# Fire Station No. 10, 752-754 Randolph Avenue
# Preservation Program


*Engine House No. 10 circa. 1890s (Photo: Minnesota Historical Society)*

# 1 Introduction

The City's Legislative Code, Chapter 73 creates the Saint Paul Heritage Preservation Commission and grants powers and duties that include the review of city permits for work at designated sites and districts. Specifically, §73.04(4) states the commission shall protect the architectural character of heritage preservation sites through review and approval or denial of applications for city permits. The preservation program will serve as the basis for the Heritage Preservation Commission's design review decisions for the property designated under the Fire Station No, 10 Nomination. The preservation program defines the most important elements of the site's unique physical appearance and state the best means of preserving and enhancing these elements in rehabilitation. The purpose is to assure that design review will be based on clear standards rather than the tastes or opinions of individual commission members. Decisions of the Heritage Preservation Commission are subject to appeal to the City Council (§73.06(h)).

# 2 General Intent

The City of Saint Paul, a Certified Local Government in the National Historic Preservation Program, has agreed to conduct its design review of locally designated heritage preservation sites and districts according to the *Secretary of the Interior's Standards for the Treatment of Historic Properties (The Standards)*. The Standards are applied to projects in a reasonable manner, taking into consideration economic and technical feasibility. *The Standards* provide general information to determine appropriate treatments for historic properties. They are intentionally broad in scope in order to apply to a wide range of circumstances. The Standards have been designed to enhance the understanding of basic preservation principals. The Standards identifies four primary treatments: preservation, rehabilitation, restoration, and reconstruction.

**Preservation** is defined as the act or process of applying measures necessary to sustain the existing form, integrity and material of an historic property. Improvements generally focus on the ongoing maintenance and repair of historic materials, rather than extensive replacement or new construction.

**Rehabilitation** is defined as the act or process of making possible a compatible use for a property through repair, alterations and additions while preserving those portions or features which convey its historical or cultural value. The Standards for Rehabilitation have been codified in 26 CFR 67.

**Restoration** is defined as the act or process of accurately depicting the form, features and character of a property as it appeared at a particular time by the removal of features from other periods in its history and reconstruction of missing features from the restoration period.

**Reconstruction** is defined as the act or process of depicting, by means of new construction, the form, features and detailing of non-surviving site features for the purpose of replicating its appearance at a specific period of time and in its historic location.

Although there are components that may include restoration and preservation treatments, it is the Standards for Rehabilitation that is emphasized when reviewing proposals. The ten Standards for Rehabilitation are:

1. A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.
2. The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.
3. Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.
4. Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.
5. Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a historic property shall be preserved.
6. 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. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.
7. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.
8. Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.
9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.
10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

# 3 Description

## 3.1 Boundaries and Sites

*3.1.1 Chemical House No. 5, Engine House No. 10*: 752-754 Randolph Avenue, Inventory # RA-SPC-3110

Legal Description: Lots 2, 3, and Lot 4, Block 1, Clarke's Addition

# 4 Repair and Rehabilitation of Sites

Although the ways we use buildings have changed over the years, we can still appreciate the historical and visual values that historic buildings present. To insure that succeeding generations can also appreciate them, the goals of rehabilitation and repair of historic buildings are two-fold. The first is to maintain the historic appearance. The second is to maintain the authenticity of the historic building and its materials.

## 4.1 Masonry

Stone is one of the more lasting masonry building materials and has been used throughout the history of American building construction. Stones most commonly used in historic buildings in the U.S. are quarried stone, including sandstone, limestone, marble, granite, slate, basalt, and coral stone, and gathered stone, such as fieldstone, river rock, and boulders. Types of stone differ considerably in hardness, durability, and other qualities. Building stones were usually laid with mortar, but sometimes they were laid without mortar using a dry-stack method of construction. Brick varies in size and permanence. Before 1870, brick clays were pressed into molds and were often unevenly fired. The quality of historic brick depended on the type of clay available and the brickmaking technique; by the 1870s, with the perfection of an extrusion process, bricks became more uniform and durable. Mortar is used to bond together masonry units. Historic mortar was generally quite soft, consisting primarily of lime and sand with other additives. Portland cement, which creates a more rigid mortar, was first manufactured in the U.S. in the early 1870s, but it was not in common use throughout the country until the early 20th century. Thus, mortar used in buildings from around 1873 until the 1930s ranged from a traditional lime-cement mix to a variety of sand and Portland cement combinations. After this time, most mortar mixes were based on Portland cement. [1]

*4.1.1 Cleaning:* Masonry should be cleaned only when necessary to halt deterioration or to remove graffiti. Cleaning shall never be undertaken if freezing temperatures are expected within two (2) weeks of the cleaning. Cleaning shall always start with the gentlest method possible; unpressured water and soft, natural or plastic bristle brushes.

Only if more gentle methods do not work, low pressure water can be considered to remove problem stains. This type of cleaning shall be used sparingly and very carefully. The pressure shall be low (under 200 psi), and wide-angle (35- and 45-degree) nozzle tips shall be used. The nozzle shall be kept a minimum of 36 inches from the surface of the masonry.

If detergents are necessary, water soluble, non-ionic cleaners are preferred because they rarely have chemical interactions with masonry. Chemical cleaners should be a method of last resort, and they shall not be used except for removing oil or solvent stains. Corrosion stains (rust, verdigris, etc.) shall be removed with a product specifically designed for the stain. Acid-based cleaners shall never be used because they dissolve limestone. Muriatic (hydrochloric) acid, other mortar removers and many “restoration” masonry cleaners contain acid and must not be used on or near stone or brick. Brick and stone surfaces shall not be sandblasted with dry or wet grit, ice, soda, glass, or any other materials or abrasives.

[1] See Weeks and Grimmer (2017). “The Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring & Reconstructing Historic Buildings” https://www.nps.gov/tps/standards/treatment-guidelines-2017.pdf

Abrasive cleaning methods generally erode the surface of the material, which will alter the appearance and can increase the speed of decomposition.[2]

The cleaning of masonry surfaces should only be attempted if necessary to halt deterioration and clean graffiti without damaging the masonry. An appropriate cleaning product, formulated specifically for cleaning or the removal of graffiti on the specific surface type, shall be applied on inconspicuously sited test areas to determine its effect on the masonry and its effectiveness in cleaning the surface or removing paint.

*4.1.2 Paint and Whitewash:* Masonry is usually a durable exterior material, but there are cases where masons historically covered soft stones and bricks with sacrificial coatings to improve their durability. Masonry that has not been painted or whitewashed shall not be painted. If the masonry coating existed historically, this coating shall be maintained or re-applied.

Whitewash, lime wash, color wash and mineral paints are a class of materials that are designed to be used on masonry. They also do not inhibit the evaporation of water vapor from the masonry. If masonry was historically painted with one of these materials, then it shall be maintained with the appropriate coating. Whitewashes, lime washes, and color washes are inexpensive and easily removed if necessary. However, they require frequent (every 1-5 years) reapplication. Mineral paints are expensive and difficult to remove, but durable.

