

CITY OF HIGHLAND SPECIAL MEETING OF THE HISTORIC AND CULTURAL PRESERVATION BOARD AGENDA

MEMBERS

Patrick Sandford, Chair
Pamela Bible, Vice Chair
Gail Shelton, Member
Jeffery Staggs, Member
Hugh Walker, Member

SPECIAL MEETING

May 1, 2025
5:00 p.m.
City Hall
Donahue Council Chambers
27215 Base Line
Highland, California

STAFF

Lawrence A. Mainez, Community Development Director
Kim Stater, Assistant Community Development Director
Angela Tafolla, Associate Planner
Camille Duarte, Administrative Assistant III



MISSION STATEMENT

Highland is dedicated to the betterment of the individual, the family, the neighborhood and the community. The City Council and the staff of Highland are dedicated to providing the quality of public facilities and services that its citizens are willing to fund and will do so as efficiently as possible.

Visit the City's Website at: www.cityofhighland.org

CITY OF HIGHLAND • 27215 BASE LINE • HIGHLAND, CALIFORNIA 92346 • (909) 864-6861 ☎ • (909) 862-3180

The City of Highland complies with the Americans with Disabilities Act of 1990. If you require special assistance to attend or participate in this meeting, please call the City Clerk's Office at (909) 864-6861 Ext. 226, at least 72 hours prior to the meeting.

Pursuant to Government Code Section 54957.5, any disclosable public records related to an open session item on a regular meeting agenda and distributed by the City of Highland to all or a majority of the Historic and Cultural Preservation Board, less than 72 hours prior to that meeting, are available for public inspection at Highland City Hall, 27215 Base Line, Highland, CA 92346, during normal business hours.

Submission of Public Comments: For those wishing to make public comments by email, please submit your comments by email to be read aloud at the meeting. Email comments must be submitted by 4:00 p.m. on May 1, 2025 to publiccomment@cityofhighland.org. If you are submitting a public comment pertaining to an item on the May 1, 2025 agenda, please identify the agenda item number in the subject line.

Members of the public will be permitted to make public comments in person.

**HISTORIC AND CULTURAL PRESERVATION BOARD
SPECIAL MEETING AGENDA
May 1, 2025 - 5:00 P.M.**

CALL TO ORDER

Pledge of Allegiance

COMMUNITY INPUT (ITEMS NOT ON THE AGENDA)

To address the Historic and Cultural Preservation Board please complete a speaker form located at the entrance and give it to the Administrative Assistant prior to the beginning of the meeting. Your name will be called when it is your turn to speak. Individual speakers are limited to three minutes each. Comments received via email by May 1, 2025, 4:00 p.m., will be read into the record, provided that the reading shall not exceed three (3) minutes.

CONSENT CALENDAR

1. Minutes from April 3, 2025 Special Meeting.
RECOMMENDATION: That the Historic and Cultural Preservation Board approve the minutes, as submitted.

BUSINESS ITEMS

2. Certificate of Appropriateness No. 25-004 to allow the installation of roof-mounted photovoltaic panels on a detached garage of a contributing residence in the Highland Historic District. (Owner: Sean Cobb, Location: 27225 Nona Ave)

RECOMMENDATION: Staff recommends the Historic and Cultural Preservation Board: Approve COA 25-004, for the installation of roof-mounted photovoltaic panels on a contributing historic district parcel, subject to Conditions of Approval, and Adopt the Findings of Fact.

3. Post-event discussion of the 2025 annual Citrus Harvest Festival, including Vendors, Car Show, Walking Tour, Entertainment, and Marketing.

RECOMMENDATION: Staff recommends the Historic and Cultural Preservation Board discuss the event and provide direction as necessary.

ANNOUNCEMENTS

ADJOURN

I, Camille Duarte, Administrative Assistant III of the City of Highland, California, certify that I caused to be posted this agenda on or before the 24th of April 2025 by 4:30 p.m. on our website at www.cityofhighland.org and in the following designated areas:

Highland Branch Library
7863 Central Avenue

Fire Station No. 1
26974 Base Line

City Hall
27215 Base Line

Date: April 24, 2025



Camille Duarte, Administrative Assistant III



STAFF REPORT

TO THE HISTORIC & CULTURAL PRESERVATION BOARD

DATE: May 1, 2025

FROM: Lawrence A. Mainez, Community Development Director

REVIEWED BY: Kim Stater, Assistant Community Development Director

PREPARED BY: Camille Duarte, Administrative Assistant III

SUBJECT: Minutes from the April 3, 2025 Historic and Cultural Preservation Board Special Meeting

RECOMMENDATION: Staff recommends the Historic and Cultural Preservation Board approve the Minutes as submitted.

PUBLIC NOTICE: The agenda for this item was posted at the three locations per Resolution No. 2011-047 and on the City's website.

Approved _____	Motion _____	Second _____	Agenda Item No. <u>1</u>
Denied _____	Ayes _____		
Continued _____	Noes _____		File No. _____
Tabled _____	Abstain _____		
	Absent _____		
			
Recording Secretary		Community Development Director	

MINUTES
HISTORIC AND CULTURAL PRESERVATION BOARD SPECIAL MEETING
April 3, 2025

CALL TO ORDER

The regular meeting of the Historic and Cultural Preservation Board of the City of Highland was called to order at 5:00 p.m. by Chair Sandford at the Donahue Council Chambers, 27215 Base Line, Highland, California.

Present:	Chair	Patrick Sandford
	Vice Chair	Pamela Bible
	Member	Gail Shelton
	Member	Jeff Staggs

Absent:	Member	Hugh Walker
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Staff Present: Lawrence Mainez, Community Development Director
Camille Duarte, Administrative Assistant III

Member Shelton led the Pledge of Allegiance

COMMUNITY INPUT

Public Speaker Maureen Merideth stated I live in the City of Highland, and I hike on the trails. I noticed that the burn area had taken the larger trees which are not coming back. I wanted to see how I can assist with replanting trees and bringing them back to their natural habitat. I would like to assist with that.

CONSENT CALENDAR

1. Minutes from March 6, 2025 Special Meeting.

A MOTION was made by Member Shelton, seconded by Vice Chair Bible to approve as approved. Motion carried, 4-0, with Member Walker being absent.

BUSINESS ITEM

1. Certified Local Government Program 2023-2024 Annual Report.

Community Development Director Mainez presented the staff report.

The Historic and Cultural Preservation Board received and filed Staff's report.

ANNOUNCEMENTS

Historic and Cultural Preservation Board next meeting will be scheduled May 1, 2025.

ADJOURN

There being no further business Chair Sanford declared the meeting adjourned at 5:10 p.m.

Submitted by:

Approved by:

Camille Duarte, Administrative Assistant III

Patrick Sanford, Chair



STAFF REPORT

TO THE HISTORIC AND CULTURAL PRESERVATION BOARD

DATE: May 1, 2025

FROM: Lawrence A. Mainez, Community Development Director

REVIEWED BY: Kim Stater, Assistant Community Development Director *KS*

PREPARED BY: Angela Tafolla, Associate Planner *AT*

SUBJECT: Certificate of Appropriateness No. 25-004 to allow the installation of roof-mounted photovoltaic panels on a detached garage of a contributing residence in the Highland Historic District.

LOCATION: 27225 Nona Ave. Highland CA 92346
Assessor's Parcel Number: 1191-341-51-0000

OWNER: Sean Cobb

RECOMMENDATION: Staff recommends the Historic and Cultural Preservation Board: Approve COA-25-004, for the installation of roof-mounted photovoltaic panels on a contributing historic district parcel, subject to Conditions of Approval, and Adopt the Findings of Fact.

ENVIRONMENTAL REVIEW: This project is Categorically Exempt from environmental review pursuant to Section 15331, Class 31 (Historical Resource Restoration/Rehabilitation) of the California Environmental Quality Act (CEQA) Guidelines, as the proposed project involves the installation of a solar photovoltaic system on the roof of a detached garage located at the rear of a contributing historic property. The work will not expand the building's overall footprint and will be completed in a manner that preserves the property's distinctive materials, features, spaces, and spatial relationships. The installation will be minimally visible from the public right-of-way, fully reversible, and will not adversely affect the historic character of the residence, consistent with the Secretary of the Interior's Standards for Rehabilitation.

Approved _____	Motion _____	Second _____	Agenda Item No. <u>2</u>
Denied _____	Ayes _____		
Continued _____	Noes _____		File No. _____
Tabled _____	Abstain _____		
	Absent _____		
<i>Grace Drost</i>		<i>Lawrence Mainez</i>	
Recording Secretary		Community Development Director	

PUBLIC NOTICE: As required by City Council Resolution, notice of the public meeting was posted at three (3) designated posting locations within the City. In addition, the notice was posted on the City's website, mailed to property owners within 300 feet of the project site. No further notice is required.

PUBLIC COMMENT: Staff has not received any public comments in response to the project notice at the time of preparing this staff report.

DESCRIPTION OF THE SITE: The Site is a contributing property within the Highland Historic District. It is located on the south side of Nona Avenue, 140 feet east of Cole Avenue (Attachment 1 – Area Map). Located on a 6,480 square foot lot, the single-story home offers 996 square feet of living space in addition to a detached garage/storage facility in the rear of the property. Constructed in 1925, the house features wood shingle siding, asphalt shingle roofing, and a sizable porch with overhanging eaves supported by diagonal braces (Attachment 2 – Photos).

