



HISTORIC PRESERVATION COMMISSION

Marc Elrich
County Executive

Robert Sutton
Chairman

Date: October 4, 2024

MEMORANDUM

TO: Rabbiah Sabbakhan
Department of Permitting Services

FROM: Laura DiPasquale
Historic Preservation Section
Maryland-National Capital Park & Planning Commission

SUBJECT: Historic Area Work Permit #1088075 - Roof replacement and installation of roof-mounted solar panels

The Montgomery County Historic Preservation Commission (HPC) has reviewed the attached application for a Historic Area Work Permit (HAWP). This application was **Approved** by HPC Staff.

The HPC staff has reviewed and stamped the attached submission materials.

THE BUILDING PERMIT FOR THIS PROJECT SHALL BE ISSUED CONDITIONAL UPON ADHERENCE TO THE ABOVE APPROVED HAWP CONDITIONS AND MAY REQUIRE APPROVAL BY DPS OR ANOTHER LOCAL OFFICE BEFORE WORK CAN BEGIN.

Applicant: David and Bernice Blair
Address: 24001 Whites Ferry Road, Dickerson

This HAWP approval is subject to the general condition that the applicant will obtain all other applicable Montgomery County or local government agency permits. After the issuance of these permits, the applicant must contact this Historic Preservation Office if any changes to the approved plan are made. Once work is complete the applicant will contact Laura DiPasquale at 301.495.2167 or laura.dipasquale@montgomeryplanning.org to schedule a follow-up site visit.





HISTORIC PRESERVATION COMMISSION

HAWP #: _____ at: _____

submitted on: _____

has been reviewed and determined that the proposal fits into the following category/categories:

Repair or replacement of a masonry foundation with new masonry materials that closely match the original in appearance;

Installation of vents or venting pipes in locations not visible from the public right-of-way;

New gutters and downspouts;

Removal of vinyl, aluminum, asbestos, or other artificial siding when the original siding is to be repaired and/or replaced in kind;

Removal of accessory buildings that are not original to the site or non-historic construction;

Repair or replacement of missing or deteriorated architectural details such as trim or other millwork, stairs or stoops, porch decking or ceilings, columns, railings, balusters, brackets shutters, etc., with new materials that match the old in design, texture, visual characteristics, and, where possible materials, so long as the applicant is able to provide one extant example, photographic evidence, or physical evidence that serves as the basis for the work proposed;

Construction of wooden decks that are at the rear of a structure and are not visible from a public right-of-way;

Roof replacement with -compatible roofing materials, or with architectural shingles replacing 3-Tab asphalt shingles;

Installation of storm windows or doors that are compatible with the historic resource or district;

Repair, replacement or installation of foundation-level doors, windows, window wells, and areaways, or foundation vents, venting pipes, or exterior grills that do not alter the character-defining features and/or the historic character of the resource;

Construction of fences that are compatible with the historic site or district in material, height, location, and design;

Fence is lower than 48" in front of rear wall plane;

Construction of walkways, parking pads, patios, driveways, or other paved areas that are not visible from a public right-of-way and measure no more than 150 square feet in size;

Replacement of existing walkways, parking pads, patios, driveways, or other paved areas with materials that are compatible with the visual character of the historic site and district and that are no greater than the dimensions of the existing hardscape;

Construction of small accessory buildings no larger than 250 square feet in size that are not visible from the public right-of-way;

Installations of skylights on the rear of a structure that will not be visible from the public right-of-way, and would not remove or alter character-defining roof materials;

Installation of solar panels and arrays in locations that are not readily visible from the public right-of-way or that are designed so as to have a minimal impact on the historic resource or the historic district (e.g., systems that are ground-mounted in areas other than the front or side yard of a corner lot, located on accessory or outbuildings, on non-historic additions, or on rear facing roof planes);

Installation of car charging stations in any location on a property or in the right-of-way;

Installation of satellite dishes;

Removal of trees greater than 6" in diameter (d.b.h.) that are dead, dying, or present an immediate hazard.

Removal of trees greater than 6" in diameter (d.b.h.) in the rear of the property that will not impact the overall tree canopy of the surrounding district or historic site;

Replacement tree required as a condition; and,

Other minor alterations that may be required by the Department of Permitting Services post-Commission approval that would have no material effect on the historic character of the property.

Staff finds the proposal complies with Chapter 24A, the Secretary of the Interior's Standards for Rehabilitation, and any additional requisite guidance. Under the authority of COMCOR No. 24A.04.01, this HAWP is approved by Laurel D. Paquale on _____. The approval memo and stamped drawings follow.



APPLICATION FOR HISTORIC AREA WORK PERMIT HISTORIC PRESERVATION COMMISSION 301.563.3400

FOR STAFF ONLY: HAWP# 1088075 DATE ASSIGNED

APPLICANT:

Name: David and Bernice Blair Address: 24001 Whites Ferry Road Daytime Phone: 202- 236- 4588

E- mail: berniceblair@icloud.com City: Dickerson Zip: 20842 Tax Account No.: 01570861

AGENT/CONTACT (if applicable):

Name: Thomas J. Taltavull, architect Address: 20650 Plum Creek Court Daytime Phone: 301-840-1847

E-mail: tom@tjtarchitects.com City: Gaithersburg Zip: 20882 Contractor Registration No.:

LOCATION OF BUILDING/PREMISE: MIHP # of Historic Property M-16-9

Is the Property Located within an Historic District? Yes/District Name No/Individual Site Name Annington

Is there an Historic Preservation/Land Trust/Environmental Easement on the Property? If YES, include a map of the easement, and documentation from the Easement Holder supporting this application.

Are other Planning and/or Hearing Examiner Approvals /Reviews Required as part of this Application? (Conditional Use, Variance, Record Plat, etc.?) If YES, include information on these reviews as supplemental information.

Building Number: 24001 Street: Whites Ferry Road

Town/City: Dickerson Nearest Cross Street:

Lot: Block: Subdivision: Parcel:

TYPE OF WORK PROPOSED: See the checklist on Page 4 to verify that all supporting items for proposed work are submitted with this application. Incomplete Applications will not be accepted for review. Check all that apply:

- Checklist of work types: New Construction, Addition, Demolition, Grading/Excavation, Deck/Porch, Fence, Hardscape/Landscape, Roof, Shed/Garage/Accessory Structure, Solar, Tree removal/planting, Window/Door, Other.

I hereby certify that I have the authority to make the foregoing application, that the application is correct and accurate and that the construction will comply with plans reviewed and approved by all necessary agencies and hereby acknowledge and accept this to be a condition for the issuance of this permit.

Signature of Thomas J. Taltavull

Sept. 25, 2025

Signature of owner or authorized agent

Date

HAWP APPLICATION: MAILING ADDRESSES FOR NOTIFYING
[Owner, Owner's Agent, Adjacent and Confronting Property Owners]

Owner's mailing address	Owner's Agent's mailing address
Adjacent and confronting Property Owners mailing addresses	

Description of Property: Please describe the building and surrounding environment. Include information on significant structures, landscape features, or other significant features of the property:

Description of Work Proposed: Please give an overview of the work to be undertaken:

REVIEWED
By Laura DiPasquale, M-NCPPC at 12:32 pm, Oct 04, 2024

APPROVED
Montgomery County
Historic Preservation Commission


Work Item 1: _____

Description of Current Condition:

Proposed Work:

Work Item 2: _____

Description of Current Condition:

Proposed Work:

REVIEWED
By Laura DiPasquale, M-NCPPC at 12:32 pm, Oct 04, 2024

APPROVED
Montgomery County
Historic Preservation Commission


Work Item 3: _____

Description of Current Condition:

Propo

**HISTORIC AREA WORK PERMIT
CHECKLIST OF
APPLICATION REQUIREMENTS**

	Required Attachments						
Proposed Work	I. Written Description	2. Site Plan	3. Plans/ Elevations	4. Material Specifications	5. Photographs	6. Tree Survey	7. Property Owner Addresses
New Construction	*	*	*	*	*	*	*
Additions/ Alterations	*	*	*	*	*	*	*
Demolition	*	*	*		*		*
Deck/Porch	*	*	*	*	*	*	*
Fence/Wall	*	*	*	*	*	*	*
Driveway/ Parking Area	*	*		*	*	*	*
Grading/Exc avation/Land scaing	*	*		*	*	*	*
Tree Removal	*	*		*	*	*	*
Siding/ Roof Changes	*	*	*	*	*		*
Window/ Door Changes	*	*	*	*	*		*
Masonry Repair/ Repoint	*	*	*	*	*		*
Signs	*	*	*	*	*		*



Maryland

DEPARTMENT OF PLANNING MARYLAND HISTORICAL TRUST

Historic Preservation Easement Program Change/Alteration Request Application

*This form is intended to be used by Maryland Historical Trust (MHT) Easement Property Owners and/or the Authorized Project Contact to initiate review of projects which require approval of the Director of the MHT as per the Deed of Easement. All **Change/Alteration Request Applications** must be submitted electronically (by email) along with pertinent supplemental information. Easement Program staff will evaluate the application for completeness and may require additional information to facilitate review by the Easement Committee and Director. The application review period (as specified by each Deed of Easement) will not commence until Easement Program staff has deemed the application to be complete.*

Return the **Change/Alteration Request Application**, and other information to:
Historic Preservation Easement Program
Maryland Historical Trust, 100 Community Place, Crownsville, MD 21032
mht.easements@maryland.gov

Easement Property Information

Name of Easement Property:			
Alternative Name:			
Address of Property:			County:
Maryland Inventory of History Places # (if known): (for more information visit http://mht.maryland.gov/research_survey.shtml)			
Scope of Easement: What does the Easement protect? (Check all that apply)	Exterior Interior Archaeology	Is the scope of work located inside an easement boundary?	Yes No

* For a copy of the easement document, please contact Kathy Monday (410) 697-9575 / kathy.Monday@maryland.gov

Property Owner Information

Name of Current Property Owner:			
Address of Property Owner: (If different than property address)			Purchase Date:
Work/Home Telephone:		Fax:	
Mobile Telephone:		Email:	

If application is completed by someone other than owner (only complete if applicable):

Name of Authorized Project Contact:			
Relationship to Owner:			
Address of Authorized Project Contact:			
Daytime Telephone:		Fax:	
Mobile Telephone:		Email:	

Project Funding Information:

<p>Is this project being funded by any of the following sources?</p> <p><i>Please check all that apply:</i></p>	<p>MHT Capital Grant (FY _____)</p> <p>MHT Loan</p> <p>MHAA Capital Grant (FY _____)</p> <p>AAHPP Grant (FY _____)</p> <p>Historic Tax Credits (Residential / Commercial)</p> <p>Bond Bill (Chapter _____ / Year _____)</p> <p>Other State/Federal Funding _____)</p> <p>Other Funding _____</p>
---	---

Please check that you have included the following information as part of your complete application:

<p><i>Required:</i></p> <p>Change/Alteration Request Application</p> <p>Detailed Work Description</p> <p>Printed Photographs & CD; properly labeled/identified</p>	<p><i>As Necessary (Recommended):</i></p> <p>Site Plan/Drawings/Plans (dated _____)</p> <p>Product Information/Specifications</p> <p>Other _____</p>
--	--

The Easement Property Owner and/or the Authorized Proposal Contact is encouraged to keep a duplicated copy of all application information sent to the MHT, including photos and plans, as the MHT staff may need to discuss the application with the applicant prior to submission to the Easement Committee.



Signature of Owner or Authorized Representative

August 19, 2024

Date

Detailed Work Description Form

(Include all construction, reconstruction, improvement, enlargement, painting and decorating, alteration, demolition, maintenance or repair, and excavation)

Work Item # _____

Architectural/Landscape Feature: Existing Barn	Describe, in detail, the proposed work and impact on existing feature: <i>Include details & specifications on proposed products</i>	
Approximate date of feature: 1930's		
Describe existing feature and its condition:	Photo no.	Drawing no.
Existing barn with wood siding and corrugated metal roofing. Existing barn is located approximately 100 feet east of main house.		