Paints, historically, were made of oils that dried through oxidation. They limited the evaporation of water from the masonry and altered its color even after the paint was gone. The vast majority of current paints are made from latex polymers that trap water inside masonry. Because they can cause problems with moisture, paint shall not be applied to masonry unless it is required to solve a specific technical problem

The removal of paint or other coatings from masonry surfaces should only be attempted if unpainted surfaces are historically appropriate and if removal can be accomplished without damage to the masonry. An appropriate paint removal product, especially for the removal of graffiti, shall be applied on inconspicuously sited test areas to determine its effect on the masonry and its effectiveness in removing the paint.

*4.1.3 Stucco and Concrete:* Stucco, also known as parging or rendering, is basically a thin coat of mortar applied to the exterior of masonry. Historically, it was used as a sacrificial coating or for improving the exterior appearance of rubble masonry. Masonry that was historically visible shall not be stuccoed. The application of stucco or parge coats as a surface treatment should only occur on exterior surfaces that historically retained such materials. Existing stucco shall be maintained by periodic re-application or covering with a thinner sacrificial coating (see whitewash in 4.1.2 above). If necessary, new stuccos shall not contain latex or other non-mineral ingredients and shall be as vapor permeable as possible (type O or softer) to encourage water vapor to evaporate from the masonry. New applications of stucco shall match historic applications in color, pattern, and texture and shall not alter the profile of openings and details. Re-dashed stucco coats should be of the same composition and strength as the original in order to match the contraction and expansion rates and avoid further deterioration of historic fabric. Smooth or heavy dashed surfaces should be avoided

[2] See Mack & Grimmer (2000). “Preservation Brief 1: Assessing Cleaning and Water-Repellent Treatments for Historic Masonry Buildings.” http://www.nps.gov/tps/how-to-preserve/briefs/1-cleaning-water-repellent.htm.

unless they were used on the original surface. Skim coats shall not alter openings or other details, such as architraves, belt courses, quoins, etc. The addition or repair of stucco shall be performed by experienced professionals using craftsmanship similar to the levels described in the guides described in repointing (below).

*4.1.4 Other Coatings*: Chemical coatings can accelerate deterioration of the masonry, and are frequently expensive and / or unnecessary. Waterproof or water repellent coatings or surface consolidation treatments shall not be applied except in specific situations.

*4.1.5 Repair:* Masonry such as brick and stone are usually durable materials, but all masonry systems need periodic maintenance. Unpredictable events can lead to damage to the masonry system. Both of these situations will require some repair. For any repair, original masonry and mortar shall be retained whenever possible without the application of any surface treatment.

Deteriorated stone and brick shall be maintained unless it has lost the majority of its exterior face or it has been professionally determined that it can no longer bear weight. The deteriorated masonry and all surrounding mortar shall be carefully removed so that the new stone or brick fits in the same area and the new mortar bonds to the surrounding masonry. Replacement stone and brick shall match the removed masonry in material, size, color, texture, detail and veining.

Deteriorated or damaged masonry, when necessary, shall be repaired or replaced with the material used in original construction or a material that closely resembles the original in size, shape, color, texture and profile. New masonry added to a building, structure or site, such as new foundations, walls, or retaining walls, shall be compatible with the size, shape, color, texture, profile and bonding of the original or existing masonry.

*4.1.6 Repointing*: Repointing (tuck-pointing) is periodic maintenance for exterior masonry that is usually performed on a 50 year cycle for exposed joints and much less frequently for protected joints. Repointing should only be done on areas that need repair. Usually, this is on those mortar joints where mortar is missing to a depth that is at least equal to the width of the joint, or the mortar has completely detached from the masonry units. Any repointing work shall be done by experienced professionals and shall conform to standards of craftsmanship laid out in guides to repointing. [34]

Deteriorated or damaged mortar, when necessary, shall be repaired or replaced with a flexible mortar that maintains a good bond with the masonry but allow the exit of water vapor from the core of the wall. This is usually a type O for softer masonry and a type N can be used in most cases with older brick. Analysis of historic mortar can provide the appropriate mix specifications for the replacement mortar. New mortar joints shall resemble the original in size, shape, color, texture and profile, if known. New mortar joints shall be flat and minimally recessed if the original joint profile is not known.

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[3] See Mack & Speweik (1998). "Preservation Brief 2: Repointing Mortar Joints in Historic Masonry Buildings." http://www2.cr.nps.gov/tps/how-to-preserve/briefs/2-repoint-mortar-joints.htm

[4] See Frew (2007). "Pointing with Lime." http://www.buildingconservation.com/articles/pointing/lime-pointing.htm

*4.1.7 Insulating Historic Masonry Walls*: Current standards for comfort and energy efficiency often require improving the thermal performance of the exterior envelope of a building. However, contemporary insulation can damage a solid masonry wall because of the potential of interstitial condensation.[5] Usually, it is simpler to find efficiency gains in other parts of the building envelope, such as the addition of storm windows or attic insulation (see Energy Efficiency below)[6] (Refer to 4.8). The addition of insulation to solid masonry should be used only as a last resort. Plaster and lath interior walls have effective insulation in the form of an air gap behind, and they should be maintained. Any new insulation system shall be vapor-permeable in both directions. No vapor barriers shall be added, and the insulation shall allow the movement of moisture. Because they are vapor barriers, spray foam insulations, polystyrene boards (Styrofoam), foil-backed bats or boards, asphalt-paper-backed bats or boards, and polyethylene sheets shall not be used. [7]

*4.1.8 Resources:* The following National Park Service publications contain more detailed information about masonry.

*Preservation Brief #1: The Cleaning and Waterproof Coating of Masonry Buildings.*

*Preservation Brief #2: Repointing Mortar Joints in Historic Brick Buildings.*

*Preservation Brief #6: Dangers of Abrasive Cleaning to Historic Buildings.*

*Preservation Brief #22: The Preservation and Repair of Historic Stucco.*

*Preservation Brief #39: Holding the Line: Controlling Unwanted Moisture in Historic Buildings.*

### 4.2 Wood Trim, Siding, Shingles, and Other Cladding

Wood is often the most prevalent material in conjunction with historic structures due to its inherent physical properties, workability, renewability, affordability, and accessibility geographically over other materials. When properly detailed, wood offers superior durability while being easy to incorporate design elements that define many historic structures. Historic wood exhibits qualities such as greater resistance to deterioration and overall girth and graining not found in modern wood products as it was harvested from forest stands (stock) that achieved natural maturity development. Often referred to as 'old growth' wood, the qualities of historic wood are not easily replicated or replaced by modern wood products and shall be retained and preserved. Along with initial structural framing, wood was used in both cladding and detailing to weather-proof a structure and to offer character to the structure. More often than not, the use of wood creates a dual functionality in utilitarian and decorative respects. Thus it preservation should respect this unique attribute.

*4.2.1 Repair:* Original wood siding, shingles, and detailing shall be retained whenever possible. Where deterioration exists and is documented to and professionally determined to be beyond repair, replacement shall occur with materials that match the existing in composition, texture, size, design, color, profile and arrangement. Replacement of wood

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[5] See Hutton (2004). "Condensation." http://www.buildingconservation.com/articles/condensation/condensation.htm

[6] See Hensley & Aguilar (2011). "Preservation Brief 3: Improving Energy Efficiency in Historic Buildings." http://www2.cr.nps.gov/tps/how-to-preserve/briefs/3-improve-energy-efficiency.htm

[7] See Jenkins & Curtis (2014). "INFORM: Improving Energy Efficiency in Traditional Buildings." http://conservation.historic-scotland.gov.uk/publication-detail.htm?pubid=6947

siding, shingles and detailing shall maintain the same dimension, orientation, pattern, texture, profile, and lap exposure as the historic material.

