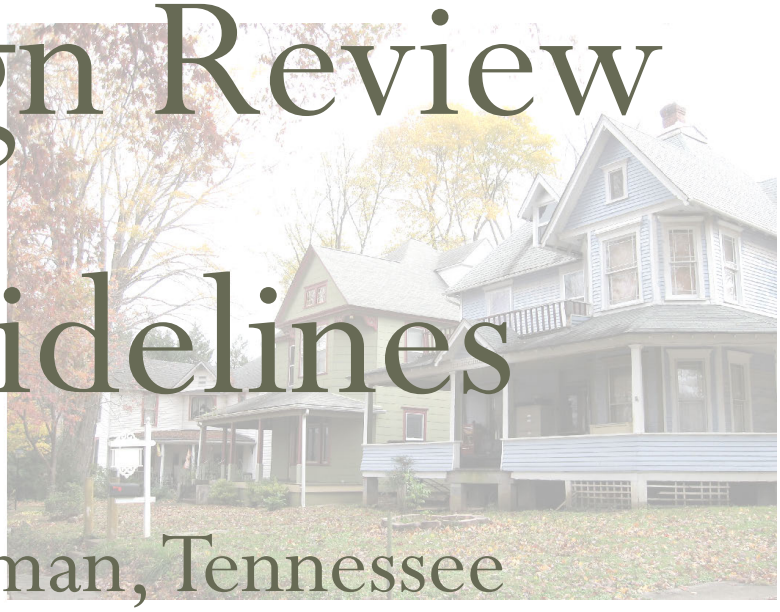


Harriman Historic Districts Design Review Guidelines



Harriman, Tennessee

2015



Harriman Historic Districts

Design Review Guidelines

Harriman, Tennessee

Prepared for the City of Harriman, Tennessee

by



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2015

The activity that is the subject of this publication has been financed in part with federal funds from the National Park Service, Department of the Interior. However, the contents and opinions do not necessarily reflect the views or policies of the Department of the Interior, nor does the mention of trade names or commercial products constitute endorsement or recommendation by the Department of the Interior. Regulations of the U. S. Department of Interior strictly prohibit unlawful discrimination in departmental Federally Assisted Programs on the basis of race, color, national origin, age or handicap. Any person who believes he or she has been discriminated against in any program, activity, or facility operated by a recipient of Federal assistance should write to: Director, Equal Opportunity Program, U. S. Department of the Interior, National Park Service, P. O. Box 37127, Washington, D. C. 20013-7127.

ACKNOWLEDGEMENTS

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TABLE OF CONTENTS

Historic Preservation Standards and Guidelines……...…….7

Designation and Review Process…….…..7

How to Use these Guidelines……....8

Overall Approach and Format……...9

Historic Preservation and Sustainability……...……...…12

Improving the Energy Efficiency of Older Buildings……..14

Brief History of Harriman and Evolution of It's Historic Neighborhoods…….....21

Historic Districts and Properties in Harriman …….23

COMMERCIAL ARCHITECTURE:

Types and Details…….27

ALTERATIONS to the BUILDING FABRIC and COMPONENTS of HISTORIC COMMERCIAL BUILDINGS:

Maintenance, Preservation and Rehabilitation of Exterior Building Materials…….……..29

Exterior Paint Color for Exterior Painted Surfaces……...……...34

Storefronts……36

Windows, Shutters, and Awnings……38

Doors and Entrances……43

Roofs……45

Signs……47

Accessibility and Safety……...51

Parking Lots…….53

RESIDENTIAL ARCHITECTURE:

Architectural Styles and Traditions in Harriman ……..……..54

Lot size……...……..58

Setbacks…….....59

Sidewalks, Driveways, Parking lots, Curbs and Vacant Sites……..……...61

Service and Mechanical Areas…….....64

Plants and Planting Recommendations……..……...……...68

Fences and Walls…….……...69

Public Property and Right-of-Way Improvements……72

ALTERATIONS to the BUILDING FABRIC and COMPONENTS of HISTORIC RESIDENTIAL BUILDINGS:

