City of DuBois – PERMIT APPLICATION

P.O. Box 408, 16 West Scribner Ave – DuBois, PA 15801
Phone: 814-375-2000 Fax: 814-375-2307

Permit No. _____

LOCATION OF PROPOSED WORK OR IMPROVEMENT

Municipality: _____ Tax Parcel # _____

Site Address: _____

Lot# _____ Subdivision/Land Development: _____ Phase: _____ Section: _____

Owner: _____ Phone# _____ Fax# _____

Mailing Address: _____ Email: _____

Principal
Contractor: _____ Phone# _____ Fax# _____

Mailing Address: _____ Email: _____

Architect: _____ Phone# _____ Fax# _____

Mailing Address: _____ Email: _____

TYPE OF WORK OR IMPROVEMENT (Circle all that apply)
New Building Addition Alteration Repair Demolition Relocation
Change of Use Plumbing Electrical Mechanical Other _____

Describe the Proposed work: _____

ESTIMATED COST OF CONSTRUCTION (Reasonable fair market value) _____

DESCRIPTION OF BUILDING USE (Check one then complete applicable info)

❒ RESIDENTIAL
Single Family Dwelling
Duplex
Townhouse
Total Sq. ft. of finished living space _____

❒ NON-RESIDENTIAL (Commercial)
Building Code Used for Design: _____
Specific Use: _____
Use Group: _____ Construction Type: _____
Change of Use (indicate former and proposed):
_____
Maximum Occupant Load: _____
Maximum Live Load: _____

Sprinkler system to be installed: (Check one) Yes_____ No_____

BUILDING DIMENSIONS

Existing Building Area: _____ sq. ft. Number of Stories: _____
Proposed Building Area: _____ sq. ft. Height Above Grade: _____ ft.
Total Building Area: _____ sq. ft. Area of Largest Floor: _____ sq. ft.

FLOODPLAIN INFORMATION

Is the site located within an identified flood plan area? (Check one) Yes_____ No_____

Note: All proposed development shall be in accordance with the requirements of the National Flood Insurance Program and the Pennsylvania Flood Plain Management Act.

HISTORIC DISTRICT INFORMATION

Is the site located within a Historical District? (Check one) Yes_____ No_____
Note: If yes, you must provide proper Historical District certification per the UCC Law.

The applicant certifies that all information on this application is correct and the work will be completed in accordance with the "approved" construction documents and PA Act 45 – Uniform Construction Code and any additional approved building code requirements adopted by the Municipality. The property owner and applicant assumes the responsibility of locating all property lines, setback lines, easements, right of ways, flood areas, etc. Issuance of a permit and approval of construction documents shall not be construed as authority to violate, cancel or set aside any provisions of the codes or ordinances of the Municipality or any other governing body. The applicant hereby certifies he/she understands all applicable codes, ordinances and regulations.

Application for a permit shall be made by the **owner or lessee of the building or structure, or authorized agent of either, or by the authorized registered Design Professional** employed in connection with the proposed work.

I certify that the Code Administrator or the Code Administrator's authorized representative shall have the authority to enter areas covered by such permit at any reasonable hour to enforce the provisions of the applicable codes to such permit.

_____ _____
Signature of Owner or Authorized Agent Print Name of Owner or Authorized Agent

Address: _____ Date: _____

Directions to Worksite: _____

_____

OFFICE USE ONLY below

Permit Fee: $_____ Plan Submittal Checklist Attached: yes_____ no _____
Plan Review Approval Date: _____

MUNICIPAL PRIOR APPROVAL CHECKLIST

Name of Municipality_____

Name of Applicant_____

Parcel#_____ Lot#_____

This Section below to be completed by the Authorized Municipal Representative

CHECKLIST ITEMS

Is the project site located in a Flood Area? (Check one) yes_____ no_____

(Circle one)----------Residential Project or Commercial Project

Description of Work: _____

Zoning or Land Use Permit	Approved_____	Not applicable_____
Stormwater Management	Approved_____	Not applicable_____
Street cut/ Driveway	Approved_____	Not applicable_____
Sewage/Onlot Permit	Approved_____	Not applicable_____
Water Permit	Approved_____	Not applicable_____
PennDot Highway Occupancy	Approved_____	Not applicable_____
Floodplain Permit	Approved_____	Not applicable_____
Other_____	Approved_____	Not applicable_____

I certify that all required Municipal Codes, Ordinances and Regulations have been met and approval thereby is granted to issue the requested Permit.

