

CERTIFICATE OF APPROPRIATENESS PLACARD

for Raleigh Historic Resources

Project Description:

Install solar panels

1101 Haynes St 1103 Haynes St 1111 Haynes St

Address

Historic District

Pilot-Crompton Mill

Historic Property

COA-0128-2020

Certificate Number

8/27/2020

Date of Issue

2/27/2021

Expiration Date

This card must be kept posted in a location within public view until all phases of the described project are complete. The work must conform with the code of the City of Raleigh and laws of the state of North Carolina. When your project is complete, you are required to ask for a final zoning inspection in a historic district area. Telephone the RHDC office at 832-7238 and commission staff will coordinate the inspection with the inspections Department. If you do not call for this final inspection, your Certificate of Appropriateness is null and void.

Signature,

Raleigh Historic Development Commission

Pending the resolution of appeals, commencement of work is at your own risk.

Type or print the following:					
Applicant name: Carrie Ehrfurth					
Mailing address: PO Box 12929					
City: Raleigh	State: NC	_	Zip code: 27605		
Date: 08/10/2020 Date: 08/10/2020			aytime phone #: 919-434-1439		
Email address: cehrfurth@hedgehogholdings.com					
Applicant signature: Cauce Elifell					
	U				
Minor work (staff review) - one copy			Office Use Only		
Major work (COA committee review) - ten			Transaction #:		
copies			File #: COA-0128-2020		
Additions > 25% of building sq. footage		ie	Fee:		
New buildings			Amount paid:		
Demolition of building or structure			Received date:		
All other			Received by:		
Post approval re-review of conditions of					
approval					
Property street address: 1101 Haynes Street and 1111 Haynes Street					
Historic district:					
Historic property/Landmark name (if applicable): Pilot Mills					
Owner name: 1894 Building, LLC; 1903 Building, LLC; 1910 Building, LLC					
Owner mailing address: PO Box 12929, Raleigh, NC 27605					

and stamped envelopes for owners for all properties with 100 feet on all sides of the property, as well as the property owner.				
Property Owner Name & Address	Property Owner Name & Address			
Stephan & Molly Kiefer, 1174 Haynes Street	William Pearson Hardy, 1170 Haynes St			
Marshall & Patricia Jones, 1166 Haynes St	David Holt & Steven Corrado, 1162 Haynes St			
William & Christine Lynch, 1158 Haynes St	Theresa Harrell, 1154 Haynes St			
Larisa & Charles Lotz, 1150 Haynes St	Kimberly Wilson, 1146 Haynes St			
David Stella, 1142 Haynes St	Leslie Fox, 1138 Haynes St			
Kenzie Rakes & William Lutter, 1134 Haynes St	John & Jessica Donachy, 1130 Haynes St			

For applications that require review by the COA Committee (major work), provide addressed

I understand that all major work applications that require review by the Raleigh Historic Development Commission's COA Committee must be submitted by 4 p.m. on the date of the application deadline; otherwise, consideration will be delayed until the following committee meeting. An incomplete application will not be accepted.

Will you be applying for rehabilitation tax credits for this project? Yes No			Office Use Only Type of work: 50			
Did you consult with staff prior to filing the application? Yes No						
Dani	an Cuidalinas, alasa	eta the mallest to establish a fitte of	- in middings (wassy ship org)			
Section/Page	Topic	cite the applicable sections of the d				
	the state of the s	Brief description of work (attach additional sheets as needed).				
1.3.10	Site	Set Solar Panels to roof				
2.5.11	Roofs	II				
2.10.12	Sustainability and Energy Retrofit	II				
	2					
Certificate of Ap Please post the Certificate shall	propriateness. It is valid enclosed placard form not relieve the applican	d until $02/27/2021$ of the certificate as indicated at the bot	tom of the card. Issuance of a Minor Work from obtaining any other permit required by			
Signature (City	of Raleigh)		Date 08/27/2020			

