

INDEX OF PLANS

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THE STANDARD PLANS LIST APPLICABLE TO THIS CONTRACT IS INCLUDED IN THE NOTICE TO BIDDERS AND SPECIAL PROVISIONS BOOK.

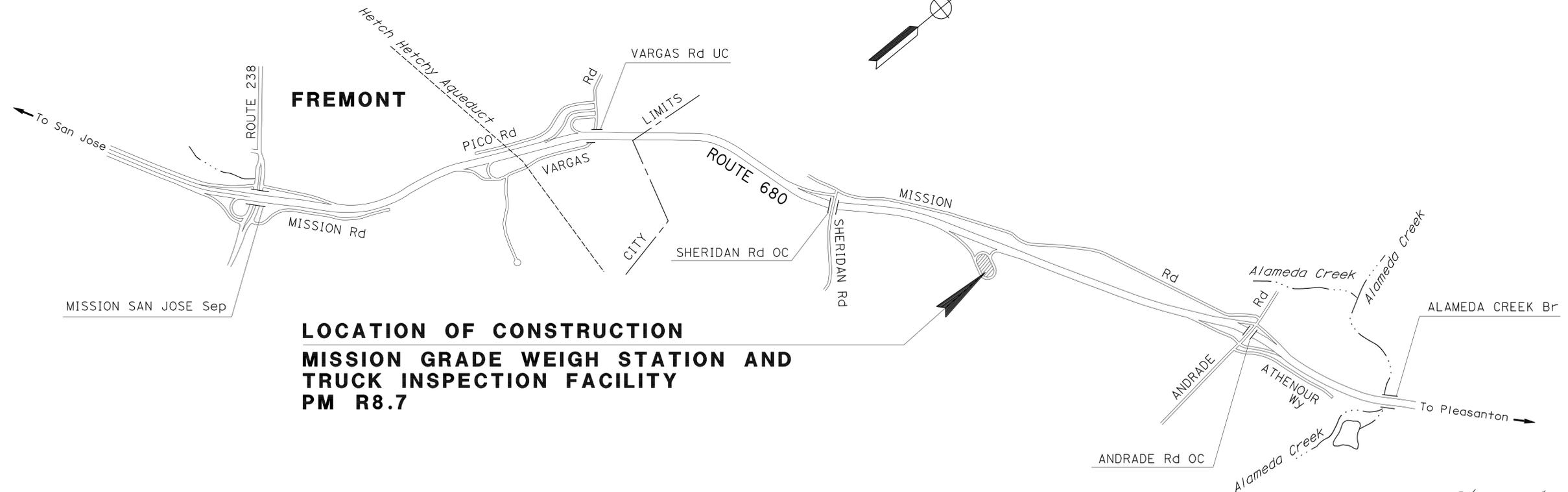
STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

PROJECT PLANS FOR CONSTRUCTION ON  
STATE HIGHWAY  
IN ALAMEDA COUNTY  
NEAR FREMONT  
FROM SHERIDAN ROAD OVERCROSSING  
TO 0.6 MILE SOUTH OF ANDRADE ROAD OVERCROSSING

TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala	680	R8.7	1	18

LOCATION MAP



LOCATION OF CONSTRUCTION  
MISSION GRADE WEIGH STATION AND  
TRUCK INSPECTION FACILITY  
PM R8.7

*ArliSSa Pang* 02-01-10  
PROJECT ENGINEER DATE  
REGISTERED CIVIL ENGINEER

April 19, 2010  
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.



PROJECT MANAGER	LARRY JONES
DESIGN ENGINEER	ARLISSA PANG

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

NO SCALE



CONTRACT No.	04-3A9504
PROJECT ID	0400000971

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala	680	R8.7	2	18

*Florante P. Perez* 12-22-09  
 REGISTERED CIVIL ENGINEER DATE  
 4-19-10  
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER  
 Florante P. Perez  
 No. 41030  
 Exp. 3-31-11  
 CIVIL  
 STATE OF CALIFORNIA

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

STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

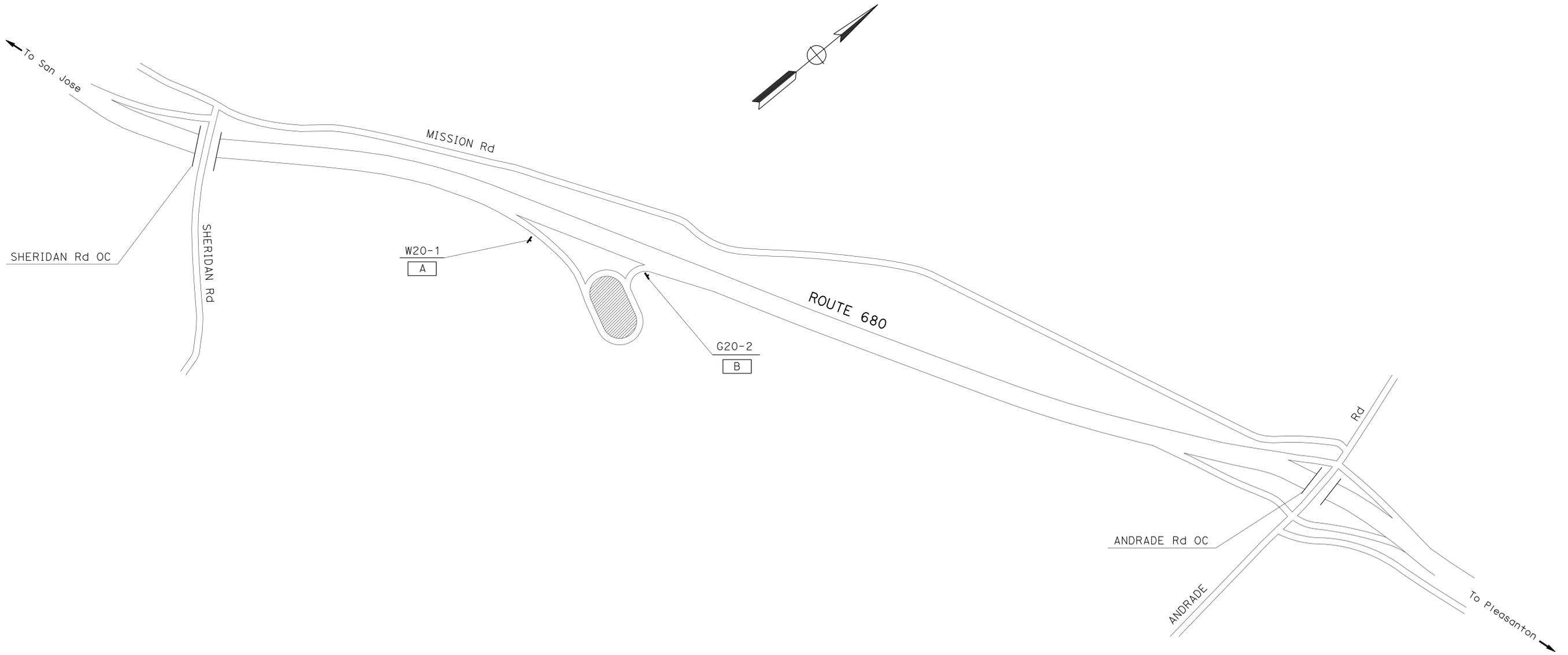
SIGN	SIGN CODE	SIGN MESSAGE	PANEL SIZE (INCH)	No. OF POSTS & SIZES (EA-INCH)	NUMBER OF SIGNS
A	W20-1	ROAD WORK AHEAD	48 x 48	1-4 x 6	1
B	G20-2	END ROAD WORK	36 x 18	1-4 x 4	1

LEGEND:

 CONSTRUCTION AREA SIGN DESIGNATION

NOTE

1. EXACT LOCATION AND POSITION OF CONSTRUCTION AREA SIGNS TO BE DETERMINED BY THE ENGINEER.

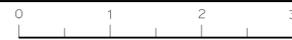


STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 TRAFFIC  
 FUNCTIONAL SUPERVISOR  
 LOURDES DAVID  
 CALCULATED/DESIGNED BY  
 CHECKED BY  
 LEOPOLDO G. BONGATO  
 FLORANTE P. PEREZ  
 REVISED BY  
 DATE REVISED

CONSTRUCTION AREA SIGNS

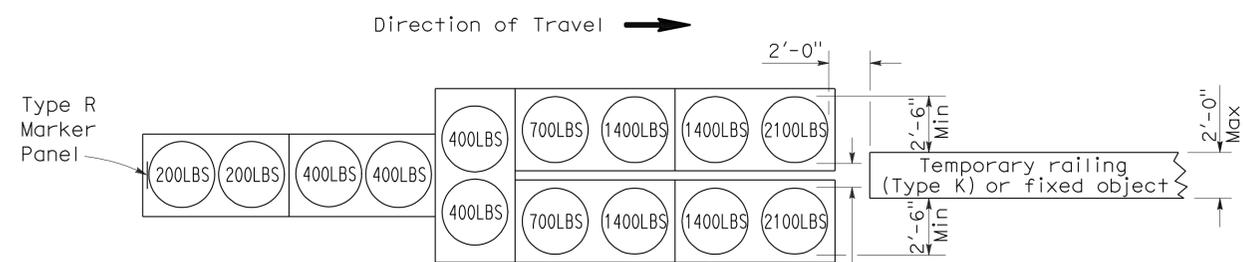
NO SCALE

CS-1



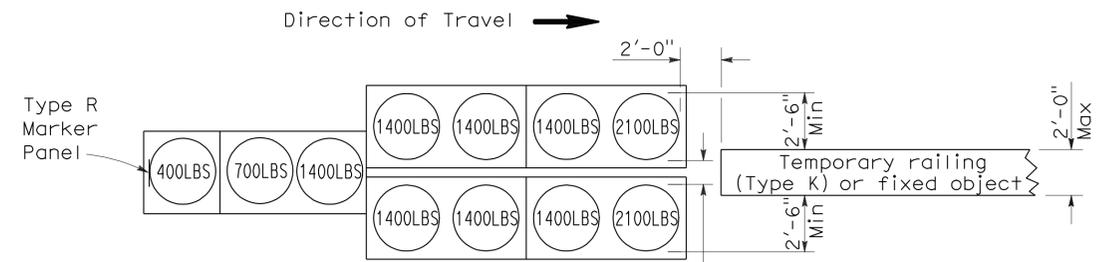
To accompany plans dated 4-19-10

2006 REVISED STANDARD PLAN RSP T1A



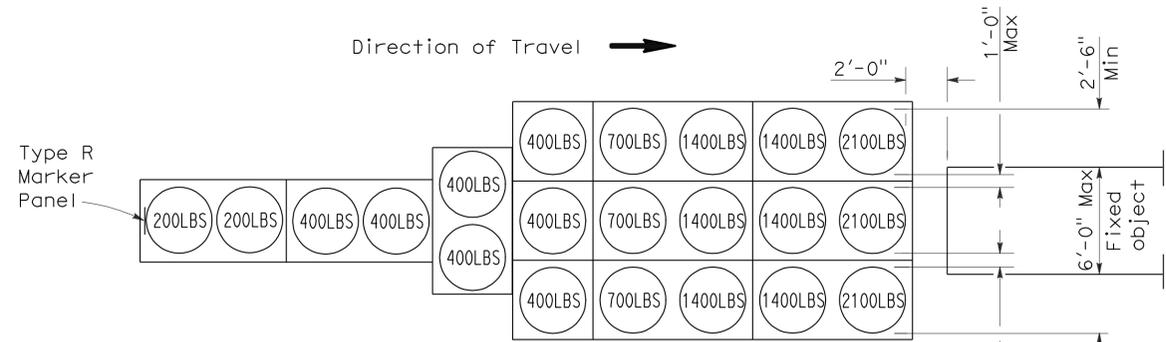
**ARRAY 'TU14'**

Approach speed 45 mph or more



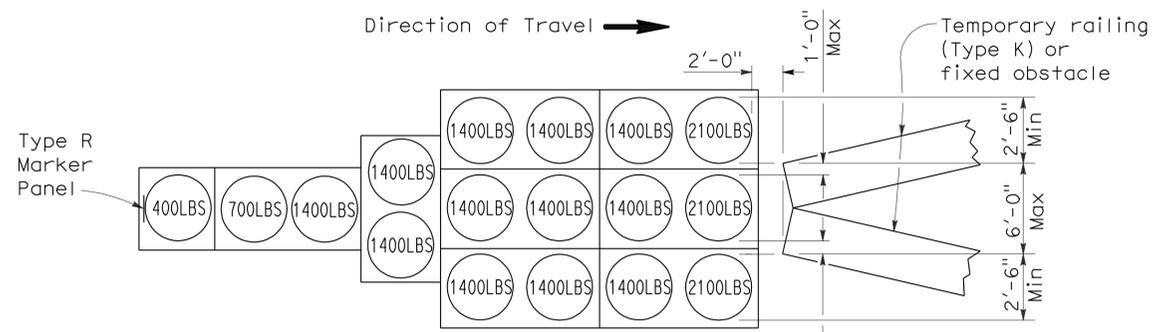
**ARRAY 'TU11'**

Approach speed less than 45 mph



**ARRAY 'TU21'**

Approach speed 45 mph or more

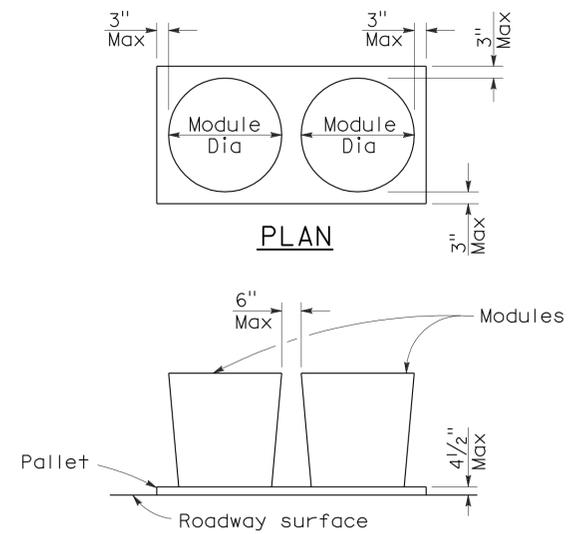


**ARRAY 'TU17'**

Approach speed less than 45 mph

**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.



**ELEVATION**

**CRASH CUSHION PALLET DETAIL**

See Note 7

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

NO SCALE

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

**REVISED STANDARD PLAN RSP T1A**

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	Ala	680	R8.7	4	18

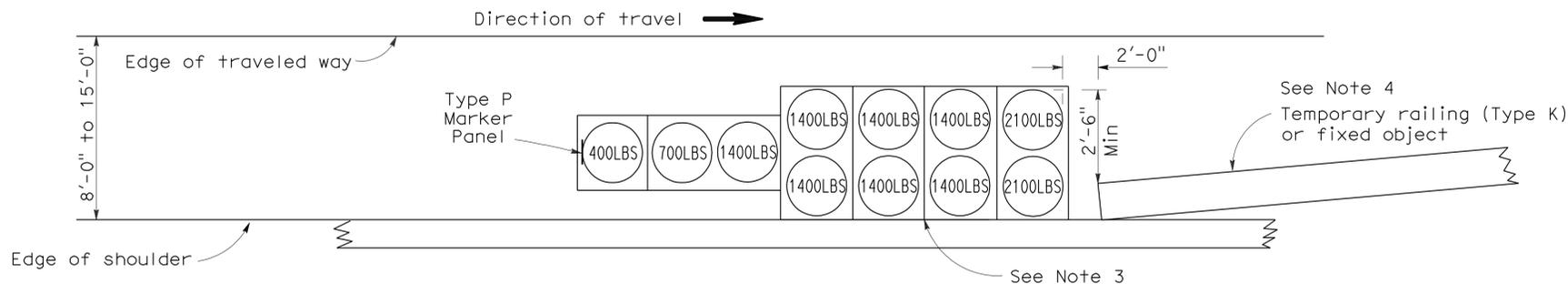
*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

June 6, 2008  
PLANS APPROVAL DATE

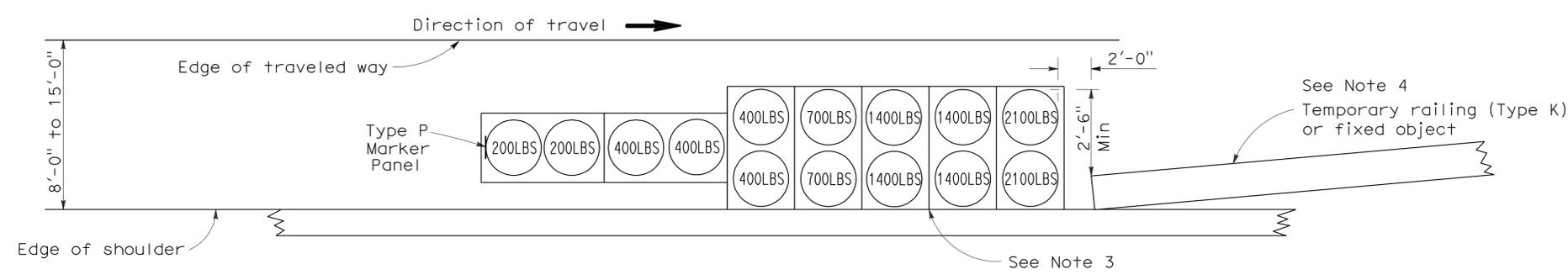
*The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.*

