



**SOLAR SME**  
SUBJECT MATTER EXPERT

DECEMBER 27, 2023

**MERRICK HOBEN  
AND  
DIANA BERMUDEZ**

**SOLAR SITE INSPECTION REPORT**

## General Information

### Location Details:

<b>BUILDING ADDRESS</b>	<b>3511 22nd Street North</b>
<b>CITY/TOWN</b>	<b>Arlington</b>
<b>STATE</b>	<b>VA</b>
<b>ZIP CODE</b>	<b>22207</b>

### Proposed System Details:

<b>System Size</b>	<b>9.13 KW (DC)</b>
<b>Inverter Make and Model</b>	<b>Hoymiles Micro inverters x (6)</b>
<b>PV Panels</b>	<b>Seraphim Panels x (22)</b>
<b>Panel Model</b>	<b>SRP-BMD-BG-415 Black</b>

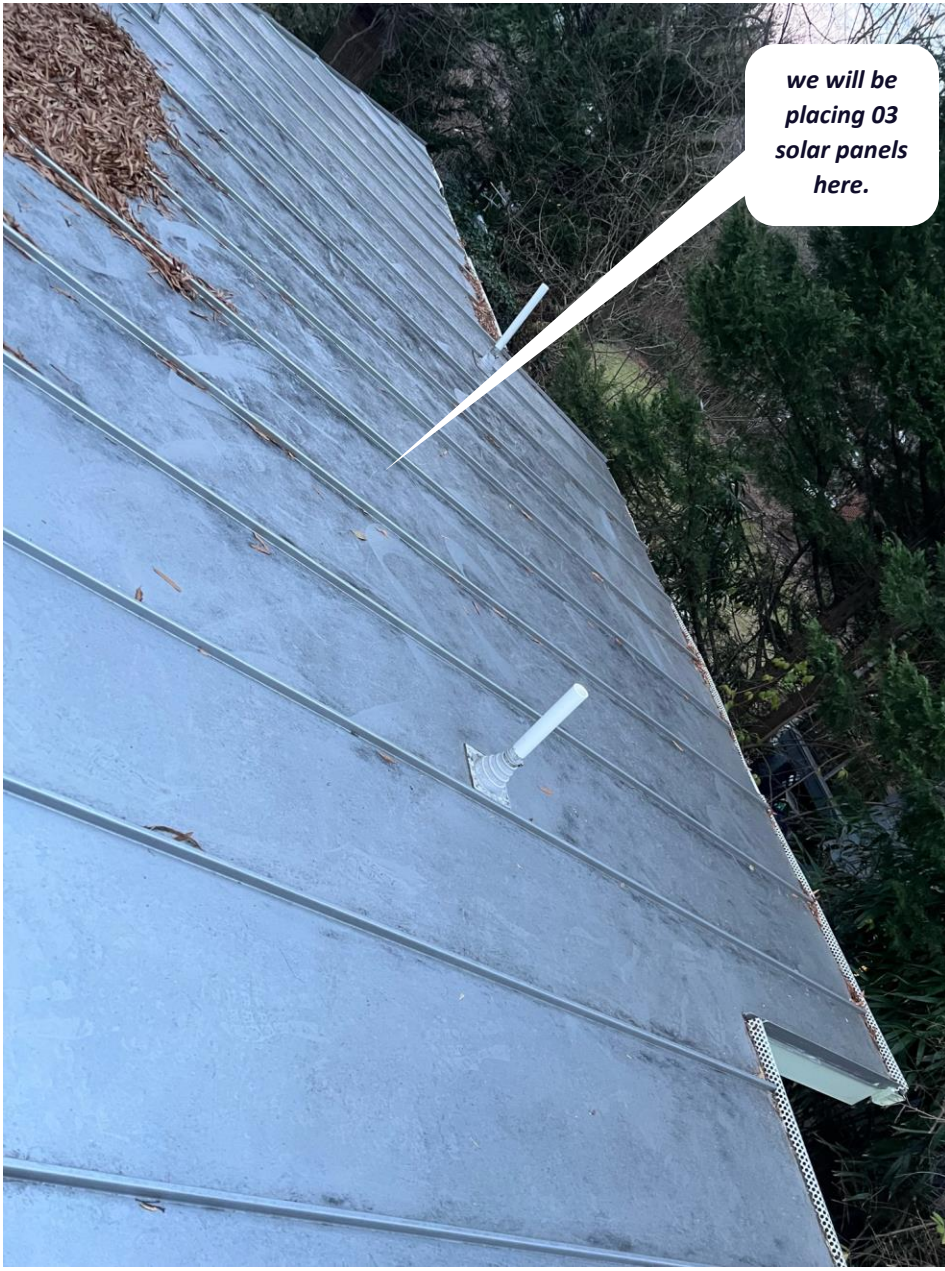


## Solar Panels Placement Side:



*Figure 1: We will be placing total 22 solar panels on the roof. This is the left side of house.*





**Figure 2: Overall condition of the roof is good.**



**Figure 3**





**Figure 4**



***Figure 5: It is better to trim the tree, to get max. production.***



## Layout Plan:



*Figure 6: The solar panels are placed in portrait & landscape orientation. Overall, the solar production is good. No shading present on the roof.*