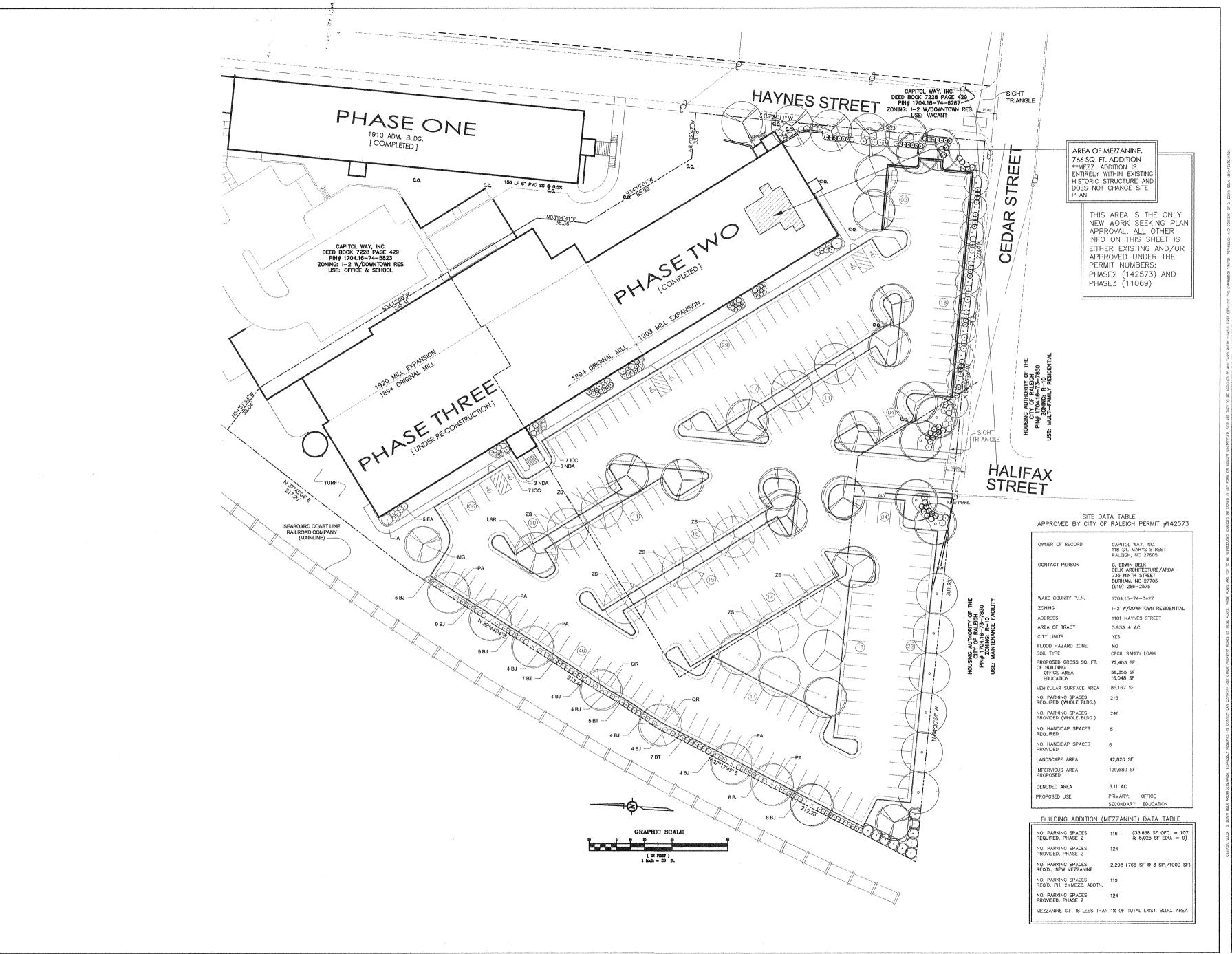
Minor Work COA Application

Pilot Mill 1101 and 1111 Haynes Street Raleigh, NC 27604

August 10, 2020

Description of Work

We propose to install solar panels on the roofs of the two buildings at Pilot Mill. The panels will be installed on flat roofs or roofs with a very shallow pitch. They will be set back off the edge of the roofs by four feet in a configuration shown on the attached plan. An attached brochure shows the mounting hardware and the panels. These are low profile panels that are about 2 inches thick. They sit on racking hardware that is 8.3" from the roof deck, so the panels will, at most, sit 11" above the surface of the roof.



