

Pd
 CC # 1883
 9-23-19 \$50
 mm

TOWN OF PLAINFIELD ZONING AND BUILDING PERMIT APPLICATION



Property Owner:

Name: Jordan Green Phone: (603) 675-2327

Street: 87 Thrasher Road Email: green.jordy@gmail.com

City State Zip: Plainfield, NH 03781

Project: Permit Type: (Check one) Building Zoning

Street Address: 87 Thrasher Road

Tax Map: 259 Lot Number: 13 Lot Acreage: 1.5 Zoning District: Rural Residential (RR)

Proposed project distances to property lines (in feet): Front: 50 Rear: 128 Side: 60 Side: 210

State Approved Septic Design #: NA Driveway Permit #: NA

Please provide a written description of the project including appropriate dimensions: Installation of one ground mounted dual axis PV Tracker with trench and wiring to house

Contractor Information:

| | | |
|---|------------------------------|------------------|
| Builder: | Electrician: | Plumber: |
| Name: <u>Solalect Energy/William H Bender</u> | Name: <u>Greg Hance</u> | Name: <u>NA</u> |
| Phone: <u>(802) 649-3700</u> | Phone: <u>(802) 649-3700</u> | Phone: <u>NA</u> |

Applicant Signature: [Signature] Date: 18 Sept 2019

Required Attachments:
 Please provide a copy of plans detailing the project. Hand-drawn plans can be used if necessary. Permits cannot be issued without receipt of the proper fee. If you are unsure of the amount due or have any questions about your application, contact the town office (603-469-3201).

TOWN USE: Current Use: Yes / No ZBA: Yes / No PB: Yes / No

BOARD OF SELECTMEN ACTION

[Signature]
Reviewed by Building Inspector or Zoning Administrator

Approved Denied

Permit # 2019-67 Date: 9/24/19



314.65'

88.57'

166.4'

264.84'

