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POWER TABLE									
LOCATION	ARRAY			MOUNT			INVERTER		
	# OF MODULES	MODULE TYPE	kW _p STC	AZIMUTH	PITCH	TYPE	TYPE	CEC EFFICIENCY	kW AC CEC
ROOF	126	BP SOLAR BP3225T	28.35	154	20	SOLARDOCK	SATCON PVS-30(480)	95%	23.66

GENERAL SHEET NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH AMERESCO SAFETY PROCEDURES.
2. ALL WORK SHALL BE DONE IN COMPLIANCE WITH APPLICABLE CODES AND REGULATIONS.



CONSULTANTS

NOT FOR *CONSTRUCTION*
 04-09-10

KEYED NOTES

1. BP SOLAR BP3225T SOLAR MODULE MOUNTED ONTO SOLAR DOCK FIXED TILT BALLASTED MOUNTING SYSTEM (TYP.)
2. SHADING AREAS.
3. DISCONNECT SWITCHES AND METER BASE, WALL MOUNTED. SEE SHEET E-003. THE METER WILL BE PROVIDED BY K.U.B.

ELECTRICAL LEGEND

SYMBOL	TO REMAIN	TO REMOVE	DESCRIPTION
[J]	[J]	[J]	JUNCTION BOX (WALL MOUNTED)
⊕	⊕	⊕	GROUND ROD
[DS]	[DS]	[DS]	DISCONNECT SWITCH - FUSIBLE
[DS] 3R	[DS] 3R	[DS] 3R	DISCONNECT SWITCH - FUSIBLE, ENCLOSURE AS INDICATED
[DS]	[DS]	[DS]	DISCONNECT SWITCH - NONFUSIBLE
[T]	[T]	[T]	TRANSFORMER - RATING AS INDICATED
[CB]	[CB]	[CB]	LOW VOLTAGE CIRCUIT BREAKER
[MCCB]	[MCCB]	[MCCB]	MOLDED CASE CIRCUIT BREAKER
[K]	[K]	[K]	SINGLE-THROW KNIFE SWITCH
[G]	[G]	[G]	GROUND
[JB]	[JB]	[JB]	JUNCTION BOX
[F]	[F]	[F]	FUSE
[M _{WH}]	[M _{WH}]	[M _{WH}]	WATT HOUR METER
[3W]	[3W]	[3W]	3 POTENTIAL WYE
[3WNG]	[3WNG]	[3WNG]	3 PHASE WYE NEUTRAL GROUND
[3WΔ]	[3WΔ]	[3WΔ]	3 PHASE DELTA
[NCS]	[NCS]	[NCS]	NORMALLY CLOSED SINGLE POLE SINGLE THROW, SINGLE BREAK
[NOS]	[NOS]	[NOS]	NORMALLY OPEN SINGLE POLE SINGLE THROW, SINGLE BREAK
[NCSDB]	[NCSDB]	[NCSDB]	NORMALLY CLOSED SINGLE POLE SINGLE THROW, DOUBLE BREAK
[NOSDB]	[NOSDB]	[NOSDB]	NORMALLY OPEN SINGLE POLE SINGLE THROW, DOUBLE BREAK
[SDTS]	[SDTS]	[SDTS]	SINGLE POLE DOUBLE THROW, SINGLE BREAK