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

To accompany plans dated 4-19-10



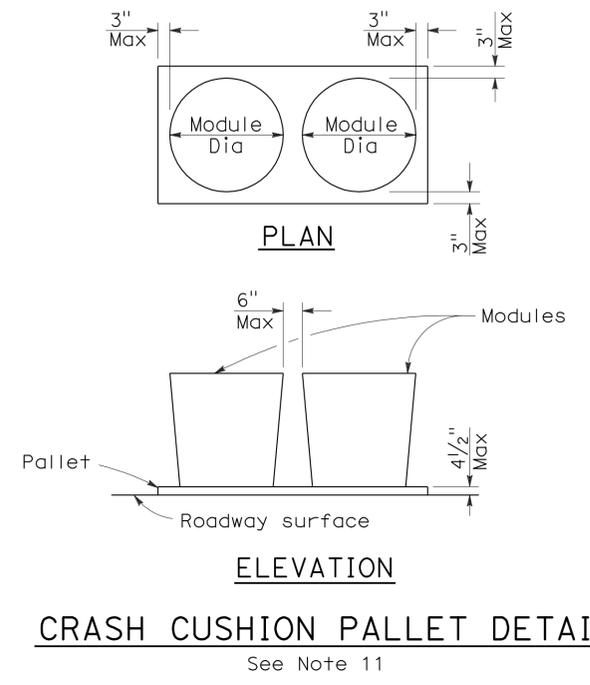
**ARRAY 'TS11'**  
Approach speed less than 45 mph  
See Note 9



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

**NOTES:**

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



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
04	Ala	680	R8.7	5	18

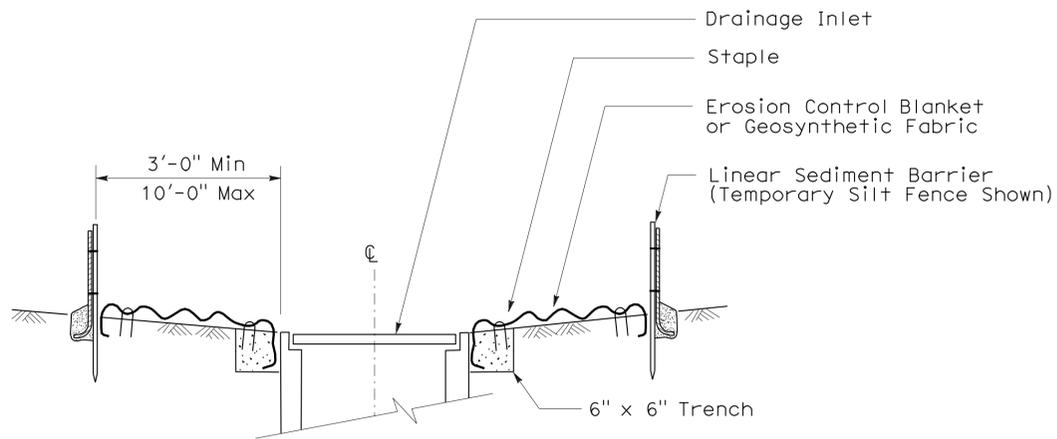
*Robert B. Schott*  
 LICENSED LANDSCAPE ARCHITECT

August 15, 2008  
 PLANS Approval DATE

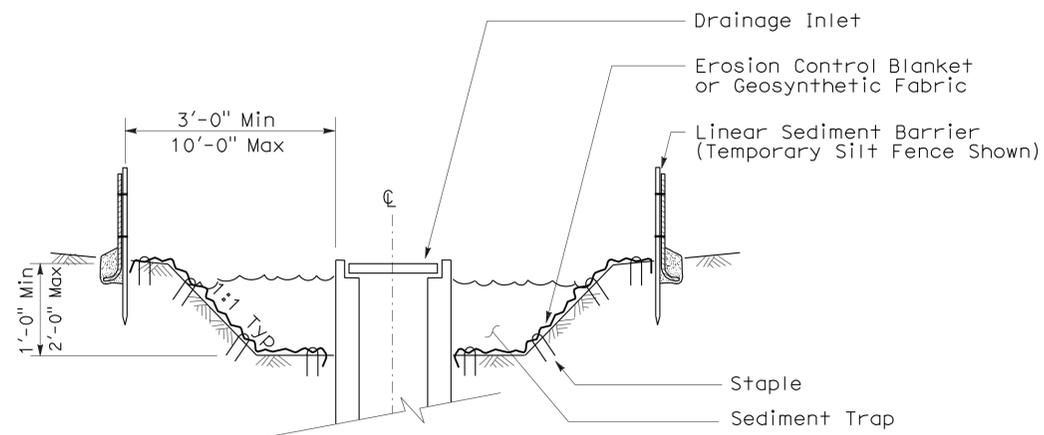
*Robert B. Schott*  
 Signature  
 11-04-08  
 08-11-08  
 Date

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To accompany plans dated 4-19-10



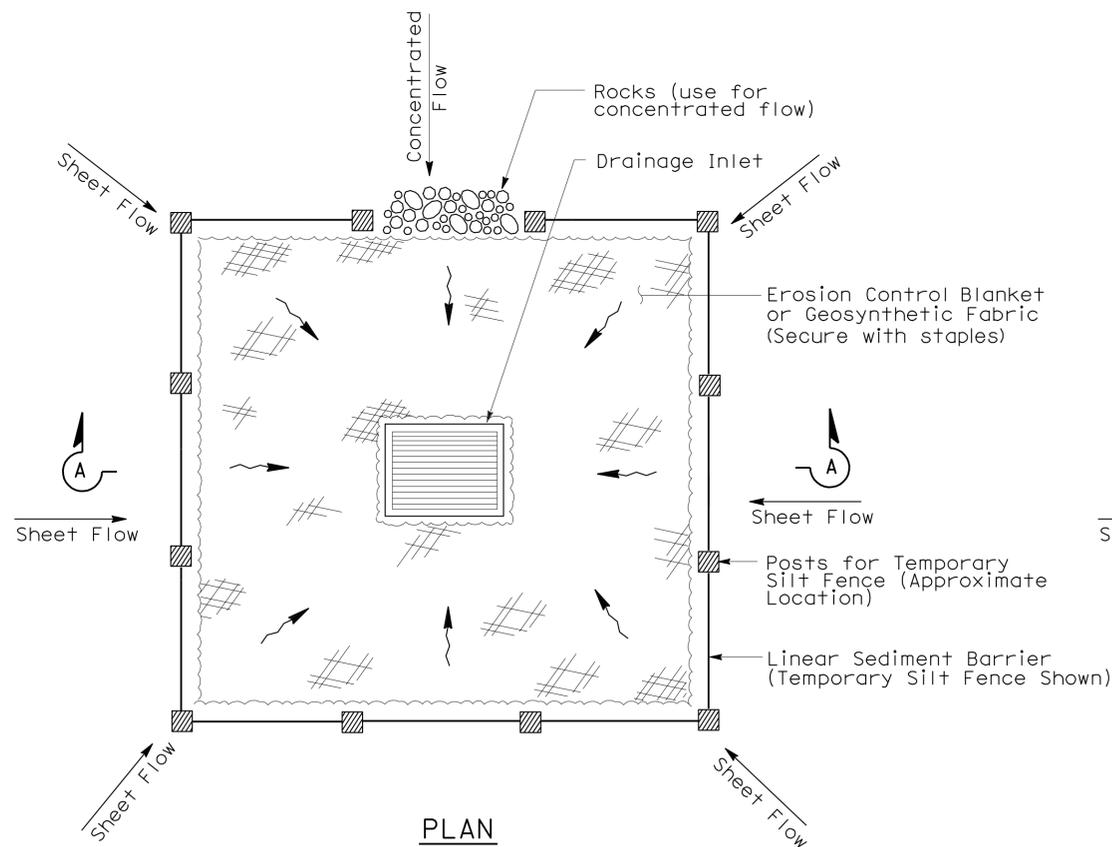
SECTION A-A



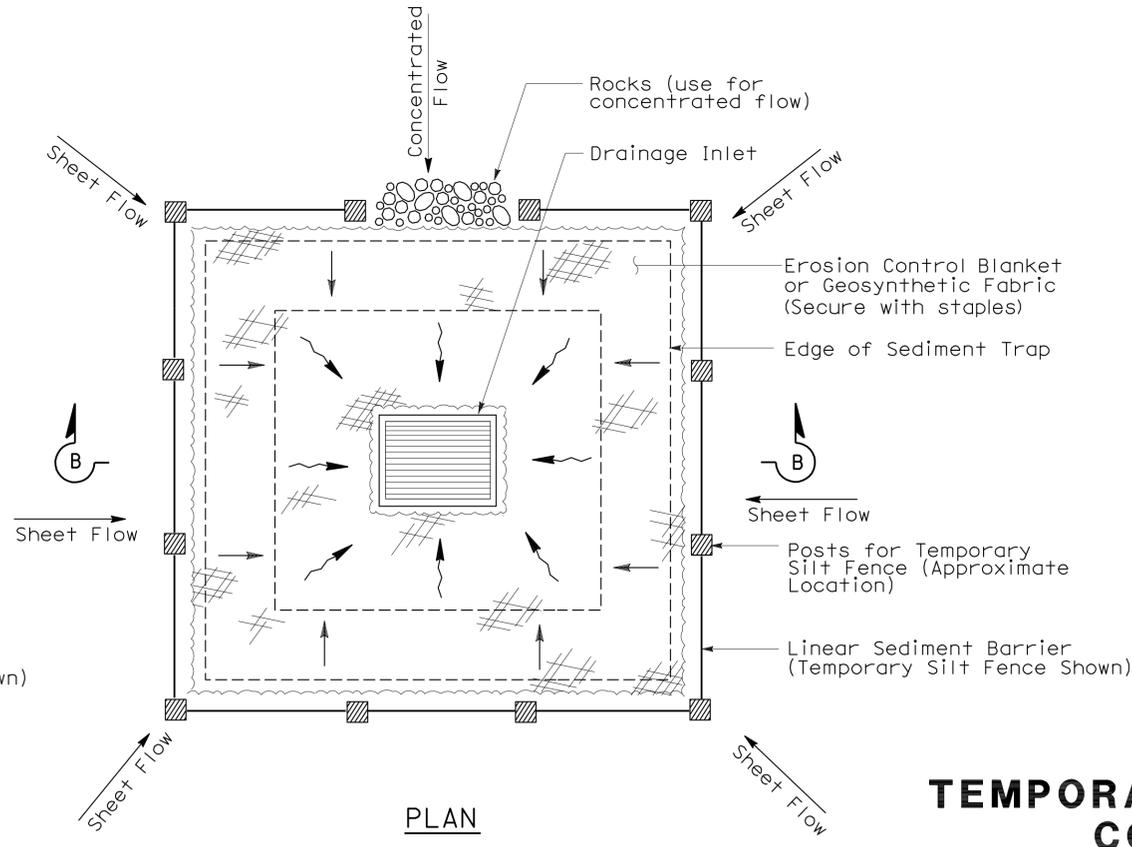
SECTION B-B

**NOTES:**

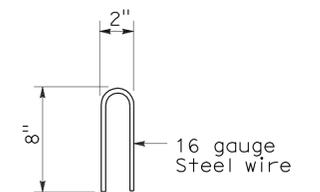
1. See Standard Plan T51 for Temporary Silt Fence.
2. Dimensions may vary to fit field conditions.



TEMPORARY DRAINAGE INLET PROTECTION (TYPE 1)



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



STAPLE DETAIL

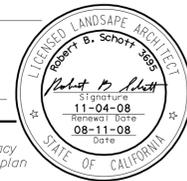
STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**TEMPORARY WATER POLLUTION CONTROL DETAILS**  
**(TEMPORARY DRAINAGE INLET PROTECTION)**

NO SCALE

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

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	Ala	680	R8.7	6	18

*Robert B. Schott*  
 LICENSED LANDSCAPE ARCHITECT  
 August 15, 2008  
 PLANS APPROVAL DATE  
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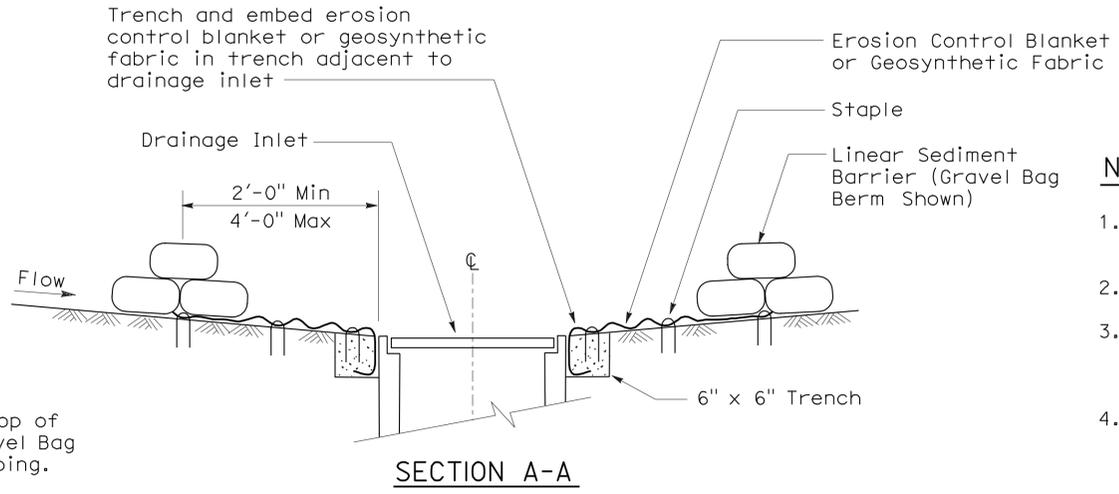
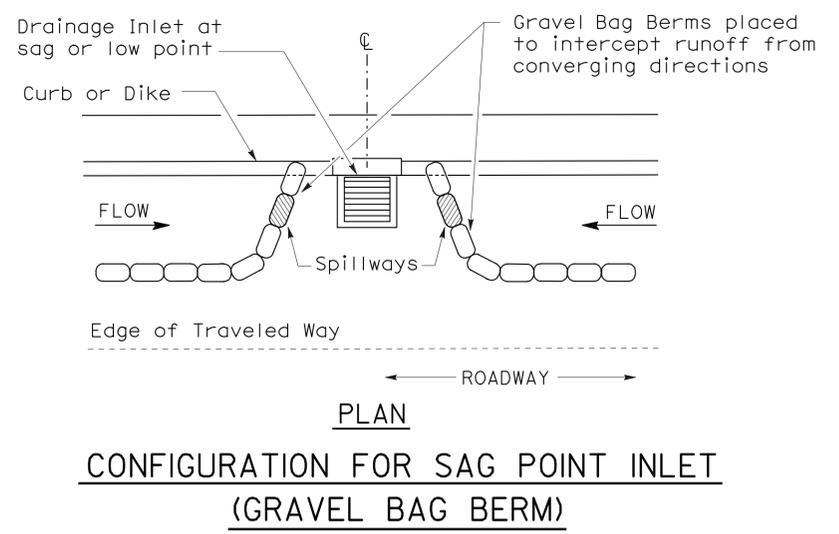


