

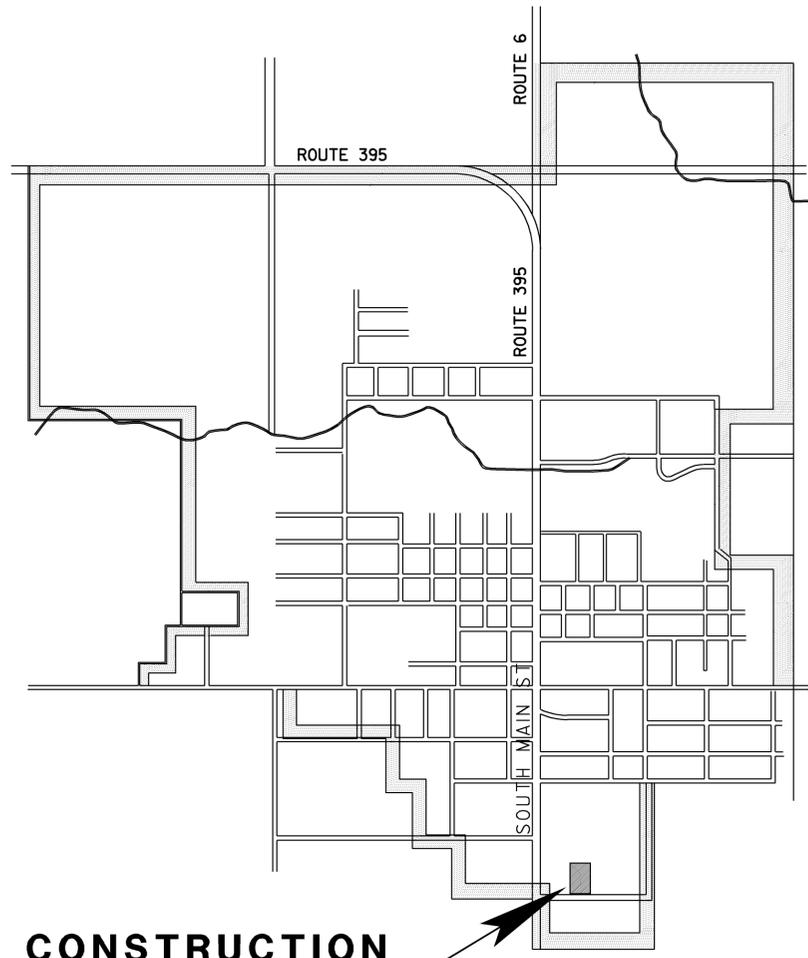
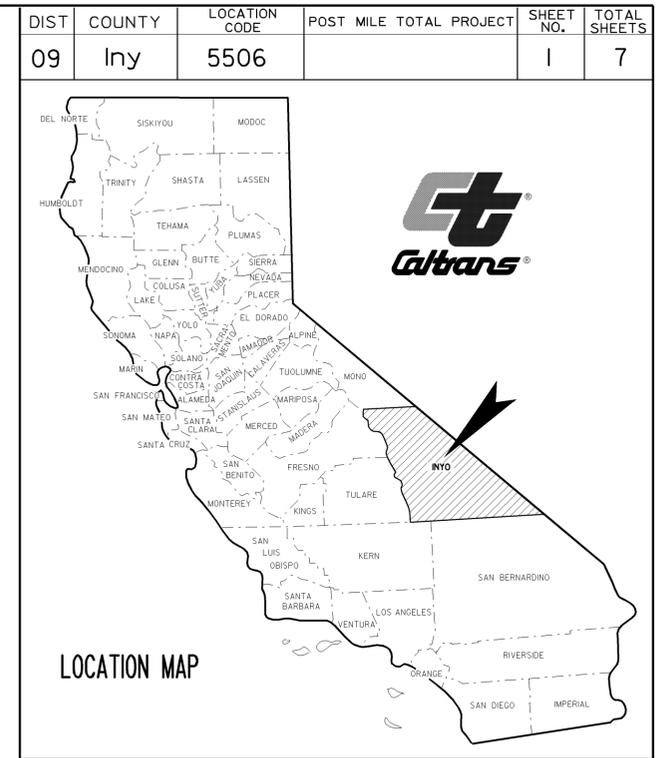
INDEX OF PLANS

SHEET NO.	DESCRIPTION
1	TITLE AND LOCATION MAP
STRUCTURE PLANS	
2	GENERAL PLAN AND LEGEND
3-7	ELECTRICAL PLANS

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 BUILDING CONSTRUCTION  
IN INYO COUNTY  
IN BISHOP  
AT THE  
DISTRICT 09 OFFICE BUILDING  
AT 500 SOUTH MAIN STREET

TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006



**LOCATION OF CONSTRUCTION  
DISTRICT 09 OFFICE BUILDING  
LOCATION CODE No. 5506**

NO SCALE



CALIFORNIA STATE FIRE MARSHAL  
APPROVED

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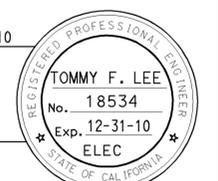
Reviewed by: MIKE TANAKA  
Approval date: 12-09-09

PHOTOVOLTAIC SYSTEMS  
CSFM FILE # 01-14-11-0005

DESIGN ENGINEER  
ALAN TORRES

PROJECT MANAGER  
BRAND McELWAIN

Tommy F. Lee 1-19-10  
PROJECT ENGINEER DATE  
REGISTERED ELECTRICAL ENGINEER



12-09-2009  
PLANS APPROVAL DATE

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

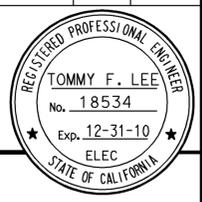


INDEX OF SHEETS

SHEET No.	DESCRIPTION
GP	GENERAL PLAN AND LEGEND
ELECTRICAL	
EE-0	EXISTING UTILITY SITE PLAN
EE-1	SITE PLAN
EE-2	SINGLE LINE DIAGRAM GRID-TIED PHOTOVOLTAIC SYSTEM
EE-3	ROOF PLAN
EE-4	ELEVATION AND DETAILS

DIST.	COUNTY	LOCATION CODE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
09	Iny	5506		2	7

Tommy F. Lee  
 REGISTERED ELECTRICAL ENGINEER  
 No. 18534  
 Exp. 12-31-10  
 DATE 1-19-10  
 PLANS APPROVAL DATE 12-09-2009



