

PB# 2014-23

CITY OF PLATTSBURGH APPLICATION TO PLANNING BOARD FOR:

HISTORIC SITE REVIEW SUBMITTAL DATE: 10/17/2014

NAME OF PROPOSED ACTION: Roof replacement

Applicant: Name Kent-Delord House Museum Address 17 Cumberland Avenue City Plattsburgh State NY Zip 12901 Telephone#: 561-1035 Fax #:

Plans prepared by: Name DON WICKMAN Address City State Zip: Telephone Fax #:

Owner (if different) ((if more than one owner, provide info. for each)

Name Address City State Zip Telephone

Purchase Option:

Location of site: 17 Cumberland Avenue

Historic District : No Current Zoning District: Residential

Property description/class: Residential

Parcel ID No.: 207.16-5-19 Lot Size: 1.3 acres

Variance #: (if any) Approved: Yes No

City, State and Federal permits needed: City building permit

Proposed uses (s) of site: Historic house museum

Total site area (square feet or acres): 1.3 acres

Anticipated construction time: 3 years (days, months, years)

Will development or restoration be Phased: yes

Current use of historic site: House museum

Current condition of site:
Very good

Character of surrounding properties:
Residential. An eclectic blend of 18th, 19th and 20th Century architecture.

Estimated cost of proposed improvement: \$ 60,000

Describe proposed use, including primary and secondary uses; ground floor area; height; and number of stories for each building:

- for residential buildings include number of dwellings units by size (efficiency, one-bedroom, two-bedroom, three or more bedrooms) and number of parking spaces to be provided.
- for nonresidential buildings, include total floor area and total sales area; number of automobile and truck parking spaces.
- other proposal structures

N/A

INSTRUCTIONS FOR SUBMITTAL:

1. Type or print neatly. Complete all blanks.
2. Submit completed application and one location map, photographs, detailed site plan, SEQR Long Form (Part 1), and building elevations (indicating finished materials) as required by the Zoning Ordinance Section 270-31 and 270-35. After review and acceptance of the above submittal by the Engineering and Planning Dept., the approved application will be returned and the applicant is to submit **15 sets** of the approved application, SEQR, and drawings to:

Engineering and Planning Dept.
41 City Hall Place
Plattsburgh, N.Y. 12901
(518) 563-7730

NOTE: A Historic Site Plan review request can not be placed on the Planning Board agenda until the Engineering and Planning Dept. certifies the submittal is complete and contains all information as required.

**Full Environmental Assessment Form
Part 1 - Project and Setting**

Instructions for Completing Part 1

Part 1 is to be completed by the applicant or project sponsor. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either "Yes" or "No". If the answer to the initial question is "Yes", complete the sub-questions that follow. If the answer to the initial question is "No", proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the project sponsor to verify that the information contained in Part 1 is accurate and complete.

A. Project and Sponsor Information.

Name of Action or Project: Roof replacement using composite shingles		
Project Location (describe, and attach a general location map): 17 Cumberland Avenue, Plattsburgh		
Brief Description of Proposed Action (include purpose or need): Replacement of 35-year-old due to deterioration of materials and leakage.		
Name of Applicant/Sponsor: Kent-Delord House Museum		Telephone: 518-561-1035
		E-Mail: kdhmdirector@gmail.com
Address: 17 Cumberland Avenue		
City/PO: Plattsburgh	State: NY	Zip Code: 12901
Project Contact (if not same as sponsor; give name and title/role): Don Wickman, Director		Telephone: 518-561-1035
		E-Mail: kdhmdirector@gmail.com
Address: 17 Cumberland Avenue		
City/PO: Plattsburgh	State: NY	Zip Code: 12901
Property Owner (if not same as sponsor):		Telephone:
		E-Mail:
Address:		
City/PO:	State:	Zip Code:

B. Government Approvals

B. Government Approvals, Funding, or Sponsorship. ("Funding" includes grants, loans, tax relief, and any other forms of financial assistance.)		
Government Entity	If Yes: Identify Agency and Approval(s) Required	Application Date (Actual or projected)
a. City Council, Town Board, <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No or Village Board of Trustees		
b. City, Town or Village <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Planning Board or Commission	Historic review	10/17/2014
c. City Council, Town or <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Village Zoning Board of Appeals		
d. Other local agencies <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
e. County agencies <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
f. Regional agencies <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
g. State agencies <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
h. Federal agencies <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
i. Coastal Resources.		
i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
iii. Is the project site within a Coastal Erosion Hazard Area?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

C. Planning and Zoning

C.1. Planning and zoning actions.	
Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> • If Yes, complete sections C, F and G. • If No, proceed to question C.2 and complete all remaining sections and questions in Part 1 	
C.2. Adopted land use plans.	
a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located?	<input type="checkbox"/> Yes <input type="checkbox"/> No
b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes, identify the plan(s):	

c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes, identify the plan(s):	

C.3. Zoning

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. Yes No
If Yes, what is the zoning classification(s) including any applicable overlay district?

Residential

b. Is the use permitted or allowed by a special or conditional use permit? Yes No

c. Is a zoning change requested as part of the proposed action? Yes No

If Yes,

i. What is the proposed new zoning for the site? _____

C.4. Existing community services.

a. In what school district is the project site located? City of Plattsburgh

b. What police or other public protection forces serve the project site?

City of Plattsburgh

c. Which fire protection and emergency medical services serve the project site?

City of Plattsburgh

d. What parks serve the project site?

N/

D. Project Details

D.1. Proposed and Potential Development

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)? Replacement of roof in residential area

b. a. Total acreage of the site of the proposed action? _____ 1.3 acres

b. Total acreage to be physically disturbed? _____ 0 acres

c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? _____ 1.3 acres

c. Is the proposed action an expansion of an existing project or use? Yes No

i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % _____ Units: _____

d. Is the proposed action a subdivision, or does it include a subdivision? Yes No

If Yes,

i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)

ii. Is a cluster/conservation layout proposed? Yes No

iii. Number of lots proposed? _____

iv. Minimum and maximum proposed lot sizes? Minimum _____ Maximum _____

e. Will proposed action be constructed in multiple phases? Yes No

i. If No, anticipated period of construction: _____ months

ii. If Yes:

- Total number of phases anticipated _____ 3
- Anticipated commencement date of phase I (including demolition) _____ 11 month _____ 2014 year
- Anticipated completion date of final phase _____ 6 month _____ 2016 year

• Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases: _____

Roof architecture permits replacement to be completed over 3 seasons. Process could be finished earlier if money is available.

f. Does the project include new residential uses? Yes No

If Yes, show numbers of units proposed.

	<u>One Family</u>	<u>Two Family</u>	<u>Three Family</u>	<u>Multiple Family (four or more)</u>
Initial Phase	_____	_____	_____	_____
At completion	_____	_____	_____	_____
of all phases	_____	_____	_____	_____

g. Does the proposed action include new non-residential construction (including expansions)? Yes No

If Yes,

- i. Total number of structures _____
- ii. Dimensions (in feet) of largest proposed structure: _____ height; _____ width; and _____ length
- iii. Approximate extent of building space to be heated or cooled: _____ square feet

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage? Yes No

If Yes,

- i. Purpose of the impoundment: _____
- ii. If a water impoundment, the principal source of the water: Ground water Surface water streams Other specify: _____

iii. If other than water, identify the type of impounded/contained liquids and their source.

