



Historic Landmarks and Preservation Districts Commission

Report to the Committee

To: Clifton Architectural Review Committee
Thru: Bob Keesaer, AIA, NCARB, Planning and Design Supervisor
From: Becky Gorman, Historic Preservation Specialist
Date: April 8, 2016

Case No: 15COA1187
Classification: Committee Review

GENERAL INFORMATION

Property Address: 174 William Street

Applicant: Mark Frazar
174 William Street
Louisville, KY 40206
frazarm@gmail.com

Owner: same as applicant

Architect: NA

Estimated Project Cost: \$14,000

Description of proposed exterior alteration:

The applicant requests After-The-Fact approval to install new solar panels on the roof of the camelback portion of the existing house facing Southeast and William Street; and After-The-Fact installation of skylight on the roof of the shotgun portion of the house facing Northeast and the side yard.

Communications with Applicant, Completion of Application

The application was received on September 11, 2015. The application was considered complete on September 14, 2015. Staff spoke with applicant that day in regards to the application and the applicable guidelines and also emailed a link to the current Clifton Roofing Guidelines. Staff proposed the applicant look into moving the solar panels to the rear side of the camelback roof to meet the guidelines for staff level review. The applicant informed staff via email January 8, 2016 that he would like to maintain the current location of the solar panels and for the ARC to review the application.

The case is scheduled to be heard by the Clifton Architectural Review Committee on April 13, 2016 at 6:30 pm, at 444 South Fifth Street, conference room 101, with notice mailed not less than seven days before the meeting to the abutting property owners.

FINDINGS

Guidelines

The following design review guidelines, approved for the Clifton Preservation District, are applicable to the subject exterior alterations: **Roofing**. The report of the Commission Staff's findings of fact and conclusions with respect to these guidelines is attached to this report.

The following additional findings are incorporated in this report:

Site Context

The site located on the west side of William Street, is zoned R5A and in a Traditional Neighborhood Form District. It is located midblock between Frankfort Avenue and Brownsboro Road, the seventh lot south of the alley. The house is a camelback structure surrounded by other 1-story shotgun and camelback houses.

Background

The applicant submitted an application for the After-The-Fact installation of a standing seam metal roof on the front shotgun portion of the house. The application was approved on September 18, 2015 (15COA1180). Staff noted in the report, "Solar panels have been installed on the street-side roof of the camelback without a COA. There is an application being reviewed and discussions between the applicant and staff on how to proceed. The applicant is consulting with the solar panel installer about potential options."

Permitting

A solar panel installation requires a building permit. There would need to be confirmation that the roof structure could support the solar installation and meet applicable building codes.

Land Development Code

The Land Development Code addresses Solar Panel installation in section 4.3.16 Accessory Alternative Energy Systems. Per the LDC:

4.3.16 Accessory Alternative Energy Systems This use may be permitted as a use with special standards within any zoning district in conformance with the following special standards.

A. Attached (Principal or Accessory structure)

1. In residential districts the system may not exceed ten feet above the maximum height within the underlying form district.
2. In non-residential districts, the system may not exceed 20 feet above the maximum height within the underlying form district.

3. In residential districts no system shall be attached to the wall or side of a structure.

B. Freestanding

1. The proposed system shall not exceed the maximum building height of the underlying form district.

2. No more than 25% of the lot area may be covered with alternative energy systems and related equipment.

Resources

Specific guidelines used by the ARC are based on the national standard, the *Secretary of the Interior's Standards for the Treatment of Historic Properties* and the Preservation Briefs created by Technical Preservation Services. Technical Preservation Services has a webpage dedicated to Solar Panels on Historic Properties and provides examples. <https://www.nps.gov/tps/sustainability/new-technology/solar-on-historic.htm>

Conclusions

Any proposed exterior alterations to a structure should receive a Certificate of Appropriateness prior to installation.