Work Item # _____

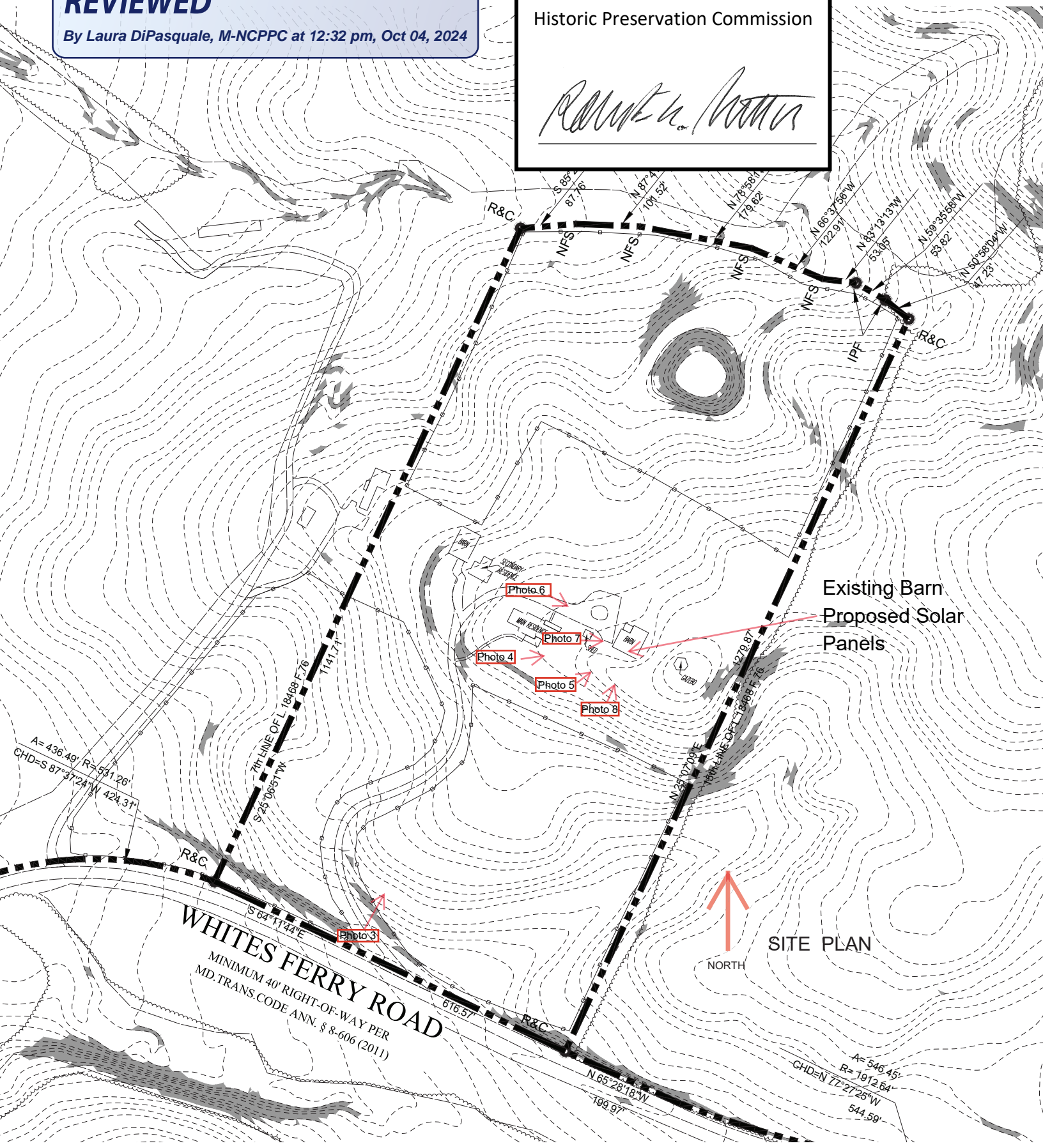
Architectural/Landscape Feature:	Describe, in detail, the proposed work and impact on existing feature: <i>Include details & specifications on proposed products</i>	
Approximate date of feature:		
Describe existing feature and its condition:	Photo no.	Drawing no.

REVIEWED

By Laura DiPasquale, M-NCPPC at 12:32 pm, Oct 04, 2024

APPROVED

Montgomery County
Historic Preservation Commission



Annington Site Plan SP1



Photo 1- Annington Aerial View looking Northeast -2023

REVIEWED

By Laura DiPasquale, M-NCPPC at 12:32 pm, Oct 04, 2024

APPROVED

Montgomery County

Historic Preservation Commission

A handwritten signature in black ink, which appears to read "Robert H. Norton". The signature is written in a cursive style and is positioned above a horizontal line.



Proposed Solar
Panel Location
on Barn Roof

REVIEWED
By Laura DiPasquale, M-NCPPC at 12:32 pm, Oct 04, 2024

APPROVED
Montgomery County
Historic Preservation Commission
Robert H. [Signature]

Photo 2 - Annington Aerial View Looking North 2023

APPROVED
Montgomery County
Historic Preservation Commission

REVIEWED
By Laura DiPasquale, M-NCPPC at 12:33 pm, Oct 04, 2024



Photo 3 - Annington View from Entrance Road - 2023

REVIEWED

By Laura DiPasquale, M-NCPPC at 12:33 pm, Oct 04

APPROVED

Montgomery County
Historic Preservation Commission

Rachel A. [Signature]