PROJECT REVIEW: As mentioned above, the residence was constructed in 1925 and is a contributing property within the Highland Historic District. The homeowner is requesting approval to install a 5.67 kW DC solar photovoltaic (PV) system, consisting of fourteen (14) solar modules, on the east- and west-facing roof slopes of the detached garage located at the rear of the property, out of public view (Attachment 3 – Solar Plan). Each panel measures approximately 65 inches in length, 40 inches in width, 2 inches in thickness, and weighs just over 47 pounds. The west-facing roof will feature one (1) row of five (5) panels in portrait orientation, with a second row of two (2) panels in landscape orientation placed below. Similarly, the east-facing roof will feature one (1) row of five (5) portrait-oriented panels, with a second row of two (2) landscape-oriented panels placed above. The solar array will cover approximately 293 square feet of roof area. The proposed service panel and meter will be installed on the south side of the residence, in a location that is easily accessible to utility providers. All exposed conduit will be painted to match the existing residence to minimize visual impact.

Although photovoltaic panels are considered to be temporary in nature, they could potentially affect the visual quality of the home and surrounding neighborhood. The proposed plans depict standard flat-plate photovoltaic panels which will be flush-mounted at the same pitch of the existing roof. As proposed, three of the east facing panels will be partially visible from the public right-of-way however, the public's view of the garage and proposed panels are significantly obscured. The garage is set back approximately 80' from the front property line with half of the garage directly behind the home and the other half behind a 6' wood fence gate. The visibility is further obscured by the neighboring residence of the east and its two-story accessory structure in the rear.

The Secretary of the Interior's Standards for Rehabilitation guides the City on how to address repairs, alterations and additions to historic structures. The Standards state that alterations may occur as long as those features of the historic property that convey its architectural values be preserved with minimal change to distinctive materials, features and spatial relationships. The solar array will not alter the architectural value of the historic residence itself, does not structurally compromise the home or cause permanent alteration, and is temporary in nature in that it can be installed and removed without affecting the structure. Moreover, the panels are proposed on the rear detached garage at a location with minimal visibility from the public right-of-way while leaving the historic residence preserved.

As such, the character of the property will be maintained and the property will continue its use as a single-family residence. Staff recommends approval of the proposed project, subject to the conditions of approval and Findings of Fact.

Attachments:

1. Area Map
2. Site Photos
3. Solar Plan
4. Secretary's Standards for Rehabilitation
5. Condition's of Approval
6. Findings of Fact

ATTACHMENT 1

Area Map

AREA MAP



ATTACHMENT 2

Site Photos



ATTACHMENT 3

Solar Plan

SHEET INDEX	
PV1	TITLE SHEET
PV2 (+PV2.1 AS NEEDED)	ROOF/SITE PLAN
PV3 (+PV3.1 AS NEEDED)	ELECTRICAL WIRE DIAGRAM / DETAILS
PV4	EQUIPMENT LABELS
PV4.1	PLACARD
PV5	ATTACHMENT PLAN
PV6	STRUCTURAL COMPONENTS
PV7	PROPERTY LINES
PV8-PV10	INSTALL DOCUMENTS
	STRUCTURAL ENGINEERING CALCS (IF REQ.)
	EQUIPMENT DATA SHEETS

APPLICABLE CODES	
2022 CA BUILDING CODE	
2022 CA RESIDENTIAL CODE	
2022 CA MECHANICAL CODE	
2022 CA ELECTRICAL CODE	
2022 CA GREEN CODE	
2022 CA PLUMBING CODE	
2022 CA ENERGY CODE	
2022 CA FIRE CODE	

OCCUPANCY & CONSTRUCTION TYPE	
OCCUPANCY - R-3	
CONSTRUCTION - VB	

CONTRACTORS LICENSE # & TYPE	
BRIGHT PLANET SOLAR INC	
C-10#1020761	

CONSTRUCTION NOTES	
A.	A LADDER SHALL BE IN PLACE FOR ANY INSPECTIONS IN COMPLIANCE WITH OSHA REGULATIONS.
B.	PV MODULES ARE NON-COMBUSTIBLE IN NATURE.
C.	THIS SYSTEM IS A UTILITY INTERACTIVE (GRID CONNECTED) SYSTEM AND DOES NOT HAVE STORAGE BATTERIES (UNLESS SPECIFICALLY INDICATED ON SHEET PV3 & PV3.1).
D.	A GROUND ELECTRODE SYSTEM WILL BE PROVIDED IN ACCORDANCE WITH CEC 690.47 & 250.50 - 250.166. GROUNDING ELECTRODE SYSTEM OF EXISTING BUILDING MAY BE USED WHEN BONDED AT THE SERVICE ENTRANCE. IF EXISTING SYSTEM IS INACCESSIBLE OR INADEQUATE, OR IS ONLY METALLIC WATER PIPING, A SUPPLEMENTAL GROUNDING ELECTRODE WILL BE USED AT THE INVERTER LOCATION CONSISTING OF A UL LISTED 8FT GROUND ROD WITH A CORN CLAMP. GROUNDING ELECTRODE CONDUCTORS SHALL BE NO LESS THAN #8 AWG AND NO GREATER THAN #6 AWG COPPER AND BONDED TO THE EXISTING GROUNDING ELECTRODE TO PROVIDE FOR A COMPLETE GROUNDING SYSTEM.
E.	EACH MODULE WILL BE GROUNDING USING THE SUPPLIED CONNECTION POINTS IDENTIFIED IN THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
F.	THE EXPOSED METALLIC TABS OF THE SOLAREEDGE OPTIMIZERS SHALL BE BONDED AND/OR GROUNDING PER CEC 690.43(A) AND THE MANUFACTURER'S INSTRUCTIONS.
G.	PROPER ACCESS AND WORKING CLEARANCE AROUND EXISTING AND PROPOSED ELECTRICAL EQUIPMENT WILL BE PROVIDED AS PER CEC 110.26.
H.	ALTERNATE POWER SOURCE PLACARD SHALL BE PLASTIC, ENGRAVED IN A CONTRASTING COLOR (WHITE). THIS PLAQUE WILL BE PERMANENTLY ATTACHED & UV RESISTANT.
I.	ALL PLAQUES AND SIGNS WILL BE INSTALLED AS REQUIRED BY 2022 CEC.
J.	A SMOKE DETECTOR, APPROVED AND LISTED BY THE STATE FIRE MARSHAL, SHALL BE INSTALLED IN EACH DWELLING WHEN A PERMIT FOR ALTERATIONS, REPAIRS OR ADDITIONS EXCEEDS \$1,000.00. A BATTERY POWERED SMOKE DETECTOR SATISFIES THE REQUIREMENTS FOR A SMOKE DETECTOR. APPROVED COMBINED SMOKE ALARMS AND CARBON DIOXIDE ALARMS SHALL BE ACCEPTABLE. A CARBON MONOXIDE DETECTOR SHALL BE INSTALLED IN THE SPECIFIC EXISTING DWELLING UNIT THAT HAVE ATTACHED GARAGES OR FUEL-BURNING APPLIANCES FOR WHICH A PERMIT IS ISSUED FOR ALTERATIONS, REPAIRS OR ADDITIONS EXCEEDING \$1,000.00. LISTED SINGLE- OR MULTI-STATION CARBON MONOXIDE ALARMS SHALL BE INSTALLED OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS AND ON EVERY LEVEL OF A DWELLING UNIT INCLUDING BASEMENTS. COMBINED SMOKE/CARBON MONOXIDE ALARMS MAY BE USED. THE ALARM SHALL RECEIVE ITS PRIMARY POWER FROM THE BUILDING WIRING EXCEPT IT IS PERMITTED TO BE SOLELY BATTERY OPERATED WHERE REPAIRS OR ALTERATIONS DO NOT RESULT IN THE REMOVAL OF WALL AND CEILING FINISHES OR THERE IS NO ACCESS BY MEANS OF AN ATTIC.
K.	THE GROUNDING ELECTRODE CONDUCTOR SHALL BE PROTECTED FROM PHYSICAL DAMAGE BETWEEN THE GROUNDING ELECTRODE AND THE PANEL (OR INVERTER) IF SMALLER THAN #6 AWG COPPER WIRE AS PER CEC 250.64(B)(2). THE GROUNDING ELECTRODE CONDUCTOR WILL BE CONTINUOUS, EXCEPT FOR SPLICES OR JOINTS AS BUSBARS WITHIN LISTED EQUIPMENT AS PER CEC 250.64(C).
L.	ROOF COVERINGS SHALL BE DESIGNED, INSTALLED, AND MAINTAINED IN ACCORDANCE WITH THE BUILDING CODE OF THE LOCAL JURISDICTION.
M.	PV SYSTEMS CONNECTION IN THE SWITCH GEAR (PANEL) SHALL BE POSITIONED AT THE OPPOSITE END FROM THE INPUT FEEDER LOCATION OR MAIN CIRCUIT LOCATION AS PER CEC 705.12(B)(3)(2).
N.	ALL EQUIPMENT SUPPLIED SHALL BE UL LISTED OR LISTED BY A LISTING AGENCY RECOGNIZED BY THE STATE IN WHICH THE SYSTEM IS CONSTRUCTED.
O.	AC DISCONNECTS SHALL BE IN COMPLIANCE WITH CEC 690.13.
P.	ALL DC CONDUCTORS SHALL BE 90° RATED THW, THWN-2, USE-2 OR PV WIRE. ALL AC CONDUCTORS SHALL BE 75° RATED THWN WIRE.
Q.	ANY DC RUNS INSIDE THE BUILDING MUST BE IN METAL CONDUIT AND LABELED EVERY 10'.
R.	THE UTILITY DISCONNECT HAS VISIBLE BLADES, IS LOCKABLE AND IS ACCESSIBLE TO THE UTILITY 24/7.
S.	ALL BREAKERS SHALL BE SUITABLE FOR BACK FEED. WHEN BACK FEED BREAKER IS THE METHOD OF UTILITY INTERCONNECTION THE BREAKER SHALL NOT READ 'LINE AND LOAD'.
T.	COORDINATE ANY POWER OUTAGE WITH LOCAL UTILITY AND PROPERTY OWNER. NOTIFY UTILITY BEFORE ACTIVATION OF PV SYSTEM.
U.	CITY BUILDING INSPECTOR SHALL INSPECT ACCESSIBLE STRUCTURAL CONNECTIONS AND THE HOUSE CURRENT SIDE OF THE SYSTEM. ALL OTHER EQUIPMENT SHALL BE UL LISTED AND APPROVED.
V.	PHOTOVOLTAIC MODULES SHALL NOT BE INSTALLED OVER ANY ATTIC, PLUMBING OR MECHANICAL VENT. PLUMBING VENTS TO EXTEND A MIN OF 6" ABOVE ROOF OR MODULE. NO BLDG, PLBG OR MECH VENTS TO BE COVERED, OBSTRUCTED OR ROUTED AROUND MODULES.
W.	ROOF ACCESS POINT SHALL BE LOCATED IN AREAS THAT DO NOT REQUIRE THE PLACEMENT OF GROUND LADDERS OVER THE OPENINGS SUCH AS WINDOWS OR DOORS, AND LOCATED AT A STRONG POINT OF BUILDING CONSTRUCTION. FIELD VERIFY EXACT LOCATION.
X.	THE DISCHARGE OF POLLUTANTS TO ANY STORM DRAINAGE SYSTEM IS PROHIBITED. NO SOLID WASTE, PETROLEUM BYPRODUCTS, SOIL PARTICULATE, CONSTRUCTION WASTE MATERIAL OR WASTEWATER GENERATED ON CONSTRUCTION SITE OR BY CONSTRUCTION ACTIVITIES SHALL BE PLACED, CONVEYED OR DISCHARGED INTO THE STREET, GUTTER OR STORM DRAIN SYSTEM.
Y.	ALL WIRING MUST BE PROPERLY SUPPORTED BY DEVICES OR MECHANICAL MEANS DESIGNED AND LISTED FOR SUCH USE AND WIRING MUST BE PERMANENTLY AND COMPLETELY HELD OFF OF THE ROOF SURFACE.
Z.	ALL EQUIPMENT AND CONDUITS SHALL BE PAINTED TO MATCH ITS EXISTING BACKGROUND COLOR OF THAT LOCATION. SYSTEM NOT TO BE ENERGIZED UNTIL APPROVED BY THE LOCAL UTILITY.
AA.	NO ROOFTOP CONDUIT RUNS, J-BOXES, VENTS, OR OTHER EQUIPMENT OR OBSTRUCTIONS ARE ALLOWED IN THE STATE FIRE MARSHAL'S EDGE SETBACKS, LESS THAN 5' WIDE.