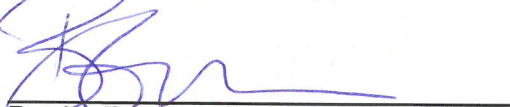
A flush style skylight has been installed on the east elevation, a non-street facing façade. The Roofing Guidelines allow this type of installation. This meets the design guideline R17.

Solar panels have been installed on the street-facing roof of the camelback portion of the structure. The guidelines in question are Roofing Guideline R17 which states, "... high-profile solar panels should not be installed where they can be seen from a building's street address façade or primary elevation and Guideline R14 which states, "New roof-top additions should not compromise the structural integrity of the building."

Concerning Guideline R17, the term 'high profile' is not defined or further explained within the Guidelines. The subject solar panels are part of a system, which consists of multiple components including panels, mechanical and electrical connections and mountings. Only the panels are visible from the William Street right of way. The panels have been installed flat and do not alter the slope of the roof. If possible, in a historic district, a solar panel should be installed in a location that is not highly visible from the right of way. In this case, the applicant installed the panels in a visible area where they would be most effective in capturing sunlight. The solar panels follow the slope of the roof and are modestly elevated above the roof. As a result, it can be asserted that the panels have a low profile and are not subject to Guideline R17 which pertains only to 'high profile' panels. In addition, solar panels and mounting systems should be compatible in color to established roof materials. While the new metal roof on the shotgun portion of the house is red, the gray/black color of the solar panels, which occupy most of the area of southeast slope of the camelback portion's roof, is a color consistent with established roof materials in the district.

It should also be noted that the applicant did not install solar panels on the shotgun portion of the house as recommended in the applicant's original solar analysis or remove the chimney to accommodate the system.

Concerning Guideline R14, based on the information provided, staff could not ascertain whether or not the system would compromise the structural integrity of the building. In any event, as mentioned a building permit is required for this improvement and the Office of Construction Review will make that determination as part of that other application.


Becky Proctor Gorman
Historic Preservation Specialist

4/8/16
Date

Attached Documents / Information

1. Staff Guideline Checklist
2. Application
3. Photos
4. email

Roofing

Clifton Design Guideline Checklist

+	Meets Guidelines	NA	Not Applicable
-	Does Not Meet Guidelines	NSI	Not Sufficient Information
+/-	Meets Guidelines with Conditions		

	Guideline	Finding	Comment
R1	Replacement roofing materials should closely match the original roofing material in texture and profile. Some substitute materials including asphalt shingles, dimensional shingles, or cement tiles may be considered. Contact the Landmarks staff for any new emerging roof technologies.	NA	
R2	Metal roofing materials like lead-coated copper, terne-coated steel, and aluminum/zinc-coated steel can successfully replace tin, terne plate, zinc, or lead. Copper-coated steel is a less expensive (and less durable) substitute for sheet copper. While copper roofs may be left unpainted, terne-metal roofs should be painted a traditional roof color. Repair and replacement with in-kind materials is recommended in order to preserve the visual appearance of the original. Contact the Landmarks staff for any new emerging metal roof technologies.	NA	
R3	When replacing metal roofing on residential roofs, the proportion and spacing of the seams and trim should match the original. Commercial-grade architectural metal roofing systems should not be used on residential architecture because the scale is inappropriate.	NA	
R4	On historic terra cotta clay tile roofs, ridge and hip tiles should be retained. Field tiles may be replaced with a compatible substitute material, such as a dimensional shingle in a color approximating the original. Ridge and hip tiles should be reinstalled to maintain the roof's historic profile. Reinstallation of sound roof tiles and slates on smaller, secondary roof forms (porches, bay windows, etc.) is encouraged wherever possible.	NA	
R5	On slate roofs, historic roof details, such as decorative cresting and finials and metal ridge caps, should be replaced with in-kind materials or materials that are visually compatible.	NA	
R6	The reconstruction of any missing roof feature should be based on historical, pictorial, and physical evidence. If the evidence is insufficient, the roof feature should be of a compatible new design rather than a falsely historical or conjectural reconstruction.	NA	
R7	On additions or new construction, new roof designs should be similar or compatible with the shape, size, scale, and materials of the historic building and other buildings within the district.	NA	
R8	For major decaying or deteriorated roof features – like cupolas, dormers, or chimneys – the form and detailing of the features should be used to create appropriate replicas. Smaller irreparable historic roof details – such as decorative cresting, finials, or metal roof caps for slate roofs – should be replaced with in-kind or visually compatible materials.	NA	
R9	Extensive areas of flashing should not be visible and should be avoided. Portions of metal flashing may be covered by mortar or stucco.	NA	
R10	When installing replacement gutters, do not destroy the historic roof detail.	NA	
R11	When replacing gutters, use half-round replacement gutters or ogee profile gutters that have a simple design and do not alter the character of the trim. When it is not possible to repair or replace the original box gutters, the box gutters	NA	