- iv. Approximate size of the proposed impoundment. Volume: _____ million gallons; surface area: _____ acres
- v. Dimensions of the proposed dam or impounding structure: _____ height; _____ length
- vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete): _____

D.2. Project Operations

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? (Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite) Yes No

If Yes:

- i. What is the purpose of the excavation or dredging? _____
- ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?
- Volume (specify tons or cubic yards): _____
 - Over what duration of time? _____
- iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them.

iv. Will there be onsite dewatering or processing of excavated materials? Yes No

If yes, describe. _____

v. What is the total area to be dredged or excavated? _____ acres

vi. What is the maximum area to be worked at any one time? _____ acres

vii. What would be the maximum depth of excavation or dredging? _____ feet

viii. Will the excavation require blasting? Yes No

ix. Summarize site reclamation goals and plan: _____

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? Yes No

If Yes:

- i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): _____

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:

iii. Will proposed action cause or result in disturbance to bottom sediments? Yes No

If Yes, describe: _____

iv. Will proposed action cause or result in the destruction or removal of aquatic vegetation? Yes No

If Yes:

- acres of aquatic vegetation proposed to be removed: _____
- expected acreage of aquatic vegetation remaining after project completion: _____
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): _____

• proposed method of plant removal: _____

• if chemical/herbicide treatment will be used, specify product(s): _____

v. Describe any proposed reclamation/mitigation following disturbance: _____

c. Will the proposed action use, or create a new demand for water? Yes No

If Yes:

i. Total anticipated water usage/demand per day: _____ gallons/day

ii. Will the proposed action obtain water from an existing public water supply? Yes No

If Yes:

- Name of district or service area: _____
- Does the existing public water supply have capacity to serve the proposal? Yes No
- Is the project site in the existing district? Yes No
- Is expansion of the district needed? Yes No
- Do existing lines serve the project site? Yes No

iii. Will line extension within an existing district be necessary to supply the project? Yes No

If Yes:

• Describe extensions or capacity expansions proposed to serve this project: _____

• Source(s) of supply for the district: _____

iv. Is a new water supply district or service area proposed to be formed to serve the project site? Yes No

If Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- Proposed source(s) of supply for new district: _____

v. If a public water supply will not be used, describe plans to provide water supply for the project: _____

vi. If water supply will be from wells (public or private), maximum pumping capacity: _____ gallons/minute.

d. Will the proposed action generate liquid wastes? Yes No

If Yes:

i. Total anticipated liquid waste generation per day: _____ gallons/day

ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each): _____

iii. Will the proposed action use any existing public wastewater treatment facilities? Yes No

If Yes:

• Name of wastewater treatment plant to be used: _____

• Name of district: _____

• Does the existing wastewater treatment plant have capacity to serve the project? Yes No

• Is the project site in the existing district? Yes No

• Is expansion of the district needed? Yes No

- Do existing sewer lines serve the project site? Yes No
- Will line extension within an existing district be necessary to serve the project? Yes No

If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____

iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? Yes No

If Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- What is the receiving water for the wastewater discharge? _____

v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge, or describe subsurface disposal plans):

vi. Describe any plans or designs to capture, recycle or reuse liquid waste: _____

e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction? Yes No

If Yes:

i. How much impervious surface will the project create in relation to total size of project parcel?

_____ Square feet or _____ acres (impervious surface)

_____ Square feet or _____ acres (parcel size)

ii. Describe types of new point sources. _____

iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)?

- If to surface waters, identify receiving water bodies or wetlands: _____

- Will stormwater runoff flow to adjacent properties? Yes No

iv. Does proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? Yes No

f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? Yes No

If Yes, identify:

i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)

ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)

iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)

g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit? Yes No

If Yes:

i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year) Yes No

ii. In addition to emissions as calculated in the application, the project will generate:

- _____ Tons/year (short tons) of Carbon Dioxide (CO₂)
- _____ Tons/year (short tons) of Nitrous Oxide (N₂O)
- _____ Tons/year (short tons) of Perfluorocarbons (PFCs)
- _____ Tons/year (short tons) of Sulfur Hexafluoride (SF₆)
- _____ Tons/year (short tons) of Carbon Dioxide equivalent of Hydrofluorocarbons (HFCs)
- _____ Tons/year (short tons) of Hazardous Air Pollutants (HAPs)

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? Yes No

If Yes:

i. Estimate methane generation in tons/year (metric): _____

ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): _____

i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? Yes No

If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust): _____

j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? Yes No

If Yes:

i. When is the peak traffic expected (Check all that apply): Morning Evening Weekend
 Randomly between hours of _____ to _____.

ii. For commercial activities only, projected number of semi-trailer truck trips/day: _____

iii. Parking spaces: Existing _____ Proposed _____ Net increase/decrease _____

iv. Does the proposed action include any shared use parking? Yes No

v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe: _____

vi. Are public/private transportation service(s) or facilities available within 1/2 mile of the proposed site? Yes No

vii. Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? Yes No

viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? Yes No

k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? Yes No

If Yes:

i. Estimate annual electricity demand during operation of the proposed action: _____

ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other): _____

iii. Will the proposed action require a new, or an upgrade to, an existing substation? Yes No

l. Hours of operation. Answer all items which apply.

<p>i. During Construction:</p> <ul style="list-style-type: none"> • Monday - Friday: _____ 10-4 _____ • Saturday: _____ • Sunday: _____ • Holidays: _____ 	<p>ii. During Operations:</p> <ul style="list-style-type: none"> • Monday - Friday: _____ 10-4 _____ • Saturday: _____ • Sunday: _____ • Holidays: _____
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m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? Yes No
 If yes:
 i. Provide details including sources, time of day and duration:
 Pneumatic nail cut, circular saw. 8-4 as needed

ii. Will proposed action remove existing natural barriers that could act as a noise barrier or screen? Yes No
 Describe: _____

n.. Will the proposed action have outdoor lighting? Yes No
 If yes:
 i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:

ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? Yes No
 Describe: _____

o. Does the proposed action have the potential to produce odors for more than one hour per day? Yes No
 If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures: _____

p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage? Yes No
 If Yes:
 i. Product(s) to be stored _____
 ii. Volume(s) _____ per unit time _____ (e.g., month, year)
 iii. Generally describe proposed storage facilities: _____

q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? Yes No
 If Yes:
 i. Describe proposed treatment(s):

ii. Will the proposed action use Integrated Pest Management Practices? Yes No

r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? Yes No
 If Yes:
 i. Describe any solid waste(s) to be generated during construction or operation of the facility:
 • Construction: _____ 4.5 tons per _____ project (unit of time)
 • Operation : _____ tons per _____ (unit of time)
 ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:
 • Construction: _____
 • Operation: _____

iii. Proposed disposal methods/facilities for solid waste generated on-site:
 • Construction: Landfill
 • Operation: _____

s. Does the proposed action include construction or modification of a solid waste management facility? Yes No

If Yes:

i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): _____

ii. Anticipated rate of disposal/processing:

- _____ Tons/month, if transfer or other non-combustion/thermal treatment, or
- _____ Tons/hour, if combustion or thermal treatment

iii. If landfill, anticipated site life: _____ years

t. Will proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? Yes No

If Yes:

i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: _____

ii. Generally describe processes or activities involving hazardous wastes or constituents: _____

iii. Specify amount to be handled or generated _____ tons/month

iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: _____

v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? Yes No

If Yes: provide name and location of facility: _____

If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility: _____

E. Site and Setting of Proposed Action

E.1. Land uses on and surrounding the project site

a. Existing land uses.

i. Check all uses that occur on, adjoining and near the project site.

- Urban Industrial Commercial Residential (suburban) Rural (non-farm)
 Forest Agriculture Aquatic Other (specify): _____

ii. If mix of uses, generally describe:

Residences surround 2/3s of the property. Across Cumberland Avenue lies the Saranac River

b. Land uses and covertypes on the project site.

