

To: Members of the Board of Adjustment, Applicants & Neighboring Property Owners

From: Jonathan B. Kanipe, Town Manager

Date: September 8, 2020

Re: Board of Adjustment Meeting – September 21, 2020

Applicants:

You or a representative <u>MUST</u> attend the Zoom meeting in order to have the matter considered.

Members of the Board of Adjustment & staff may visit each property prior to the meeting. If this occurs, the property owner will be notified beforehand and asked if they approve the visit. If so, the visit will be conducted in a socially distant manner consistent with North Carolina state orders related to preventing the spread of Covid-19.

Neighbors:

You are receiving this notice because your property is adjacent to an applicant on this month's agenda.

You may review applications & plans for the projects on this agenda at http://www.biltmoreforest.org/ board-of-adjustments.

You are invited to attend the scheduled meeting via Zoom and make comment when called upon. Any additional information regarding the Zoom meeting will be provided on the Town's website no later than September 11, 2020. The following items of business are scheduled to be addressed by the Biltmore Forest Board of Adjustment on Monday, September 21, 2020 at 4:00 pm in the Town Hall Board Room via Zoom. The format for the meeting and instructions for attending the meeting via Zoom can be found on the second page of this agenda. The link for the Zoom meeting can be found at the bottom of the second page.

- 1. The meeting will be called to order and roll call taken.
- 2. The minutes of the July 20, 2020 regular meeting will be considered.
- 3. Hearing of Cases (Evidentiary Hearings, Deliberations & Determinations).

Case 1: **1** Lone Pine Road – A special use permit is requested for installation of an outdoor brick fireplace adjacent to and abutting the existing outdoor patio.

Case 2: **15 Busbee Road** – A special use permit is requested for the installation of landscaping boulders.

Case 3: **453 Vanderbilt Road** – A special use permit is requested for the installation of a roof mounted solar panel system.

Case 4: **22** Cedarcliff Road – A special use permit is requested for the installation of a roof mounted solar panel system.

4. Adjourn

Process and Procedure for September 21, 2020 Board of Adjustment Meeting held on Zoom

- All participants attending will be held in the "waiting room" prior to admittance by Town staff. Once admitted into the meeting, please mute audio until called upon by the Board chair.
- The meeting will be called to order at 4:00 p.m. by the Chair. All interested parties and applicants will be virtually sworn-in at this time.
- Each matter will be called forward and Town staff will authorize video and audio for the applicants and any person with standing for that particular case. If an applicant would like to present visual evidence, they must provide this evidence to Town staff no later than Friday, September 18, 2020.
- The Board chair, or other Board of Adjustment member, will specifically ask questions to the applicant and ask for any evidence that they would like to present.
- The Board chair, or other Board of Adjustment member, will then specifically ask for any person with standing for that specific matter to provide comment. Town staff will moderate this comment period but will ensure each person who wishes to speak or provide evidence is able to do so.
- When all evidence and testimony has been provided, the Board will deliberate and render a decision, then move on to the next matter where the process will be repeated.

How to Access the September 21, 2020 Board of Adjustment Meeting via Zoom

In order to access the Board of Adjustment meeting, please visit <u>http://zoom.us</u> to sign up, for free, for a Zoom account. This will enable you to participate with your desktop or laptop computer as you see fit. The Zoom link and log-in credentials are at the bottom of this page.

You may also download the free Zoom app from the Apple Store or Google Play on your mobile iOS or Android device. This app will walk you through setting up a free account.

If you are unable to access the meeting through a web or app based format, but would still like to listen and participate in the meeting, you may do so by calling one of the phone numbers listed below and entering the meeting ID and password.

Dial by your location +1 646 876 9923 US (New York) +1 301 715 8592 US (Germantown) +1 312 626 6799 US (Chicago) +1 253 215 8782 US (Tacoma) +1 346 248 7799 US (Houston) +1 408 638 0968 US (San Jose) +1 669 900 6833 US (San Jose) Meeting ID: 850 9639 7224

Passcode: 423619 Find your local number: <u>https://us02web.zoom.us/u/kc2OBwZDMh</u>

https://us02web.zoom.us/j/85096397224?pwd=UTR3bGlnWlNIVlp1ZHFvL21IQmVNdz09

MINUTES OF THE BOARD OF ADJUSTMENT MEETING HELD MONDAY, AUGUST 17, 2020

The Board of Adjustment met at 4:00 p.m. on Monday, August 17, 2020. The meeting was held virtually via Zoom.

Members present: Mr. Greg Goosmann, Ms. Lynn Kieffer, Ms. Rhoda Groce, Mr. Lowell Pearlman, and Mr. Robert Chandler. Ms. Martha Barnes, alternate member, was also present. Mr. Jonathan Kanipe, Town Manager and Mr. Harry Buckner, Public Works Director, and Mr. William Clarke, Town Attorney were also present.

Chairman Greg Goosmann called the meeting to order at 4:00 p.m.

Chairman Goosmann thanked Dr. Richard Landau for his service to the Board. Ms. Martha Barnes has replaced Dr. Landau as the alternate to the Board.

Mr. Goosmann swore in the following:

Mr. Dan Ryan Ms. Melissa Ryan Mr. Jonathan Kanipe

A motion was made by Ms. Rhoda Groce to approve the minutes from July 20, 2020. Ms. Lynn Kieffer seconded the motion. Mr. Clarke informed the Board that a roll call needs to be taken for the minutes for remote meeting sessions. Chairman Goosmann conducted roll call. Mr. Robert Chandler voted aye, Ms. Lynn Kieffer voted aye, Ms. Rhoda Groce voted aye, Mr. Lowell Pearlman voted aye, and Chairman Goosmann voted aye. The minutes were approved as written.

<u>HEARING (Evidentiary):</u>

A Special Use Permit was requested for the installation of a playset in the rear yard, and a Variance is requested for installation within the side and rear yard setback at 9 White Oak Road. Mr. Robert Chandler shepherded the matter. The homeowners would like to have a playset installed that can easily be seen from the kitchen windows and back deck. It will be placed on the Northwest corner of the lot on an angle, which goes both into the rear and side yard setback. The playhouse would be unobtrusive to the neighbors. The neighbors to the North approved the project. Mr. Chandler asked the homeowners if they would install additional buffering if necessary. The homeowners agreed to have buffering installed if needed. The neighbor to the West and South had also approved the playset.

DELIBERATION AND DETERMINATION:

Mr. Chandler recited the facts and said the applicants at 9 White Oak are requesting a Special Use Permit for construction of a playset in the rear and side yard setback and a Variance for placement within the rear and side yard setback which would be 5 feet inside the side yard setback and 7.5 feet within the rear yard setback. The homeowners have agreed to put in buffering if needed. It would be difficult to place on the other side due to the water line being placed in that location. Chairman Goosmann also added the property is already significantly buffered from their neighbors currently. There were no additional questions or comments regarding this project.

Ms. Rhoda Groce moved that a Special Use Permit and Variance as requested be granted to Mr. Dan Ryan & Ms. Melissa Ryan for placement of a playset within the side and rear yard setback. The facts as recited by Robert Chandler and his summation be accepted as findings and facts to support this grant. The Board has inspected this site and no neighboring property owner has objected.

