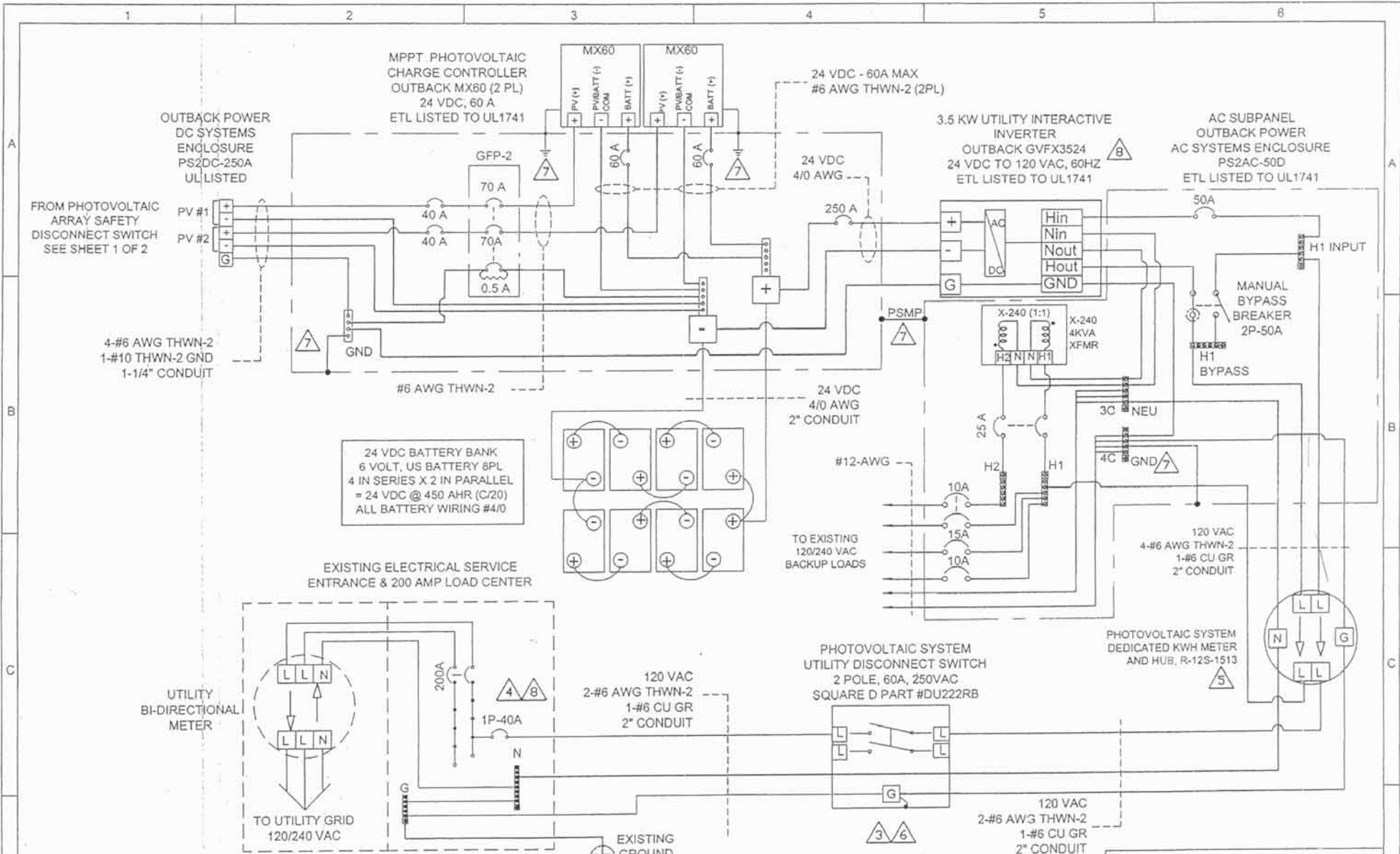


NOTES:
ARE REFERENCED FROM SHEET 3

This Sample Drawing is for illustration purposes only and is not to be used for design or construction. This drawing and its suitability for end use is not implied. The intent is only to illustrate typical minimum information required at time of application to APS. Additional information may be required.

**RESIDENTIAL PV
SAMPLE ONLY**

COMPANY NAME		
ONE-LINE ELECTRICAL DIAGRAM		
3.5 kW PHOTOVOLTAIC SYSTEM		
999 N. CACTUS BIRD RD.		
ANY CITY, AZ 85123		
DATE:	06/12/04	SIZE
	08/24/04	B
CHECKED BY:	08/24/04	ORDER NUMBER:
APPR BY:	08/25/04	0007
REVISION: 6	11/12/04	DRAWING NO.
		2004-107-03
DATE: 12-11-2008		SCALE:
		NTS
		SHEET 1 OF 1



NOTES:

ARE REFERENCED FROM SHEET 3

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RESIDENTIAL PV
SAMPLE ONLY

APPROVALS	DATE:
	6/12/04
	8/25/04
	09/22/04
	09/22/04
REVISION: 0	11/12/04
DATE: 12-11-2008	

COMPANY NAME		
3-LINE ELECTRICAL DIAGRAM 3.5 kW PHOTOVOLTAIC SYSTEM 999 N. CACTUS BIRD RD. ANY CITY, AZ 85123		
SIZE	ORDER NUMBER:	DRAWING NO.
A	0002	2004-107-04
SCALE: NTS	SHEET 2 OF 2	