Photo 4 - Annington South Elevation of Main House and Barn - 2023

REVIEWED

By Laura DiPasquale, M-NCPPC at 12:33 pm, Oct 04, 2024

APPROVED

Montgomery County
Historic Preservation Commission



Photo 5 - Annington Southwest Elevation of Existing Barn October 2023

REVIEWED

By Laura DiPasquale, M-NCPPC at 12:33 pm, Oct 04, 2024

APPROVED

Montgomery County
Historic Preservation Commission



Photo 6- Annington West View of Barn - Sept. 2023

REVIEWED

By Laura DiPasquale, M-NCPPC at 12:33 pm, Oct 04, 2024

APPROVED

Montgomery County
Historic Preservation Commission



Photo 7- Annington SouthWest View of Barn - Sept. 2023

REVIEWED

By Laura DiPasquale, M-NCPPC at 12:33 pm, Oct 04, 2024

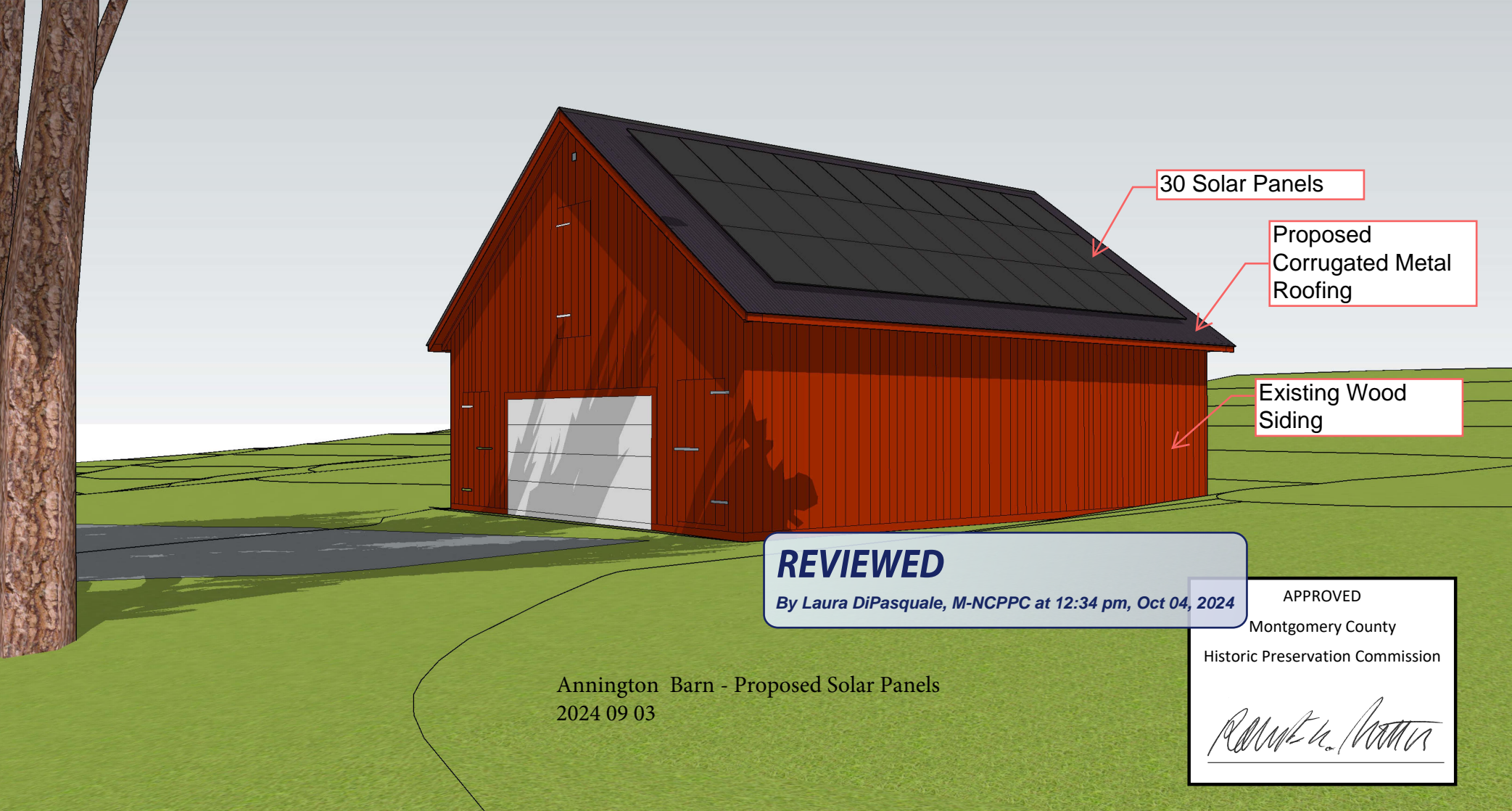
APPROVED

Montgomery County
Historic Preservation Commission





Photo 8- Annington South View of Barn - Sept. 2023



30 Solar Panels

Proposed
Corrugated Metal
Roofing

Existing Wood
Siding

REVIEWED

By Laura DiPasquale, M-NCPPC at 12:34 pm, Oct 04, 2024

APPROVED

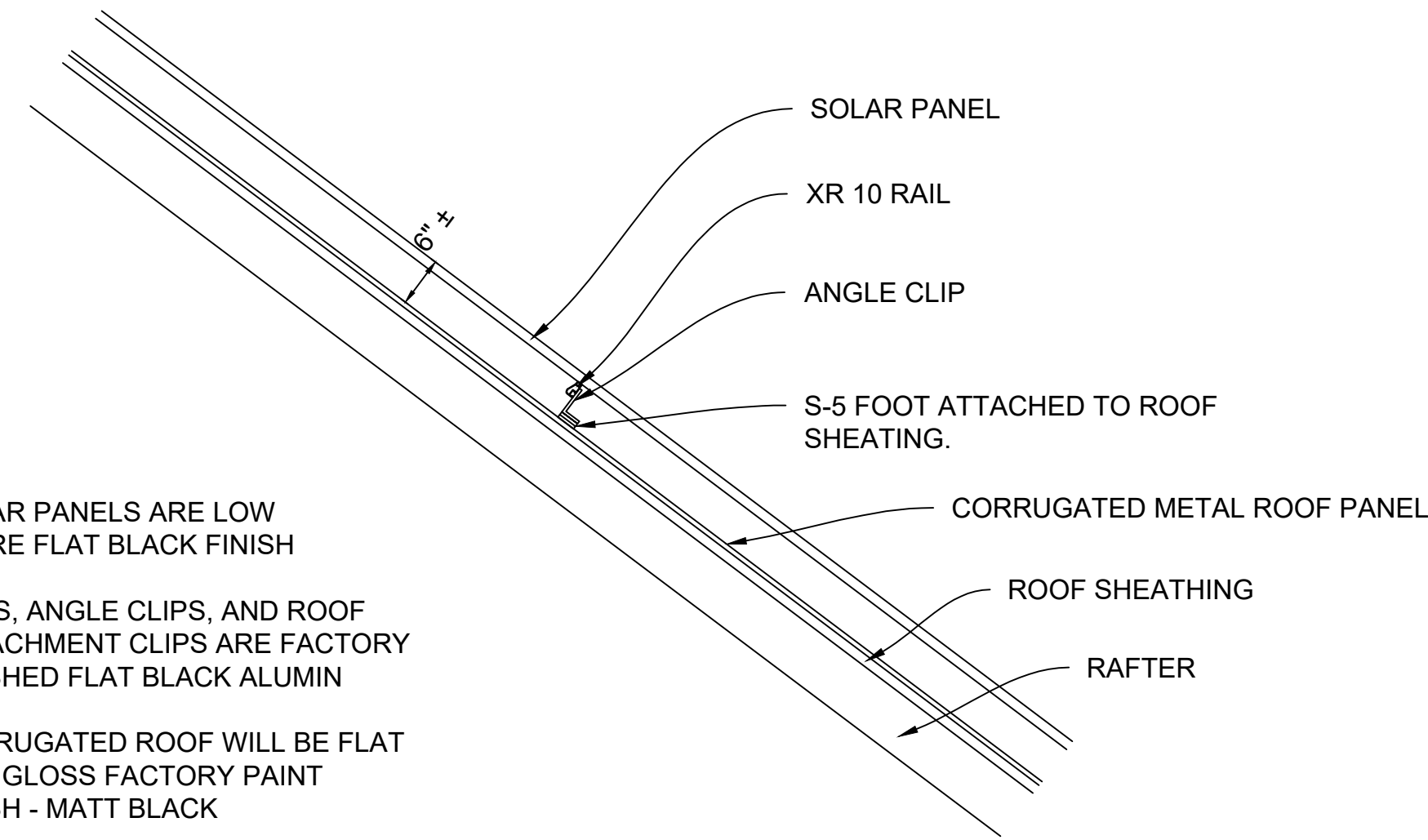
Montgomery County

Historic Preservation Commission

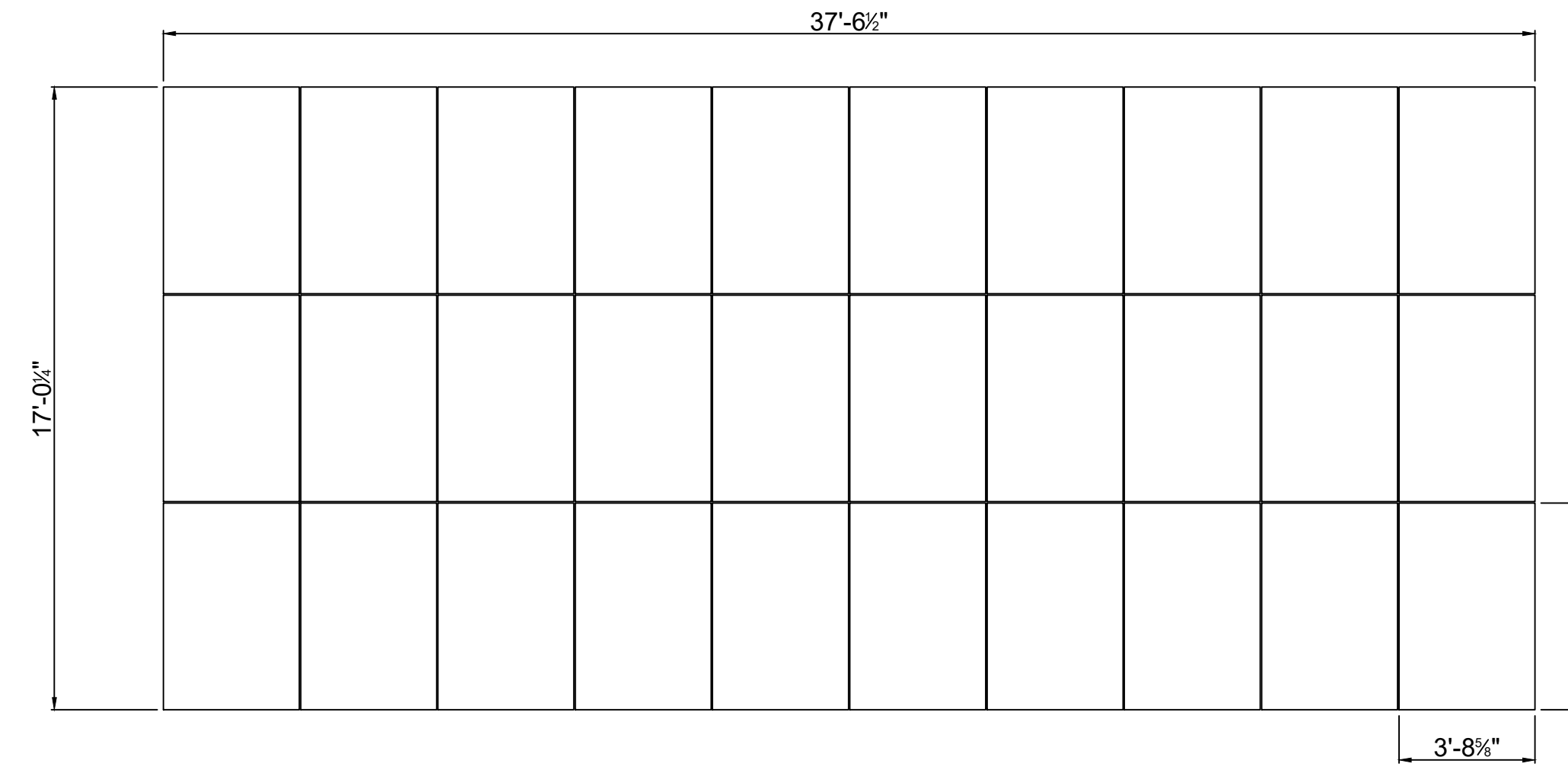
Annington Barn - Proposed Solar Panels
2024 09 03

NOTE:

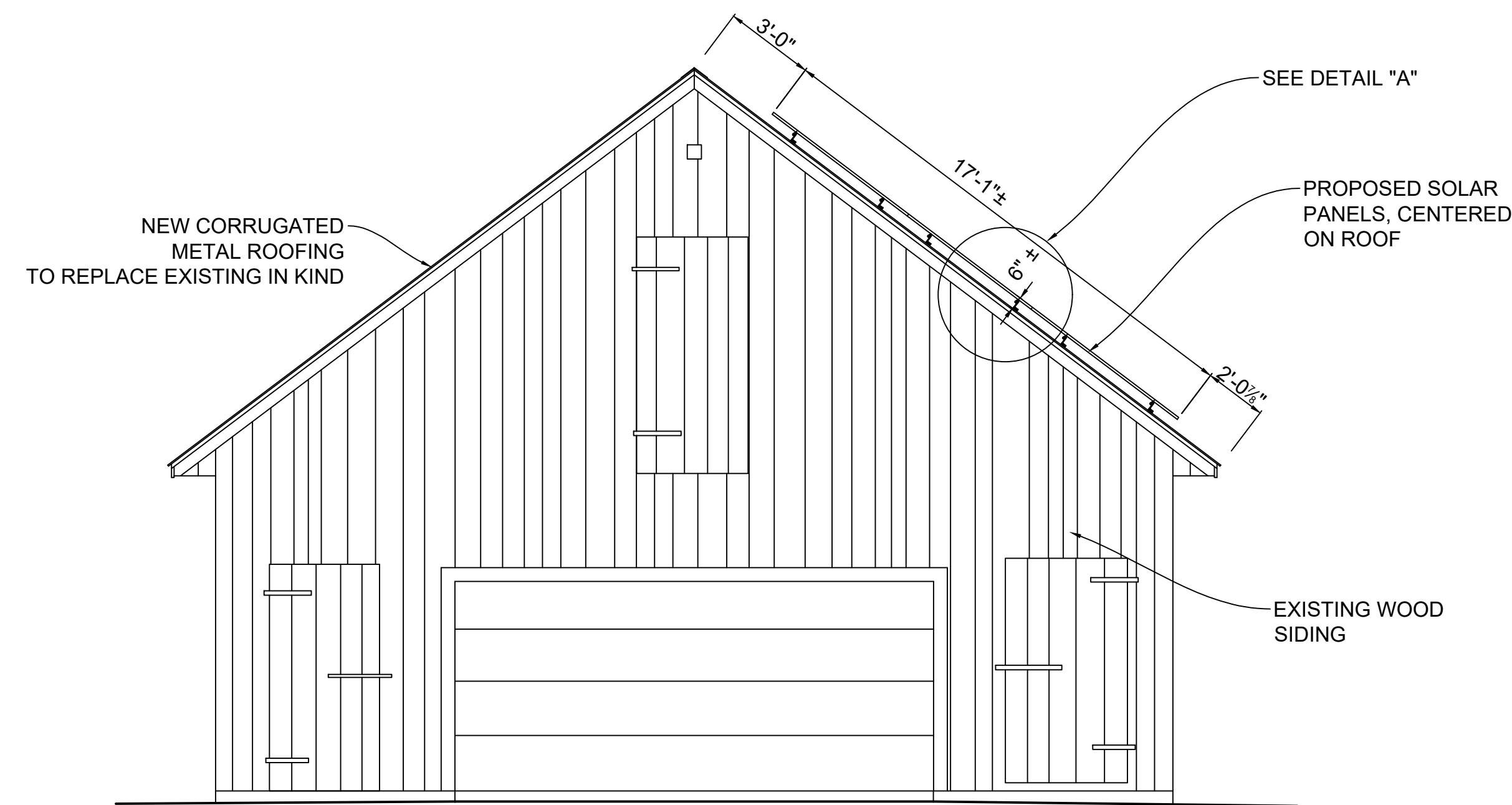
1. SOLAR PANELS ARE LOW GLARE FLAT BLACK FINISH
2. RAILS, ANGLE CLIPS, AND ROOF ATTACHMENT CLIPS ARE FACTORY FINISHED FLAT BLACK ALUMINUM
3. CORRUGATED ROOF WILL BE FLAT LOW GLOSS FACTORY PAINT FINISH - MATT BLACK



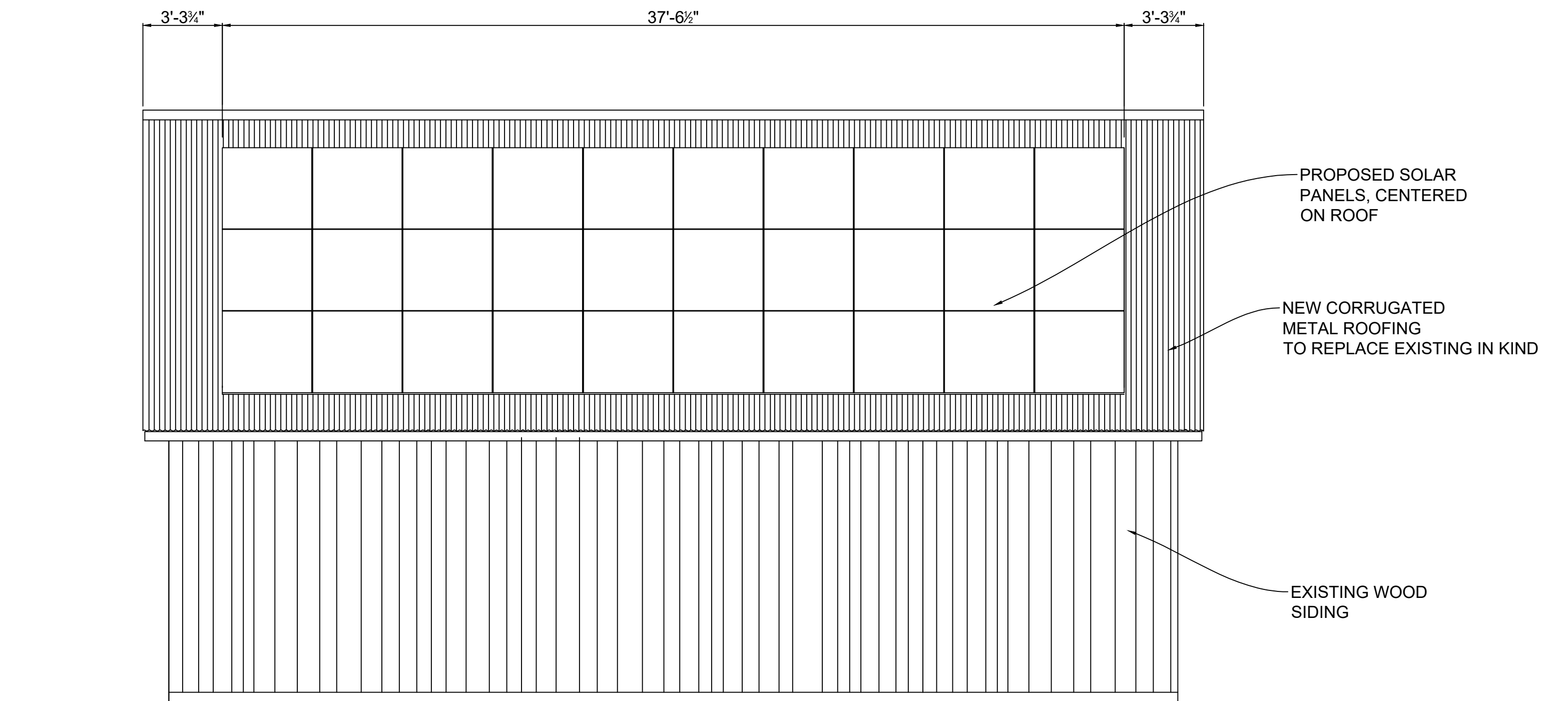
DETAIL "A" SOLAR PANEL 3/4" = 1'-0"