	Guideline	Finding	Comment
	should be roofed over and the replacement gutters attached.		
R12	Unpainted galvanized steel gutters or downspouts are not preferred as they will rust and stain adjacent materials. Galvanized gutters should be appropriately primed and painted after a period of weathering. Vinyl gutters and downspouts should be avoided due to their short life expectancy.	NA	
R13	Historically exposed rafter ends and eaves should remain and be preserved.	NA	
R14	New roof-top additions should not compromise the structural integrity of the building.	NSI	
R15	Any new roof-top mechanical or service equipment should be installed in a manner as to not damage the historic elements or fabric; examples include: cupola, weathervane, and chimney.	NA	
R16	Mechanical equipment or systems (examples: HVAC or water) should not be installed on roofs where they may overload and compromise a historic building's existing structural system. Additional support systems may need to be constructed to support the additional weight load.	NA	
R17	Antennae, satellite dishes, skylights, vents, roof-top mechanical units, decks, terraces, dormers, or high-profile solar panels should not be installed where they can be seen from a building's street address façade or primary elevation. Skylights should be flush (not the "bubble" type) with curbs painted to match the color of the roof material. Consolidate antennae wherever possible.	+ -	Skylight meets the design guidelines. Solar panel installation faces the building's street address façade or primary elevation.







From: Mark Frazar [mailto:frazarm@gmail.com]
Sent: Friday, January 08, 2016 5:52 PM
To: Gorman, Becky
Subject: Re: Clifton Roofing Guidelines

Hi Becky -

I am very sorry for the delay in my response. I was out of town traveling for work in December, and then came the Holidays.

I do feel that we have done the best that we could in locating the solar modules in the limited area of the upper roof, a compromise of function and aesthetics that maintains the character and profile of the house.

Additionally, the solar installer did (finally) get back to me before Thanksgiving with a price of \$3,000 to relocate the modules to the rear roof. They estimate that this will affect approximately a 30% loss in production. Initially I expected a possible return on investment at 11 years, those two factors might push it closer to 25.

For these reasons, I feel that I really have no choice but to appeal to the board to maintain the current location, on the only south facing roof area that is not near to the street.

Thank you for your assistance in the process.

- Mark Frazar

On Wed, Dec 9, 2015 at 8:37 AM Gorman, Becky <Becky.Gorman@louisvilleky.gov> wrote:

Mr. Frazar,

Please let me know what you've decided about the solar roof installation, case #15COA1187. Last we talked, you were going to discuss options with your contractor.

Thank you,

Becky

From: Gorman, Becky
Sent: Monday, September 14, 2015 5:07 PM
To: 'frazarm@gmail.com'
Subject: Clifton Roofing Guidelines

Mr. Frazar,

Here is the link to the roofing guidelines that we discussed.

http://louisvilleky.gov/sites/default/files/planning_design/general/roofing.pdf

Thank you,

Becky Proctor Gorman
Historic Preservation Specialist



**DEVELOP
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LOUISVILLE FORWARD

Louisville Metro Planning & Design Services
444 South Fifth Street, Suite 300

Phone: (502) 574-5210

Fax: (502) 574-8129

Please visit our website at: <http://www.louisvilleky.gov/PlanningDesign/>