02/27/2025

VSE Project Number: U1932.6253.251

Vector Structural Engineering has reviewed the existing structure with loading from the solar array and screw connections to the existing framing. The design of the racking system, racking connections, and all other structural is by others. Mechanical, architectural, and all other non-structural aspects of the design are by others. Electrical is by others, unless stamped by Dean Levenson.



BRIGHT PLANET SOLAR
103A MILLBURY ST,
AUBURN MA 01501
888-997-4469

SIGNATURE:

Sean Cobbe

CONTRACTOR LICENSE:
C-10#1020761
DATE: 3/27/2025 10:36:27 AM

PROJECT #	BPN134692	REV		DATE		DESCRIPTION	
SYSTEM SIZE	5.67KW/DC 5.76KW/AC						
DATE:	3/27/2025 10:36:27 AM						
DESIGNER:	MICHAEL BURGOS PA						

SEAN COBB
27225 NONA AVE,
HIGHLAND, CA 92346

TITLE SHEET

PV1

AZIMUTH AND TILT ANGLE						
	ROOF					
	ROOF A:	ROOF B:	ROOF C:	ROOF D:	ROOF E:	ROOF F:
AZIMUTH	30°	270°				
TILT ANGLE	6/12	6/12				
MODULE COUNT	7	7				
SOLAR ACCESS						
TYPICAL RACKING						
INVERTERS	SOLAR EDGE S2500BT - US94W	3				
OPTIMIZERS	HOLOEDGE S448	14				
	MODULE #1:	COUNT:	MODULE #2:	COUNT:	TOTAL COUNT:	
	1A 501 AR 144W/600T 40°/148°	14			14	

 FIRE CODE PATHWAYS & SETBACKS

SYMBOL LEGEND

-  = MECHANICAL VENT
-  = FLUE / PLUMBING VENT

1 MAIN SERVICE PANEL

2 UTILITY METER

3 AC DISCONNECT

4 ESSENTIAL LOADS PANEL

4.1 NOT USED

5 INVERTER & INTEGRATED DC DISCONNECT

5.1 NOT USED

6 OPTIMIZER (TYPICAL FOR EACH MODULE)

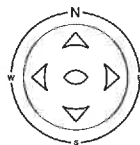
7 JUNCTION BOX ON ROOF (SIZE DETERMINED IN FIELD)

8 PV MODULES

9 CONDUIT RUN IS SURFACE MOUNTED (ACTUAL CONDUIT RUNS TO BE DETERMINED IN THE FIELD)

10 ENERGY BANK BATTERY PACK

11 BACKUP INTERFACE



ROOF CALCULATIONS:

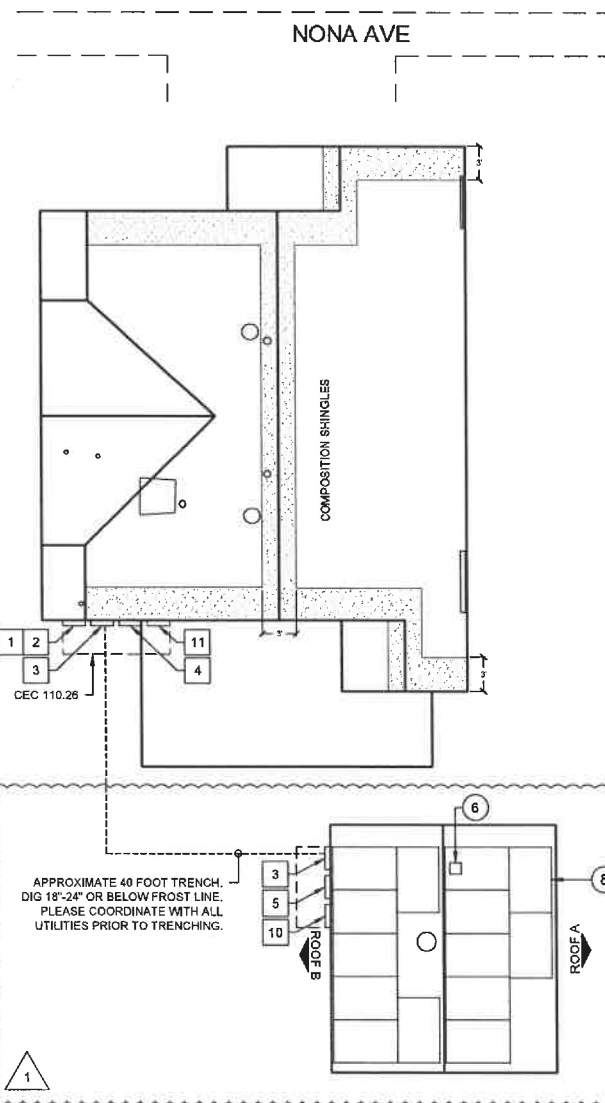
TOTAL AREA OF ARRAY(S) = 293.72 SQ. FT.
TOTAL AREA OF ROOF = 1928 SQ. FT.
% OF TOTAL ROOF COVERED = 15.2%
TOTAL WEIGHT OF ARRAY(S) = 663.46



02/27/2025

VSE Project Number: U1932.6253.251

Vector Structural Engineering has reviewed the existing structure with loading from the solar array and solar connections to the existing framing. The design of the racking system, racking connections, and all other structural is by others. Mechanical, architectural, and all other non-structural aspects of the design are by others. Electrical is by others, unless stamped by Dean Levenson.



BRIGHT PLANET SOLAR
103A MILLBURY ST,
AUBURN MA 01501
888-997-4469

SIGNATURE:



CONTRACTOR LICENSE:
C-1061020761
DATE: 3/27/2025 10:36:29 AM

PROJECT #	BPN134582	REV	DATE	DESCRIPTION
SYSTEM SIZE	5.87kW/DC 5.76kW/AC	△	3/27/2025	APU COMMENTS
DATE:	3/27/2025 10:36:29 AM		—	
DESIGNER:	MICHAEL BURGOS PA		—	
			—	