Ms. Groce further moved the Board define that granting this Special Use Permit (a) would not materially endanger the public health or safety if located where proposed and developed according to the plans as submitted and improved, (b) met all required conditions and specifications of the Town of Biltmore Forest Zoning ordinance, (c) would not substantially injure the value of adjoining or abutting property, and (d) would be in general conformity with the plan of development of the Town of Biltmore Forest and its environs as set forth in Sections 153.110 (C)(2-3)of the above ordinance. The applicant has been informed that he/she is to report to the Zoning Administrator within seven (7) days of completion of the project in order that the Zoning Administrator can determine that the project has been completed in accordance with plans submitted to the Town.

Ms. Groce further moved that granting this Variance satisfies the applicable Sections of 153.110(D) and paragraphs one through four, and would not be contrary to the public interest where, owing to special conditions, a literal enforcement of the provisions of this Ordinance would, in this case, result in a practical difficulty or unnecessary hardship. She further moved the Board to find the spirit of the ordinance would be observed, public safety and welfare secured and substantial justice done. The applicant has been informed that he/she is to report to the Zoning Administrator within seven (7) days of completion of the project in order that the Zoning Administrator can determine that the project has been completed in accordance with plans submitted to the Town.

Mr. Pearlman seconded the motion. Roll call was taken by Chairman Goosmann and the motion was unanimously approved.

Chairman Goosmann adjourned the meeting at 4:19 pm. The next Board of Adjustment meeting was scheduled for Monday, September 21, 2020 at 4:00 pm.

ATTEST:

Greg Goosmann Chairman Laura Jacobs Town Clerk 355 Vanderbilt Rd | Biltmore Forest, NC Po Box 5352 | Biltmore Forest, NC 28803 P (828) 274-0824 | F (828) 274-8131 www.biltmoreforest.org



George F. Goosmann, III, Mayor Fran G. Cogburn, Mayor-Pro Tem E. Glenn Kelly, Commissioner Doris P. Loomis, Commissioner

> Jonathan B. Kanipe, Town Manager

MEMORANDUM

To:	Board of Adjustment Members
From:	Jonathan Kanipe, Town Manager
Re:	Board of Adjustment Case Number 1 (1 Lone Pine Road)
Date:	September 11, 2020

Special Use Permit Request for Accessory Structure Placement in Rear Yard

A special use permit is requested for the construction of an outdoor brick fireplace in the rear yard. The brick fireplace would be constructed adjacent to and abutting an existing brick patio. The proposed fireplace would be nine (9) feet tall and a maximum of forty (40) inches deep. A seating wall will be included within the brick fireplace that is twenty-two (22) feet long.

The proposed location of the fireplace is compliant with setbacks for the R-2 zoning district. The side setback in this district is fifteen (15) feet and the rear setback is twenty (20) feet. The proposed fireplace would be 15'9" from the side setback and 30 feet from the rear property line.

Zoning Compliance Application

Town of Biltmore Forest

Name Benjamin Baldwin

Property Address 1 Lone Pine Road

Phone (704) 277-0228

Parcel ID/PIN Number 9646-89-7922-00000 Email benjamin.w.baldwin@gmail.com

Proposed Roof Coverage Total

Adding 20.5 Square feet

Side Yard Setback

Proposed Impervious Surface Coverage

15 feet (R-2, R-3, R-4, and R-5 Districts)

ZONING INFORMATION

Lot Size

.8 Acres

Unchanged

Current Zoning R-2

Maximum Roof Coverage 4,682 square feet (Up to 1 acres)

Maximum Impervious Surface Coverage Up to 1 acre (27.5 percent of lot area)

Front Yard Setback 50 feet (R-2, R-3, R-4, and R-5 Districts)

Rear Yard Setback 20 feet (R-2, R-3, R-4, and R-5 Districts) Building Height Unchanged

Description of the Proposed Project

We request/propose to add an outdoor brick fireplace, immediately adjacent to and abutting the existing brick patio. Danny Frye will build it for us.

Estimated Start Date 9/30/2020

Estimated Completion Date 10/15/2020

Estimated Cost of Project \$20,000.00

Supporting Documentation (Site Plan, Drawings, Other Information) Scan Aug 15, 2020 at 5.10 PM (Merged).pdf Applicant Signature

Date 8/15/2020

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Special Use Permit Application

Town of Biltmore Forest

Name Benjamin Baldwin

Address 1 Lone Pine Road

Phone (704) 277-0228 Email benjamin.w.baldwin@gmail.com

Please select the type of special use you are applying for:

Accessory Structures

The applicant must show that the proposed use will not materially endanger public health or safety or injure value of adjoining or abutting property. In addition, the proposed use must be in general conformity with the plan of development of the town and be in harmony with scale, bulk, height, coverage, density, and character of the neighborhood.

Please provide a description of the proposed project:

We request/propose to have built an outdoor brick fireplace adjacent to and abutting the existing outdoor patio.

Explain why the project would not adversely affect the public interest of those living in the neighborhood:

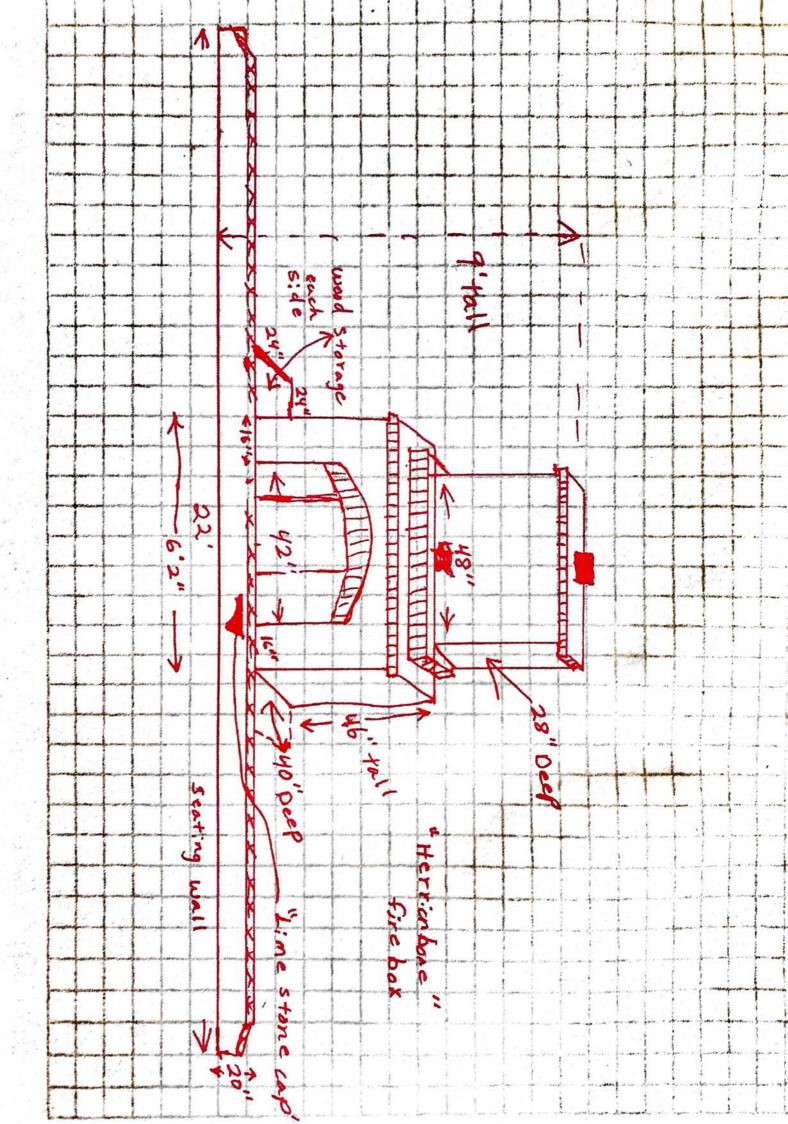
The addition would be tastefully done and would add to (and not detract from) the value of the home. Specifically, the fireplace will seamlessly blend with the existing structure and patio (i.e., matching brick and continuation of existing seat-wall), and we are using a known, experienced and capable brick mason (Danny Frye) who has done a lot of work in Biltmore Forest and who is familiar with the sensibilities of the neighborhood and its residents.