To accompany plans dated 4-19-10

### GRAVEL BAG BERM (TYPE 3A) SPACING TABLE

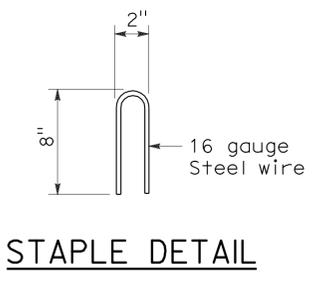
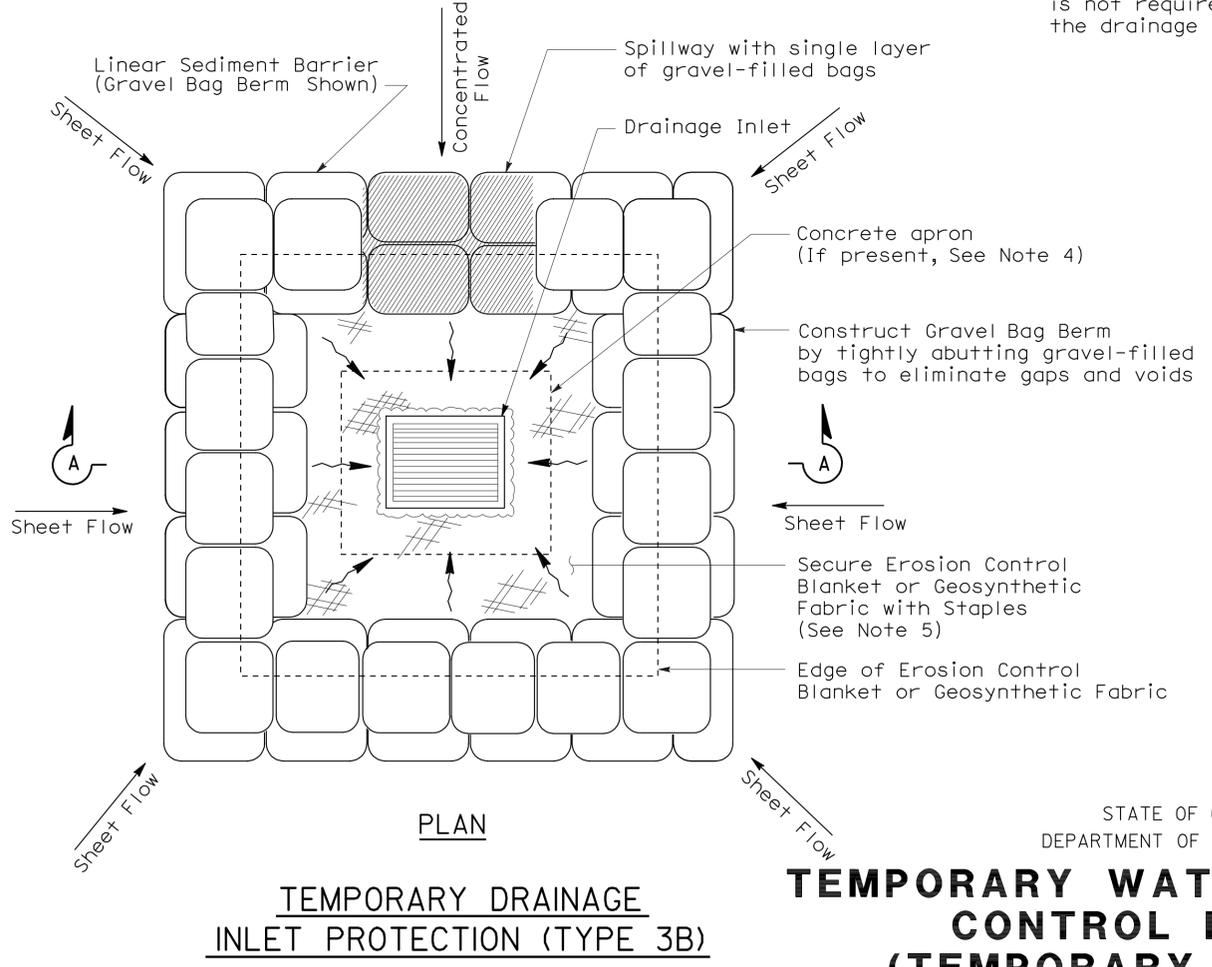
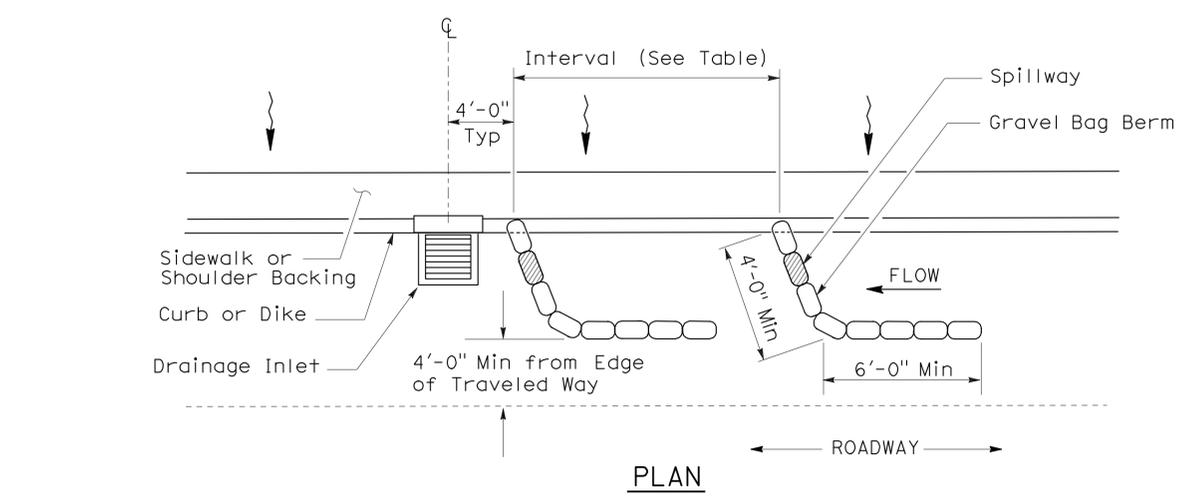
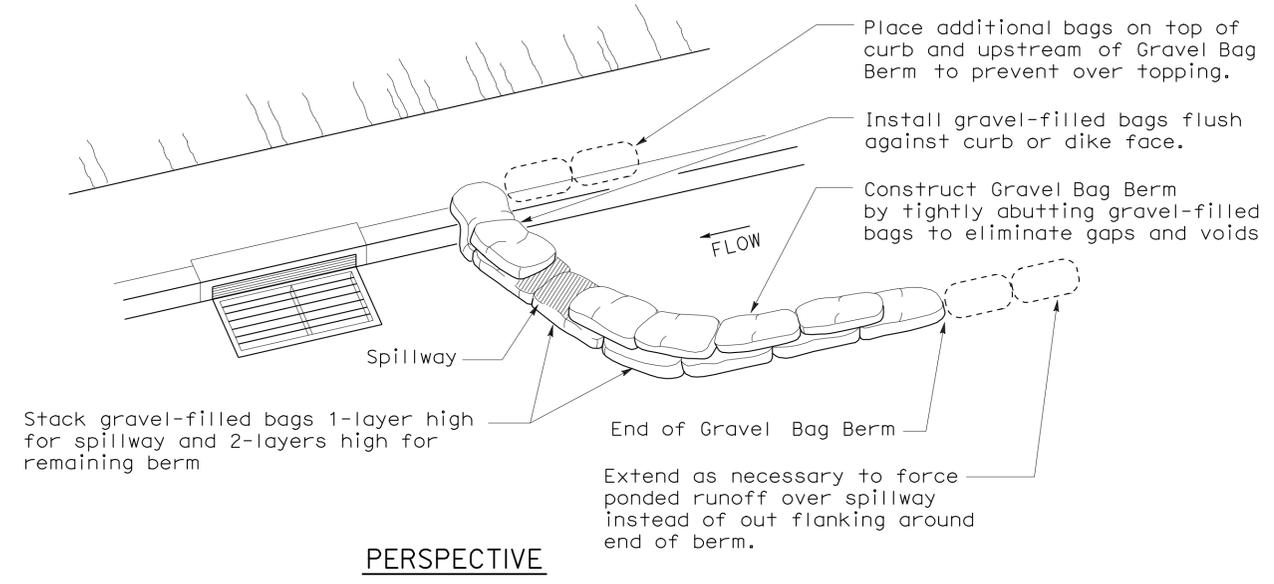
SLOPE OF ROADWAY (PERCENT)	1 to 3.9	4 to 5.9	6 to 7.9	8 to 10	10+
INTERVAL BETWEEN BERM	100'	75'	50'	25'	12'

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



#### 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.



## 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.

2006 NEW STANDARD PLAN NSP T62

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'

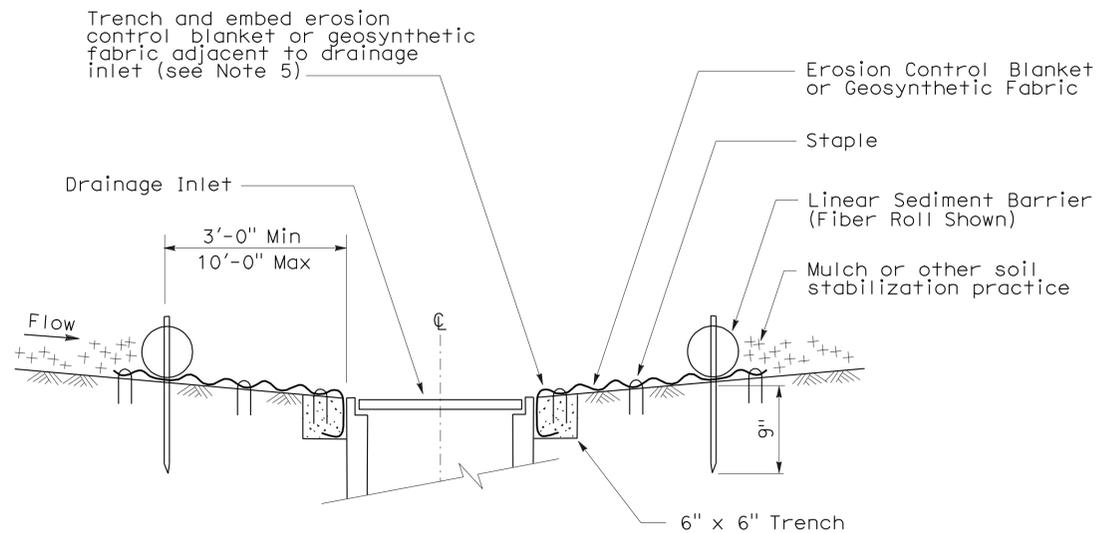
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	Ala	680	R8.7	7	18

Robert B. Schott  
LICENSED LANDSCAPE ARCHITECT

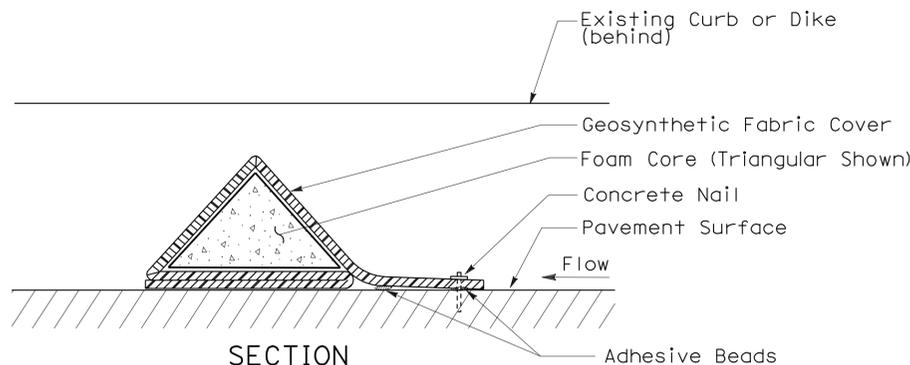
August 15, 2008  
PLANS APPROVAL DATE

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To accompany plans dated 4-19-10



SECTION A-A

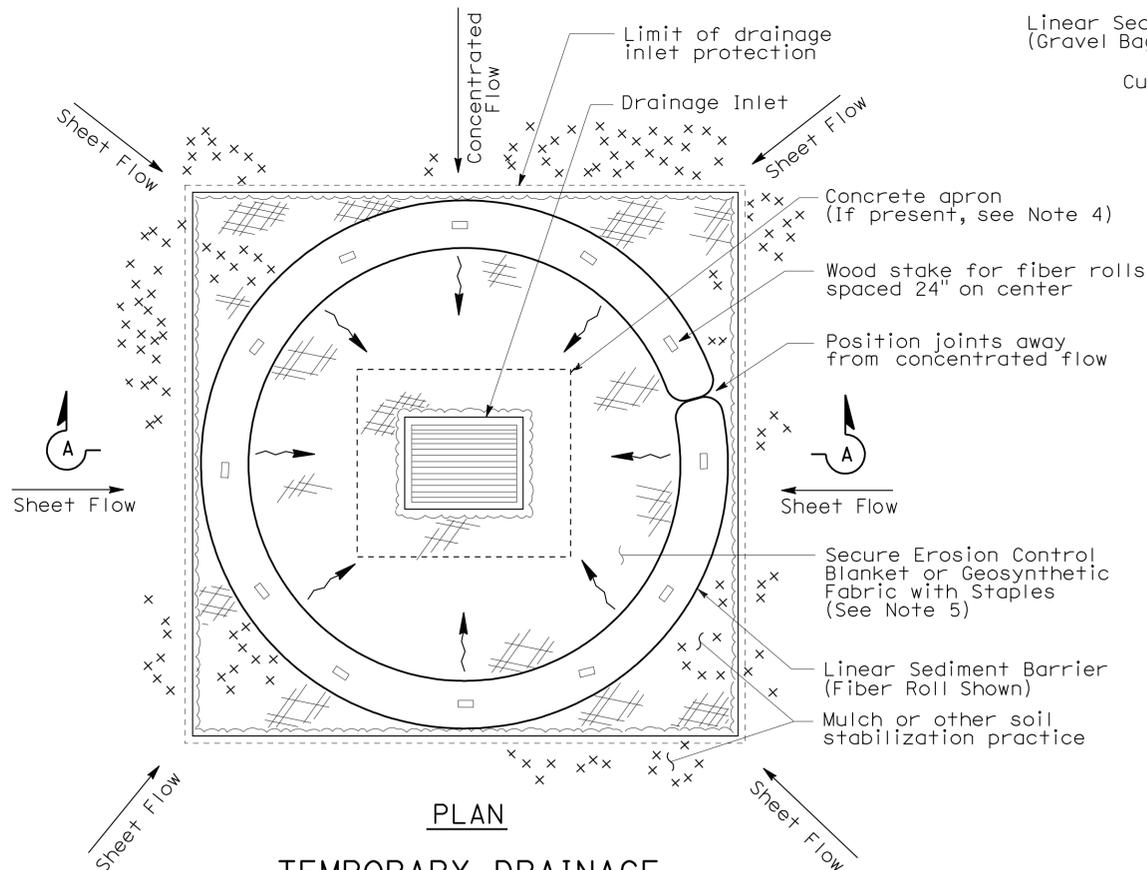


SECTION

FLEXIBLE SEDIMENT BARRIER DETAIL (FOAM BARRIER SHOWN)

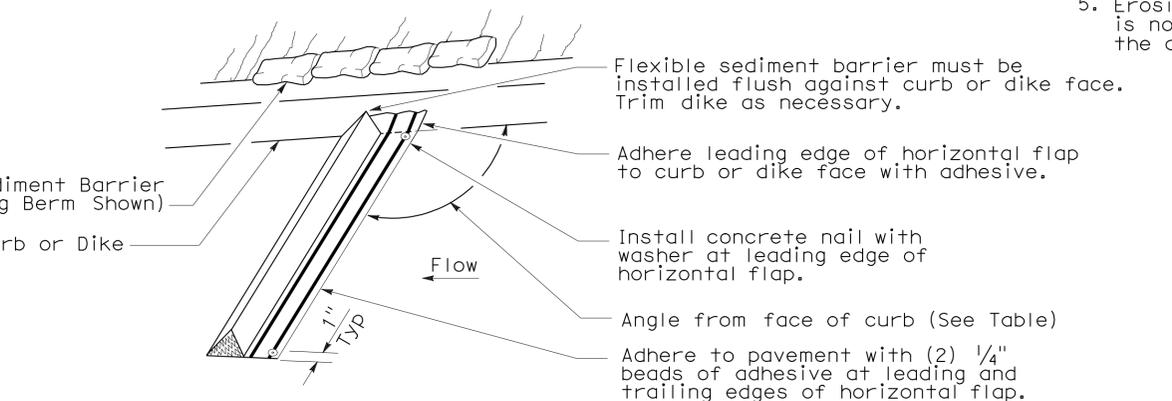
NOTES:

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.

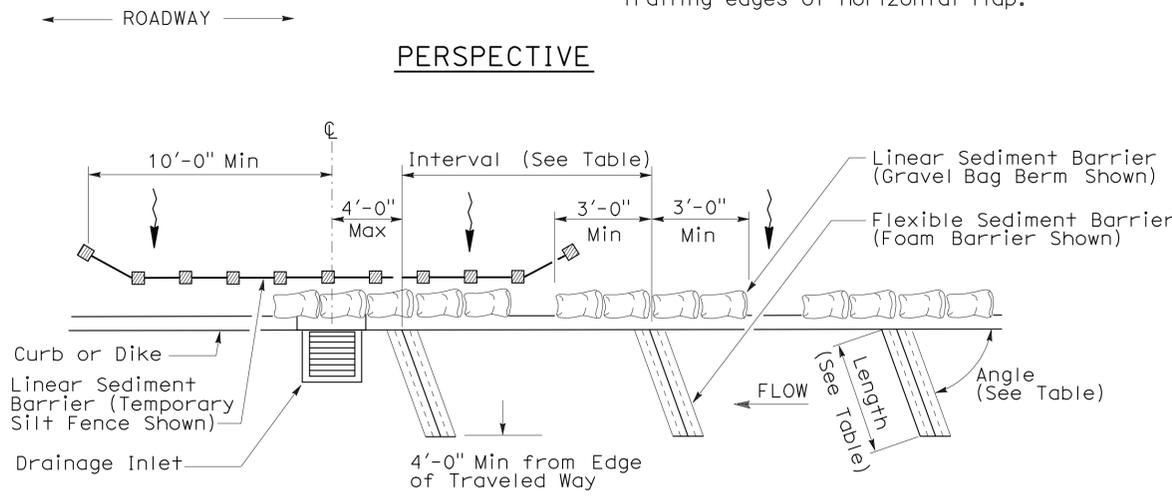


PLAN

TEMPORARY DRAINAGE INLET PROTECTION (TYPE 4A)

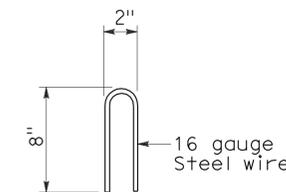


PERSPECTIVE



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.