Authorized Municipal Representative signature:_____

Date:_____

NOTE THAT THIS PERMIT APPLICATION PACKAGE MUST BE COMPLETED AND THEN SUBMITTED WITH THE PROJECT CONSTRUCTION PLANS AND THE CORRESPONDING SUBMITTAL CHECKLIST

City of DuBois

PLAN SUBMITTAL HANDOUT for SOLAR PANELS

The Project Submittal package is required to include all information on this handout. Check each applicable item. If not applicable, then mark item n/a. This form must be submitted with attached project drawings.

- ☐ Permit Application
- ☐ Municipal Prior Approval
- ☐ Two full sets of Building Plans drawn to scale
- ☐ Existing Certificate of Occupancy (if available)

The following items are required to be included on the Building Plans

(Check every item that will be included in the project or marked n/a as not applicable)

- ☐ System Description
  - ☐ Type of PV and Inverter
  - ☐ How is it wired
  - ☐ How is it mounted
- ☐ Specification sheets for all equipment
  - ☐ PV module
  - ☐ Inverter
  - ☐ PV mounting system
  - ☐ AC & DC disconnect
  - ☐ Combiner box
  - ☐ Battery
  - ☐ Charge controller
- ☐ Mechanical drawings
- ☐ Electrical drawings
- ☐ Wind loading calculations
- ☐ Weight of array
- ☐ Structural information about roof
- ☐ PV layout on roof
- ☐ Rack drawing from manufacturer
- ☐ Attachment plan
- ☐ Attachment detail (if attaching to a truss it requires approval of a registered design professional)
- ☐ Electrical 3-line diagram

Is the array to be mounted on a defined, permitted roof structure? ☐ Yes ☐ No

If No due to non-compliant roof or a ground mount, submit completed worksheet for structure.

Roof Information:

1. Is the roofing type lightweight (Yes = composition, lightweight, masonry, metal, etc.) ☐ Yes ☐ No

If No, submit completed worksheet for roof structure (No = heavy masonry, slate, etc.)

2. Does the roof have a single roof covering? ☐ Yes ☐ No
   If No, submit completed worksheet for roof structure

3. Provide method and type of weatherproofing roof penetrations (flashing, caulk) _____
   _____

Mounting System Information:

1. Is the mounting structure an engineered product designed to mount PV modules? ☐ Yes ☐ No
   If No, provide details of structural attachment certified by a design professional.

2. For manufactured mounting systems, fill out information on the mounting system below:

   a. Mounting System Manufacturer _____Product Name and Model # _____
   b. Total Weight of PV Modules and Rails _____lbs
   c. Total Number of Attachment Points _____
   d. Weight per Attachment Point (b / c) _____lbs (if greater than 45 lbs, see worksheet
   e. Maximum Spacing Between Attachment Points on a Rail _____inches (see product manual for maximum spacing allowed based on maximum design wind speed)
   f. Total Surface Area of PV Modules (square feet) _____ft^2
   g. Distributed Weight of PV Module on Roof (b / c) _____lbs/ft^2
   If distributed weight of the PV system is greater than 5 lbs/ft^2, see worksheet.

Ground Mounts:

- ☐ PA One Call
- ☐ Find customer-owned underground utilities (septic, phone, electric wiring (yard lights, pool, etc.), pool plumbing
- ☐ Rack manufacturer can supply footer designs based on your soil conditions and wind zone.
- ☐ For multiple ground-mounts, space them far enough apart to avoid shading each other.

