

Worksheet for PV System Plan Check

Supplied Diagrams

- _____ Is a basic site diagram supplied with the permit package?
 Location of major equipment identified on plan.
- _____ Is a one-line diagram supplied with the permit package?
- _____ Array configuration shown
- _____ Equipment grounding specified
- _____ Disconnect specified
- _____ System grounding specified
- _____ Point of connection attachment method identified

Inverter Information

- _____ Are cut sheets provided for Inverter?
- _____ Is inverter listed for utility interactivity (see CEC list of Eligible Inverters)

PV Module Information

- _____ Are cut sheets and manufactures installation instructions provided for PV modules?
- _____ Are the modules listed? (see CEC list of Eligible PV Modules)
- _____ Voltage at Pmax from listing label
- _____ Current at Pmax from listing label

Array Information

- _____ Short-circuit current (690.8)

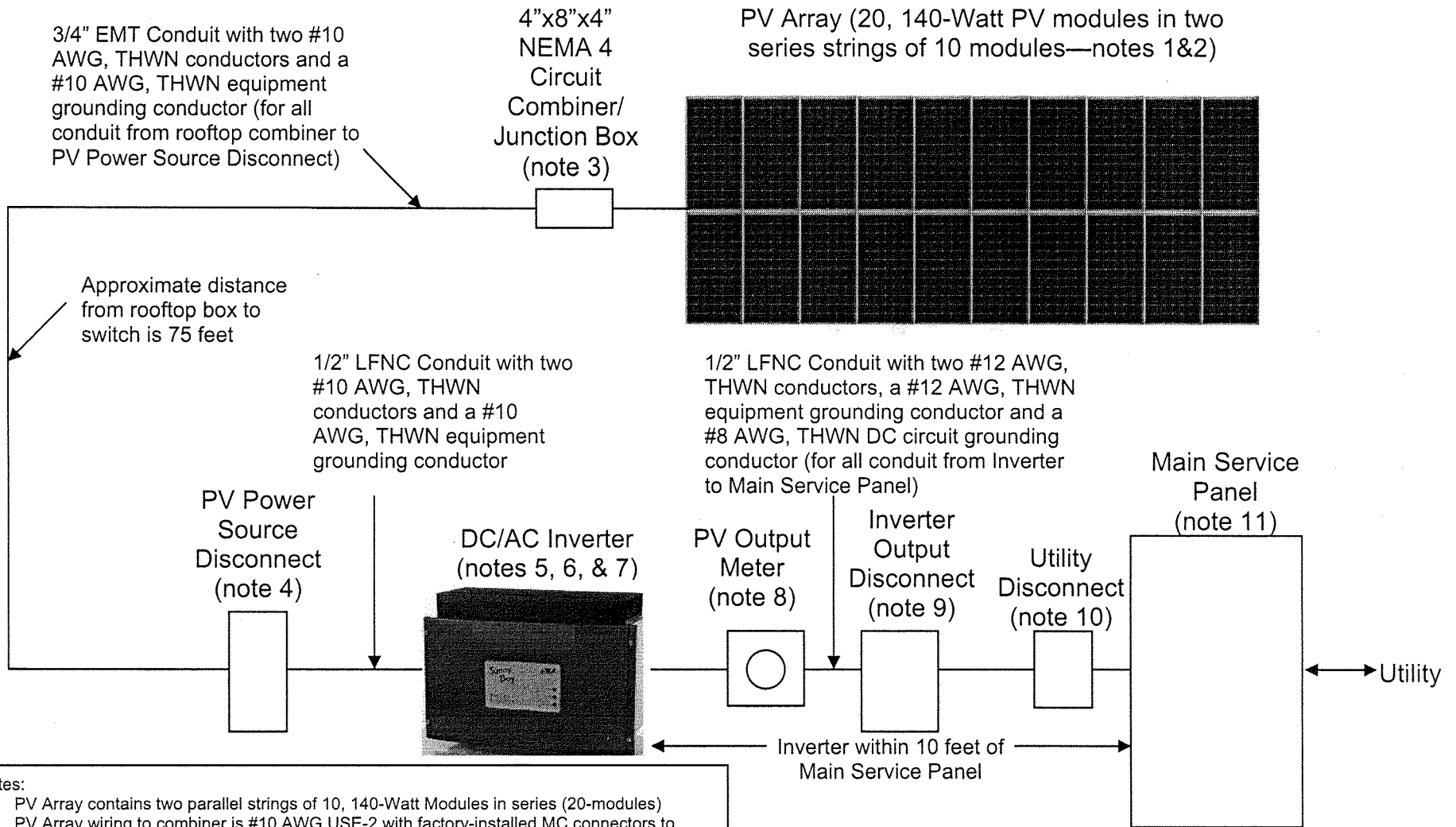
Roof Information (for rooftop systems)