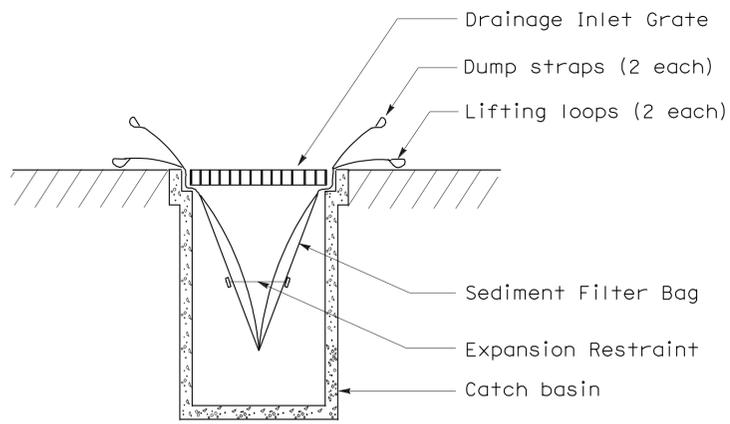
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	Ala	680	R8.7	8	18

*Robert B. Schott*  
 LICENSED LANDSCAPE ARCHITECT

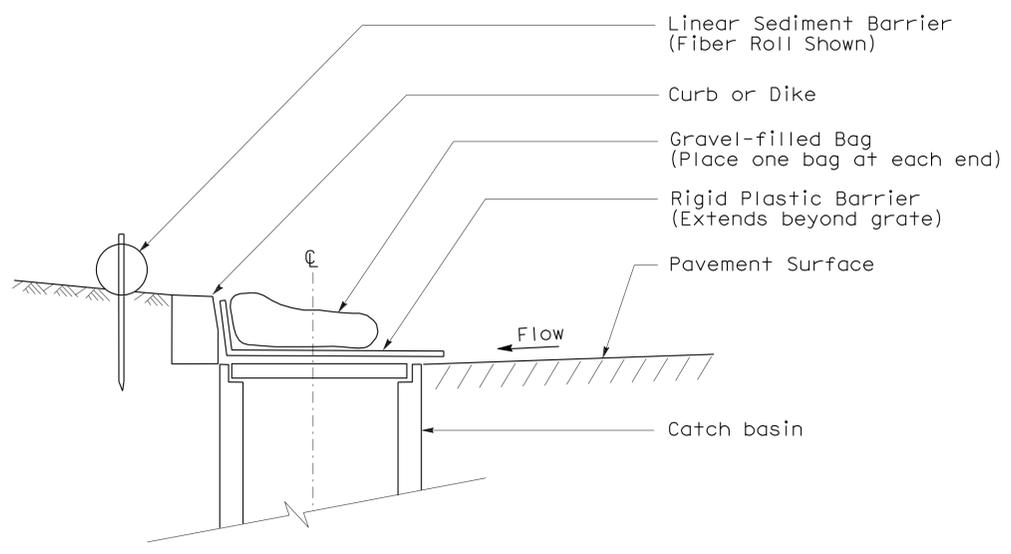
August 15, 2008  
 PLANS APPROVAL DATE

*Robert B. Schott*  
 LICENSED LANDSCAPE ARCHITECT  
 Signature  
 11-04-08  
 Renewal Date  
 08-11-08  
 Date

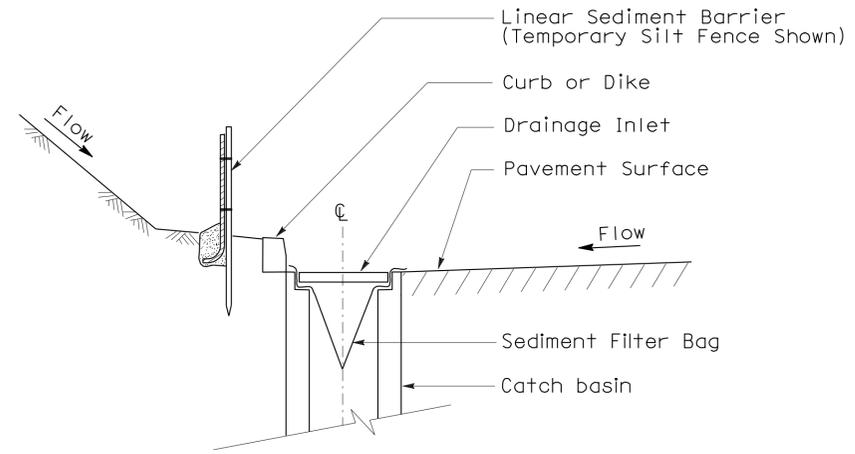
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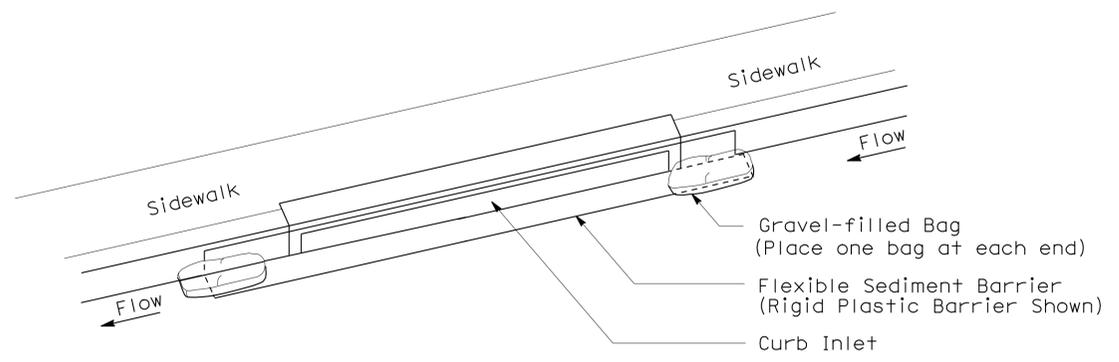
SECTION B-B  
SEDIMENT FILTER BAG DETAIL



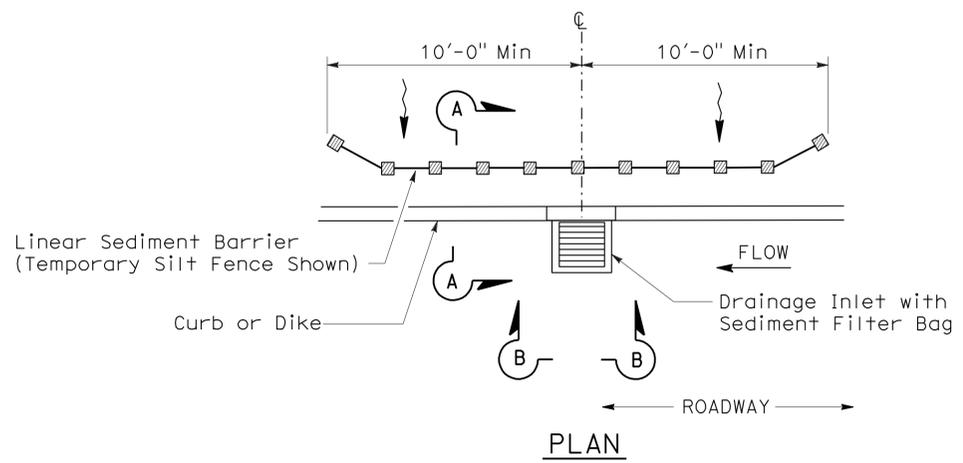
SECTION  
TEMPORARY DRAINAGE  
INLET PROTECTION (TYPE 6A)  
(CATCH BASIN WITH GRATE)



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.

To accompany plans dated 4-19-10

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.

**NEW STANDARD PLAN NSP T64**

2006 NEW STANDARD PLAN NSP T64

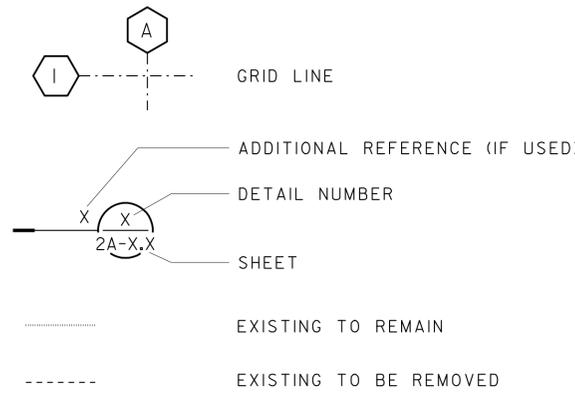
# ARCHITECTURAL ABBREVIATIONS

&	AND	M	METER
CL	CENTER LINE	MAX	MAXIMUM
A/C	AIR CONDITIONING	MBR	MEMBER
ABV	ABOVE	MECH	MECHANICAL
APA	AMERICAN PLYWOOD ASSOCIATION	MET	METAL
ARCH	ARCHITECTURAL, ARCHITECT	MFR	MANUFACTURER
		MIN	MINIMUM
		MISC	MISCELLANEOUS
		MTD	MOUNTED
BD	BOARD	N	NORTH
BLDG	BUILDING	NIC	NOT IN CONTRACT
BLK	BLOCK	NO	NUMBER
BLKG	BLOCKING	NOM	NOMINAL
BM	BEAM	NTS	NOT TO SCALE
BOT	BOTTOM		
BR	BRIDGE	OC	ON CENTER
BTM	BOTTOM	OFF	OFFICE
BTWN	BETWEEN	OH	OPPOSITE HAND
		OHD	OVERHEAD
		OPNG	OPENING
		OPP	OPPOSITE
CLG	CEILING	PDF	POWDER DRIVEN FASTENERS
CLR	CLEAR	PL	PLATE
COL	COLUMN	PLYWD	PLYWOOD
CONC	CONCRETE	PT	POINT
CONN	CONNECTION		
CONST	CONSTRUCTION	RD	ROOF DRAIN
CONT	CONTINUOUS	REF	REFERENCE
CTR	CENTER	REQ	REQUIRED
		RFG	ROOFING
DBL	DOUBLE	RH	ROUND HEAD
DET	DETAIL	RHWS	ROUND HEAD WOOD SCREWS
DIA	DIAMETER	RJ	ROOF JOIST
DIM	DIMENSION	RM	ROOM
DN	DOWN	RO	ROUGH OPENING
DR	DOOR	RTE	ROUTE
DS	DOWNSPOUT		
DWG	DRAWING	S	SOUTH
		SCHED	SCHEDULE
(E)	EXISTING	SF	SQUARE FEET/STORE FRONT
E	EAST	SHT	SHEET
EA	EACH	SHTG	SHEATHING
EF	EXHAUST FAN	SIM	SIMILAR
EL	ELEVATION (HEIGHT)		
ELEC	ELECTRICAL	SOHD	SECTIONAL OVERHEAD DOOR
ELEV	ELEVATION (VIEW)	SPEC	SPECIFICATION
EQ	EQUAL	SPS	STRUCTURAL PLYWOOD SHEATHING
EPB	ELECTRICAL PANELBOARD	SQ	SQUARE
		SST	STAINLESS STEEL
EQUIP	EQUIPMENT	STA	STATION
EXT	EXTERIOR	STAG	STAGGER
		STD	STANDARD
FF	FINISH FLOOR	STL	STEEL
FG	FINISH GRADE	STOR	STORAGE
FIN	FINISH	STRUC	STRUCTURAL
FLASH	FLASHING		
FLR	FLOOR	TOT	TOTAL
FLUOR	FLUORESCENT	TOW	TOP OF WALL
FOF	FACE OF FINISH	TYP	TYPICAL
FOS	FACE OF STUD		
FRMG	FRAMING	UON	UNLESS OTHERWISE NOTED
FT	FEET, FOOT	VAR	VARIES
FWY	FREEWAY	VERT	VERTICAL
		W	WEST
GA	GAUGE	W/	WITH
GALV	GALVANIZED	W/O	WITHOUT
GL	GLASS	WD	WOOD
GR	GRADE	WDW	WINDOW
GSM	GALVANIZED SHEET METAL	WT	WEIGHT
HORIZ	HORIZONTAL		
HT	HEIGHT VENTILATING,		
HVAC	HEATING, AIR CONDITIONING		
HWY	HIGHWAY		
IN	INCH		
INFO	INFORMATION		
INSUL	INSULATION		
JB	JUNCTION BOX		
JST	JOIST		
JT	JOINT		
L	LENGTH		
LBS	POUNDS		

# INDEX TO PLANS

SHEET NO	DESCRIPTION
GP	GENERAL PLAN
A-1	ROOF PLAN / EXISTING FLOOR PLAN
A-2	ELEVATIONS
A-3	ROOF DETAILS 1
A-4	ROOF DETAILS 2
A-5	ROOF DETAILS 3
M-0	LEGEND
M-1	SITE PLAN
M-2	ROOF PLAN & FAN SUPPORT DETAIL
EE-1	POWER PLAN

# SYMBOLS



# GENERAL NOTES

1. THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS AND CONDITIONS BEFORE FABRICATING ANY MATERIAL.
2. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BETWEEN THESE PLANS AND ACTUAL MEASUREMENTS OR CONDITIONS.
3. CONTRACTOR SHALL VERIFY LOCATIONS OF EXISTING EQUIPMENT & PENETRATIONS, INCLUDE EXHAUST FAN, ROOF JACKS, ANTENNAS, PIPES, ELECTRICAL CONDUITS, ETC.

# BUILDING CODE DATA

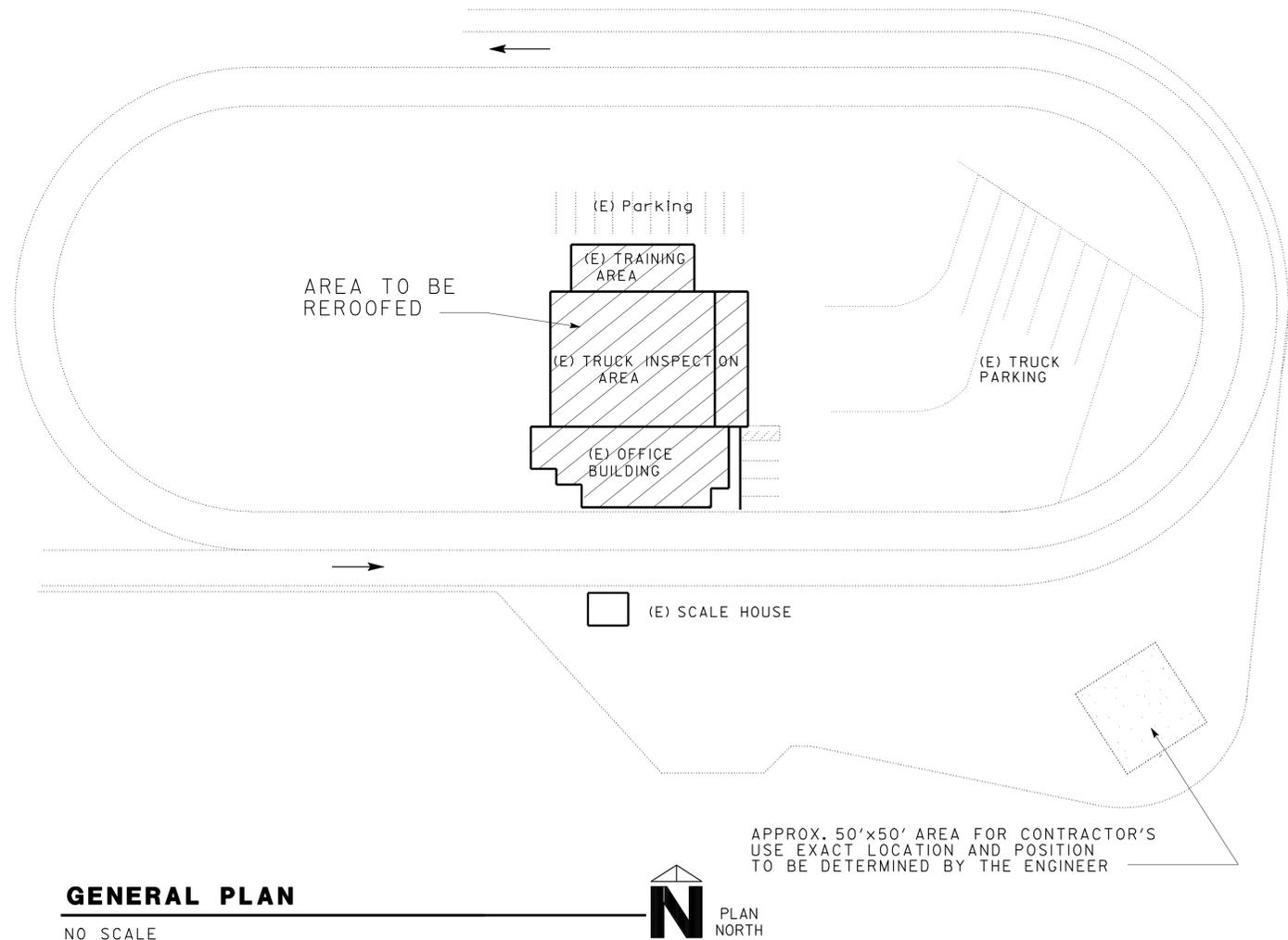
DESIGN CODE	2007 CALIFORNIA BUILDING CODE 2007 CALIFORNIA FIRE CODE 2007 CALIFORNIA MECHANICAL CODE 2007 CALIFORNIA ELECTRICAL CODE
BUILDING OCCUPANCY	S-1 (EXISTING), B (EXISTING)
CONSTRUCTION TYPE	VB