Maintenance, Preservation and Rehabilitation of Exterior Building Materials…….……73

Exterior Paint Color for Exterior Painted Surfaces……...……..78

Doors and Entries……85

Windows, Shutters, and Awnings……...87

Roofs…….……..93

Foundations……98

Accessory Buildings, Including Garages……...……...…….100

Signs……....….....102

Lighting……103

NEW CONSTRUCTION:

Stand-Alone New Construction……104

Building Additions…….……...111

Garages……...……...……114

Accessory Buildings…….....115

Exterior Materials at New Construction……..…….116

Features for Improving Energy Efficiency in New Construction…….118

APPENDICES:

A - Definitions……...…120

B - Secretary of Interior's Standards……....130

C - Bibliography and Sources……...…134

HISTORIC PRESERVATION STANDARDS & GUIDELINES

Cities and towns nationwide have adopted historic preservation codes to protect historic neighborhoods and landmarks. Preserving the historic character of a downtown area or neighborhood can improve livability and quality of life. Preservation can also promote civic pride in older and historic districts, improve property values, create skilled jobs, increase sales tax revenues, reduce sprawl and minimize negative impacts on the environment by retaining existing buildings and building materials.

The historic districts in Harriman are distinctive areas, each with its own unique character. Each historic district is distinguished by its buildings, streets, parks and parkways, trees, architectural design and landscape features. Each district serves as a legacy, linking present and future generations with their heritage and providing diversity to the city's appearance and character. Historic districts are valuable assets to the city and are indicative of healthy, vital neighborhoods occupied by residents proud of their neighborhood and its history. Development and investment that enhances the character and livability of Harriman's historic districts are encouraged.

DESIGNATION AND REVIEW PROCESS

The City of Harriman established the Harriman Historic Zoning Commission (HHZC) by ordinance in 1990, granting the Commission powers of identifying and designating historic districts and drafting design review guidelines for rehabilitation of historic properties and for new construction with historic districts. The design review process requires property owners to obtain a Certificate of Appropriateness (COA) prior to the issuing of a building permit for such work. A COA application is available from the Building Department and should be submitted with a detailed description of proposed work. The property owner shall submit the application before the HHZC.

How to apply for a Certificate of Appropriateness (COA)

1. A property owner should contact the Building Inspector's office for a building permit. If the property is located within a historic district, the owner will receive a COA application.

2. For minor changes, completion of the form may be all that is required. For major changes, the owner should submit the application accompanied with plans, photographs, drawings and any other documentation illustrating the property and the proposed work.

3. The HHZC will review the application and inform the owner if further documentation is needed.

4. Property owners are encouraged to contact the Building Department Staff if they have any questions concerning the need for a Certificate of Appropriateness and the level of review required for their specific project.

HOW TO USE THESE GUIDELINES

Property owners, real estate agents, developers, contractors, tenants, architects and building designers shall use these Standards and Guidelines when considering any project that will affect the exterior elements of a property in a historic district. The Guidelines provide suggestions for an appropriate direction for project planning. For any project that is subject to review by the HHZC or staff, the applicant shall refer to the Guidelines at the beginning of the planning process, to avoid efforts that later may prove to be inappropriate and are ultimately rejected by the HHZC.

The HHZC will also use these Guidelines in its review of proposed projects in the historic districts and properties. In each case, a unique combination of circumstances and preservation variables will require the HHZC to conduct its review and make its decision on the merits of the particular case. In making its determination of the appropriateness of a project, the HHZC will determine whether:

- The proposed work complies with the criteria in the Municipal Code and these Guidelines.
- The integrity of the individual historic building or property is preserved.
- The integrity and overall character of the historic district is preserved.
- New buildings or additions are designed to be compatible with surrounding historic properties.

Each chapter and subchapter of these Guidelines is organized to provide background information and specific recommendations. Each design guideline element is described with a broad statement followed by justification of both design and sustainability principles. Each design guideline element is then presented with the following levels of review:

⇒ **Recommended**

This refers to proper care and regular maintenance of a building as well as minor repairs in keeping with original design and materials. Typically regular maintenance will not require HHZC review. Maintenance is defined as conformance of a building, and its facilities, to the code under which the building was constructed or to another applicable maintenance code.