SOLAR PANEL PLAN 1/4" = 1'-0"



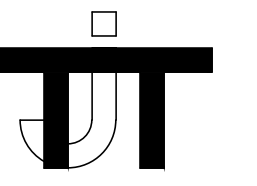
EXISTING BARN WEST ELEVATION 1/4" = 1'-0"



EXISTING BARN SOUTH ELEVATION 1/4" = 1'-0"

REVIEWED
By Laura DiPasquale, M-NCPPC at 12:34 pm, Oct 04, 2024

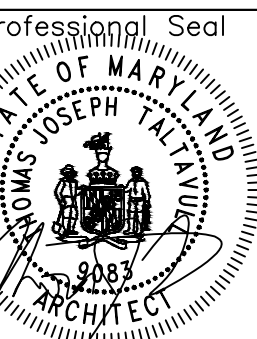
APPROVED
Montgomery County
Historic Preservation Commission
Ronald A. ...



ARCHITECTS
PLANNERS
HISTORIC
PRESERVATION

THOMAS J. TALTAVULL
ARCHITECT
20650 PLUM CREEK COURT
GAITHERSBURG, MARYLAND 20882
301.840.1847

Professional Certification.
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed architect under the laws of the State of Maryland, License No.9083, Expiration Date: 6-13-2026



Revisions

Drawing Title

EXISTING BARN

Date: Sept. 3, 2024

Renovations to:
ANNINGTON
24001 Whites Ferry Road
Dickerson, Maryland

Drawing Number

A2.3

AXIblackpremium XXL HC

390 - 410 Wp

REVIEWED

By Laura DiPasquale, M-NCPPC at 12:34 pm, Oct 04, 2024

APPROVED
Montgomery County
Historic Preservation Commission



High performance bifacial solar module
108 halfcell, monocrystalline



German-American-Engineering

The advantages:

25
Years

25 years Manufacturer's warranty



Up to 25 % more power output by
Bifacial-Technology



Guaranteed positive power tolerance
from 0-5 Wp by individual measurement



100% visual electroluminescence inspection
in production



High stability due to innovative frame design



High quality junction box
and connector systems

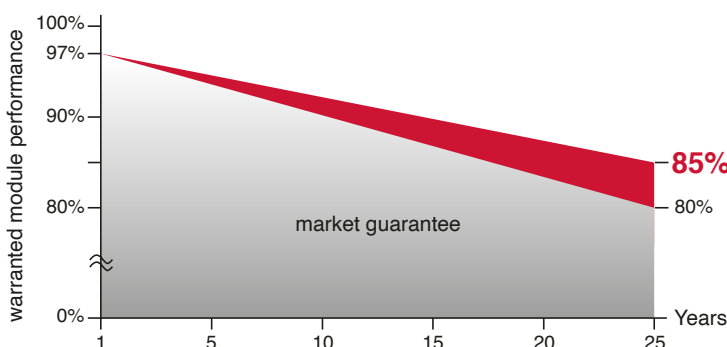
25
Years

25 years Performance guarantee



Fig. similar 08MHE221208A

Exclusive linear AXITEC high performance guarantee!



85% AXITEC Warranty Added Value: up to 5% more power after 25 years



604457

Conforms to UL STD No.1703
Certified to ULC/ORD Std. C1703

AXIblackpremium XXL HC 390 - 410 Wp

APPROVED
Montgomery County
Historic Preservation Commission



Electrical data (at standard conditions (STC) irradiance 1000 watt/m². spectrum AM 1.5 at a cell temperature of 25°C)

Type	AC-390MBT/108V	AC-395MBT/108V	AC-400MBT/108V	AC-405MBT/108V	AC-410MBT/108V
Nominal output	390 Wp	395 Wp	400 Wp	405 Wp	410 Wp
Nominal voltage U _{mp}	30.64 V	30.84 V	31.01 V	31.21 V	31.45 V
Nominal current I _{mp}	12.73 A	12.81 A	12.90 A	12.98 A	13.04 A
Short circuit current I _{sc}	13.61 A	13.7 A	13.79 A	13.87 A	13.95 A
Open circuit voltag U _{oc}	36.85 V	36.98 V	37.07 V	37.23 V	37.32 V
Module conversion efficiency	19.97 %	20.23 %	20.48 %	20.74 %	21.00 %

Bifacial output - Backside Power gain

	AC-390MBT/108V	AC-395MBT/108V	AC-400MBT/108V	AC-405MBT/108V	AC-410MBT/108V
10% Power output	429.00 Wp	434.50 Wp	440.00 Wp	445.50 Wp	451.00 Wp
Module Efficiency	21.97 %	22.25 %	22.53 %	22.81 %	23.10 %
15% Power output	448.50 Wp	454.25 Wp	460.00 Wp	465.75 Wp	471.50 Wp
Module Efficiency	22.97 %	23.26 %	23.56 %	23.85 %	24.15 %
20% Power output	468.00 Wp	474.00 Wp	480.00 Wp	486.00 Wp	492.00 Wp
Module Efficiency	23.97 %	24.27 %	24.58 %	24.89 %	25.20 %
25% Power output	487.50 Wp	493.75 Wp	500.00 Wp	506.25 Wp	512.50 Wp
Module Efficiency	24.96 %	25.28 %	25.60 %	25.93 %	26.25 %

Design

- Frontside 0.13 inch (3.2 mm) hardened, low-reflection white glass
- Cells 108 bifacial monocrystalline high efficiency cells
- Backside Composite film, cell gaps black
- Frame 1.18 inch (30 mm) black aluminium frame

Mechanical data

- L x W x H 67.80 x 44.65 x 1.18 inch (1722 x 1134 x 30 mm)
- Weight 47.40 lbs (21.5 kg) with frame

Mechanical load

- Design load (pressure/suction) 75.3 PSF / 33.3 PSF
- Test load (pressure/suction) 113 PSF / 50 PSF

Power connection

- Socket Protection Class IP68
- Wire 47.25 inch, AWG 12
- Plug-in system Plug/socket IP68, Stäubli EVO2 / EVO2 pluggable

Limit values

- System voltage 1500 VDC (UL) 1500 VDC (IEC)
- Module Fire Performance TYPE 1 (UL 1703) or CLASS C (IEC 61730)
- NOCT (nominal operating cell temperature)* 45°C +/-2K
- Reverse current feed IR 25.0 A

- Permissible operating temperature -40°C to 85°C / -40F to 185F

- Bifaciality 70 % ± 10 %

(No external voltages greater than V_o may be applied to the module)

* NOCT, irradiance 800 W/m²; AM 1.5; wind speed 1 m/s; Temperature 20°C

Temperature coefficients

- Voltage U_{oc} -0.28 %/K
- Current I_{sc} 0.045 %/K
- Output P_{mp} -0.35 %/K

Low-light performance without Bifacial-effect
(Example for AC-410MBT/108V)

I-U characteristic curve	Current I _{pp}	Voltage U _{pp}
200 W/m ²	2.66 A	30.27 V
400 W/m ²	5.38 A	30.62 V
600 W/m ²	8.03 A	30.86 V
800 W/m ²	10.62 A	31.12 V
1000 W/m ²	13.04 A	31.45 V

Packaging

- Module pieces per pallet 36
- Module pieces per HC-container 936

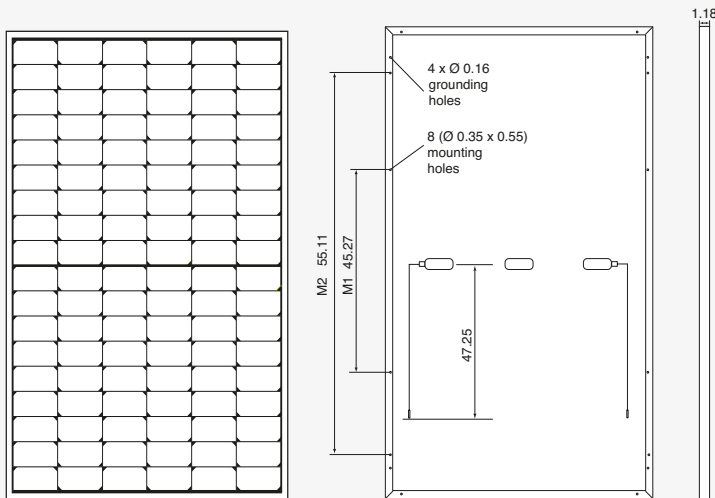


Fig. principle sketch

All dimensions in inch

S-5!®

The Right Way!

REVIEWED

By Laura DiPasquale, M-NCPPC at 12:34 pm, Oct 04, 2024

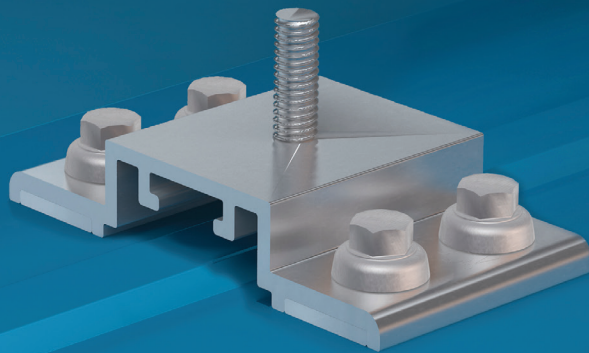
NEW PRODUCT
SolarFoot™

APPROVED
Montgomery County
Historic Preservation Commission



Introducing the new SolarFoot™ for exposed fastener metal roofing with the strength, testing, quality, and time-proven integrity you expect from S-5!. The SolarFoot provides an ideal mounting platform to attach the L-Foot (not included) of a rail-mounted PV system to the roof. This solution is The Right Way to secure rail-mounted solar systems to exposed fastener metal such as AG-Panel or R-Panel.

The right way to attach almost anything to metal roofs!



SolarFoot Features:

Manufactured in the U.S.A. from certified raw material

Fabricated in our own ISO 9001:2015 certified factory

All aluminum and stainless components

25yr limited warranty

Compatible with all commercial L-Foot products on the market

Factory applied 40-year isobutylene/isoprene crosslink polymer sealant for reliable weathertightness

Sealant reservoir to prevent over-compression of sealant

Load-to-failure tested Normal to Seam by a nationally accredited laboratory on numerous metal roof materials and substrates

Four points of attachment into structure or deck with tested holding strength for engineered applications

Integrated M8-1.25x17mm stud and M8-1.25 stainless steel hex flange nut included

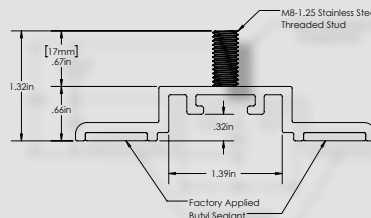
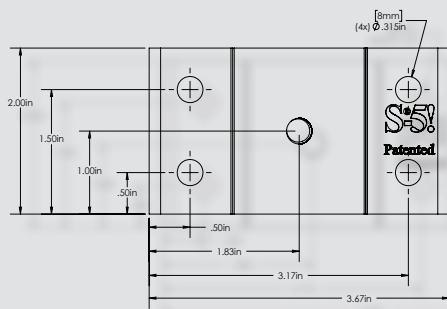


888-825-3432 | www.S-5.com

SolarFoot™ Mounting for Exposed Fasteners

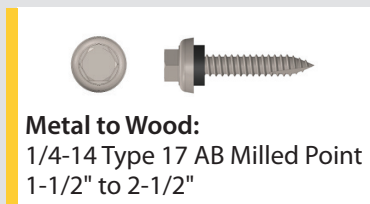
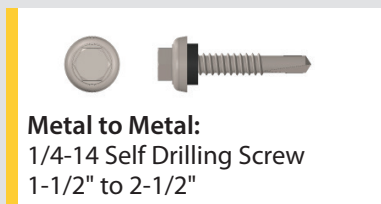


The SolarFoot is a simple, cost-effective pedestal for L-Foot (not included) attachment of rail-mounted solar PV. The unique design is compatible with all rail producer L-Foot components. The new SolarFoot assembly ensures a durable weathertight solution for the life of the roof. Special factory applied butyl co-polymeric sealant contained in a reservoir is The Right Way, allowing a water-tested seal. Stainless integrated stud and hex flange lock-nut secure the L-Foot into position. A low center of gravity reduces the moment arm commonly associated with L-Foot attachments. Direct attachment of the SolarFoot to the structural member or deck provides unparalleled holding strength.