I hereby certify that all of the information set forth above is true and accurate to the best of my knowledge.

Signature

on Boldin

Date 8/15/2020



Ben & Kerry Baldwin I Lone Pine Road 1"= 10' (All mensurements are approximations)* 33 House Proposed Fireplace Existing Patio 15'9" * Based on actual hand measurements and 451 references to + extra polations from original landscape survey drawings 1 30

355 Vanderbilt Rd | Biltmore Forest, NC Po Box 5352 | Biltmore Forest, NC 28803 P (828) 274-0824 | F (828) 274-8131 www.biltmoreforest.org



George F. Goosmann, III, Mayor Fran G. Cogburn, Mayor-Pro Tem E. Glenn Kelly, Commissioner Doris P. Loomis, Commissioner

> Jonathan B. Kanipe, Town Manager

MEMORANDUM

To:	Board of Adjustment Members
From:	Jonathan Kanipe, Town Manager
Re:	Board of Adjustment Case Number 2 (15 Busbee Road)
Date:	September 11, 2020

Special Use Permit Request for Installation of Landscape Boulders

A special use permit is requested for the installation of landscape boulders within a newly installed vegetative berm. The applicants have created a berm and planted trees, shrubs, and other vegetative material. All plantings have been site verified by the Town and are outside of the Town's right of way for both Busbee and Vanderbilt Roads.

The Town requires a special use permit approval for the inclusion of the landscape boulders within this project. There are total of five (5) boulders as shown on the attached landscaping plan. These landscape boulders are included as accessory structures under the Town's Zoning Ordinance.

Zoning Compliance Application

Town of Biltmore Forest

Name Stanley Coffman

Property Address 15 Busbee Rd, Biltmore Forest, NC 28803

Phone (417) 766-3302 Email stan@ozarksfn.com

Parcel ID/PIN Number 9647-80-0961-00000

ZONING INFORMATION

Lot Size

1.0 acre

Current Zoning R-1

Maximum Roof Coverage

Proposed Roof Coverage Total

Maximum Impervious Surface Coverage	Proposed Impervious Surface Coverage
Front Yard Setback	Side Yard Setback
Rear Yard Setback	Building Height

Description of the Proposed Project

Placing a 45 foot long by 13' wide berm that crests at its highest around 3 feet at the corner of Busbee and Vanderbilt Roads. The shape of the bed will mimic the curve of the road, a bean shape. Plantings will be installed in a to be determined layout on the berm with taller evergreen shrubs in the middle and layering in the middle downward with lower growing and herbaceous material.

Estimated Start Date 8/31/2020

Estimated Completion Date 9/5/2020

Estimated Cost of Project \$17,000.00

Supporting Documentation (Site Plan, Drawings, Other Information)

Applicant Signature

Date 8/25/2020

Ston Coffman

Special Use Permit Application

Town of Biltmore Forest

Name Stan Coffman

Address 15 Busbee Rd, Biltmore Forest, NC 28803

Phone (417) 766-3302 Email stan@ozarksfn.com

Please select the type of special use you are applying for:

Accessory Structures

The applicant must show that the proposed use will not materially endanger public health or safety or injure value of adjoining or abutting property. In addition, the proposed use must be in general conformity with the plan of development of the town and be in harmony with scale, bulk, height, coverage, density, and character of the neighborhood.

Please provide a description of the proposed project:

Placing a 45' long by 13' wide berm at the corner of Busbee and Vanderbilt Roads. The berm will crest at its tallest around 3 feet. The shape of the bed will mimic the curve of the road, a bean shape. Plantings will be installed in a to be determined layout on the berm with taller evergreen shrubs in the middle and layering downward with lower growing and herbaceous material.

Explain why the project would not adversely affect the public interest of those living in the neighborhood:

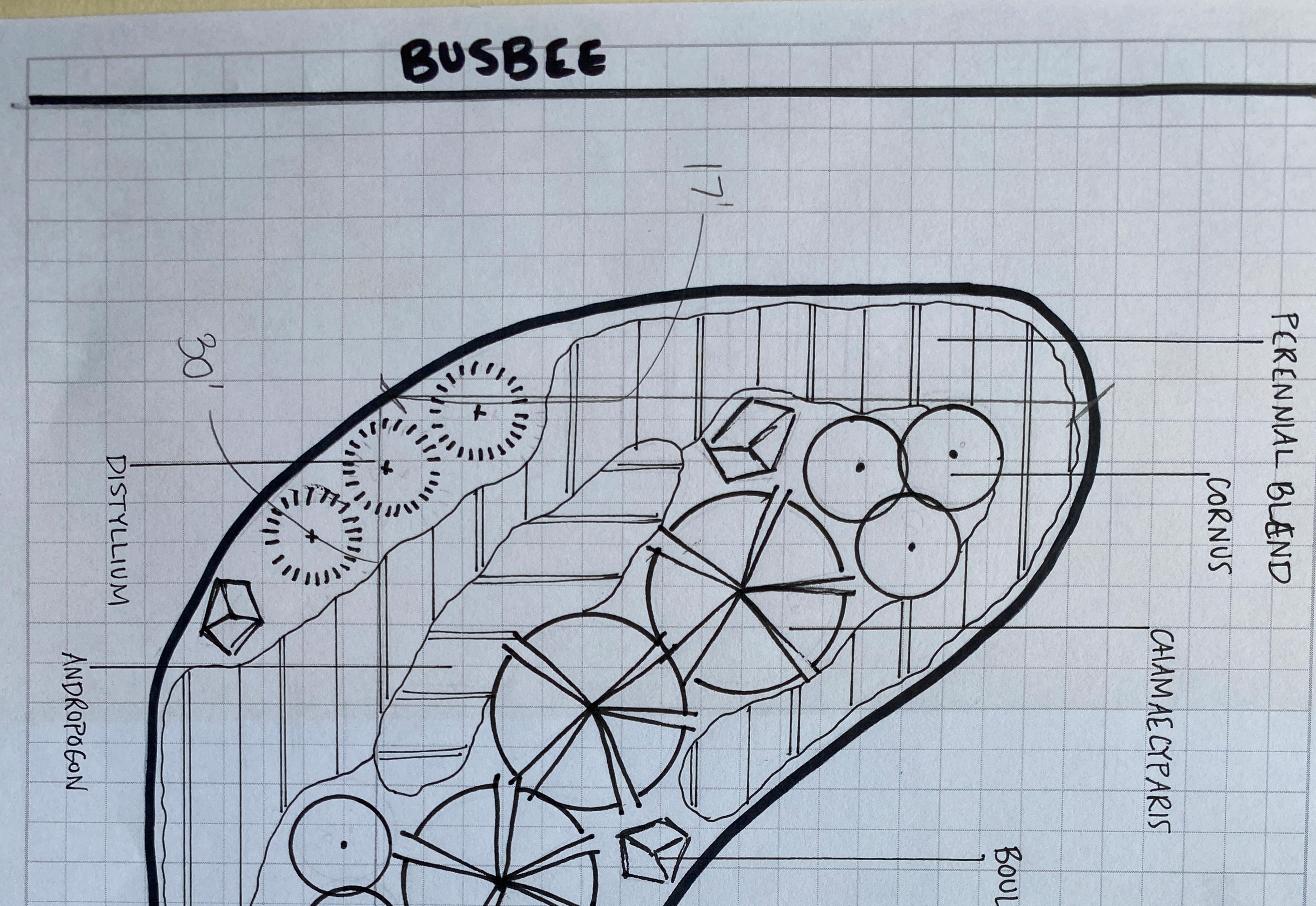
The berm will be built by a professional landscaping company, BB Barns Landscape. It will be aesthetically pleasing and will add beauty to the property. The berm is not to be built as a barrier and will not cause a traffic hazard.