*4.2.2 Vinyl, Aluminum and Composite Materials:* Avoid covering architectural features with new materials that are inappropriate to the historic nature of the building, including vinyl, aluminum and hard-board siding, shingles, and panels. Buildings originally clad in wood siding shall not be resurfaced with brick, stucco, artificial stone or brick veneer, hardboard, or vinyl or aluminum siding.

*4.2.3 Decorative Siding Treatments:* Decorative siding treatments, such as paneling, patterns, corner boards, frieze boards, bracketing, moulding, trim, or similar shall be retained and repaired. If replacement is necessary, the new detailing shall match the historic in material, size, pattern, profile, texture, orientation, placement, and location.

*4.2.4 Painting:* Wood shingles, siding, or decorative treatments may have been painted or whitewashed for practical and aesthetic reasons. Paint should not be indiscriminately removed from wooden surfaces as this may subject the building to damage and change its appearance. Exterior wooden surfaces shall be maintained with appropriate paint or stain.

*4.2.5 Resources:* The following National Park Service publications contain more detailed information about wood.

*Preservation Brief #9: The Repair of Historic Wood Windows.*

*Preservation Brief #10: Exterior Paint and Problems on Historic Woodwork.*

*Preservation Brief #17: Identifying the Visual Aspects of Historic Buildings as an Aid to Preserving Their Character.*

*Preservation Brief #32: Making Historic Properties Accessible.*

*Preservation Brief #37: Appropriate Methods for Reducing Lead-Paint Hazards in Historic Housing.*

*Preservation Brief #39: Holding the Line: Controlling Unwanted Moisture in Historic Buildings.*

### 4.3 Roofs, Chimneys, Cornices and Parapets

The roof of any building is a critical part of keeping water out of the walls. The roof, detailing, and water conveyance systems (gutters, downspouts, etc.) should be checked annually and repaired immediately if any problems occur.

*4.3.1 Roof Structure:* The historic structure of a roof for historic structures must be maintained. Truss roofs must not be replaced with rafter roofs, and any horizontal roof members, including tension rods, must not be removed. Masonry walls are weak in tension, and the horizontal thrust of rafters can distort and collapse walls unless the walls are designed to counter the forces.

*4.3.2 Roof Shape:* The original roof type, slope, overhangs and architectural details shall be preserved. The size, shape and original roof features such as dormers, cupolas and parapets shall also be preserved. New roof features may be acceptable if compatible with the original design, are not conspicuously located and respect the overall massing of the initial structure.

*4.3.3 Materials:* When the roof is visible from street level, the original material should be retained if possible, otherwise it shall be replaced with new material that matches the old in composition, material, size, shape, color, pattern and texture. When partially re-roofing, the deteriorated roof coverings shall be replaced with new materials that match the original in composition, material, profile, size, shape, color, pattern and texture. When completely re-roofing, new materials that differ from the original roofing in composition, material, size, shape, color, pattern or texture and that the altered appearance of the building, shall not be used. The predominant roof shape of Fire Station No. 10 is a low-sloped, flat roof. When re-roofing, materials that respect the overall shape and historic methods such as built up tar roofing, metal seamed roofing, or rolled asphalt shall be used. New materials such as rubber membrane roofing may be acceptable if the membrane is appropriately terminated at junction points and does not alter, remove, or disfigure adjacent architectural characteristics. The color, texture, pattern, and overall visual characteristic of roofing materials shall respect the age of structure, original or other roofing methods within the period of significance, if existing, and surrounding architectural characteristics. Dark shades for roofing materials are preferred as they generally emulate the materiality and color of historic roofing materials and do not act as a distraction to other architectural characteristics. The predominant roofing materials of accessory structures at Fire Station No. 10 feature asphalt shingles. When asphalt shingles began to be used in the 1890s and early twentieth century, the most common colors were solid, uniform, deep red and solid, uniform, dark green. Dark brown, dark gray and weathered-wood colors may also be acceptable for new asphalt shingles. Black shingles were not historically used until the 1930s and generally are not acceptable for new asphalt shingles on historic structures constructed prior to 1930.

*4.3.4 Alterations:* The roof shape of buildings shall not be altered except to restore it to the original documented appearance. The additions of architecturally compatible elements like dormers or other small additions may be considered by the Heritage Preservation Commission on a case-by-case basis. Large scale roof alterations are discouraged, as they disrupt the massing, detailing, scale and original design intent of the historic structure. For more information on additions refer to *Rehabilitating Historic Buildings - New Exterior Additions to Historic Buildings and Related New Construction*.

*4.3.5 Skylights, Vents:* Historic skylights or light wells shall be maintained and preserved. If repairs are necessary, original material should be retained as much as possible, otherwise it shall be replaced with new materials that match the old in composition, material, design, size, shape, color, texture, finish, and opacity. The addition of new skylights and vents shall be behind and below parapet level for flat roofs. Skylights and vents shall not be installed on principal elevations for sloped roofs. Modern skylights are a simple way to alter a roof to admit light and air without disrupting its plane surface. Skylights shall be flat and as close to the roof plane as possible. They shall not be placed on the front or highly visible roof planes. "Bubble"-type skylights shall not be installed. Skylights and venting shall be of a color and finish that compliments adjacent materials. There shall be no raw or unfinished metal unless of a natural metal or alloy such as brass, bronze, copper, tin, gold, or silver. Unfinished materials shall not detract from other architectural characteristics by causing reactions, staining, or other visual disturbances.

*4.3.6 Chimneys, Stovepipes and Smokestacks:* Chimneys and smokestacks shall be preserved or restored to their original condition. Only in severe cases of deterioration, it may be acceptable to deconstruct the historic chimney, stovepipe or smokestack and reconstruct

the feature in the same location using salvaged, repaired, or new, in-kind materials. The existing feature shall be photographed and documented through construction-level drawings prior to deconstruction. In the absence of physical or historical documentation on the original design of such features, designs shall be in keeping with the period and style of the building. New chimneys and stovepipes shall not be installed on front roof planes. Repairs shall follow the specifications for materials for masonry and metal (Refer to 4.1, 6.4.2, and 6.4.4).

*4.3.7 Cornices, Parapets, Cupolas, and Other Details:* All architectural features that give the roof its essential character shall be preserved or replaced in kind. Materials used to repair/replace deteriorating or missing architectural elements such as cornices, brackets, coping, railings and chimneys shall match the historic material and finish in-kind, whenever possible.

*4.3.8 Resources:* The following National Park Service publications contain more detailed information about roofs.

*Preservation Brief #4: Roofing for Historic Buildings.*

*Preservation Brief #19: The Repair and Replacement of Historic Wooden Shingle Roofs*

*Preservation Brief #29: The Repair, Replacement, and Maintenance of Historic Slate Roofs.*

*Preservation Brief #35: Understanding Old Buildings: The Process of Architectural Investigation.*

### 4.4 Windows and Doors

Windows and doors are a character defining architectural feature of any building, and they establish the visual rhythm, balance and general character of the facades. Any alteration, including removal of moldings or changes in window and door size or type, can have a significant and often detrimental effect on the appearance of the building.

