

# *MILLER BROS.*

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## **Brookdale Community College-Lincroft- Permit Packet**

To:  
Ms. Erin Uriarte  
Board Secretary  
Township of Middletown  
1 Kings Highway  
Middletown, NJ 07748

From:  
Tim Kitchell  
Director, Business Dev.  
Miller Bros.  
301 Alan Wood Road  
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[tkitchell@millerbros.us](mailto:tkitchell@millerbros.us)

February 1, 2022

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**Capital Review Letter**

Township of Middletown Board

Dear Erin,

Miller Bros. on behalf of Brookdale Community College, Lincroft Campus, requests a Capital Review of the solar facility to be installed on the campus. Enclosed with this Capital Review Letter of request is the Project Narrative and set of plans. Miller Bros. will physically mail 15 copies of the Project Narrative and reduced plan sets as requested by the Board. Thank you for your time and consideration.

Sincerely,



Tim Kitchell

**Submitted by: Tim Kitchell | Director, BD | 301 Alan Wood Road, Conshohocken, PA 19428 | [tkitchell@millerbros.us](mailto:tkitchell@millerbros.us) | C: 717-809-0471**

## **Project Narrative**

Brookdale Community College is focused on renewable energy, cost savings and opportunities for new revenue streams. As Brookdale Community College continues to lead in the classroom, they desire to become a leader in clean energy as well. Luminace, with their EPC contractor Miller Bros., will design, build, operate and maintain a solar canopy facility in the parking lot(s) of the Lincroft campus; directly in line with the goals of Brookdale Community College. \*\*Please review the attached site plans for further details on the solar canopy facility.\*\*

### **Background**

In 2021, Brookdale Community College issued a Request for Qualifications to find a solar provider who could develop, design, build, operate, maintain and own a solar facility on their campus. Brookdale Community College awarded the contract to Luminace. Luminace, a subsidiary of Brookfield Renewables, is one of the largest renewable asset managers in the United States. Luminace has provided a Power Purchase Agreement for Brookdale Community College that meets the following goals for Brookdale CC:

1. Clean Energy. Brookdale Community College will offset almost 5 MWdc of electric usage with the proposed Solar Canopies. Go Green!
2. Cost Savings. Brookdale Community College understands fiscal responsibility and is always looking for ways to save money, without impact to their students and staff. This Power Purchase Agreement will yield over \$250,000 USD in electric bill savings for Brookdale Community College.
3. New Revenue Stream. Luminace is providing a land lease payment to Brookdale Community College for the use of parking lots for the solar facility.

### **Solar Canopies Overview (Additional Benefits)**

Typically utilized in parking lots, walkways and other paved areas, solar canopies are elevated structures that host solar panels while providing shade at the same time. Schools can reduce their electric bills and protect against rising electric costs all while reducing their impact on the environment. Beyond the significant major benefits of energy and cost savings, solar canopies provide multiple other advantages including:

- Efficient use of space – adding additional uses to the same square footage of space
- Protecting people from the elements
- Providing shade to pedestrians and autos – beyond the comfort aspect of shade to pedestrians and cooler cars, the shade also provides an improvement to the fuel economy of the car by reducing the need for heavy air conditioning use
- Canopies can be angled for maximum production, whereas rooftop solar installations are limited by the characteristics of the roof on which it is installed
- Provides an alternative to rooftop solar panels if a roof is unable to host solar panels or if the property's electricity needs are too large to support a rooftop solar system

### **Technical Specifications**

As seen on the site plans provided, Miller Bros. will construct the following in the parking lot(s) of Brookdale Community College at Lincroft.

PV System Size Specifications

<b>PV SYSTEM SPECIFICATIONS</b>	
OVERALL DC CAPACITY POWER (MW)	4.994 MW DC
OVERALL AC CAPACITY POWER (MW)	3.700 MW AC
DC/AC RATIO	1.35
<b>MODULES</b>	
MANUFACTURER	Boviet
MODEL	BVM7612M-H-HC-BF-DG
MODULE WATTAGE	540 Wp
MODULE PER STRING	16
TOTAL MODULE QTY	9,248
<b>INVERTER</b>	
MANUFACTURER	CPS
MODEL	SCA60KTL-DO/US-480
MAX POWER OUTPUT @ 35°C	60 KVA
MAX DC SYSTEM VOLTAGE	1000
NO. OF INVERTERS	62
<b>RACKING</b>	
MANUFACTURER	TERRASMART
RACKING/TRACKER	CANOPY
MODULE ORIENTATION	PORTRAIT
TILT ANGLE	7 DEGREES