SEAN COBB
27225 NONA AVE,
HIGHLAND, CA 92346

ROOF/SITE PLAN

PV2

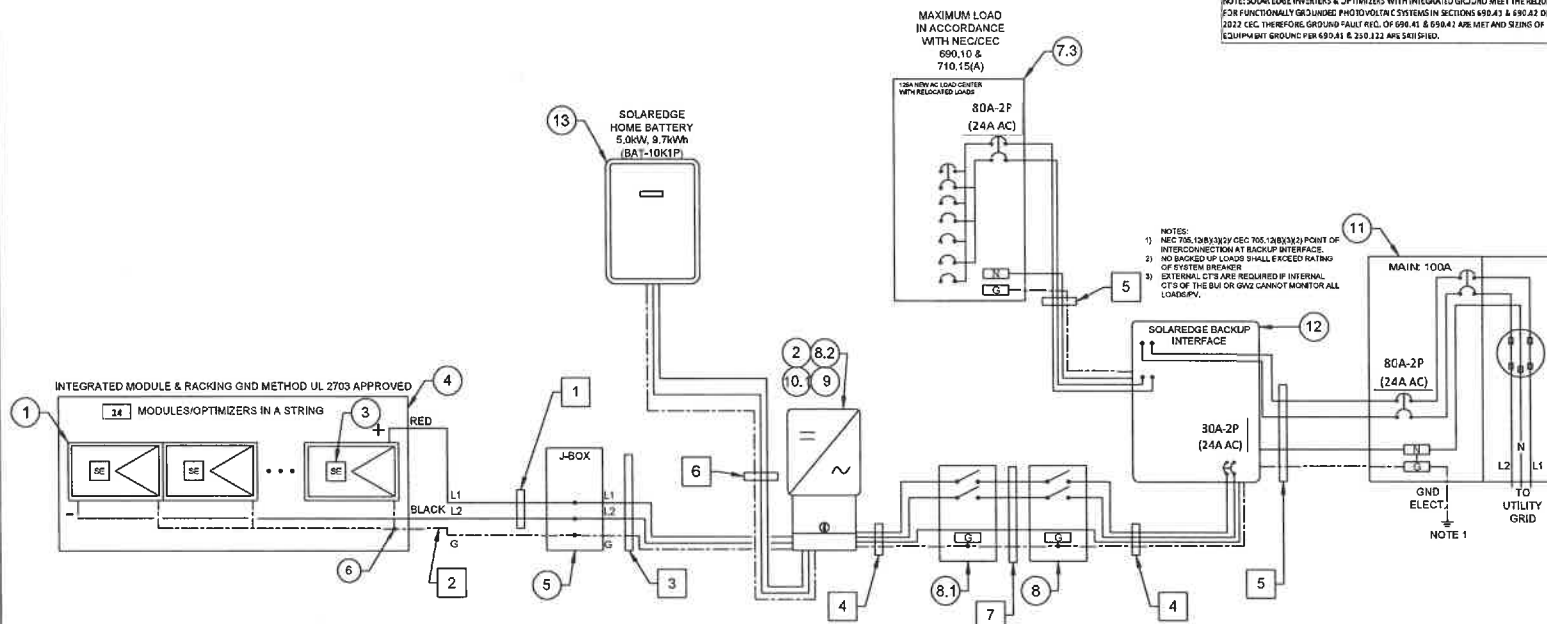


OPTIMIZER SPECIFICATIONS					
MAXIMUM MODEL		SOLAREDGE S440			
		INPUTS		OUTPUTS	
MAX INPUT VOLTAGE AT VOC/MIN	63	[V]	60	MAX OUTPUT VOLTAGE	
MAX SHORT CIRCUIT CURRENT I _{sc}	14.5	[A]	15	MAX OUTPUT CURRENT	
MAX INPUT DC POWER	410	[W]	380	ACTUAL STRING OUTPUT CURRENT	
NOTE 1: OPTIMIZERS TO BE GROUNDING USING 1/4" HEX HEAD BOLT, WASHER, NUT, FOR TOP RAIL MOUNT. SUPPLIED WITH STAINLESS WASHER.					

PV MODULE #1 SPECIFICATIONS			
MAKE AND MODEL	1A SOLAR JAM4531-405/1MR	1A WATT	1A WATT
MAX POWER POINT CURRENT (I _{mp})	[A]	12.98	26.1
MAX POWER POINT VOLTAGE (V _{mp})	[V]	31.1	83.5
OPEN CIRCUIT VOLTAGE (V _{oc})	[V]	37.2	95.3
SHORT CIRCUIT CURRENT (I _{sc})	[A]	13.37	27.5
MAX SERIES RESISTANCE (R _{ps})	[Ω]	25	64
MAX TOLERANCE (T _{max})	[V]	475	1213
MAX VOLTAGE (V _{max})	[V]	1000	2500

INVERTER SPECIFICATIONS			
MANUFACTURER AND MODEL		SOLAR EDGE SE5700H-USMN	
MAX DC INPUT VOLTAGE	[V]	480	
MAX OUTPUT POWER	[W]	5760	
NOMINAL DC INPUT VOLTAGE	[V]	380	
NOMINAL AC OUTPUT VOLTAGE	[V]	240	
MAX CONTINUOUS OUTPUT CURRENT	[A]	24	
OVERCURRENT PROTECTION DEVICE RATING	[A]	30	
MAX DC INPUT CURRENT *	[A]	16	
* DC CURRENT LIMITED BY INVERTER AT DC DISCONNECT NOTE: SOLAR EDGE INVERTERS & OPTIMIZERS WITH INTEGRATED GROUND MEET THE REQUIREMENTS FOR FUNCTIONALLY GROUNDING PHOTOVOLTAIC SYSTEMS IN SECTIONS 690.43 & 690.42 OF THE 2022 NEC. THEREFORE, GROUND FAULT RCD OF 690.41 & 690.42 ARE MET AND SIZES OF EQUIPMENT GROUND PER 690.41 & 250.122 ARE SATISFIED.			

EXISTING MAIN SERVICE PANEL			
MANUFACTURER:		50/100/150	
PANEL MODEL NUMBER:			
VOLTAGE:	240V	[V]	
PHASES:	1	Ø	
BUS/RATING:	125	[A]	
MAIN BREAKER:	100	[A]	
MINIMUM PV SYSTEM BREAKER SIZE	30	[A]	
NO. OF SPARE BREAKER	2		
CALCS:	BUS	MAX	
	125 * 1.25	= 156	NEC 705.12(B)(2)
	100 + (1.25 * 24)	= 130	
NOTE 1: IF THE EXISTING MAIN SERVICE PANEL DOES NOT HAVE A VERIFIABLE GROUNDING ELECTRODE, IT IS THE PV CONTRACTOR'S RESPONSIBILITY TO INSTALL A SUPPLEMENTAL GROUNDING ELECTRODE. NOTE 2: ENSURE G.E.C. IS INSTALLED AS PER 690.47 & 250.54. NOTE 3: ALL NEW EQUIPMENT INSTALLED SHALL BE RATED TO MATCH THE EXISTING EQUIPMENT'S AVAILABLE FAULT CURRENT 110.0			



STRING CALCULATIONS			
1 CIRCUIT WITH 14 - SOLAREDGE S440 OPTIMIZERS IN SERIES			
5570W	/	380V	ACTUAL STRING CURRENT 14.92A
380V	/	14	ACTUAL VOLTAGE PER OPTIMIZER 27.1V
1	X	380V	MAX SYSTEM VOLTAGE 380V
1	X	15A	MAX SYSTEM CURRENT 15A
14	X	409W	← ACTUAL MAX POWER DC → 5670W

EQUIPMENT SCHEDULE			
TAG	DESCRIPTION	MANUFACTURER	NOTES
1	SOLAR PV MODULE #1	JA SOLAR JAM4531-405/1MR	JA SOLAR JAM4531-405/1MR
2	INVERTER #1	SOLAR EDGE SE5700H-USMN	QUANTITY 1
3	OPTIMIZERS	SOLAREDGE S440	14
4	RACKING	SNAPTRACK ULTRA	SEE RACKING SPECIFICATIONS
5	J-BOX	SNAPTRACK ULTRA	SELECTED IN FIELD
6	GROUNDING	SNAPTRACK ULTRA	MODULE TO RAIL RAIL TO J-BOX
2.3 ESSENTIAL LOADS PANEL			
8	AC (UTILITY) DISCONNECT	SQUARE D OR EQUAL	BUS SIZE: 125A / OCPD: 80A
8.1	AC DISCONNECT #2	SQUARE D OR EQUAL	DU222RB 240V 100A 2P 3R
8.2	INTEGRATED DC DISCONNECT	SOLAR EDGE	DU222RB 240V 50A 2P 3R
9	RAPID SHUT-DOWN	SOLAR EDGE	
10.1	INTEGRATED REVENUE METER	SOLAR EDGE	INTEGRAL TO INVERTER
11	EXISTING MAIN SERVICE PANEL	SQUARE D	INTEGRAL TO INVERTER
12	BACKUP INTERFACE/BUS	SOLAR EDGE	INTEGRAL TO INVERTER
13	ENERGY STORAGE	SOLAR EDGE	QUANTITY 1

CONDUIT AND CONDUCTOR SCHEDULE			
TAG	DESCRIPTION OF CONDUCTOR TYPE	CONDUCTOR SIZE (AWG)	CONDUIT TYPE
1	PV WIRE	#10	IN FREE AIR
2	600/600	#6	IN FREE AIR
3	THWN-2	#10 & #6	EMT
4	THWN	#6 & #8	EMT
5	THWN	#4 & #6	EMT
6	THWN	#10 & #8	EMT
CONDUCTOR CALCULATIONS:			
3) 690.3(B)(1) 15 x 1.25 = 18.75a			
4) 24 x 1.25 = 30a			
18.75a < 30a			
Amb. Temp. Max = 17°C			
30a / 0.88 = 34.09a			
34.09a < 100a			
20.63a < 30a			
1. ALL CONDUCTORS ARE DESIGNED FOR LESS THAN 2% VOLTAGE DROP. 2. ALL EXTERIOR CONDUITS SHALL HAVE WATERPROOF FITTINGS. 3. ALL CONDUCTORS ARE COPPER			

		BRIGHT PLANET SOLAR 103A MILLBURY ST. AUBURN MA 01501 888-997-4469		SIGNATURE:		PROJECT # BPN134592		REV		DATE		DESCRIPTION		ELECTRICAL LINE DIAGRAM/ DETAILS	
				CONTRACTOR LICENSE: C-10#1020781		SYSTEM SIZE 5.87kW/DC 5.76kW/AC		DATE: 3/27/2025 10:30:34 AM						SEAN COBB 27225 NONA AVE, HIGHLAND, CA 92346	
				DESIGNER: MICHAEL BURGOS PA										PV3	
				DATE: 3/27/2025 10:30:34 AM											

NOTE: PLAQUES SHALL BE ATTACHED TO THE SERVICE EQUIPMENT WITH NON CORROSIVE, POP-RIVETS, SCREWS, OR APPROVED ADHESIVE.