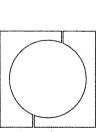


G. Edwin Belk Architecture 735 Ninth Street Durham, North Carolina 27705

> 919 . 286 . 2575 *phone* 919 . 286 . 1906 *facsimilie* ardabelk@mindspring.com



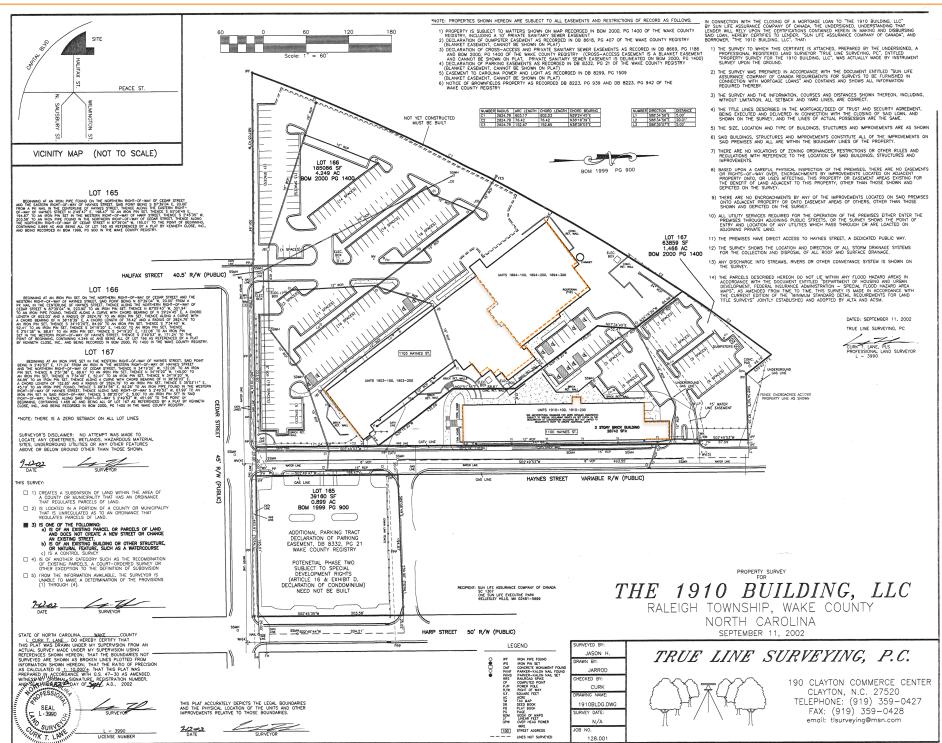
GAILOR & ASSOCIATES
** MEZZANINE ADDITION **
@PILOT MILL, RALEIGH, NC



Project PM_GAILOR_n
Date 05 APRIL 2001
Issued PERMIT
Revisions

Drawn By ARDA Content EXIST. SITE PLAN, PARKING PLAN, LANDSCAPING

SP1.0m







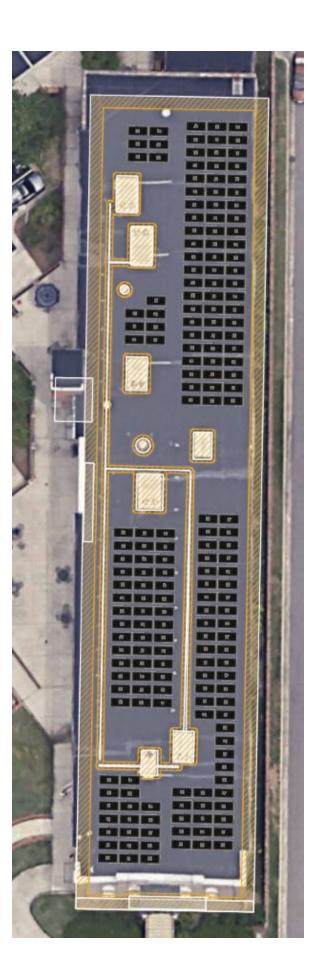
1894 and 1903 Buildings

Solar Panels are not visible on this section of roof.

-1894 Building 1903 Building

Panels are just slightly visible above the roof line along this elevation. It looks like 3-3.5 inches could be visible above the roofline depending on the viewer's vantage point.

Solar Panels are just slightly visible above the roofline along this elevation. Possibly 3-3.5" could be visible above the roofline.

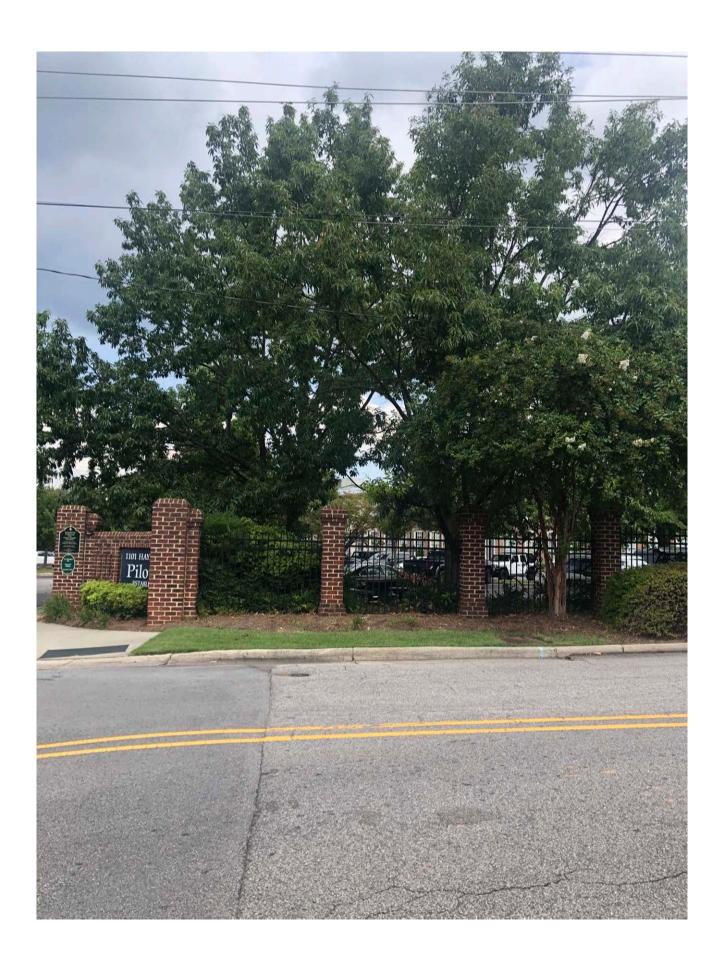


1910 Building:

Solar Panels are not visible above the roof line on this building.