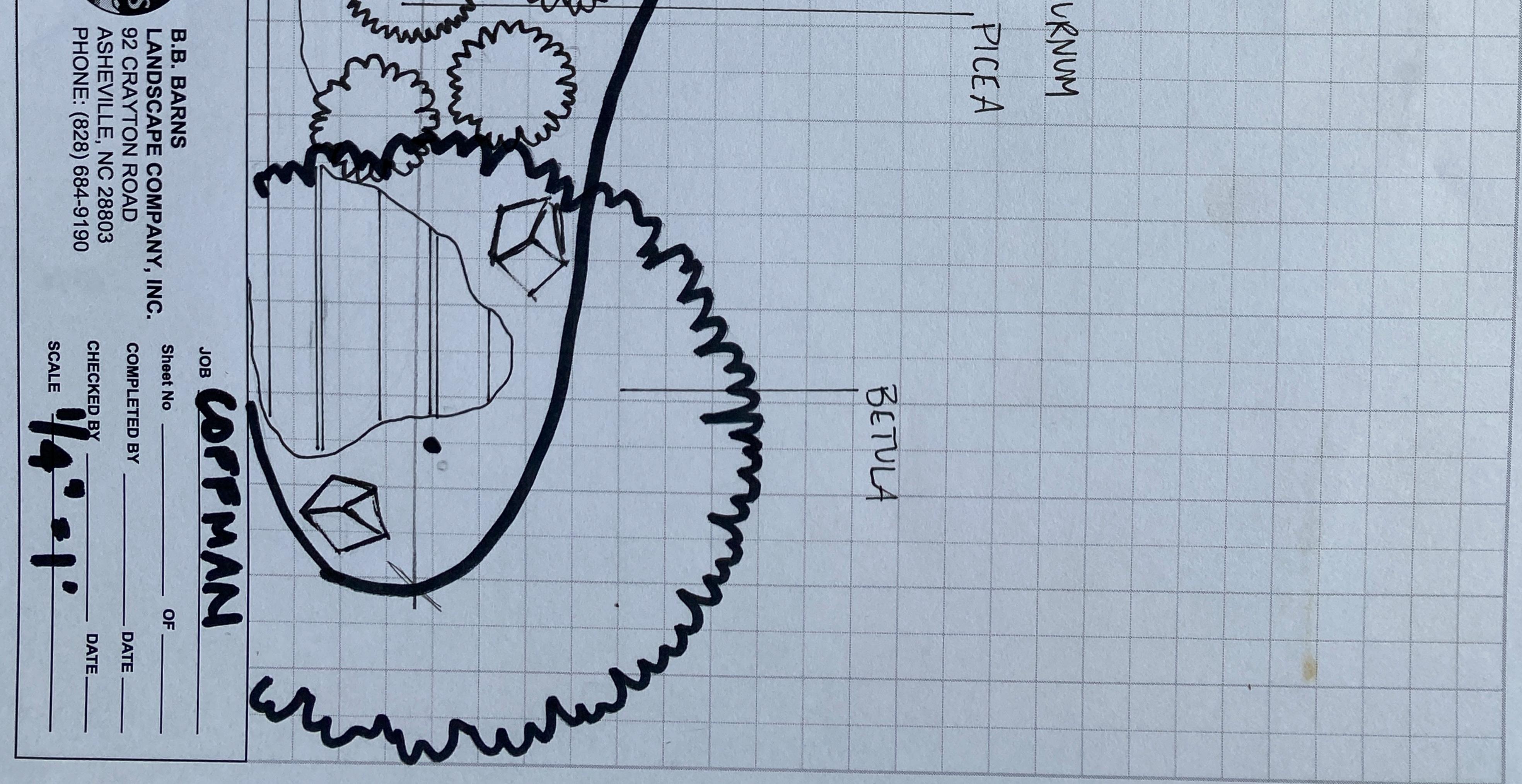
I hereby certify that all of the information set forth above is true and accurate to the best of my knowledge.

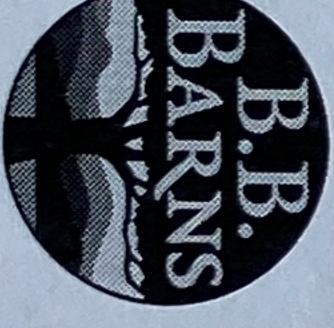
Signature

Date 8/25/2020

Stan Coffman







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George F. Goosmann, III, Mayor Fran G. Cogburn, Mayor-Pro Tem E. Glenn Kelly, Commissioner Doris P. Loomis, Commissioner

> Jonathan B. Kanipe, Town Manager

MEMORANDUM

To:	Board of Adjustment Members
From:	Jonathan Kanipe, Town Manager
Re:	Board of Adjustment Case Number 3 (453 Vanderbilt Road)
Date:	September 11, 2020

Special Use Permit Request for the Installation of a Roof Mounted Solar Panel System

A special use permit is requested for the installation of a roof mounted solar panel system. The Town's Zoning Ordinance considers solar collectors an accessory structure and states they "shall be regulated in accordance with N.C.G.S. 160A-201". A copy of this statute is attached to this memorandum. As a result, a special use permit must be obtained by the applicant before installation on an existing roof. Solar panels are allowed by right as a part of a new construction design under the Town's Zoning Ordinance.

In addition to the zoning applications and special use permit applications, the applicant has included a schematic showing the placement of the panels and a site plan showing the panels on the home.