ABBREVIATIONS

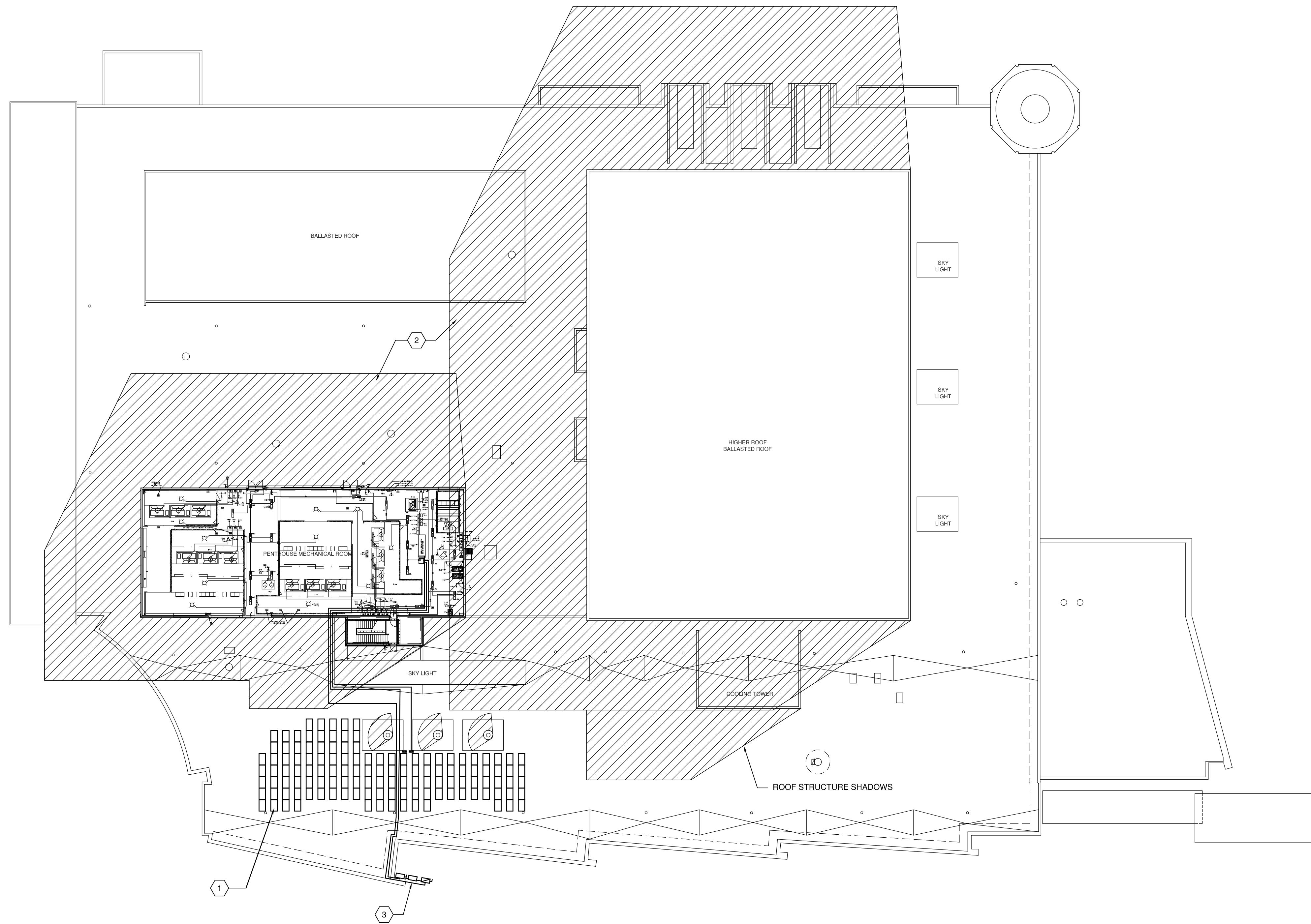
AFF	ABOVE FINISHED FLOOR
C.	CONDUIT
DP	DISTRIBUTION PANEL
LP	LIGHTING PANEL
MCC	MOTOR CONTROL CENTER
MDP	MAIN DISTRIBUTION PANEL
OAE	OR AN EQUIVALENT
RT	RAIN TIGHT
UNO/UON	UNLESS NOTED OTHERWISE
WP	WEATHERPROOF

PROJECT NO.: 031982000
 CAD DWG. FILE: E-001
 DRAWN BY: LMW
 CHECKED BY: DB

SHEET TITLE
PV ARRAY LAYOUT PLAN VIEW LEGEND

E-001

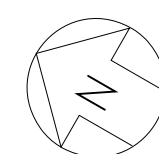
SHEET 1 OF 3



A4

PV ARRAY LAYOUT ROOF PLAN

SCALE: 1" = 30'-0"