13

approx 145' length trench to house interconnection

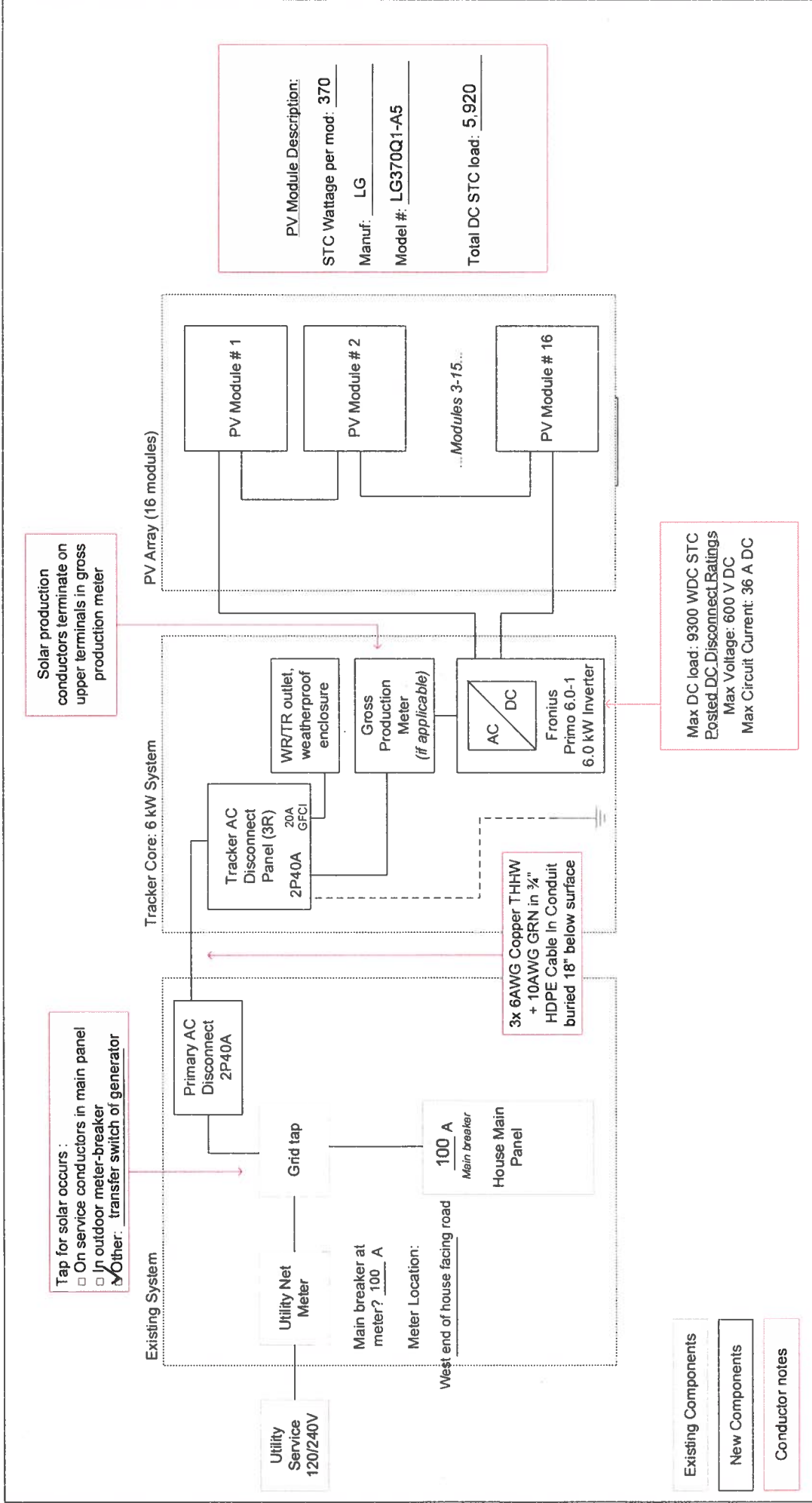
1.5 AC

240.7'

85.36'

227.33'

CORNISH



PV Module Description:
 STC Wattage per mod: 370
 Manuf: LG
 Model #: LG370Q1-A5
 Total DC STC load: 5,920

Solar production conductors terminate on upper terminals in gross production meter

Max DC load: 9300 WDC STC
 Posted DC Disconnect Ratings
 Max Voltage: 600 V DC
 Max Circuit Current: 36 A DC

Tap for solar occurs :
 On service conductors in main panel
 In outdoor meter-breaker
 Other: transfer switch of generator

- Existing Components
- New Components
- Conductor notes

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| REV | Date | Description |
|-----|---------|-----------------|
| 0 | 9/18/19 | Initial release |
| | | |
| | | |
| | | |

| | |
|----------------------------------|-----------|
| SOLAFLECT ENERGY | |
| Newrich, VT 05055 (802) 281.4284 | TITLE |
| DIMENSIONS IN INCHES | |
| ONE PLACE DEC | +/- 0.100 |
| TWO PLACE DEC | +/- 0.015 |
| THREE PLACE DEC | +/- 0.005 |
| ANGULAR | +/- 2.00g |
| DRAWN | DL |
| DATE | 9/18/2019 |
| DRAWING NUMBER | SF19xxxx |

Attachment: description of excavation

Solar array uses pre-cast concrete foundation as described in attached spec sheet. Foundation is set at depth of 4 feet. Excavation is square hole approximately 8 ft x 8 ft, to depth, then backfilled over/around foundation.

Solar array wiring to run in trench as shown in attached map. Trench is approximately 2 ft wide by 2 ft deep between array and garage, then backfilled.

Attachment: list of master electrician subcontractors

Primary Electrician:

Gregory P Hance
NH Lic # 13015M
326 Main Street, Ste 4
Norwich, VT 05055
(802) 649-3700
ghance@solaflect.com

Alternate electrical subcontractors:

Chris Snider
NH Lic # 13893M
Simple Energy
112 N. Main St.
West Lebanon, New Hampshire 03784
(603) 298-7200

OR

Richard Electric
NH Lic # 8366M
PO Box 999
Wilder, Vermont 05088
(802) 295-3894

OR

Don Dompier
NH Lic # 1755
230 Elliot St.
Brattleboro, Vermont 05301
(802) 254 4581
Email: N/A
Fax: N/A

Reginald Cramer
Cramer Electric Co., Inc.
NH Lic # 4063M
VT Lic # EM-2325
461 Lake Morey Rd, #3
Fairlee, VT 05045
(802) 333-4144

OR

Gray Electric
30 Plateau Acres
Bradford, VT 05033
NH Lic # 0387C (Corporate License)
Robert Kruse - Master Electrician
(802) 222-1592 /
kruserobert25@gmail.com