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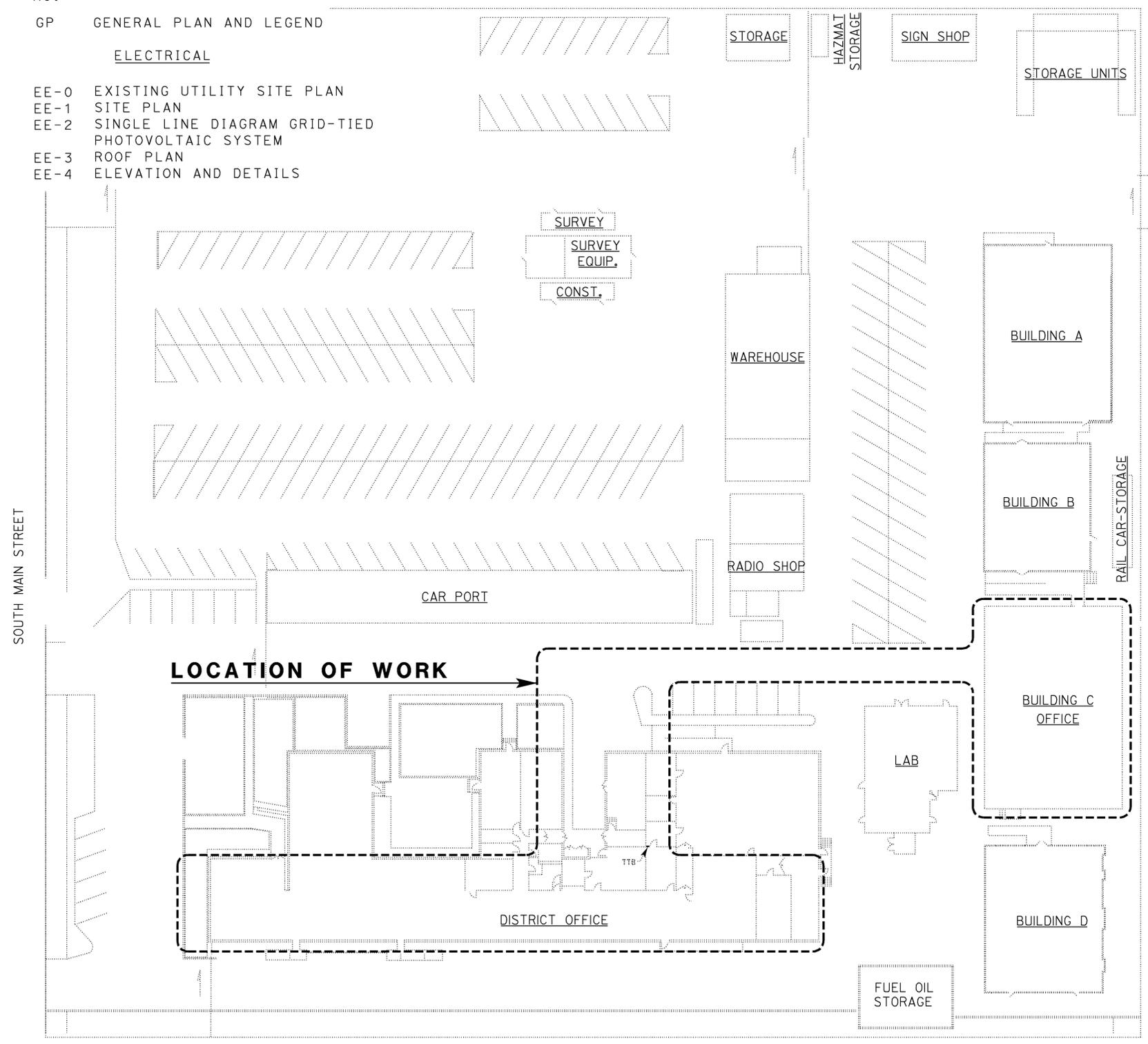
GRAPHIC SYMBOLS

SYMBOL	DESCRIPTION
(2) 1/2" C, PVC, 2#12	CONDUCTOR INFO (PER CONDUIT) CONDUIT TYPE CONDUIT SIZE NUMBER OF CONDUITS (NO NUMBER INDICATES ONE CONDUIT)
—MC—	CONDUIT, RIGID STEEL, UNDERGROUND
—PVC—	CONDUIT, POLYVINYL CHLORIDE, UNDERGROUND
~	CONDUIT, FLEXIBLE
○	CONDUIT, TURN UP
●	CONDUIT, TURN DOWN
△	SECTION/ELEVATION LETTER
EE-2	SHEET NUMBER
1	DETAIL NUMBER
EE-2	SHEET NUMBER
-E-E-	EXISTING CONDUIT AND CONDUCTORS-TO REMAIN UNLESS OTHERWISE NOTED
* * *	CONDUIT EXPOSED
[BC]	INSTALL PULL BOX IN EXISTING CONDUIT RUN.
⎓	CIRCUIT BREAKER, SINGLE POLE
⎓	CIRCUIT BREAKER, DOUBLE POLE
⎓	CONTACT, NORMALLY OPEN
⎓	SWITCH, DOUBLE-POLE
⎓	FUSE
⎓	GROUNDING ELECTRODE
⎓	ENCLOSURE BOND
□(T)	TRAFFIC RATED PULL BOX

ABBREVIATIONS

A	AMPERES
AC	ALTERNATE CURRENT
C	CONDUIT
DC	DIRECT CURRENT
E	EXISTING
G	GROUND
JB	JUNCTION BOX
M	METER
MC	METALIC CONDUIT
MIN	MINIMUM
MT	EMPTY CONDUIT
P	POLE
PB	PULL BOX
PTC	PV USA TEST CONDITIONS
PVC	POLYVINYL CHLORINE
PV	PHOTOVOLTAIC
SF, SQ FT	SQUARE FOOT
STC	STANDARD TEST CONDITIONS
TYP	TYPICAL
TTB	TELEPHONE TERMINAL BOARD
V	VOLT

CALIFORNIA STATE FIRE MARSHAL APPROVED  
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 Approval date: 12-09-09



EXISTING BUILDING DATA 2007 CBC				
BUILDING/ PORTION	OCCUPANCY GROUP	CONSTRUCTION TYPE	ACTUAL AREA	YEAR BUILDING BUILT
OFFICE BUILDING*	B	V-B	20,221 SF	1950
BUILDING C**	B	V-B	4,980 SF	1995

\* ROOF DATA : COLOR COATING OVER  
 FIBRATED ASPHALTIC EMULSION OVER  
 BUILT-UP ROOFING OVER  
 FIBER INSULATION BOARD OVER  
 METAL DECKING  
 \*\* ROOF DATA : BUILT-UP ROOFING OVER

APPLICABLE CODES

2007 California Building Code (CBC) Title 24, Part 2 CCR
2007 California Electrical Code (CEC) Title 24, Part 3 CCR
2007 California Fire Code (CEC) Title 24, Part 9 CCR

**SITE PLAN**  
 SCALE 1" = 30'-0"

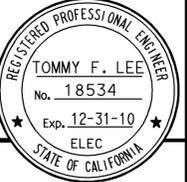
THIS DRAWING ACCURATE FOR ELECTRICAL WORK ONLY

DESIGN SUPERVISOR <i>Jud Schreff</i>	DESIGN	BY Tommy F. Lee	CHECKED Jesse Sandhu	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ELECTRICAL-MECHANICAL-WATER AND WASTEWATER DESIGN	BRIDGE NO.	BISHOP OFFICE BUILDING PHOTOVOLTAIC SYSTEM	SHEET GP
	DESIGN ENGINEER <i>Jasvirinder K. Sandhu</i>	DETAILS	BY Dall Zhou			CHECKED Tommy F. Lee		
	QUANTITIES	BY Tommy F. Lee	CHECKED Jesse Sandhu			POST MILE	GENERAL PLAN AND LEGEND	
DOES SD Imperial Rev. 1/07	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	0 1 2 3	CU 09124 EA 0AA011			DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES (PRELIMINARY STAGE ONLY)	SHEET OF

