



# *DESIGN REVIEW COMMITTEE*

## AGENDA ITEM

AGENDA DATE: DECEMBER 2, 2015  
TO: Chair McCormack and Members of the Design Review Committee  
THRU: Leslie Aranda Roseberry, Planning Manager  
FROM: Marissa Moshier, Associate Planner – Historic Preservation  
SUBJECT: **Use of Alternate Materials Study Session**

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### **SUMMARY**

A study session to review, discuss and receive comments on policies related to the use of alternate materials on historic buildings, non-historic buildings, additions to historic buildings, and new construction in the City's historic districts.

### **RECOMMENDED ACTION – NO ACTION**

Staff requests the Design Review Committee (DRC) provide comments on the existing policy on the use of alternate materials in the Old Towne Historic District as described in the City's Historic Preservation Design Standards for Old Towne Orange (Design Standards) and potential changes to the policy to be incorporated into an update to the Design Standards.

### **PUBLIC NOTICE**

No Public Notice is required for this study session.

### **EXISTING POLICY**

When a project involves replacing existing materials on a building or completing new construction in the Old Towne Historic District, the Design Standards provide guidance on the use of two types of materials: in-kind or alternate. An “in-kind material” is defined in the Design Standards Appendix A: Definitions as “that which matches the existing in material, design, texture and color.” In-kind replacement typically refers to the use of traditional building materials that are already present on a historic building and were commonly used for construction of such buildings during their periods of significance.

The Design Standards do not include a definition for an “alternate material.” However, “alternate” typically describes the use of a non-traditional, synthetic building material in place of an original material. The alternate material may have the general appearance of the original material but may differ in texture, color or detailing. The alternate material may also weather and age differently from a traditional building material.

The Design Standards provide guidance on when the use of in-kind or alternate materials is appropriate in Appendix B: Use of Appropriate Materials. Appendix B states the following related

to the use of materials for repairs to historic buildings, additions to historic buildings and new construction:

#### Maintenance, Repair and Alteration

The policy is to retain, repair or restore rather than replace historic building materials. Where severely deteriorated or irreparable historic building materials must be replaced, only areas of deterioration shall be replaced with in-kind materials matching existing in material, design, texture and color.

#### Additions

Additions which are compatible in scale and character with existing historic and non-historic resources shall utilize in-kind materials and shall be differentiated from existing by a change in plane, offset, reveal or other demarcation so that it is clear where the historic resource ends.

#### New Infill Development

Use of in-kind materials on new infill development is encouraged but not required. Use of alternate materials may be used where such elements and materials convey the appearance of like features on existing resources on the property. The materials used for new infill development (whether occurring on vacant or developed property) shall be compatible with those materials that are original to historic structures in Old Towne.

The Design Standards also provide the potential for applicants to propose use of an alternate material on a historic building in the Design Criteria and Development Standards section under “4. Materials” (Page 30):

Material substitutes will be considered during project review (fiber-glass columns, tin cornices, etc.); however, traditional detailing and intent shall be maintained. Any improvements, restoration, or new construction shall duplicate traditional original details and materials as accurately as possible.

In summary, the existing policy in the Design Standards states that:

- 1) In-kind materials should be used for repairs and additions to historic buildings. Alternate materials may be considered on a limited, case-by-case basis, if the appearance and detailing of the alternate material adequately matches the historic material.
- 2) In-kind materials are encouraged for new construction, but alternate materials may be considered if they convey the appearance of similar features on historic buildings.

### **ALTERNATE MATERIALS AND THE SECRETARY’S STANDARDS**

The *Secretary of the Interior’s Standards for the Treatment of Historic Properties* (*Secretary’s Standards*) generally recommends in-kind replacement of historic materials, only when replacement is necessitated by deterioration of the historic feature. Rehabilitation Standard 6 states:

Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities, and where possible, materials.

Although the *Secretary's Standards* encourages in-kind replacement of historic materials, it provides flexibility for the use of alternate materials, if in-kind replacement is not feasible. The National Park Service provides guidance on the use of alternate materials on historic buildings in *Preservation Brief 16: The Use of Substitute Materials on Historic Building Exteriors* (Attachment 1). NPS recommends a conservative approach to the use of alternate materials to replace deteriorated original features on historic buildings. In conformance with the *Secretary's Standards*, NPS recommends that "substitute materials should be used only on a limited basis and only when they will match the appearance and general properties of the historic materials and will not damage the historic resource." NPS provides the following criteria for evaluating when the use of alternate materials may be appropriate on a historic building:

- 1) The historic material is unavailable.
- 2) The historic craft techniques and skilled artisans used to produce the historic material are unavailable.
- 3) The original building materials are poor quality and may cause deterioration to adjacent historic materials, or modern equivalents are substantially inferior to an alternate material.
- 4) Building code requirements prohibit use of the historic material.