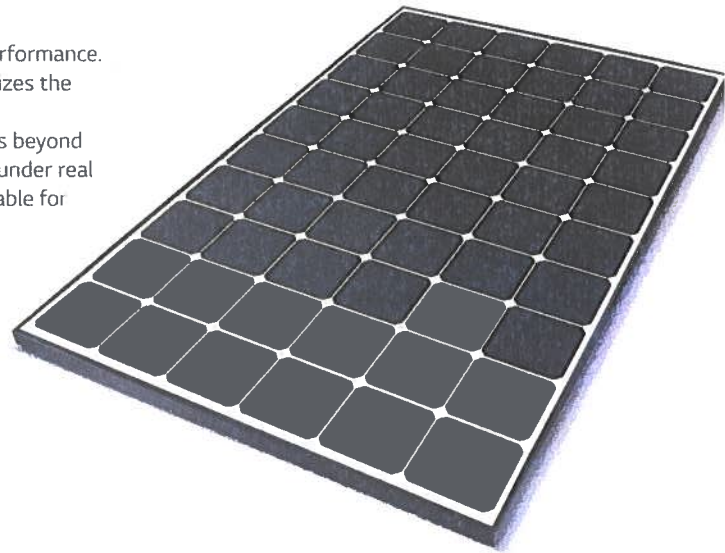
LG NeON[®]R

LG370Q1C-V5 | LG365Q1C-V5

60

370W | 365W

LG NeON[®]R is a powerful solar module that provides world-class performance. A new cell structure that eliminates electrodes on the front maximizes the utilization of light and enhances reliability. LG NeON[®]R is a result of LG's efforts to increase customer's values beyond efficiency. LG NeON[®]R features enhanced durability, performance under real-world conditions, an enhanced warranty and aesthetic design suitable for roofs.



Feature



Aesthetic Roof

LG NeON[®]R has been designed with aesthetics in mind: the lack of any electrodes on the front creates an improved, modern aesthetic.



Extended Product Warranty

LG has extended the product warranty of the LG NeON[®]R to 25 years which is top level of the industry.



Enhanced Performance Warranty

LG NeON[®]R has an enhanced performance warranty. After 25 years, LG NeON[®]R is guaranteed to perform at minimum 90.8% of initial performance.



More generation per square meter

The LG NeON[®]R has been designed to significantly enhance its output, making it efficient even in limited space.

About LG Electronics

LG Electronics is a global big player, committed to expanding its operations with the solar market. The company first embarked on a solar energy source research program in 1985, supported by LG Group's vast experience in the semi-conductor, LCD, chemistry and materials industries. In 2010, LG Solar successfully released its first MonoX[®] series to the market, which is now available in 32 countries. The NeON[®] (previous MonoX[®] NeON), NeON[®] 2, NeON[®] 2 BiFacial won the "Intersolar AWARDS" in 2013, 2015 and 2016, which demonstrates LG Solar's lead, innovation and commitment to the industry.



LG NeON[®]R

LG370Q1C-V5 | LG365Q1C-V5

General Data

| | |
|----------------------------------|--|
| Cell Properties(Material / Type) | Monocrystalline / N-type |
| Cell Maker | LG |
| Cell Configuration | 60 Cells (6 x 10) |
| Module Dimensions(L x W x H) | 1,700mm x 1,016mm x 40mm |
| Weight | 17.5 kg |
| Glass(Thickness / Material) | 2.8mm / Tempered Glass with AR Coating |
| Backsheet(Color) | White |
| Frame(Material) | Anodized Aluminum |
| Junction Box(Protection Degree) | IP68 with 3 Bypass Diodes |
| Cables(Length) | 1,000mm x 2EA |
| Connector(Type / Maker) | MC4 / MC |

Certifications and Warranty

| | |
|--------------------------|---|
| Certifications | IEC 61215-1/-1-1/2 2016, IEC 61730-1/2 2016 |
| | UL 1703 |
| | ISO 9001, ISO 14001, ISO 50001 |
| | OHSAS 18001 |
| Salt Mist Corrosion Test | IEC 61701:2012 Severity 6 |
| Ammonia Corrosion Test | IEC 62716:2013 |
| Module Fire Performance | Type 1 |
| Fire Rating | Class C (UL 790) |
| Product Warranty | 25 Years |
| Output Warranty of Pmax | Linear Warranty* |

* 1) First year 98%, 2) After 1st year 0.3% annual degradation 31.908% for 25years

