

To: Members of the Board of Adjustment, Applicants &

Neighboring Property Owners

From: Jonathan B. Kanipe, Zoning Administrator

Date: April 3, 2019

Re: **Board of Adjustment Meeting – April 22, 2019**

Applicants:

You or your representative <u>MUST</u> be present at this meeting or your application will not be reviewed.

Members of the Board of Adjustment & the Zoning Administrator may visit the property prior to the meeting.

You or your representative **must** also attend the Design Review Board meeting on **Thursday April 25, 2019 at 5:30pm** to complete the approval process.

Certificates of Zoning Compliance will be issued after review and approval from the Board of Adjustment & Design Review Board.

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 Town Hall M-F 9am-5pm or online at http://www.biltmoreforest.org/board-of-adjustments.

You are invited to attend the scheduled meeting and make comment.

The following items of business are scheduled to be addressed by the Biltmore Forest Board of Adjustment on Monday, April 22, 2019 at 4:00 pm in the Town Hall Board Room.

- 1) The meeting will be called to order and roll call will be taken.
- 2) The minutes of the March 18, 2019 regular meeting will be considered.
- 3) Hearing of Cases (Evidentiary Hearings, Deliberations & Determinations):

Case 1: A Conditional Use Permit is requested for property located at 50 Chauncey Circle for installation of a solar array system.

4) Adjourn

MINUTES OF THE BOARD OF ADJUSTMENT MEETING HELD MONDAY, MARCH 18, 2019.

The Board of Adjustment met at 4:00 p.m. on Monday, March 18, 2019.

Members present: Goosmann, Chandler, Landau, Kieffer, and Pearlman. Mr. Jonathan Kanipe, Town Manager and Ms. Adrienne Isenhower, Town Planner, were also present.

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

Mr. Goosmann swore in the following:

Ms. Joyce Young Mr. Jon Moore Mr. Jonathan Kanipe Ms. Mary Dillon Moon

A motion was made by Mr. Robert Chandler to approve the minutes as amended for the February 11, 2019 meeting. The motion was seconded by Mrs. Lynn Kieffer. The minutes were unanimously approved.

HEARING (Evidentiary):

The first matter discussed was the relocation of a driveway gate and wall at 4 Southwood Road. Ms. Rhoda Groce shepherded the proposal for the Conditional Use Permit application related to an existing stone pier at the end of the existing driveway. Mr. Jon Moore from Griffin Architects described the project. The existing stone pier would be relocated 10 feet west and the wall attached to it would be rebuilt. The intent is to widen the driveway to allow large trucks to access the driveway and allow two large SUV size vehicles pass so that no vehicles are stuck in the road waiting on another car.

Chairman Goosmann asked how far the stone pier was from the road edge. Mr. Moore said the stone pier is 7 feet from the edge of pavement and is outside the Town's right of way of 5 feet.

Chairman Goosmann asked if this also would assist with site visibility for exiting the driveway and improve the safety of those exiting the driveway. Mr. Moore said yes, it makes getting out of the driveway much better due to increased visibility from having the trees removed. Mr. Charles Tesner, the Town Arborist approved the trees to be removed.

Mrs. Kieffer asked whether the stone would be reused to recreate the new wall. Mr. Moore said this was their intention and they want to make it look like it has not been changed.

Mrs. Joyce Young, 1 Frith Drive, had questions related to the provision of this driveway entrance column not being considered a wall. Mr. Kanipe addressed this by stating that the Town's dimensional requirement table allowed this as a Conditional Use permit and not variance. Mrs. Young restated the Town's existing ordinance related to driveway walls not being replaced in the front yard. Mr. Kanipe stated that the Ordinance's specific allowance for the Board of Adjustments to consider this as a Conditional Use overrode this portion.

DELIBERATION AND DETERMINATION:

Ms. Rhoda Groce summarized the facts. Ms. Melissa Hollmann of 4 Southwood Road is applying for a Conditional Use Permit for relocation of a driveway entrance column and wall. In order to widen the driveway 285 square feet, a column and a wall need to be relocated. Two poplars, a white pine, and a hemlock tree will be removed as well.