Zoning Compliance Application

Town of Biltmore Forest

Name Daniel Lopez De La Cruz

Property Address 453 Vanderbilt Road

Phone (323) 854-5413

Parcel ID/PIN Number 964667153700000

Email dlopez@dlopez.com

ZONING INFORMATION

Current Zoning R-1

Maximum Roof Coverage 6,100 square feet (Up to 2 acres) Proposed Roof Coverage Total

1319

Maximum Impervious Surface Coverage 1-3 acres (25 percent of lot area)

Proposed Impervious Surface Coverage

Front Yard Setback 60 feet (R-1 District) Side Yard Setback 20 feet (R-1 District)

Rear Yard Setback 25 feet (R-1 District) Building Height 25

Description of the Proposed Project Roof mounted solar electric system as well as Tesla PowerWall battery back up system

Estimated Start Date 9/8/2020

Estimated Completion Date 9/15/2020

Estimated Cost of Project \$41,548.00

Supporting Documentation (Site Plan, Drawings, Other Information) Site Plan.pdf Lopez South Entrance Flat Roof Cut.pdf

Revised with 5 Added Lopez Roof.pdf

SPWR 360 DC data sheet.pdf

1.93 Proposed

Lot Size

Applicant Signature

Date 8/12/2020

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Special Use Permit Application

Town of Biltmore Forest

Name Daniel Lopez De La Cruz

Address 453 Vanderbilt Road

Phone (323) 854-5413 Email dlopez@dlopez.com

Please select the type of special use you are applying for:

Accessory Structures

The applicant must show that the proposed use will not materially endanger public health or safety or injure value of adjoining or abutting property. In addition, the proposed use must be in general conformity with the plan of development of the town and be in harmony with scale, bulk, height, coverage, density, and character of the neighborhood.

Please provide a description of the proposed project:

Roof mounted solar electric system and Tesla powerwall battery installation

Explain why the project would not adversely affect the public interest of those living in the neighborhood:

Mr. Lopez was very concerned about the placement of the modules on his roof. We worked with him to assure that the system would be aesthetically pleasing to not only Mr. Lopez, but all residents of Biltmore Forest.

I hereby certify that all of the information set forth above is true and accurate to the best of my knowledge.

Signature

Date 8/21/2020

§ 160A-201. (Repealed effective January 1, 2021) Limitations on regulating solar collectors.

(a) Except as provided in subsection (c) of this section, no city ordinance shall prohibit, or have the effect of prohibiting, the installation of a solar collector that gathers solar radiation as a substitute for traditional energy for water heating, active space heating and cooling, passive heating, or generating electricity for a residential property, and no person shall be denied permission by a city to install a solar collector that gathers solar radiation as a substitute for traditional energy for water heating, active space heating and cooling, passive heating, or generating electricity for a residential property. As used in this section, the term "residential property" means property where the predominant use is for residential purposes.


(b) This section does not prohibit an ordinance regulating the location or screening of solar collectors as described in subsection (a) of this section, provided the ordinance does not have the effect of preventing the reasonable use of a solar collector for a residential property.

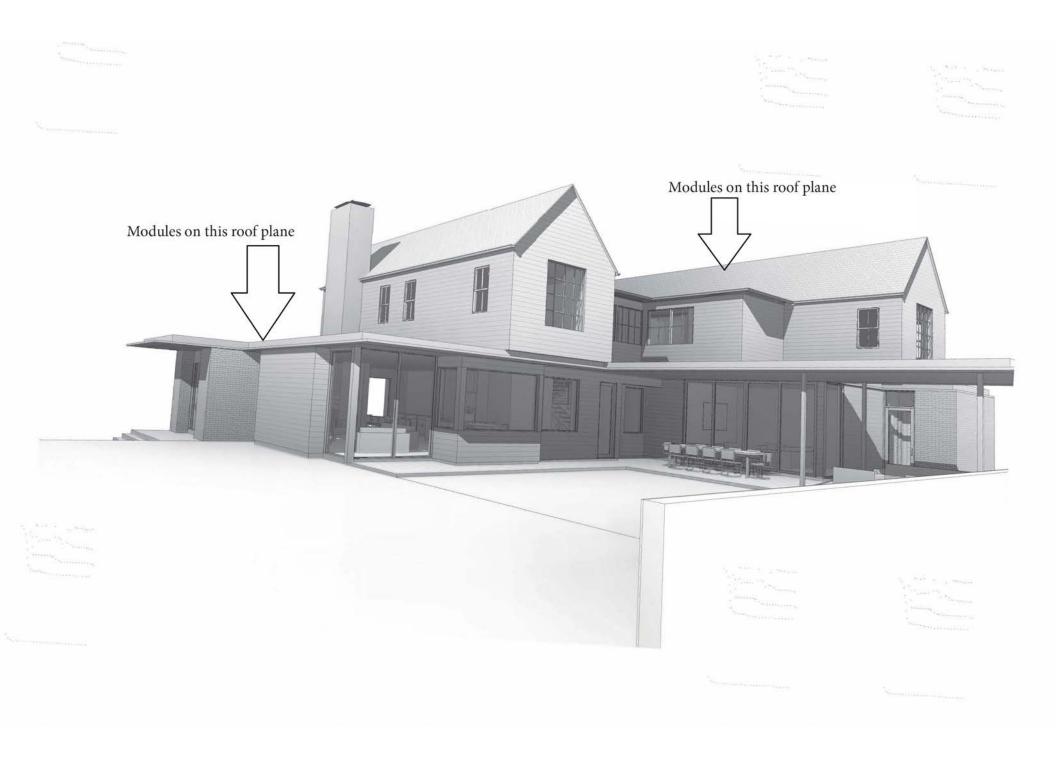
(c) This section does not prohibit an ordinance that would prohibit the location of solar collectors as described in subsection (a) of this section that are visible by a person on the ground:

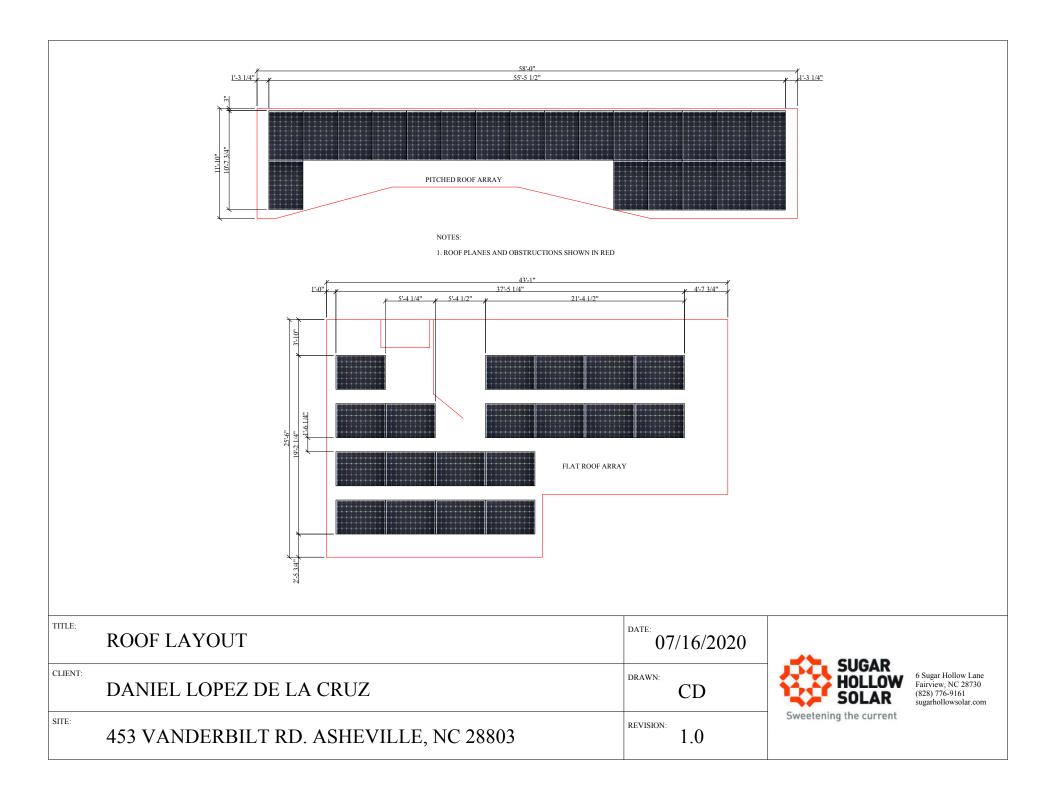
- (1) On the facade of a structure that faces areas open to common or public access;
- (2) On a roof surface that slopes downward toward the same areas open to common or public access that the facade of the structure faces; or
- (3) Within the area set off by a line running across the facade of the structure extending to the property boundaries on either side of the facade, and those areas of common or public access faced by the structure.

