

# Solar PV Permit Process



*A Guide for your Project . . .*





## ***INTRODUCTION***

**The information in this guide is intended to make the permit process a rewarding experience.**

**The issuance of a permit for a small commercial or residential PV project will be accomplished in a timely manner, providing that the applicant follows the procedures outlined in this guide.**

## **Required Submittal Documents**

- Completed Permit Application
- Site Plan indicating location of the PV components (See sample Site Plan)
- Electrical diagram indicating all components (See standard electrical diagram)
- Manufacturer's specification sheets and installation instructions for all major components.
- Structural information

## **Site Plan Requirements**

*See sample site plan*

- Indicate solar modules in relation to existing structure
- Indicate existing roof configuration (Hips, valleys, gables etc.)
- Indicate all major electrical components (Junction boxes, conductors, raceways, inverter, combiner etc.)

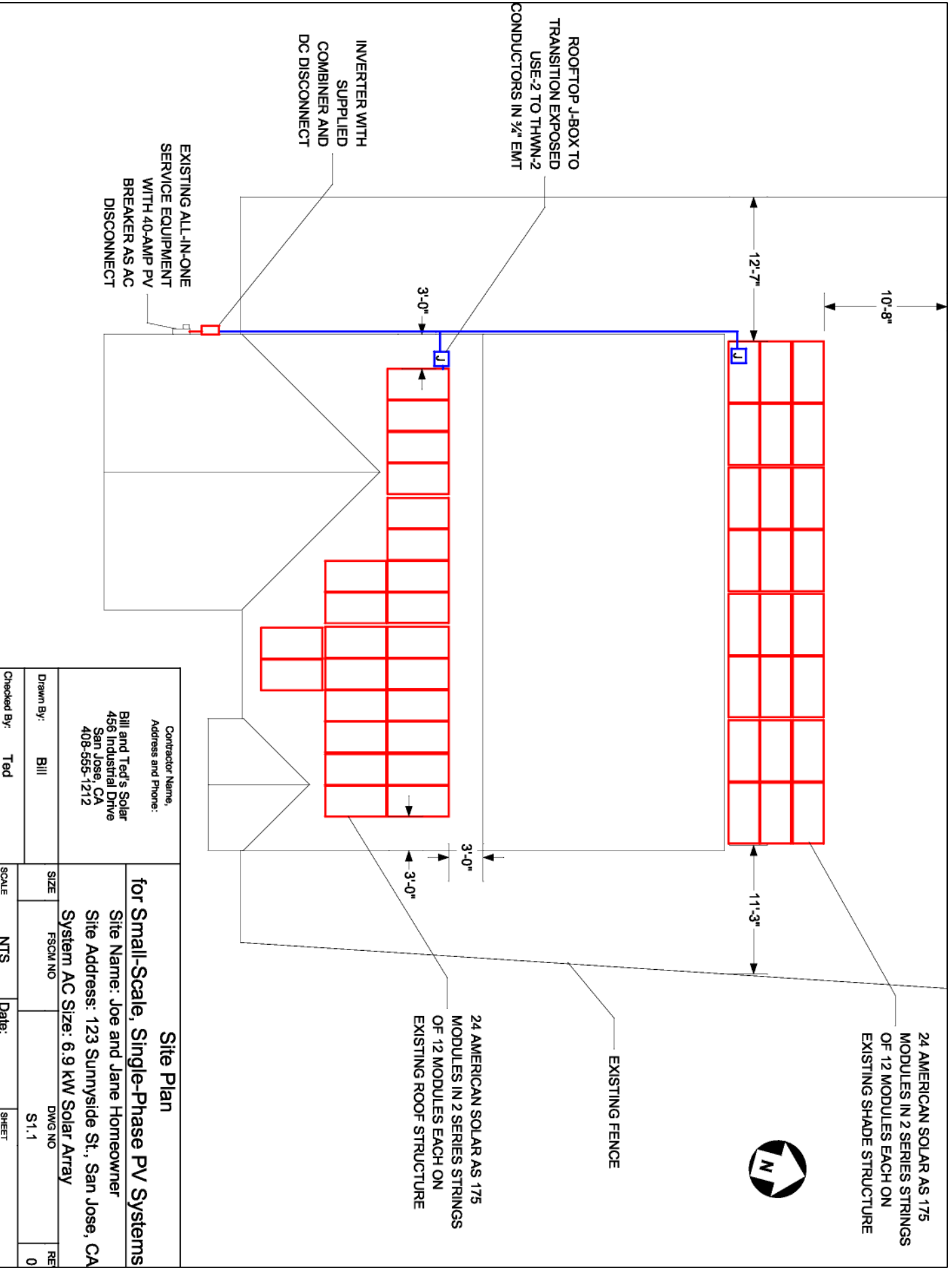
## **Electrical Diagram Requirements**

*See Sample One-Line Electrical Diagram*

- Complete equipment schedule
- Complete conduit and conductor schedule
- Indicate number of modules in each series source circuit

## **Structural Requirements**

- Describe existing roof pitch, rafter spacing, engineered truss system or conventional framed system
- Describe existing roof covering (Asphalt shingles-how many layers, tile-weight or other type covering)
- Provide information regarding mounting hardware



24 AMERICAN SOLAR AS 175  
 MODULES IN 2 SERIES STRINGS  
 OF 12 MODULES EACH ON  
 EXISTING SHADE STRUCTURE



EXISTING FENCE

24 AMERICAN SOLAR AS 175  
 MODULES IN 2 SERIES STRINGS  
 OF 12 MODULES EACH ON  
 EXISTING ROOF STRUCTURE

ROOFTOP J-BOX TO  
 TRANSITION EXPOSED  
 USE 2 TO THWN-2  
 CONDUCTORS IN 3/4" EMT

INVERTER WITH  
 SUPPLIED  
 COMBINER AND  
 DC DISCONNECT

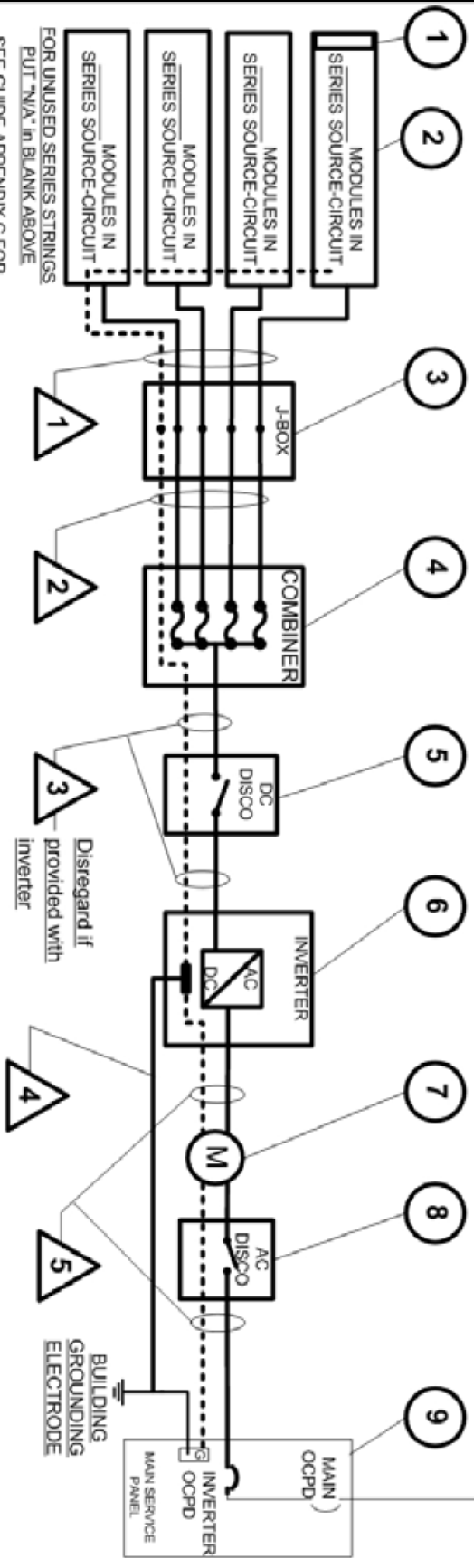
EXISTING ALL-IN-ONE  
 SERVICE EQUIPMENT  
 WITH 40-AMP PV  
 BREAKER AS AC  
 DISCONNECT