- 1 LOCATION: MAIN SERVICE PANEL & AC DISCONNECT



- 2 LOCATION: MAIN SERVICE PANEL PV BACK-FED BREAKER



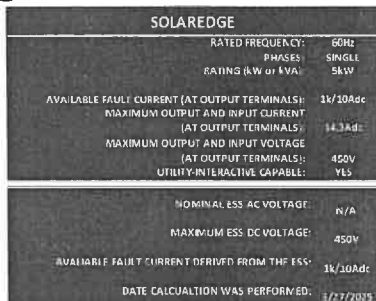
- 4 LOCATION: UTILITY METER



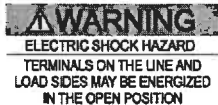
- 5 LOCATION: PV SUB PANEL (IF USED)



- 16 LOCATION: ENERGY STORAGE



- 5.1 LOCATION: BATTERY DISCONNECT



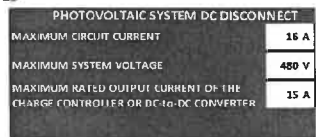
- 15 LOCATION: MAIN SERVICE PANEL



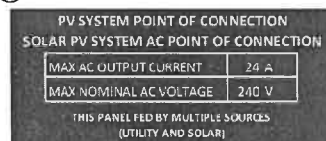
- 6 CONDUIT, RACEWAYS & ENCLOSURES



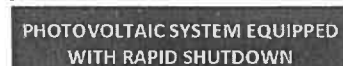
- 7 LOCATION: DC DISCONNECT/INVERTER #1



- 8 LOCATION: MAIN SERVICE PANEL



- 9 LOCATION: MAIN SERVICE PANEL



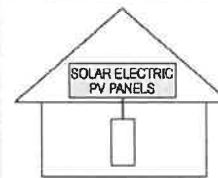
- 10 LOCATION: INVERTER



- 11 LOCATION: MAIN PANEL

SOLAR PV SYSTEM EQUIPPED WITH RAPID SHUTDOWN

TURN RAPID SHUTDOWN SWITCH TO THE "OFF" POSITION TO SHUT DOWN PV SYSTEM AND REDUCE SHOCK HAZARD IN THE ARRAY



- 13 LOCATION: MAIN SERVICE PANEL / AC DISCONNECT



- 14 LOCATION: AC DISCONNECT



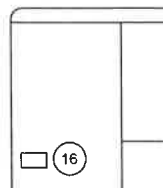
- 2 LOCATION: MAIN SERVICE PANEL PV BACK-FED BREAKER



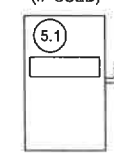
- 14 LOCATION: ESS DISCONNECT



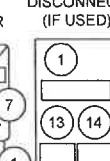
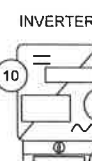
ENERGY STORAGE



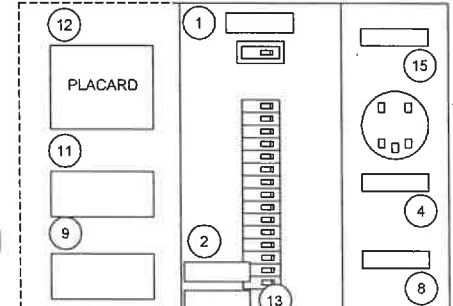
BATTERY DISCONNECT (IF USED)



PV SUB PANEL (IF USED) CONDUITS/RACEWAYS



FOR ILLUSTRATION ONLY (NOT ACTUAL MSP) MAIN SERVICE PANEL



BRIGHT PLANET SOLAR
103A MILLBURY ST,
AUBURN MA 01501
888-997-4469

SIGNATURE:

Michael Burgos

CONTRACTOR LICENSE:
C-10#1020761
DATE: 3/27/2025 10:36:37 AM

PROJECT #

BPN134592

REV

DATE

DESCRIPTION

SYSTEM SIZE

5.67kW/DC 5.78kW/AC

DATE:

3/27/2025 10:36:37 AM

DESIGNER:

MICHAEL BURGOS PA

SEAN COBB
27225 NONA AVE,
HIGHLAND, CA 92346

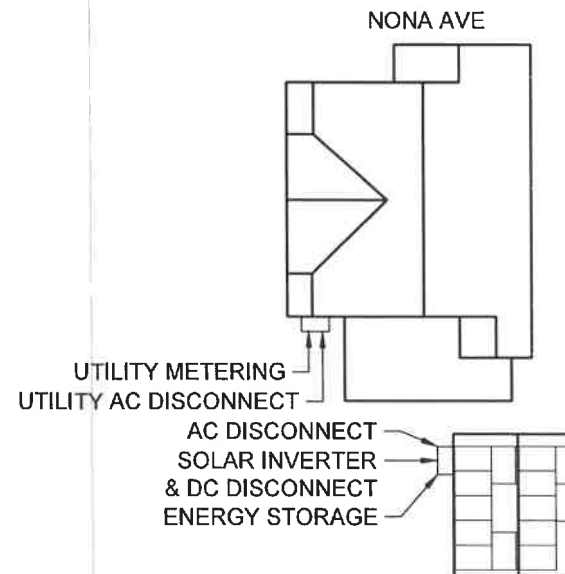
EQUIPMENT
LABELS

PV4

12 PLACARD

CAUTION:

MULTIPLE SOURCES OF POWER



BRIGHT PLANET SOLAR
103A MILLBURY ST,
AUBURN MA 01501
888-997-4469

SIGNATURE:

John G.

CONTRACTOR LICENSE:
C-10#1020761
DATE: 3/27/2025 10:36:38 AM

PROJECT #	DPN134592	REV	DATE	DESCRIPTION
SYSTEM SIZE	5.67KW/DC 5.78KW/AC		—	
DATE:	3/27/2025 10:36:38 AM		—	
DESIGNER:	MICHAEL BURGOS PA		—	
			—	

SEAN COBB
27225 NONA AVE,
HIGHLAND, CA 92346

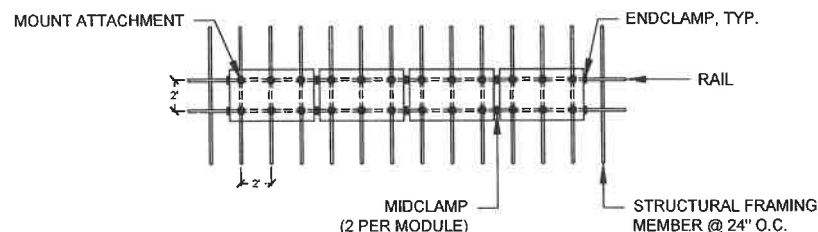
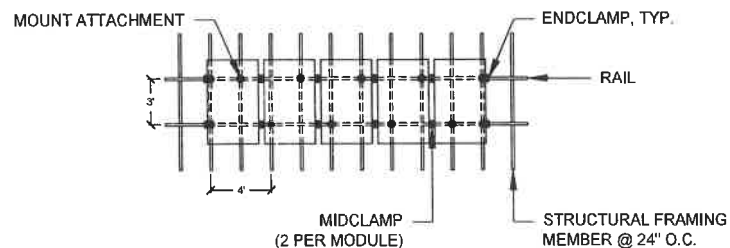
PLACARD

PV4.1

- = MOUNT ATTACHMENT LOCATION
MAXIMUM OVERHANG (CANTILEVER) IS 19
MAXIMUM SPACING OF ANCHORS (FOOTINGS) IS 48 IN. O.C.
FIELD VERIFY EXACT LOCATION OF STRUCTURE MEMBERS.

ROOF A:
PHOTOVOLTAIC DEAD LOAD STATEMENT
TOTAL AREA OF ARRAY = 146.86 SQ. FT.
ARRAY GROSS WEIGHT = 331.73 LBS
DEAD LOAD RATING = 2.8 LBS/SQ.FT.
EXISTING STRUCTURAL FRAMING = 2x4 @ 24 IN. O.C.

ROOF B:
PHOTOVOLTAIC DEAD LOAD STATEMENT
TOTAL AREA OF ARRAY = 146.86 SQ. FT.
ARRAY GROSS WEIGHT = 331.73 LBS
DEAD LOAD RATING = 2.8 LBS/SQ.FT.
EXISTING STRUCTURAL FRAMING = 2x4 @ 24 IN. O.C.



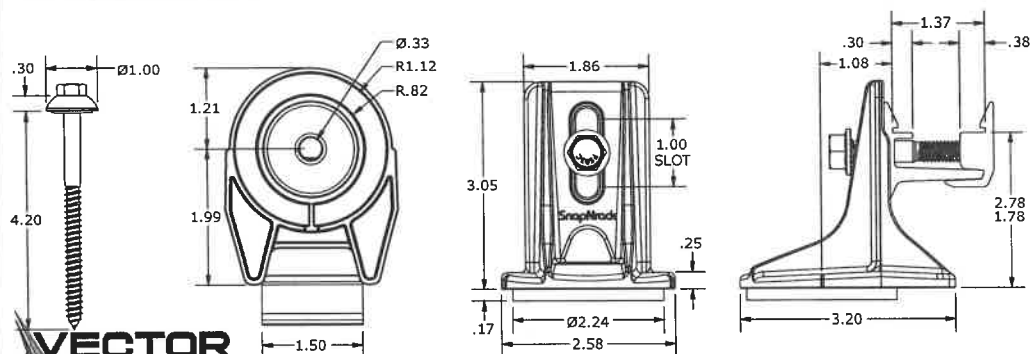
VECTOR
ENGINEERS®
851 W. TAYLOR PARK BLVD. STE. 1111 | PHONE (801) 200-1775
DRAPER, UTAH 84020 | WWW.VECTORBE.COM



02/27/2025
VSE Project Number: U1932.6253.251
Vector Structural Engineering has reviewed the existing structure with loading from the solar array and screw connections to the existing framing. The design of the racking system, racking connections, and all other structural aspects of the design are by others. Electrical is by others, unless stamped by Dean Levarson.