Ms. Lynn Kieffer made a motion to approve the Conditional Use Permit as requested be granted to Ms. Melissa Hollmann of 4 Southwood Road for relocation of a driveway entrance

column and wall and the facts as recited by Rhoda Groce and her summation be accepted as findings of facts to support this grant. The Board has inspected the site and no neighboring property owner has objected. Ms. Kieffer further moved that granting this Conditional 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 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. Chandler seconded the motion. All voted in favor and the project was approved unanimously.

The next meeting for the Board of Adjustments is scheduled for Monday, April 22, 2019 at 4:00pm.

The meeting was adjourned at 4:16 p.m.

ATTEST:		
Greg Goosmann	 Jonathan B. Kanipe	
Chairman	Town Manager	

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 Adjustments Members From: Jonathan Kanipe, Town Manager

Re: Board of Adjustments Case Number 1 (50 Chauncey Circle)

Date: April 12, 2019

Request for Conditional Use Permit for Installation of a Solar Array System

The applicant is requesting a Conditional Use Permit for a solar array system to be located on the front-facing roof of the house. The system will consist of 31 Solaria PowerXT 355-watt All-Black solar modules. The solar panels are considered an accessory structure by the zoning ordinance that requires application and approval of a Conditional Use Permit.

Limitations are placed on local government's ability to regulate placement of solar panels by state statutes. A few exceptions are provided when the panels are placed in areas of public access or on a downward sloping roof that faces common areas. The statutory language is found in § 160A-20 Limitations on regulating solar collectors and reads as follows:

- (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.)

Zoning Compliance Application

Town of Biltmore Forest

Name

Thomas Tachovsky

Address

50 Chauncey Circle

Phone

(508) 230-2746

Email

tgtachovsky64@gmail.com

Parcel ID/PIN Number

964660732600000

ZONING INFORMATION

Current Zoning

R-3

Lot Size

.99

Maximum Roof Coverage

2,874 square feet (Up to .5 acres)

Proposed Roof Coverage Total

420

Maximum Impervious Surface Coverage

27.5 percent of lot area (Up to 1 acre)

Proposed Impervious Surface Coverage

No change

Front Yard Setback

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

Side Yard Setback

15 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)

No buildings or structures may be located within these setback areas. A variance application is required if your project requires encroachment upon the setback.

Description of the Proposed Project

Installation of solar panels on south facing roof.

Bones &

Estimated Cost of Project

\$30,000.00

Estimated Completion Date

6/1/2019

Applicant Signature

Supporting Documentation (Site Plan, Drawings, Other Information) Tachovsky solar system proposal (2019).pdf

Conditional Use Permit Application

Town of Biltmore Forest

Name

Thomas Tachovsky

Address

50 Chauncey Circle

Phone

(508) 230-2746

Email

tgtachovsky64@gmail.com

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

Home Occupations

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:

Installation of solar panels on the front-facing roof of existing home.

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

The solar panels will be situated on the roof of our home. The panels are unobtrusive, do not impact other's property and are manufactured of non-toxic materials. Our neighbors have been canvassed and have no objection.

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

Signature

Date

2/27/2019

39 American Way Fletcher, NC 28732 828-552-4851

Date: 1/24/19

Expires: 2/24/19

PROPOSAL

Customer: Tom Tachovsky Address: 50 Chauncey Circle

Asheville, NC 28803

Phone #: 508-801-4153

Dear Mr. Tachovsky,

Thank you for taking the time to review this solar system proposal for your property located in 50 Chauncey Circle. We appreciate the opportunity to propose this state of the art solar renewable energy system. This system provides the best available opportunity to reduce your energy consumption and save money through the use of renewable energy. Solar is one of the most cost-effective ways to take control of your energy future with a sustainable resource and provide a positive return on investment.

Why should you consider a Turnkey Solar Solution from Asheville Solar Company?

- Asheville based, locally owned and operated
- Great Return-On-Investment
- Lower your energy cost
- Environmentally sustainable
- Take control of your energy future

You will find Asheville Solar Company to be a worthy partner for this exciting project. We will do all we can to earn your business by providing the best experience and best customer service from Asheville's local solar installer.

Sincerely,

Nate Pembleton
Owner/Operator



I. Solar Array Overview

We have designed a state of the art solar array to help power your home. The system is comprised of American made solar modules, industry leading inverter(s) and racking to aesthetically blend your solar array with your home. This proposal represents the best available product in the market that Asheville Solar Company can stand behind. Please review the listed major components and let us know if you have any question or desire alternative materials. We are vendor neutral however, the materials we are proposing are those we believe are best suited for your installation.