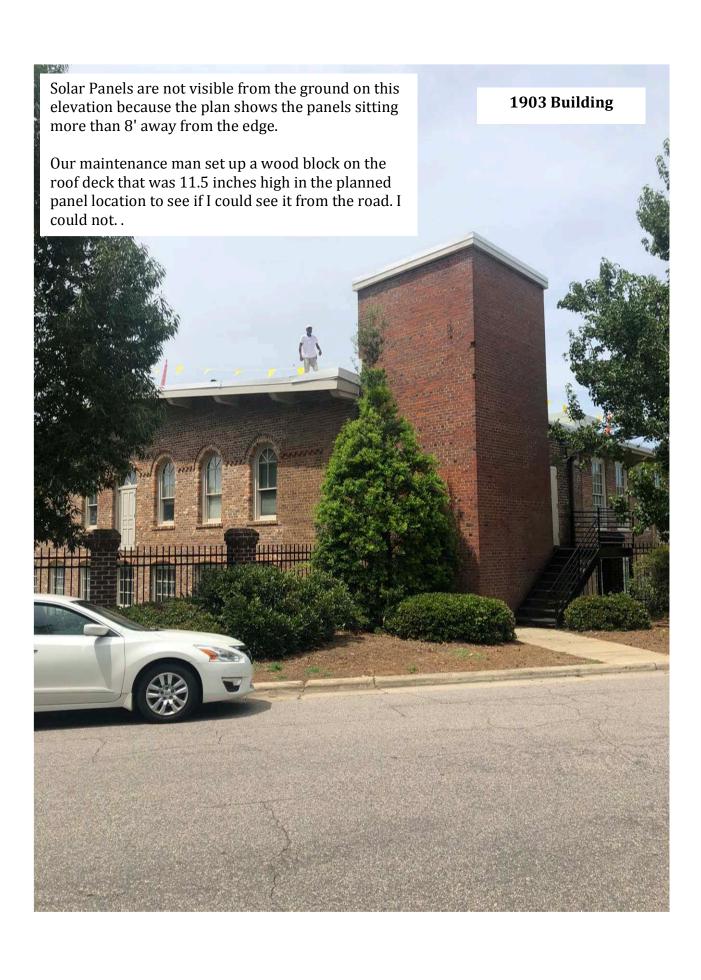


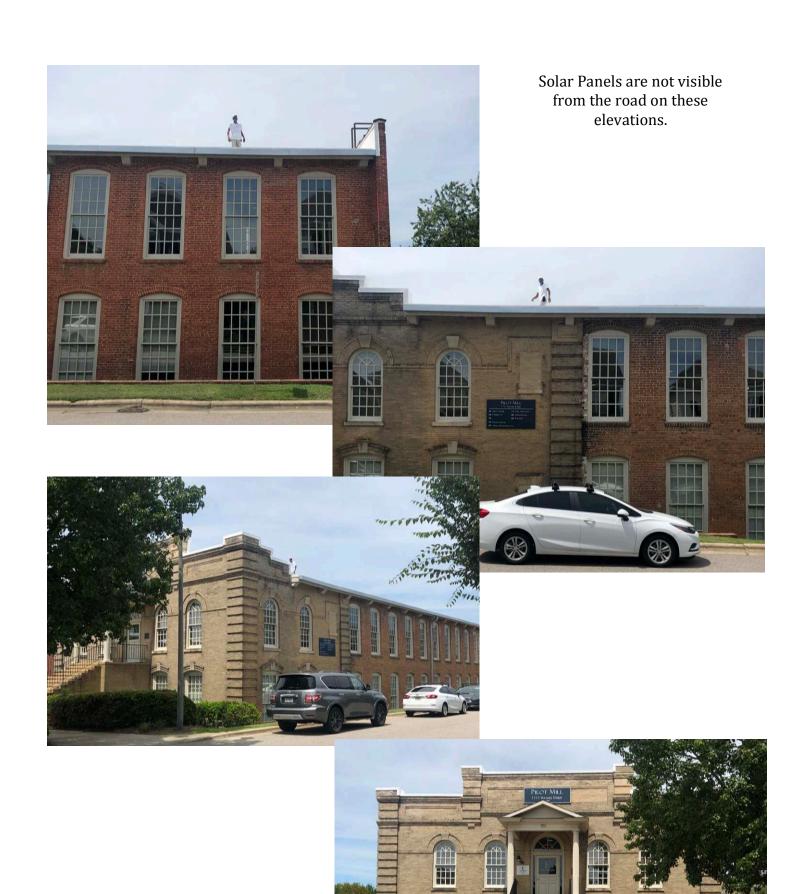
The Pilot Mill 1894 and 1903 Buildings are difficult to see from the road. The trees effectively screen the building from the street. I walked all the way around the building to see where they are visible and took the following photos.











1903 Building

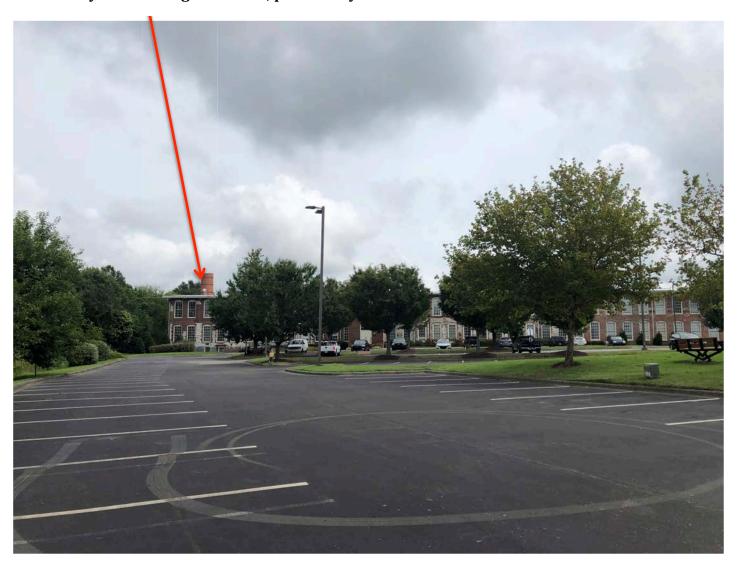


Handyman holding 9.5" block, panel not visible

1894 Building



Handyman holding 9.5" block, panels may be \sim 3 inches visible



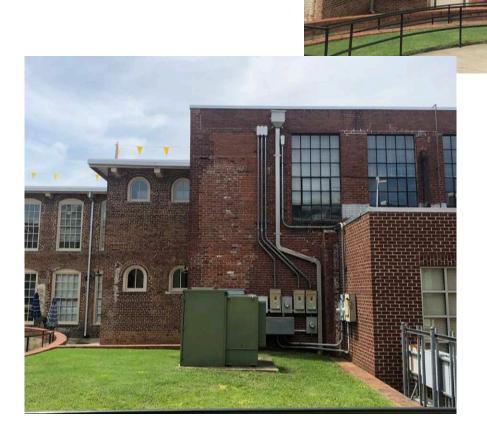


Solar Panels are not visible from the ground on these elevations.