20-JAN-2010 08:04  
gp.dgn

DIST.	COUNTY	LOCATION CODE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
09	Iny	5506		3	7

Tommy F. Lee  
 REGISTERED ELECTRICAL ENGINEER DATE 1-19-10



12-09-2009  
 PLANS APPROVAL DATE

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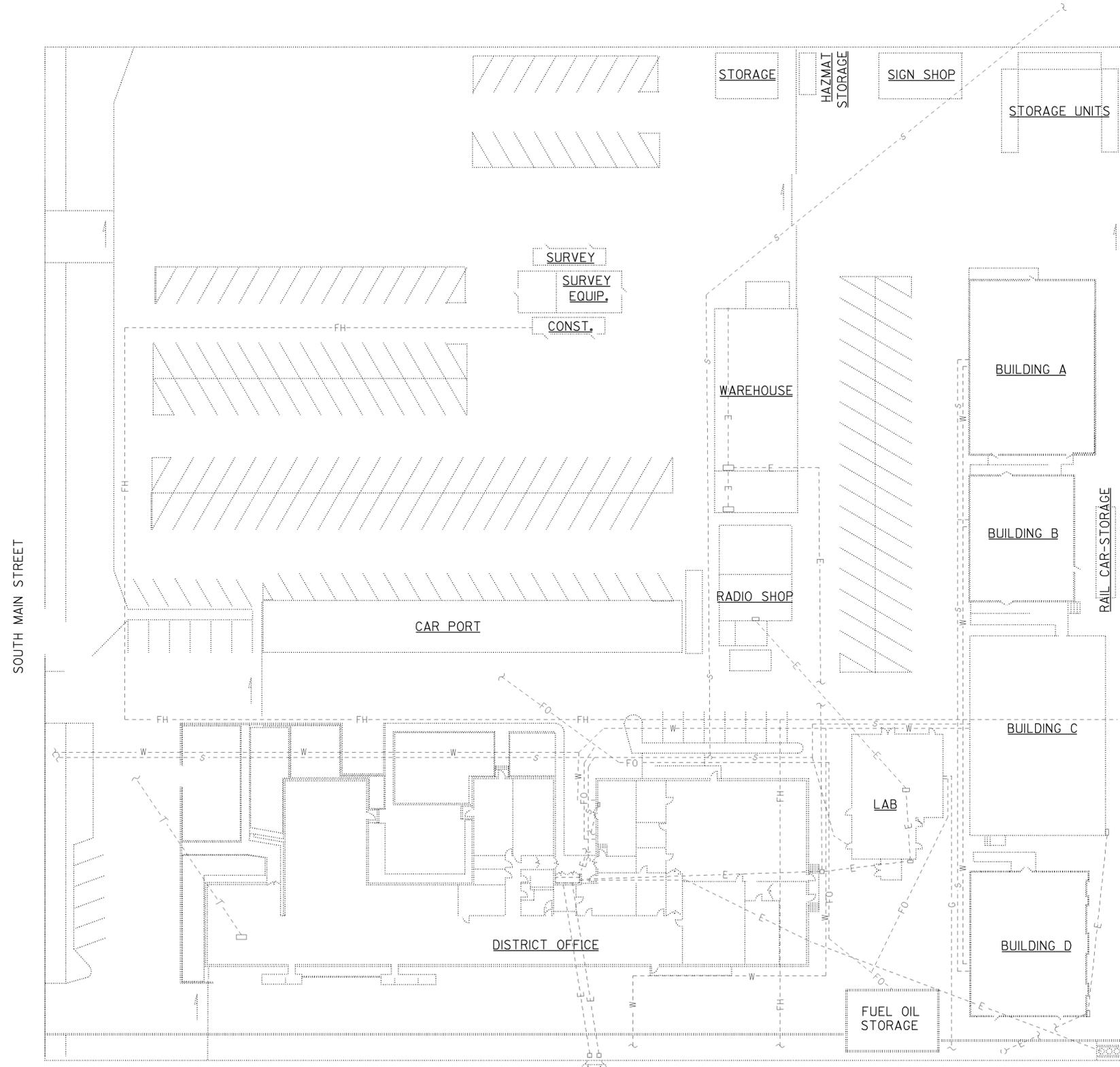
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 Reviewed by: *[Signature]*  
 MIKE TANAKA  
 Approval date: 12-09-09

General notes:

- A. For complete right of way, see Right of Way Record Maps at the District 9 office.
- B. This plan accurate for Utility Information only.
- C. Location of Utility Facilities shown are approximate and shall be verified prior to beginning of construction.

GRAPHIC SYMBOLS (THIS SHEET)

SYMBOL	DESCRIPTION
— E —	POWER
— FH —	FIRE HYDRANT
— FO —	FUEL OIL
— G —	GAS
— T —	TELEPHONE
— S —	SEWER
— W —	WATER



**SITE PLAN**  
 SCALE 1" = 30'-0"

DESIGN	BY Tommy F. Lee	CHECKED Jesse Sandhu
DETAILS	BY Dall Zhou	CHECKED Tommy F. Lee
QUANTITIES	BY Tommy F. Lee	CHECKED Jesse Sandhu

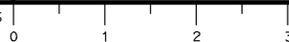
STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION

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

BRIDGE NO. 48M5506  
 POST MILE

**BISHOP OFFICE BUILDING PHOTOVOLTAIC SYSTEM**  
 EXISTING UTILITY SITE PLAN

SHEET **EE-0** OF



10/27/09	1/19/10								
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20-JAN-2010 08:04

General Notes:

- A. The Contractor shall verify true north prior to installation of photovoltaic system.
- B. All AC/DC feeder conductors and equipment grounding conductors shall be sized to meet or exceed the following:
  - Total net voltage drop of the photovoltaic system from photovoltaic source to the existing switchboard shall not exceed 2%.
  - Upon occurrence of any kind of fault at any point in the system, over current protective devices shall trip within 1/2 cycle.
- C. Not all electrical/mechanical equipment and conduit systems are shown.
- D. Location of all existing equipment and conduit systems as shown are approximate only. Contractor shall verify the exact location of all equipment and conduit systems in the field where required.
- E. Sawcut existing paved surfaces at places where required for installation of underground conduit system and repair disturbed surfaces to match existing.
- F. For photovoltaic system single line diagram, see sheet EE-2.
- G. For Graphic Symbols and Abbreviations, see GP sheet.
- H. Provide conduit flashing as required for penetration through roofing.