****THIS COMPLETED FORM MUST BE SUBMITTED WITH PROJECT PLANS****

PV ARRAY INFORMATION (Guide Sec. 6)

NUMBER OF MODULES IN SERIES _____

NUMBER OF PARALLEL CIRCUITS _____

LOWEST EXPECTED AMBIENT TEMP _____ºC

HIGHEST CONTINUOUS TEMPERATURE _____ºC

OCPD = OVERCURRENT PROTECTION DEVICE
(IF NO OCPD–PUT "N/A" IN RELEVANT BLANKS)

NATIONAL ELECTRICAL CODE® REFERENCES
SHOWN AS *(NEC XXX.XX)*

SOURCE-CIRCUIT COMBINER RATINGS (IF USED)

MAX OCPD RATING = _____A

OCPD AMP RATING =_____A

OCPD VOLT RATING = _____V

DC DISCONNECT RATINGS
(See Guide Appendix B)

DISCO AMP RATING = _____A

DISCO VOLT RATING = _____V

INVERTER RATINGS (Guide Sec. 4)

INVERTER MAKE_____

INVERTER MODEL # _____

MAX DC VOLT RATING = _____V

MAX POWER @ 40ºC = _____W

NOMINAL AC VOLTAGE = _____V

MAX AC CURRENT = _____A

MAX OCPD RATING = _____A

AC DISCONNECT RATINGS (IF USED)
(See Guide Appendix B)

DISCO AMP RATING = _____A

DISCO VOLT RATING = _____V

UTILITY SERVICE

_____MODULES IN SERIES SOURCE-CIRCUIT

_____MODULES IN SERIES SOURCE-CIRCUIT

_____MODULES IN SERIES SOURCE-CIRCUIT

_____MODULES IN SERIES SOURCE-CIRCUIT

ROOFTOP J-BOX (IF USED)

COMBINER

DC DISCONNECT

INVERTER

AC

DC

AC DISCONNECT

SEE NOTE 1 FOR INVERTER CIRCUITS

PV OUTPUT METER
(SEE NOTE 2 FOR INVERTER CIRCUITS)

M

M

MAIN OCPD

INVERTER OCPD

MAIN SERVICE PANEL

GROUNDING ELECTRODE

FOR UNUSED SERIES STRINGS
PUT "N/A" in BLANK ABOVE

SEE GUIDE SECTION 10 FOR INFORMATION ON MODULE AND ARRAY GROUNDING

SEE NOTES FOR ARRAY CIRCUIT WIRING (Guide Sec. 8)

CONDUIT TYPE_____

CONDUIT SIZE_____

CONDUCTOR TYPE (SEE BELOW)

CONDUCTOR SIZE_____AWG

NUMBER OF CONDUCTORS____

(____Red,____White, 1 Green) EGC

SIZE_AWG (*NEC* 250.122)

SEE NOTE 3 FOR INVERTER CIRCUITS (Guide Sec. 8–disregard if integral with inverter)

CONDUIT TYPE_____

CONDUIT SIZE_____

CONDUCTOR TYPE_____

CONDUCTOR SIZE_____AWG

NUMBER OF CONDUCTORS____

(____Red,____White, 1 Green)

EGC SIZE____AWG (*NEC* 250.122)

DC GROUNDING ELECTRODE CONDUCTOR SIZE_____AWG (*NEC* 250.166, Guide Sec. 10)

SEE NOTE 4 FOR INVERTER CIRCUITS (Guide Sec. 8)

CONDUIT TYPE_____

CONDUIT SIZE_____

CONDUCTOR TYPE_____

CONDUCTOR SIZE_____AWG

NUMBER OF CONDUCTORS____

(____Black, ____Red, ____White, _____Green)

EGC SIZE____AWG (*NEC* 250.122)

SERVICE PANEL RATINGS

BUS AMP RATING = _____A

SERVICE VOLTAGE = _____V

MAIN OCPD RATING = _____A

INVERTER OCPD AMPERE RATING = _____A

(SEE NOTE 5 FOR INVERTER OCPDs BELOW, ALSO SEE GUIDE SECTION 9)

ROOFTOP JUNCTION BOX NEMA 3R MINIMUM REQUIRED WITH WATERPROOF SPLICES OR OTHER APPROVED TERMINATION METHOD (*NEC* 110.14; 300.6; 314)