⇒ **Approvable**

Many actions involving historic buildings can be reviewed directly by Building Department Staff and can typically be reviewed in a brief period of time as long as such actions would not require review by the HHZC and are consistent with the requirements and recommendations contained in the Guidelines.

⇒ **Not Approvable**

Some materials and alterations have a detrimental effect on a property's overall architectural integrity. The guidelines describe what actions or materials are discouraged and to be avoided and in most instances would not be approved by the HHZC.

OVERALL APPROACH AND FORMAT

The primary approach of the Historic Harriman Zoning Commission (HHZC) and the design review standards and guidelines is the emphasis on preservation instead of removal/replacement and the use of sustainable practices and materials where possible. This approach is illustrated by the use of words such as *repair, retain, maintain* and *replace in kind*. In conducting its review the HHZC will review Certificates of Appropriateness applications with the following approach:

⇒ Property owners and applicants should first consider retaining, maintaining, preserving and repairing original or historic building features.

⇒ If such features and elements cannot be retained, maintained, preserved and repaired, then replacement in kind is recommended. Replacement in kind means that the new feature and element match the existing original, or historic in material, size, detail, profile, finish and texture as closely as possible. Architectural details and materials can be documented through drawn, photographic or physical evidence. Such documentation will aid in defining appropriate rehabilitation activities.

⇒ If material replacement in kind is not feasible or practical, the HHZC may consider the use of appropriate substitute materials that are sustainable.

⇒ Rehabilitation of historic buildings is reviewed to determine the impact, compatibility and appropriateness of proposed work to the existing structures, site, streetscape and district.

⇒ Rehabilitation should "work with" the historic building or structure for which it is proposed. Compatible rehabilitation efforts are those that protect and retain significant architectural and features and elements of individual buildings and the district.



Original details must be preserved and maintained such as this distinctive bay window at 525 Cumberland Street .

Throughout the standards and guidelines a number of terms are frequently used to reflect the design principles that the HHZC will consider when making decisions. These terms and their interpretation are as follows:

Appropriate/Approvable: Rehabilitation and new construction actions especially suitable or compatible with the design guideline standards.
Compatible/Compatibility: The characteristics of different uses or activities that permit them to be located near each other in harmony and without conflict.
Character: Attributes, qualities and features that make up and distinguish a particular place or development and give such a place a sense of definition, purpose and uniqueness.
In Kind: Use of the same or similar materials to the original or existing materials.
Not Approvable: Actions or materials which in most instances would not be approved by the HHZC.
Preservation: The adaptive use, conservation, protection, reconstruction, restoration, rehabilitation or stabilization of sites, buildings, districts, structures or monuments significant to the heritage of the people of Tennessee .
Recommended: Suggested, but not mandatory actions outlined in the design guidelines.
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 historic, cultural or architectural values.
Scale: The harmonious proportion of parts of a building, structure or monument to one another and to the human figure.
Significant (Characteristics of Historical or Architectural Resources): Those characteristics that are important to, or expressive of, the historical, architectural or cultural quality and integrity of the resource and its setting, and includes, but is not limited to, building material, detail, height, mass, proportion, rhythm, scale, setback, setting, shape, street accessories and workmanship.

The design guidelines also consider the potential importance of past remodeling work or additions that may have gained historic significance. Many properties built in the nineteenth century were later remodeled in the early twentieth century, and these remodelings may be significant in reflecting the evolution of the building over time. For example, Bungalow porches were often added to Folk Victorian and Queen Anne style homes in the 1910s and 1920s. Property owners should consider preserving and maintaining these types of features to illustrate the influence of later historical styles.