NOTES:

- <1> ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE NEC AND ALL APPLICABLE REQUIREMENTS OF THE SERVING ELECTRIC UTILITY COMPANY AND OF THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ).
- <2> BI-DIRECTIONAL UTILITY METER TO BE INSTALLED BY UTILITY COMPANY.
- <3> LABEL BREAKER "PV ELECTRIC POWER SOURCE" PER NEC 705.10 AND "BREAKERS ARE BACKFED" PER NEC 690.64(B)(5). LABEL WITH THE MAX AC OUTPUT OPERATING CURRENT AND THE OPERATING VOLTAGE PER NEC 690.54.
- <4> LABEL "PHOTOVOLTAIC SYSTEM UTILITY DISCONNECT SWITCH". SWITCH COVER TO BE LOCKED AT ALL TIMES. SWITCH TO BE VISIBLE BLADE AND ACCESSIBLE PER UTILITY REQUIREMENTS AND CONFORM TO NEC 705.22.
- <5> LABEL PER NEC 690.14(C)(2), "PHOTOVOLTAIC SYSTEM DC DISCONNECT SWITCH". LABEL PER NEC 690.53, WITH OPERATING VOLTAGE, OPERATING CURRENT, MAX SYSTEM VOLTAGE, AND SHORT CIRCUIT . SWITCH TO BE LOCKED PER NEC 690.7(D).
- <6> LABEL "PHOTOVOLTAIC POWER SYSTEM DEDICATED KWH METER".
- <7> PROVIDE WARNING SIGN PER NEC 690.17 READING, "WARNING-ELECTRIC SHOCK HAZARD-DO NOT TOUCH TERMINALS-TERMINALS ON BOTH LINE AND LOAD SIDES MAY BE ENERGIZED IN THE OFF POSITION".
- <8> LISTING AGENCY NAMES AND NUMBERS TO BE INDICATED ON POWER INVERTER AND SOLAR MODULES PER NEC 110.3(B).
- <9> METALLIC CONDUIT SHALL BE USED WITHIN BUILDING PER NEC 690.31(E).
- <10> LABEL "DEDICATED PHOTOVOLTAIC SYSTEM COMBINER PANEL" AND "LOADS NOT TO BE ADDED TO THIS PANEL".
- <11> GEC TO BE INSTALLED AS REQUIRED BY MANUFACTURER INSTRUCTIONS AND NEC 690.47.

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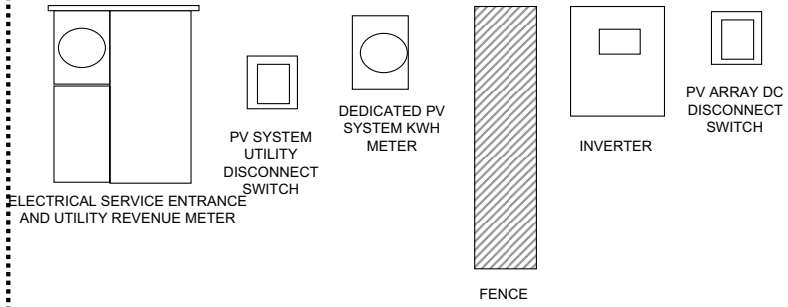
ABBREVIATIONS

PV = PHOTOVOLTAIC
GEC = GROUNDING ELECTRODE CONDUCTOR

**RESIDENTIAL PV
SAMPLE ONLY**

COMPANY NAME				
COMPANY ADDRESS Phone #		NOTES		
Drawn:		3.5 PHOTOVOLTAIC SYSTEM		
Checked:		999 N. CACTUS BIRD RD.		
		ANY CITY, AZ 85123		
Scale	Drawing No.	Sheet	Rev	Date
NONE	0000-0000	3 of 4	A	12-11-2008

EQUIPMENT LAYOUT



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NOTE: UTILITY HAS 24-HR UNRESTRICTED ACCESS TO UTILITY DISCONNECT SWITCH AND kWh METER(S)

N. CACTUS BIRD RD.

PV MODULES

DRIVEWAY

RESIDENCE

SHED WITH BATTERIES, AND CHARGE CONTROLLER



MANUAL BY-PASS SWITCH

PV ARRAY DC DISCONNECT SWITCH

INVERTER

UNLOCKED GATE

DEDICATED PV SYSTEM kWh METER

PV SYSTEM UTILITY DISCONNECT SWITCH

ELECTRICAL SERVICE ENTRANCE AND UTILITY REVENUE METER

RESIDENTIAL PV SAMPLE ONLY

COMPANY NAME				
COMPANY ADDRESS Phone #		SITE PLAN 3.5 PHOTOVOLTAIC SYSTEM 999 N. CACTUS BIRD RD. ANY CITY, AZ 85123		
Drawn:		Checked:		
Scale	Drawing No 1 of 4	Sheet	Rev	Date
NONE	0000-0000	4 of 4	A	12-11-2008