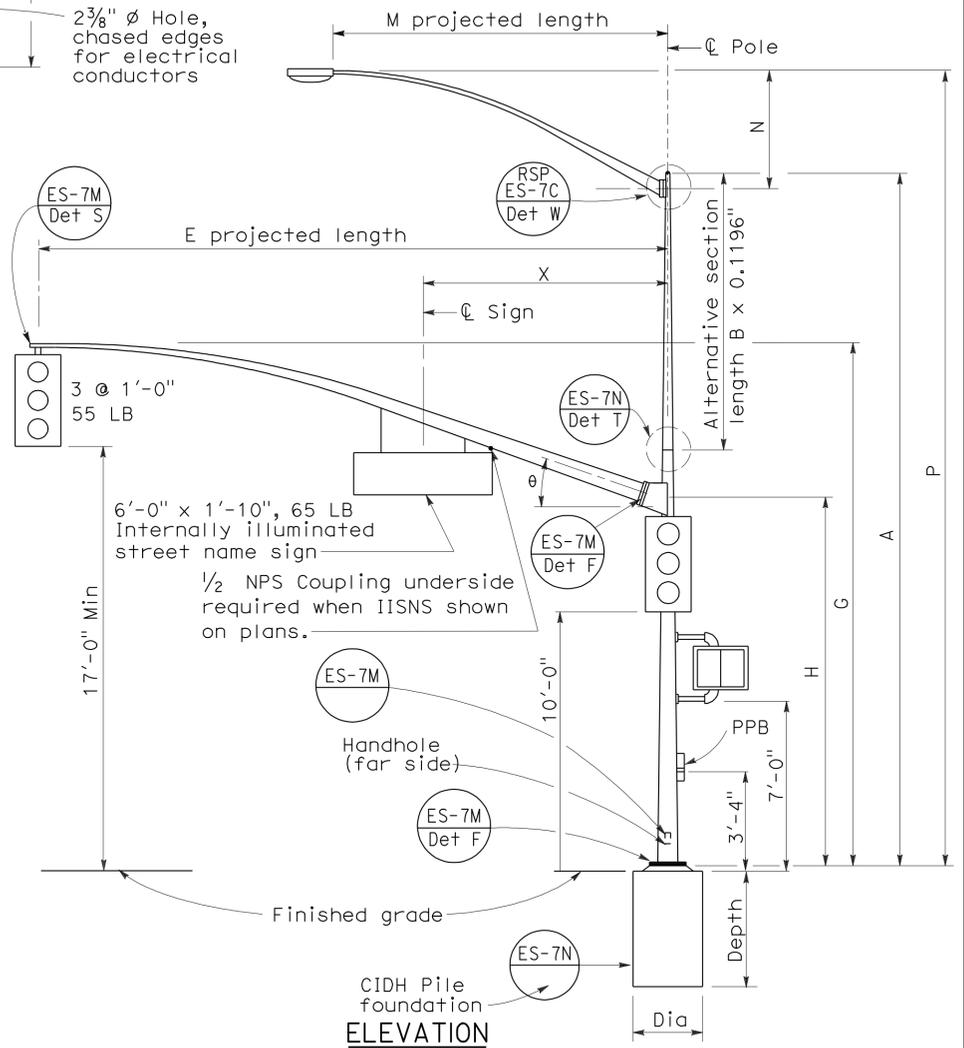
ELEVATION
TYPE 16-2-100, 18-2-100



ELEVATION
VIEW A-A
SIGNAL ARM CONNECTION DETAILS



BASE PLATE



ELEVATION
TYPE 17-2-100, 17A-2-100,
19-2-100, 19A-2-100

E Projected Length	G Mounting Height	H	Min OD At Pole	Thickness	I Bolt Circle	HS Cap Screws	J Plate Size	K Arm R Thickness	L Pole R Thickness	θ	X Max
15'-0"	21'-8"±	17'-6"	6 5/8"	0.1793"	12"	1 1/4"-7NC-3"	1'-0"	1 1/4"	1 1/2"	23°	10'-6"
20'-0"	21'-8"±	17'-0"	6 5/8"								
25'-0"	22'-8"±	16'-0"	7 5/16"	0.1793"	12"	1 1/4"-7NC-3"	1'-0"	1 1/4"	1 1/2"	23°	10'-6"
30'-0"	23'-0"±		8"								

M Projected Length	N Rise	Min OD at Pole	Thickness	P Mounting Height	
				30'-0" Pole	35'-0" Pole
6'-0"	2'-0"±	3 1/4"	0.1196"	31'-6"±	36'-6"±
8'-0"	2'-6"±	3 1/2"		32'-0"±	37'-0"±
10'-0"	3'-3"±	3 7/8"		32'-9"±	37'-9"±
12'-0"	4'-3"±	4"		33'-9"±	38'-9"±
15'-0"	4'-9"±	4 1/4"		34'-3"±	39'-3"±

Pole Type	Load Case	Wind Velocity mph	POLE DATA				BASE PLATE DATA				Anchor Bolts Size	Luminaire Arm	Signal Arm	CIDH PILE FOUNDATION				
			A Height	Min OD		Thickness	Alternative Section		C	D1 Bolt Circle				Thickness	Diameter	Depth	Reinforced	
				Base	Top		B Length	Bottom										Top
16-2-100	2	100	18'-6"	10 3/4"	0.1793"	None	8"	6 5/8"	1'-6"	1'-5 1/2"	1 1/2"	2"φ x 42" x 6"	None	15'-0", 20'-0"	2'-6"	7'-2"	Yes	
17-2-100			30'-0"			10'-0"												6 5/8"
17A-2-100			35'-0"			15'-0"												5 15/16"
18-2-100			17'-0"			None												8 7/16"
19-2-100			30'-0"			10'-0"												6 5/8"
19A-2-100	35'-0"	15'-0"	5 15/16"	0.2391"	8"	5 5/8"												