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	Ala	680	R8.7	9	18

LICENSED ARCHITECT: *Anthony Chung*  
 ANTHONY CHUNG  
 No. C-24693  
 Exp. 11-30-11  
 STATE OF CALIFORNIA

LICENSED ARCHITECT: \_\_\_\_\_ DATE: \_\_\_\_\_  
 PLANS APPROVAL DATE: 4-19-10  
*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.*

**CALIFORNIA STATE FIRE MARSHAL APPROVED**  
 Approval of this plan does not authorize or approve any omission or deviation from applicable regulations. Final approval is subject to field inspection. One set of approved plans shall be available on the project site at all times.  
 Reviewed by: *John E Woods*  
 JOHN E WOODS  
 Approval date: 12-21-09



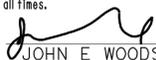
DESIGNER: DOUG LOWE ANTHONY CHUNG CHECKED BY: _____ STRUCTURAL REVIEW: _____	SHEET LEGEND A-1 ARCHITECTURAL ST-1 STRUCTURAL M-1 MECHANICAL EE-1 ELECTRICAL P-1 WATER SUPPLY SS-1 SANITARY	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ARCHITECTURAL AND STRUCTURAL DESIGN	BRIDGE NO. 33W0002 POST MILE R8.7	<b>MISSION GRADE TIF REROOF</b> GENERAL PLAN	SHEET OF <b>GP</b> X X
gp.dgn DS OSD Imperial Rev. 10/07 21-APR-2010 11:21	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3	CU 04xx EA 3A9501	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES (PRELIMINARY STAGE ONLY)	SHEET OF X X	gp.dgn

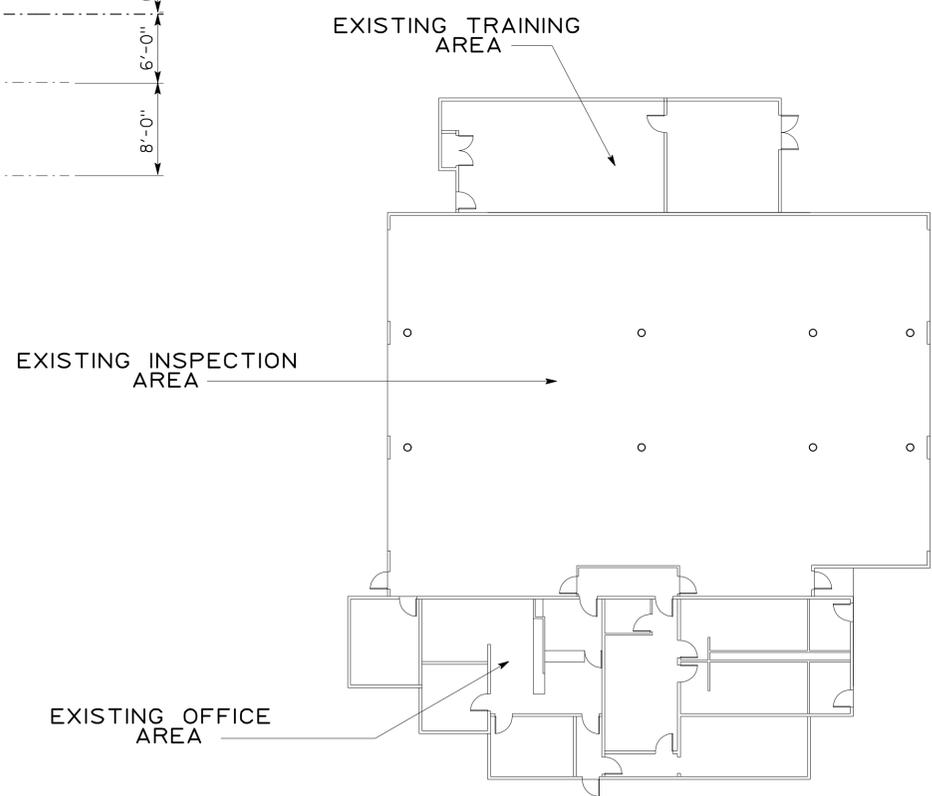
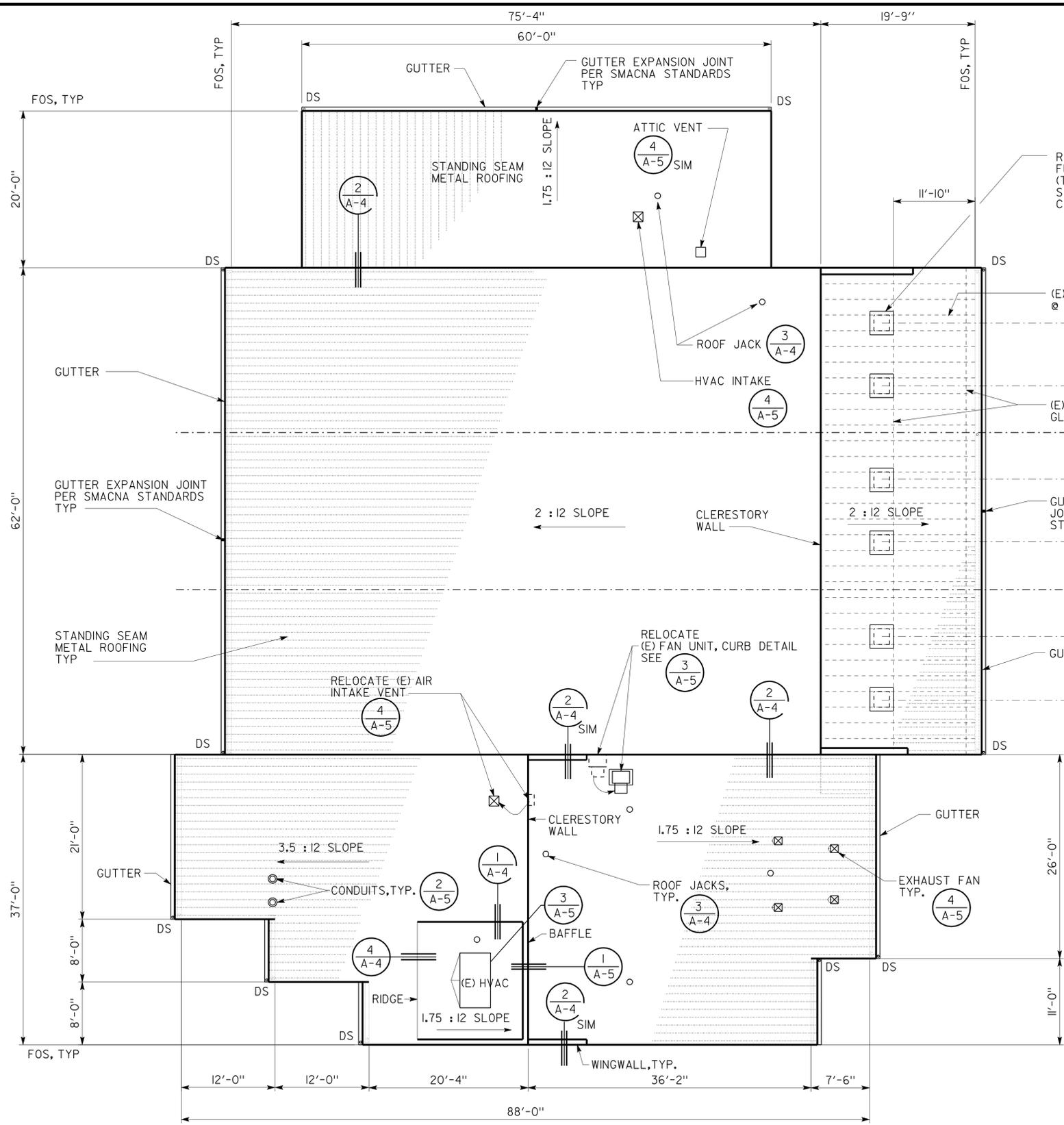
DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	Ala	680	R8.7	10	18

  
 LICENSED ARCHITECT DATE \_\_\_\_\_  
 ANTHONY CHUNG  
 No. C-24693  
 Exp. 11-30-11  
 STATE OF CALIFORNIA

4-19-10  
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Reviewed by:   
 Approval date: 12-21-09



**1 ROOF PLAN**  
 SCALE: 1/8" = 1'-0"

NOTE: FIELD VERIFY ALL DIMENSIONS



**2 EXISTING FLOOR PLAN**  
 SCALE: 1/16" = 1'-0"



a1 roof plan.dgn DS OSD Imperial Rev. 10/07 21-APR-2010 11:21	DESIGN	BY ANTHONY CHUNG	CHECKED CARLOS SANCHEZ	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES	BRIDGE NO. 33W0002	<b>MISSION GRADE TIF REROOF</b> ROOF PLAN/ EXISTING FLOOR PLAN	SHEET
	DETAILS	BY	CHECKED		ARCHITECTURAL AND STRUCTURAL DESIGN	POST MILE R8.7		A-1
	QUANTITIES	BY	CHECKED		CU 04xx EA 3A9501	DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES (PRELIMINARY STAGE ONLY)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS: 0 1 2 3

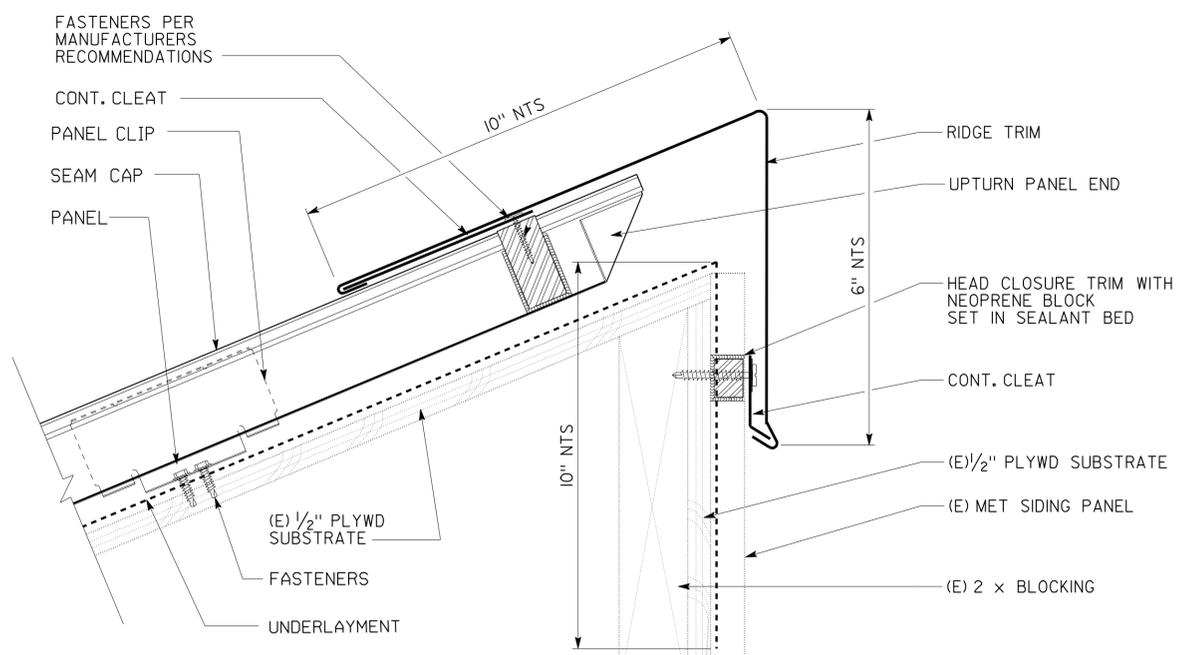
21-APR-2010 11:21 a1 roof plan.dgn



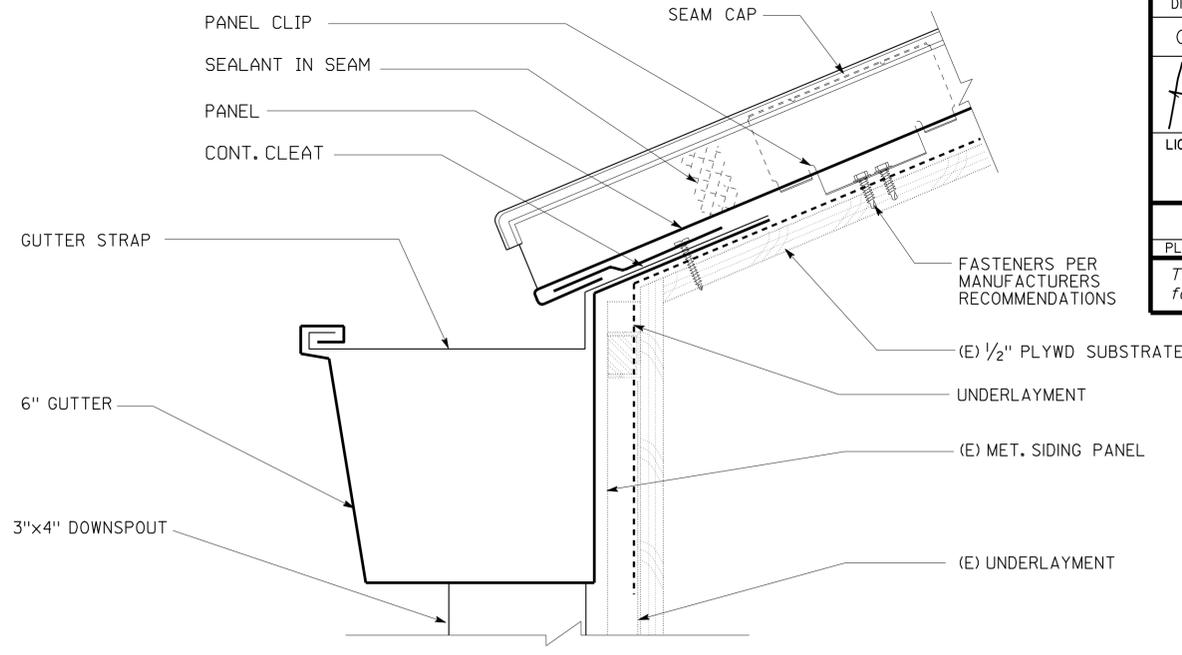
DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	Alameda	680	R8.7	12	18
 LICENSED ARCHITECT				DATE	
4-19-10 PLANS APPROVAL DATE					
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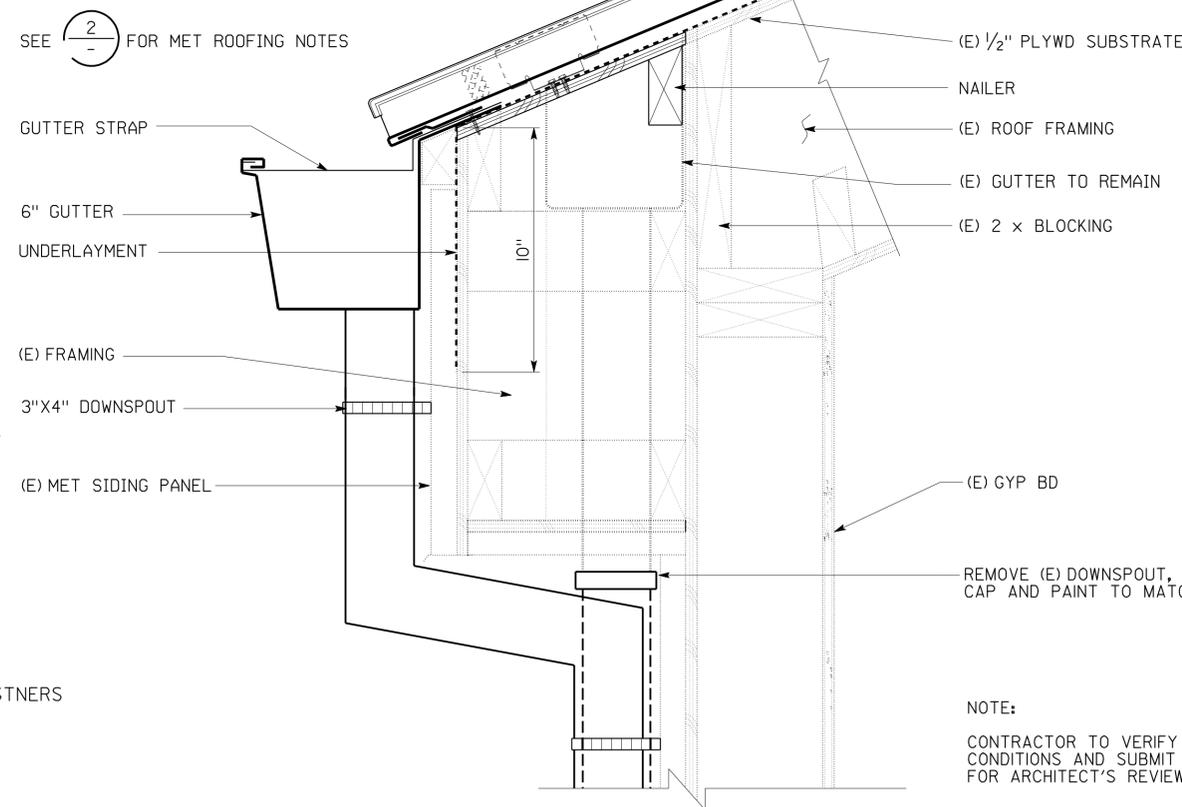
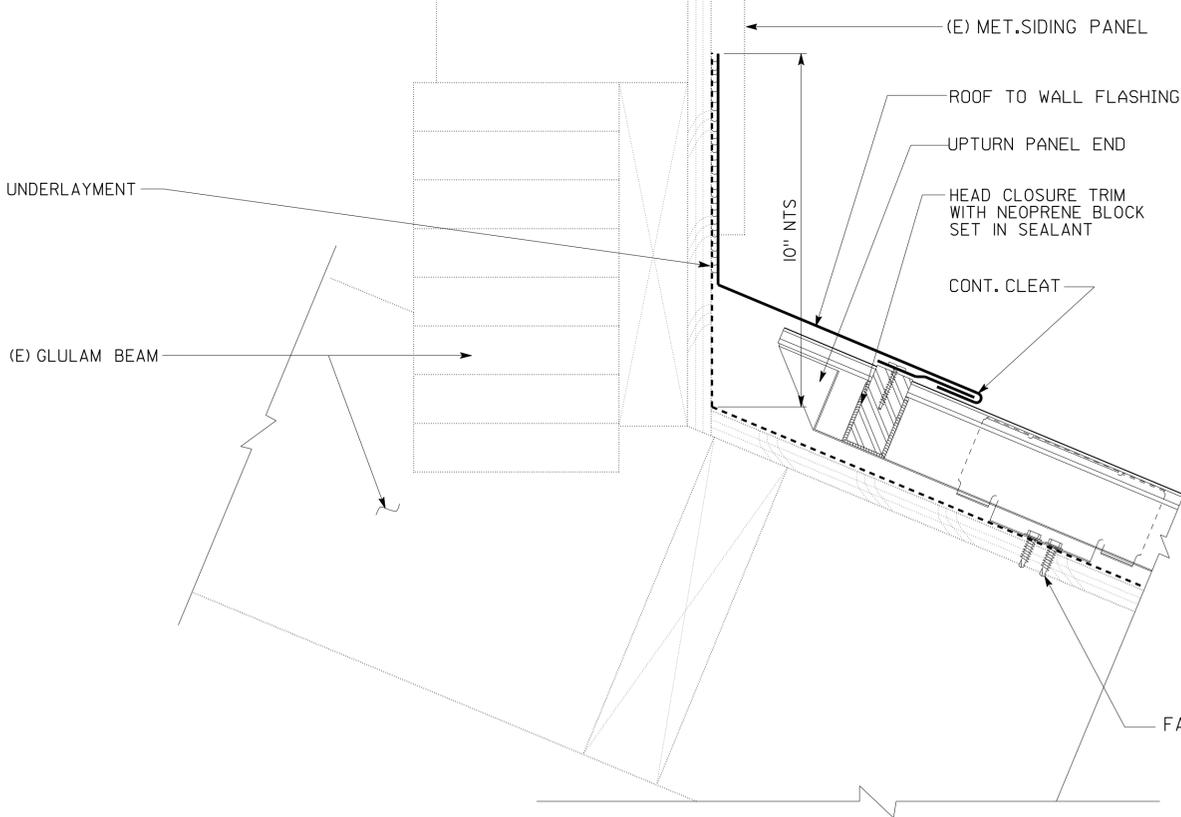
**CALIFORNIA STATE FIRE MARSHAL**  
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 Reviewed by:   
**JOHN E WOODS**  
 Approval date: 12-21-09