Notes:

- ① Existing Main Switchboard is Westinghouse, Style LAY8654I, 480-Volt, 3-phase, 3-wire, switchboard with 800-Ampere main circuit breaker. Install 150-Ampere, 3-pole, molded case circuit breaker, in the lowest available space of the distribution section, for connecting photovoltaic system. New circuit breaker shall have Ampere Interrupting Capacity (AIC) of 35,000 symmetrical at 480-Volt. Adjacent to the new 3-pole circuit breaker, install screw on type nameplate with letter height of 1/4" to read "PHOTOVOLTAIC SYSTEM". Install screw on type sign on existing Main Switchboard with letter height of 1/2" to read "THIS PANEL FED BY MULTIPLE SOURCES (UTILITY AND SOLAR)".
- ② 3" C, MC, five conductors; three phase, one neutral and one equipment grounding conductor, to 3-pole circuit breaker for photovoltaic system at the existing 480-Volt switchboard.
- ③ 2" C, MC, with DC conductors and equipment grounding conductor from photovoltaic Array Circuit Combiner Box on the roof of existing Office building.
- ④ 2" C, MC, with DC conductors and equipment grounding conductor from photovoltaic Array Circuit Combiner Box on the roof of Building C.
- ⑤ 1/2" C, MC, 2\*12, 1\*12G.
- ⑥ Install 20-Ampere, single pole, molded case circuit breaker in available space at existing 120/208-Volt, 3-phase, distribution switchboard for supplying weather station and communication gateway. New circuit breaker shall have Ampere Interrupting Capacity (AIC) of 35,000 symmetrical at 240-Volt. Adjacent to the circuit breaker, install screw on type nameplate with letter height of 1/4" to read "WEATHER STATION".
- ⑦ Weather Station. See detail 4 on sheet EE-4. Install weather station on existing roof as directed by the Engineer.
- ⑧ 1/2" C, MC, one RS485 modbus cable.
- ⑨ 1/2" C, MC, Category 6 cable to existing TTB.
- ⑩ Install ground rod inside the pull box and connect equipment grounding conductor to it by using ground clamp.
- ⑪ 1/2" C, MC, shielded cable for photovoltaic module cell temperature monitoring.

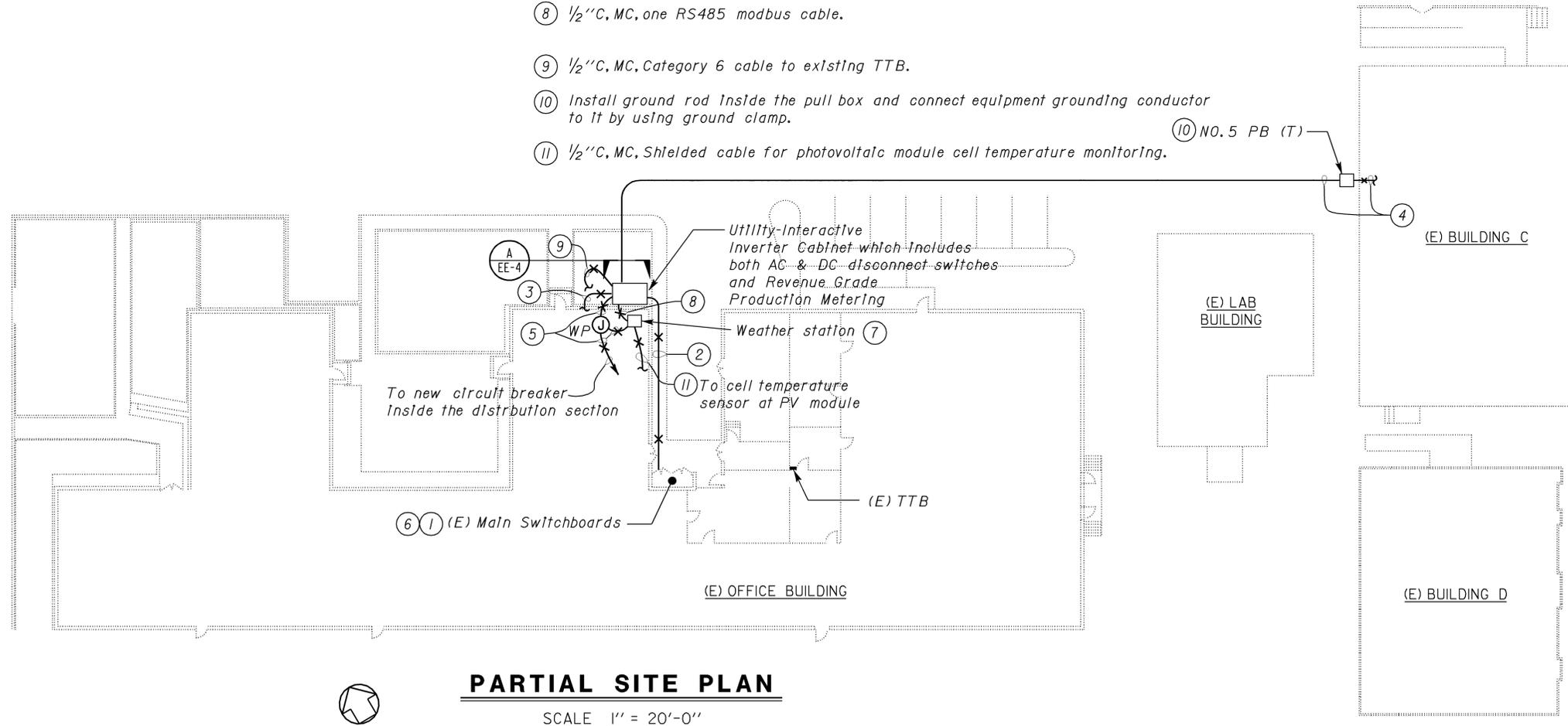
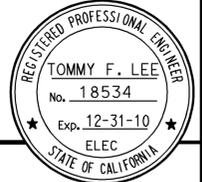
**CALIFORNIA STATE FIRE MARSHAL APPROVED**  
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 Reviewed by: *[Signature]*  
 MIKE TANAKA  
 Approval date: 12-09-09

DIST.	COUNTY	LOCATION CODE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
09	Iny	5506		4	7

Tommy F. Lee 1-19-10  
 REGISTERED ELECTRICAL ENGINEER DATE

12-09-2009  
 PLANS APPROVAL DATE

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THIS DRAWING ACCURATE FOR ELECTRICAL WORK ONLY

DESIGN	BY Tommy F. Lee	CHECKED Jesse Sandhu
DETAILS	BY Dall Zhou	CHECKED Tommy F. Lee
QUANTITIES	BY Tommy F. Lee	CHECKED Jesse Sandhu

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION

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

BRIDGE NO. 48M5506  
 POST MILE

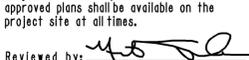
**BISHOP OFFICE BUILDING PHOTOVOLTAIC SYSTEM**

GENERAL PLAN

SHEET **EE-1** OF

DIST.	COUNTY	LOCATION CODE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
09	Iny	5506		5	7

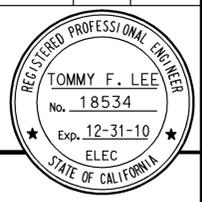
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Reviewed by:	 <b>MIKE TANAKA</b>
Approval date:	12-09-09

12-09-2009	PLANS APPROVAL DATE
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**Photovoltaic Module**  
 PV modules shall be minimum 185 (STC) watt, polycrystalline silicon cell type module with interconnection connectors rated for 90°C. PV modules shall be UL 1703 listed with a maximum system voltage of 600 VDC. PV module manufacturer shall be one of those manufacturers listed as eligible California Solar Initiative (CSI) PV module manufacturer.

**Photovoltaic Array Circuit Combiner Box**  
 PV array circuit combiner box shall be factory assembled, 600 VDC rated combiner box with fused input circuits, two isolated DC bus bars, ground bus bar, all enclosed inside NEMA 3R lockable hinged cover enclosure. The combiner box shall be UL 1741 listed.