## Main Service Panel:



**Figure 7: This is a Main Service Panel (MSP). MSP is mounted inside the house.**

**Main breaker rating is 200 Amps each.**

## Utility Meter:



*Figure 8 & 9: Meter is mounted on left side of the house. We will be able to place disconnect and load center near this one.*



## Rafters:



*Figure 10: Spacing between 2 Rafters is 24" inch on center.*



*Figure 11: Width of rafter is 1 1/2" inch*

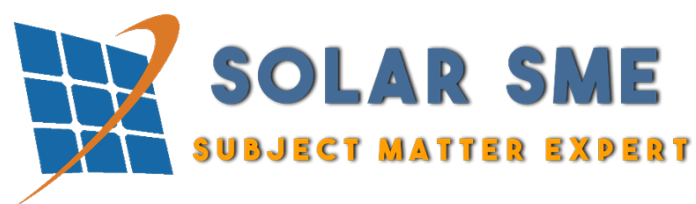
*Figure 12: Height of rafter is 1 1/2" inch*

*Overall, the rafters are in good condition.*

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Any Change require in the Proposed Layout by Structural Engineer, Building Permit Department and or Installation Team will need prior approval from the homeowner.

■







**CONTRACTOR**

SOLAR SME, INC  
 PHONE: 832 - 626 - 2337  
**ADDRESS:**  
 2630 AERO DR GRAND PRAIRIE, TX 75052

LIC.NO:  
 HIC.NO:  
 ELE.NO:

(N) PV SYSTEM: 9.20 KW<sub>p</sub>

**MERRICK HOBEN AND DIANA BERMUDEZ**  
 3511, 22ND STREET, NORTH ARLINGTON, VA 22207

**ENGINEER OF DESIGN**

PAGE SIZE : 17" X 11" (ANSI B)

**SOLAR ATTACHMENT PLAN**

DATE: 01-11-2024  
 DESIGN BY: H.A  
 CHECKED BY: M.A

**A-103 SHEET-4**

RAFTERS - - - - -  
 RAILING - - - - -  
 VENTS & OBSTACLES ● ■

RAFTER SIZE:  
 2" X 4" @ 24"

METAL SHINGLES

ATTACHMENT:  
 S-5 SOLAR FOOT

EXTERNAL COMPONENT  
 LOAD CENTER (N)  
 AC DISCONNECT (N)  
 METER (E)  
 INTERNAL COMPONENT  
 MSP (E)

METAL SHINGLES

METAL SHINGLES

RAIL TYPE :  
 IRONRIDGE XR100

ATTACHMENT:  
 S-5-S CLAMP

METAL FOLD SEAM

18" FIRE SETBACK

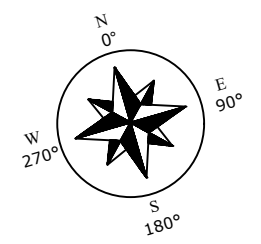
36" FIRE SETBACK

36" FIRE SETBACK

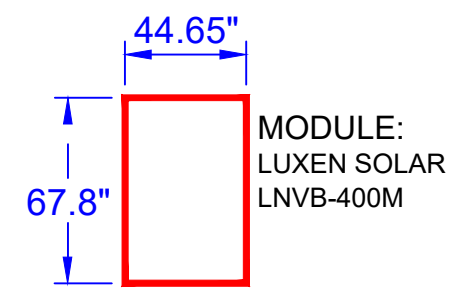
48" MAX SPACE BETWEEN  
 TWO ATTACHMENTS

18" FIRE SETBACK

**01 SOLAR ATTACHMENT PLAN**  
 0.16" = 1'-0"



(23) LUXEN SOLAR LNVB-400M  
 (06) HOYMILES HM-1500NT [240V]



PROPERTY LINE

EXTERNAL COMPONENT

LOAD CENTER (N)

AC DISCONNECT (N)

METER (E)

INTERNAL COMPONENT

MSP (E)

13'

36'

18" FIRE SETBACK

23'

28'

FENCE

(23) LUXEN SOLAR LNVB-400M  
(06) HOYMILES HM-1500NT [240V]

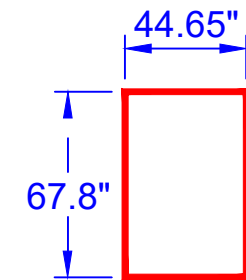
22ND STREET N

DRIVEWAY

N MONROE ST

22ND STREET N

VISIBLE, LOCKABLE, LABELED, FUSED AC DISCONNECT  
WITHIN 10 FEET OF UTILITY METER



MODULE:  
LUXEN SOLAR  
LNVB-400M



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(N) PV SYSTEM: 9.20 KW<sub>p</sub>

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3511, 22ND STREET, NORTH  
ARLINGTON, VA 22207