If an alternate material is used, it should match the appearance of the historic material and should cause no further deterioration to the historic building. The appearance of the material includes the details, craftsmanship, color, texture, reflectivity and finish. NPS recommends that the closer a material is to the viewer, the more closely it should match the historic material and craftsmanship. The alternate material should also have sufficient longevity and durability to avoid becoming recognizable as a replacement material as the building ages and to avoid damaging the surrounding historic materials as it weathers.

## **TYPES OF ALTERNATE MATERIALS**

The following are types of building features for which the DRC may be asked to consider alternate materials in the Old Towne Historic District. These are commonly available types of alternate materials that may be considered during project review and do not represent a complete list of potential alternate materials. For photographs of the common alternate materials described below and additional alternate materials that have been used in historic districts, see Attachment 3: *Alternate Materials and Their Use in Historic Districts*.

### *Siding*

Cementitious siding has been considered as an alternate for wood siding on non-historic buildings or new construction. Cementitious siding is most commonly known by its commercial name, Hardie Board. Made from cement mixed with sand and cellulose fiber, it comes in a variety of widths, thicknesses, profiles and surface patterns. Hardie Board has been approved by the DRC for use on new detached construction in the Historic District. Generally, the smooth surface siding is considered to be compatible with wood siding on historic buildings. The wood-grained surface

siding does not adequately replicate the texture of historic wood siding and is less compatible with historic buildings in the Historic District.

#### *Windows*

Alternate materials for traditional wood or steel windows include aluminum-clad or vinyl-clad windows or full vinyl windows. Aluminum- or vinyl-clad windows have an aluminum or vinyl facing over a wood frame, sash and muntins. The purpose of the exterior cladding is to reduce the long term maintenance of a wood window. Such windows typically come in a variety of finish colors. The exterior of the window may be trimmed to match similar windows on historic buildings. Vinyl windows are composed entirely of vinyl for the frame, sash, and muntins. In general, staff will consider the use of alternate window materials in non-contributing buildings, if the existing windows are deteriorated and if the proposed window replacements are similar in style and appearance to the existing windows. Aluminum and vinyl-clad windows have been approved by the DRC for new infill construction in the Historic District. Typically, full vinyl windows are not considered to be compatible with the Historic District, unless they have a profile and depth to match comparable historic windows and may be trimmed to match similar windows.

#### *Doors*

Both exterior building and garage doors may be proposed for replacement with an alternate material, including aluminum, steel, fiberglass, vinyl and composite doors. Staff will consider the use of doors in alternate materials on non-historic buildings, if the exterior appearance of the door is compatible with the existing building and the Historic District. Staff has also considered the use of an alternate door material on the rear elevation of a contributing building.

#### *Porch Floors and Decks*

Composite porch floors are manufactured as imitation wood planks in a variety of textures and colors and may be used to replace deteriorated porches and decks. Porch floors that are visible from the street on front or side elevations of historic buildings will not be considered for replacement with a composite material. However, staff will consider the use of a composite for a new deck at the rear of a historic building. Staff will also consider the use of composite material for porches and decks on non-contributing buildings.

#### *Roofs*

Although wood shingle or shake roofs are rare in the Historic District, there are a small number of historic buildings that retain wood roof coverings. Orange Municipal Code Chapter 15 requires the use of a U.L. listed Class A rating for new roof coverings. To staff's knowledge, there are not readily available wood roof coverings that are guaranteed to meet the Class A rating over the life of the roof. The longevity and durability of contemporary wood roof products may also be substantially inferior to the performance of alternate roofing materials. Given the restrictions and disadvantages to using in-kind wood shingles or shakes, staff has considered and approved dimensional asphalt shingles as an alternate roofing material for replacing wood shingles on historic buildings in the Historic District.

### *Fencing*

Vinyl fencing has been proposed as a potential alternate to traditional wood picket fences in the Historic District. The character of the streetscape plays an important role in the preservation of the Historic District, including maintaining compatible front and side yards fences on contributing and non-contributing properties. The use of vinyl fencing has been denied in the Historic District, because the material does not adequately replicate the appearance of historic fencing materials.