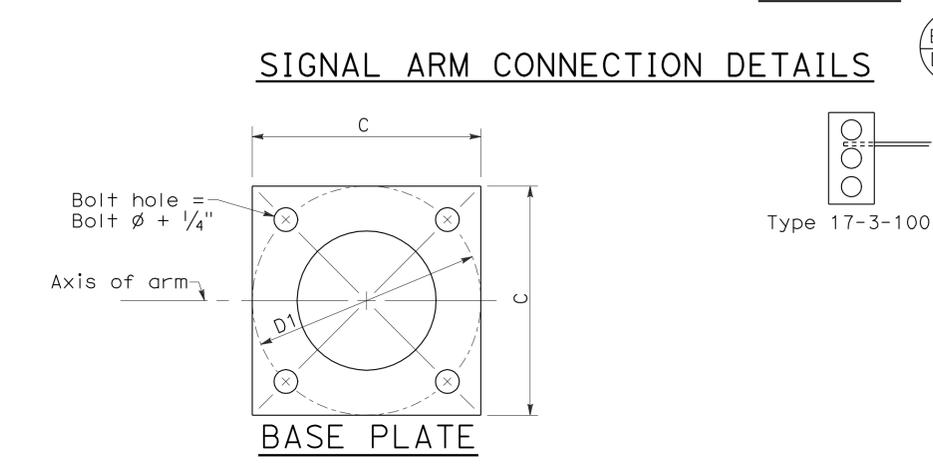
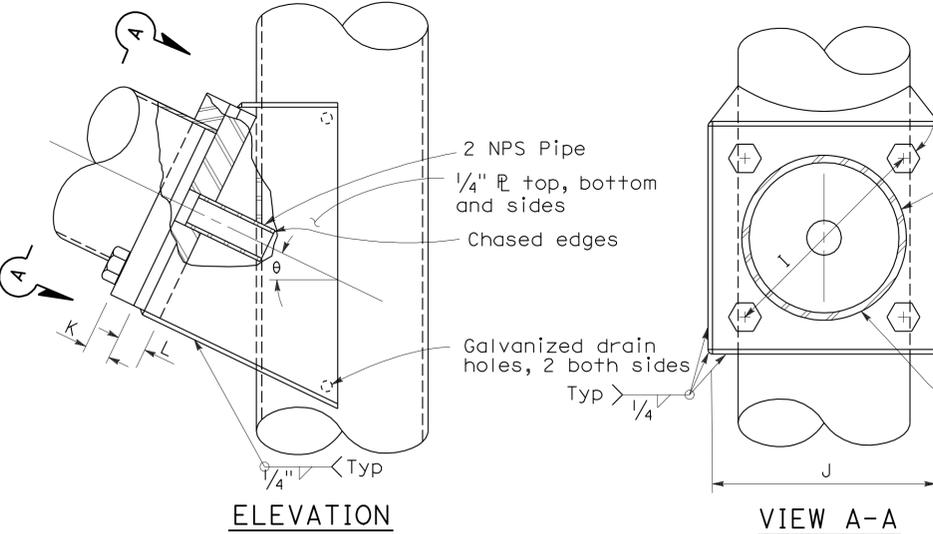
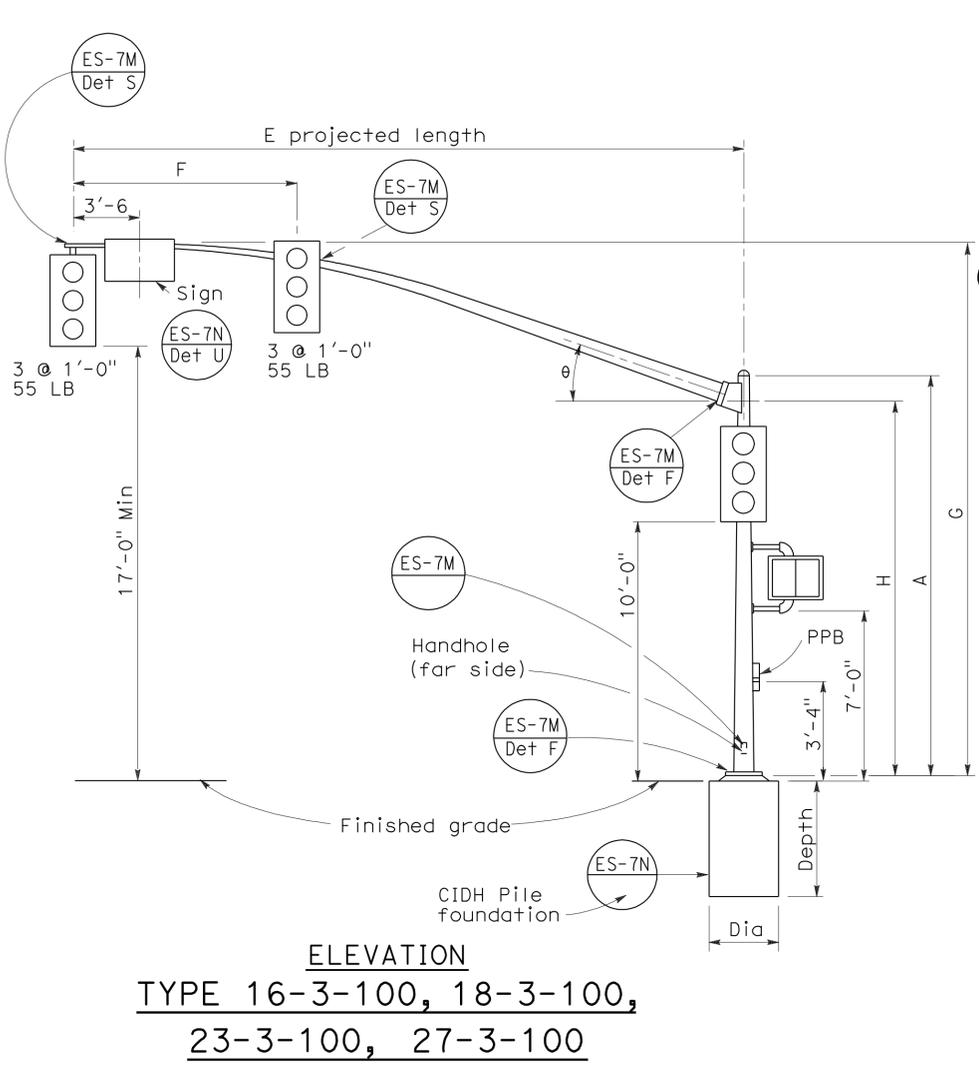
□ Indicates arm length to be used unless otherwise noted on plans.