*4.4.1 Openings:* Existing window and door openings shall be retained. New window and door openings shall not be introduced into principal or highly visible elevations. New openings may be acceptable on secondary or minimally visible elevations so long as they do not destroy or alter any architectural features and the size and placement is in keeping with the solid-to-void (wall-to-openings) ratio of the elevation. [8,9] Enlarging or reducing window or door openings shall not be done. If new openings are proposed near where existing historic windows or doors are blocked in, the feasibility of reopening the enclosed opening for the necessary function shall be considered before the consideration of adding an additional opening. Reopening an enclosed opening shall not result in the total disfiguration of the opening size from its overall proportion. If a secondary elevation window/door or enclosed window/door is proposed to be enlarged or reduced to accommodate a new function, it shall find basis in the rhythm, proportion, and detailing of extant historic openings, windows, and doors on the structure. Openings that existed on an exterior wall before becoming an interior

[8] See Staveteig (2000). “New Openings in Secondary Elevations or Introducing New Windows in Blank Walls.” http://www.nps.gov/tps/standards/applying-rehabilitation/its-bulletins/ITS14-Adding-NewOpenings.pdf

[9] See Grimmer (2001). "Adding New Openings on Secondary Elevations." http://www.nps.gov/tps/standards/applying-rehabilitation/its-bulletins/ITS21-NewOpenings-SecondaryElevations.pdf

wall by subsequent additions shall be maintained and incorporated into interior rehabilitation plans, especially if the openings provide inference to the original function (use) of the structure.

*4.4.2 Panes, Sashes, and Hardware:* Historic windows and doors shall be preserved, and repair of historic windows and doors shall be considered before replacement.[10]. If replacement is warranted, windows and doors shall be replaced in-kind. Window and door panes shall be clear glass. No reflective, textured, frosted, tinted, spandrel, or opaque glass is permitted. Missing or irreparable windows or doors shall be replaced with new windows and doors that match the original in material, size, muntin and mullion proportion and configuration, and reflective qualities of the glass. Replacement sash shall not alter the profile depth between window and wall. Heating and air conditioning units shall not be installed in the window frames. The addition of mechanical, electrical, or other utility services to a window or door shall not occur on historic windows or doors. If the addition of such is proposed, it shall occur only on secondary elevations, be non-visible from the public right of way, and not result in the disfiguration, removal, or damage to the historic window or door opening. The addition of services shall respect the window or door opening and relate to historic divisions found on the structure. The venting or use of a window or door for utility services shall be secondary to methods that are more easily concealed and respectful of the historic fabric such as entrance or exposure underground or via the roof plane.

*4.4.3 Trim:* Historic window and door casings and exterior trim, such as brick mould, shall be retained wherever possible. If replacement is necessary, the original material, size, detail, and profile shall be replicated. Historic trim shall not be covered with metal or synthetic coverings (wrapping or panning). Replacement of trim shall meet the specifications of wood and metal (Refer to 6.4.2 and 6.4.3).

*4.4.4 Lintels, Arches and Sills:* Lintels, sills, architraves, pediments and hoods are an important part of the structure and water protection of the window. They should be retained or repaired if possible. If repair is not feasible, then replacement elements shall be crafted with the same materials, profiles, scales, details, and craftsmanship. Historic colors, if determined, and textures shall be matched when repairing these elements.

*4.4.5 Storms and Screens:* Storm windows and doors are an important first line in making a building energy efficient. They should be compatible with the character of the building and should not damage window and door frames, or require removal of original windows and doors. Exterior storms should be appropriate in size and color and resemble historic wood storms. Combination storm windows should have wood frames or be painted to match trim colors. If combination metal storms are installed, they shall have a baked-enamel finish, be attached to the exterior (blind) stops, and have an exterior surface flush with the adjacent brick molds. Storm windows should resemble the inner window and shall not have vertical or horizontal divisions which conflict with the divisions of the inner sash. Storms and screens shall not pan or wrap the opening or casing. Storms shall meet the specifications of metal (Refer to 6.4.2).

*4.4.6 Shutters:* Shutters were a feature of some historic buildings, and they functioned as climate control, security, and sometimes as windows. Exterior shutters shall not be added

[10] See Myers (1981). "Preservation Brief 9: The Repair of Historic Wooden Windows." http://www.cr.nps.gov/tps/how-to-preserve/briefs/9-wooden-windows.htm

to a building unless there is evidence that they existed historically. Where appropriate, shutters should be, or appear to be, functional and should be mounted to the window casing. Shutters should be constructed of wood and should be simple (paneled wood) unless evidence proves otherwise.

*4.4.7 Security Measures:* There are situations where visible security features for window and door openings are useful, but they shall be installed so that they can be removed later with minimal damage to the historic building. Historic trim or other architectural features shall not be removed for the installation of security bars or grills. Interior shutters are a traditional option that sensitively adds security and insulation to existing windows.[11]

*4.4.8 Awnings and Canopies:* Some historic buildings employed awnings for climate control and as a form of decoration. Awnings and canopies shall not be used if they conceal detailed entries and windows. Aluminum or plastic material awnings shall not be used. Surface design elements shall not detract from or conflict with the related structure's age and design. Awnings shall have a traditional shape. Awnings shall be used in a traditional application for shading window or door openings.

*4.4.9 Resources:* The following National Park Service publications contain more detailed information about windows and doors.

*Preservation Brief #3: Conserving Energy in Historic Buildings.*

*Preservation Brief #9: The Repair of Historic Wood Windows.*

*Preservation Brief #10: Exterior Paint and Problems on Historic Woodwork.*

*Preservation Brief #17: Identifying the Visual Aspects of Historic Buildings as an Aid to Preserving Their Character.*

*Preservation Brief #37: Appropriate Methods for Reducing Lead-Paint Hazards in Historic Housing.*

### 4.5 Porches and Steps

Porches were a significant part of a house in the nineteenth century and reflected the social development of the US.[12] Porches should be considered one of the most significant architectural features of a building and treated as such.

*4.5.1 Preservation:* Porches and steps which are historic or appropriate to the building and its development shall be retained. Porches and additions reflecting later styles of architecture are often important to the building's historical evolution and should be retained. Infilling of porches shall be avoided. The addition of a front, side or rear porch to a historic commercial or institutional structure where one did not exist historically is generally inappropriate and shall not be done. The treatment of historic materials of porches shall meet the specifications outlined in the above and following masonry or wood sections (Refer to 4.1, 4.2, 6.4.3, and 6.4.4).

*4.5.2 Reconstruction:* If porches and steps removed from the building are to be reconstructed, the new work must be based upon photographic documentation, physical

[11] See Craw and Historic Scotland (2010). “Inform: Timber Window Shutters.” http://www.historic-scotland.gov.uk/inform_timber_window_shutters.pdf

[12] Sullivan and Leeke (2006) “Preseration Brief 45: Preserving Historic Wood Porches.” http://www.cr.nps.gov/tps/how-to-preserve/briefs/45-wooden-porches.htm

evidence, and historical research. Simple designs should be used if evidence is lacking in order to avoid speculation. Preservation architects or preservation professionals can help create a design that is compatible in design and detail with the period and style of the building. In replacing porch railings, it is important to maintain the original spacing, section and profile of the balustrades.