 BRIGHT PLANET SOLAR 103A MILLBURY ST, AUBURN MA 01501 888-997-4469	SIGNATURE: 	PROJECT #	BPN134592	REV	DATE	DESCRIPTION	SEAN COBB 27225 NONA AVE, HIGHLAND, CA 92346	ATTACHMENT PLAN	
	CONTRACTOR LICENSE: C-10#1020761	SYSTEM SIZE	5.67KW/DC	5.78KW/AC		---			PV5
	DATE: 3/27/2025 10:36:39 AM	DATE:	3/27/2025 10:36:39 AM		---				
		DESIGNER:	MICHAEL BURGOS PA		---				

ALL DIMENSIONS IN INCHES



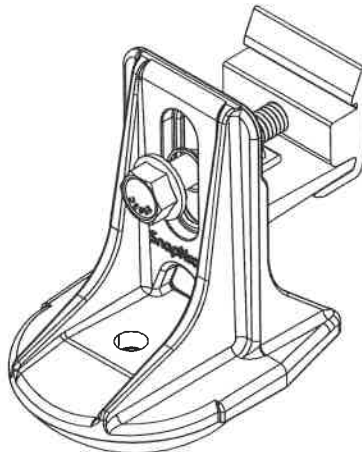
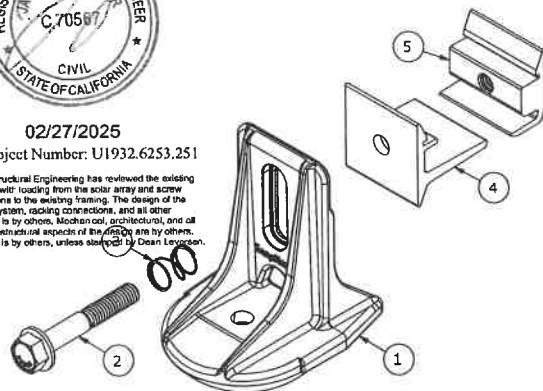
VECTOR ENGINEERS, INC.
451 W. BALFA PARK BLVD. RT. 171 PHONE (801) 900-1775
CHURCH, UTAH 84002 WWW.VECTORBS.COM



02/27/2025

VSE Project Number: U1932.6253.251

Vector Structural Engineering has reviewed the existing structure with loading from the solar array and screw connections to the existing framing. The design of the racking system, including components, and all other structural is by others, Mechanical, architectural, and all other nonstructural aspects of the design are by others. Electrical is by others, unless specified by Sean Leighton.

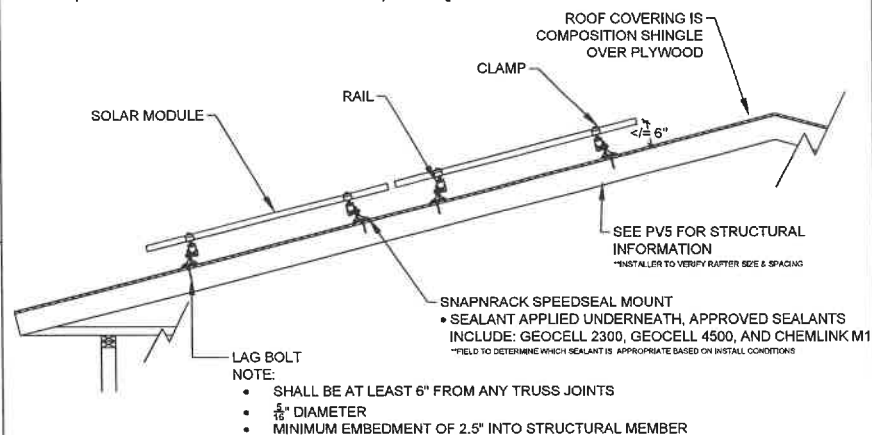


PARTS LIST

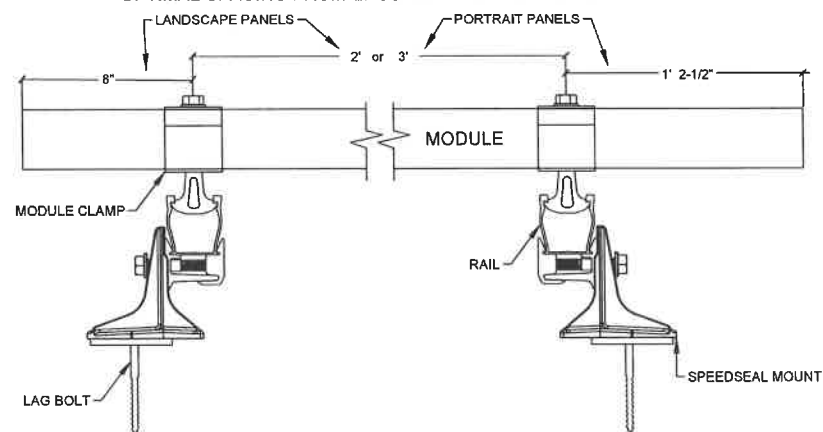
ITEM	QTY	DESCRIPTION
1	1	SNAPRACK, SPEEDSEAL FOOT, BASE, SEALING, SILVER / BLACK
2	1	BOLT, FLANGE, SERRATED, 5/16IN-18 X 2IN, SS
3	1	SNAPRACK, RL UNIVERSAL, MOUNT SPRING, SS
4	1	SNAPRACK, ULTRA RAIL MOUNT THRU PRC, CLEAR / BLACK
5	1	SNAPRACK, ULTRA RAIL MOUNT TAPPED PRC, CLEAR / BLACK

SNAPRACK ROOF MOUNT SYSTEM

SNOW/CRITTER GUARD TO BE INSTALLED, IF REQUIRED



OPTIMAL SPACING FROM EDGE AND IN BETWEEN CLAMPS



BRIGHT PLANET SOLAR
103A MILLBURY ST.
AUBURN MA 01501
888-997-4469

SIGNATURE:

Sean Cobb

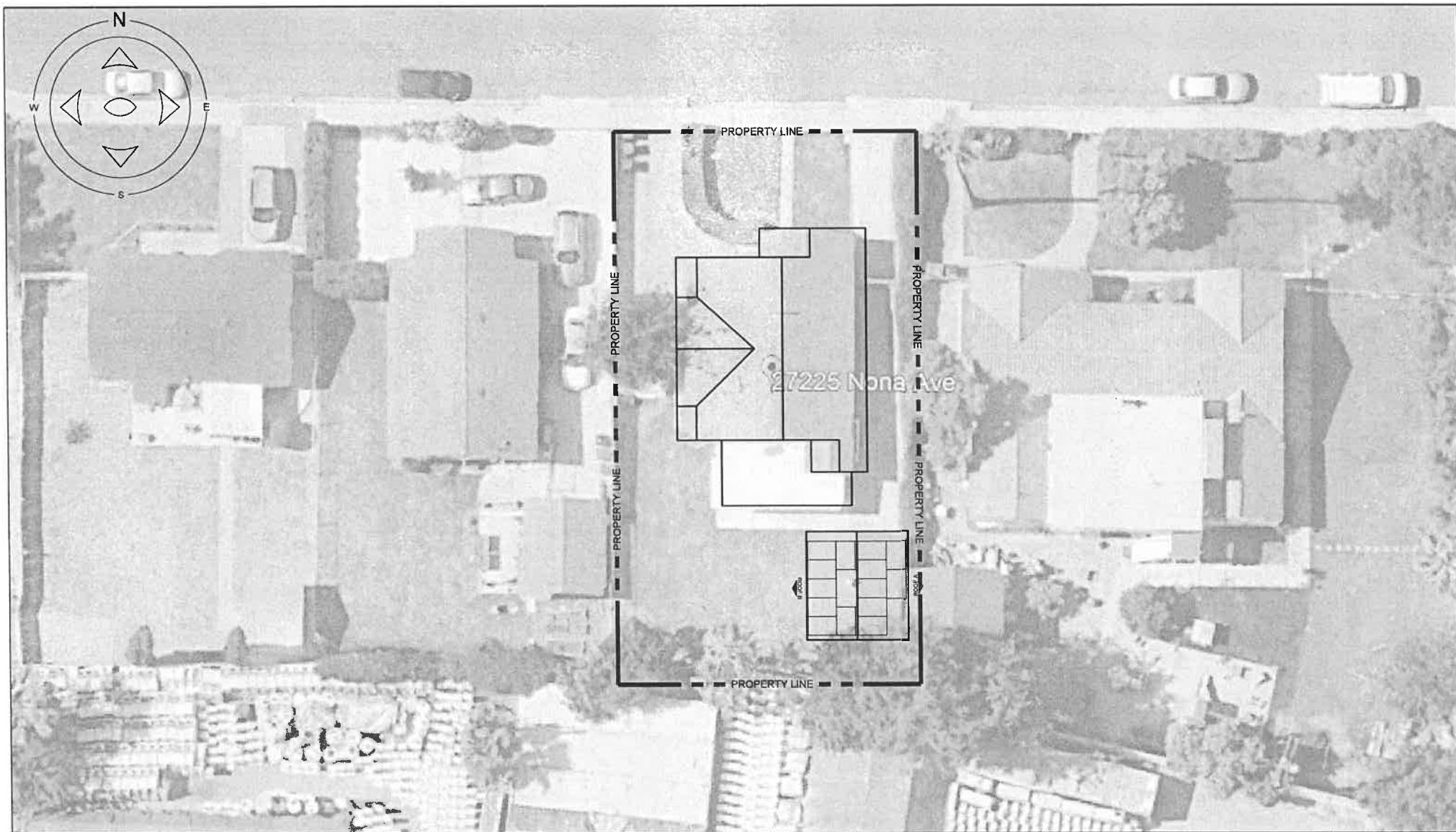
CONTRACTOR LICENSE:
C-10#1020761
DATE: 3/27/2025 10:36:39 AM

PROJECT #	UPN134592	REV	DATE	DESCRIPTION
SYSTEM SIZE	5.67KW/DC 5.76KW/AC			
DATE:	3/27/2025 10:36:39 AM			
DESIGNER:	MICHAEL BURGOS PA			

SEAN COBB
27225 NONA AVE,
HIGHLAND, CA 92346

STRUCTURAL
COMPONENTS

PV6



BRIGHT PLANET SOLAR
103A MILLBURY ST,
AUBURN MA 01501
888-997-4469

SIGNATURE:

John G.