Land use or Covertype	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces	.3	.3	0
• Forested			
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)	1.0	1.0	0
• Agricultural (includes active orchards, field, greenhouse etc.)			
• Surface water features (lakes, ponds, streams, rivers, etc.)			
• Wetlands (freshwater or tidal)			
• Non-vegetated (bare rock, earth or fill)			
• Other Describe: _____			

c. Is the project site presently used by members of the community for public recreation? Yes No
i. If Yes: explain: Public attends museum sponsored events.

d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site? Yes No
If Yes,
i. Identify Facilities:

e. Does the project site contain an existing dam? Yes No
If Yes:
i. Dimensions of the dam and impoundment:
• Dam height: _____ feet
• Dam length: _____ feet
• Surface area: _____ acres
• Volume impounded: _____ gallons OR acre-feet
ii. Dam's existing hazard classification: _____
iii. Provide date and summarize results of last inspection:

f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility? Yes No
If Yes:
i. Has the facility been formally closed? Yes No
• If yes, cite sources/documentation: _____
ii. Describe the location of the project site relative to the boundaries of the solid waste management facility:

iii. Describe any development constraints due to the prior solid waste activities: _____

g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? Yes No
If Yes:
i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred:

h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? Yes No
If Yes:
i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply: Yes No
 Yes – Spills Incidents database Provide DEC ID number(s): _____
 Yes – Environmental Site Remediation database Provide DEC ID number(s): _____
 Neither database
ii. If site has been subject of RCRA corrective activities, describe control measures: _____
iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? Yes No
If yes, provide DEC ID number(s): _____
iv. If yes to (i), (ii) or (iii) above, describe current status of site(s):

v. Is the project site subject to an institutional control limiting property uses? Yes No

- If yes, DEC site ID number: _____
- Describe the type of institutional control (e.g., deed restriction or easement): _____
- Describe any use limitations: _____
- Describe any engineering controls: _____
- Will the project affect the institutional or engineering controls in place? Yes No
- Explain: _____

E.2. Natural Resources On or Near Project Site

a. What is the average depth to bedrock on the project site? _____ 30 feet

b. Are there bedrock outcroppings on the project site? Yes No
 If Yes, what proportion of the site is comprised of bedrock outcroppings? _____ %

c. Predominant soil type(s) present on project site: _____ %
 _____ %
 _____ %

d. What is the average depth to the water table on the project site? Average: _____ feet

e. Drainage status of project site soils: Well Drained: _____ % of site
 Moderately Well Drained: _____ % of site
 Poorly Drained _____ % of site

f. Approximate proportion of proposed action site with slopes: 0-10%: _____ 100 % of site
 10-15%: _____ % of site
 15% or greater: _____ % of site

g. Are there any unique geologic features on the project site? Yes No
 If Yes, describe: _____

h. Surface water features.

i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? Yes No

ii. Do any wetlands or other waterbodies adjoin the project site? Yes No
 If Yes to either *i* or *ii*, continue. If No, skip to E.2.i.

iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? Yes No

iv. For each identified regulated wetland and waterbody on the project site, provide the following information:

- Streams: Name _____ Classification _____
- Lakes or Ponds: Name _____ Classification _____
- Wetlands: Name _____ Approximate Size _____
- Wetland No. (if regulated by DEC) _____

v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? Yes No
 If yes, name of impaired water body/bodies and basis for listing as impaired: _____

i. Is the project site in a designated Floodway? Yes No

j. Is the project site in the 100 year Floodplain? Yes No

k. Is the project site in the 500 year Floodplain? Yes No

l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? Yes No
 If Yes:
 i. Name of aquifer: _____

m. Identify the predominant wildlife species that occupy or use the project site: _____

 _____ Woodchucks, Gray Squirrels _____

n. Does the project site contain a designated significant natural community? Yes No
 If Yes:
 i. Describe the habitat/community (composition, function, and basis for designation): _____
 ii. Source(s) of description or evaluation: _____
 iii. Extent of community/habitat:
 • Currently: _____ acres
 • Following completion of project as proposed: _____ acres
 • Gain or loss (indicate + or -): _____ acres

o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? Yes No

p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? Yes No

q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? Yes No
 If yes, give a brief description of how the proposed action may affect that use: _____

E.3. Designated Public Resources On or Near Project Site

a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? Yes No
 If Yes, provide county plus district name/number: _____

b. Are agricultural lands consisting of highly productive soils present? Yes No
 i. If Yes: acreage(s) on project site? _____
 ii. Source(s) of soil rating(s): _____

c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? Yes No
 If Yes:
 i. Nature of the natural landmark: Biological Community Geological Feature
 ii. Provide brief description of landmark, including values behind designation and approximate size/extent: _____

d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? Yes No
 If Yes:
 i. CEA name: _____
 ii. Basis for designation: _____
 iii. Designating agency and date: _____

e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on, or has been nominated by the NYS Board of Historic Preservation for inclusion on, the State or National Register of Historic Places? Yes No

If Yes:

i. Nature of historic/archaeological resource: Archaeological Site Historic Building or District

ii. Name: _____

iii. Brief description of attributes on which listing is based: _____

Architecture and history of structures _____

f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory? Yes No

g. Have additional archaeological or historic site(s) or resources been identified on the project site? Yes No

If Yes:

i. Describe possible resource(s): _____

ii. Basis for identification: _____

h. Is the project site within five miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? Yes No

If Yes:

i. Identify resource: Plattsburgh Bay

ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): Scenic byway

iii. Distance between project and resource: _____ .05 miles.

i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666? Yes No

If Yes:

i. Identify the name of the river and its designation: _____

ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666? Yes No

F. Additional Information

Attach any additional information which may be needed to clarify your project.

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

G. Verification

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name Donald Wickman Date 10/17/2014

Signature _____ Title _____

Kent-Delord House Roof Replacement

The roof of the Kent-Delord House is in need of replacement. It has pushed the extremes of its life and is thin from erosion, brittle and in many cases, held on by single nails. Last year's winter was extremely hard for the section over the kitchen as it exposed to winter's prevailing winds from the northwest.

To replace the roof with cedar would be costly, a tough circumstance for a small nonprofit. Also, though wood shingles convey a sense of authenticity, the product has changed from the time Henry Delord had wooden shingled installed when he expanded the size and footprint of the house. Cedar roofs now may last only 25 years before needing replacement. Cedar is also an expensive installation process.

Some portions of the roof may survive for one to two more years. Due to this fact and the architecture of the roof, it is possible to complete the project over three years.

With the factors of product longevity and financial pressures present the Board of Directors have examined the replacement of the existing cedar with a sustainable composite manufactured by Ecostar. The Seneca Shakes replicate the appearance of real cedar and the Board has selected a color that closely resembles weathered cedar. The shakes come in three widths to better resemble the random pattern found on shingled roofs. The Board of Directors is quite cognizant of appearance in a historical setting.

The replacement shakes do cost more as a product, but have a 50- year lifespan, or the equivalency of possibly two cedar roofs. Also, installation is approximately 50% less and, because the product is sustainable, there is no loss of trees in the replacement process. The composites are mold resistant, repel hail and possess a high fire rating.

The Kent-Delord House does have a history of having roofs with wooden shingles, but in some circumstances, only for half of the house's history. Family members have used new technology for roofing as indicated by the following timeline:

- 1797 – One and a half story cottage is constructed
- 1811-1815 – Henry Delord contracts the enlarging of the cottage. Roofs with wooden shingles.
- ca. 1880 – Frank/Fannie Hall install a metal roof over existing and probably deteriorating wooden shingles. Photo documentation illustrates not the entire house was covered by the metal.
- 1925 – William H. Miner replaces Hall roof with copper during the house's restoration into a museum
- 1980 – Wind damages metal roof. Replaced with cedar, but with modern galvanized valleys and some drip edge.

Attached with this application is supporting documentation that illustrates the accepted use of composite shingles on historic structures, several which are on the National Register for Historic Places and one set of buildings within a National Forest. Some of the pages describe the use of composite slates, but the installation process is the same. Organizations are looking for a long-term solution without having to absorb the high cost of materials and installation while not sacrificing the historical appearance of the property.

Balancing Historic Preservation & Environmental Stewardship

In the fall of 2012, Prince William Forest Park will begin to implement its plans to replace the roofing system on its historic 1930s era cabins. Park staff work around the clock to maintain these historic structures to historic standards, replacing board for board and nail for nail. In planning for the long term stability of the structures, park managers must work to balance the historic standards requirements with ever-present funding constraints and park goals for environmental stewardship. It is the goal of the park to eventually replace all of the cabin roofs in alignment with this plan.

The Historic Cabins:

The Prince William Forest Park cabins were built by the Civilian Conservation Corps during the Great Depression to provide overnight, outdoor recreation for impoverished youth from Washington, DC. During World War II, these same cabins were taken over by the Office of Strategic Services, the WWII predecessor the CIA and America's Special Forces, for use as Special Operations and Communications Training Camps. Though many of these cabins have been on the National Register of Historic Places for many years, the park, in its entirety, was nominated to the National Register of Historic Places this year based in a large part on the cabins' Great Depression and WWII era history.