SOURCE-CIRCUIT CONDUCTORS OUTSIDE CONDUIT–MINIMUM 12 AWG AND TWO TYPE OPTIONS–(CIRCLE ONE) USE-2; PV WIRE/CABLE

SIGNS–SEE GUIDE SECTION 7

SIGN FOR DC DISCONNECT

PHOTOVOLTAIC POWER SOURCE

RATED MPP CURRENT = _____A

RATED MPP VOLTAGE = _____V

MAX SYSTEM VOLTAGE = _____ V

MAX CIRCUIT CURRENT= _____A

WARNING: ELECTRICAL SHOCK HAZARD–LINE AND LOAD MAY BE ENERGIZED IN OPEN POSITION

SIGN FOR AC DISCONNECT (if used)

SOLAR AC DISCONNECT

AC OUTPUT CURRENT = _____A

NOMINAL AC VOLTAGE = _____V

SIGN FOR INVERTER OCPD

AC POINT OF CONNECTION

AC OUTPUT CURRENT = _____A

NOMINAL AC VOLTAGE = _____V

NOTES FOR INVERTER CIRCUITS (Guide Sec. 8):

1) IF UTILITY REQUIRES A VISIBLE-BREAK SWITCH, DOES THIS SWITCH MEET THE REQUIREMENT? YES/NO (CIRCLE ONE)

2) IF GENERATION METER REQUIRED, DOES THIS METER SOCKET MEET THE REQUIREMENT? YES/NO (CIRCLE ONE)

3) SIZE PHOTOVOLTAIC POWER SOURCE (DC) CONDUCTORS BASED ON MAX CURRENT ON 690.53 SIGN OR OCPD RATING AT DISCONNECT (IF SUPPLIED)

4) SIZE INVERTER OUTPUT CIRCUIT (AC) CONDUCTORS ACCORDING TO INVERTER OCPD AMPERE RATING.

5) TOTAL OF _____INVERTER OCPD(s), ONE FOR EACH INVERTER. DOES TOTAL SUPPLY BREAKERS COMPLY WITH 120% BUSBAR EXCEPTION IN 690.64(B)(2)(a)? YES/NO (CIRCLE ONE)

PV MODULE RATINGS @ STC (Guide Sec. 5)

MODULE MANUFACTURER _____

MODULE MODEL # _____

MAX POWER-POINT CURRENT (Imp) = _____A

MAX POWER-POINT VOLTAGE (Vmp) = _____V

OPEN-CIRCUIT VOLTAGE (Voc) = _____V

SHORT-CIRCUIT CURRENT (Isc) = _____A

MAX SERIES FUSE (OCPD) = _____A

MAXIMUM POWER (Pmax) = _____W

MAX SYSTEM VOLTAGE (typ 600Vdc) = _____V

Voc TEMP COEFF = _____mV/ºC or %/ºC
(IF SUPPLIED, CIRCLE TYPE OF COEFF)

NOTES FOR ARRAY CIRCUIT WIRING (Guide Sec. 8):

1.) THREE OPTIONS FOR SOURCE CIRCUIT CONDUCTOR TYPE (INSIDE CONDUIT–CIRCLE ONE) THWN-2; XHHW-2; RHW-2

2.) 2005 ASHRAE FUNDEMENTALS 2% DESIGN TEMPERATURES DO NOT EXCEED 47ºC IN THE UNITED STATES (PALM SPRINGS, CA IS 44.1ºC). FOR LESS THAN 9 CURRENT-CARRYING CONDUCTORS IN ROOF-MOUNTED SUNLIT CONDUIT AT LEAST 0.5" ABOVE ROOF AND USING THE OUTDOOR DESIGN TEMPERATURE OF 47ºC OR LESS (ALL OF UNITED STATES),
a) 12 AWG, 90ºC CONDUCTORS ARE GENERALLY ACCEPTABLE FOR MODULES WITH Isc OF 7.68 AMPS OR LESS WHEN PROTECTED BY A 12-AMP OR SMALLER FUSE.
b) 10 AWG, 90ºC CONDUCTORS ARE GENERALLY ACCEPTABLE FOR MODULES WITH Isc OF 9.6 AMPS OR LESS WHEN PROTECTED BY A 15-AMP OR SMALLER FUSE.

Contractor Name and Address:

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

Site Name:

Site Address:_

System AC Size:

Drawn By:	SIZE	FSCM NO	DWG NO	REV
			E1.1	0
Checked By:	SCALE NTS	Date:	SHEET	