**1 CLERESTORY WALL DETAIL**  
 SCALE 6" = 1'-0"



**2 EAVE W/ GUTTER**  
 SCALE 6" = 1'-0"

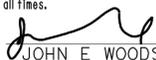


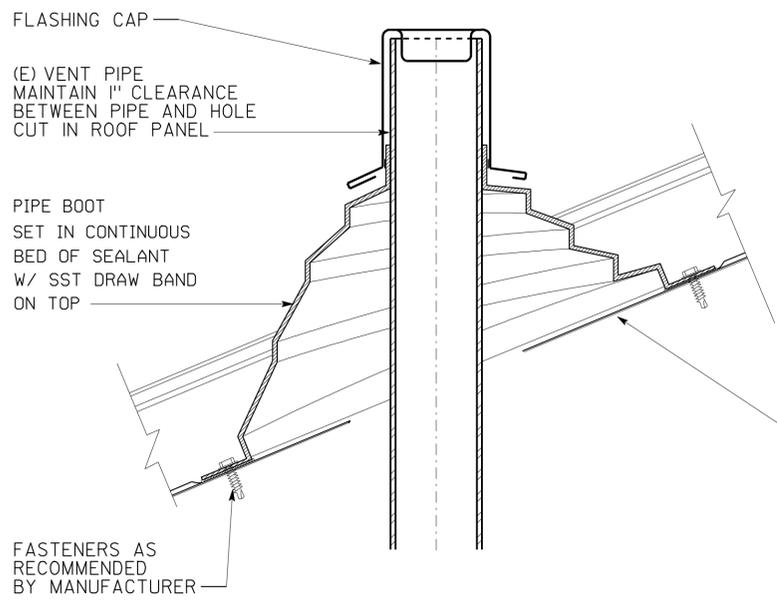
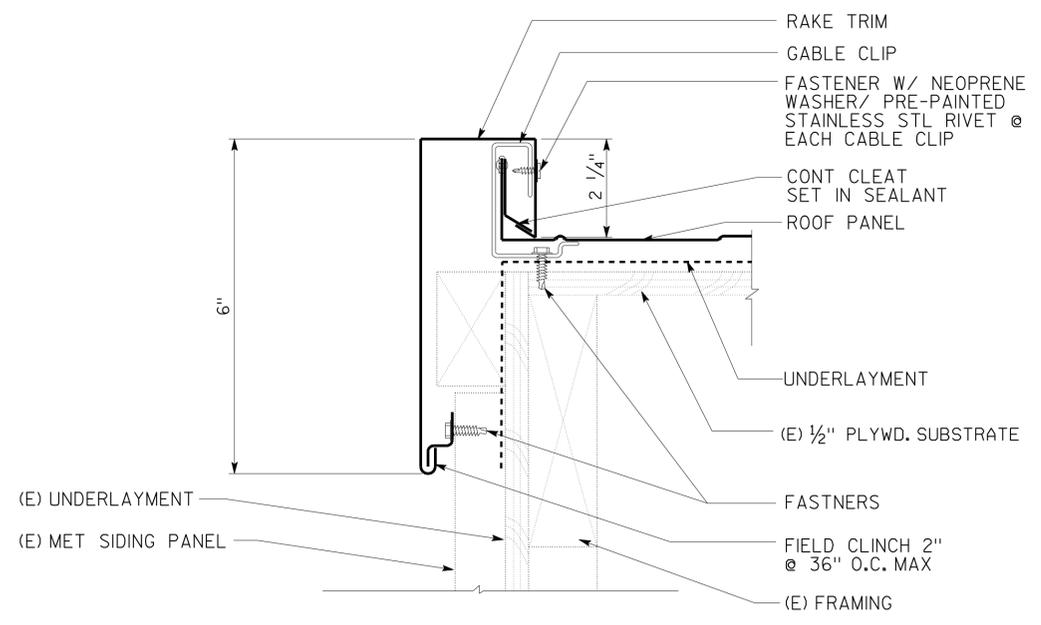
**3 ROOF AND SOFFIT W/ GUTTER**  
 SCALE 3" = 1'-0"

NOTE:  
 CONTRACTOR TO VERIFY (E) FRAMING CONDITIONS AND SUBMIT CONSTRUCTION DETAIL FOR ARCHITECT'S REVIEW PRIOR CONSTRUCTION

a3 details_1.dgn DS OSD Imperial Rev. 10/07 21-APR-2010 11:30	DESIGN	BY ANTHONY CHUNG	CHECKED CARLOS SANCHEZ	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ARCHITECTURAL AND STRUCTURAL DESIGN	BRIDGE NO.	MISSION GRADE TIF REROOF	SHEET A-3
	DETAILS	BY	CHECKED			33W0002		
	QUANTITIES	BY	CHECKED			POST MILE	ROOF DETAILS I	
				ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	CU 04xx EA 3A9501	R8.7	REVISION DATES (PRELIMINARY STAGE ONLY)	SHEET OF
				0 1 2 3			DISREGARD PRINTS BEARING EARLIER REVISION DATES	21-APR-2010 11:30

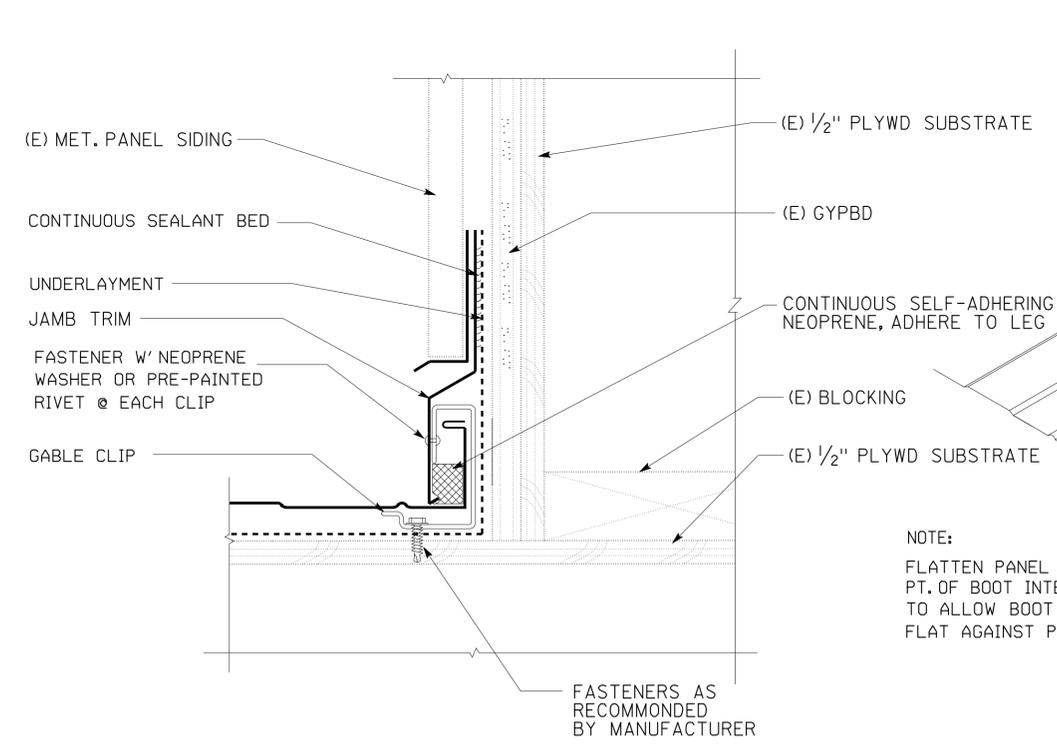
DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	Ala	680	R8.7	13	18
 LICENSED ARCHITECT			DATE _____ PLANS APPROVAL DATE 4-19-10 <i>The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.</i>		
					

**CALIFORNIA STATE FIRE MARSHAL APPROVED**  
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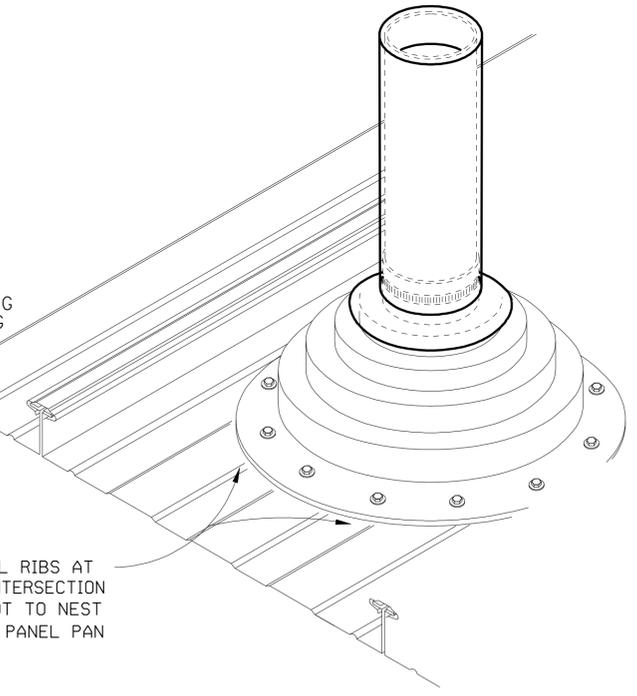
PANEL EXPANSION AROUND PIPE

**1 RAKE DETAIL**  
 SCALE 6" = 1'-0"

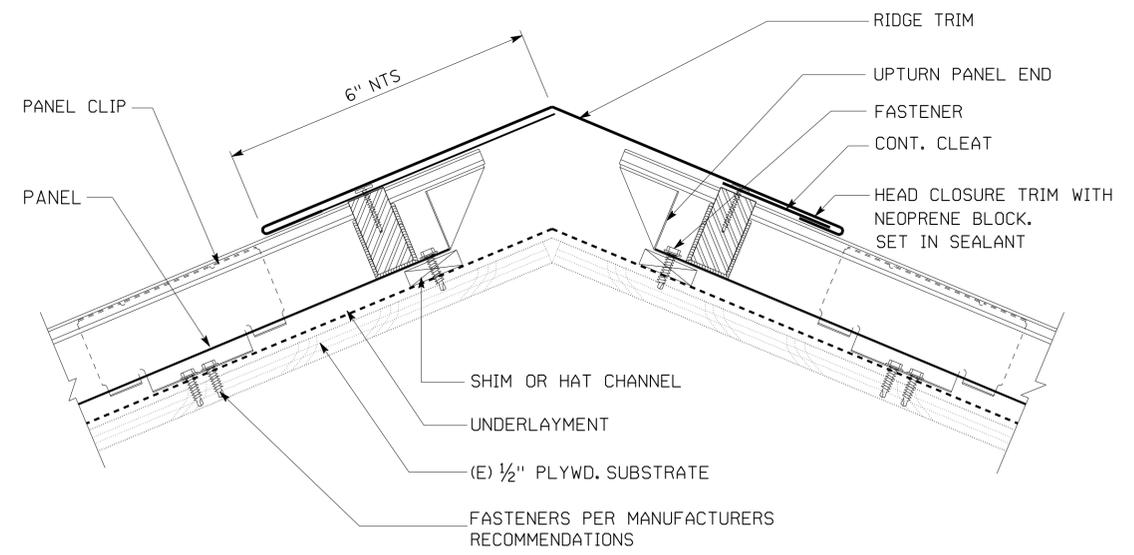


NOTE:  
 FLATTEN PANEL RIBS AT PT. OF BOOT INTERSECTION TO ALLOW BOOT TO NEST FLAT AGAINST PANEL PAN

**2 ROOF @ WALL DETAIL**  
 SCALE 6" = 1'-0"



**3 PIPE BOOT DETAIL**  
 SCALE 6" = 1'-0"

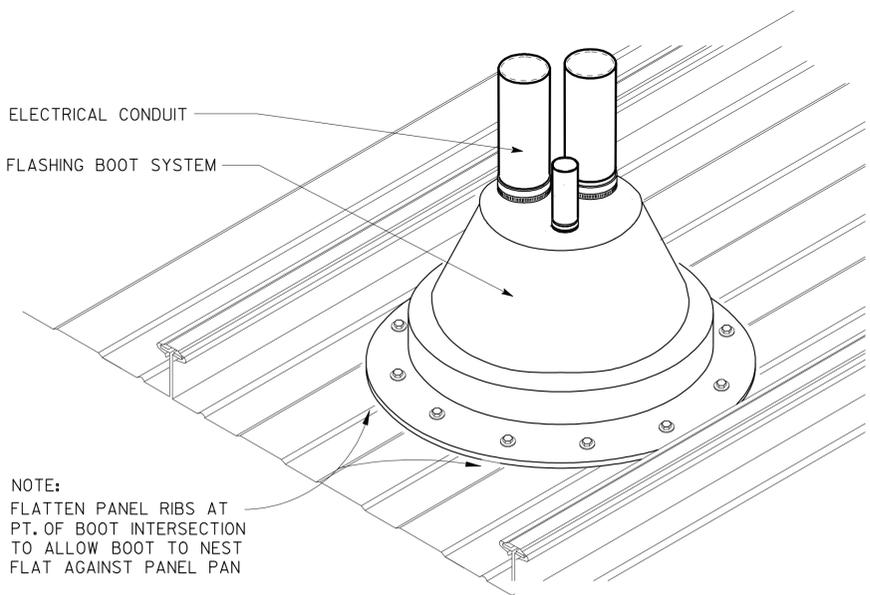
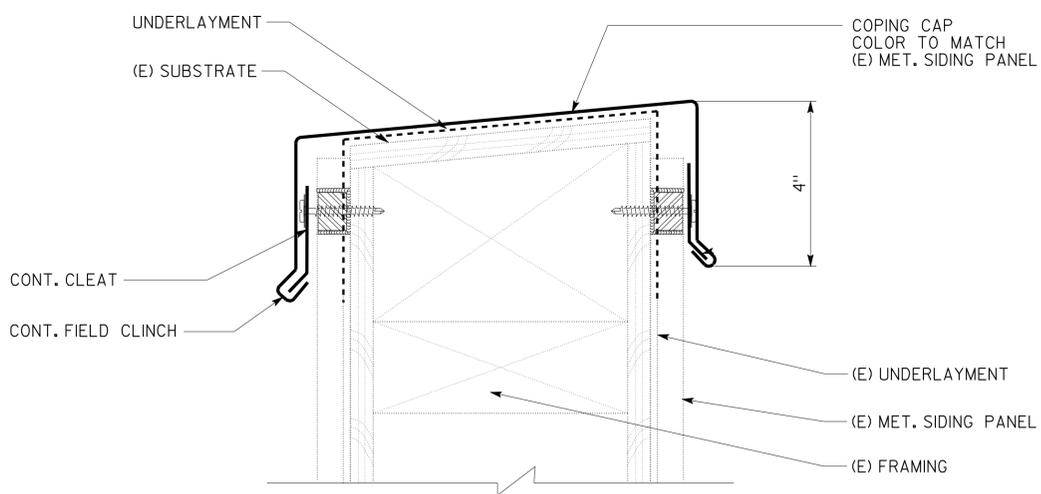