About the Cabin Roofs:

The cabins were constructed following the tenets of the rustic architecture movement which was very popular in the early 20th century. This movement used locally-harvested materials to achieve a naturalist, pioneer-made look, despite the use of machines for some construction. For the cabin roofs at Prince William Forest Park, the CCC used hand-made, cedar shake shingles on all of the buildings.

During the OSS era (42-45), some of the original cabin roofs were replaced with asphalt shingles which was cheaper and less labor intensive, despite being aesthetically opposed to the rustic architecture movement. Since the 1940s, layer after layer of asphalt shingles have been laid upon the roofs with more regard to structural preservation than architectural aesthetics. Over the years, the roof color has varied from the original, faded gray for a cedar shake, to brown, green, and gray asphalt shingles.

Considering Our Options

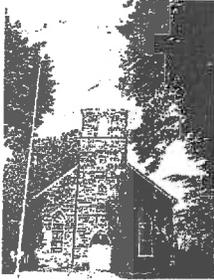
Prince William Forest Park management has considered a variety of materials for the proposed roof replacement, and has concluded that the use of authentic cedar shake shingles would be fiscally prohibitive not only due to the cost of the materials themselves, but also because of the frequency with which the shingles would have to be replaced. This new roofing plan will return to a more aesthetic and sustainable roofing material that maintains the character of the rustic style architecture originally used on the camp buildings, as well as to provide for the long-term preservation of these historic buildings. The NPS chose not to select asphalt shingles because they do not match the appearance and visual qualities of wood shake.

About the New Roofing Proposal

Park management has selected to replace the existing asphalt shingles with a substitute material shingle, made of composite, recycled material, which best meets the purpose and need of this project. These shingles are made to replicate the look and profile of the original cedar shake shingles that were hand-made by the CCC and installed on the cabins in the 1930s. They are a faded grey color, matching the look of cedar after a few years of weathering. The long term life cycle replacement (how long the shingles are on the roofs until they need to be replaced) far outstretches both asphalt shingles and the original cedar shake shingles. The composite shingles are fire and mold resistant. These factors led the park to choose the composite shingle for its roofing needs on the historic cabins.

Taken from a leaflet prepared by the Forest Service.

Historical Projects using EcoStar Seneca Shake



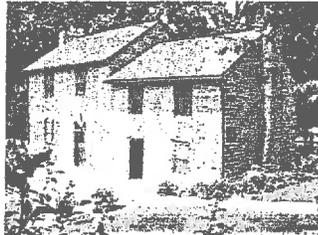
Reformed Dutch Church of the English Neighborhood (1793)

1040 Edgewater Ave

Ridgefield, NJ 07657

On National Register

Seneca Shake – Cedar Brown



Oliver Miller Homestead (1808/1836)

Stone Manse Rd.

South Park, PA 15129

URL:

On National Register

Seneca Shake – Midnight Gray



Hermitage Museum & Gardens (1908-1936)

7637 North Shore Rd

Norfolk, VA 23505

URL:

Seneca Shake – Chestnut Brown



Heart of the Renaissance



Cheyenne Train Depot Renovates Roof with EcoStar Tiles

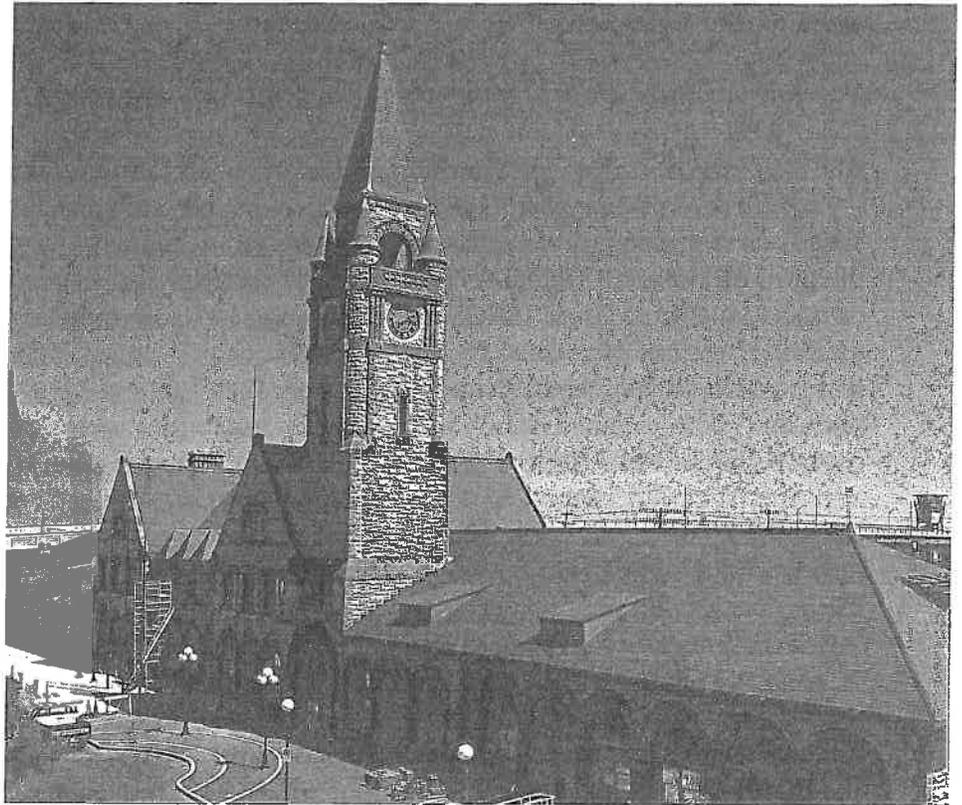
For over a century, one of the main landmarks in downtown Cheyenne, Wyoming has been their historic train depot. Built in 1886, the station was a key point in America's push to provide rail service from coast to coast.

The depot offered train service until the 1960s when the depot portion was shut down and the building was used solely for Union Pacific Corporation office space. In the mid 1990s, private investors began restoring the depot to the 1922 art deco grandeur. At that time, they began a major structural renovation to stabilize and reinvigorate the building.

One of the major structural renovations was the roofing system. Hosting an original slate roof, it was re-roofed during the 1990s restoration. In 2001, the depot was turned over to the City of Cheyenne. It was at that time that the real renaissance of downtown Cheyenne began.

The old roofing tiles installed in 1994 were not compatible to the area. Small hail, wind and freeze/thaw cycles had worn the shingles until they were actually falling off the roof. "It had become a hazard to people walking below and the city had to do something. The roof was only eight years old," confirmed Ed Cochran, sales representative for EcoStar.

EcoStar tiles are strong enough to withstand Wyoming's extreme elements. The unique tiles offer supreme protection from hail, wind driven rain and high winds.



"The Majestic Slate Tile carries a 50-year transferable warranty, 100 mph wind warranty and Class 4 hail impact resistance," said the divisional president of EcoStar.

The EcoStar roof not only offers durability, but they also offer sustainable attributes. The tiles are comprised of 100 percent recycled building products manufactured using post-industrial rubber and plastics. "Builders, architects and owners are looking for options that are sustainable. EcoStar uses raw materials, which in the past, would have gone into a landfill," stated the president.

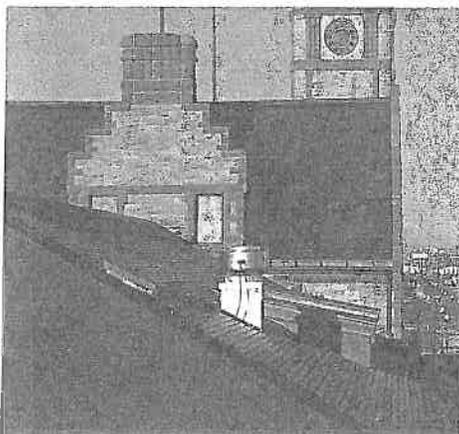
Once the project was put to bid with Majestic Slate, Douglas Roofing of Denver, Colorado won the bid for the re-roof. "The project was massive," said Bob Bradshaw. "EcoStar's lightweight properties and aesthetics worked well for the depot."