PV array circuit combiner box shall have the following components:  
 - DIN Rail mounted touch safe fuse holders with fuse.  
 - Positive DC bus bar, Negative DC bus bar and ground bus bar.  
 - DIN rail mounted Grid-Tie surge arrester. The surge arrester shall be rated to withstand 40 kA (8/20 micro second) induced transient surge type and compatible to use with grounded PV arrays.

**Weather Station Cabinet**  
 Weather station cabinet shall be outdoor type, factory assembled system consisting of the following equipment:  
 - Irradiance transducers, Silicon Pyranometer type  
 - Ambient Temperature transducers, K-type thermistor type  
 - Module Temperature transducers, K-type thermistor type  
 - Wind speed and Direction transducers, Anemometer type  
 - Communications controller, Scalling board, Power supply, and RS485 Surge Suppressor all enclosed inside cabinet

**Utility-Interactive Inverter Cabinet**  
 Utility Interactive Inverter Cabinet shall be outdoor type, factory assembled system consisting of the following equipment:  
 - NEMA 3R Enclosure.  
 - 100 kW/100 kVA, 480/277 V, 3-phase, 4-wire at a power factor of 0.99 or greater.  
 - Fused Sub-array Combiner with minimum of 4 array inputs for positive DC, negative DC, and DC ground bus bars. Positive array inputs fuse size to match loading.  
 - Built-in DC and AC disconnect switches size to match loading.  
 - Integrated output Isolation type transformer.  
 - Ground Fault Protection.  
 - Integrated AC and DC Surge Protections.  
 - Integrated AC and DC contactors.  
 - Pre-charge circuit.  
 - Current and potential transformers  
 - Human Machine Interface (HMI). AC/DC Inverter's HMI shall be equipped with LCD and keypad displaying main menu. HMI main menu shall display system monitoring, status and faults and operation. Monitoring menu shall display system status, metering, daily, weekly and monthly energy production. Status and faults menu shall display status messages, system output, and number of faults. Operation menu shall display control and settings.  
 - Communication Gateway with datalogging and communications for remote monitoring system with Internet connectivity (TCP/IP). Communication gateway shall be UL listed.  
 - Sub-array monitoring  
 - AC Ground bus bars.

Enclosure shall be NEMA 3R, 14-Gauge, and powder-coated standard factory finish steel enclosure. All screws, latches, hinge pins and similar hardware shall be stainless steel. HMI, AC and DC disconnect switches, and equipment rating labels shall be mounted on the exterior door. Exterior door shall have interlock switch and be lockable with a padlock. The cabinet shall have MEVI3 rated filtered, top entry forced air cooling system with one fan, sloped roof, and shall be suitable for seismic zone 4 compliance.

DC/AC Inverter shall be rated at maximum continuous output power of 100 kW (100 kVA) with input operating voltage range between 315 to 600 VDC and maximum DC input current of 331 A. Inverter shall be capable of operating at ambient temperature range (Full power) of -4°F to +122°F. DC/AC Inverter manufacturer shall be one of those manufacturers listed as eligible California Solar Initiative (CSI) DC/AC Inverter manufacturer.

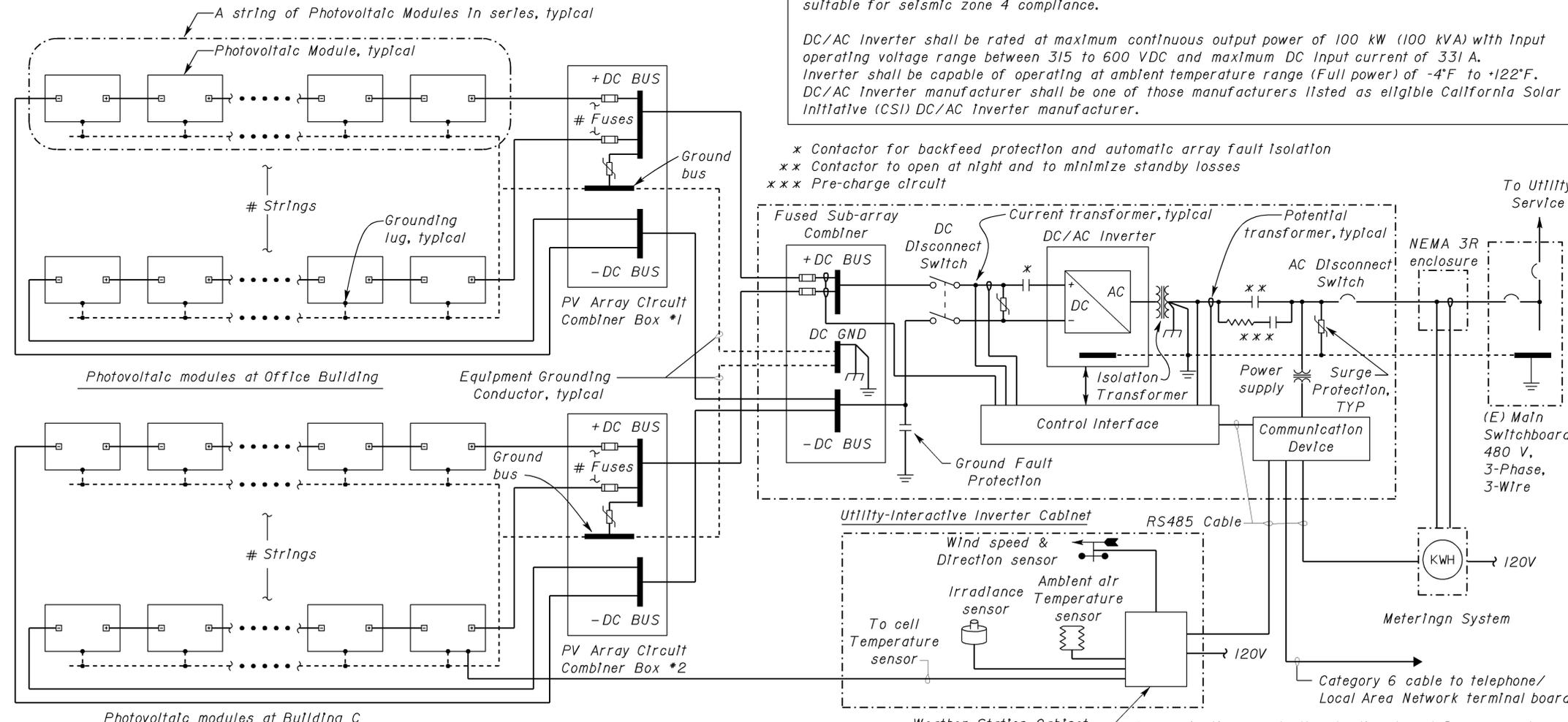
**General Notes:**

- Provide and install all necessary warning labels/markings per Article 690 of California Electrical Code (CEC) and the State Fire Marshal's guideline for solar PV installation.
- Solar PV installation shall comply with the latest guideline from California Department of Forestry & Fire Protection, Office of the State Fire Marshal and latest Program Handbook from California Solar Initiative (CSI).
- For graphic symbols and abbreviations, see GP.