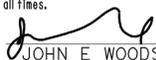
**4 RIDGE DETAIL**  
 SCALE 6" = 1'-0"

a4 details_2.dgn DS OSD Imperial Rev. 10/07 21-APR-2010 11:30	DESIGN BY ANTHONY CHUNG	CHECKED CARLOS SANCHEZ	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ARCHITECTURAL AND STRUCTURAL DESIGN	BRIDGE NO. 33W0002	MISSION GRADE TIF REROOF	SHEET A-4
	DETAILS BY	CHECKED			POST MILE R8.7		
	QUANTITIES BY	CHECKED	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	CU 04xx EA 3A9501	REVISION DATES (PRELIMINARY STAGE ONLY)		SHEET OF
			0 1 2 3		DISREGARD PRINTS BEARING EARLIER REVISION DATES		

21-APR-2010 11:30

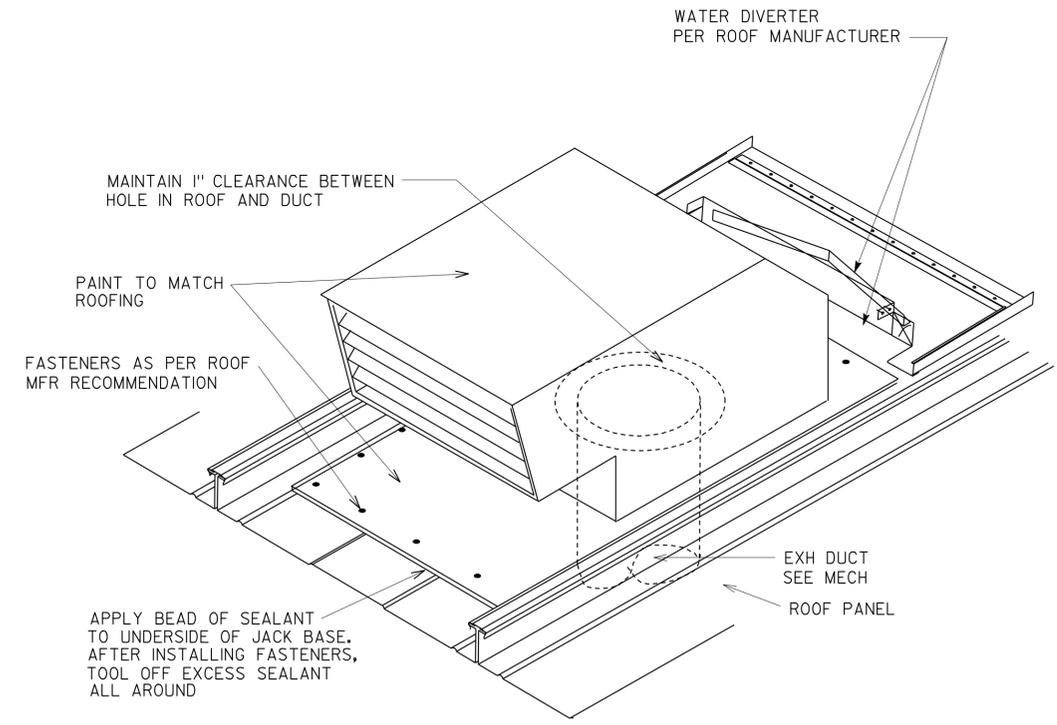
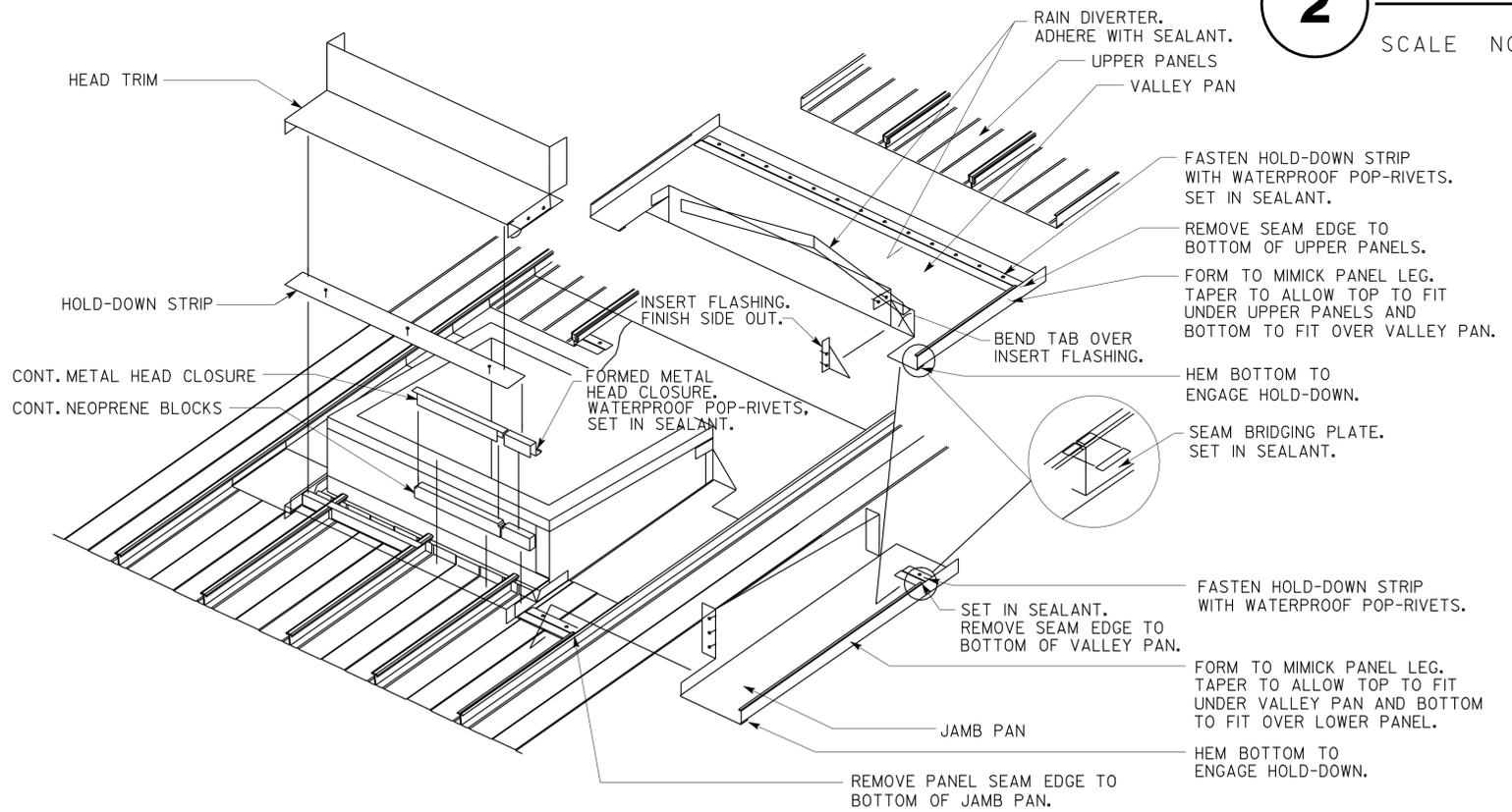
DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	Alameda	680	R8.7	14	18
 LICENSED ARCHITECT				DATE	
4-19-10 PLANS APPROVAL DATE					
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 Approval date: 12-21-09

**1 TOP OF BAFFLE**  
 SCALE 6" = 1'-0"

**2 ELECTRICAL CONDUIT ROOF PENETRATION**  
 SCALE NONE



**3 CURB FLASHING**  
 SCALE NONE

**4 AIR INTAKE VENT CAP**  
 SCALE NONE

a5 details_3.dgn DS OSD Imperial Rev. 10/07 21-APR-2010 11:37	DESIGN	BY ANTHONY CHUNG	CHECKED CARLOS SANCHEZ	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ARCHITECTURAL AND STRUCTURAL DESIGN	BRIDGE NO. 33W0002	MISSION GRADE TIF REROOF ROOF DETAILS 3	SHEET
	DETAILS	BY	CHECKED		POST MILE R8.7	A-5		
QUANTITIES	BY	CHECKED	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		CU 04xx EA 3A9501	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES (PRELIMINARY STAGE ONLY)	SHEET OF X X

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	Ala	680	R8.7	15	18

REGISTERED MECHANICAL ENGINEER DATE 12/10  
 4-19-10  
 PLANS APPROVAL DATE  
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**PLUMBING**

— — — — —	Cold Water
— A — — —	Compressed Air
— LPG — — —	Liquefied Petroleum Gas
— D — — — —	Equipment Drain
— RD — — — —	Roof Drain
— OD — — — —	Overflow Drain
— RW — — — —	Non Potable Water
— FW — — — —	Fire Water
— — — — —	Hot Water
— — — — —	Hot Water Return
— R — — — —	Relief Valve Discharge Pipe
— S — — — —	Sewer Line
— — — — —	Sanitary Sewer (above grade)
— — — — —	Sanitary Sewer (below grade)
— — — — —	Sanitary Sewer Vent

**PIPE FITTINGS AND VALVES**

— — — — —	Cap, Threaded
— C — — — —	Elbow, Turned Down
— — — — —	Elbow, Turned Up
— — — — —	Reducer, Concentric
— — — — —	Pressure Gauge (with gage cock and Snubber)
— — — — —	Strainer
— — — — —	Union
— — — — —	Union, Insulating
— — — — —	Valve, Ball
— — — — —	Valve, Check
— — — — —	Valve, Gas
— — — — —	Valve, Gate
— — — — —	Valve, Safety Relief
— — — — —	Valve, Faucet Assembly
— — — — —	Valve, Pressure/Temperature Relief
— — — — —	Water Hammer Arrestor

**HEATING, VENTILATING AND AIR CONDITIONING**

— — — — —	Balance Damper
— — — — —	Flexible Duct
— EA — — — —	Exhaust Air
— RA — — — —	Return Air
— SA — — — —	Supply Air
— — — — —	Exhaust Register
— — — — —	Return Register
— — — — —	Supply Diffuser
— — — — —	Thermostat
— — — — —	Time Switch
— — — — —	Anode Test Station
— — — — —	Three Wire Test Station
— — — — —	Exhaust Fan
— — — — —	Fire Extinguisher

**MISCELLANEOUS**

L	Angle
⊕	Centerline
∅	Diameter
— RE — — — —	(E) Duct to be Removed
— — — — —	Section / Elevation Letter
— — — — —	Sheet Number
— — — — —	Detail Number
— — — — —	Sheet Number
12x12 "	NECK SIZE
190 cfm	FLOW RATE

**MECHANICAL ABBREVIATIONS:**

A/C	Air Conditioning	GA	Gauge	RE	Refrigerator
ABS	Acrylonitrile Butadiene Styrene	GALV	Galvanized	REG	Register
AC	Asphalt Concrete	GH	Ground Hydrant	RA	Return Air
AD	Air Drop	GLV	Globe Valve	RCP	Reinforced Concrete Pipe
AP	Alternative Pipe	GSP	Galvanized Steel Pipe	RD	Roof Drain
ATF	Automatic Transmission Fluid	GV	Gate Valve	REQ	Required
AWG	American Wire Gauge	GWH	Gas Water Heater	RH	Radiant Heater
BFP	Backflow Preventer	GYP	Gypsum	RV	Relief Valve
BH	Box Hydrant	H	Height	RWL	Rain Water Leader
BLDG	Building	HB	Hose Bibb	RW	Raw Water
BV	Balancing Valve	H/C	Hot Water, High Pressure Cleaner	S	Switch
°C	Celsius Temperature	HP	Horse Power	SF	Fan, Switch
C	Conduit	HVAC	Heating, Ventilating And Air Conditioning	S/S	Service Sink
Cap.	Capacity	HW	Hot Water	SA	Supply Air
CFM	Cubic Feet/Minute	HZ	Hertz	SCH	Schedule
CI	Cast-Iron	ID	Inside Diameter	SDS	Sanitary Dump Station
CO	Cleanout	IE	Invert Elevation	SF	Supply Fan
COTF	Cleanout Through Floor	IPS	International Pipe Standard	SHR	Shower
COTG	Cleanout Through Grade	KS	Kitchen Sink	SP	Static Pressure
COTW	Cleanout To Wall	KW	Kilowatt	SPS	Structural Plywood Sheathing
CV	Check Valve	LAV	Lavatory	STA	Station
CW	Cold Water	L/s	Liters per Second	STD	Standard
D	Depth	m	Meter	TCV	Temperature Control Valve
DB	Dry Bulb	MAX	Maximum	TSPV	Trap Seal Primer Valve
DF	Drinking Fountain	MAN	Manhole	TPRV	Temp., Pressure, Relief Valve
DH	Duct Heater	MIN	Minimum	TS	Time Switch
DI	Drain Inlet	mm	millimeter	Typ.	Typical
Dia	Diameter	MS	Mop Sink	UH	Unit Heater
(E)	Existing	NIC	Not In Contract	UL	Undertruck Light
EA	Exhaust Air	NO	Number	UR	Urinal
EC	Evaporative Cooler	NPS	Nominal Pipe Size	V	Valve
ESEW	Emergency Shower And Eye Wash	NPT	National Pipe Thread	VB	Valve Box
EF	Exhaust Fan	NST	National Standard Thread	VR	Vent Riser
EL	Elevation	OA	Outside Air	VM	Vending Machine
Elect.	Electrical	O.C.	On Center	VTR	Vent Thru Roof
ES	Evaporative Cooler Switch	OD	Outside Diameter	W	Width
ESP	External Static Pressure	OG	Original Ground	W/	With
EWC	Electric Water Cooler	PBEF	Push-Button Exhaust Fan	W/O	Without
EWH	Electric Water Heater	PCC	Portland Cement Concrete	WB	Wet Bulb
FC	Flexible Connection	PH	Phase	WC	Water Closet
FD	Floor Drain	PRV	Pressure Reducing Valve	W.C.	Water Column
FDC	Fire Department Connection	PSI	Pounds Per Square Inch	WH	Water Heater
FE	Fire Extinguisher	PVC	Polyvinyl Chloride	W.H.	Wall Hydrant
FG	Finish Grade			WHA	Water Hammer Arrestor
FH	Fire Hydrant			WLS	Water Level Switch
FL	Flow Line			WP	Weatherproof
FS	Floor Sink			WS	Wash Sink
FTR	Flue through roof			WSP	Welded Steel Pipe