(d) In any civil action arising under this section, the court may award costs and reasonable attorneys' fees to the prevailing party. (2007-279, s. 1; 2009-553, s. 1; 2019-111, s. 2.6(g).)









SUNPOWER®





SunPower X-Series: X22-360

SunPower[®] Residential DC Panel

SunPower X-Series panels combine the top efficiency, durability and warranty available in the market today, resulting in more long-term energy and savings.^{1,2}



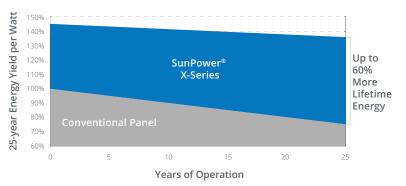
Maximum Power. Minimalist Design.

Industry-leading efficiency means more power and savings per available space. With fewer panels required, less is truly more.



Highest Lifetime Energy and Savings

Designed to deliver 60% more energy in the same space over 25 years in real-world conditions like partial shade and high temperatures. $^{\rm 2}$

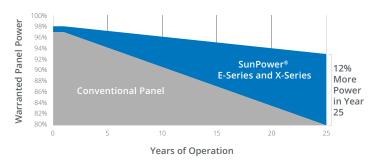




Best Reliability, Best Warranty

With more than 25 million panels deployed around the world, SunPower technology is proven to last. That's why we stand behind our panel with the industry's best 25-year Combined Power and Product Warranty, including the highest Power Warranty in solar.





Fundamentally Different. And Better.



The SunPower Maxeon[®] Solar Cell

- Enables highest efficiency panels available ²
- Unmatched reliability ³
- Patented solid metal foundation prevents breakage and corrosion



As Sustainable As Its Energy

- Ranked #1 in Silicon Valley Toxics Coalition 2015 Solar Scorecard⁴
- First solar panels to achieve Cradle to Cradle Certified[™] Silver recognition⁵
- Contributes to more LEED categories than conventional panels ⁶

X-Series: X22-360 SunPower® Residential DC Panel

Electrical Data				
	SPR-X22-360	SPR-X21-345		
Nominal Power (Pnom) ⁷	360 W	345 W		
Power Tolerance	+5/0%	+5/0%		
Panel Efficiency	22.1%	21.2%		
Rated Voltage (Vmpp)	59.1 V	57.3 V		
Rated Current (Impp)	6.09 A	6.02 A		
Open-Circuit Voltage (Voc)	69.5 V	68.2 V		
Short-Circuit Current (Isc)	6.48 A	6.39 A		
Max. System Voltage	600 V UL & 1000 V IEC			
Maximum Series Fuse	15 A			
Power Temp Coef.	−0.29% / ° C			
Voltage Temp Coef.	−167.4 mV / ° C			
Current Temp Coef.	2.9 mA / ° C			

Operating Condition And Mechanical Data			
Temperature	-40° F to +185° F (-40° C to +85° C)		
Impact Resistance	1 inch (25 mm) diameter hail at 52 mph (23 m/s)		
Appearance	Class A+		
Solar Cells	96 Monocrystalline Maxeon Gen III		
Tempered Glass	High-transmission tempered anti-reflective		
Junction Box	IP-65, MC4 compatible		
Weight	41 lbs (18.6 kg)		
Max. Load	G5 Frame: Wind: 62 psf, 3000 Pa front & back Snow: 125 psf, 6000 Pa front G3 Frame: Wind: 50 psf, 2400 Pa front & back Snow: 112 psf, 5400 Pa front		
Frame	Class 1 black anodized (highest AAMA rating)		

Tests And Certifications			
Standard Tests ⁸	UL1703 (Type 2 Fire Rating), IEC 61215, IEC 61730		
Quality Management Certs	ISO 9001:2015, ISO 14001:2015		
EHS Compliance	RoHS, OHSAS 18001:2007, lead free, Recycle Scheme, REACH SVHC-163		
Sustainability	Cradle to Cradle Certified [™] Silver. "Declare." listed.		
Ammonia Test	IEC 62716		
Desert Test	10.1109/PVSC.2013.6744437		
Salt Spray Test	IEC 61701 (maximum severity)		
PID Test	1000V: IEC 62804, PVEL 600 hr duration		
Available Listings	UL, TUV, MCS, FSEC, CEC		

1 SunPower 360 W compared to a Conventional Panel on same-sized arrays (260 W, 16% efficient, approx. 1.6 m²), 4% more energy per watt (based on PVSyst pan files), 0.75%/yr slower degradation (Campeau, Z. et al. "SunPower Module Degradation Rate," SunPower white paper, 2013).

2 Based on search of datasheet values from websites of top 10 manufacturers per IHS, as of January 2017.

3 #1 rank in "Fraunhofer PV Durability Initiative for Solar Modules: Part 3". PVTech Power Magazine, 2015. Campeau, Z. et al. "SunPower Module Degradation Rate," SunPower white paper, 2013.

4 SunPower is rated #1 on Silicon Valley Toxics Coalition's Solar Scorecard.

5 Cradle to Cradle Certified is a multi-attribute certification program that assesses products and materials for safety to human and environmental health, design for future use cycles, and sustainable manufacturing.

6 X-Series and E-Series panels additionally contribute to LEED Materials and Resources credit categories.

7 Standard Test Conditions (1000 W/m² irradiance, AM 1.5, 25° C). NREL calibration Standard: SOMS current, LACCS FF and Voltage.

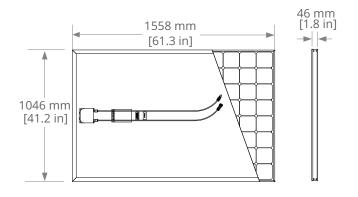
8 Type 2 fire rating per UL1703:2013, Class C fire rating per UL1703:2002.

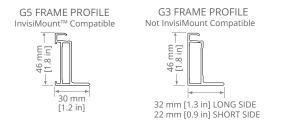
See www.sunpower.com/company for more reference information. For more details, see extended datasheet: www.sunpower.com/solar-resources. Specifications included in this datasheet are subject to change without notice.

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1-800-SUNPOWER





G5 frames have no mounting holes. Please read the safety and installation guide.