Your solar array will consist of 31 Solaria PowerXT 355-watt All-Black solar modules. The modules will be placed on your roof using an IronRidge Flush Mount Racking System. The racking will be attached to the rafter/trusses/decking under your roof with IronRidge Flashing Foot 2 flashing mounts to protect and seal your roof. The solar array will be wired into SolarEdge DC Optimizers that optimize the output of each panel and mitigate against shading. The optimizers/panels will then be connected to a SolarEdge inverter that converts the DC power from your solar panels into usable AC energy matching your utility supplied voltage and frequency. SolarEdge offers a monitoring service that connects your solar performance data to the internet. You will be able to watch your solar in action with details that allow for performance monitoring and environmental savings.

Major System Components

Component	Manufacturer/Model	Quantity	Warranty
Solar Module	Solaria PowerXT 355w module	31	25 year performance 20 year workmanship
Inverter	SolarEdge SE10000H-US	1	25 year
Optimizers	SolarEdge P370	31	25 year
Racking	IronRidge Flush Mount System	As needed per system layout	20 year
Monitoring	SolarEdge monitoring	1	5,10,12 year

^{*}spec sheets attached to this proposal

The remaining equipment referred to as Balance of System (BOS) are the parts and pieces needed to create a code compliant and safe solar energy system. All materials and components supplied in this system will be acceptable and approved by our local authority and Utility.

^{**}material supply can vary. If exact materials are not available at time of order we will work with you to utilize an equal quality product to fulfill your project expectation.



II. Solar Production

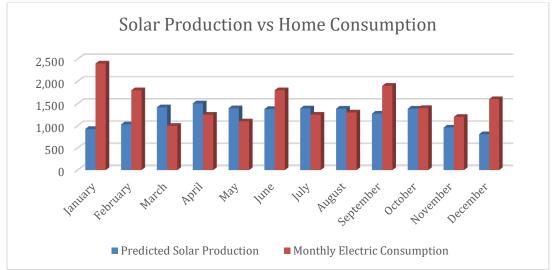
Solar energy produces electricity and is measured in kWh sent to your building or to the utility. Your solar array will be metered with a utility grade meter that tracks the exact amount of energy you produce. The method used to predict this production of electricity is based on several design factors.

Design factors:

- Total amount of solar modules measured in watts
- Orientation solar module direction toward the sun
- Location specific to Asheville region
- Shading effects
- System efficiency and quality

Our process for predicting your energy harvest starts with a system layout to determine your maximum solar potential in total number of modules. We orient these modules toward the south with the best angle that makes sense for your site and location. The system parameters are inputted into Solar Pathfinder's software which utilizes local weather data, the roof pitch, the roof's orientation (azimuth) to south, the specific panel(s) and inverter(s) to predict system output. We use some of the most efficient solar modules and inverters which increase your system efficiency. Your actual production will vary from year to year due to inclement weather patterns but you should see an average of what is predicted.

We have provided an estimate showing the total kWh produced each year. There are several assumptions inserted into the model to make it accurate but all estimate are conservative.



Annual Solar Production ~ 10,769 kWh/year

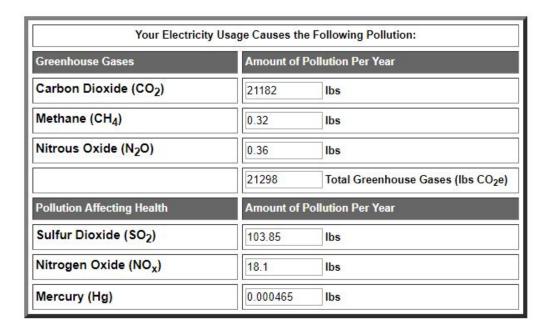
Solar System Efficiency ~ 84%

Electrical Offset $\sim 60\%$



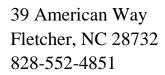
III. Environmental Attributes

Your solar array will create a positive impact on the environment. Below we have some interesting facts on how much carbon pollution and health related pollution your system will mitigate per year.



Additionally, your solar array will provide the equivalent offsets equal to the following per year.