2006 REVISED STANDARD PLAN RSP ES-7D

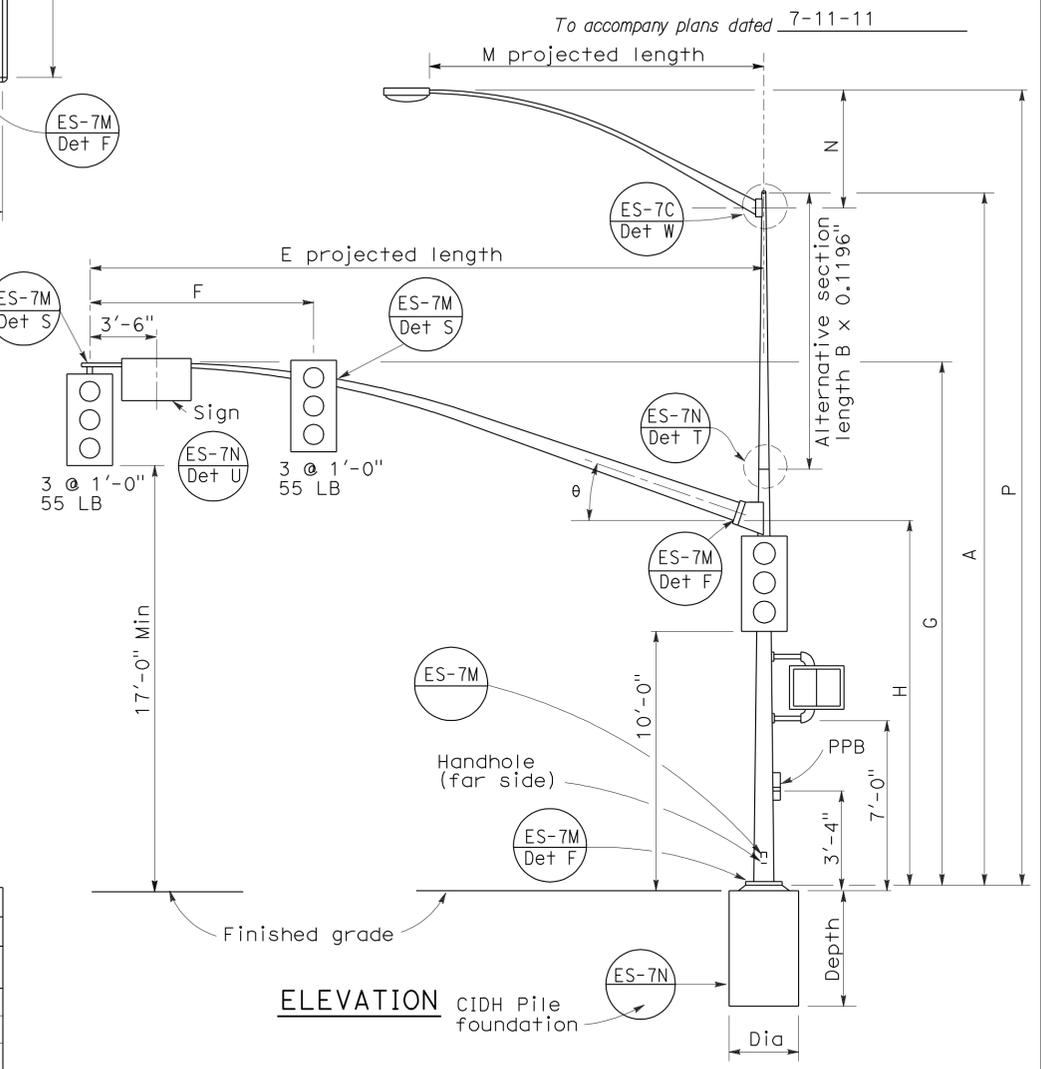
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	591	595

REGISTERED CIVIL ENGINEER
 June 30, 2006
 PLANS APPROVAL DATE
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REGISTERED PROFESSIONAL ENGINEER
 Jeffrey B. Woody
 No. C41260
 Exp. 3-31-07
 CIVIL
 STATE OF CALIFORNIA



ELEVATION
 TYPE 16-3-100, 18-3-100,
 23-3-100, 27-3-100



ELEVATION
 TYPE 17-3-100, 24A-3-100,
 19-3-100, 26-3-100,
 19A-3-100, 26A-3-100, 24-3-100

E Projected Length	F Min Spacing	G Mounting Height	H	Min OD At Pole	Thickness	I Bolt Circle	HS Cap Screws	J Plate Size	K Arm Thickness	L Pole Thickness	theta
15'-0"	8'-0"	21'-8"±	17'-6"	6 5/8"	0.1793"	12"	1 1/4"-7NC-3"	1'-0"	1 1/4"	1 1/2"	23°
20'-0"		21'-8"±		7"							
25'-0"		22'-8"±		7 5/8"							
30'-0"	12'-0"			8"							
35'-0"	14'-0"	23'-0"±	16'-0"	8 3/4"	0.2391"	13"	1'-1"	1 1/2"	1 3/4"	21°	
40'-0"				9 3/8"							
45'-0"	15'-0"	23'-8"±		10 1/16"							

M Projected Length	N Rise	Min OD at Pole	Thickness	P Mounting Height Pole
6'-0"	2'-0"±	3 1/4"	0.1196"	31'-6"±
8'-0"	2'-6"±	3 1/2"		32'-0"±
10'-0"	3'-3"±	3 7/8"	0.1196"	32'-9"±
12'-0"	4'-3"±			33'-9"±
15'-0"	4'-9"±	4 1/4"		34'-3"±