**Metering System**  
 Metering System shall consist of the following equipment:  
 - Revenue Grade Production Meter  
 - Power supply  
 - RS485 Surge Suppressor

**Photovoltaic System Requirements**  
 Photovoltaic System complete design and installation details inclusive of all engineering calculations shall be signed by an Professional Engineer of the respective field (both Electrical and Civil Engineering) in the State of California shall be submitted for approval by the Contractor. The PV design shall meet or exceed the following requirements:

- Total designed capacity of photovoltaic system shall be minimum 89.3 kW of the CEC-AC rating. Number of PV module per string shall be arranged in a manner to meet or exceed the following:  
 - Maximum system voltage based on lowest excepted ambient temperature at the site (Voc maximum on coldest day) shall be no less than 1% of the inverter's maximum input DC voltage range.  
 - Maximum system power voltage based on average high ambient temperature at the site (Vmp on warmest day) shall be 20% greater than the inverter's minimum input DC voltage range.
- Photovoltaic system module row spacing shall be designed to prevent shading from adjacent module.
- All wiring except at module interconnection shall be concealed inside conduit system.
- Photovoltaic system modules structural support system shall be designed to withstand wind forces of 85-mile per hour.
- Photovoltaic system wiring and protective devices shall meet or exceed the requirements of all applicable codes.
- PV Array Circuit Combiner Boxes locations as shown are arbitrary only. Contractor shall install the combiner boxes at locations that best suit the photovoltaic system strings layout.
- PV modules installed on different slopes and/or orientation shall not be part of the same string except PV modules installed on flat roof.



**PHOTOVOLTAIC SYSTEM**

DESIGN	BY	Tommy F. Lee	CHECKED	Jesse Sandhu	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ELECTRICAL-MECHANICAL-WATER AND WASTEWATER DESIGN	BRIDGE NO. 48M5506 POST MILE	BISHOP OFFICE BUILDING PHOTOVOLTAIC SYSTEM SINGLE LINE DIAGRAM GRID-TIED PHOTOVOLTAIC SYSTEM	SHEET EE-2	
	DETAILS	BY	Dall Zhou	CHECKED						Tommy F. Lee
	QUANTITIES	BY	Tommy F. Lee	CHECKED						Jesse Sandhu

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	0	1	2	3	CU 09124 EA 0AA011	DISREGARD PRINTS BEARING EARLIER REVISION DATES	10/27/08 11/18/10	REVISION DATES (PRELIMINARY STAGE ONLY)	SHEET OF
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DOES SD Imperial Rev. 1/07

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DIST.	COUNTY	LOCATION CODE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
09	Iny	5506		6	7

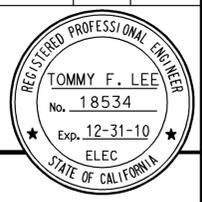
  

Tommy F. Lee		1-19-10
REGISTERED ELECTRICAL ENGINEER	DATE	

12-09-2009
PLANS APPROVAL DATE

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**General notes:**

- A. Provide and Install approved conduit support on top of the roof to support conduit system and junction boxes. Conduit support shall be one-piece and non metallic type. For conduit support details, see Detail 3 on sheet EE-4.
- B. All exposed conduits shall be galvanized rigid steel, with minimum size 3/4".
- C. Size conduits to allow for 50% future capacity.
- D. No DC wiring except at the module connector shall be exposed.
- E. Use type CGB connectors at conduit terminations to exposed conductors.
- F. DC conduit/conductors between photovoltaic modules and photovoltaic Array Circuit Combiner Boxes are not shown.
- G. Existing Office building and Building C roofs minimum height is approximately 9'-6".
- H. For graphic symbols and abbreviations, see GP.
- I. For photovoltaic rack mounting, see roof attachment Details 1 and 2 on sheet EE-4.

- J. Provide and Install all necessary warning labels/markings per Article 690 of California Electrical Code (CEC) and the State Fire Marshal's guideline for solar photovoltaic installation.

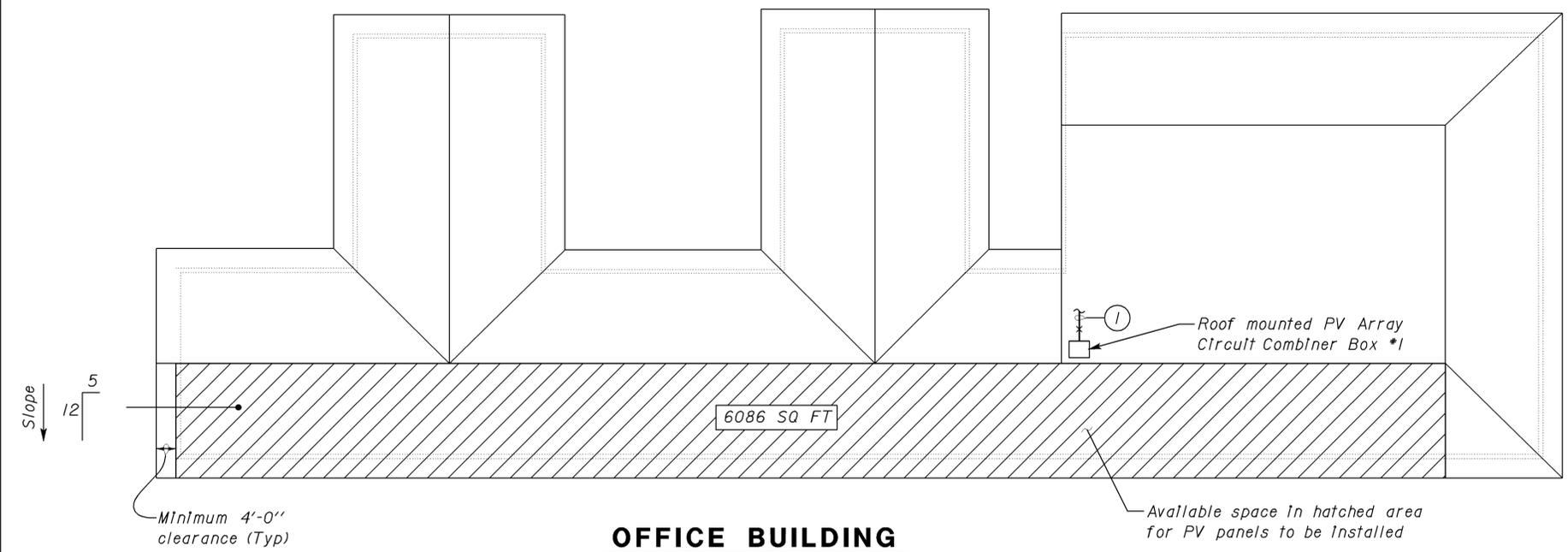
**Note:**

- ① 2" C, MC, with DC conductors and equipment grounding conductor to Utility Interactive Inverter Cabinet. For continuation, see sheet EE-1.