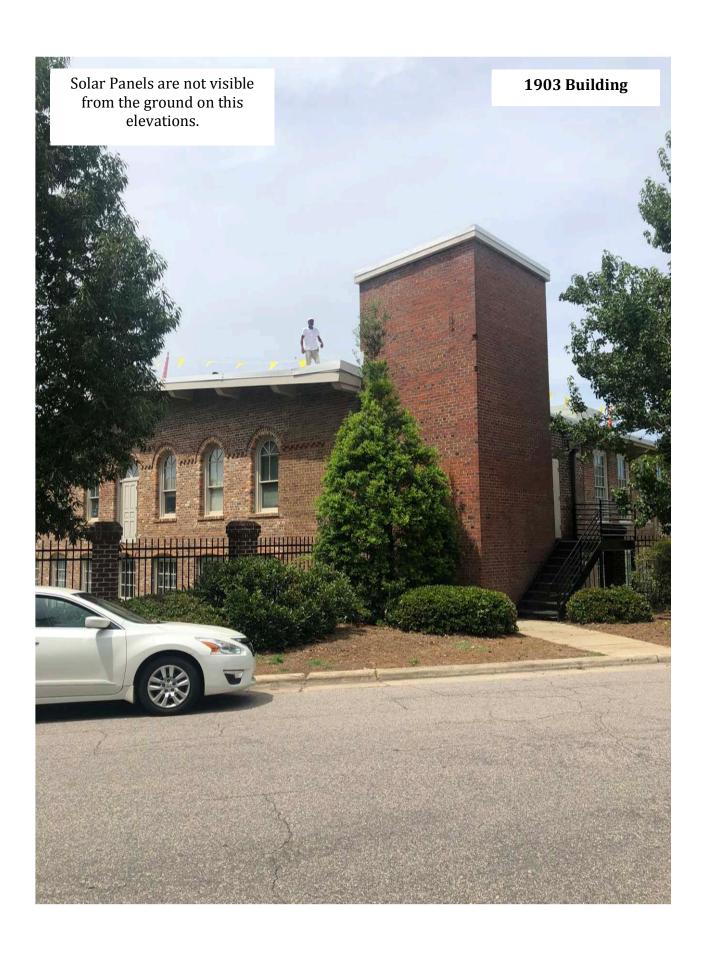




Solar Panels are not visible from the ground on these elevations.







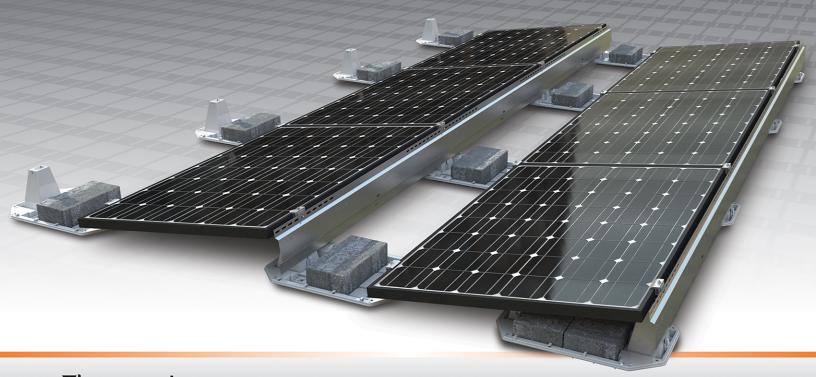




Ecofoot2t

The next step in the EcoFoot Line:

The PV installation professionals tested EcoFoot2, helped us find ways to make it better, and the result is EcoFoot2+°. More validation, fewer parts, and increased design flexibility.



Three main components (six with the push pin & nut)



The Foot

The white UL listed resin's heat deflection properties are an advantage on fully exposed roof tops.



Preassembled Universal Clamp

The new preassembled universal clamp achieves integrated grounding without the use of grounding washers.



Wind Deflector

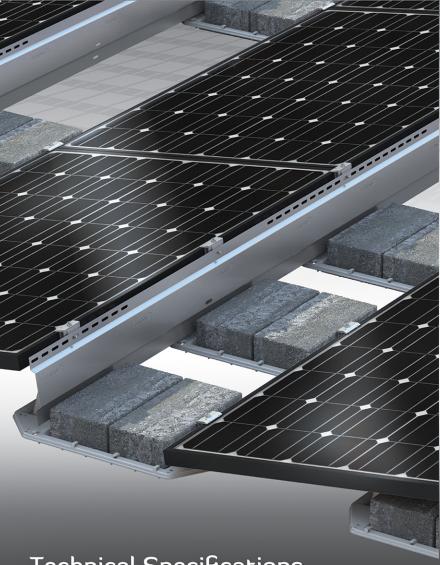
Our deflector is galvanized with a G90 steel or if you rather you can elect the aluminum option



Ecolibrium Solar[®]

EcoFoot2 + Installer Feedback = EcoFoot2+

The EcoFoot2+® design enhancements increase the product's ability to satisfy the most difficult site or rooftop conditions. The ability to tuck the foot or insert at any point along the module frame allows the system to work in tight spaces, distribute weight more evenly, or increase ballast capacity to support wind speeds up to 150mph.