CONTRACTOR LICENSE:
C-10#1020761

DATE: 3/27/2025 10:36:40 AM

PROJECT #	BPN134592	REV		DATE		DESCRIPTION	
SYSTEM SIZE	5.67kW/DC 5.76kW/AC			--			
DATE:	3/27/2025 10:36:40 AM			--			
DESIGNER:	MICHAEL BURGOS PA			--			
				--			

SEAN COBB
27225 NONA AVE,
HIGHLAND, CA 92346

PROPERTY LINES

PV7

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23	24	25
26	27	28	29	30
31	32	33	34	35
36	37	38	39	40
41	42	43	44	45

MAPPING INSTRUCTIONS:

1. REMOVE THE 'SQUARE' OPTIMIZER STICKER AND PLACE NEATLY ON THE APPROPRIATE NUMBERED SPACE.
2. WRITE THE CORRESPONDING NUMBER ON THE APPROPRIATE MODULE WITHIN THE ARRAY.

INVERTER(S)	AZIMUTH AND TILT ANGLE					
	ROOF A	ROOF B	ROOF C	ROOF D	ROOF E	ROOF F
INVERTER #	1	2	3	4	5	6
INVERTER #	7	8	9	10	11	12
INVERTER #	13	14	15	16	17	18
INVERTER #	19	20	21	22	23	24
INVERTER #	25	26	27	28	29	30
INVERTER #	31	32	33	34	35	36
INVERTER #	37	38	39	40	41	42
INVERTER #	43	44	45	46	47	48
INVERTER #	49	50	51	52	53	54
INVERTER #	55	56	57	58	59	60
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INVERTER #	67	68	69	70	71	72
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INVERTER #	79	80	81	82	83	84
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INVERTER #	97	98	99	100	101	102
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INVERTER #	793	794	795	796	797	798
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INVERTER #	1057	1058	1059	1060	1061	1062
INVERTER #	1063	1064	1065	1066	1067	1068
INVERTER #	1069	1070	1071	1072	1073	1074
INVERTER #	1075	1076	1077	1078	1079	1080
INVERTER #	1081	1082	1083	1084	1085	1086
INVERTER #	1087	1088	1089	1090	1091	1092
INVERTER #	1093	1094	1095	1096	1097	1098
INVERTER #	1099	1100	1101	1102	1103	1104
INVERTER #	1105	1106	1107	1108	1109	1110

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	BRIGHT PLANET SOLAR 103A MILLBURY ST, AUBURN MA 01501 888-997-4469	SIGNATURE:	PROJECT #	BPN134592	REV	DATE	DESCRIPTION	SEAN COBB 27225 NONA AVE, HIGHLAND, CA 92348
			SYSTEM SIZE	5.67KW/DC	5.76KW/AC	--		
		CONTRACTOR LICENSE:	DATE:	3/27/2025 10:36:42 AM	--			
		C-10#1020761	DESIGNER:	MICHAEL BURGOS PA	--			
		DATE: 3/27/2025 10:36:42 AM			--			

LEGEND / LEYENDA	JOB HAZARD ANALYSIS / ANALISIS DE RIESGOS LABORALES																												
EXCLUSION ZONE/ ZONA RESTRINGIDA XXXXXXXXXXXX ELECTRICAL ZONE/ ZONA ELECTRICA L LADDER/ ESCALERA A ANCHOR/ ANCLAJE ANCHOR WORK ANGLES/ ANCLAJE TRABAJADO EN ANGULOS V VEHICLES/ VEHICULOS H# HAZARD NUMBER & EXPLAIN/ RIESGOS NUMERADOS Y EXPLICADOS TREE / ARBOL E HOME ENTRANCES/ ENTRADA DE LA CASA	SITE NOTES (INCLUDE ANY HAZARD, NUMBERED AND EXPLAINED): NOTAS DEL LUGAR (INCLUYE CUALQUIER RIESGO, NUMERADO Y EXPLICADO): CLOSEST URGENT CARE / MEDICAL FACILITY: SALA DE EMERGENCIA / HOSPITAL MAS CERCANO: PUBLIC PROTECTION / PROTECCION PUBLICA: ☐ EXCLUSION ZONES / ZONA RESTRINGIDA ☐ MARKED ENTRYWAYS / ENTRADA MARCADA FALL PROTECTION / PROTECCION DE CAIDAS: ☐ ANCHORS / ANCLAJE ☐ ROPES / CARABINERS & ROPE GRAB / SOGAS CARABINERO Y AGARRE DE SOGA ☐ HARNESS / ARNES ☐ LANYARDS / SOGA PPE / EPP: ☐ SAFETY GLASSES / GAFAS DE SEGURIDAD GLOVES/GUANTES ☐ HARD HATS/CASCO DE SEGURIDAD ☐ ARC FLASH SUIT / HOT GLOVES / TRAJE AISLANTE/GUANTES PARA ELECTRICIDAD ☐ FIRST AID KIT / KIT DE PRIMEROS AUXILIOS ☐ COVID-19 PPE ON SITE / EPP POR COVID EN EL LUGAR ☐ CREW ADHERING TO BPS COVID-19 PLAN / AJUSTE EN EL GRUPO AL PLAN POR COVID-19 DE BPS DATE / FECHA: CREW LEAD / LIDER DE GRUPO: CREW MEMBERS / MIEMBROS DEL GRUPO:	----- NONA AVE ----- 																											
BRIGHT PLANET SOLAR 103A MILLBURY ST, AUBURN MA 01501 888-997-4469		SIGNATURE: CONTRACTOR LICENSE: C-10#1020761 DATE: 3/27/2025 10:36:42 AM <table border="1" style="width: 100%; border-collapse: collapse; font-size: 0.8em;"> <thead> <tr> <th>PROJECT #</th> <th>BPN134692</th> <th>REV</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>SYSTEM SIZE</td> <td>5.67kW/DC 5.76kW/AC</td> <td></td> <td>---</td> <td></td> </tr> <tr> <td>DATE:</td> <td>3/27/2025 10:36:42 AM</td> <td></td> <td>---</td> <td></td> </tr> <tr> <td>DESIGNER:</td> <td>MICHAEL BURGOS PA</td> <td></td> <td>---</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>---</td> <td></td> </tr> </tbody> </table>	PROJECT #	BPN134692	REV	DATE	DESCRIPTION	SYSTEM SIZE	5.67kW/DC 5.76kW/AC		---		DATE:	3/27/2025 10:36:42 AM		---		DESIGNER:	MICHAEL BURGOS PA		---					---		SEAN COBB 27225 NONA AVE, HIGHLAND, CA 92346	JOB HAZARD ANALYSIS PV9
PROJECT #	BPN134692	REV	DATE	DESCRIPTION																									
SYSTEM SIZE	5.67kW/DC 5.76kW/AC		---																										
DATE:	3/27/2025 10:36:42 AM		---																										
DESIGNER:	MICHAEL BURGOS PA		---																										

BOM SHEET							
ITEM	DESCRIPTION	MANUFACTURER	PART NUMBER	QUANTITY NEEDED	EQUIPMENT BREAKER	PARTS PULLED	PARTS RECEIVED
1	SOLAR PV MODULE #1	JA SOLAR JAM54531-405/MR	JA SOLAR JAM54531-405/MR	14			
2	INVERTER #1	SOLAR EDGE SE5700H - USMN	SOLAR EDGE SE5700H - USMN	1	INVERTER #1: 30A-2P		
3	OPTIMIZERS	SOLAREGE S440	SOLAREGE S440	14			
4	RACKING	SNAPNRACK	SNAPNRACK ULTRA	SEE RACKING / HARDWARE INFORMATION BELOW			
5	J-BOX	SELECTED BY FIELD	SELECTED BY FIELD	PULL AS REQUIRED			
6	GROUNDING	INTEGRATED WITH RACKING		INTEGRATED, SEE RACKING / HARDWARE INFORMATION BELOW			
7.3	ESSENTIAL LOADS PANEL	SQUARE D OR EQUAL	BUS SIZE:125A / OCPD:80A	1			
8	AC (UTILITY) DISCONNECT	SQUARE D OR EQUAL	DU222RB,240V,60A,2P,3R	1			
8.1	AC DISCONNECT #2	SQUARE D OR EQUAL	DU222RB,240V,60A,2P,3R	1			
8.2	INTEGRATED DC DISCONNECT	SOLAR EDGE		INTEGRATED TO THE INVERTER			
9	RAPID SHUTDOWN	SOLAR EDGE		INTEGRATED TO THE INVERTER			
10.1	INTEGRATED REVENUE METER	SOLAR EDGE		INTEGRATED TO THE INVERTER			
11	EXISTING MAIN SERVICE PANEL	SQUARE D		N/A EXISTING	MAIN BREAKER :100A PV TIE IN: 40A-2P		
12	BACKUP INTERFACE/BUI	SOLAREGE	BI-N	1			
13	ENERGY STORAGE	SOLAREGE	BAT-10K1P	1			
14							
	ADD'L PARTS:	CT		1			
	ADD'L PARTS:	ENT		1			
	ADD'L PARTS:						
	ADD'L PARTS:						
RACKING / MOUNTING HARDWARE							
ROOFING TYPE: COMPOSITION SHINGLES							
	STANDOFF (L FEET/HOOKS/SLIDER & MOUNT)	SNAPNRACK ULTRA		35			
	FLASHING	SNAPNRACK ULTRA		35			
	LAG BOLT	SNAPNRACK ULTRA		35/70			
	GROUND LUGS	SNAPNRACK ULTRA		4			
	RAIL	SNAPNRACK ULTRA		12			
	SPLICES OR SKIRTS	SNAPNRACK ULTRA		12			
	OPTIMIZER MOUNT	SNAPNRACK ULTRA		14			
	MID CLAMPS	SNAPNRACK ULTRA		28			
	END CLAMPS OR RL LINK	SNAPNRACK ULTRA		14			
	ADDITIONAL KITS REQUIRED	SNAPNRACK ULTRA					
NOTES							