SUNPOWER[®]

527980 Rev A / LTR_US

355 Vanderbilt Rd | Biltmore Forest, NC Po Box 5352 | Biltmore Forest, NC 28803 P (828) 274-0824 | F (828) 274-8131 www.biltmoreforest.org



George F. Goosmann, III, Mayor Fran G. Cogburn, Mayor-Pro Tem E. Glenn Kelly, Commissioner Doris P. Loomis, Commissioner

> Jonathan B. Kanipe, Town Manager

MEMORANDUM

To:	Board of Adjustment Members
From:	Jonathan Kanipe, Town Manager
Re:	Board of Adjustment Case Number 4 (22 Cedarcliff Road)
Date:	September 11, 2020

Special Use Permit Request for the Installation of a Roof Mounted Solar Panel System

A special use permit is requested for the installation of a roof mounted solar panel system. The Town's Zoning Ordinance considers solar collectors an accessory structure and states they "shall be regulated in accordance with N.C.G.S. 160A-201". A copy of this statute is attached to this memorandum. As a result, a special use permit must be obtained by the applicant before installation on an existing roof. Solar panels are allowed by right as a part of a new construction design under the Town's Zoning Ordinance.

In addition to the zoning applications and special use permit applications, the applicant has included a schematic showing the placement of the panels.

Zoning Compliance Application

Town of Biltmore Forest

Name Samuel Olesky

Property Address 22 Cedarcliff Road

Phone (248) 943-5729 Email samuelolesky@gmail.com

Parcel ID/PIN Number 964762675600000

ZONING INFORMATION

Current Zoning R-1

Maximum Roof Coverage 5,060 square feet (Up to 1.2 acres) Proposed Roof Coverage Total 610.5

Maximum Impervious Surface Coverage 1-3 acres (25 percent of lot area)

Proposed Impervious Surface Coverage 0

Front Yard Setback 60 feet (R-1 District) Side Yard Setback 20 feet (R-1 District)

Rear Yard Setback 25 feet (R-1 District)

Building Height

Description of the Proposed Project Roof Mounted Solar Electric System and Tesla Powerwall Battery

Estimated Start Date 10/12/2020

Estimated Completion Date 10/16/2020

Estimated Cost of Project \$35,537.00

Supporting Documentation (Site Plan, Drawings, Other Information) MSESQ8T_PERC-60_300-310W.pdf

Olesky Roof.pdf

34 black on black.JPG

Lot Size 1.26 Applicant Signature

Date 8/17/2020

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Special Use Permit Application

Town of Biltmore Forest

Name Samuel Olesky

Address 22 Cedarcliff Road

Phone (248) 943-5729 Email samuelolesky@gmail.com

Please select the type of special use you are applying for:

Accessory Structures

The applicant must show that the proposed use will not materially endanger public health or safety or injure value of adjoining or abutting property. In addition, the proposed use must be in general conformity with the plan of development of the town and be in harmony with scale, bulk, height, coverage, density, and character of the neighborhood.

Please provide a description of the proposed project:

Roof mounted solar electric system and tesla powerwall battery

Explain why the project would not adversely affect the public interest of those living in the neighborhood:

Much consideration was taken with which modules were proposed. The Mission Solar 310s were chosen because they matched the black roof that is being installed on the house. The placement of the modules was also important. They were placed in such a way as to maximize production, but also be less visible from Cedarcliff Rd.

I hereby certify that all of the information set forth above is true and accurate to the best of my knowledge.

Signature

Date 8/17/2020

MM

§ 160A-201. (Repealed effective January 1, 2021) Limitations on regulating solar collectors.

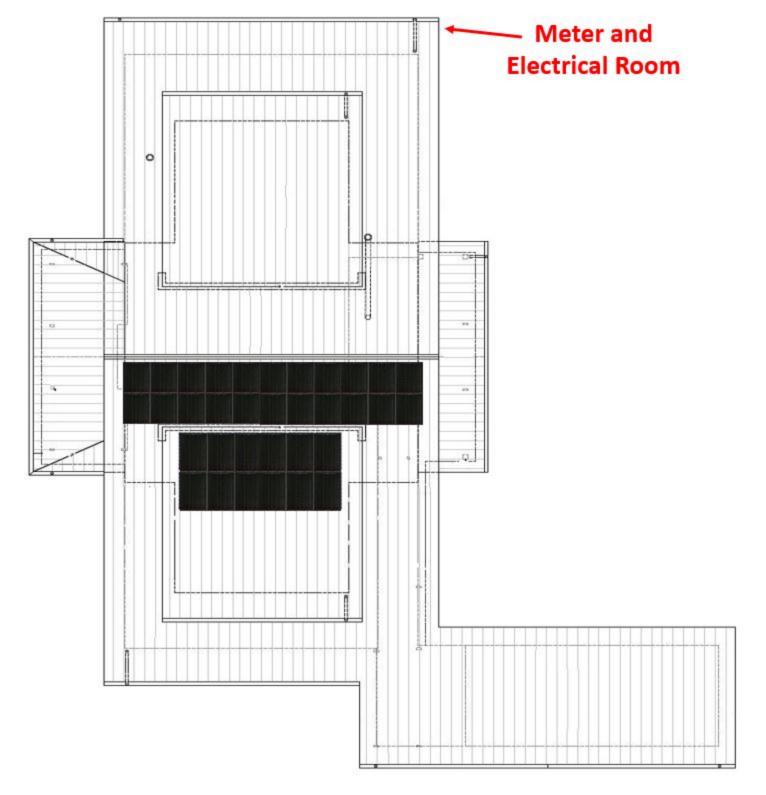
(a) Except as provided in subsection (c) of this section, no city ordinance shall prohibit, or have the effect of prohibiting, the installation of a solar collector that gathers solar radiation as a substitute for traditional energy for water heating, active space heating and cooling, passive heating, or generating electricity for a residential property, and no person shall be denied permission by a city to install a solar collector that gathers solar radiation as a substitute for traditional energy for water heating, active space heating and cooling, passive heating, or generating electricity for a residential property. As used in this section, the term "residential property" means property where the predominant use is for residential purposes.