*Fasteners sold separately. Fastener type varies with substrate. Contact S-5! on how to purchase fasteners and obtain our test results. L-Foot also sold separately.

Fastener Selection



To source fasteners for your projects, contact S-5!

When other brands claim to be "just as good as S-5!"; tell them to PROVE IT.

SolarFoot

Exposed fastener platform for solar PV attachment via L-Foot and Rails

Weatherproof attachment to exposed fastener roofing

Butyl sealant reservoir provides long-term waterproof seal

M8-1.25x17mm stud with M8 hex flange nut for attachment of all popular L-Foot/rail combinations

Tool: 13 mm Hex Socket or 1/2" Hex Socket

Tool Required: Electric screw gun with hex drive socket for self-tapping screws.

Low Center of Gravity reduces moment arm commonly associated with L-Foot/Rail solar mounting scenarios

Attaches directly to structure or deck for optimal holding strength

S-5! Recommended substrate-specific (e.g. steel purlin, wood 2x4, OSB, etc.) fasteners provide excellent waterproofing and pull-out strength

Fastener through-hole locations comply with NDS (National Design Specification) for Wood Construction

S-5!® Warning! Please use this product responsibly!

The independent lab test data found at www.S-5.com can be used for load-critical designs and applications.

Products are protected by multiple U.S. and foreign patents. For published data regarding holding strength, fastener torque, patents, and trademarks, visit the S-5! website at www.S-5.com. Copyright 2017, Metal Roof Innovations, Ltd. S-5! products are patent protected.

Copyright 2017, Metal Roof Innovations, Ltd. Version 102017

Distributed by:

REVIEWED

By Laura DiPasquale, M-NCPPC at 12:34 pm, Oct 04, 2024

APPROVED

Montgomery County

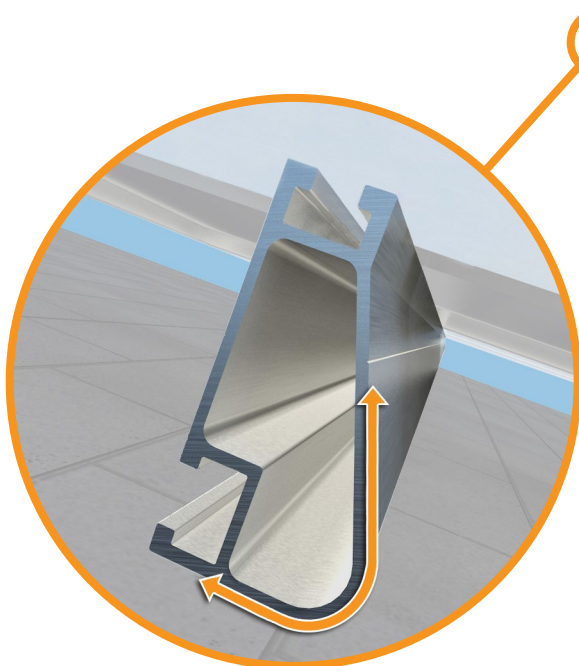
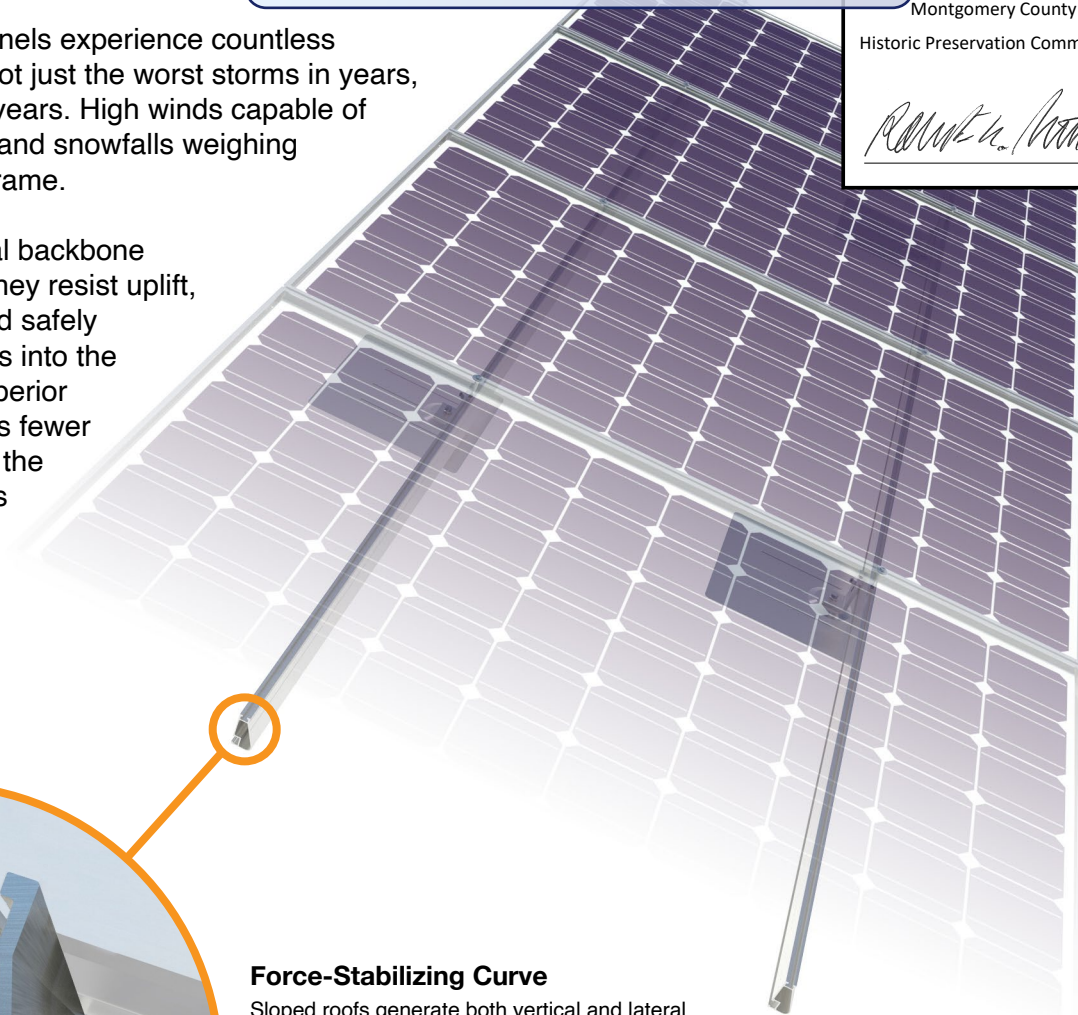
Historic Preservation Commission



Solar Is Not Always Sunny

Over their lifetime, solar panels experience countless extreme weather events. Not just the worst storms in years, but the worst storms in 40 years. High winds capable of ripping panels from a roof, and snowfalls weighing enough to buckle a panel frame.

XR Rails® are the structural backbone preventing these results. They resist uplift, protect against buckling and safely and efficiently transfer loads into the building structure. Their superior spanning capability requires fewer roof attachments, reducing the number of roof penetrations and the amount of installation time.



Force-Stabilizing Curve

Sloped roofs generate both vertical and lateral forces on mounting rails which can cause them to bend and twist. The curved shape of XR Rails® is specially designed to increase strength in both directions while resisting the twisting. This unique feature ensures greater security during extreme weather and a longer system lifetime.

Compatible with Flat & Pitched Roofs



XR Rails® are compatible with FlashFoot® and other pitched roof attachments.



IronRidge® offers a range of tilt leg options for flat roof mounting applications.

Corrosion-Resistant Materials

All XR Rails® are made of 6000-series aluminum alloy, then protected with an anodized finish. Anodizing prevents surface and structural corrosion, while also providing a more attractive appearance.



XR Rail® Family

REVIEWED

By Laura DiPasquale, M-NCPPC at 12:35 pm, Oct 04, 2024

The XR Rail® Family offers the strength of a curved rail in three targeted sizes. Each size supports specific design loads, while minimizing material costs. Depending on your location, there is an XR Rail® to match.



XR10

XR10 is a sleek, low-profile mounting rail, designed for regions with light or no snow. It achieves spans up to 6 feet, while remaining light and economical.

- 6' spanning capability
- Moderate load capability
- Clear & black anodized finish
- Internal splices available



XR100

XR100 is a residential and commercial mounting rail. It supports a range of wind and snow conditions, while also maximizing spans up to 10 feet.

- 10' spanning capability
- Heavy load capability
- Clear & black anodized finish
- Internal splices available



APPROVED
Montgomery County
Historic Preservation Commission
Robert H. Porter

XR1000

XR1000 is a heavyweight among solar mounting rails. It's built to handle extreme climates and spans up to 12 feet for commercial applications.

- 12' spanning capability
- Extreme load capability
- Clear anodized finish
- Internal splices available

Rail Selection

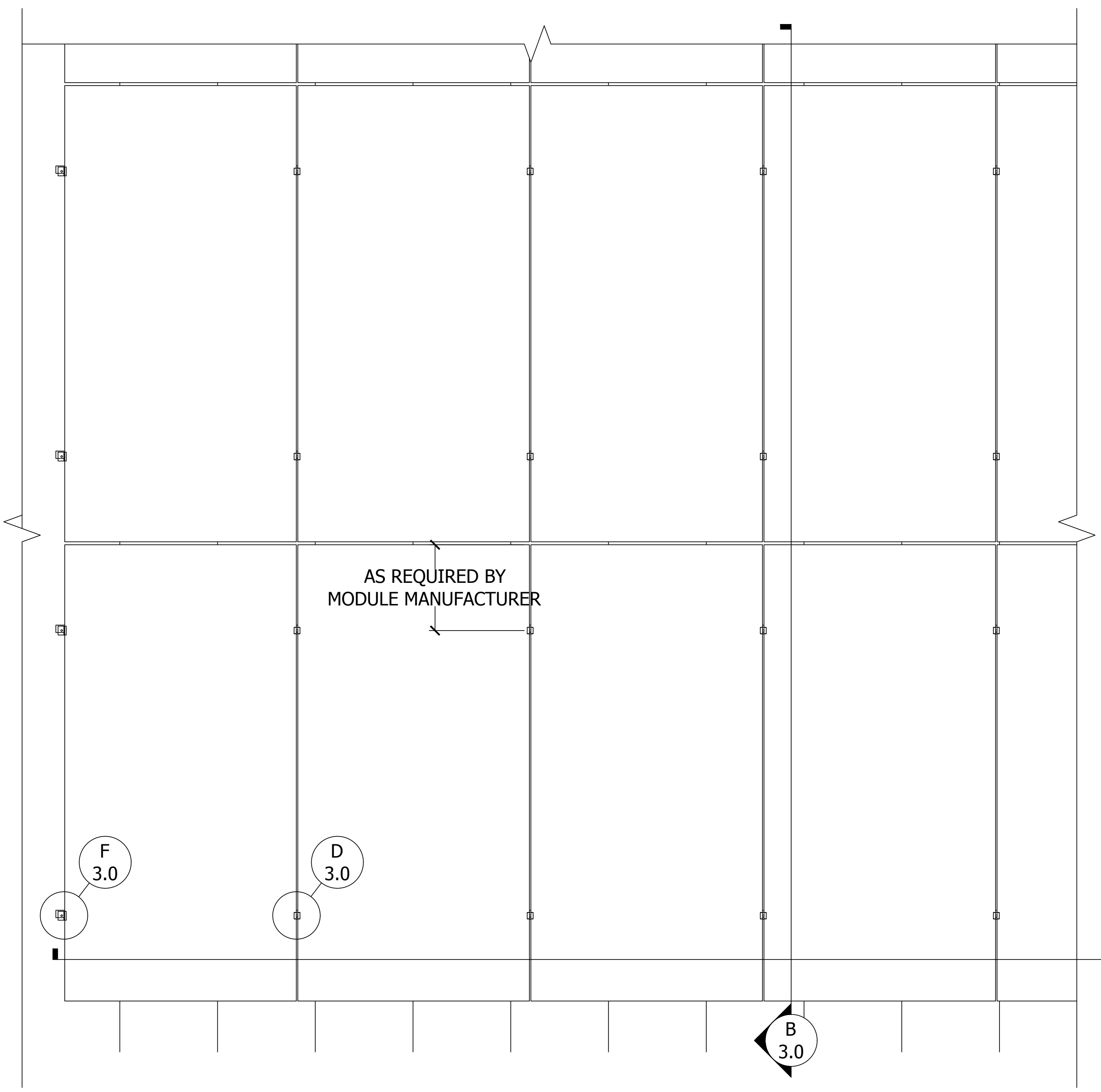
The table below was prepared in compliance with applicable engineering codes and standards.* Values are based on the following criteria: ASCE 7-16, Gable Roof Flush Mount, Roof Zones 1 & 2e, Exposure B, Roof Slope of 8 to 20 degrees and Mean Building Height of 30 ft. Visit IronRidge.com for detailed certification letters.