When the existing form, materials and ornament of a historic building cause it to retain its essential historic character, preservation and maintenance of those features is preferred. When a building has been subjected to numerous alterations over time, it is important to determine the relative integrity and importance of existing materials and forms. If the alterations are an important part of the building's history or significance, then their preservation may be appropriate, particularly if they are more than 50 years old. Historic architectural features and materials are to be preserved while adapting the building to contemporary use. Any missing or severely deteriorated elements may be replaced in-kind to closely match the original feature. Ensure that roof, window, cornice and parapet treatments are preserved, or when preservation is not possible, replace in-kind. It is encouraged that incompatible non-historic alterations to a historic building be removed, and the building 'brought back' to its' original appearance.

When considering a new alteration to a historic building, previous non-historic alterations in the area of the proposed alteration should be removed. Often, "modern" renovations conceal original facade details. If important original materials do not remain, the original form may be recreated. Historic photographs, Sanborn fire insurance maps, written accounts and other sources may provide information about the earlier appearance of buildings. Sources for historic photographs include the Harriman Public Library and the Tennessee State Library and Archives. Other sources may include previous owners and the Building Inspector's Office.

Where replication of original elements is not possible, a new design that is compatible with the original form, style and period of the building may be used. In such circumstances, it may be appropriate to design an interim solution that, while appropriate and consistent, is reversible and can be replaced at a later date when a more appropriate design is possible. An acceptable option for the replaced feature is a new design that is compatible with the remaining character-defining features of the historic building. The new design should always take into account the size, scale and material of the historic building itself and, more importantly, should be clearly differentiated so that a false historical appearance is not created. Replication of building elements shall reflect the size, scale, material and level of detail of the original design.

Some interior and exterior alterations and additions to historic buildings are often needed to assure their continued use, particularly when adapting a historic multifamily residence to single-family use or adapting a historic residential building for commercial use. When such alterations or additions are made, the project is described as rehabilitation. While rehabilitation projects are frequently appropriate, it is important that alterations and additions do not radically change, obscure or destroy the features of the building that define its historic character. The historic architectural features and materials should be preserved while adapting the building to contemporary use.

Repair of historic buildings or their components is often necessary and desired to assure a building's continued use and to correct deterioration of components of the building such as windows, siding and roof. If repairs or replacement affect one-half (50%) or less of an appropriate component or material located on any individual building face or roof, then replacement in-kind no longer meets the definition of ordinary maintenance and repair, and a COA is required. When repairs or replacement affect one-half (50%) or less of an inappropriate component or material located on any individual building face, then it is strongly encouraged that all of the inappropriate components or materials be replaced with appropriate materials.

However, if repairs or replacement affect more than two-thirds (66%) of an inappropriate component or material located on any individual building face, then all of the inappropriate components or materials shall be replaced with an appropriate component or material. Removal of more than 50% of an inappropriate material no longer meets the definition of ordinary maintenance and repair and a COA is needed. For examples, on a building with vinyl siding, if over two-thirds (66%) of this siding is to be removed and replaced due to deterioration or damage, then all of this inappropriate siding is to be replaced with an appropriate material such as wood siding or the historic material shall be uncovered and restored.

HISTORIC PRESERVATION AND SUSTAINABILITY

Introduction

Many cities across the country have adopted design guidelines to promote the preservation of historic buildings and the retention of their original materials. In the sense that preservation inherently discourages the replacement of original architectural features, design guidelines promote a "green" philosophy. Design guidelines embrace the tenets of re-use and maintenance, thus preserving historic buildings and protecting existing resources from depletion. This concept is known as sustainability. Thus, preservation's traditional focus on the aesthetic and cultural significance of historic buildings is expanding to highlight the inherent energy-efficient values of older buildings.

Sustainable Development

The word sustainability has become a common part of our twenty-first-century language. However, it originated in 1983, when the United Nations Commission on Environment and Development published the definition we are familiar with today: Sustainable development meets the needs of the present without compromising the ability of future generations to meet their own needs. Sustainable development requires consideration of the finite supply of resources.