IV. Cost

Product Description: 11 kW DC Turn-Key Solar Photovoltaic System

System Includes: 31 - Solaria PowerXT 355w modules

1 - SolarEdge SE10000H-US inverter

1 – Inverter warranty upgrade to 25 years

31 - SolarEdge P370 optimizers

1 – SolarEdge monitoring

1 – IronRidge flush mount racking system

BOS to tie the system into the home

Sizing and Design: General Contractor Licensing - # 76074

> Electrical Contractor Licensing (all electrical work will be completed by Electra City Solutions. – license # 29783)

Electrical permit

Engineers' letter and stamp

Building permit

Inspection

Installation: Lifetime - parts and labor warranty from faulty installation

System Cost: \$29,500 (\$2.68/watt)

Duke Rebate: \$6,000

Federal Tax Credit: \$7,050

Net After Incentive: \$16,450*

> *ASC is not responsible for the accuracy of this calculation, please consult a CPA for an accurate portrayal of the incentives impact*



V. Incentive and Rebates

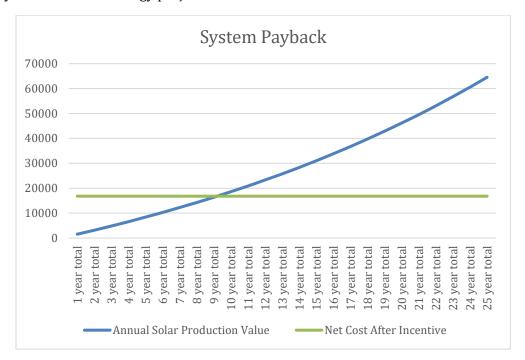
Solar energy offers a variety of advantageous tax incentives to help you realize additional savings for your new energy system. The incentives presented today can change. The Federal tax credit is currently at 30%. The incentives listed below are currently available for you at your listed location.

Please review the listed incentives and rebates and determine your family's ability to utilize them. Your ability to use these credits is critical to the financial viability of your project. We ask that you provide this information to your tax advisor.

Incentives

- Federal Tax Credit (30%) http://programs.dsireusa.org/system/program/detail/1235
- Property Tax Abatement
 http://programs.dsireusa.org/system/program/detail/3036
- Duke Solar Rebate \$.60/watt up to \$6.000

The website <u>www.dsireusa.org</u> is a great resource for finding incentives for all types of energy efficiency and renewable energy projects.



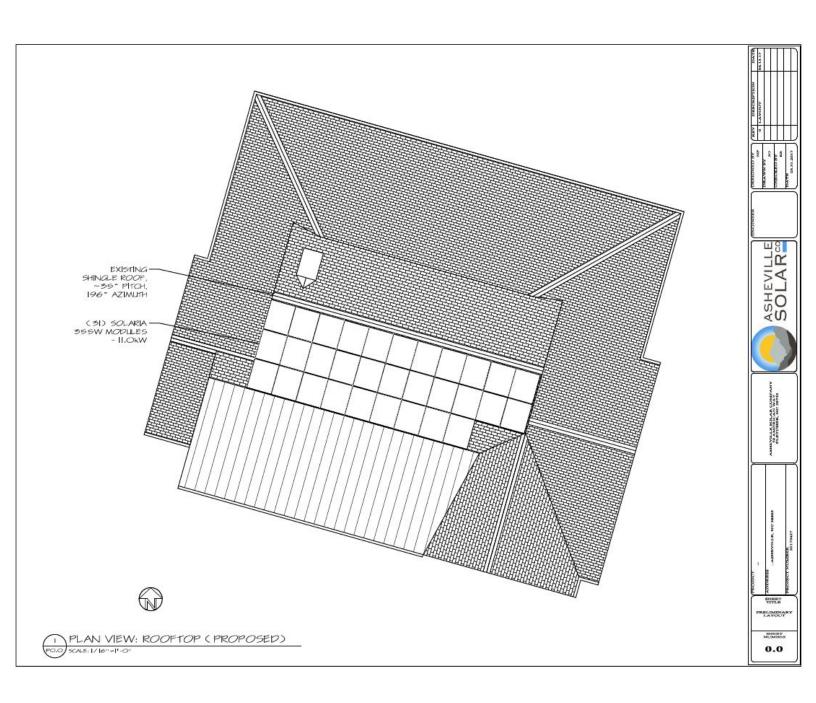
Projected Payback (ROI):

8/9 years if you can fully utilize the Federal tax incentive and based on the Duke rebate.