The depot has inspired renovation and encouraged new construction throughout the city. "It is a new look for down-

town and a refreshed face for the depot. Buildings are being renovating and lofts are being developed in other older buildings in the city," said Bradshaw. "We will have a new 720-space parking structure and new construction is being architecturally designed to match the older look of the depot and surrounding buildings."

"The partnership with all of our consultants has been tremendous for the city," concluded Bradshaw. "They have a wealth of knowledge that has helped to make the renovation a huge success. Their knowledge of products in particular the success of the roof material and how to make it all work together has made our renaissance possible. The train depot really is the heart of it."

For more information on EcoStar products visit www.ecostarllc.com or call 800.211.7170.



Premium Roofing Premium Performance

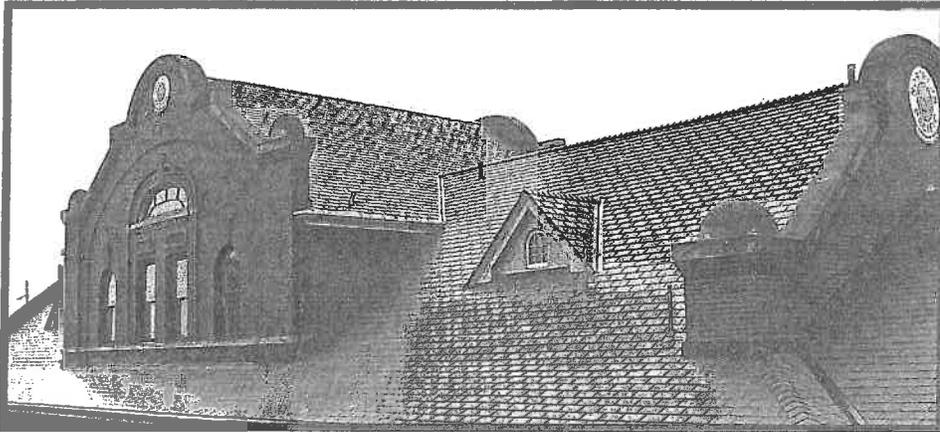
EcoStar
The Green Choice



Preservation Efforts On Track



Ellensburg Depot Renovates Roof with Empire Slate Tiles



preserves the historical look of the depot with tiles weighing significantly less than their natural counterpart. The roofing system also provides peace of mind for the long-term future of the depot with a product designed to withstand extreme weather conditions such as hail, driving rain and high winds.

“The value of it is much better, it’s a recycled material, it’s thicker, it’s safer, it’s not brittle, it’s fire retardant, a good thing for the environment and should last forever,” said FNPD president Steve Hayden.

The preservation efforts for the Northern Pacific Depot in Ellensburg, Washington were at a critical juncture last summer that could have derailed the entire project. The original slate roof, built in 1910, was in a state of significant disrepair and those involved with the redevelopment project were concerned the structure may not survive another winter under the harsh conditions created by the Cascade Mountains. In a climate known for significant freeze-thaw cycles and strong winds that reach in excess of 70 mph the not-for-profit group heading the project, Friends of the Northern Pacific Depot (FNPD), turned to EcoStar LLC and its Empire Slate™ roofing system. Using Empire Slate in the Manhattan Midnight color blend allowed the group to maintain the classic look of natural slate while obtaining the synthetic industry’s leader in durability and sustainability.

fire resistance, impact resistance and wind resistance testing through its proprietary compound made from recycled materials.

The first phase of the restoration revealed the original natural slate roof tiles measured only 1/8” thick, thus failing to meet the original building codes and architectural design requirements. In order to meet the current building codes and sustain the high winds the depot faces, the roof would have needed to be re-engineered to use 3/4” thick slate tiles – a major cost and structural issue avoided with the use of durable and lightweight Empire Slate tiles.

The train depot in Ellensburg is listed on the National Register of Historic Places for its role in the development of the Northern Pacific Railroad and was designed by architects Reed & Stern, the same team responsible for Seattle’s King Street Station (1906), Tacoma’s Union Station (1911), and New York City’s Grand Central Terminal (1913).

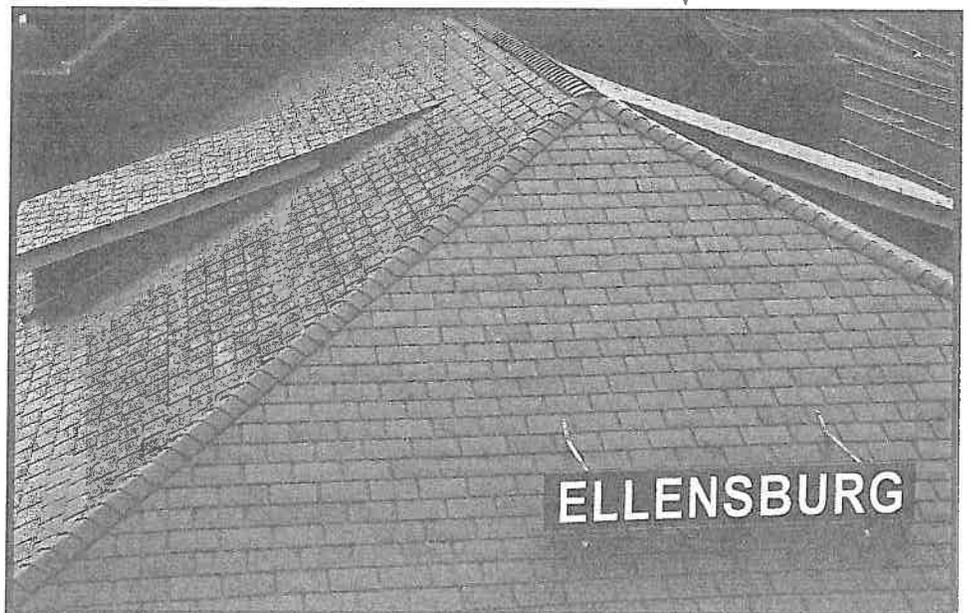
To find out more about the full line of sustainable roofing products offered by EcoStar, visit www.ecostarllc.com or call (800) 211-7170. Additional information on the restoration efforts in Ellensburg can be found at facebook.com/EllensburgDepot.

Empire Slate was the ideal choice for the FNPD since it offers a solution that



“Our goal in restoring the depot is to maintain the building’s original grandeur, while abiding by the very stringent policies and standards in place for the restoration of historic properties in Washington State,” said FNPD board member Erin Condit, “and Empire Slate was the slate alternative that met our needs as well as the state requirements for LEED credits.”

Made in the USA, EcoStar Empire Slate is the second generation of synthetic slate tile from the New York-based producer of synthetic slate and shake tiles. Empire Slate maintains the look of natural slate while contributing to LEED® certification and provides enhanced performance in



ELLENSBURG



EcoStar Sheds Light on Historical Preservation

A mile offshore Newport, Rhode Island, in Narragansett Bay, stands 'the little lighthouse that could.' The Rose Island Lighthouse, originally established in 1870, operates as a fully functioning independent and energy-efficient light station, maintained by the non-profit Rose Island Lighthouse Foundation (RILF).

The Rose Island light station is the epitome of self-sufficiency – with no public water, electric, sewer, phone or cable television. The only fresh water available on the island is that produced by rain clouds or carried to the island from the shore. The minimal amount of electricity that is necessary for the station's operation is provided by a wind turbine located on the island.

Built on the remains of an 18th century fort, the Rose Island Lighthouse served as a navigation aid until it was abandoned in 1971. The lighthouse deteriorated from the effects of vandalism and exposure to the elements until 1984, when the RILF came to its rescue.

The RILF was organized by a group of Newport residents in an effort to restore the light station to its 1912 appearance and create a landmark that promoted a clean, healthy environment and aided in the preservation of the natural wildlife that inhabits the island. A second but equally important goal was to establish the light station as a historical education site that would benefit the general public.