PICKED BY: _____

RECEIVED BY: _____

 Bright Planet Solar 103A MILLBURY ST, AUBURN MA 01501 888-997-4469	SIGNATURE:	PROJECT #	BPN134592	REV	DATE	DESCRIPTION	SEAN COBB 27225 NONA AVE, HIGHLAND, CA 92346	BOM SHEET PV10
		SYSTEM SIZE	5.87KW/DC 5.78KW/AC		---			
		DATE:	3/27/2025 10:36:44 AM		---			
		DESIGNER:	MICHAEL BURGOS PA		---			
CONTRACTOR LICENSE: C-10#1020761 DATE: 3/27/2025 10:36:44 AM								

ATTACHMENT 4

Secretary's Standards for Rehabilitation

The Secretary of the Interior's Standards for Rehabilitation

The Secretary of the Interior is responsible for establishing professional standards and providing advice on the rehabilitation and protection of all cultural resources listed in or eligible for listing in the National Register of Historic Places.

The Secretary of the Interior's Standards for Treatment of Historic Properties apply to all proposed development grant-in-aid projects assisted through the National Historic Preservation Fund, and are intended to be applied to a wide variety of resource types, including buildings, sites, structures, objects and districts. These Standards, developed in 1992, were codified as 36 CFR Part 68 in the July 12, 1995, Federal Register (Volume 60, No. 133). They replace the 1978 and 1983 versions of 36 CFR 68 entitled, "The Secretary of the Interior's Standards for Historic Preservation Projects."

The Secretary of the Interior's Standards for the Treatment of Historic Properties may be used by anyone planning and undertaking work on historic properties, even if grant-in-aid funds are not being sought. It should be noted that another regulation, 36 CFR Part 67, focuses on "certified historic structures" as defined by the IRS Code of 1986. The "Standards for Rehabilitation" cited in 36 CFR 67 should always be used when property owners are seeking certification for federal tax benefits.

Rehabilitation:

The act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values.

Standards for Rehabilitation:

1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.
2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.
3. Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.
4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.
5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.
6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.
7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.

9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.

10. New additions and adjacent or related new construction will be undertaken in a such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

NOTE:

When repair and replacement of deteriorated features are necessary; when alterations or additions to the property are planned for a new or continued use; and when its depiction at a particular period of time is not appropriate, Rehabilitation may be considered as a treatment. Prior to undertaking work, a documentation plan for Rehabilitation should be developed.

ATTACHMENT 5

Conditions of Approval

CERTIFICATE OF APPROPRIATENESS CONDITIONS OF APPROVAL

Date: May 1, 2025
Owner: Sean Cobb
File/Index: Certificate of Appropriateness (COA 25-004)
Proposal: Installation of a 293 square foot roof-mounted solar photovoltaic system on the roof of a detached garage at the rear of a contributing historic residence.
Location: 27225 Nona Ave., Highland Historic District
Assessor's Parcel No. 1191-341-51-0000

The CERTIFICATE OF APPROPRIATENESS Application has been conditionally approved subject to the compliance with the requirements as specified below:

1. This CERTIFICATE OF APPROPRIATENESS shall become null and void:
 - a. Unless all conditions have been complied with and occupancy or use of the land or existing structures authorized by Certificate of Appropriateness (COA 25-004) has taken place within twelve (12) months after the approval of said Certificate of Appropriateness.
 - b. Where circumstances beyond the control of the Applicant cause delays which do not permit compliance with the time limitation established in this Section, the Historic and Cultural Preservation Board may grant an Extension of Time for a period of not to exceed an additional twelve (12) months. Applications for an extension of time must set forth, in writing, the reasons for granting an extension, and shall be filed together with a fee as established by the City Council, with the Planning Division thirty (30) calendar days prior to the expiration of Certificate of Appropriateness (COA 25-004).

NOTE:

All required on-site and off-site improvements, shall be completed and approved prior to final inspection of any building or structure.

The conditions listed below are continuing conditions; failure of the Applicant to comply with any/all conditions at any time, shall result in initiating revocation of the subject permit granted to use the property.

PLANNING CONDITIONS

1. The subject property shall be developed in accordance with materials approved by the Historic and Cultural Preservation Board on May 1, 2025, and shall be in compliance with all conditions of approval contained herein.
2. Prior to the issuance of any permits, the Applicant/Owner of the property shall submit to the Planning Department written evidence of agreement with all conditions of this approval.

3. Certificate of Appropriateness (COA 25-004) shall allow for the installation of an 5.67kW roof-mounted photovoltaic system consisting of fourteen (14) panels installed on the roof of the rear detached garage.
4. Photovoltaic panels shall be flush-mounted against the existing roof and shall be installed at the angles consistent with the pitch of the supporting roof. Visible conduit shall be painted to match the existing residence.
5. The owner/applicant shall obtain all required permits from the Planning, Engineering and Building and Safety Divisions.
6. Revisions, modifications, and/or deletions to the approved materials shall be submitted to the Planning Division for review and approval. Revisions, modifications and/or deletions may require additional review by the Historic and Cultural Preservation Board.
7. In compliance with the Highland Municipal Code, the owner/applicant shall agree, at his/her sole cost and expense, to defend, indemnify, and hold harmless, the City, its officers, employees, agents, and consultants, from any claim, action, or proceeding brought by a third-party against the City, its officers, agents, and employees, which seeks to attack, set aside, challenge, void, or annul an approval of the City Council, Planning Commission, or other decision-making body, including staff, concerning this project. The City may, at its sole discretion, participate at its own expense in the defense of any such action but such participation shall not relieve the Applicant/Owner of his/her obligations under this condition.
8. All Ordinances, Policy Resolutions, and Standards of the City in effect at the time this project is approved shall be complied with as a condition of this approval.

ATTACHMENT 6

Findings of Fact

CERTIFICATE OF APPROPRIATENESS FINDINGS OF FACT

Date: May 1, 2025
Owner: Sean Cobb
File/Index: Certificate of Appropriateness (COA 25-004)
Proposal: Installation of a 293 square foot roof-mounted solar photovoltaic system on the roof of a detached garage at the rear of a contributing historic residence.
Location: 27225 Nona Ave., Highland Historic District
Assessor's Parcel No. 1191-341-51-0000

The Historic and Cultural Preservation Board shall make the following Findings of Fact prior to approval of the application:

1. With regard to a designated resource, the proposed work will neither adversely affect the significant architectural features of the designated resource nor adversely affect the character of historical, architectural, or aesthetic interest or value of the designated resource and its site.

The residence has been listed as a contributor to the Historic District within the 2001 Historic Architectural Survey (which updated the 1988 Historic Architectural Survey). The one-story residence is a simple cottage with wood shingle siding, asphalt shingle roofing, and a sizable porch with overhanging eaves supported by diagonal braces. The proposed project consists of the installation of photovoltaic panels on the roof of the detached garage located at the rear of the property. As conditioned, the panels are required to be installed in a manner which will reduce visibility from the surrounding area. In addition, photovoltaic panels are intended to be temporary in nature, in that they can be removed without significant damage to the resource.

2. With regard to any property located within a Historic District, the proposed work conforms to the prescriptive standards and design guidelines for the District adopted by the Board, and does not adversely affect the character of the district.

The Secretary of the Interior's Standards for Rehabilitation state alterations may be made if they do not destroy historic materials, features and spatial relationships that characterize the property. Specifically, standard No. 2 states that *"The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided."* The solar panels on the detached rear garage roof will have minimal visibility from Nona Avenue, and will not negatively impact the historical aesthetic of the home nor the District.

3. In the case of construction of a new improvement, addition, building, or structure upon a designated cultural resource site, the use and exterior of such improvements will not adversely affect and will be compatible with the use and exterior or existing designated cultural resources, improvements, buildings, natural features, and structures on said site.

Standard for Rehabilitation No. 3 states that *"Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken."*

While, the installation of solar arrays are generally discouraged on homes within the Historic District, they are acceptable if positioned away from the public right-of-way and out of the public's view. In this case, the solar array configuration will include fourteen (14) panels on the detached garage roof, with minimal public view.



STAFF REPORT

TO THE HISTORIC AND CULTURAL PRESERVATION BOARD

DATE: May 1, 2025

FROM: Lawrence A. Mainez, Community Development Director

REVIEWED BY: Kim Stater, Assistant Community Development Director *KS*

PREPARED BY: Angela Tafolla, Associate Planner *AT*

SUBJECT: Post-event discussion of the 2025 annual Citrus Harvest Festival, including Vendors, Car Show, Walking Tour, Entertainment, and Marketing.

RECOMMENDATION: Staff recommends the Historic and Cultural Preservation Board discuss the event and provide direction as necessary.

FISCAL REVIEW: The 27th annual Citrus Harvest Festival took place on Saturday, March 29, 2025. Staff will provide a verbal presentation regarding the Logistics, Entertainment, Car Show, Vendors, Administration, Marketing, and Home Tour.

Approved _____	Motion _____	Second _____	Agenda Item No. <u>3</u>
Denied _____	Ayes _____		
Continued _____	Noes _____		File No. _____
Tabled _____	Abstain _____		
	Absent _____		
<i>Caleb Drote</i>		<i>Lawrence Mainez</i>	
Recording Secretary		Community Development Director	