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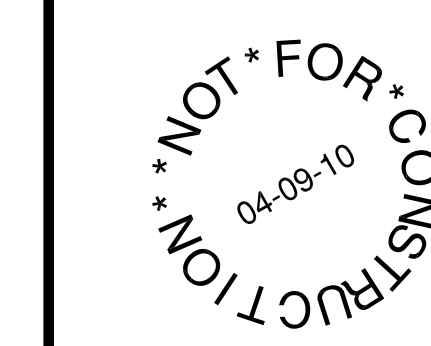
A

GENERAL SHEET NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH AMERESCO SAFETY PROCEDURES.
2. ALL WORK SHALL BE DONE IN COMPLIANCE WITH APPLICABLE CODES AND REGULATIONS.



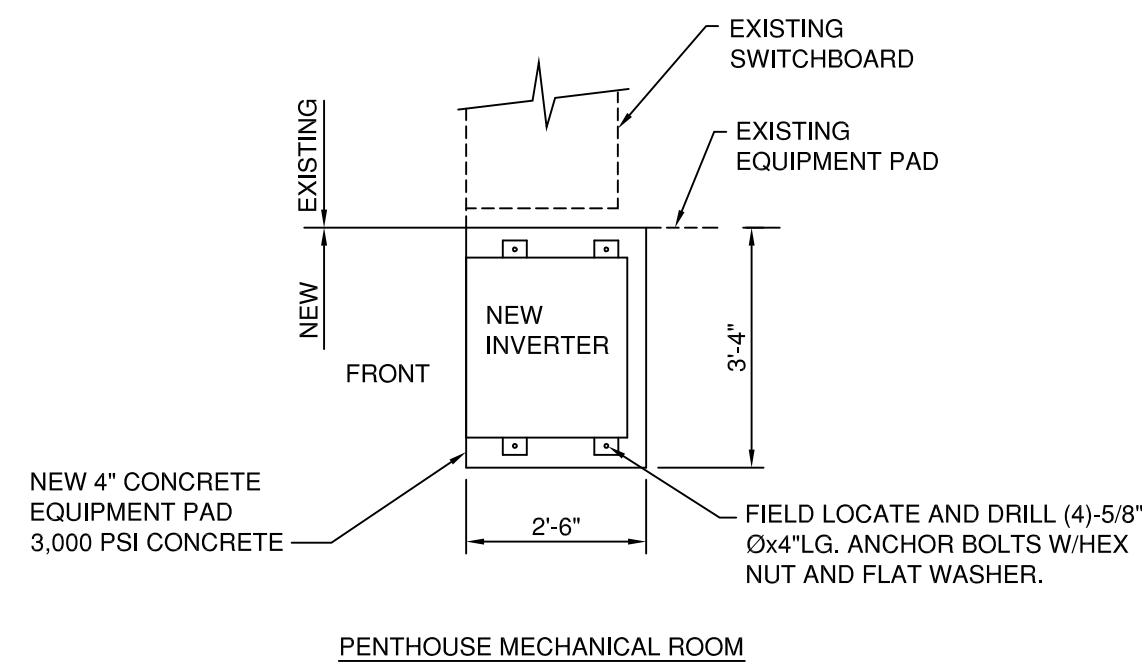
CONSULTANTS



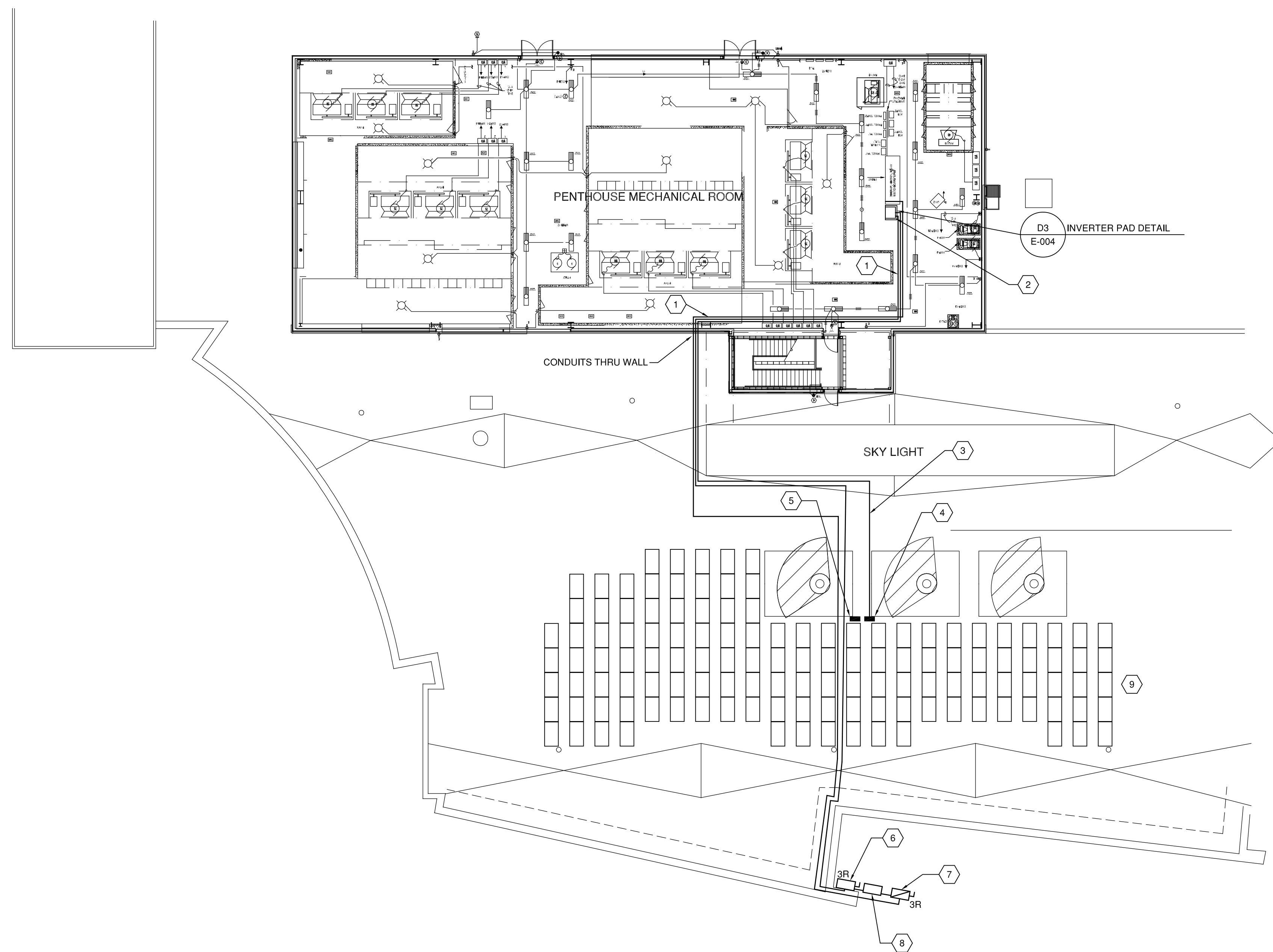
KNOXVILLE CONVENTION CENTER
PHOTO VOLTAIC SYSTEM