As part of the RILF's mission to restore and preserve the environmental integrity of Rose Island, the organization decided to construct several new outbuildings and replace the roofing systems on the existing outbuildings of the light station. While the lighthouse itself was re-roofed with natural slate as part of its restoration, the roofs of the outbuildings were well worn and in need of replacement. Begun in 1998, this phase of the restoration effort is still in progress.

The geographical location and environmental conditions of the light station made it ideal for an experimental project. The Rhode Island Historical Preservation and Heritage Commission granted an allowance to the RILF for the purpose of conducting this project, which would incorporate various construction products in order to test their performance.

After conducting extensive research on various products, the RILF chose to use EcoStar™ midnight gray Majestic Slate™ tiles as the ideal product for the roofing component of this project, which included both restoration and new construction.

Manufactured from 80% post-industrial recycled rubber and plastic, EcoStar's Majestic Slate tiles

Rose Island Lighthouse

Location:

Newport, Rhode Island

Application:

EcoStar Majestic Slate™ Traditional

are an environmentally friendly alternative to traditional slate roofing products. The tiles were installed on four of the light station outbuildings, including the newly constructed public restroom and garden shed as well as an existing workshop and underground cistern, covering an approximate total of 1,000 square feet.

On the existing workshop and cistern buildings, the EcoStar tiles replaced rolled asphalt roof systems that were installed in 1992 and 2005, respectively. The EcoStar tiles, installed by RILF, were formed into a hip roof on the restrooms and gable roofs on the garden shed, the workshop and the cistern.

There were three determining factors that led to the decision to use the Majestic Slate product: its similar appearance to natural slate, the enhanced sustainability of the product and the environmentally friendly characteristics of its recycled content.

Majestic Slate tiles offered RILF the environmental safety that was necessary for a project that involved the preservation of both historical integrity and wildlife habitats. The recycled composition of these tiles also provides sustained durability, which was an important consideration for the continued historic maintenance of the buildings.

"We loved the fact that EcoStar products are manufactured from recycled rubbers and plastics from the automotive industry," said Charlotte Eschenheimer-Johnson, executive director of the RILF. "This fits perfectly with our motto: reduce, reuse, recycle. We all agreed that EcoStar was the best option on the market."

Aesthetic appearance was another important factor in the decision to use EcoStar's Majestic Slate tiles. As the original slate roof on the lighthouse was to remain intact, the RILF needed a product that would help to maintain

a consistent appearance throughout the station buildings. Available in nine colors, all of which emulate the appearance of natural slate, Majestic Slate tiles offered the design flexibility that was needed for a consistent appearance on all of the light station buildings.

"We wanted to match the newly re-roofed buildings with those that had historic slate, the lighthouse being one of them, and EcoStar was the best fit," said Johnson, "The thickness and appearance of the tiles was absolutely excellent. EcoStar tiles had a better mold and better color than all of the other products we looked at - they have a depth and character that other roofing tiles just do not have."

"The EcoStar tile is absolutely beautiful," Johnson explained. "We tell people that it is made from recycled materials, and they say 'No way!'"

Not only did the roofing system need to provide natural, sustainable beauty, but it also needed to withstand the harsh elements of Rose Island. "As a historic site in the middle of Narragansett Bay, we were interested in a good-looking product that would hold up in a severe environment like ours," Johnson said. "On the coast, we regularly experience winds between 60 and 80 miles per hour, as well as severe temperatures, both hot and cold."

Other hazards to the light station buildings include the flocks of seagulls that continuously fly over the station.

"The gulls are always dropping clams to break them open on the roofs, so we needed a product that would withstand the impact without cracking," said Johnson. "The slate on the lighthouse is always being mended from damage caused by both the gulls and the elements. I tested an EcoStar shingle by placing it in my freezer overnight. The next morning I hit the frozen shingle really hard with a hammer and nothing happened! I was sold!"

With superior flexibility, EcoStar's Majestic Slate tiles provided the necessary protection, offering enhanced resistance to cracking, hail, driven rain and wind. Featuring class 4 hail resistance, class A fire ratings and a 110 mph wind warranty, Majestic Slate tiles provide extreme strength and protection with no additional weight. The unique composition of the tiles help to reduce the problems associated with freezing or thawing in extreme temperatures.

EcoStar tiles are also available with a 50-year material warranty, offering the strength, durability and performance necessary for the continued, long-term preservation of this historical landmark. This long-lasting protection enables the



RILF to further its mission to "preserve the historic and environmental integrity of Rose Island, to maintain and operate its lighthouse and to provide education and public access to all people."

Always seeking to improve the efficiency and environmental sustainability of the Rose Island light station, the RILF continues to follow a plan for transitioning from "green to greener" in its capital campaign, which includes plans to rebuild the Bergey 1500 windmill, install solar panels and convert back-up diesel generator and heating system to bio-fuels. The RILF also plans to install interior window shutters to retain solar heat, invest in a composting system, restore the basement cistern and re-roof two more buildings.

The RILF has received a significant donation of EcoStar tiles, which they plan to use for the re-roofing of these buildings. "The EcoStar product has been a real joy; we are extremely happy with their performance. We have recommended them to a number of people, and would be more than happy to use them for future projects," said Johnson.

With its continued use of sustainable products such as EcoStar roofing tiles, the Rose Island Lighthouse Foundation will continue to establish itself as a leader in environmental and historic preservation, sustaining Rose Island as a historical landmark and propelling the global pursuit of energy efficiency and environmental sustainability.

EcoStar[™]
RILF



Alternative Materials and Their Use in Historic Districts

**Prepared for the Historic Preservation Office
City of Columbus, Ohio Planning Division**

Synthetic Slate Roof Shingles

Slate is an important historic roof material and was widely used in many areas of the country in the 18th, 19th and early 20th centuries. It was the roof material of choice in many cities since it was durable and fire resistant. Slate is a metamorphic rock that splits into thin, smooth layered surfaces. The durability of a slate roof depends on the type of slate used. Many slate roofs have lasted well over 100 years and remain in good condition. Softer slate may begin to flake, crack and crumble after fifty to sixty years.

Slate roofs cannot be repaired or restored after the slate has reached the end of its useful life. Even the hardest slate roofs can develop cracks and breaks over time. Slate is stone and some individual slate pieces may have tiny imperfections or fractures that are not evident at the time of installation. Environmental factors such as freeze-thaw cycles may eventually cause these slates to crack, break or fall off.

Some cities with extensive amounts of slate roofs are now finding that the slate installed in the late 19th century is reaching the end of its life expectancy. Most Commissions encourage the installation of new slate roofs but recognize that new slate roofs are three to four times the cost of asphalt or fiberglass shingles. In these cases the use of synthetic slate shingles may be an option.

Synthetic slate is manufactured in a variety of materials. Some are made of slate and clay with reinforcing from fiberglass and resins. Others are ceramic based, while others are from recycled post-industrial rubber and plastic. The "greenness" of these materials varies as do their profiles and overall compatibility with historic slate.

Use in Historic Districts

Synthetic slate materials have been approved in a number of historic districts. Indianapolis, Charlotte, and Jacksonville all allow the installation of synthetic slate shingles if the original materials are clearly deteriorated and beyond repair. In Nashville slate can be replaced if shown to be unrestorable but the city has yet to receive a request for the use of synthetic slate shingles. Likewise the commission in Austin has yet to receive a request for synthetic slate but would likely approve it if the material was comparable to the original slate.

In Boston, the Landmarks Commission recently approved synthetic slate materials for the roof of a large church building. The material was approved since it has color variations for individual shingles, is made from recycled rubber and the texture and size of the shingles are comparable to the original slate. Memphis and El Paso do not currently allow the installation of synthetic slate. In many of the smaller communities slate was an uncommon roof material so these materials have not been requested. Slate was widely used in Roanoke and Lynchburg, Virginia and these cities allow the use of synthetic slate in their historic districts.

Lynchburg Historic Districts Residential Design Review Guidelines
Lynchburg, Virginia

ROOFS

POLICY:

Original roof forms should be preserved and maintained. If additions to roofs are desired such as new dormers or skylights, these should be added at rear or side rooflines that are not visible from the street. Historic roof materials such as metal standing seam, clay tiles, or slate should be repaired and preserved. If repair is no longer practical, replacement with an appropriate substitute material is appropriate.