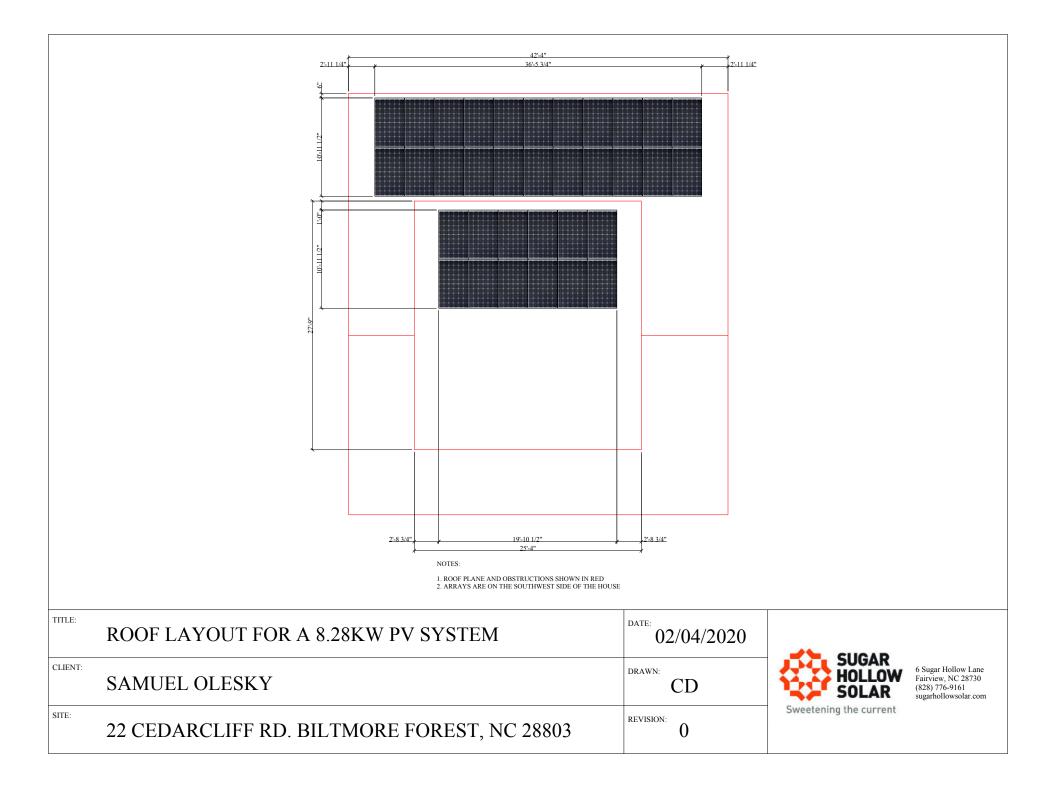
(b) This section does not prohibit an ordinance regulating the location or screening of solar collectors as described in subsection (a) of this section, provided the ordinance does not have the effect of preventing the reasonable use of a solar collector for a residential property.

(c) This section does not prohibit an ordinance that would prohibit the location of solar collectors as described in subsection (a) of this section that are visible by a person on the ground:

- (1) On the facade of a structure that faces areas open to common or public access;
- (2) On a roof surface that slopes downward toward the same areas open to common or public access that the facade of the structure faces; or
- (3) Within the area set off by a line running across the facade of the structure extending to the property boundaries on either side of the facade, and those areas of common or public access faced by the structure.

(d) In any civil action arising under this section, the court may award costs and reasonable attorneys' fees to the prevailing party. (2007-279, s. 1; 2009-553, s. 1; 2019-111, s. 2.6(g).)







300-31 **CLASS LEADING POWER OUTPUT**

18.65% MAXIMUM EFFICIENCY

0~+3% **POSITIVE POWER TOLERANCE**

High-Power, American Quality

Mission Solar Energy is headquartered in San Antonio, TX with module facilities onsite. We produce American quality poducts ensuring the highest power output and reliability to our customers. Our product line is well suited for residential, commercial and utility applications. Every Mission Solar Energy product is certified and surpasses industry standard regulations, proving excellent performance over the long-term.

MSE PERC 60

High Power PERC Rooftop Module All-black PERC with 5 busbar technology



CERTIFIED RELIABILITY

> Tested to UL1703 & IEC standards > PID Resistant



SUPERIOR AESTHETICS

> All-black design coupled with outstanding power output > Ideal for residential & commercial applications



EXTREME WEATHER RESILIENCE

- > 5631 Pa snow load (117 psf) tested load to UL1703
- > 185 mph wind rating*



BAA COMPLIANT FOR GOVERNMENT PROJECTS Buy American Act

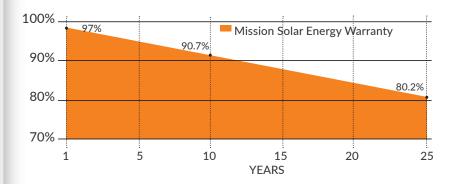
American Recovery & Reinvestment Act





LINEAR WARRANTY

PRODUCT WARRANTY



CERTIFICATIONS

IEC 61215/ IEC 61730/ IEC 61701 UL 1703



*As there are different certification requirements in different markets, please contact your local Mission Solar Energy sales representative for the specific certificates applicable to the products in the region in which the products are to be used.

*185 mph wind rating based upon installation at 30° or less fixed tilt mount



PERC 60

ELECTRICAL SPECIFICATIONS

Electrical Parameters at Standard Test Conditions (STC)

Module Type			MSE300SQ8T	MSE305SQ8T	MSE310SQ8T
Power Output	Pmax	Wp	300	305	310
Module Efficiency		%	18.05	18.35	18.65
Tolerance			0~+3%	0~+3%	0~+3%
Short-Circuit Current	lsc	А	9.571	9.664	9.760
Open Circuit Voltage	Voc	V	40.08	40.10	40.12
Rated Current	Imp	А	9.058	9.202	9.345
Rated Voltage	Vmp	V	33.12	33.14	33.17
Fuse Rating			15	20	20

TEMPERATURE COEFFICIENTS

Normal Operating Cell Temperature (NOCT)	46.09°C (±2°C)
Temperature Coefficient of Pmax	-0.377%/°C
Temperature Coefficient of Voc	-0.280%/°C
Temperature Coefficient of Isc	0.039%/°C

OPERATING CONDITIONS

Maximum System Voltage	1,000VDC
Operating Temperature Range	-40°C (-40°F) to +85°C (185°F)
Maximum Series Fuse Rating	20A
Fire Safety Classification	Class C
Front & Back Load (UL standard)	5631Pa (117 psf) Tested to UL1703 standard
Hail Safety Impact Velocity	25mm at 23 m/s

MECHANICAL DATA

Solar Cells	P-type Mono-crystalline Silicon (156.75mm)
Cell orientation	60 cells (6x10), 5 busbar
Module dimension	1664mm x 999mm x 40mm (65.53 in. x 39.33 in. x 1.58 in.)
Weight	18.2 kg (40.1 lb)
Front Glass	3.2mm (0.126 in.) tempered, Low-iron, Anti-reflective coating
Frame	Anodized aluminum alloy
Encapsulant	Ethylene vinyl acetate (EVA)
J-Box	Protection class IP67 with 3 bypass-diodes
Cables	PV wire, 1m (39.37 in.), 4mm ² / 12 AWG
Connector	MC4

SHIPPING INFORMATION

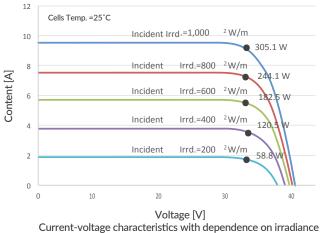
Container FT		Pallets	Panels	305 W	
53'	Double stack	36	936	285.48 kW	
40'	Double stack	28	728	222.04 kW	
	Panels	Weight	Height	Width	Length
Pallet	26	1,105lbs	45.50"	45.50"	67.00"

CLASS LEADING 300-310W

CERTIFICATIONS & TESTS

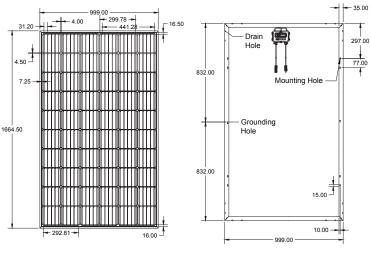
IEC		
61215 / 61730 / 61701		
UL		
UL 1703 listed		
	PowerGuard	CEC

MSE305SQ8T: 305WP, 60CELL SOLAR MODULE CURRENT-VOLTAGE CURVE



Current-voltage characteristics with dependence on irradiance and module temperature

BASIC DESIGN (UNITS: mm)



Front View

Back View