*4.5.3 Decorative Features:* Decorative architectural features such as cornices, brackets, railings, and those around front doors and windows shall be preserved. New material used to repair or replace, where necessary, deteriorated architectural features of wood, iron, cast iron, terra-cotta, tile and brick shall match the original as closely as possible.

*4.5.4 Additions and Infill*: If new materials must be added for necessity or compliance, the old materials shall be preserved in place. Taller railings shall be slim in profile and mounted behind existing balustrades. Infilling shall be avoided, but infill panels should not displace or obscure porch columns, knee walls, and balustrades.[13] Deck and fire stair additions and new balconies may be acceptable in some cases, but should be kept to the rear of buildings where they will be the most inconspicuous and detract the least from the historical context. The detailing of decks and exterior stairs shall be compatible with the period and style of the building.

*4.5.5 Resources:* The following National Park Service publications contain more detailed information about porches.

*Preservation Brief #10: Exterior Paint and Problems on Historic Woodwork.*

*Preservation Brief #17: Identifying the Visual Aspects of Historic Buildings as an Aid to Preserving Their Character.*

*Preservation Brief #32: Making Historic Properties Accessible.*

*Preservation Brief #45: Preserving Historic Wood Porches.*

### 4.6 Fencing, Enclosures and Retaining Walls

Many houses, structures, and sites have walls and other enclosures that are part of the historic fabric of the building site. Existing fencing and retaining walls that are identified as contributing elements to the Site or District shall be appropriately maintained and preserved.

*4.6.1 Preservation:* The treatment of historic materials of fences, enclosures, or retaining walls shall follow the above and following masonry or wood sections (Refer to 4.1, 4.2, 6.4.3, and 6.4.4). Mortar shall not be added to stone walls that were historically dry-laid (i.e. built without mortar). Otherwise, the elements of walls shall be treated as elements of historic buildings.

### 4.7 Mechanical Systems

Many standards of living, such as climate control, were achieved by simple and natural methods and often were incorporated into the design of the overall structure. Modern standards of comfort can require the installation of many systems that could disrupt the visual and material integrity of a building. The installation of climate control systems shall be carefully considered and designed by professionals.

*4.7.1 Location and Siting:* Mechanical related equipment shall be sited in such a way that they do not block or disrupt principal elevations and prominent views, especially on roof

[13] Sullivan and Leeke (2006).

tops. Mechanical related equipment that is sited on grade should be inconspicuously sited and contained to rear elevations or the rear portion of side elevations. In some cases, appropriate screening such as low hedges or low wood screening/fencing may be necessary. Any equipment that must be attached to the exterior of a wall shall be done in an unobtrusive location and into mortar joints only. Attachments should be as few and as unobtrusive as possible to the historic structure. If mechanical attachments, such as water or cooling line sets must penetrate through a historic masonry wall, the installation shall affect as few stones or bricks as possible. If electrical, condensing lines, or other lines needed for service need to be routed on the exterior of the structure, their run length shall be limited to approximately ten (10) feet. Lines shall be covered by a line hide that has been painted to match the surrounding material The attachment of the line hide shall not conceal, damage, remove, or disfigure architectural characteristics and shall be installed into mortar joints only with the fewest attachments as possible. The installation of modern equipment should be carefully planned to avoid damage and removal of any historic materials.

*4.7.2 Grills, Exhaust Fans, etc.:* Grills, vents, exhaust outlets for air conditioners, bath and kitchen exhaust fans, radon equipment and other utilities shall be vented through the roof, if possible. If a penetration through the exterior facade is needed for mechanical, electrical, or other utilitarian uses, a penetration shall be on a non-primary façade, through an enclosed window or door opening is preferred over a penetration through a previously unaltered surface and should remove or disrupt as little historic fabric as possible. All penetrations and associated equipment shall be of a color and finish that compliments adjacent materials or is dark in color. Materials shall not detract from other architectural characteristics by causing reactions, staining, or other visual disturbances.

*4.7.3 Solar:* The addition of solar equipment, such as voltaic panel systems and associated equipment shall be inconspicuously placed, and not disfigure, remove, or alter architectural features. Solar installed on roof slopes, shall be set back from the parapet and shall not be visible from the public right of way. Solar placed on secondary structures shall be contained to roof slopes that are not visible from the public right of way. Siting and attachment of equipment and associated detailing, including color, shall follow the conditions outlined in the mechanical section above (Refer to 4.7.1).

*4.7.4 Communications:* The addition of communication, security, or other related equipment shall be inconspicuously placed and shall not remove, conceal, or alter architectural features. Communication devices that damage architectural features or are visible from the public right-of-way and shall not be installed. Attachment of equipment and associated detailing, including color, shall follow the conditions outlined in the mechanical section above (Refer to 4.7.1).

*4.7.5 Resources:* The following National Park Service publications contain more detailed information about mechanical systems.

*Preservation Brief #24: Heating, Ventilating, and Cooling Historic Buildings—Problems and Recommended Approaches.*

### 4.8 Energy Efficiency

Historically, Fire Station No. 10, (Chemical House No. 5) was fully “off the grid” (i.e. no electricity, no city water). The introduction of modern conveniences and comforts has required the addition of many electrical and fuel-burning mechanicals into the structure. Historic Structures will never function in the same way as contemporary structures, and some

energy-efficiencies designed for contemporary structures will damage historic structures. Improving efficiency in historic structures should be performed with an overall plan; not piecemeal improvements without consideration for unintended consequences.

*4.8.1 Energy Audit and Planning:* Both the property owner and the structure will be best served if an audit is performed to try and identify where inefficiencies exist. The audit will identify the areas of the building where energy efficiency can be improved. It is the research that will give the property owner the most return for a given investment, and it will also minimize the loss of historic fabric. A plan for step-by-step improvement is made by applying the preservation program and the energy audit results in combination.

*4.8.2 Upgrading Building Performance:* Before altering historic materials, there are steps that can be taken to greatly increase energy efficiency; from closing off rooms that are not in use to upgrading heating and cooling systems and other appliances. Upgrades that minimally alter the materials and appearance of the building should be considered only if system improvements do not achieve significant savings. The following steps are minimally-invasive to the authenticity of the building and are less likely to damage historic fabric.[14]

•Reduce air leakage.

•Add attic insulation.

•Install storm windows.

•Insulate between joists basements and crawlspaces.

•Seal and insulate ducts and pipes.

•Weather strip doors and add storm doors.

Other, alterations should be avoided because they can alter or destroy the historic integrity of the building through removal of materials or through irreparable alterations. In addition, some alterations could cause long-term moisture problems which can lead to the further deterioration of historic fabric.

*4.8.3 Resources:* The following National Park Service publications contain more detailed information about energy.

*Preservation Brief #3: Conserving Energy in Historic Buildings.*

*Preservation Brief #24: Heating, Ventilating, and Cooling Historic Buildings—Problems and Recommended Approaches.*

# 5 Signage, Awnings, and Accessories

## 5.1 General.

Historically, Fire Station No. 10 as well as other institutional municipal service buildings in St. Paul rarely incorporated the use of signs. Signs, awnings, or accessories, including window signs or decals, should blend with the character of the structures. Signs should not conceal architectural detail, clutter the building's image, or distract from the unity of the facade but, rather, should complement the overall design. Signs, graphics and lighting should

[14] See Hensley & Aguilar (2011). “Preservation Brief 3: Improving Energy Efficiency in Historic Buildings.” http://www2.cr.nps.gov/tps/how-to-preserve/briefs/3-improve-energy-efficiency.htm

be designed as part of the facade. A master plan for signage is encouraged with multiple tenant properties.