Roofs:

should be preserved in their original size, shape and pitch, with original features (such as cresting, finials, cupolas, etc.), and, if possible, with original roof material.

of slate should be repaired with new slate to match. If deterioration is extensive consider removing slate from rear roof surfaces in order to repair slate on the main and readily visible facades. If overall removal is demonstrated as necessary, the use of faux slate materials will be considered. The substitution of asphalt or fiberglass simulated slate shingles for slate is not acceptable.

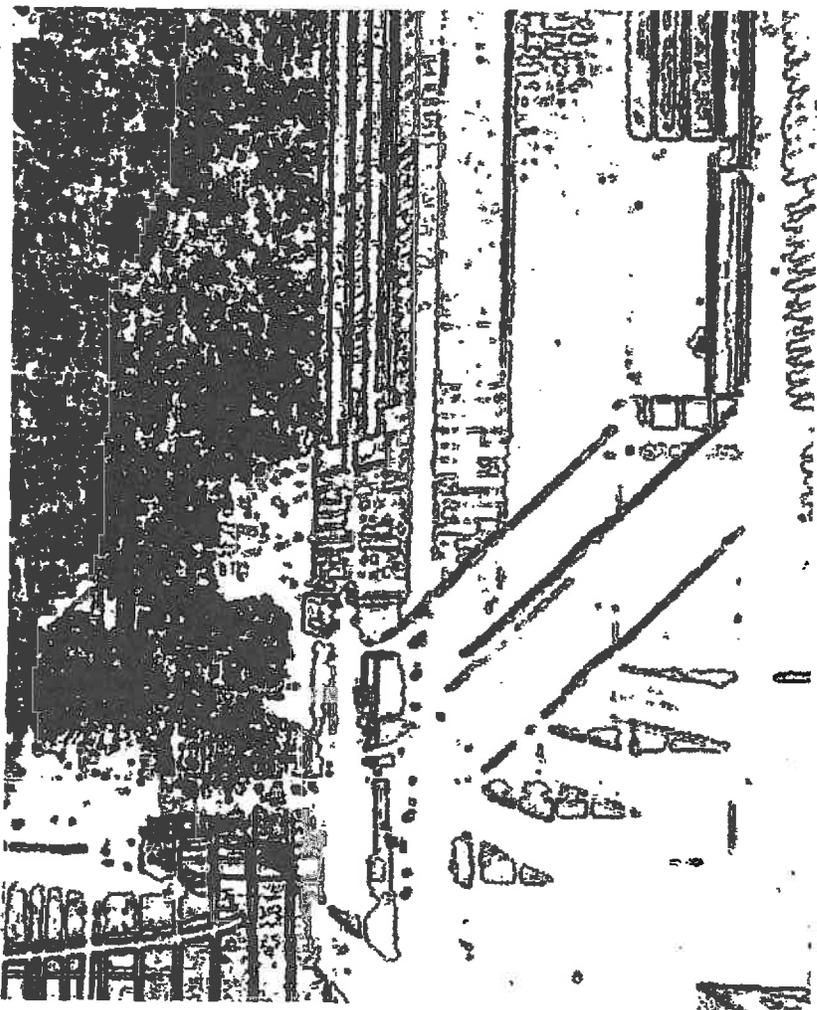
of standing seam metal should be repaired. If replacement is necessary the new roof should match the original as closely as possible in dimensions, seam crimping, and seam spacing. Historically correct commercially available roof coatings may be considered for repairs. The HPC Secretary has information on acceptable materials.

should not have new dormers introduced on front facades but may have dormers added on rear facades or secondary facades where not noticeably visible if in keeping with the character and scale of the structure.

should not have skylights, decks, or balconies added where visible from the street.

District of Columbia
Historic Preservation Guidelines

INTRODUCTION TO THE HISTORIC PRESERVATION GUIDELINES



Maintenance, Repair and Replacement

Maintaining existing materials, elements and systems is always the best method of preserving the character of a historic building. However, no matter how well maintained, most historic buildings will eventually require repair. If economically and technically feasible, repairs should be done so that the original materials and elements remain intact. If repair proves not to be technically or economically feasible, the building owner should evaluate the feasibility of replacing the deteriorated portion in-kind, that is using the same material as the original for replacement. This will help insure that the original character of the building is not altered. If, for technical or economic reasons, replacement in-kind also proves not to be feasible, the building owner may then consider replacing the deteriorated material or element in a compatible substitute material. However, the substitute material should have the same appearance, size, shape, texture, color and other defining characteristics as the original. The substitute material should also be physically and chemically compatible with adjacent materials so that it does not cause future maintenance problems.

District of Columbia Historic Districts

The District of Columbia's principal legislation protecting the city's architectural and cultural heritage, the Historic Landmark and Historic District Act of 1978, states in part:

"... as a matter of public policy, the protection, enhancement, and perpetuation of properties of historic, cultural, and aesthetic merit are in the interests of the health, prosperity, and welfare of the people of the District of Columbia."

The Act provides for the designation of buildings and districts to the city's official list as well as to the National Register of Historic Places. Once designated, these districts, buildings and sites enjoy wide protection since any exterior changes or major maintenance work requires a building permit subject to review and approval by the Historic Preservation Review Board.

Washington's historic districts are made up of a diverse collection of building types and styles. In others, turn of the century residential buildings and modest commercial blocks or imposing mansions and embassies define the architectural character of the neighborhood. Still other historic districts primarily contain educational and federal government buildings or large commercial blocks.

It is better to maintain than repair, better to repair than replace, and better to replace in the same material than in a substitute material.

To be listed as historic, a building or district must be:

1. Structures and sites that are associated with events that have made a significant contribution to the broad patterns of our history; or
2. Structures and sites that are associated with the lives of persons significant in our past; or
3. Structures and sites that embody the distinctive characteristics of a type, period or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
4. Sites that have yielded, or may be likely to yield, information important in prehistory or history.

Slate Roof Stand-Ins

A buyer's guide to man-made substitutes for natural stone.

By James C. Massey

Long the pride of homeowners by virtue of its beauty, longevity, slate reached peak popularity as a roofing material around 1915. As early as 1906, though, manufacturers were already experimenting with man-made alternatives, such as asphalt shingles and asbestos-cement slates, that could be made lighter, cheaper, or easier to install. The search for the perfect slate substitute continues today. The choice of products grows wider every year, while the list of manufacturers changes annually as new players enter the market and old ones leave. Since modern slate substitutes may be one of the options for old-house owners replacing or extending a natural slate roof-or an ersatz slate installation from, say, the 1930s that is now historic in its own right-OHJ has put together the following buyer's guide to help sort out the many products, materials, and makers that represent the state of the art in this evolving industry.

Simulated Slate Suitability

Natural slate is famously long-lived. Nonetheless, many old houses are at the point where their original slate roofs have reached the end of their useful lives. New slate is readily available, but it is expensive to buy, expensive to install and, as a natural piece of split stone, unforgiving of mistreatment. While the variety of man-made substitutes on the market includes some adequate to very good replicas of the real thing, these substitutes are just that-their shape, thickness, size, color, and longevity are not the same as the original material.

If you must reroof an old slated house, by all means do so in slate when possible. If enough of the slate is still in good condition (see *Slate Weathering*, May/June 2002 OHJ) consider removing it, repairing the underlying sheathing and flashing, then reusing the good original slates on the principal roofs-that is, the ones that show. You can then use new slate or a substitute on the rear or subordinate roofs.

After a shaky start, simulated slates are finding growing acceptance for restoration projects because of better quality replicas and good performance on historic buildings in Europe (where they have been extensively used for several decades). Though these are still substitute materials as defined by the Secretary of the Interior's Standards for Rehabilitation, some of the better products have garnered cautious federal government endorsement for preservation use. Sharon Park, FAIA, senior historical architect for the National Park Service Technical Assistance Division, recommends checking with your local historical commission, if there is one, and with your State Historic Preservation Office concerning the appropriate substitute slate for your project. This is obligatory if you hope to cash in on tax credits for home rehabilitation in states that provide them.