^{*}ÁSC is not responsible for the accuracy of the payback projections, please consult a CPA for an accurate portrayal of the incentives impact*



VI. Layout





VII. Experience



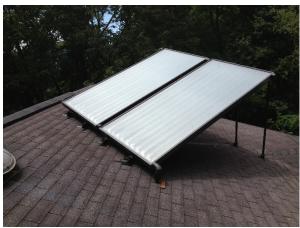


VIII. References

Joe and Dot Sulock - 828-253-5513

"This small, local firm is very user-friendly and very knowledgeable. My brother, an expert, was very impressed by all the specs. We are all impressed by the final systems. The solar hot water provides all of our hot water most of the summer and the PV provides as much electricity as we use on an annual basis. Because of Duke's strange timing on the accounting and their linkage fee (fair), we end up paying them a little for electricity each year. We save 2 lbs/kWh (the CO2 emissions of coal) for about 7000 kWh/year of electricity, which is 7 tons of CO2 per year, not even counting the hot water. And it is profitable, not costly."





Bill and Laura Winterhalter - 828-989-0846

"After weighing the pros and cons of solar energy we chose to take the step and go solar for our entire home. Choosing Asheville Solar helped make the decision that much easier. After talking with Nate we became much more aware of the impact on going solar would be on our lives. Nate explained in detail of what we needed in solar panels and what to expect from our investment on going green on energy. Nate and his crew are outstanding in their work ethics and making sure the job is done correctly and all questions were answered. Thank you Asheville Solar."







Bob Thompson - 828-645-0208

"We contracted with Asheville Solar last year to install 8000 watts of solar panels. I did a lot of research on the subject and decided that their approach was the best. The job went well and we frequently have a \$12/month electric bills (the connect charge) with no energy purchased. I am very glad we did this as working with Nate and his crew was a pleasure. The quality of their work is outstanding. I highly recommend this firm!"





Michael Fleenor - 205-937-6561

"As part of a 2015 AVL area green energy program that included pre-vetted solar installers (companies that the program would stake their reputation to support), AVL Solar (Nate Pemberton) was assigned to me. He was very professional yet personable. His estimates of solar power generation were accurate (in fact, 102% of the estimated amount), his availability and ability to explain the effect of credits and payback excellent, and the work was done on-time, efficiently (something that is not assured in this area of NC) and total costs very competitive. He has also been available for service after the sale, which has not been related to the installation but rather to questions about how to read Duke's monthly net power production and charges (not intuitive at all) associated with it. I would highly recommend his company."







Jeff Byrum & Beverly Kimble - 828-575-9418

"We contracted with Asheville Solar Company for a rooftop PV panel solar system, and we couldn't be happier. We're now generating close to half of the electricity we use, with a fairly modest size system (5.78 kW). But equally important, these guys are perfectionists: they were well-organized, did a real quality job from beginning to end, and delivered on time. The owner, Nate, walked us through and handled all the paperwork, explained everything, and answered all our questions. And they continue to track our system's status via the internet to make sure everything is working optimally. Read the "Our Story" page on their website -- you couldn't do better than Asheville Solar!"



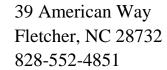


Brenda Dobashi - 828-242-3662

"Asheville Solar Company installed the photovoltaic solar system on our house over a year ago. We got an estimate from another company, but Nate's knowledge for all things solar and his patience in listening and explaining things to us made the choice to use Asheville Solar pretty easy. The installation was how we wish every household repair/renovation/improvement could be. The whole crew obviously takes a lot of pride in what they do. They were friendly, professional and very conscientious about their work. We highly recommend Asheville Solar Company for all your solar needs. GO SOLAR!"









Solar Energy System Installation Contract

This Contract for Services is made between Asheville Solar Company LLC, 39 American Way Fletcher, NC 28732, 828-552-4851 (hereinafter referred to as Contractor), and Tom Tachovsky, 50 Chauncey Circle Asheville, NC 28803, 508-801-4153 (hereinafter referred to as Owner).

Owner is contracting for work to be performed according to the following terms and specifications.