## **DISCUSSION TOPICS**

### **Issue 1: Use of Alternate Materials for Repairs to Historic Building**

The existing policy on the replacement of materials on historic buildings can be summarized as:

- 1) Replacement of historic materials on historic buildings shall be considered as a last resort, only when the existing materials are too deteriorated to be repaired.
- 2) When replacement is necessary, the replacement should be in kind, to exactly match the historic material in design, texture and color.
- 3) An alternate material may be considered only if the alternate material can accurately duplicate the historic material.

The National Park Service criteria for evaluating the use of alternate materials on historic buildings generally will not apply to the majority of materials on contributing buildings in the Old Towne Historic District. The types of materials found on historic buildings in Orange are readily available and of sufficient quality to allow in-kind replacement. In rare circumstances, the DRC may consider an alternate material, if the historic material is unavailable, poor quality or cannot be used under the building code.

Staff is requesting that the DRC comment on the existing policy related to the use of alternate materials on historic buildings. Staff has provided the following expanded policy for the DRC's consideration:

Historic materials shall be repaired, rather than replaced. If the historic material is too deteriorated to be repaired, it shall be replaced in kind. The in-kind replacement shall match the material, design, profile, texture and color of the historic feature.

Replacement of a historic material with an alternate material may be considered in limited circumstances. The proposed alternate material will be evaluated using the criteria described in National Park Service Preservation Brief 16: The Use of Substitute Materials on Historic Building Exteriors. The applicant will provide justification for the use of an alternate material, including information on the availability and performance of an in-kind replacement material. The applicant will also provide samples and specifications of the proposed alternate material, including information on performance and durability.

### **Issue 2: Use of Alternate Materials on Additions to Historic Buildings**

Under the Design Standards, additions to historic buildings are required to use traditional building materials that match the historic building in material, design, texture and color. An addition is required to be differentiated from the historic building by "a change in plane, offset, reveal or other

demarcation.” The DRC has consistently approved additions to historic buildings that use traditional building materials found on the existing historic building or comparable historic buildings in the neighborhood. Differentiation between the historic building and the addition is typically accomplished through a change in plane or a subtle change in the dimensions of the siding or other materials between the original and new construction. Although the additions are frequently on the rear elevation and are minimally visible from the street, the use of traditional building materials on the addition provides a cohesive and internally consistent design that is compatible with the historic building.

Staff is requesting that the DRC comment on the existing policy related to the use of alternate materials on additions to historic buildings. Staff has provided the following expanded policy for the DRC’s consideration:

Additions to historic buildings shall use traditional building materials that are present on the existing historic building and comparable historic buildings in the Historic District. New building materials may differ from the historic materials in size, scale, or profile; however, the texture, color and detailing of new building materials on an addition should match the historic building, in order to be considered compatible.

**Issue 3: Use of Alternate Materials on Non-Contributing Buildings and New Infill Construction**

For new detached construction in the Historic District, the Design Standards encourage the use of traditional building materials. However, the DRC may consider the use of alternate materials if those materials adequately convey the appearance of similar features on comparable historic buildings. Under the existing policy, the DRC has approved projects for new construction that include the use of Hardie Board and aluminum- or vinyl-clad windows. For projects reviewed at the administrative level, staff has considered and approved the use of alternate materials for replacement of doors, windows and other architectural features on non-contributing buildings, provided that the appearance is compatible with the existing building and the Historic District.

Staff is requesting that the DRC comment on the use of alternate materials on non-contributing buildings and new detached infill construction. Staff has provided the following expanded policy for the DRC’s consideration:

The use of traditional building materials found on historic buildings in the Historic District is encouraged for non-contributing buildings and new construction. Proposed exterior materials shall be compatible with the size, scale, design, texture and color of historic materials used on comparable buildings in the Historic District. Alternates to traditional building materials may be considered, if the alternate material is compatible with the design and appearance of comparable features on historic buildings.

**ATTACHMENTS**

1. Historic Preservation Design Standards for Old Towne Orange Appendix B: Use of Appropriate Materials
2. National Park Service Preservation Brief 16: The Use of Substitute Materials on Historic Building Exteriors
3. Alternative Materials and Their Use in Historic Districts, Prepared by the Historic Preservation Office, City of Columbus, Ohio Planning Division.