Losing the character and patina of an old slate roof is always regrettable, but Park acknowledges that there are circumstances when a new or man-made roof becomes necessary. Regarding

replacement materials in general, the National Park Service stresses that they be compatible with historic materials in appearance. As outlined in Preservation Brief number 16, The Use of Substitute Materials on Historic Building Exteriors, the new, substitute material should match the details and craftsmanship of the original, as well as the color, surface texture, surface reflectivity and finish of the original material. The closer an element is to the viewer, the more closely the material and craftsmanship must match the original.

Trade-offs in Historic Preservation

By David Wright on November 18, 2013



During a renovation in the early 1930s, the wood shingle roof of the Brafferton was replaced with a replica clay tile that was stained and textured to look like wood. The clay tiles lasted 2 1/2 times longer than perhaps the wood shingle roof would have. GWWO worked with the College of William and Mary to replace the clay tiles in 2013.

In our work on historic structures at GWWO, we almost daily face questions and decisions while evaluating the competing trade-offs in regards to preservation. Ideally the preservation architect would like nothing better than to keep everything within an historic property in a preserved condition, respecting the intent of the original architect or builder. Alas, ideals are seldom achieved, and the realities of most preservation projects involve change: replacement of existing materials, change to past uses of spaces, or a combination of both of these.

Almost any intervention—replacing a worn-out material or piece of equipment with something new, or fixing something that is broken or partially missing, means not only taking away vintage material, but also often interfering with some of the other surrounding original fabric. Interfering with ANY of the original fabric in an historic property is frowned upon, and usually needs to be thoroughly investigated and justified prior to action. Addressing worn out roofing materials is a good case in point. Wood shingle, standing seam metal, and even clay tile roofs eventually need to be replaced. If the roof failure (leaking) is a matter of a flashing failure rather than a total failure of the roof material itself, then sometimes the original materials can be removed, selectively repaired and then reinstalled. Such an approach is actually favored over total roof replacement. However, if the roofing material is beyond its normal expected life, full replacement is required, and almost universally needs to replicate the historic roof material in composition, color and detailing. Even though such a replacement makes logical sense, the action—especially in really significant properties—requires what the federal government calls “mitigation.” For buildings listed on the National Register where federal or state funds are involved, if you cannot get a FONSI for the work proposed, (not referring Happy Day’s Arthur Fonzarelli, but pronounced the same) which actually stands for “Finding of No Significant Impact,” then you have to compensate for the “damage”—the irreversible loss of original material. This requires some level of mitigation, usually including good documentation of what is going to be removed. For the roof example, the mitigation might include archival photographs of the roof prior to material removal, and drawings to detail special roofing conditions or intersections.

Specific cases are seldom “black-and-white” however. Take for example the recent roof replacement at the Brafferton, on the campus of the College of William & Mary, and the second oldest collegiate building still in continuous operation since its construction in 1723. The building had undergone an extensive renovation during the early 1930s, as part of the early Williamsburg restoration efforts, carried out by the Boston firm of Perry, Shaw, and Hepburn. They chose to replace the wood shingle roof with a replica clay tile shingle that was stained and textured to look like wood. They wanted to preserve the “look” of the wood shingles, but to make the building more fire-resistant. I personally congratulate their decision, despite the fact that today such a change in material would face a challenging approval process, where many SHPOs (State Historic Preservation Officers) would reject the substitution of any material other than the original wood. The “purest” attitude, in my opinion, fails to factor in the issues of safety, as well as cost. The life-cycle replacement cost of the clay tile roof is significantly lower than that of the wood shingle.

At the Brafferton, the 1930s restoration efforts had survived sufficiently long to have developed a level of historical respect and integrity unto themselves. Studies were made of the 80-year old tiles to assess their integrity, and many were found to have become excessively brittle and beyond practical reuse. The College favored replacement with new clay tile to match the non-original but now acceptable roof for this particular building, as opposed to returning to the original wood shingle, for the same reasons that the 1930s architects proposed it: safety and life-cycle cost. The new roof should last for another 80-plus years with little or no maintenance. Perhaps two-and-one-half wood shingle roofs would be necessary during this same period.

My bottom line thoughts: Historical review and approval agencies need to be a bit more flexible in their acceptance of valid “newer” materials that have an acceptable and appropriate look, color, and performance characteristic which is sympathetic to the historic. These review groups should not blindly insist on replacement of only “in-kind” materials. Asphalt shingle roofs will never truly look like wood shingle roofs, and are not appropriate to be considered as a replacement material. But the clay tile roofs do work as a valid substitute. As another example, some new products have the look, dimensional characteristics, and stability of real wood, but will not rot or decay. For some trim applications on historic wood properties, such materials may make good sense, and need to gain approval. On the other hand, aluminum siding will never be an appropriate replacement material for wood siding. It dents unlike wood, and its detailing at corners and intersections is unlike that of wood. I think reviewers should be open, on a case-by-case basis for use of substitute materials that, in many cases, would have been chosen by the original designers or builders—had these materials existed when the buildings were built.

The Basics: Composite Roof Shingles

From: BobVila.com

By Joe Provey

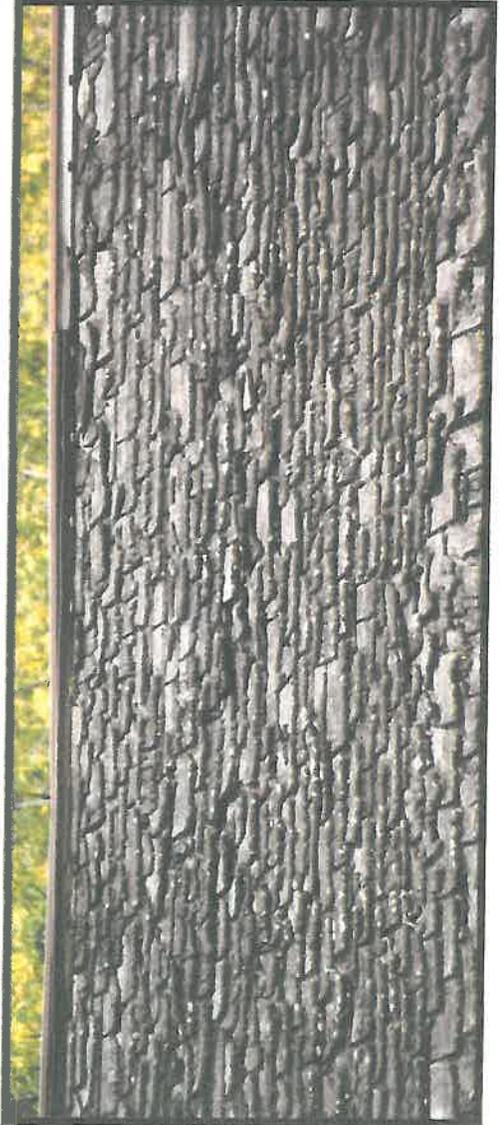
EcoStar's Midnight Majestic Composition Slate Roofing

Coming up with alternatives for traditional shingle materials has proved a steep and slippery slope for a surprising number of manufacturers. Class-action lawsuits have showered down on so-called "lifetime" roofing products with names like Hardishake, Maxishake, and Permatek have prematurely failed.

"The impetus for the development of many of these products was the ban on the use of asbestos fibers," says Rick Damato, a 38-year industry veteran and editorial director of *Roofing Contractor* magazine. "Manufacturers substituted other fibers and they just didn't perform as well."

Several companies have successfully developed composite formulations, most notably EcoStar. Unlike its competitors' products, EcoStar's slates and shakes boast a 20-year track record. They're green, too—in fact, if you build with EcoStar roofing materials, it's possible to score four extra LEED points.

Virtually indistinguishable from real slate and wood, EcoStar's composites have earned approval for use in historic preservation projects. And their "Class A" fire rating and "Class 4" impact-resistance position the company at the top of its class for both measures.



Kent-Delord House