- **1. Location.** The proposed system will be located at: The Tachovsky residence, 50 Chauncey Circle Asheville, NC 28803.
- **2. Scope of Work**. Permitting, design, installation and commissioning of a 31-panel 11 kW DC Solar PV System as described in the proposal. A structural evaluation will be performed by a licensed engineer. Any structural reinforcements/improvements will be completed at the expense of the Owner. If the cost of the proposed measures from the engineer are deemed too high by the Owner this contract can be voided at that time and a sum of \$1,000 will be owed to Contractor. The system will be permitted under NC GC license # 76074. All electrical work will be completed by Electra City Solutions license # 29783.
- **3. Contract Price**. The price for this installation is \$29,500.00 and includes all materials, labor, taxes, permits and subcontractor fees.
- **4. Timeline.** Installations generally last 3-4 days. Installation generally start within 1-2 month from contract signing.

5. Payment Terms.

- a. The sum of \$8,850.00 (30%) is due at contract signing.
- b. The sum of \$8,850.00 (30%) is due upon commencing onsite work.
- c. The sum of \$8,850.00 (30%) is due upon passed final inspection.
- d. The sum of \$2,950.00 (10%) is due upon final commissioning of the system.
- e. Owner agrees to pay, after 30 days of completion, a 1.5% service charge per month on any unpaid balance.
- f. In the event that any obligations as a result of this contract are placed with an attorney for collection, Owner agrees to pay all costs of collection, including reasonable attorney fees.



39 American Way Fletcher, NC 28732 828-552-4851

6. Owner Responsibility.

- a. Owner to provide adequate access to the site for Contractor's personnel and equipment.
- b. Owner to provide access to a toilet for the duration of this Contract.
- c. Owner to provide access to potable water source.
- d. Owner to provide access to a source of 110-120 v. electrical service.
- **7. Odors and Smells**. Through the duration of the services, unusual odors and smells may occur due to the removal and/or disturbance of site debris, deconstruction or from products used in the installation.
- **8.** Warranty. This warranty applies to any solar energy system installed by Asheville Solar Company LLC. (ASC). This warranty covers the installation labor and/or faulty component installation for the life of the solar system. If during this period a malfunction of any system component occurs due to faulty installation, ASC will repair or replace the component at no charge. If a component is under warranty, ASC will advise the system owner as to claims procedures for that component. ASC cannot process warranty claims as that must be done by the system owner.
- **9. Remedies.** In addition to any and all other rights a party may have available according to law, if a party defaults by failing to substantially perform any provision, term or condition of this Contract and proposal (including without limitation the failure to make a monetary payment when due), the other party may terminate the Contract by providing written notice to the defaulting party. This notice shall describe with sufficient detail the nature of the default. The party receiving such notice shall have thirty (30) days from the effective date of such notice to cure the default(s). Unless waived by the party providing notice, the failure to cure the default(s) within such time period shall result in the automatic termination of this Contract and proposal.
- **10. Entire Agreement.** This Contract and proposal contains the entire agreement of the parties, and there are no other promises or conditions in any other agreement whether oral or written concerning the subject matter of this Contract and proposal. This Contract and proposal supersedes any prior written or oral agreements between the parties.
- **11. Amendment**. This contract and proposal may be modified or amended in writing if the proposed changes are agreed upon and signed by the parties and prior to the start of Services. After Services begin, any alteration or deviation from the above terms and conditions which involves additional costs in labor and or materials will require a written Change Order signed by both parties. Payment for the original contracted amount shall NOT be contingent upon the completion of work outlined in the Change Order.
- **12. Severability.** If any provision of this Contract and proposal are held to be invalid or unenforceable for any reason, the remaining provisions will continue to be valid and enforceable. If a court finds that any provision of this Contract is invalid or unenforceable, but by limiting such provision it would become valid and enforceable, then such provision will be deemed written, construed and enforced as so limited.



39 American Way Fletcher, NC 28732 828-552-4851

Signature	Date	Signature	Date
Ву		Ву	
Owner: Tom Tachovsky		Contractor: Asheville Solar Company, LLC	
15. Governing Law . This Contract of North Carolina.	and proposal shall b	e construed in accordance with the laws of the	State
consent of the other party, which ap		chis Contract and proposal without prior writte unreasonably withheld.	:I1
14 Assignment Noither party many	y accion or transfor t	his Contract and proposal without prior written	n
sufficiently given if delivered in pers	son or by certified m	ermitted under this Contract and proposal sha nail, return receipt requested, to the addresses party may have furnished to the other in writin	set
42 Nation Assessment		annith don don this Contract and annual about	11 1