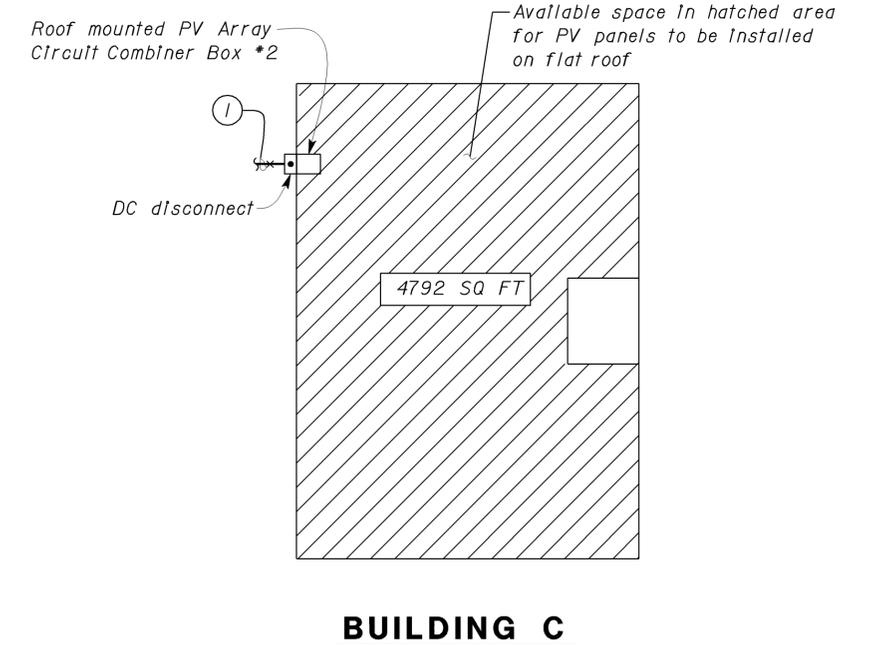
**CALIFORNIA STATE FIRE MARSHAL APPROVED**

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Reviewed by: *[Signature]*  
MIKE TANAKA  
Approval date: 12-09-09



**OFFICE BUILDING**



**BUILDING C**

**ROOF PLAN**  
SCALE 1/16" = 1'-0"

THIS DRAWING ACCURATE FOR ELECTRICAL WORK ONLY

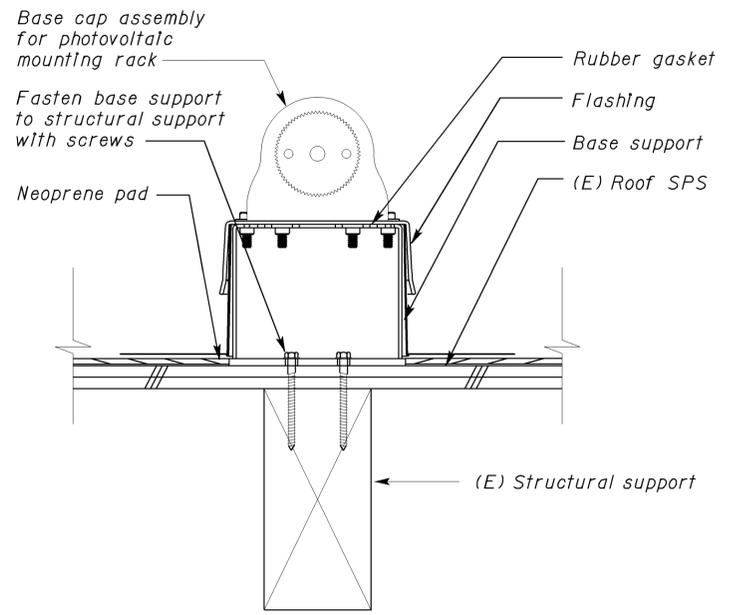
DESIGN BY Tommy F. Lee CHECKED Jesse Sandhu	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ELECTRICAL-MECHANICAL-WATER AND WASTEWATER DESIGN	BRIDGE NO. 48M5506	<b>BISHOP OFFICE BUILDING PHOTOVOLTAIC SYSTEM</b>	SHEET <b>EE-3</b> OF
			POST MILE		
			REVISION DATES (PRELIMINARY STAGE ONLY)		
DETAILS BY Dall Zhou CHECKED Tommy F. Lee	CU 09124 EA 0AA011	DISREGARD PRINTS BEARING EARLIER REVISION DATES	9/30/09 1/18/10	SHEET OF	
QUANTITIES BY Tommy F. Lee CHECKED Jesse Sandhu	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	0 1 2 3			

DIST.	COUNTY	LOCATION CODE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
09	Iny	5506		7	7

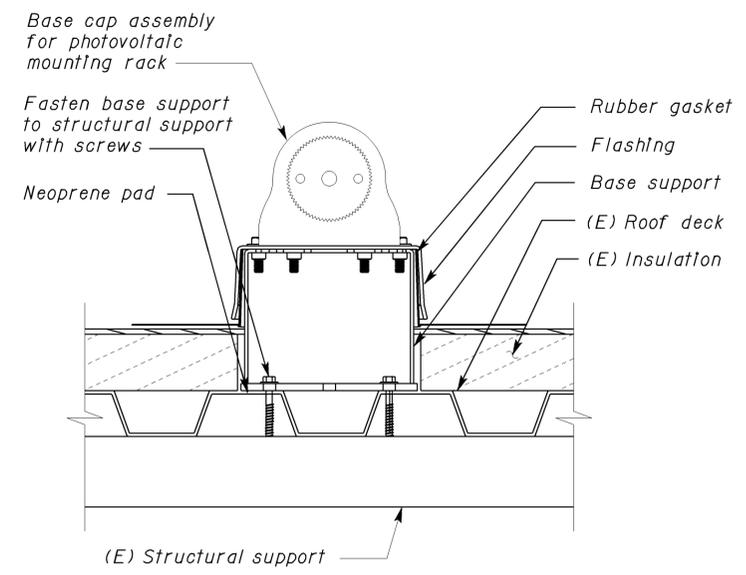
  

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12-09-2009 PLANS APPROVAL DATE		

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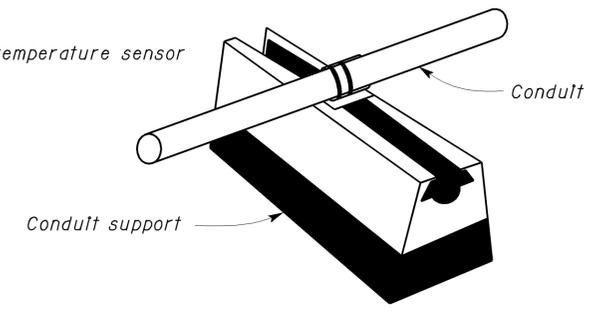