SHEET KEYED NOTES

1. CONDUITS SHALL BE ROUTED HIGH AS POSSIBLE AND ALONG SIDE WALL INSIDE PENTHOUSE MECHANICAL ROOM.
2. SATCON PVS-50(480) INVERTER. CONNECT TO MP5B IN PENTHOUSE.
3. CONDUIT (TYP.) SUPPORT AT MAX 10FT INTERVALS WITH COOPER B-LINE DURABLOCK OAE.
4. DC DISCONNECT SWITCH. APPROXIMATE LOCATION.
5. SUB-ARRAY COMBINER BOX
6. AC DISCONNECT ACD-01 SQUARE D H362RB OR EQUIVALENT. WALL MOUNTED AT 5'-6" A.F.F.
7. AC DISCONNECT ACD-02 SQUARE D HU362RB OR EQUIVALENT. WALL MOUNTED AT 5'-6" A.F.F.
8. POWER METER SOCKET 5 TERMINAL FOR FORM 12S METER MIL BANKS U9581-RXL-OG OR EQUIVALENT. WALL MOUNTED BETWEEN DISCONNECT SWITCHES.
9. PRIOR TO INSTALLATION, AMERESCO SHALL HAVE A CARLISLE CERTIFIED ROOFING INSPECTOR, INSPECT THE ROOF AND RECOMMEND WALKING PADS FOR PV EQUIPMENT INSTALLATION TO PRESERVE THE ROOF SYSTEM WARRANTY. AFTER INSTALLATION IS COMPLETE, THE INSPECTOR SHALL CONDUCT A POST INSPECTION TO CERTIFY THE WORK IS DONE PER MANUFACTURERS SPECIFICATIONS AND THE ROOF WARRANTY IS PRESERVED.



D3 INVERTER PAD DETAIL
3/8" = 1'-0"



A4 PV ARRAY EQUIPMENT LAYOUT
SCALE: 1/16" = 1'-0"

MARK	DATE	ISSUED FOR REVIEW DESCRIPTION	MARK	DATE	DESCRIPTION
0	04-09-10				

PROJECT NO.: 031982000
 CAD DWG. FILE: E-003
 DRAWN BY: LMW
 CHECKED BY: DB

SHEET TITLE
PV ARRAY EQUIPMENT LAYOUT

E-003
 SHEET 3 OF 3

Versatile. Efficient. Fast.

This is the SolarDock solution.

Features:

- No roof penetrations
- Meets ASCE 7-98 wind loading criteria for 90 - 120 mph
- UL Listed
- Lightweight
- Customizable angle of inclination
- Quick and easy installation
- 20-year warranty
- Fits most commercially available solar modules
- Aesthetically pleasing
- Made in the USA
- Mill-certified aluminum construction
- Stainless steel fasteners
- Unrestricted water drainage
- Ballast and wiring hidden from view
- One inch rigid foam insulation for roof protection
- Sheds snow
- Easy access to every component
- Limits dirt and debris build-up
- Convective ventilation for improved system performance
- No moving parts



The SolarDock® mounting system revolutionizes the installation of both flat-roofed building and ground-mount photovoltaic arrays by dramatically reducing installation labor, lowering overall system costs, and improving system efficiencies.

This mounting system makes no roof penetrations and fits most commercially available photovoltaic modules. Holding modules in place at a customizable angle, the SolarDock increases annual system output by up to 15% when compared to a flat-mount system. Further, the angled design reduces the build-up of dirt and debris, sheds snow in colder climates, and reduces heat buildup through front, side, and rear ventilation.

The SolarDock, with no moving parts, is maintenance-free and one of the lightest non-penetrating solar mounting systems commercially available. And, it's quick to install. A team of 4 installers can set up the SolarDock units for a 40 kW system in one day.

Constructed from mill-certified aluminum and high quality stainless steel fasteners, this mounting system will last decades — even in harsh marine environments. Backed by a robust 20-year warranty, the SolarDock is UL certified, meets ASCE 7-98 and carries a Class C fire rating.



21MP
LISTED
PHOTOVOLTAIC POWER
SYSTEM ACCESSORIES

China
Patent Pending
CN 0101061281 A

United States
Patent
US 6,968,654

Europe
Patent Pending
EP 01585873 A2

A standard feature of the SolarDock is one inch rigid foam insulation adhered to the bottom of the mounting structure, which provides protection to the roof and incorporates channels allowing for water flow.