System Benefits

- Low part count
- Rapid system deployment
- Preassembled Universal Clamp
- Increased design flexibility
- More ballast capacity

Validation Summary

- Fire Tested for commercial rooftops
- SEAOC Seismic Compliant
- Wind Tunnel and CFD Tested
- UL 2703 Qualified, Bonding/Grounding
- Structurally tested

Technical Specifications

Dimensions: 26.5"L x 18.25"W x 8.3"H

Weight: 4 lbs.

Module orientation: Landscape and Portrait

Module tilt angle: 5° & 10°

Module inter-row spacing: 18.5"

Roof pitch: 0°-7°

Ballast requirements: 4"x8"x16"

Warranty: 25 years





Ecofoot2+

Ballasted Racking System

Installer-Preferred for Low-Slope Roofs

Three Main Components.



Base

UL-Listed ASA based resin is a durable material commonly used for automotive and construction products. Wire Clips are built-in for easy wire management. Class A fire rated and UL2703 Certified.

Universal Clamp

The preassembled Universal Clamp is ready to go right out of the box. Simply drop the Clamp into the Base. Integrated Bond Pin achieves integrated grounding without the use of grounding washers. Fits 30-50mm module frames with a single component.

Wind Deflector

Corrosion-resistant wind deflector on every module helps minimize uplift, reduce ballast requirements and carries UL2703 validated ground path from modules and racking components.



Pure Performance

Unbeatable, Right Out of the Box.

No other racking products install flat roof arrays better than EcoFoot2+ Racking Solution. Installers prefer EcoFoot2+ because it's fast, simple, and durable. The line-up is unbeatable:

- Ready-to-go, preassembled components and simple installation
- No PV panel prep required: bases self-align
- Low-effort roof layout, just two chalk lines required
- No training required, 5-minute learning curve

Master the Most Challenging Rooftop



Stackable Bases fit up to 50kW of Bases delivered on a standard pallet.

System Benefits

- Low part count
- Rapid system deployment
- Preassembled Universal Clamp
- · Increased design flexibility
- More ballast capacity
- · Simplified logistics
- Ship up to 50kW per pallet

Validation Summary

- Certified to UL2703 Fire
 Class A for Type I and II modules
- Certified to UL2703
- Grounding and Bonding
- Wind tunnel tested to 150mph
- SEAOC seismic compliant
- CFD and structurally tested
- DNV GL rated at 13.5 panels per installer-hour



Commercial



Residential



Design Flexibility



Wire Management Built-In

Technical Specifications

Dimensions: 26.5"L x 18.25"W x 8.3"H Typical System Weight: 3.5–6 lbs. per sq. ft. Module orientation: Landscape/Portrait Tilt angle: Landscape 10°/Portrait 5° Module inter-row spacing: 18.9"

Roof pitch: 0° to 7°

Clamping range: 30-50mm

Ballast requirements: 4" x 8" x 16"

Warranty: 25 years

Slip sheets: not required by Ecolibrium Solar. If required by roofer, use 20"x29" under Base.



Ecolibrium Solar

740-249-1877 | www.ecolibriumsolar.com 507 Richland Avenue, Athens, OH 45701

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Morton, Erin

From: Morton, Erin

Sent: Thursday, August 27, 2020 10:15 AM

To: Carrie Ehrfurth

Cc: Tully, Tania; Kinane, Collette

Subject: COA-0128-2020 (1101 Haynes St) Minor Work

Attachments: Blue Placard.pdf

Carrie,

With the additional information provided, we have determined that the proposed work meets the Guidelines. The COA application for your project at 1101 Haynes Street has been approved. In order to limit the number of people entering the City office buildings, we'll be mailing you the signed application and blue placard. It is currently taking a bit longer for mail to be processed through our internal system, as well as the US Postal Service. In the meantime, please find a digital copy of the placard attached.

You should present the blue placard to the Development Services staff for any permits you may need related to this project. We also ask that the placard be posted in a publicly visible location on the property for the duration of the project work. Please let us know if you have any questions.

Best, Erin

Erin Morton

Preservation Planner II

City of Raleigh

Planning and Development

■ Raleigh Urban Design Center

919-996-2632 | raleighnc.gov

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From: Carrie Ehrfurth <cehrfurth@hedgehogholdings.com>

Sent: Wednesday, August 26, 2020 5:01 PM **To:** Morton, Erin < Erin. Morton@raleighnc.gov>

Subject: COA for solar at Pilot Mill

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you verify that the attachment and content are safe. If you believe this email is suspicious, please click the 'Phish Alert' link in the banner to report this message.