**1 WOOD-NO INSULATION AT BUILDING C**  
NO SCALE

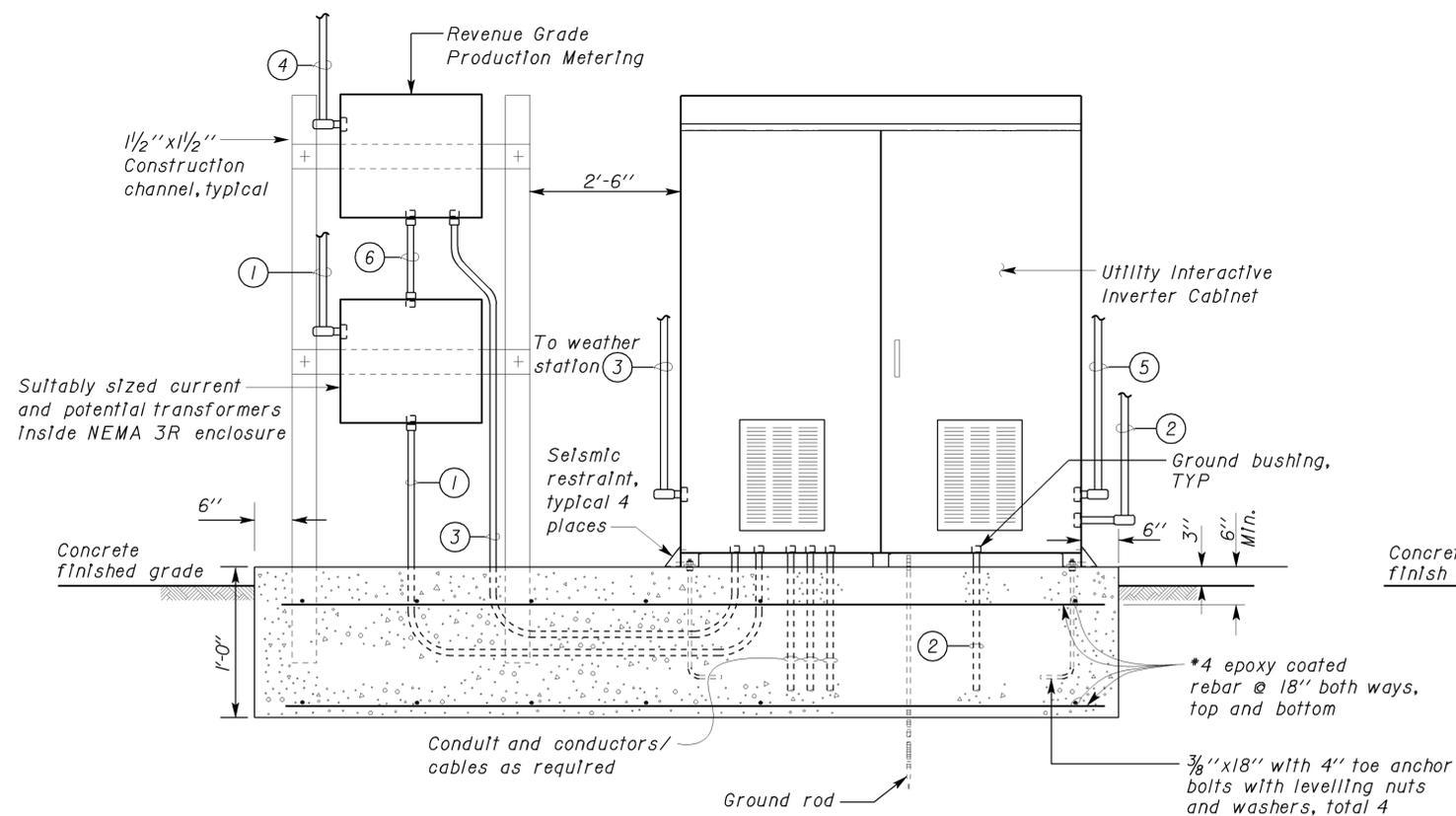


**2 1 1/2" DECK WITH WOOD FILLERS-INSULATION AT OFFICE BUILDING**  
NO SCALE

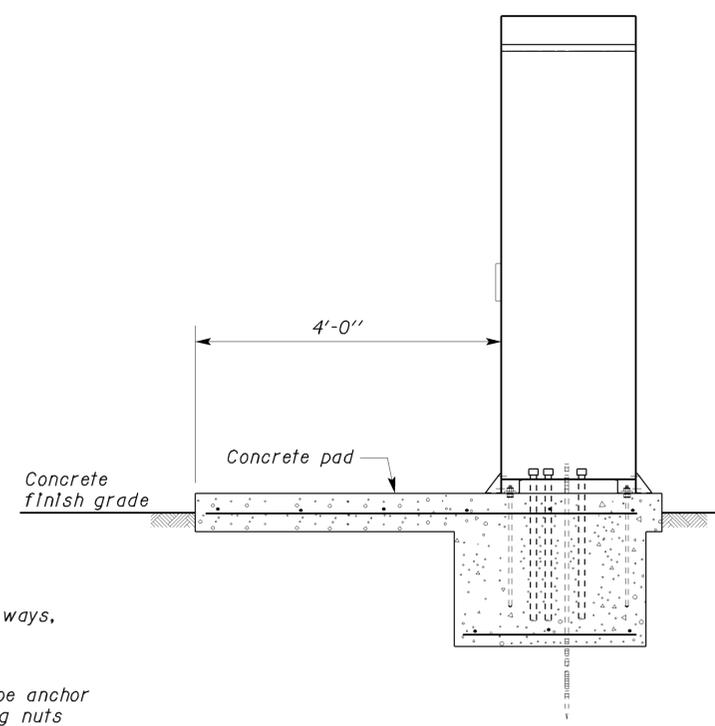
- Notes:**
- 3" C, RSC, five conductors; three phase, one neutral and one equipment grounding conductor.
  - 2" C, RSC, with DC conductors and equipment grounding conductor from photovoltaic Array Circuit Combiner Box on the roof.
  - 1/2" C, RSC, one RS485 modbus cable.
  - 1/2" C, RSC, 2\*12, 1\*12G.
  - 1/2" C, RSC, Category 6 cable to existing TTB Inside the Telephone Cabinet.
  - 2" C, RSC, conductors as required.
  - 3/4" C, shielded data conductors/cable to cell temperature sensor at photovoltaic module.



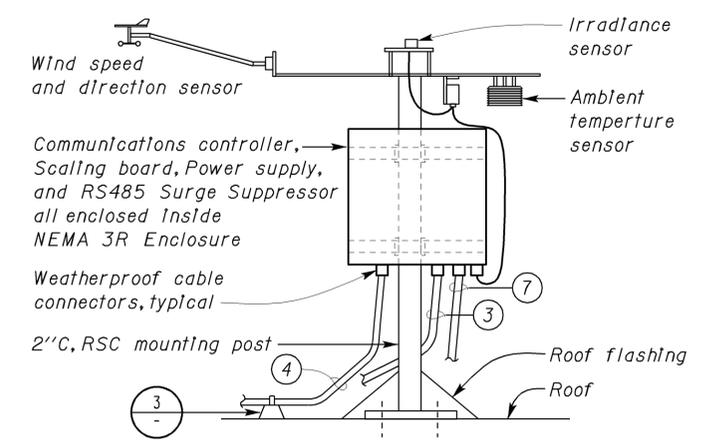
**3 ROOF MOUNTED CONDUIT SUPPORT**  
NO SCALE



**A ELEVATION**  
NO SCALE



**SIDE VIEW**



**4 WEATHER STATION**  
NO SCALE

DOES SD Imperial Rev. 1/07	DESIGN	BY Tommy F. Lee	CHECKED Jesse Sandhu	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES	BRIDGE NO.	BISHOP OFFICE BUILDING PHOTOVOLTAIC SYSTEM ELEVATION AND DETAILS	SHEET
	DETAILS	BY Dall Zhou	CHECKED Tommy F. Lee		ELECTRICAL-MECHANICAL-WATER AND WASTEWATER DESIGN	48M5506		EE-4
	QUANTITIES	BY Tommy F. Lee	CHECKED Jesse Sandhu		POST MILE			
	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				CU 09124 EA 0AA011	DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES (PRELIMINARY STAGE ONLY)
	0	1	2	3		8/27/09	1/19/10	

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