- _____ Structural calculations provided along with details on the attachment to the roof framing members per the layout.
- _____ Weight of array for rooftop systems
 (pounds per square foot—include mounting hardware)
- _____ Age of building (roof structure)
 (If array weight is less than 5lb/sq.ft. then engineering calculations are unnecessary for roof loading)
- _____ Identify roofing type (e.g. comp shingle, masonry tile, shake, etc...)

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Ground Mounting Structure (for ground-mounted structures)

- _____ Weight of array
(pounds per square foot—include mounting hardware)
- _____ Are the details of the array supports, framing members, and foundation posts and footings provided
- _____ Is the information on mounting structure(s) construction provided?
(If the mounting structure is unfamiliar to the local jurisdiction and is more than six feet above grade, it may require engineering calculations.)
- _____ Is the detail on module attachment method to mounting structure provided?



Notes:

1. PV Array contains two parallel strings of 10, 140-Watt Modules in series (20-modules)
2. PV Array wiring to combiner is #10 AWG USE-2 with factory-installed MC connectors to interface with modules.
3. PV Array Combiner/Junction box provides transition from array wiring to conduit wiring.
4. PV Power Source Disconnect (unfused) rated at 30-amps, 600-Vdc, NEMA 3R Rainproof.
5. Ground-Fault Protection provided in DC/AC Inverter.
6. DC/AC Inverter is SB2500UL model rated at 2.5 kW AC output and is rated to provide 10.4 amps at 240-Volts at 40°C.
7. Inverter is Listed to UL-1741 "Utility-Interactive"
8. PV Output Meter is Form 2S kWh meter with cyclometer register (easy-read).
9. Inverter Output Disconnect rated at 30-amps, 240Vac, NEMA 3R. (needed only if Utility Switch not within view of inverter)
10. Utility Switch is visible open, lockable in open position, 240-Vac, 30-amp switch.
11. 100-Amp Main Service Panel with 15-Amp Two-Pole Circuit Breaker for Interactive Point of Connection (up to 20-amp allowed for 100 amp busbar—NEC 690.64(B)(2) exception)
12. Equipment grounding conductors on AC- and DC-side sized according to NEC 250.122.
13. Negative pole of PV array referenced to ground at the Inverter.
14. All grounds connected to main service ground in Main Service Panel.

COMPANY NAME

Title: Sample One-Line Diagram for PV System

Drawn By:

Date:

Checked By:

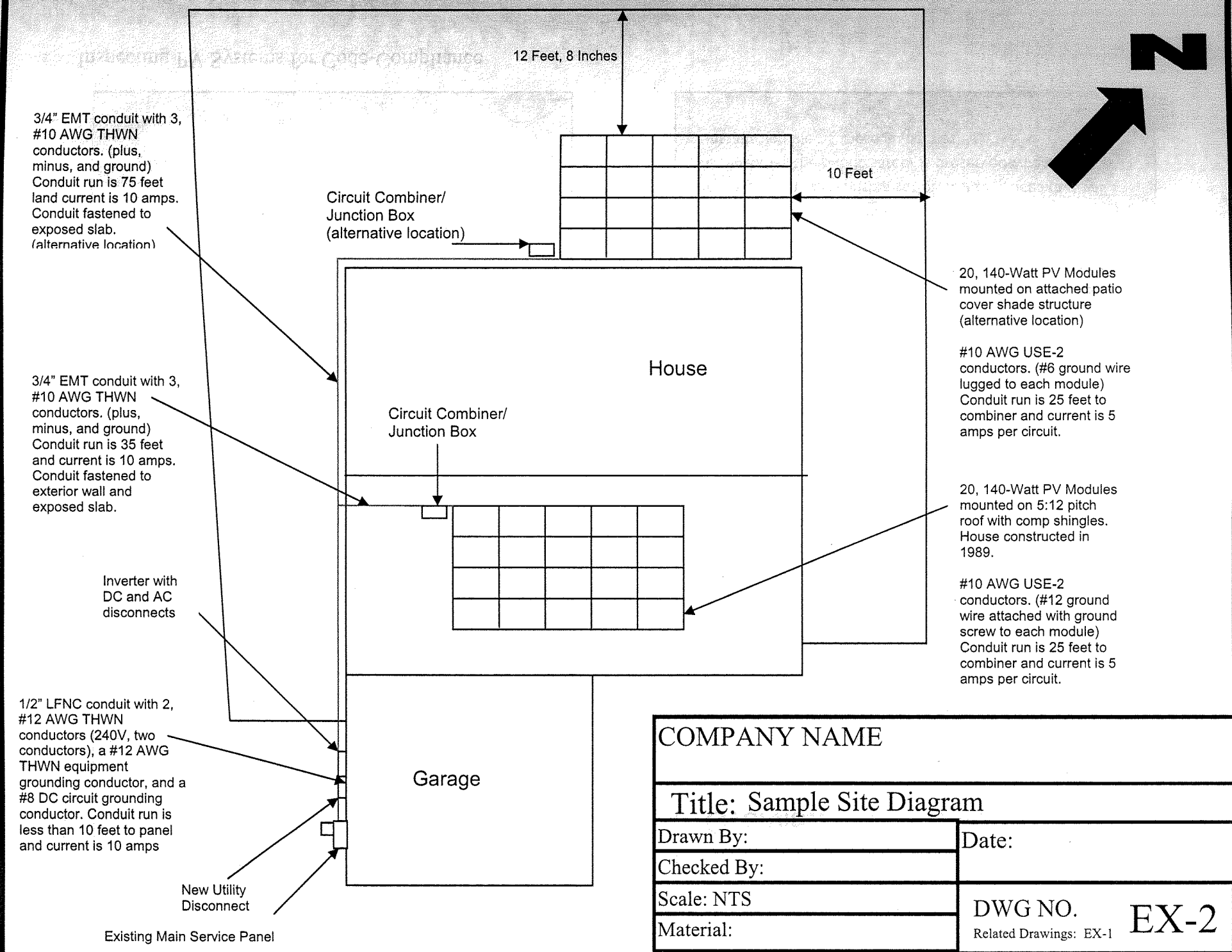
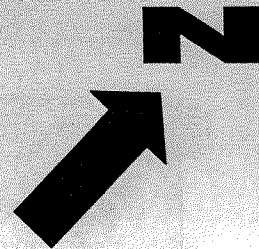
Scale: NTS

DWG NO.

EX-1

Material:

Related Dwgs: EX-2



3/4" EMT conduit with 3, #10 AWG THWN conductors. (plus, minus, and ground) Conduit run is 75 feet land current is 10 amps. Conduit fastened to exposed slab. (alternative location)

3/4" EMT conduit with 3, #10 AWG THWN conductors. (plus, minus, and ground) Conduit run is 35 feet and current is 10 amps. Conduit fastened to exterior wall and exposed slab.

Inverter with DC and AC disconnects

1/2" LFNC conduit with 2, #12 AWG THWN conductors (240V, two conductors), a #12 AWG THWN equipment grounding conductor, and a #8 DC circuit grounding conductor. Conduit run is less than 10 feet to panel and current is 10 amps

New Utility Disconnect

Existing Main Service Panel

Circuit Combiner/Junction Box (alternative location)

Circuit Combiner/Junction Box

12 Feet, 8 Inches

10 Feet

House

Garage

20, 140-Watt PV Modules mounted on attached patio cover shade structure (alternative location)

#10 AWG USE-2 conductors. (#6 ground wire lugged to each module) Conduit run is 25 feet to combiner and current is 5 amps per circuit.

20, 140-Watt PV Modules mounted on 5:12 pitch roof with comp shingles. House constructed in 1989.

#10 AWG USE-2 conductors. (#12 ground wire attached with ground screw to each module) Conduit run is 25 feet to combiner and current is 5 amps per circuit.

COMPANY NAME	
Title: Sample Site Diagram	
Drawn By:	Date:
Checked By:	
Scale: NTS	DWG NO. EX-2
Material:	Related Drawings: EX-1