Thanks for your helpful message yesterday. I've talked to our team about the COA application and they have agreed convert it to a major works COA in the interest of time. We are providing the requested photos of the building from the parking lot as a courtesy and because the owner wishes to get this underway. We are up against a tight deadline to get under contract and get the panels before the end of the year. As I mentioned

before, our previous guidance from your office was that this would be a Minor Works COA and we relied on that fact in our planning timeline. Now we find ourselves facing the possibility that we may miss this window for the project as solar tax credits are changing next year and there is a growing scarcity issue with the panels.

With that in mind, may we please be put on the Sept. agenda? I submitted the original application to your office on 8/10 before the Sept. deadline, and we have been supplementing the application with additional information. It would make a tremendous difference to our project.

I've attached a pdf showing the photos you requested. You'll see that from different spots on our property, the panels may be just slightly visible (maybe 3" of the panels height). It is very minimal and less visually disruptive than the HVAC units that already sit on the roofs.

I truly appreciate all your help and guidance. Take care, Carrie

Carrie Ehrfurth

Hedgehog Holdings, LLC

PO Box 12929

Raleigh, NC 27605

(919) 755-2250 office

(919) 755-2251 fax

Morton, Erin

From: Morton, Erin

Sent: Tuesday, August 25, 2020 11:24 AM

To: Carrie Ehrfurth

Cc: Tully, Tania; Kinane, Collette

Subject: RE: COA-0128-2020 (1101 Haynes St) Minor Work

Carrie,

Thank you for providing some of the additional information needed. The explanation regarding the ballast anchoring system and clarification of total system height is particularly helpful. The RHDC's <u>Design Guidelines</u> for Raleigh Historic Districts and Landmarks is the document used to determine whether the work request is congruous with the historic character of the site. Staff is only able to approve applications at the minor work level which are not substantial, clearly meet the Design Guidelines, and are not of a precedent setting nature. The relevant paragraph in the <u>RHDC Bylaws</u> states: "Minor Work projects are reviewed by the staff. Staff will refer Minor Work projects to the COA Committee for review if in staff's judgment the change involves alterations, additions, or removals that are substantial, do not meet the quidelines, or are of a precedent-setting nature."

The number of solar panels proposed to be installed may be considered substantial in itself, as all solar panel COA approvals up to this point have been associated with a small number of panels installed on non-character-defining facades of smaller residential lots. Without definitive evidence that the solar panels requested will not be visible, staff is not able to approve the request as a minor work. Please provide the requested photographs demonstrating that the panels will not be visible. The other option is to go ahead and convert the application to a major work COA for the committee to review. The requested photographs would also be part of the required materials to consider the major work application complete. Let us know how you would like to proceed. Thank you.

Best, Erin

Erin Morton

Preservation Planner II

City of Raleigh

Planning and Development

Raleigh Urban Design Center

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----Original Message-----

From: Carrie Ehrfurth <cehrfurth@hedgehogholdings.com>

Sent: Monday, August 24, 2020 8:35 AM

To: Morton, Erin < Erin. Morton@raleighnc.gov>

Cc: Tully, Tania <Tania.Tully@raleighnc.gov>; Kinane, Collette <Collette.Kinane@raleighnc.gov>

Subject: Re: COA-0128-2020 (1101 Haynes St) Minor Work

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Hi Erin,

I tried calling you on Friday because I wanted to talk through a couple questions. I was giving the building owner an update on our COA status. He asked what guidelines are being applied to our application (he's an attorney). I have been referencing 2.5.11 and 2.10.12 in my conversations with him which specifically say panels shouldn't be visible from the street. Most of the photos you have requested are from the private parking lot for the building. I would appreciate you giving me the specific guideline(s) that applies so I can explain better to the owner and make sure I can keep moving this forward.

As for the additional information you requested:

- 1. A site plan showing the locations on the roof where there are parapet walls on both buildings.
- 2. A old landscaping plan.
- 3. The brochure showing the racking system. It is a system that is held down by ballast (shallow cinder blocks). The system is designed to sit on the roof without penetrating the building more than a few times. I have spoken to the panel provider and the height of the racking system + panel at its highest point is 9.5", and at its lowest point, it is 3.4".
- 4. All of the other equipment shown on the plans I originally sent is existing HVAC equipment.

Thank you and take care! Carrie

> On Aug 20, 2020, at 1:23 PM, Morton, Erin < Erin. Morton@raleighnc.gov > wrote:

>

>

Morton, Erin

From: Morton, Erin

Sent: Thursday, August 20, 2020 1:24 PM

To: Carrie Ehrfurth

Cc: Tully, Tania; Kinane, Collette

Subject: RE: COA-0128-2020 (1101 Haynes St) Minor Work

Attachments: Pilot Mill perspective photos.pdf

Carrie,

Please see attached for examples of the additional perspective photos we would like to see. Of primary concern is what may be visible along Haynes Street for the building that is not parallel with the street. We also need to see perspectives from the parking lot areas for each building. We need to be able to clearly determine that the final solar panel installation will not be visible from any of these areas in order to review the application as a minor work. Your aid in helping us make that determination is greatly appreciated.

The previously requested information of a full site plan for context and a roof plan identifying the areas where roof parapets or other edging materials sit higher than the finished roof surface, and how high above the roof surface they rise, would also be tremendously helpful. Please send the photographs and any additional materials at your earliest convenience. Thank you.