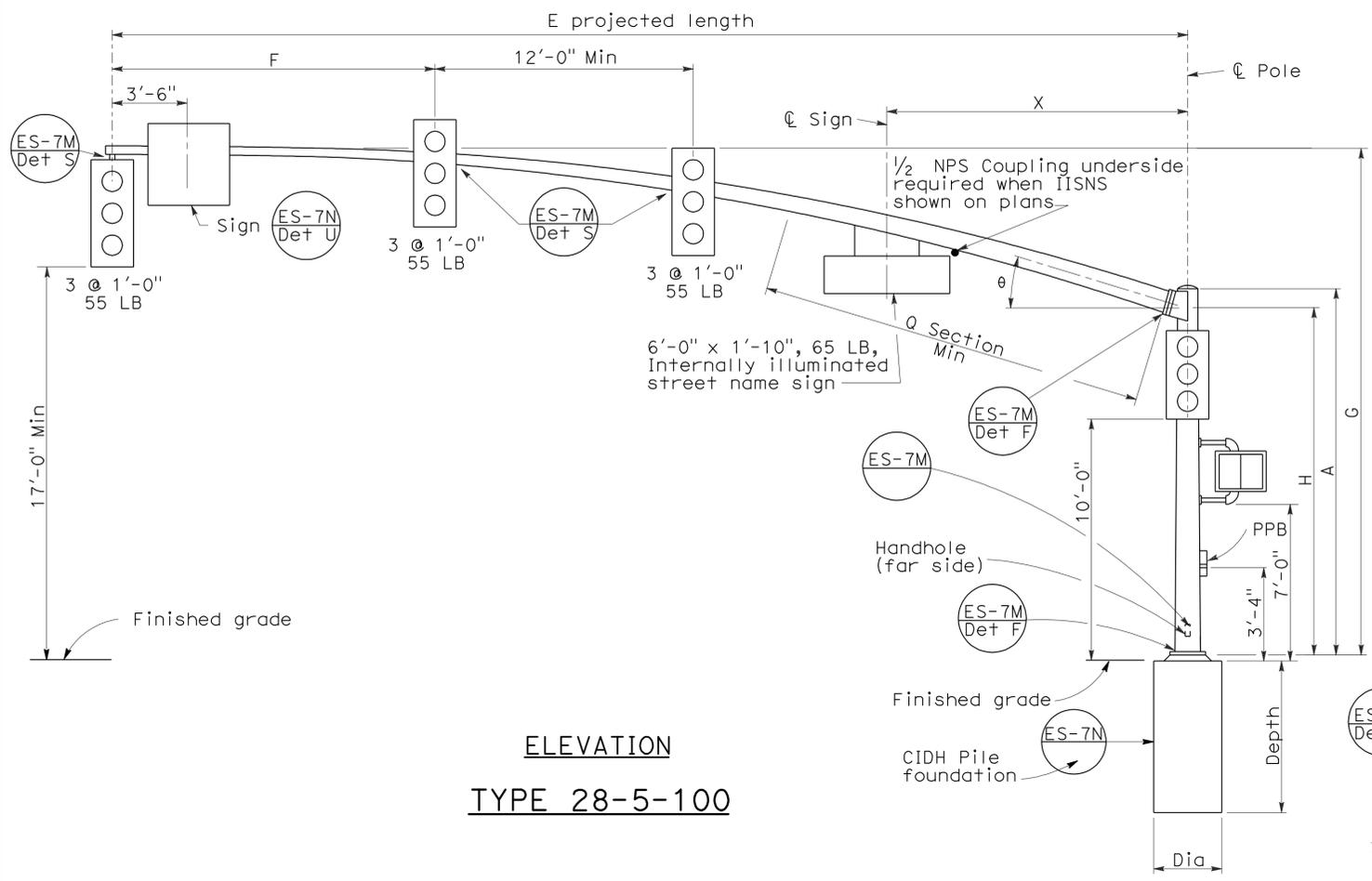
Pole Type	Load Case	Wind Velocity mph	POLE DATA				BASE PLATE DATA				Luminaire Arm	Signal Arm	CIDH PILE FOUNDATION					
			A Height	Min OD		Thickness	Alternative Section			C			D1 Bolt Circle	Thickness	Anchor Bolts Size	Diameter	Depth	Reinforced
				Base	Top		B Length	Bottom	Top									
16-3-100	3	100	18'-6"	10 3/4"	8 1/4"	0.1793"	None	8"	7 5/8"	1'-6"	1'-5 1/2"	1 1/2"	2"ø x 42" x 6"	3'-0"	9'-0"	Yes		
17-3-100			30'-0"		6 5/8"		10'-0"		None								7 5/8"	
18-3-100			17'-0"	8 7/16"	None	None	7 5/8"											
19-3-100			30'-0"	7 7/8"	10'-0"	9 1/4"	7 7/8"											
19A-3-100			35'-0"	7 3/16"	15'-0"	9 1/4"	7 3/16"											
23-3-100			17'-0"	9 5/8"	None	None	7 7/8"											
24-3-100			30'-0"	7 7/8"	10'-0"	9 1/4"	7 7/8"											
24A-3-100			35'-0"	7 3/16"	15'-0"	9 1/4"	7 3/16"											
26-3-100			30'-0"	8"	10'-0"	9 3/8"	8"											
26A-3-100			35'-0"	7 5/16"	15'-0"	9 3/8"	7 5/16"											
27-3-100			17'-0"	9 3/4"	None	None	None											

□ Indicates arm length to be used unless otherwise noted on plans.

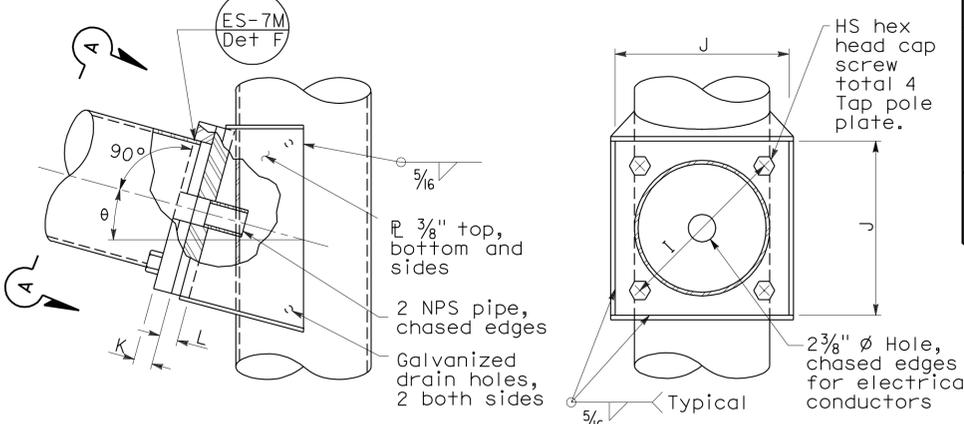
REVISED STANDARD PLAN RSP ES-7E

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
 (SIGNAL AND LIGHTING STANDARD
 CASE 3 ARM LOADING
 WIND VELOCITY=100 MPH
 ARM LENGTHS 15' TO 45')**
 NO SCALE
 RSP ES-7E DATED JUNE 30, 2006 SUPERSEDES STANDARD PLAN DATED MAY 1, 2006 -
 PAGE 441 OF THE STANDARD PLANS BOOK DATED MAY 2006.

