

SCOPE OF WORK

TO INSTALL A RESIDENTIAL ROOFTOP SOLAR PHOTOVOLTAIC (PV) SYSTEM.
THE POWER GENERATED BY THE PV SYSTEM WILL BE INTERCONNECTED WITH THE
UTILITY GRID THROUGH THE EXISTING ELECTRICAL SERVICE EQUIPMENT.
THE PV SYSTEM DOES NOT INCLUDE BATTERIES.

ELECTRICAL NOTES

- 1) ALL EQUIPMENT TO BE LISTED BY THE UL OR OTHER NRTL AND LABELED FOR ITS APPLICATION.
- 2) ALL CONDUCTORS SHALL BE COPPER, RATED FOR 600V AND 90°C WET ENVIRONMENT.
- 3) WIRING, CONDUIT, AND RACEWAYS MOUNTED ON ROOFTOPS SHALL BE ROUTED DIRECTLY TO, AND LOCATED AS CLOSE AS POSSIBLE TO THE NEAREST RIDGE, HIP, OR VALLEY.
- 4) WORKING CLEARANCES AROUND ALL NEW AND EXISTING ELECTRICAL EQUIPMENT SHALL COMPLY WITH NEC 110.26.
- 5) DRAWINGS INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS. CONTRACTOR SHALL FURNISH ALL NECESSARY OUTLETS, SUPPORTS, FITTINGS AND ACCESSORIES TO FULLY COMPLETEABLE IN ACCORDANCE WITH THE STANDARDS.
- 6) WHERE SIZES OF JUNCTION BOXES, RACEWAYS AND CONDUITS ARE NOT SPECIFIED, THE CONTRACTOR SHALL SIZE THEM ACCORDINGLY.
- 7) ALL WIRE TERMINATIONS SHALL BE APPROPRIATELY LABELED AND READILY VISIBLE.
- 8) MODULE GROUNDING CLIPS TO BE INSTALLED BETWEEN MODULE FRAME AND MODULE SUPPORT RAIL, PER THE GROUNDING CLIP MANUFACTURER'S INSTRUCTION.
- 9) MODULE SUPPORT RAIL TO BE BONDED TO CONTINUOUS COPPER G.E.C. VIA WEBB LUG OR THE ILSCO GBL-4DBT LAY-IN LUG.
- 10) THE POLARITY OF THE GROUNDED CONDUCTORS IS (positive/negative) OR THE DC SIDE OF THE PV SYSTEM IS UNGROUNDED AND SHALL COMPLY WITH NEC 690.35

NCDOT REQUIREMENTS

OPTION 2

WEIGHT OF PV SYSTEM ON ROOF:

2.6883 PSF

EXISTING ROOF MATERIAL TYPE:

ASPHALT SHINGLES (SINGLE LAYER)

PROJECT LOCATION WIND ZONE:

115 MPH



VICINITY MAP

CONTRACTOR



SUN DOLLAR ENERGY, LLC
4904 ELAINE AVENUE
RALEIGH, NC 27616
(919) 508-6907
NC ELE LICENSE # 30043U
NC GC LICENSE # 73462

PROJECT & CLIENT INFORMATION

**DRAPALA RESIDENCE
NEW SOLAR PV SYSTEM**
SYSTEM SIZE: 7.245 KW DC
SYSTEM SIZE: 7.6 KW AC

GARRETT DRAPALA
4000 REMINGTON OAKS CIR
CARY, NC 27519
(518) 852-2193

ENGINEER OF RECORD

DRAWING BY

GBR

REVISIONS

DESCRIPTION	DATE	#	BY
RELEASED FOR PERMITTING	7/6/2020	1	GBR

SHEET SIZE

**ANSI B
11" X 17"**

DATE

7/6/2020

SHEET NAME

**GENERAL
INFORMATION**

SHEET NUMBER

COVER

SHEET INDEX

COVER	GENERAL INFORMATION
PV-1	SITE PLAN
PV-2	ROOF LAYOUT AND MOUNTING DETAIL
PV-3	ELECTRICAL SCHEMATIC
PV-4	AMPACTY CALCULATIONS AND WIRE SIZING
PV-5	LABELING SCHEDULE
CUTSHEETS	MANUFACTURER SPECIFICATION SHEETS

GOVERNING CODES

NFPA 70 NATIONAL ELECTRICAL CODE 2017
2018 INTERNATIONAL BUILDING CODE
2018 NORTH CAROLINA BUILDING CODE
2018 NORTH CAROLINA RESIDENTIAL CODE
UNDERWRITERS LABORATORIES (UL) STANDARDS
OSHA 29 CFR 1910.269
NORTH CAROLINA DEPARTMENT OF INSURANCE