Load		Rail Span					
Snow (PSF)	Wind (MPH)	4'	5' 4"	6'	8'	10'	12'
None	90						
	120						
	140	XR10		XR100		XR1000	
	160						
20	90						
	120						
	140						
	160						
30	90						
	160						
40	90						
	160						
80	160						
120	160						

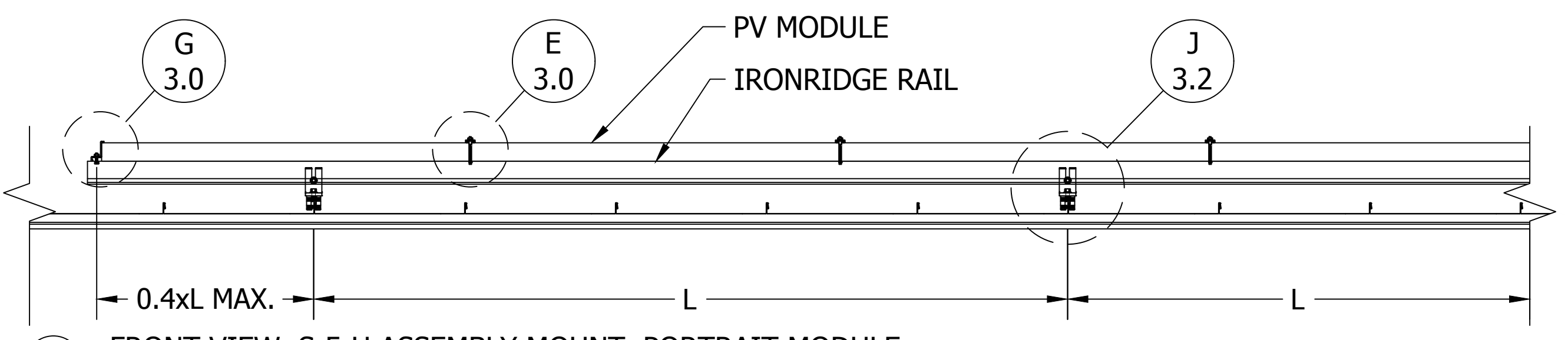
*Table is meant to be a simplified span chart for conveying general rail capabilities. Use approved certification letters for actual design guidance.

REVIEWED
By Laura DiPasquale, M-NCPPC at 12:35 pm, Oct 04, 2024

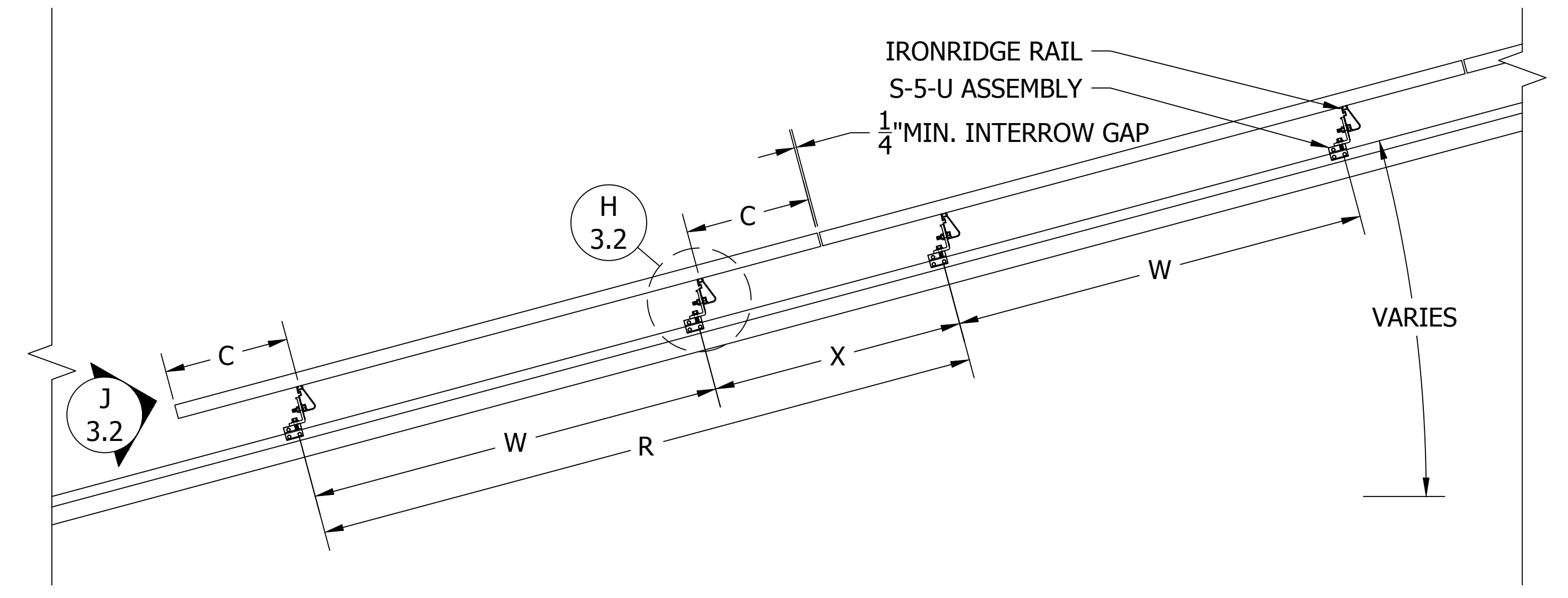
APPROVED
Montgomery County
Historic Preservation Commission
Robert A. [Signature]



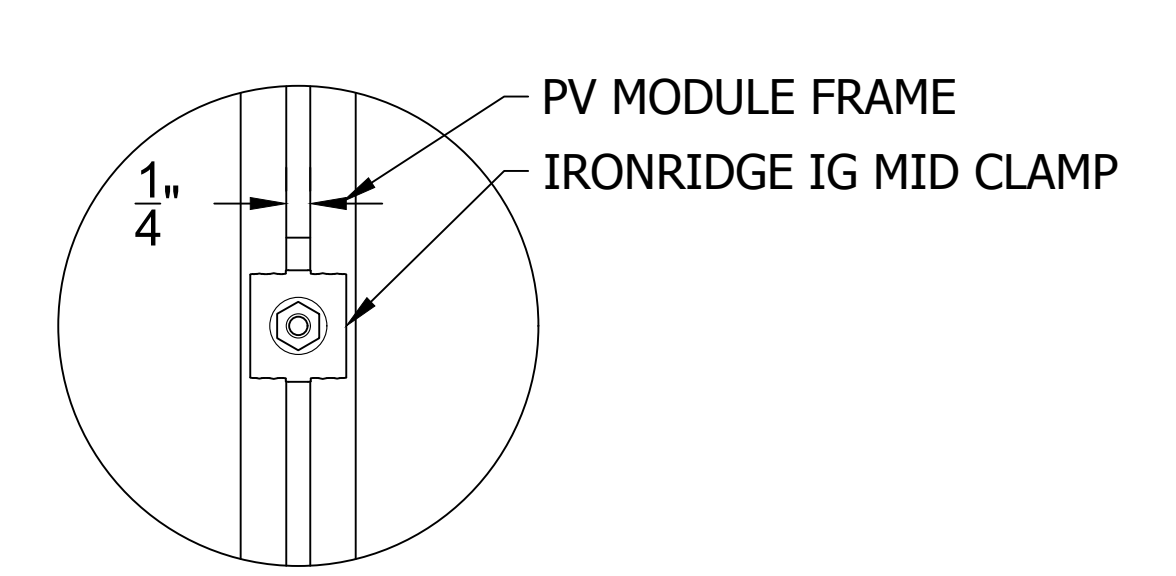
A PLAN VIEW, S-5-U ASSEMBLY MOUNT, PORTRAIT MODULE
Scale: 1"=1'-0"



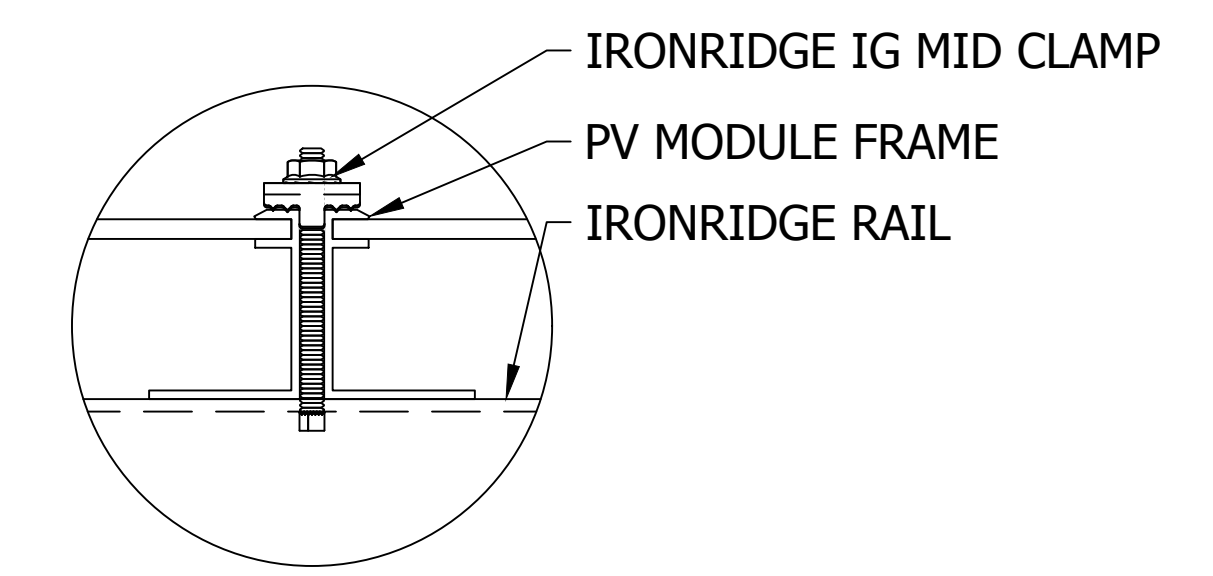
C FRONT VIEW, S-5-U ASSEMBLY MOUNT, PORTRAIT MODULE
Scale: 1"=1'-0"