Best, Erin

Erin Morton

Preservation Planner II

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From: Carrie Ehrfurth <cehrfurth@hedgehogholdings.com>

Sent: Wednesday, August 19, 2020 3:01 PM **To:** Morton, Erin <Erin.Morton@raleighnc.gov>

Cc: Tully, Tania <Tania.Tully@raleighnc.gov>; Kinane, Collette <Collette.Kinane@raleighnc.gov>

Subject: Re: COA-0128-2020 (1101 Haynes St) Minor Work

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Hi Erin,

Thanks for working through this with me. This is a dream project we've long wanted to complete. In fact, we've discussed it with Tania twice when we explored the possibility in the past (2013 and 2019). In the past, panel costs were prohibitive, but the economics are finally in our favor.

I went out to Pilot Mill yesterday and today to look carefully at the visibility of the planned solar panels. Our understanding of the RHDC design guidelines are that panels should be installed so they are not visible from the street (Both 2.5.11 and 2.10.12 specifically state this). The trees around the perimeter of the Pilot Mill main parking lot make it very difficult to see the building and the roof of the building from the public streets. I've included photos from my walk around the 1894 and 1903 Building. I also included photos of the 1910 Building that is not screened by trees. My maintenance man (who you'll see in the photos) placed a 11.5" block in the planned locations of the solar panels at various points along the roofline, and I took photos to see if the panels would be visible. They were not. I've attached a pdf showing the photographs I took.

My two previous conversations with Tania regarding solar panels and the RHDC guidelines led us to believe that visibility from the street is the important limitation to the panel placement. This is also why we felt confident that this was going to be a minor works COA. We have based contract planning and negotiations on these facts, and I believe we are well within the guidelines for this project.

I appreciate your attention and consideration while we work out the details.

Take care! Carrie

Carrie Ehrfurth

Hedgehog Holdings, LLC

PO Box 12929

Raleigh, NC 27605

(919) 755-2250 office

(919) 755-2251 fax

From: Morton, Erin < Erin. Morton@raleighnc.gov>

Sent: Tuesday, August 18, 2020 12:06 PM

To: Carrie Ehrfurth <cehrfurth@hedgehogholdings.com>

Cc: Tully, Tania < Tania. Tully@raleighnc.gov >; Kinane, Collette < Collette. Kinane@raleighnc.gov >

Subject: RE: COA-0128-2020 (1101 Haynes St) Minor Work

Carrie,

That would be a great experiment to run. Our primary concern relates to the shallow gable roof visible from Haynes Street, but we really need to understand the potential visibility from all areas. We will look for your photos whenever you are ready.

Best, Erin

Erin Morton

Preservation Planner II

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From: Carrie Ehrfurth < cehrfurth@hedgehogholdings.com >

Sent: Tuesday, August 18, 2020 11:37 AM **To:** Morton, Erin < Erin. Morton@raleighnc.gov>

Cc: Tully, Tania <Tania.Tully@raleighnc.gov>; Kinane, Collette <Collette.Kinane@raleighnc.gov>

Subject: Re: COA-0128-2020 (1101 Haynes St) Minor Work

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Hi Erin,

Thanks so much for getting back to me about this. Our solar installation contractor felt that the panels would not be visible from street level as they must be set back from the edge of the roof by 4'. Today I'm going to go over and take some photos of an 11.5" block of wood set at 4' from the edge of the roof in various places around the buildings to test that assertion. I should be able to send you the resulting photos this afternoon.

Take care! Carrie

Carrie Ehrfurth

Hedgehog Holdings, LLC

PO Box 12929

Raleigh, NC 27605

(919) 755-2250 office

(919) 755-2251 fax

From: Morton, Erin < Erin.Morton@raleighnc.gov>

Sent: Tuesday, August 18, 2020 7:41 AM

To: Carrie Ehrfurth <cehrfurth@hedgehogholdings.com>

Cc: Tully, Tania <Tania.Tully@raleighnc.gov>; Kinane, Collette <Collette.Kinane@raleighnc.gov>

Subject: COA-0128-2020 (1101 Haynes St) Minor Work

Hi Carrie,

Thank you for submitting a minor work COA application. After completing an initial review, we are not able approve the work request as staff at the minor work level. The request does not clearly meet the RHDC's <u>Design Guidelines</u>, specifically Guideline 2.5.11. Although the installation of solar panels is listed as a minor work category in our list of work, due to the location and possible visibility of the panels, it has the potential to be a precedent-setting decision. It is potentially approvable by the COA Committee, but it requires an interpretation that staff cannot provide. We are able to convert the application to a major work on your behalf and it would be heard at the COA Committee's October 22nd meeting. Please let us know if you would like to pursue this option.

Some additional items that would be required in order consider the application complete are a scaled site plan, showing the two buildings to receive solar panels in context with the full site. Please also provide several contextual photographs of the buildings from all angles, including the adjacent streets and parking lots. On the diagram provided, it would be helpful to note the location of any parapets and their height from the roof surface.

Please also provide additional information on the solar panel equipment itself. The written description states that the panels will be 8" high, but the manufacturer's info provided states that the assembly reaches 11". How will the panels be mounted to existing roof? Is there any other equipment involved in the installation? If so, what are its dimensions, including height? It is difficult to tell from the diagram provided whether there is additional equipment proposed or if it is simply existing HVAC equipment.

Please let us know if you have any questions and how you would like to proceed. Thank you.

Best, Erin

Erin Morton

Preservation Planner II

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