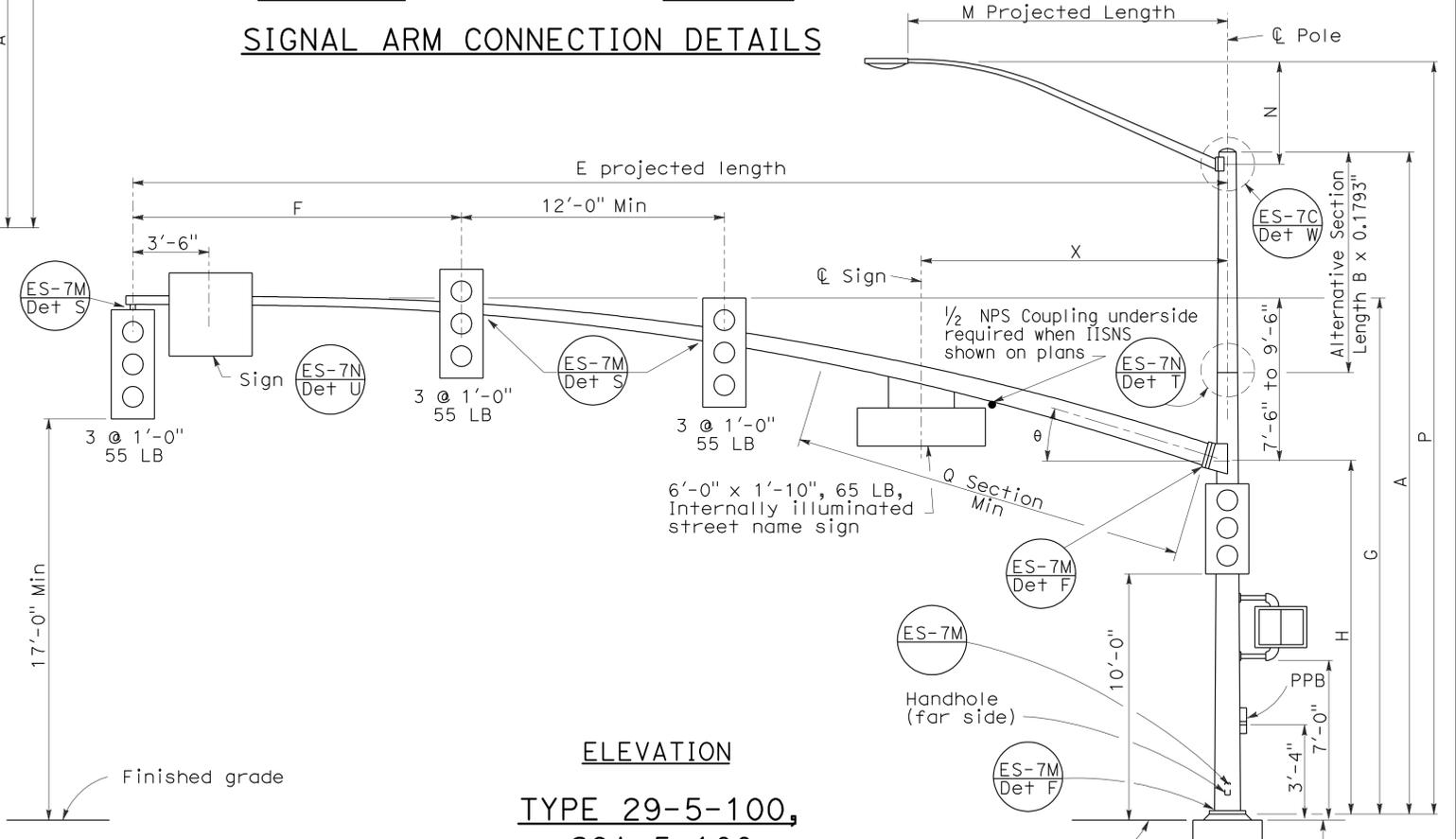
2006 REVISED STANDARD PLAN RSP ES-7E



ELEVATION
TYPE 28-5-100

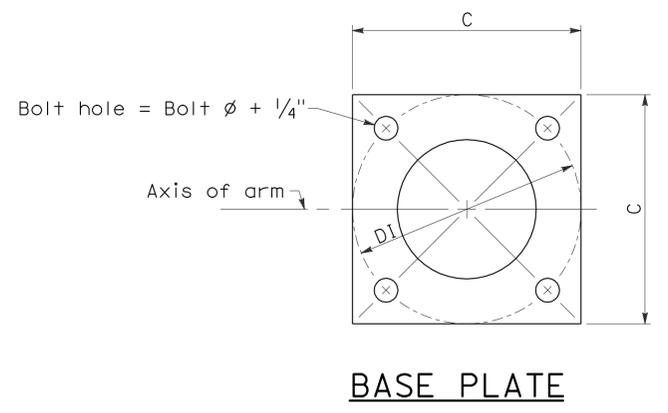


ELEVATION
VIEW A-A
SIGNAL ARM CONNECTION DETAILS



ELEVATION
TYPE 29-5-100,
29A-5-100

M Projected Length	N Rise	Min OD at Pole	Thickness	P Mounting Height
6'-0"	2'-0"±	3 1/4"	0.1196"	30'-0" Pole
8'-0"	2'-6"±	3 1/2"		31'-6"±
10'-0"	3'-3"±	3 7/8"		32'-0"±
12'-0"	4'-3"±	4 1/4"		32'-9"±
15'-0"	4'-9"±	4 1/4"		33'-9"±
				35'-0" Pole
				36'-6"±
				37'-0"±
				37'-9"±
				38'-9"±
				39'-3"±



BASE PLATE

E Projected Length	F Min Spacing	G Mounting Height	H	Min OD at Pole	Thickness	I Bolt Circle	HS Cap Screws	J Plate Size	K Arm R Thickness	L Pole R Thickness	θ	Q Section		X Max
												Length	Thickness	
50'-0"	15'-0"	23'-7"± to 25'-7"±	16'-0"	11 7/16"	0.1793"	16"	1 1/2"-6NC-3 1/4"	1'-4"	1 3/4"	1 3/4"	15°	18'-0"	0.2391"	14'-0"
55'-0"				23'-0"										

Pole Type	Load Case	Wind Velocity mph	POLE DATA					BASE PLATE DATA				Luminaire Arm	Signal Arm	CIDH PILE FOUNDATION						
			A Height	Min OD		Thickness	C	DI Bolt Circle	Thickness	Anchor Bolts Size				Dia	Depth	Reinforced				
				Base	Top					B Length	Bottom						Top			
28-5-100	5	100	17'-0"	14"	11 11/16"	21"	21"	2"	2" ø x 42" x 6"	6'-15'	15'-0"	50'-0", 55'-0"	3'-0"	9'-2"	Yes					
29-5-100			30'-0"		9 7/8"											10'-0"	11 1/4"	9 7/8"	23"	23"
29A-5-100			35'-0"		9 3/16"											15'-0"	9 3/16"			

□ Indicates arm length to be used unless otherwise noted on plans.