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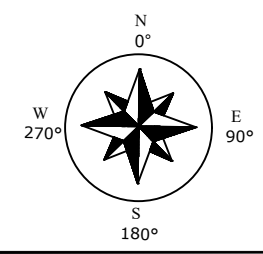
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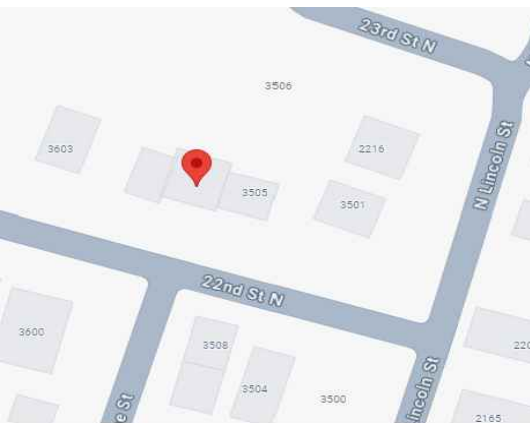
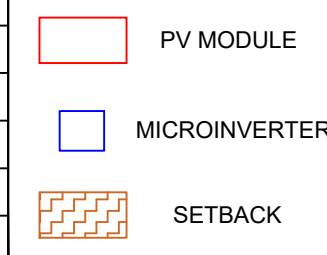
**A-101  
SHEET-2**

01 SITE PLAN





# ROOF MOUNT INSTALLATION OF 9.20-KW<sub>p</sub> SOLAR SYSTEM

		GENERAL NOTES				SATELLITE VIEW			
PROJECT ADDRESS	3511, 22ND STREET NORTH ARLINGTON, VA 22207	1. ALL PV MODULES & WIRING SHALL BE PROTECTED FROM ANY PHYSICAL DAMAGE. 2. ALL METALLIC COMPONENTS MUST BE GROUNDED FOR SAFETY PURPOSES. 3. ALL EQUIPMENTS MUST MEET SETBACKS REQUIREMENTS AS REQUIRED BY NEC. 4. ALL OCPDS RATINGS & TYPES SPECIFY ACCORDING TO NEC. 5. LOAD SIDE INTERCONNECTION & SUPPLY SIDE TAP INTERCONNECTION ACCORDING TO NEC. 6. PV SYSTEM CIRCUIT INSTALLED IN BUILDING MUST INCLUDE A RAPID SHUTDOWN FUNCTION TO REDUCE SHOCK HAZARDS . 7. EQUIPMENT GROUNDING CONDUCTOR ON AC & DC SIDE SIZED ACCORDING TO NEC.							
OWNER	MERRICK HOBEN AND DIANA BERMUDEZ								
SCOPE OF WORK	SYSTEM SIZE							9.20 KW <sub>p</sub>	
	23 X LUXEN 400W							LUXEN SOLAR LNVB-400M	
	06 X HOYMILES							HM-1500NT	
ELECTRICAL EQUIPMENTS	MSP BUSBAR RATING							200A	
	MSP BREAKER RATING							200A	
BUILDING INFORMATION	ZONING	RESIDENTIAL							
	CONSTRUCTION TYPE	TWO STORY BUILDING							
	ROOF TYPE	METAL							
	UTILITY METER	DOMINION							
	RAFTER SIZE	2" X 4" @ 24"							
RACKING INFORMATION	S-5 SOLAR FOOT , S-5 S CLAMP , XR-100								
AHJ	ARLINGTON COUNTY								
PARCEL #	05051069								
LOT AREA	6500 SQFT								
LIVING AREA	1,342 SQFT								
PROJECT MANAGER	EROL SHAMS								
CONTACT DETAILS	984-263-3006								
<b>CODE REFERENCES</b>		<b>UNIT INDEX</b>							
NATIONAL ELECTRIC CODE (NEC), 2017		MSP	MAIN SERVICE PANEL	IN	INVERTER				
INTERNATIONAL RESIDENTIAL CODE (IRC), 2018		UM	UTILITY METER	PV	PV LOAD CENTER				
INTERNATIONAL BUILDING CODE (IBC), 2018		PM	PRODUCTION METER	DB	DISTRIBUTION BOX				
		ACD	AC DISCONNECT	IQ	IQ COMBINER BOX				
		JB	JUNCTION BOX	SSP	SERVICE SUB PANEL				
		RSC	RAPID SHUTDOWN CONT	RSB	RAPID SHUTDOWN BOX				
									
						<b>SHEET INDEX</b>			
						SHEET NUMBER	SHEET TITLE		
						T-001	COVER PAGE		
						A-101	SITE PLAN		
						A-102	ELECTRICAL PLAN		
						A-103	SOLAR ATTACHMENT PLAN		
						E-601	LINE DIAGRAM		
						E-602	DESIGN TABLE		
						E-603	PLACARDS		
						S-501	ASSEMBLY DETAILS		
						S-502	ASSEMBLY DETAILS-2		
						R-002	RESOURCE DOCUMENT		



**SolarSME**  
Subject Matter Expert

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**ENGINEER OF DESIGN**



**PV Installation Professional**  
MUHAMMAD ARSHAD  
PV-050220-029071

DocuSigned by:  
*Muhammad Arshad*  
739E883FB5DC491...

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**T-001 SHEET-1**