Contractor Name, Address and Phone: <b>Bill and Ted's Solar</b> 456 Industrial Drive San Jose, CA 408-555-1212		<b>Site Plan</b> for Small-Scale, Single-Phase PV Systems	
Drawn By: <b>Bill</b>	FSCM NO	DWG NO S1,1	RE 0
Checked By: <b>Ted</b>	SCALE NTS	Date:	SHEET
Site Name: Joe and Jane Homeowner Site Address: 123 Sunnyside St., San Jose, CA System AC Size: 6.9 kW Solar Array			



TAG	DESCRIPTION	PART NUMBER	NOTES
1	SOLAR PV MODULE		
2	PV ARRAY		
3	J-BOX (IF USED)		
4	COMBINER (IF USED)		
5	DC DISCONNECT		
6	DC/AC INVERTER		
7	GEN METER (IF USED)		
8	AC DISCONNECT (IF USED)		
9	SERVICE PANEL		

TAG	DESCRIPTION OR CONDUCTOR TYPE	COND. GAUGE	NUMBER OF CONDUCTORS	CONDUIT TYPE	CONDUIT SIZE
1	USE-2 <input type="checkbox"/> or PV WIRE <input type="checkbox"/>				
2	BARE COPPER EQ. GRD. COND. (EGC)			N/A	N/A
3	THWN-2 <input type="checkbox"/> or XHHW-2 <input type="checkbox"/> or RHW-2 <input type="checkbox"/>				
4	DC GROUNDING ELECTRODE COND.				
5	THWN-2 <input type="checkbox"/> or XHHW-2 <input type="checkbox"/> or RHW-2 <input type="checkbox"/>				



SEE GUIDE APPENDIX C FOR INFORMATION ON MODULE AND ARRAY GROUNDING

CONDUIT AND CONDUCTOR SCHEDULE

TAG	DESCRIPTION OR CONDUCTOR TYPE	COND. GAUGE	NUMBER OF CONDUCTORS	CONDUIT TYPE	CONDUIT SIZE
1	USE-2 <input type="checkbox"/> or PV WIRE <input type="checkbox"/>				
2	BARE COPPER EQ. GRD. COND. (EGC)			N/A	N/A
3	THWN-2 <input type="checkbox"/> or XHHW-2 <input type="checkbox"/> or RHW-2 <input type="checkbox"/>				
4	DC GROUNDING ELECTRODE COND.				
5	THWN-2 <input type="checkbox"/> or XHHW-2 <input type="checkbox"/> or RHW-2 <input type="checkbox"/>				

Contractor Name, Address and Phone: \_\_\_\_\_

Site Name: \_\_\_\_\_

Site Address: \_\_\_\_\_

System AC Size: \_\_\_\_\_

Drawn By: \_\_\_\_\_

Checked By: \_\_\_\_\_

SIZE: \_\_\_\_\_ FSC# INO: \_\_\_\_\_ DWG NO: E1.1

SCALE: \_\_\_\_\_ NTS: \_\_\_\_\_ Date: \_\_\_\_\_ SHEET: \_\_\_\_\_

One-Line Standard Electrical Diagram for Small-Scale, Single-Phase PV Systems



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