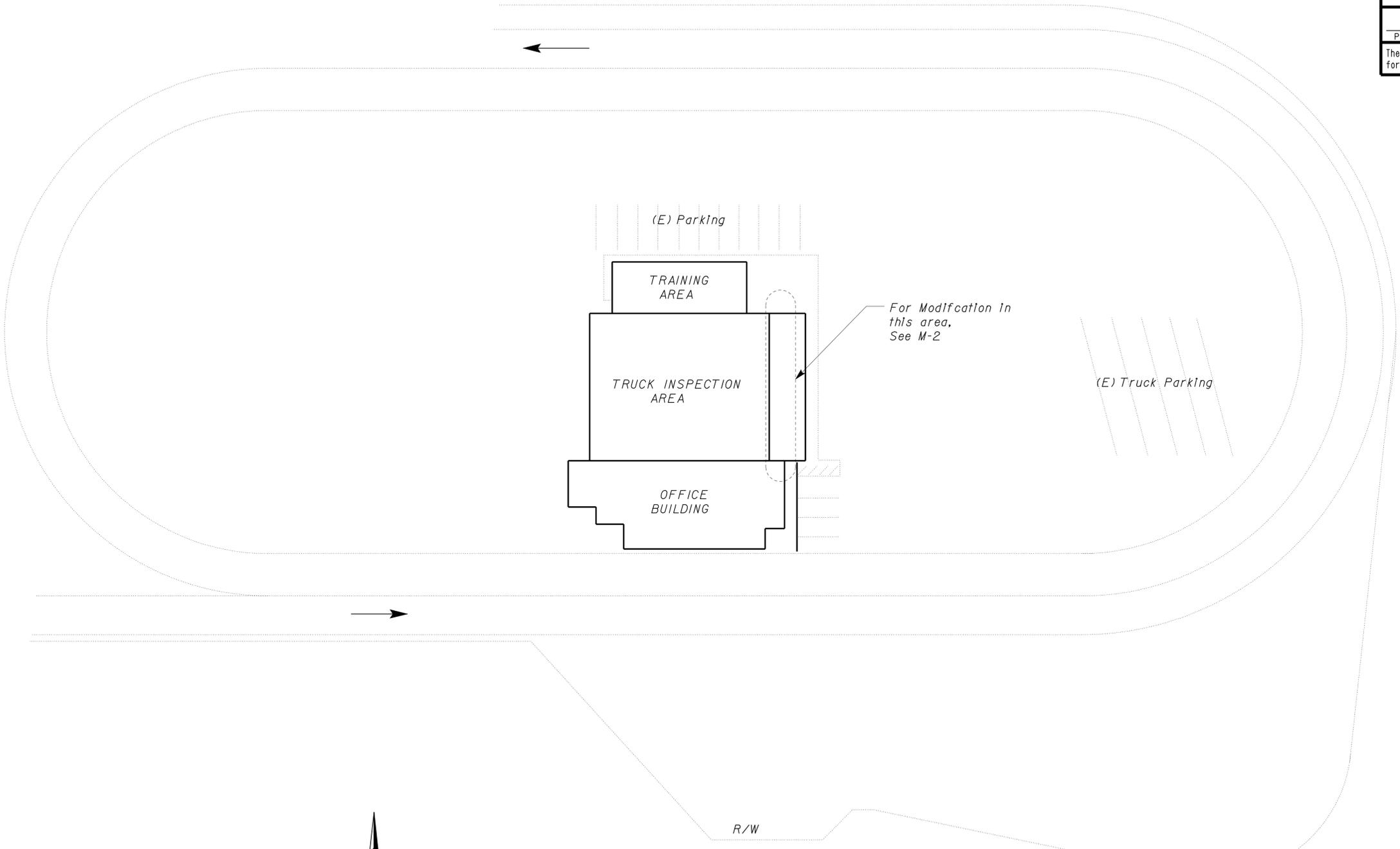
DESIGN BY <u>Alvin Kwan</u> CHECKED <u>Thomas Dietsch</u>	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ELECTRICAL-MECHANICAL-WATER AND WASTEWATER DESIGN	BRIDGE NO. <u>33W002</u>	MISSION GRADE TIF REROOF	SHEET <b>M-0</b>
			POST MILE <u>R8.7</u>		
DETAILS BY <u>J.R. Stangl</u> CHECKED <u>Thomas Dietsch</u>	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	CU 04 EA 3A9501	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES (PRELIMINARY STAGE ONLY)	SHEET OF
QUANTITIES BY <u>Alvin Kwan</u> CHECKED <u>Thomas Dietsch</u>	0 1 2 3		2/2/10		

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	Ala	680	R8.7	16	18

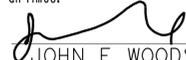
  
 REGISTERED MECHANICAL ENGINEER DATE 12/10  
 Jack Wheeler  
 No. 21648  
 Exp. 6-30-11  
 MECH  
 STATE OF CALIFORNIA

4-19-10  
 PLANS APPROVAL DATE

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**SITE PLAN**  
 No Scale

**CALIFORNIA STATE FIRE MARSHAL**  
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 Approval date: 12-21-09

DESIGN	BY <i>Alvin Kwan</i>	CHECKED <i>Thomas Dietsch</i>
DETAILS	BY <i>J.R. Stangl</i>	CHECKED <i>Thomas Dietsch</i>
QUANTITIES	BY <i>Alvin Kwan</i>	CHECKED <i>Thomas Dietsch</i>

STATE OF  
**CALIFORNIA**  
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES  
 ELECTRICAL-MECHANICAL-WATER  
 AND  
 WASTEWATER DESIGN

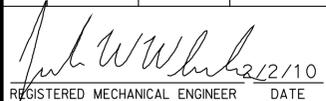
BRIDGE NO.	33W002
POST MILE	R8.7

**MISSION GRADE TIF**  
**REROOF**  
 SITE PLAN

SHEET  
**M-1**

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	Ala	680	R8.7	17	18

 REGISTERED MECHANICAL ENGINEER DATE 2/2/10		
PLANS APPROVAL DATE 4-19-10		

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**Notes:**

1. Install Fume Exhaust Fans on lower roof of Inspection Bays. See Fan Support Detail on this sheet for installation. See Architectural Sheets for exact location and dimensions.
2. Disconnect ductwork from Undertruck Light (UL) fan. Remove fan and supporting frame from wall. Relocate fan to fan curb on Office Building roof. See Architectural sheets for location and curb detail. Modify and add new duct to connect to fan.
3. Air Intake Vent is to provide fresh air for Vestibule Supply Fan. Re-configure ductwork to accommodate relocation of vent from wall to roof. See A-1 and A-2.

**Equipment:**

Fume Exhaust Fan  
 2700 CFM @ 1/4" SP,  
 1/2 HP, 208 V - 1 Ph  
 15 Sones max.

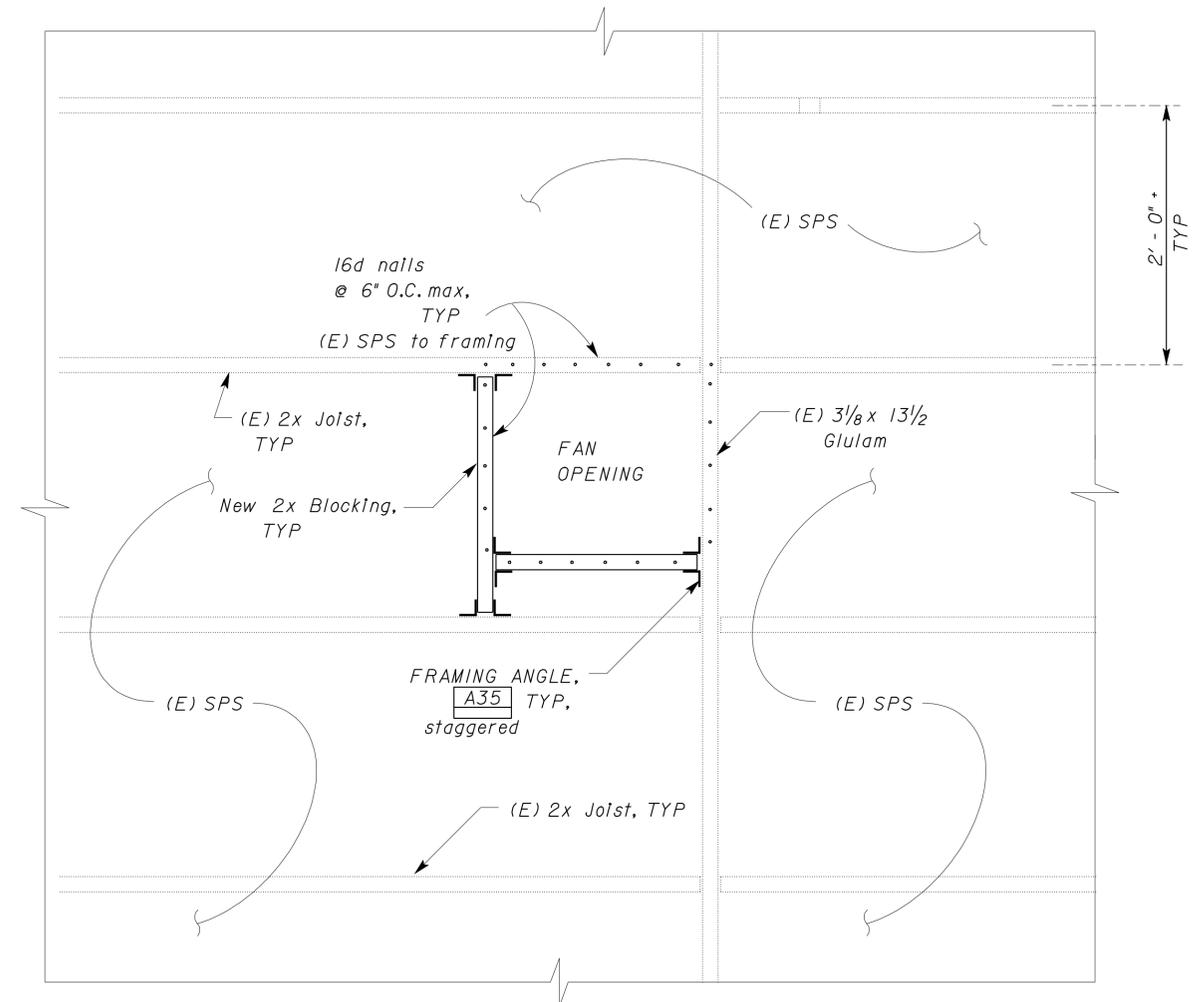
**Notes:**

1. Fan opening dimensions are based on fan submitted.
2. Maximum opening size shall be less than the existing joist spacing.
3. Remove portion of (E) SPS and nail SPS to joists and blocking at opening (as shown).



**PARTIAL ROOF PLAN**

No Scale



**FAN SUPPORT DETAIL**

No Scale

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DESIGN BY <i>Alvin Kwan</i>	CHECKED <i>Thomas Dietsch</i>	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ELECTRICAL-MECHANICAL-WATER AND WASTEWATER DESIGN	BRIDGE NO. 33W002	MISSION GRADE TIF REROOF	SHEET M-2	
				POST MILE R8.7			ROOF PLAN & FAN SUPPORT DETAIL
DETAILS BY <i>J.R. Stangl</i>	CHECKED <i>Thomas Dietsch</i>	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3	CU 04 EA 3A9501	REVISION DATES (PRELIMINARY STAGE ONLY)			SHEET OF
QUANTITIES BY <i>Alvin Kwan</i>	CHECKED <i>Thomas Dietsch</i>			2/2/10			

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	Ala	680	R8.7	18	18

<i>Tech Ngov</i>		REGISTERED ELECTRICAL ENGINEER	DATE
4-19-10		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.



General Note:

-For exact location of exhaust fans, see Mechanical Plans.

-See Architectural sheet for exhaust fan to be relocated and new location of relocated exhaust fan.

**CALIFORNIA STATE FIRE MARSHAL**  
**APPROVED**  
 Approval of this plan does not authorize or approve any omission or deviation from applicable regulations. Final approval is subject to field inspection. One set of approved plans shall be available on the project site at all times.

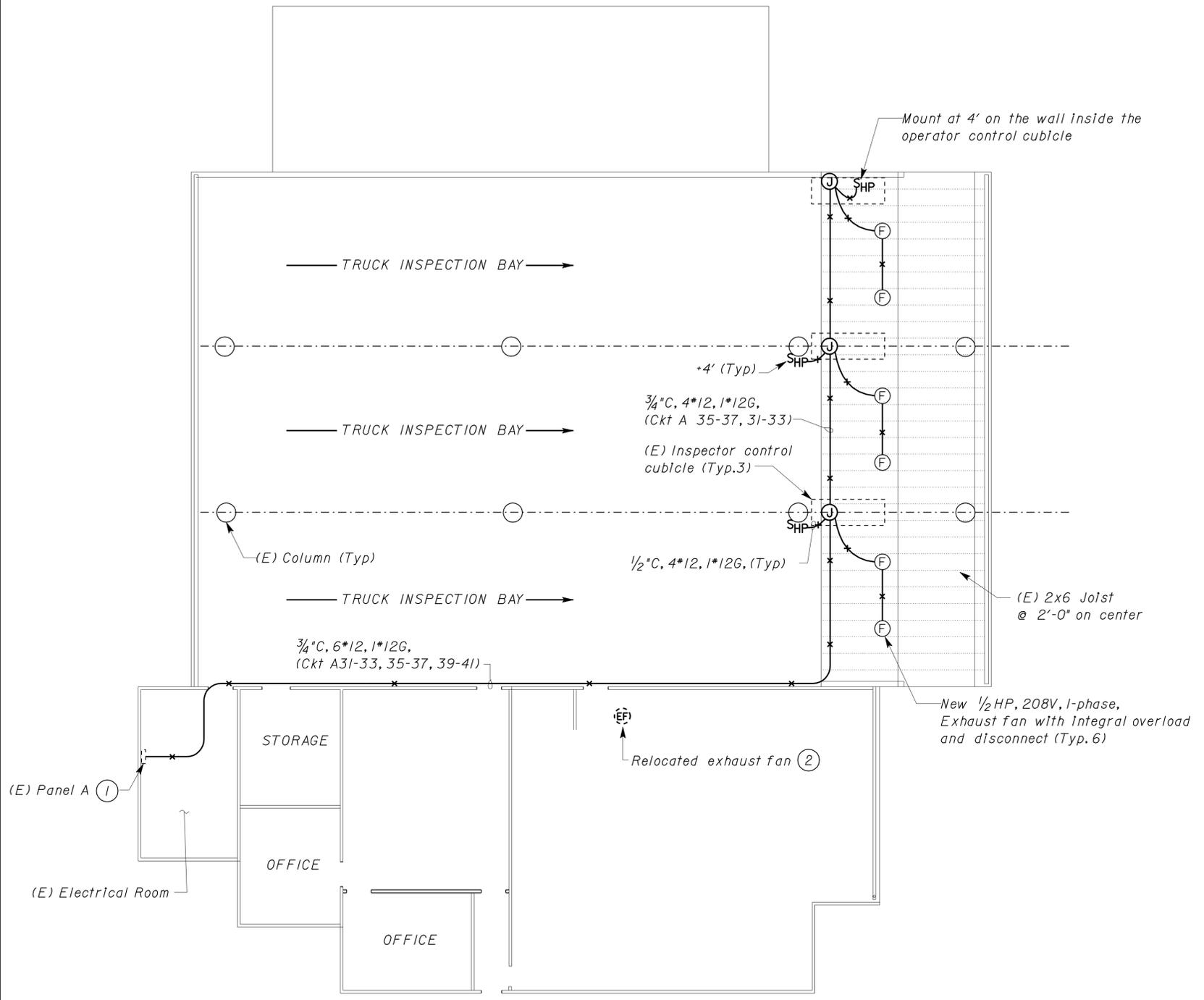
Reviewed by: *John E Woods*  
**JOHN E WOODS**  
 Approval date: 12-21-09

**GRAPHIC SYMBOLS FOR ELECTRICAL DIAGRAMS**

SYMBOL	DESCRIPTION
---x---	CONDUIT EXPOSED
---/---	CROSS-LINES INDICATE NUMBER OF #12 AWG CONDUCTORS. NO CROSS-LINE INDICATES 2#12 WITH #12 (G) UNLESS OTHERWISE NOTED. ALL CONDUIT 1/2" UNLESS OTHERWISE NOTED.
(2) 1/2" C, PVC, 2#12	CONDUCTOR INFO (PER CONDUIT) CONDUIT TYPE CONDUIT SIZE NUMBER OF CONDUITS (NO NUMBER INDICATES ONE CONDUIT)
SHP	MANUAL MOTOR STARTING SWITCH, WITHOUT OVERLOAD ELEMENT
J	JUNCTION BOX
F	FAN MOTOR

**ABBREVIATIONS**

CKT	CIRCUIT
(E)	EXISTING
HP	HORSE POWER
TYP	TYPICAL
V	VOLT



**PLAN**

Scale 1/8" = 1' - 0"

- Notes:
- Existing Panel A is Westinghouse panelboard using BAB type branch circuit breakers. Install three 15-ampere, 2-pole circuit breakers in spaces 31 through 41 to feed the new exhaust fans.
  - Modify electrical conduit system connected to existing exhaust fan to reconnect to relocated fan.

DESIGN BY <i>Tech Ngov</i> CHECKED <i>Mark Cheap</i>	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ELECTRICAL-MECHANICAL-WATER AND WASTEWATER DESIGN	BRIDGE NO.	MISSION GRADE TIF - REROOF	SHEET <b>EE-1</b>
			33W0002		
			POST MILE R8.7		
DETAILS BY <i>Tech Ngov</i> CHECKED <i>Mark Cheap</i>	CU 04	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES (PRELIMINARY STAGE ONLY)	SHEET OF	
QUANTITIES BY <i>Tech Ngov</i> CHECKED <i>Mark Cheap</i>	EA 3A9501	10-05-09 12-07-09			