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
ELECTRICAL SYSTEMS
(SIGNAL AND LIGHTING STANDARD
CASE 5 ARM LOADING
WIND VELOCITY=100 MPH,
ARM LENGTHS 50' TO 55')
 NO SCALE

RSP ES-7G DATED NOVEMBER 17, 2006 SUPERSEDES STANDARD PLAN ES-7G
 DATED MAY 1, 2006 - PAGE 443 OF THE STANDARD PLANS BOOK DATED MAY 2006.

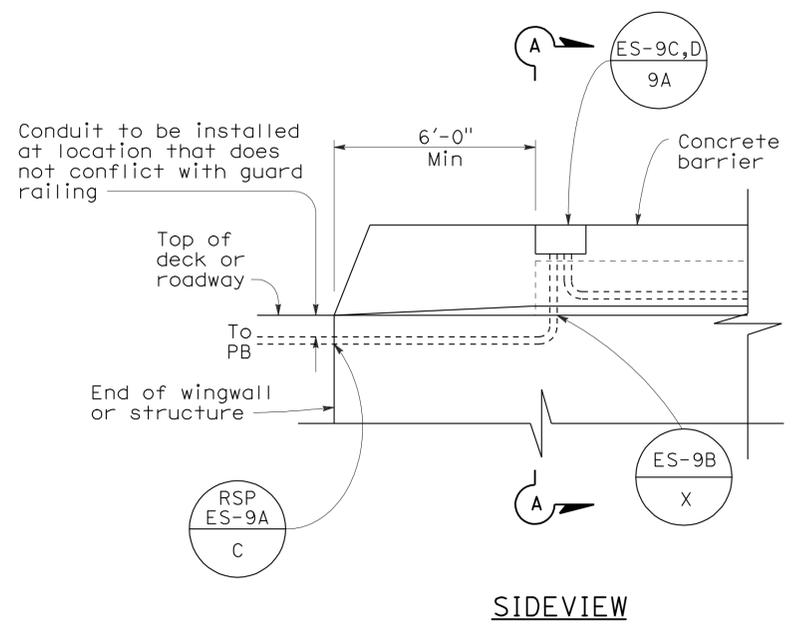
2006 REVISED STANDARD PLAN RSP ES-7G

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	594	595

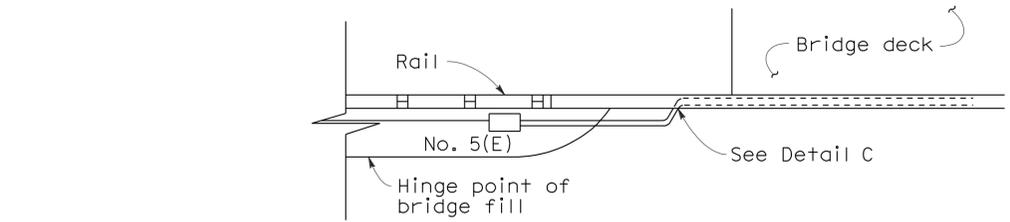
Jeffery G. McRae
 REGISTERED ELECTRICAL ENGINEER
 October 5, 2007
 PLANS APPROVAL DATE
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REGISTERED PROFESSIONAL ENGINEER
 Jeffery G. McRae
 No. E14512
 Exp. 6-30-08
 ELECTRICAL
 STATE OF CALIFORNIA

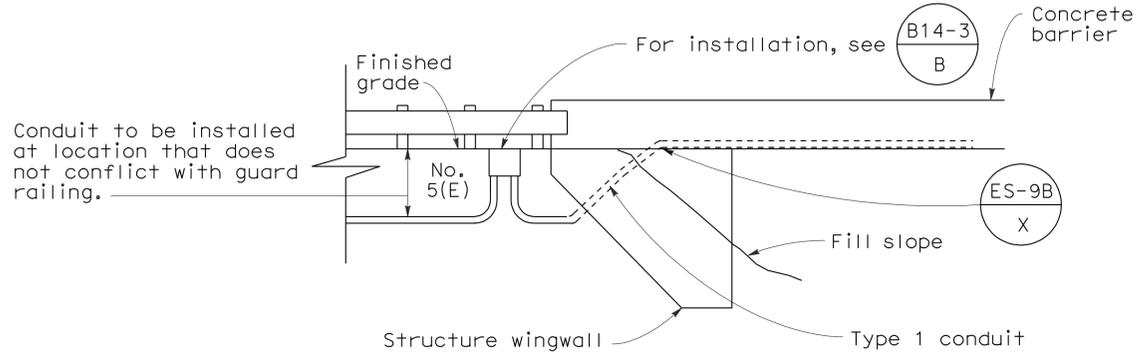
To accompany plans dated 7-11-11



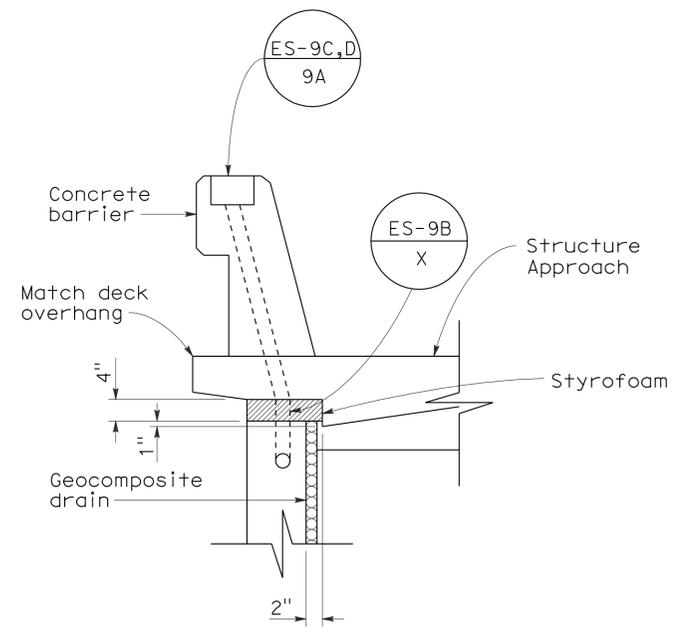
SIDEVIEW



TOP VIEW

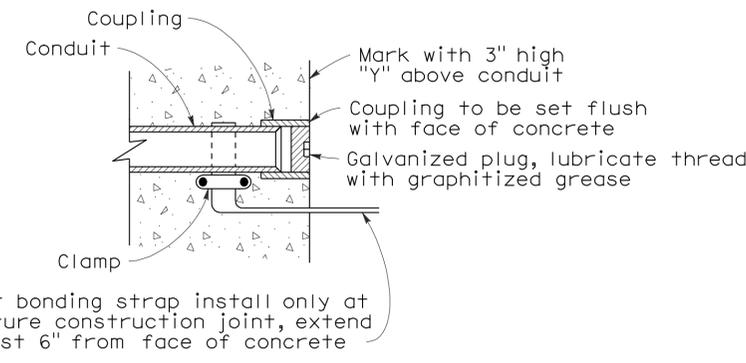


**SIDE VIEW
DETAIL I
CONDUIT TERMINATION**



SECTION A-A

**DETAIL A
CONDUIT TERMINATION**



**DETAIL C
CONDUIT TERMINATION**

Copper bonding strap install only at structure construction joint, extend at least 6" from face of concrete