DESIGN SPECIFICATIONS

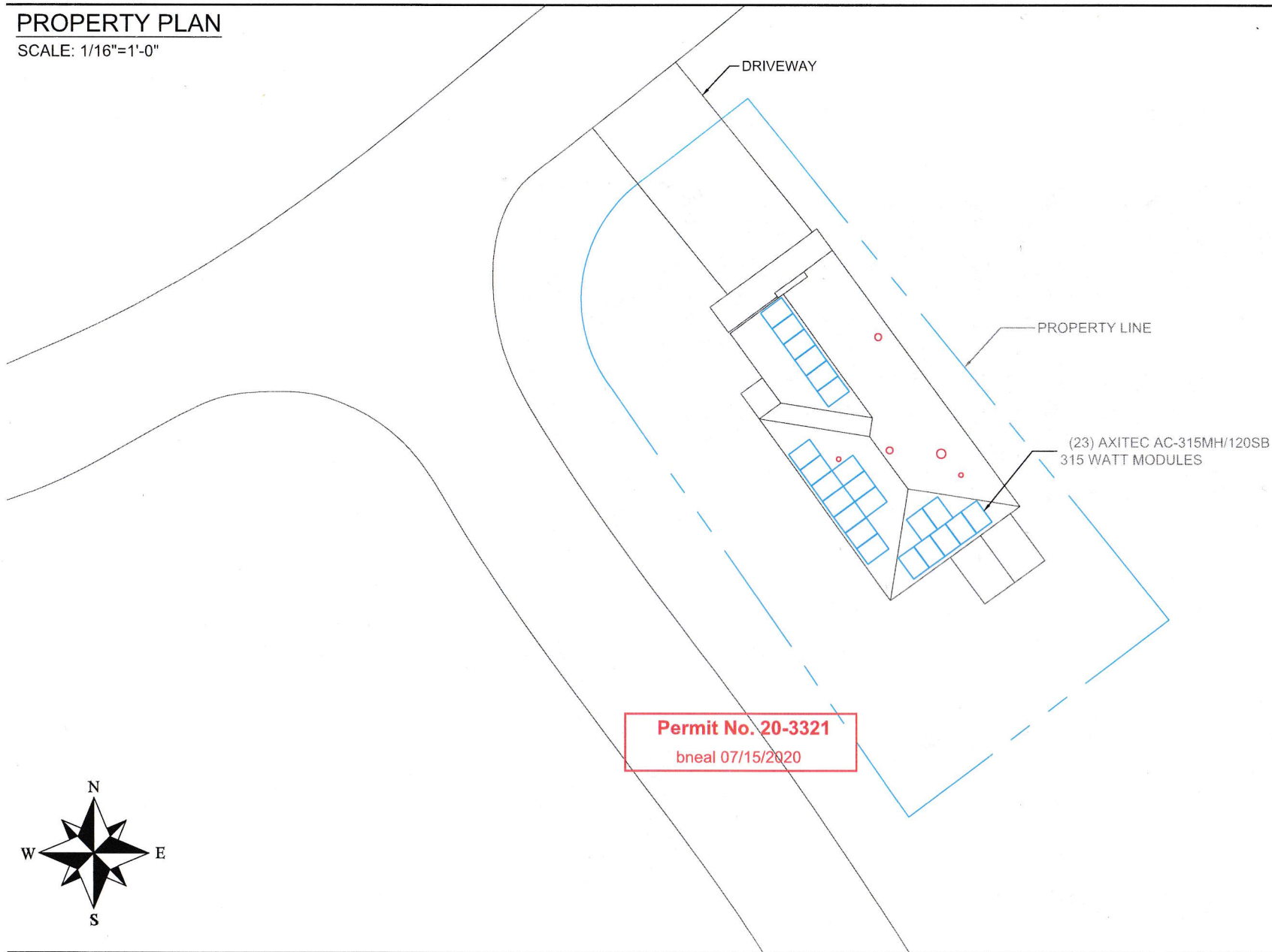
CONSTRUCTION TYPE	SINGLE-FAMILY
ZONING	RESIDENTIAL
GROUND SNOW LOAD	20 PSF
WIND EXPOSURE CATEGORY	CATEGORY B
WIND SPEED	115 MPH
UTILITY PROVIDER	DUKE PROGRESS
AHJ	TOWN OF CARY

SYSTEM SPECIFICATIONS

SOLAR MODULES	(23) AXITEC AC-315MH/120SB 315 WATT MODULES
POWER OPTIMIZERS	(23) SOLAREDGE P320
INVERTER(S)	(1) SOLAREDGE SE7600H-US
SOLAR MOUNTS	QUICKMOUNT PV L-MOUNTS
SOLAR RACKING SYSTEM	EVEREST CROSSRAIL X48
MONITORING	YES
POINT OF INTERCONNECT	40A/2P LOAD SIDE BREAKER INSIDE MSP

PROPERTY PLAN

SCALE: 1/16"=1'-0"



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