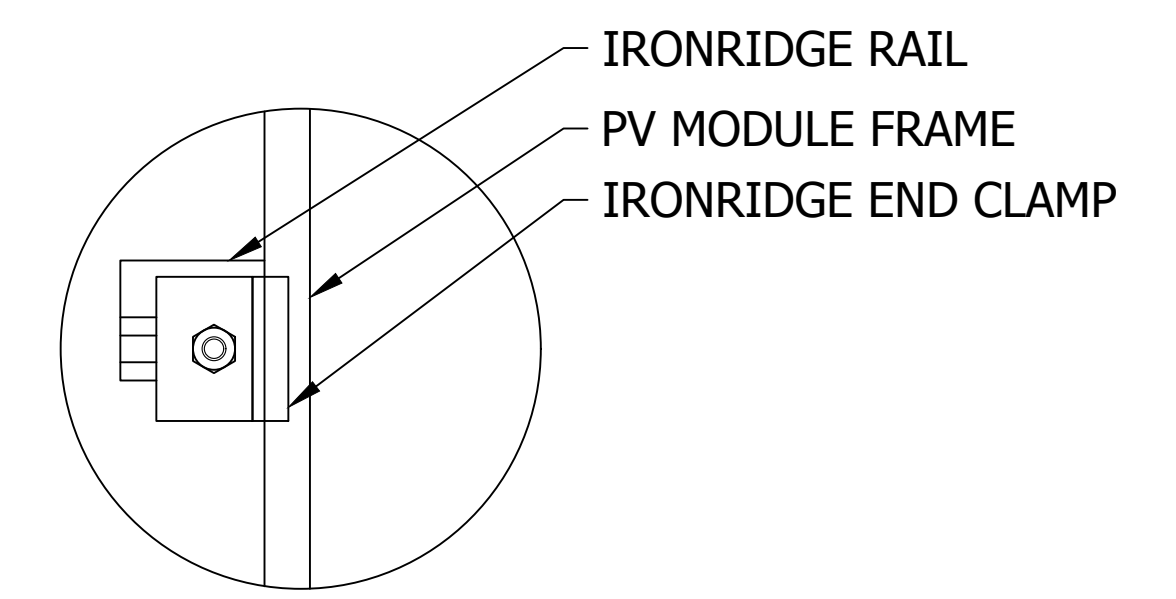
B SIDE VIEW, S-5-U ASSEMBLY MOUNT, PORTRAIT MODULE
Scale: 1"=1'-0"



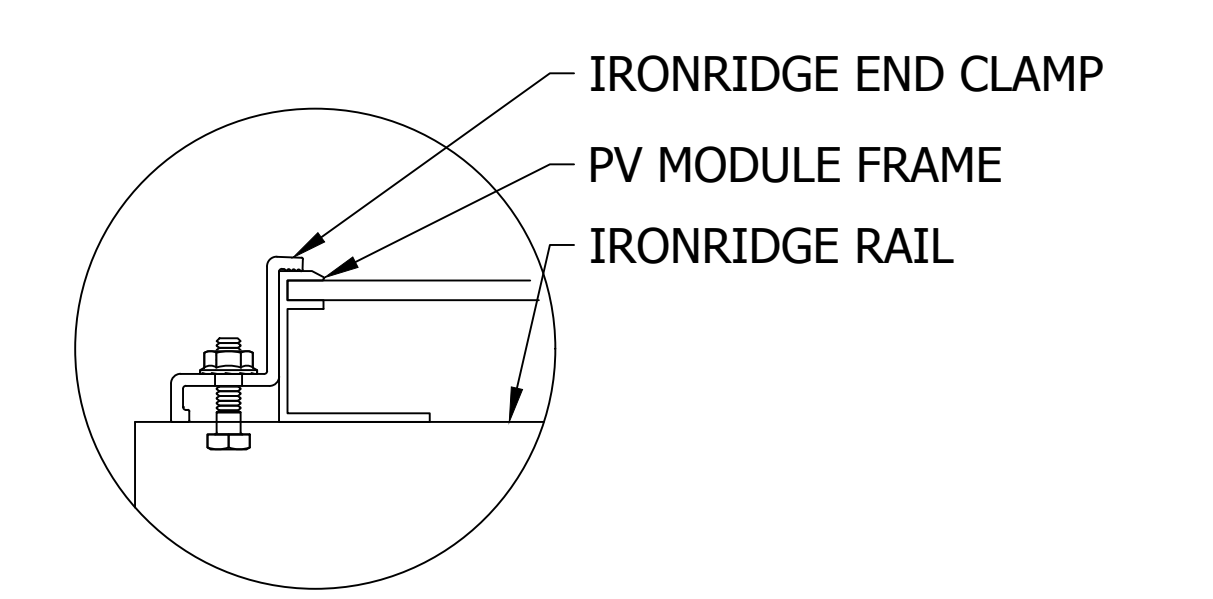
D DETAIL, MID CLAMP PLAN
Scale: 6"=1'-0"



E DETAIL, MID CLAMP FRONT
Scale: 6"=1'-0"



F DETAIL, END CLAMP PLAN
Scale: 6"=1'-0"



G DETAIL, END CLAMP FRONT
Scale: 6"=1'-0"

IRONRIDGE	CLIENT NAME	PROJECT NAME	PROJECT ADDRESS	SYSTEM KW/DC
		SLOPED ROOF MOUNT SYSTEM		

WIND SPEED, MPH	SNOW LOAD, PSF	EXPOSURE CAT	RISK CAT	MODULE TYPE	MODULE W/DC	MODULE QTY
-	-	-	-	72-CELL, GENERIC	-	-

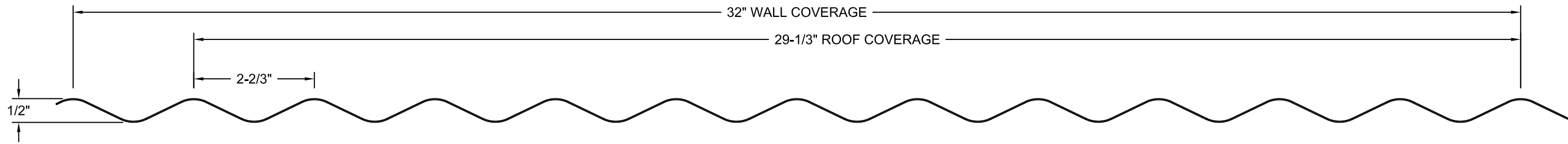
NOT FOR CONSTRUCTION

REV	DESCRIPTION	DATE

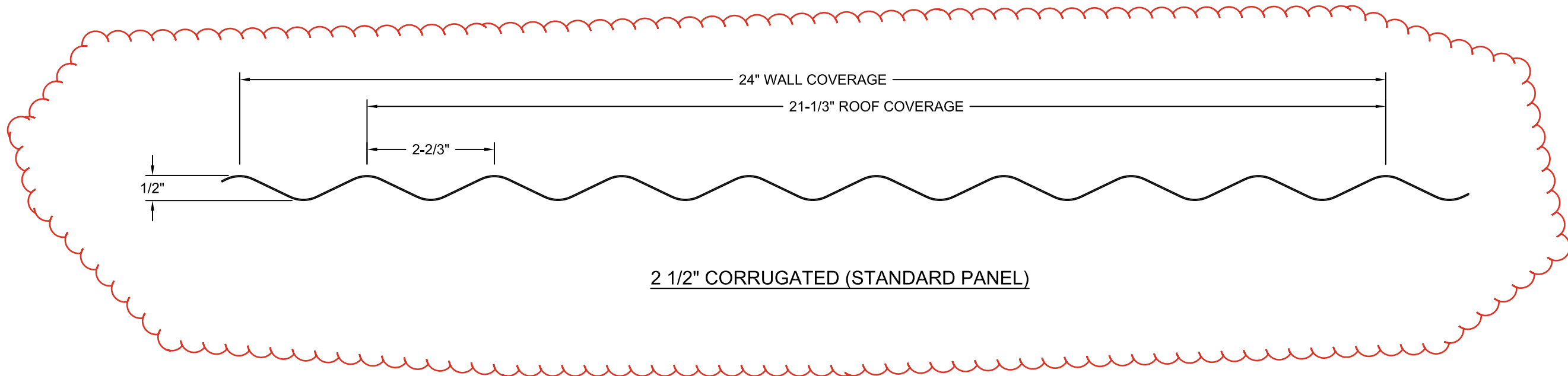
SHEET NAME	
SLOPED ROOF PV SYSTEM DETAILS: S-5-U ASSEMBLY	
JOB NO.	3.1 SR
ISSUE DATE	XX FEB 2016
SHEET NO.	IR 3.0
SHEET SIZE	24X36

REVIEWED
 By Laura DiPasquale, M-NCPPC at 12:35 pm, Oct 04, 2024

APPROVED
 Montgomery County
 Historic Preservation Commission

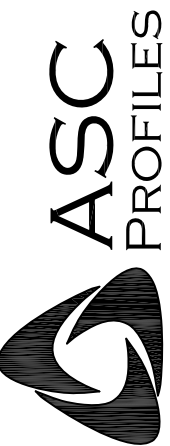


2 1/2" CORRUGATED (EXPANDED COVERAGE)



2 1/2" CORRUGATED (STANDARD PANEL)

PRODUCT: 2.5 CORRUGATED
 FOR:



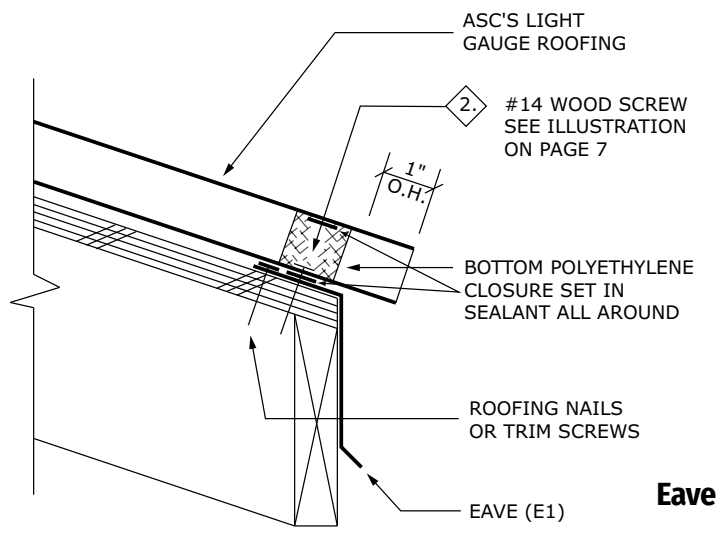
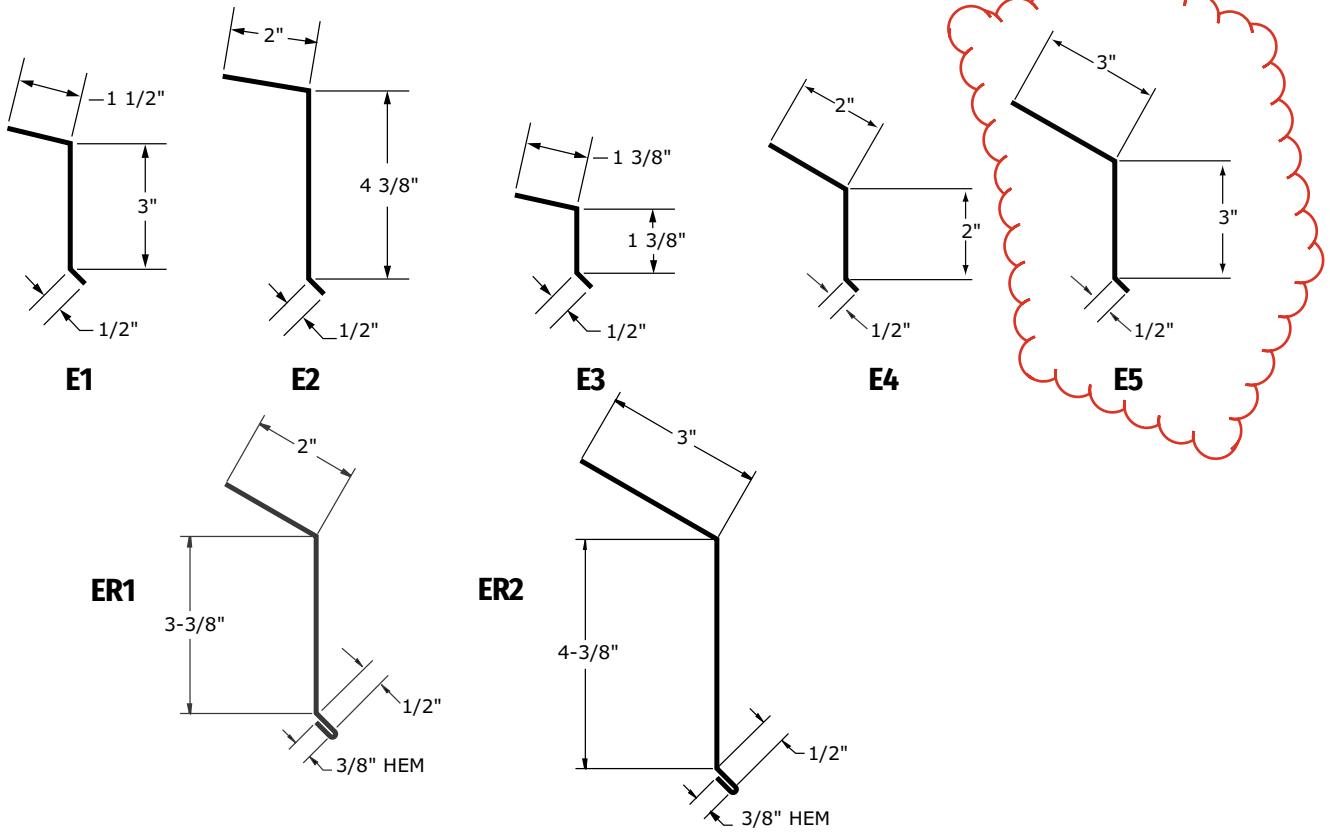
NAME:		
DATE: 9/15/22		
SCALE: NTS		
CHECKED: ---		
REV	DATE	BY
-	9/15/22	BG

