TOWN OF WARRENTON
Department of Community Development
PO BOX 341
WARRENTON, VIRGINIA 20188
http://www.warrentonva.gov
TELEPHONE (540) 347-1101
FAX (540) 349-2414

ARCHITECTURAL REVIEW BOARD

Staff Analysis COA 22-30

October 27, 2022

Owner/Applicant: Keith Selbo

Property: 178 Main Street

GPIN: 6984-52-2795

Request: New solar panels

Present Use: Residential Dwelling

Zoning: R-6 Residential

Historic District Guidelines Considerations:

Historic District Guideline	Page No.	Analysis
Guidelines for Energy & Sustainability		
Locate energy-generating technology to minimize impacts to the historic character of the site and building. a. Install energy-generating technology where it will not be visible or damage, obscure, or cause removal of significant features or materials. Install technology in such a way that it can be readily removed, and the original character easily restored. b. Install solar collectors in such a way as to minimize potential adverse effects on the character of a historic property and upon the district. Place collectors to be minimally visible and avoid obscuring significant features. Size collector arrays are to remain subordinate to the historic building. Mount collectors flush below the ridge line on a sloping roof. This will not cause a significant decrease in the device's solar gain capabilities. Install collectors on an addition or secondary building, where they will be minimally visible. Ensure that exposed hardware, frames, and piping have a matte finish and are consistent with the color scheme of the primary building. Use the least-invasive method feasible to attach solar collectors to a historic roof.	3.58	The applicant is proposing 18 new solar panels to the existing standing seam metal roof with associated electric cables and control box. The proposed panels are 71.7" x 40" x 1.2" for an aggregate covered area roughly 107.5' by 60'. This span will be broken into two groups across the east and south roof sections. All panels are noted with black aluminum frames secured to aluminum racks installed to the standing seams using L-feet clamps with oval point set screws (QuickMount Lynx Metal Roof Attachments). An electric consolidation box (Enphase IQ Combiner 4/4C) is also proposed with the dimensions of 14 ¼ x 19 ½ x 6 3/5.

Staff Review:

The applicant is proposing a solar panel mounting system that would seem to have the least amount of negative long-term impact on the existing roof. The clamp mounted tracks allow for the panels to be removed at any time with minimal to no damage to the roof.

The panels on the east side of the structure will be highly visible from the public right-of way. The height of the panels would have less impact on the pedestrians but can cause a negative impact related to its location on a vehicle thoroughfare to Old Town Warrenton. The guidelines encourage visibility of the panels should be minimal, therefore an alternative location should be considered, if at all possible. The proposed locations may be the only feasible areas considering the situation of the roof, surrounding trees, and the structures position to the sun.

Vicinity Map

Street View

Proposed Project Location

Proposed Design

Proposed Equipment

Site Photos