Temperature Characteristics

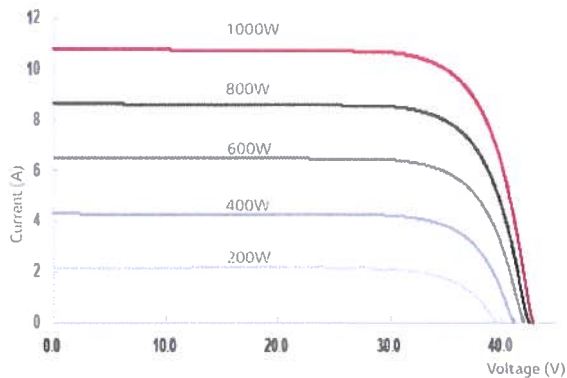
| | | |
|-------|--------|--------|
| NMOT* | [°C] | 44 ± 3 |
| Pmax | [%/°C] | -0.30 |
| Voc | [%/°C] | -0.24 |
| Isc | [%/°C] | 0.037 |

* NMOT(Nominal Module Operating Temperature) : Irradiance 800 W/m² Ambient temperature 70 °C, Wind speed 1 m/s, Spectrum AM 1.5

Electrical Properties (NMOT)

| Model | | LG370Q1C-V5 | LG365Q1C-V5 |
|-----------------------------|-----|-------------|-------------|
| Maximum Power (Pmax) | [W] | 279 | 275 |
| MPP Voltage (Vmpp) | [V] | 36.9 | 36.6 |
| MPP Current (Impp) | [A] | 7.55 | 7.51 |
| Open Circuit Voltage (Voc) | [V] | 40.3 | 40.2 |
| Short Circuit Current (Isc) | [A] | 8.71 | 8.70 |

I-V Curves



Electrical Properties (STC*)

| Model | | LG370Q1C-V5 | LG365Q1C-V5 |
|----------------------------------|-----|-------------|-------------|
| Maximum Power (Pmax) | [W] | 370 | 365 |
| MPP Voltage (Vmpp) | [V] | 37.0 | 36.7 |
| MPP Current (Impp) | [A] | 10.01 | 9.95 |
| Open Circuit Voltage (Voc, ±5%) | [V] | 42.8 | 42.8 |
| Short Circuit Current (Isc, ±5%) | [A] | 10.82 | 10.80 |
| Module Efficiency | [%] | 21.4 | 21.1 |
| Power Tolerance | [%] | 0 ~ +3 | |

* STC (Standard Test Condition): Irradiance 1000 W/m², Cell Temperature 25 °C, AM 1.5, Measure Tolerance ± 3%

Operating Conditions

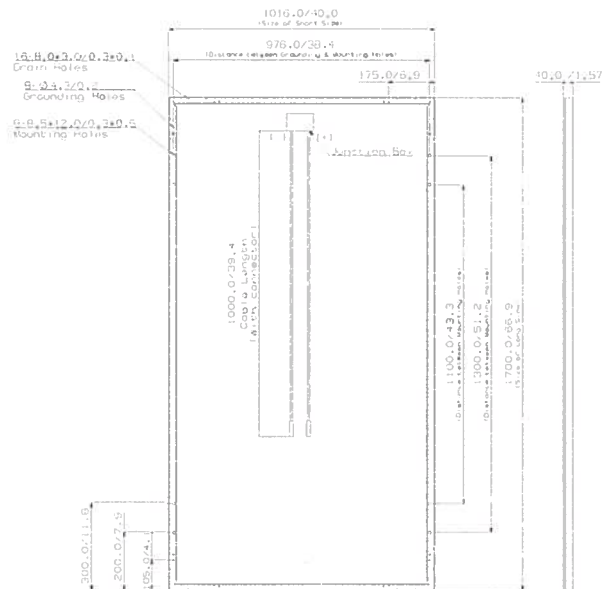
| | | |
|-----------------------------|------------|--------------|
| Operating Temperature | [°C] | -40 ~ +90 |
| Maximum System Voltage | [V] | 1,000 |
| Maximum Series Fuse Rating | [A] | 20 |
| Mechanical Test Load(Front) | [Pa / psf] | 5,400 / 113 |
| Mechanical Test Load(Rear) | [Pa / psf] | 4,000 / 83.5 |

* Test Load = Design x Safety Factor(1.5)

Packaging Configuration

| | | |
|---|------|-----------------------|
| Number of Modules Per Pallet | [EA] | 25 |
| Number of Modules Per 40ft HQ Container | [EA] | 650 |
| Packaging Box Dimensions (L x W x H) | [mm] | 1,750 x 1,120 x 1,221 |
| Packaging Box Gross Weight | [kg] | 473 |

Dimensions (mm / inch)



LG Electronics Inc.
Solar Business Division
LG Twin Towers, 128 Yeouido-daero, Yeongdeungpo-gu, Seoul
07336, Korea
www.lg-solar.com

Product specifications are subject to change without notice.
DS-V5-60-C-G-F-EN-90314

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