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**ELECTRICAL SYSTEMS
(ELECTRICAL DETAILS
STRUCTURE INSTALLATIONS)**

NO SCALE

RSP ES-9A DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-9A
DATED MAY 1, 2006 - PAGE 454 OF THE STANDARD PLANS BOOK DATED MAY 2006.

2006 REVISED STANDARD PLAN RSP ES-9A

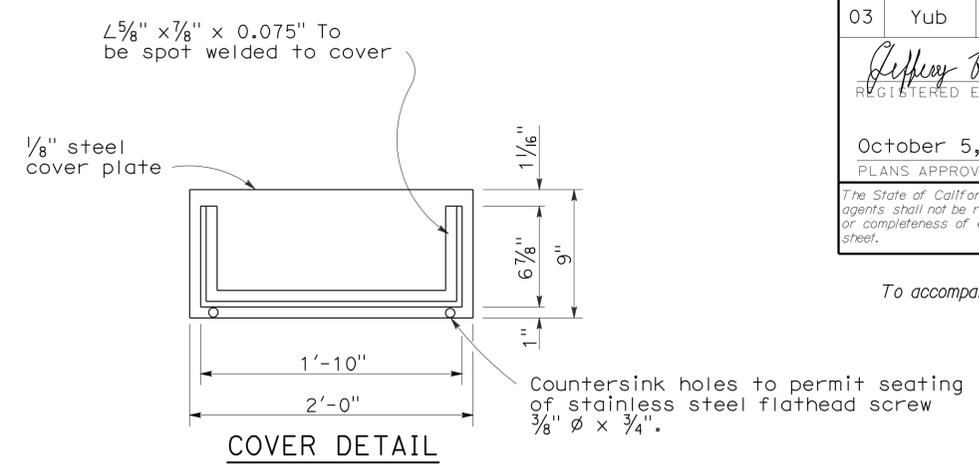
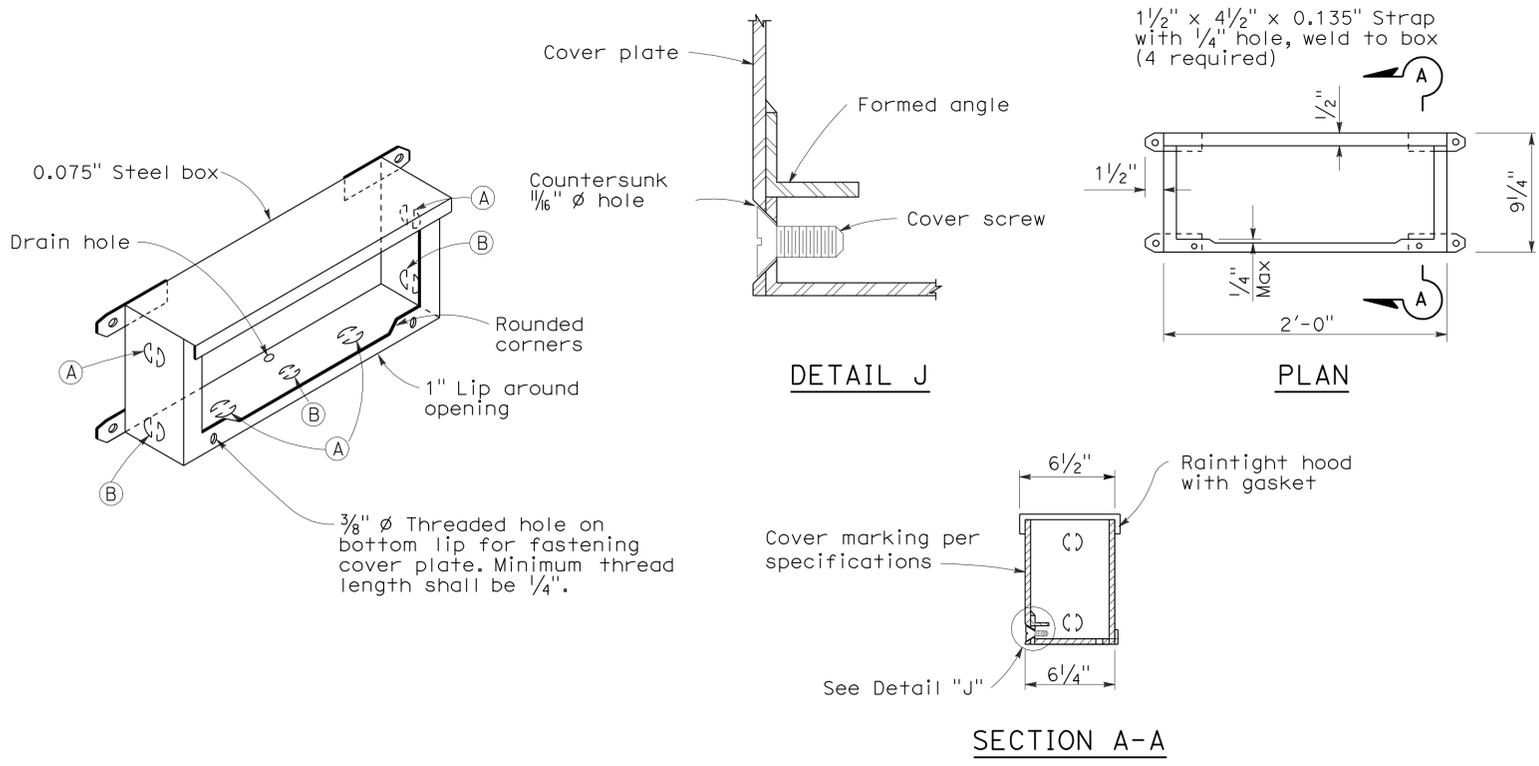
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	20,70	0.8/R2.0, 14.4/15.0	595	595