DWG: SALES PRINT
 SHEET: 1 OF 1



Eave and Vented Eave Flashings

This flashing must be installed prior to the panels.



Eave

Procedures

- Attach the eave flashing using roofing nails or trim screws evenly spaced to temporarily secure flashing prior to installing panels.
- Caulk and lap the flashing a minimum of 3". (see page 45)
- Panels should overhang the eave 1" minimum.

REVIEWED

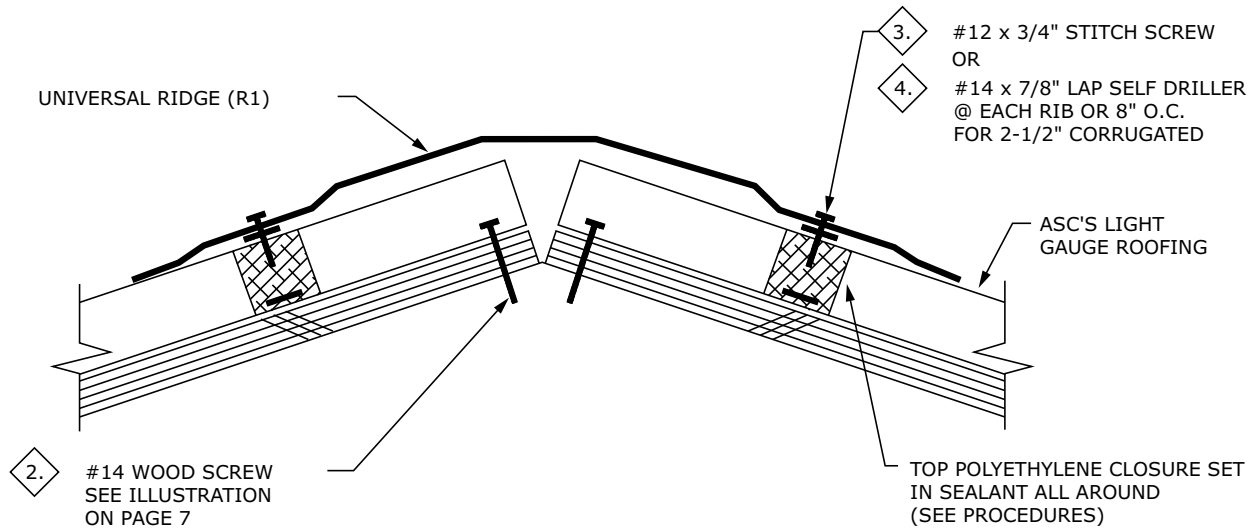
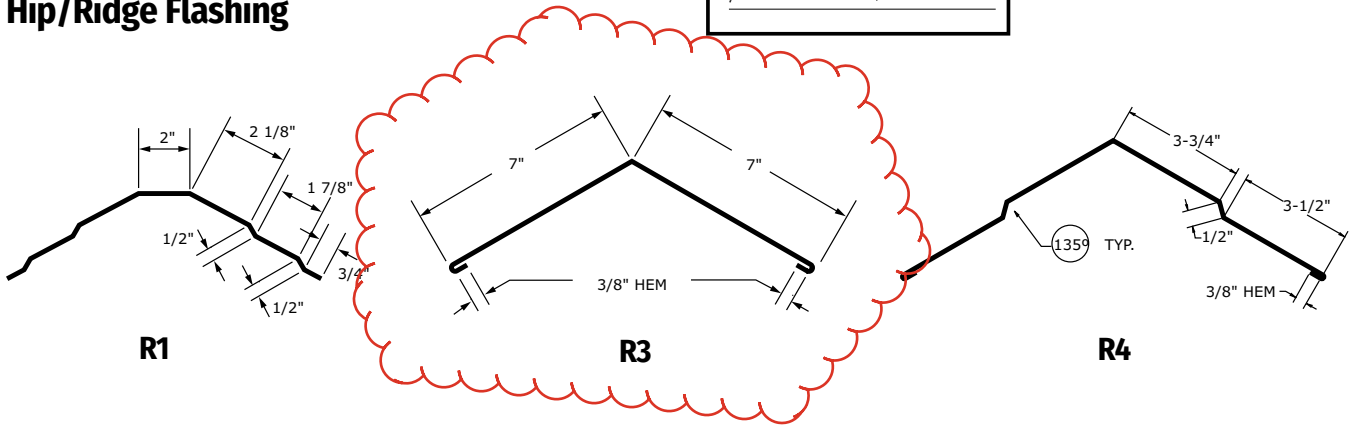
By Laura DiPasquale, M-NCPPC at 12:35 pm, Oct 04, 2024

APPROVED
Montgomery County
Historic Preservation Commission



ASC Building Products

Hip/Ridge Flashing



Note: The gable flashing must be installed prior to installation of the ridge (see page 18).

Procedures

- Caulk the bottom and sides of the polyethylene closure. Set the closure as shown above and caulk the top. The closure is optional if the panel is turned up and caulked at the sides near the rib.
- Fasten the ridge cap using stitch screw at each rib or 8" o.c. for 2-1/2" Corrugated.
- Close the ends of the universal ridge cap by cutting and folding material at each end. Fasten with rivets. (see page 10)
- Caulk, lap and rivet sequential ridge flashings. (see page 45)

Note: "R1" is a universal hip/ridge. A standard hip/ridge, "R3 & R4", is also available.

REVIEWED

By Laura DiPasquale, M-NCPPC at 12:35 pm, Oct 04, 2024

COLOR CHART

APPROVED
Montgomery County
Historic Preservation Commission



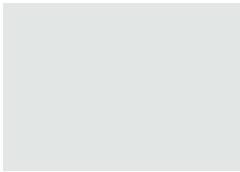
Not all colors and profiles are available at all locations. Please see back of color card for details.

STA

ommend you request a physical sample to review ering. We are not responsible for color variations.



ZINCALUME® Plus*
SRI: 64 • LRV: 67



WINTER WHITE
SRI: 88 • LRV: 74



SURF WHITE
SRI: 74 • LRV: 59



LIGHT STONE
SRI: 70 • LRV: 53



DESERT BEIGE
SRI: 58 • LRV: 39



CASCADe GRAY
SRI: 58 • LRV: 41



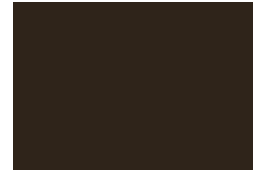
TAUPE
SRI: 53 • LRV: 28



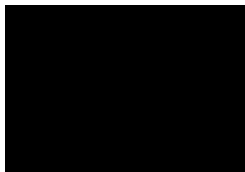
PATINA STEEL
SRI: 38 • LRV: 17



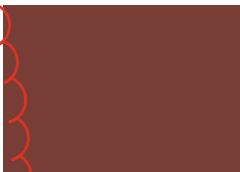
CHESTNUT BROWN
SRI: 36 • LRV: 12



CLASSIC BROWN
SRI: 29 • LRV: 7



MATTE BLACK
SRI: N/A • LRV: 5



CANYON RED
SRI: 45 • LRV: 16



RUSTIC RED
SRI: 43 • LRV: 13



OLD TOWN GRAY
SRI: 43 • LRV: 27



OLD ZINC GRAY
SRI: 43 • LRV: 22



WEATHERED COPPER
SRI: 32 • LRV: 11



SLATE GRAY
SRI: 32 • LRV: 13



TAHOE BLUE
SRI: 33 • LRV: 14



EVERGLADE
SRI: 35 • LRV: 19



DENALI GREEN
SRI: 29 • LRV: 11



FOREST GREEN
SRI: 36 • LRV: 8



COPPER PENNY¹
SRI: 53 • LRV: 28



NATURAL RUST¹
SRI: 32 • LRV: 10
(Subject to upcharge)



IRONOX²
SRI: N/A • LRV: N/A

MEASURED ON A SCALE OF 0 - 100

Light Reflective Value (LRV)
Measures how much visible light a color reflects and how much it absorbs. The **higher** the LRV, the **more reflective** it will be.

Solar Reflective Index (SRI)
Measures the amount of **heat reflected** from painted metal roof. The higher the SRI value, the cooler the metal will be, helping cut down on **energy costs** to keep your **home cool**.

SRI values in accordance with ASTM E1980 and are based on independent testing. Cool Roof Rating Council (CRRC) performance values (for CA Title 24) are based on color families and will differ from above.

SRI=Solar Reflective Index. LRV=Light Reflectance Value. GA= Gauge of Steel. *Clear acrylic coated.

¹Please note, these colors are batch sensitive (may have color variation) and are directional in nature. Different batches are not to be mixed on projects.

²IronOx is black steel (uncoated and unpainted), that rusts naturally. No warranty is offered or implied. Only available in 22 GA Nu-Wave® Corrugated.

REPRESENTATION OF COLORS MAY VARY DUE TO PRINTING LIMITATIONS.

Sample color chips are available upon request. Consult your ASC Building Products representative for more information.

Customer Service Centers

Salem, OR: 503-390-7174 or 800-272-7023 | **Spokane, WA:** 509-536-4097 or 800-776-8771

www.ascbp.com

Wes Moore, Governor
Aruna Miller, Lt. Governor



Rebecca L. Flora, AICP, LEED ND / BD+C, Secretary
Elizabeth Hughes, MHT Director and
State Historic Preservation Officer

Maryland
DEPARTMENT OF PLANNING
MARYLAND HISTORICAL TRUST

September 20, 2024

Thomas J. Taltavull
Architect
20650 Plum Creek Court
Gaithersburg, MD 20882

Re: Annington, Montgomery County – Change/Alteration
Maryland Historical Trust Preservation Easement

Dear Mr. Taltavull:

The Maryland Historical Trust (MHT) is in receipt of your application, received on August 19, 2024, with additional information received on September 3, 2024, requesting approval to replace the barn roof in-kind and install solar panels on the south side of the new barn roof at Annington. MHT's Easement Committee (Committee) reviewed the information on September 10, 2024.

Based on the review and recommendation of the Committee, I grant approval to replace the barn roof in-kind and install solar panels on the south side of the barn roof. This work is consistent with the Secretary of the Interior's *Standards for the Treatment of Historic Properties*, specifically *General Rehabilitation Standards 2, 5, 6, 9, and 10*.

This approval is valid for a period of six months from the date of this letter. Should you require additional time to complete the project, make any changes to the scope of work as approved, or have any questions regarding this letter, please contact MHT Easement Staff via email at mht.easements@maryland.gov.

Sincerely,

Elizabeth Hughes
Director
Maryland Historical Trust

EH/CN