**5.2 Materials.**

Sign materials should complement the age and materials of the related building. Surface design elements should not detract from or conflict with the related structure's age and design in terms of identification symbol (logo), lettering, and related patterns or pictures. Materials used should be the same as those used for signs during the period of the building's construction.

**5.3 Types.**

The sign type should enhance the building's design and materials. There are a number of types of signs which may be used: (1) single-faced; (2) projecting, double-faced; (3) three-dimensional; (4) painted wall signs; and (5) temporary signs.

**5.4 Location and Method of Attachment.**

Signs should be appropriately sized and complement the building exterior; roof-top signs are inappropriate. There should be no sign above the cornice line or uppermost portion of a facade wall and shall not conceal any architectural detail or features.

*5.4.1 Exterior Signs:* Signs should not disfigure or conceal architectural details. Painted signs may be permissible on glass windows and doors. Historic painted signs, often referred to as ghost signs, on exterior walls should be incorporated into rehabilitation plans and shall be preserved without alterations or new applications. New painted signs on exterior surfaces are generally unacceptable and should not be done. Painted signs on unpainted masonry shall not be considered. The facade shall not be damaged or altered in sign application, except for necessary attachment points. Any attachment points on masonry surfaces should be in mortar joints only. The method of attachment should respect the structure's architectural integrity and should become an extension of the architecture. Projecting signs should have a space separating them from the building. (Protection of architecture in method of attachment shall be regarded as a basis for granting variance of the normal zoning code prohibition against guy wire supports for projecting signs.)

*5.4.2 Interior Signs:* Interior signs or decals intended to be visible from the exterior may be permissible provided they are physically removable without causing damage to the historic window or door glass, frame, sash, wall or hardware. Permeant signage applications such as etching of glass shall not be done. Interior signage should not completely obscure the glass pane of a window or door such that it hinders visibility through the pane.

**5.5 Illumination.**

If illumination is necessary, signs should be lit from on the site (not internal illumination). There should be no flashing, blinking, moving, or varying intensity lighting. Subdued lighting is preferred. Backlit fluorescent, LED, or exposed neon are inappropriate. The color temperature of the lighting should be 3000K or less.

*5.5.1 Method of Attachment:* Illumination should not disfigure or conceal architectural details. The façade should not be damaged or altered in the application of illumination and associated conduit, except for necessary attachment points. Any attachment points should be into mortar joints only or make the smallest penetrations into the façade as possible. The method of attachment should respect the structure’s architectural integrity and should become an extension of the architecture.

### 5.6 Resources.

The following National Park Service publications contain more detailed information about signs and awnings.

*Preservation Brief #11: Rehabilitating Historic Storefronts.*

*Preservation Brief #25: The Preservation of Historic Signs.*

*Preservation Brief #44: The Use of Awnings on Historic Buildings: Repair, Replacement and New Design.*

# 6 New Construction, Additions and Alterations

## 6.1 General

In general, historic properties should be used as their historic intended purpose or be placed in a new use that requires minimal change to the characteristics of the building and its site and environment. There are cases where small additions or detached new construction will not materially impair the historic or architectural character of the building or its site. New construction can be detached structures on the same property of the historic structure or an addition that is physically attached to the historic structure. This section focuses on general rather than specific design elements in order to allow for architectural innovation. Existing historic buildings and landscape features should be retained and rehabilitated. New construction, additions, and alterations should reinforce the historic architectural and visual character of the site. A new addition to a historic building or site has the potential to change its historic character as well as to damage and destroy significant historic materials, features and contexts. A new addition also has the potential to confuse the public and to make it difficult or impossible to differentiate the old from the new or to recognize what part of the historic building is genuinely historic.

## 6.2 Location

New construction on the site should not detract from the primary historic building and should be subordinate in massing to the historic structure. Therefore, additions to the primary historic building should be on the rear of the building and visually set back from the side elevations. New, separate buildings generally should be set in the rear of the property and should not obscure the views to the historic building from the public right-of-way. Proper placement of new detached buildings and even additions require an understanding of the development of the property over time and the surrounding area so that new construction is consistent with historic development patterns.

The massing, volume, and height of any new construction should be subordinate to the massing, volume, and height of the existing historic structure on the site. Additions or new buildings on the site that “dwarf” the historic buildings do not comply with the preservation program.

## 6.3 Roofs and Cornices.

New roof, and cornice designs should be compatible with the primary building on the site. It is more important for roof and roof edges to relate in size and proportion, than in detailing.

## 6.4 Materials and Details.

The materials and details of new construction should relate to the materials and details of the primary building on the site, but should not be overly imitative. New construction should

display materiality that respects the principal structure through simplification or subordination. Materials should be detailed in a way that respects the age and character and does not distract from the importance from the historic structure, site, or district. Materials should be used to create a sense of unity between the historic structure, site or district and any new construction. Materials that introduce a discord or distraction should not be used.

6.4.1 Synthetic Materials: The use of synthetic siding, shingles, panels or trim materials should have as smooth surface treatment as much as possible. Faux or imitative grains are generally inappropriate. Materials that have the color inherent in the product are subject to review by the commission and shall relate in color to materials found on the principal structure.

6.4.2 Metal: There shall be no raw or unfinished metal unless of a natural metal or alloy such as brass, bronze or copper. Materials should not detract from other architectural characteristics by causing reactions, staining, or other visual disturbances.

6.4.3 Wood: The inclusion of wood on new construction should meet the quality and standard of wood found on historic structures. Wood such as oriented strand board (OSB), plywood, T-111, MDF, Masonite, panel siding or other manufactured wood products shall not be used.

6.4.4 Masonry: The inclusion of masonry on new construction should meet the quality and standard of masonry found on historic structures. Masonry additions to historic masonry structures should match the historic masonry as outlined in the above masonry section (Refer to 4.1) but should be subordinate to the principal structure in massing, detail, and overall visual impact. Additions should be constructed from simplified materials that reinforce the importance and quality of the principal structure.

**6.5 Windows and Doors.**

Windows, doors, and openings should relate to those of the buildings on the site in the ratio of solid to void, distribution of window openings, and window profile from the exterior wall plane. The proportion, size, style, function, configuration, and detailing of windows and doors in new construction should relate to that of the principal structure and of similar aged, styled, and functioned (use) structures which are often adjacent in the surrounding neighborhood. Windows and doors should be constructed from wood, but imitative materials may be considered on a case-by-case basis. Imitative materials that are detailed in a similar manner to wood windows and doors are preferred. Any grid, or window lite division patterning shall either be true- or simulated-divided-lites and all glazing shall be clear glazing only. Windows and doors that feature grids between the glass and/or reflective, tinted, or opaque glazing is inappropriate and shall not be used. Materials shall comply as outlined in the material and detail section above (Refer to 6.4).

**6.6 Resources**.

The following National Park Service publications contain more detailed information about additions and new construction.