REGISTERED ELECTRICAL ENGINEER
Jeffery G. McRae
 No. E14512
 Exp. 6-30-08
 ELECTRICAL
 STATE OF CALIFORNIA

October 5, 2007
 PLANS APPROVAL DATE

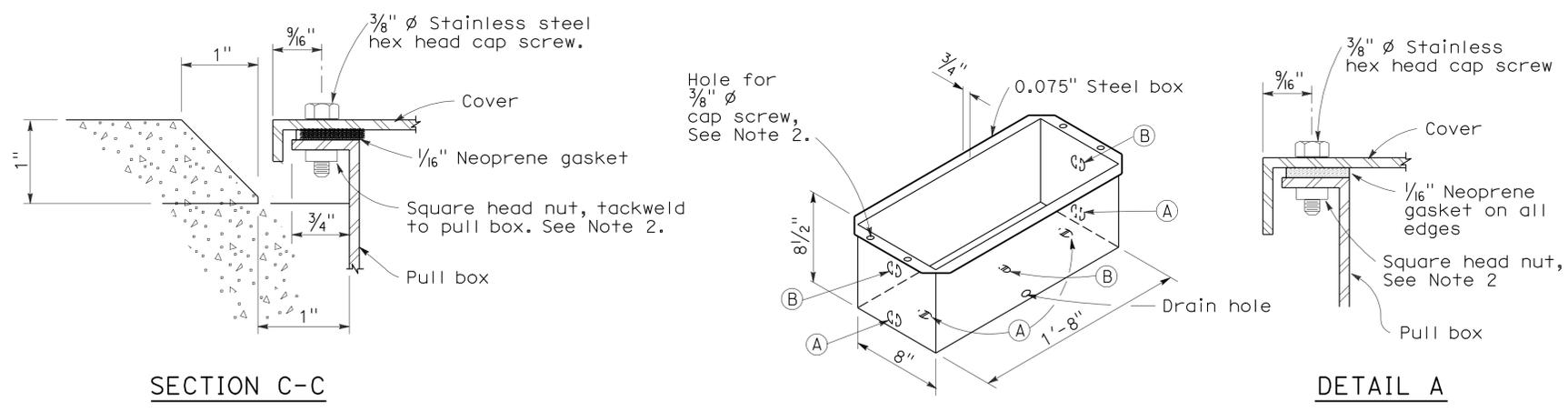
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

To accompany plans dated 7-11-11



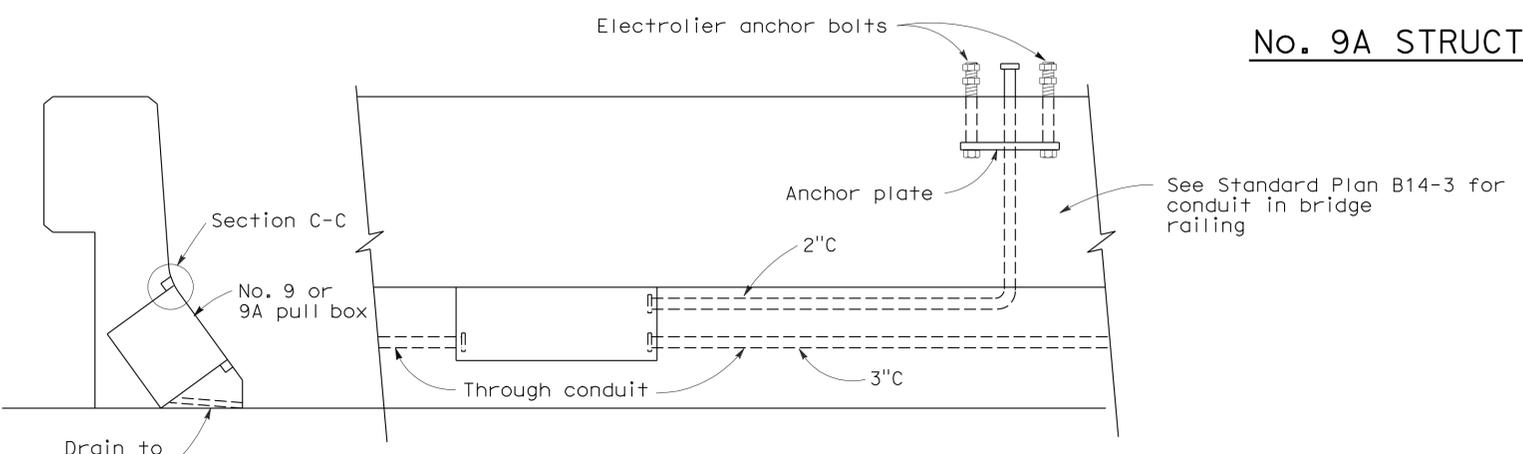
INSTALLATION NOTE:
 Box shall be parallel to top of railing. Close cover box during pouring with 1/4" plywood of sufficient size to provide 1:1 chamfer on 3 sides of cover. Upper edge of plywood shall fit against lower edge of raintight hood.

No. 9 STRUCTURE PULL BOX



- NOTES:** No. 9 and 9A Pull Box
- Corner joints shall be lapped and secured by spot welding or riveting.
 - Where cap screws are used to attach cover to box, either of the following methods of providing adequate threading may be used:
 - Tack weld square nut to bottom of flange (Total 4), or
 - Tack weld a 1/4" x 5/8" x 8" bar beneath flange (Total 2).
 - Pound knockouts flat after punching.
 - Multiple size knockouts shall not be permitted.
 - Pull box covers shall be marked as shown on Standard Plan ES-8.

No. 9A STRUCTURE PULL BOX



INSTALLATION IN SLOPING PARAPETS

For reinforcement in area of electrolier, see railing sheets. For electrolier anchor bolts, see Standard Plan ES-6B.

- KNOCKOUT SCHEDULE**
No. 9 AND 9A PULL BOX
- (A) 2"C, 1 each end, 2 on bottom.
 - (B) 3"C, 1 each end, 1 on bottom.

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
ELECTRICAL SYSTEMS
(ELECTRICAL DETAILS
STRUCTURE INSTALLATIONS)

NO SCALE
 RSP ES-9C DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-9C DATED MAY 1, 2006 - PAGE 456 OF THE STANDARD PLANS BOOK DATED MAY 2006.

2006 REVISED STANDARD PLAN RSP ES-9C