Another advantage of the SolarDock mounting system is its ability to be moved easily for any routine building maintenance. No longer does a building owner need to put off purchasing a solar electric system until their roof is replaced. The SolarDock's versatile, modular design is ideal for installations ranging from a few to thousands of solar modules.

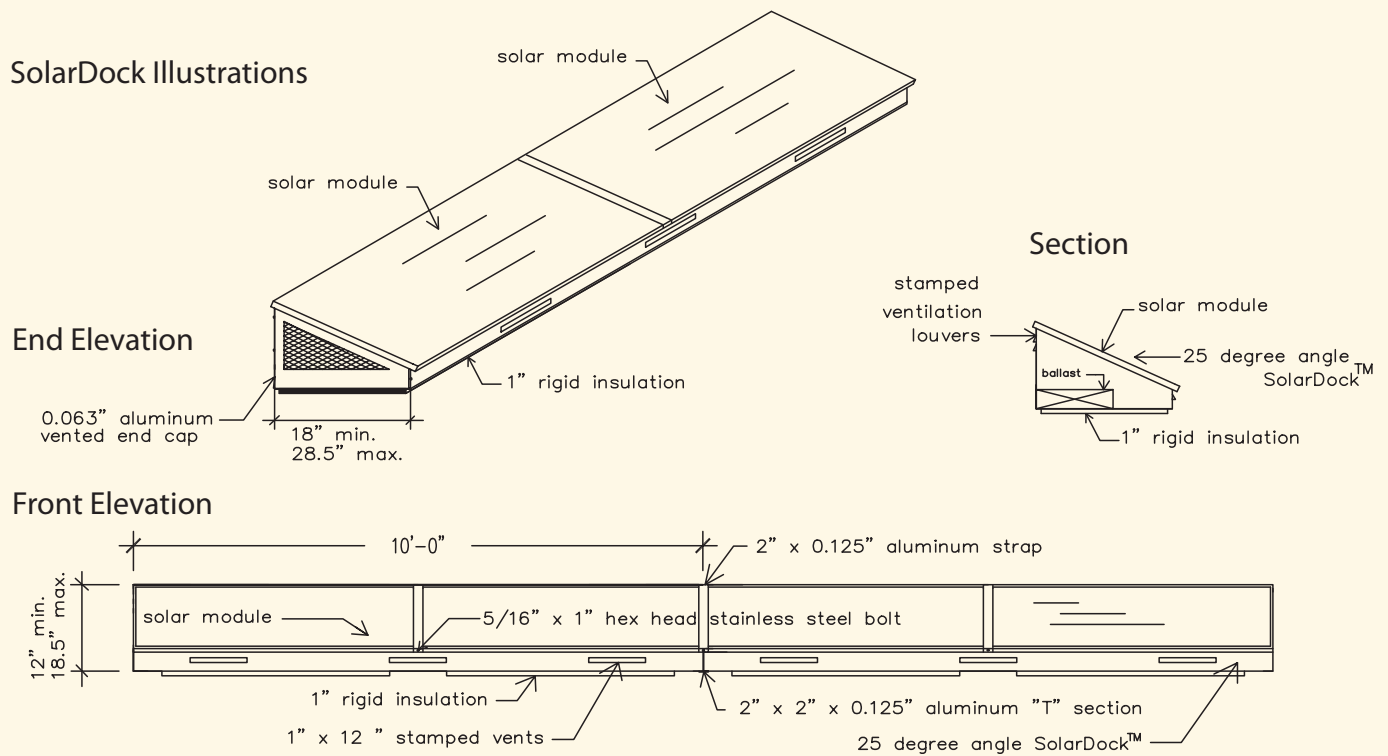


Questions about SolarDock?

Contact us for layout design tips and information on ballast requirements, roof loads, and other technical details.

(302) 504-0124

SolarDock Illustrations



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