*Preservation Brief #14: New Exterior Additions to Historic Buildings: Preservation Concerns.*

*Preservation Brief #17: Architectural Character—Identifying the Visual Aspects of Historic Buildings as an Aid to Preserving their Character*

# 7 Concerning Site Considerations

## 7.1 General.

The traditional pattern of the lots, streets, curbs, boulevards and sidewalks should be maintained. Distinctive features such as fences, retaining walls, curb cuts, steps and walkways that are important in defining the context should be preserved. The relationship of buildings to open space and setbacks of buildings should be preserved. Alterations that disrupt or encroach upon the setback, pattern, and rhythm of the street are not appropriate. New street furniture and landscape improvements including, but not limited to: benches, bus shelters, kiosks, sign standards, trash containers, planters and fences should be compatible with the character of the site. The historic urban pattern should be retained and enhanced in improvement projects.

## 7.2 Fences and Retaining Walls

Fences which are situated in or adjacent to front yard space or streetscapes shall be no taller than four (4) feet and allow visual penetration into the yard versus fences which create complete enclosure and be of a wood or metal material. Cyclone or chain-link fencing is not appropriate. Privacy fences installed in rear yards shall be no taller than six (6) feet, six (6) inches, and shall be constructed from wood, or metal with a dark finish. Cyclone or chain-link fencing is not appropriate. Stone, brick and split-faced concrete block are preferable to landscape timber for the construction of retaining walls and should be of a color that emulates a natural stone. Artificial or dyed, colored stone with saturated hues that deviate from earth tones are inappropriate. Fencing shall comply with all applicable City of Saint Paul Zoning Codes.

## 7.3 Lighting

The character and level of lighting that is used on the exterior of a building is of special concern. Lighting used to accent building entrances, architectural features, signs and illuminate walkways is appropriate. Lighting that washes an entire building façade in light, blinks, flashes, or moves is not appropriate. The location and style of exterior lights, street lights, or similar should be appropriate to the structure's age and original design intent. The color temperature of the lighting shall be 3000K or less. Lighting that emits a blue-white light is inappropriate. Attachment of lighting to exterior facades should follow the methods of attachment as outlined in the sign/illumination section above (Refer to 5.5).

## 7.4 Hardscaping and Landscaping

New landscaping should respect the historical and architectural character of the existing property. Landscaping shall not create a wall of enclosure nor obstruct views of the property from the public right-of-way. Landscaping in the front and front-half of side yards shall be low, no taller than four (4) feet. Hardscaping such as concrete, asphalt, paver, brick, or stone sidewalks, patios, driveways, parking pads, or similar shall respect the historical and architectural character and patterns of the designated property. Hardscaping shall be constructed from materials that are natural stone, earth tone, or represent the natural appearance of composite aggregates in color. Poured, stamped or formed concrete which has artificial coloring, tint, stains, or dyes is not appropriate. Hardscaping or impermeable surfaces shall not be a means of replacement for landscaping or open permeable surfaces. The balance of hardscaping to landscaping shall be subordinate, unless in cases where hardscaping existed historically and is documented through pictorial or physical evidence. Hardscaping that reinforces an isolated private function or obscures the primary elevation visually is not appropriate. Parking lots for commercial uses should be to the side or rear of

commercial structures and have a minimum number of curb cuts. The scale of parking lots should be minimized.

### 7.5 Infrastructure

Infrastructure such as private, public, or city owned, operated, or maintained resources (sidewalks, curbs, gutters, street lights, benches, bike racks or similar) shall be compatible with and respect the age, character, historic fabric, and overall feel of the historic structure and site. Associated service connections (electric, water, sewer, gas) and technology shall be inconspicuously located and shall not harm the historic and architectural integrity of the historic structure and site. Attachments and location of infrastructure should follow the mechanical and signage/illumination section as outlined above (Refer to 4.7.1, 5.4, and 5.5).

## 8 Treatment of Architectural Features

Complimentary to the architectural features, Fire Station No. 10 exhibits both an accessory building and interiors that are defining features. These features, such as the rear yard accessory structure, the large apparatus bay openings, hose tower, fire poles, and fire pole openings are crucial to understanding the function and importance of the structure and they shall be preserved as a part of the site and structure. Alterations that seek to misrepresent or confuse interpretations of these features by instilling belief in alternative features or functions that are not adequately documented are inappropriate. Missing features should only be reinstalled or reconstructed when significant physical or pictorial evidence exists.

### 8.1 Accessory Structure:

The concrete block portion of the accessory structure was constructed between 1903 and 1923, during the period of significance, and is contributing to the interpretation of Fire House No. 10. The earliest function of the structure was to contain livestock and/or horses of the Saint Paul Fire Department in the early 1920s. The addition to the east and west of the concrete block structure was constructed between 1953 and 1957 and consists of wood clapboard siding over, modern concrete masonry unit block, situated on slab on grade foundation and features a gabled asphalt singled roof. Thus, the accessory structure located at the rear of the property shall be maintained and preserved. Alterations which disfigure, remove, or relocate any part of the structure shall not occur. Alterations which respect the accessory structure, and allow for its continued interpretation as a horse related structure, may be acceptable. Repairs and Alterations should follow the section for Repair and Rehabilitations, New Construction, and Additions and Alterations outlined in Section 6.

### 8.2. Bay Openings:

While the current configuration of the bay openings and hardware stems from the 1980-1981 alterations to Fire Station No. 10, that were completed outside the period of significance, they are in the same general location and character of the historic openings. The large bay openings of the primary facade define the interpretation of Fire Station No. 10 and should be maintained and preserved. Alterations which disfigure, enlarge, or completely remove the openings shall not be acceptable. Alterations which propose to modify the opening may be considered as long as the opening is in compliance with documented precedence set by historic photographs of the fire station. The replacement of the overhead doors shall respect the stylistic period or periods a building represents. The main function of the door in providing large access into the interior should be respected. If the doors are

proposed to become un-functional, they should appear to be functional. Material and detailing of the large bay opening doors shall comply with the Window and Door, and Material and Detailing section above (Refer to 4.4 and 6.4).

### 8.3 Interior

*8.3.1 General*: The nomination form indicates specific areas, such as the hose tower and fire pole openings within the Fire Station No. 10 that are designated. The Interior Spaces, Features and Finishes chapter of *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring & Reconstructing Historic Buildings* apply to all finishes, features and fixtures that are affixed to the walls, floors and ceilings.

*8.3.2 Interior Spaces*: Identify, retain, and preserve the original floor plan and interior spaces that are important in defining and interpreting the historic character and use of the building. This includes size, configuration, proportion, and relationship of rooms; the relationship of features to spaces; and the spaces themselves.

*8.3.3 Interior Features and Finishes*: Identify, retain, and preserve the interior features and finishes that are important in defining and interpreting the historic character and use of the building.

*8.3.4 Alterations/Additions for New Uses*: Locate new code-required stairways and elevators in secondary and service areas of the historic building. Situate service functions such as bathrooms, mechanical equipment in secondary spaces. Preserve, restore, and reuse decorative materials or features removed during the rehabilitation work and reinstall and rehabilitate such material or features in historically appropriate locations.

## 9. Demolition and Moving Buildings

When reviewing proposals for demolition of structures, the Heritage Preservation Commission will consider the following:

1. The architectural and historical merit of the building. This includes consideration of the integrity of the structure and whether it was constructed during the Period of Significance.
2. The effect of the demolition on surrounding buildings, the effect of any proposed new construction on the remainder of the building (in case of partial demolition) and on surrounding buildings.
3. The economic value or usefulness of the building as it now exists in comparison with the value or usefulness of rehabilitating the building or structure for a new use.
4. The physical condition of the structure and the feasibility of continued use with considerations of maintenance, safety, and compliance with codes.

Proposals for moving structures off of designated sites shall be reviewed as a demolition and proposals for moving structures onto the designated sites shall be reviewed as new construction.

# Glossary

**Adaptive Reuse** Conversion of a building originally designed for a certain purpose to a different purpose.

**Ashlar** A stone that has been dressed (see dressing) on four or more sides. Ashlar stones are square and regular in the wall. The outside face can be dressed or left rock-faced. Ashlar stone is usually laid in full courses (see course).

**Balustrade** A row of upright posts (balusters) which support a railing.

**Bay** A structural division of a building defined by projections, columns, pilasters or window groupings.

**Belt Course** A horizontal, decorative band around a building, often of a projecting, contrasting material.

**Bracket** A support element under eaves or other overhangs that is often decorative.

**Clapboards** Narrow overlapping wooden boards, often tapering in thickness, nailed horizontally and used as siding.

**Clerestory** An upper fenestrated section of a building designed to provide natural light to a high-ceilinged room.

**Coping.** That capping member of a wall or parapet, usually sloped to shed water.

**Corbel.** A brick or stone support produced by extending successive courses out from the wall surface.

**Cornice.** Projecting ornamental molding which crowns a wall or an entablature.

**Course.** In masonry, coursing describes the built levels of the masonry units. A full course is a level that is horizontally constant and of even thickness (height). All brick and ashlar stone masonry are fully coursed. Stones that are less dressed (see dressing) can be semi-coursed or random (uncoursed).

**Cupola. A small dome or projection placed on a circular, polygonal, or square base that emerges from the roof plane.**

**Dentils.** A row of small rectangular blocks forming a molding that resembles teeth, usually part of a cornice.

**Dormer.** A roofed structure, usually housing a window, which is vertically set on a sloping roof.

**Dressing.** Dressing is the process of cutting and chiseling that gives stone its shape and final appearance. The surfaces of the stone are usually flattened and left with or without tool marks, or they can be left rock-faced.

**Eaves.** The underpart of a roof that extends beyond the structure's wall.

**Fenestration.** The arrangement, proportions, and pattern of windows and door opening in a wall.

**Finial.** A decorative, pointed ornament on the top of a spire, gable, or pinnacle.

**Flashing.** A sheet, usually metal, used to make an intersection of materials watertight.

**Frieze.** An ornamental band immediately below the cornice.

**Gable.** The triangular upper portion of an end wall under a pitched roof.

**Hose Tower.** A multi-story vertical shaft used for the drying and draining of fire hoses after use and before storage and re-use. The shaft allows for a straight datum to let moisture drain via gravity. Often the tower is capped with a cupola to provide ventilation to speed drying.

**In-kind.** When deteriorated, damaged, or lost features of a historic building need repair or replacement, use historic materials that match in all aspects. In limited circumstances substitute materials that imitate historic materials may be used if the appearance and properties of the historic materials can be matched closely and no damage to the remaining historic fabric will result.

**Integrity.** The authenticity of a historic building, site, or resource as evidenced by its location, design, setting, materials, workmanship or association.

**Keystone.** The central stone of an arch.

**Light.** An individual pane of glass between mullions and muntins on a window.

**Lintel.** A horizontal beam spanning an opening and supporting construction above.

**Massing**. The combination of height, volume, and scale of a building in relation to its surroundings.

**Mortar.** A mixture of minerals mixed as a workable paste that then sets to a hard material. It keep masonry units in the location where the mason placed them, fills the gaps between the units, protects the wall interior from liquid water, and absorbs the expansion, contraction, and movement of the building.

Mortar is traditionally sand and / or small gravel with lime and possibly other binders such as cement, clay, or pozzolana.

**Mullion.** A vertical member dividing (and often supporting) a series of windows or panels: mullions are wider than muntins.

**Muntins.** A narrow bar dividing a window onto individual lights.

**Parapet.** A low projecting wall at the edge of a roof.

**Pilaster.** A shallow pier attached to a wall, sometimes having a capital and base to resemble a classical column.

**Pinning Stone.** In stone masonry, a pinning stone is used when coursing to help level the next course and reduce the amount of mortar used. Repointing work should keep pinning stones to help reduce cracking and shrinking in new mortar.

**Preservation.** The act or process of applying measures necessary to sustain the existing form, integrity, and materials of an historic property. It reflects a building's continuum over time, through successive occupancies, and the respectful changes and alterations that are made.

**Principal Elevation.** The exterior face of a building which is considered an architectural front and/or facing a public right-of-way.

**Property.** Any land, building, structure or object, surface or subsurface area, natural or landscape feature.

**Quoins.** Bricks or stones used to define the corners of masonry buildings.

**Reconstruction.** The act or process of depicting, by means of new construction, the form, features, and detailing of a non-surviving site, landscape, building, structure, or object for the purpose of replicating its appearance at a specific period of time in its historic location.

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

**Repointing.** The process of removing the old mortar and applying new mortar between brick and masonry joints.

**Restoration.** The act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period.

**Rhythm.** The relationship of buildings to open space along the street and between structures, the relationship of solids to voids and the repetition or pattern of features on building facades and landscapes.

**Rubble**. Rubble stone is stone that is dressed only on the top and bottom or completely undressed (see dressing). Rubble that is dressed on top and bottom is usually laid in courses (see course). Undressed rubble is usually uncoursed or “random”.

**Sandblasting.** The operation of forcibly propelling a stream of abrasive material, such as sand, against a surface under high pressure to smooth a rough surface, roughen a smooth surface, shape a surface, or remove surface contaminants.

**Secondary Elevation.** Generally, the sides and rear of a building which are not considered the architectural front and/or not facing a public right-of-way.

**Sill.** In windows, the horizontal member below the window that projects from the wall surface. The sill is sloped to direct water away from the surface and interior of the wall.

**Site.** The location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing or ruined, or vanished, where the location itself possesses historic, cultural, or archeological value.

**Storm Windows.** Windows which are mounted on the outside of the main windows of a building.

**Structure.** Anything constructed or erected with a more or less fixed location on or in the ground or in or over a body of water. A structure shall include, but not be limited to, buildings, fences, walls, signs, canopies, decks, patios, antennas, piers, bridges, docks, and any objects or things permanently attached to the structure.

***Substitute materials.*** Products, often of a synthetic composite, used to imitate historic materials. Substitute materials can be considered only after all other options for repair and replacement in-kind has been ruled out.

***The Secretary of the Interior’s Standards for Rehabilitation*.** The most recent standards for rehabilitating historic buildings established by the National Parks Service, United States Department of the Interior.

**Transom window.** A small operable or fixed window located above a door or other window.

**Veneer.** Exterior facing of brick, stone, etc. that provides a decorative, durable, non-load-bearing surface.

**Water Table.** A projecting ledge above the foundation sloped to direct water away from the structure.