Working with Nature: Site Orientation

Historic buildings are often as energy-efficient as new ones. Buildings constructed before World War II were designed, constructed, and sited to achieve optimum ventilation, insulation, and use of daylight. Over the past sixty years, as electricity, synthetic insulation, and central heating and air conditioning systems became standard installations in modern construction, architectural design no longer required attention to the natural environment. Quality and longevity of building materials also became less important, as these modern conveniences could control the interior climate of buildings and materials were readily available to build anew.



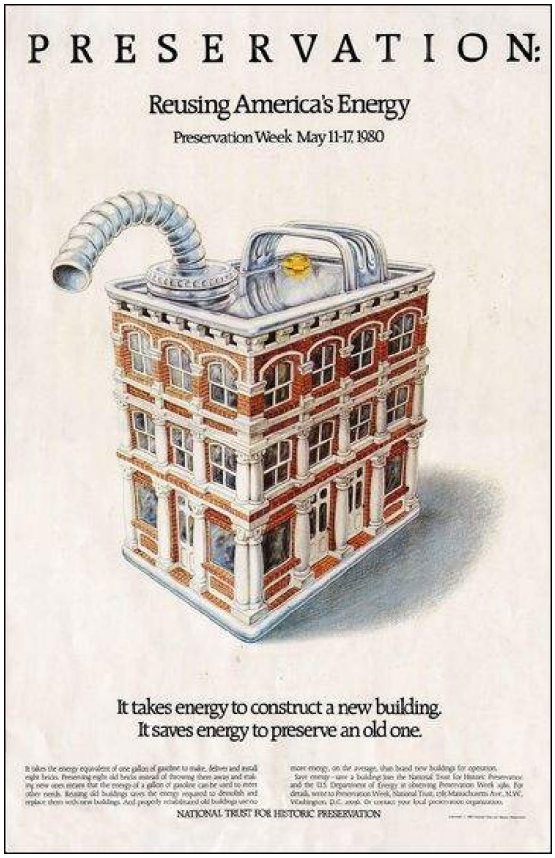
Dwellings in the city's historic districts were designed with inherent energy conservation methods in the days before air conditioning. This included wide roof eaves, broad porches, and double-hung sash windows for cross ventilation (573 Margrave Drive).

Embodied Energy

One of the most important aspects of preserving older buildings is the concept of embodied energy. An existing building represents a cumulative amount of energy, compounded over the course of its construction. From the extraction of raw natural materials, to their transportation, manufacture, and distribution, to the physical act of construction of the building, energy is spent. This energy, in the inert form of a building, remains in place as long as the building stands. If demolished, the building's embodied energy is lost, and additional energy has been spent to raze it. Loading and hauling the building debris to a landfill requires additional energy and loss of resources.

Construction of a new building on the empty lot or on a new parcel of undeveloped land requires a new expense of energy, beginning with the mining of natural materials embodied in the earth. While many architects, designers, and developers today tout the "green" practices and materials used in constructing contemporary buildings, this frame of mind overlooks the fiscal benefits and resource conservation of re-using existing buildings. Furthermore, it is estimated that a new, energy-efficient building will take 65 years to gain back the embodied energy lost in demolishing an existing building.[1] Re-using an existing building embraces the philosophy of recycling, making it the greenest choice. Thus, embodied energy can be viewed as investment in a building. This investment is also the most fiscally responsible choice for a community.

The concept of embodied energy was expressed as early as 1980 in this poster by the National Trust for Historic Preservation.



1. "It's Easy Being Green: Sustainability in Bayfield From a Historic Preservation Perspective," (Bayfield, WI: City of Bayfield, WI, 2002), 8.

IMPROVING THE ENERGY EFFICIENCY OF OLDER BUILDINGS

Historic buildings are often as energy-efficient as new ones. Data from the U.S. Energy Information Agency found that buildings constructed before 1920 are actually more energy-efficient than those built at any time until the past two decades, when home builders began a concerted effort to design and construct more energy-efficient buildings. Yet, contrary to common thought, these newer buildings use more energy. When buildings are designed to take advantage of the natural benefits of their site, energy use can be reduced by 50% or more.[2]

In Tennessee, approximately 30 percent of homes were constructed before 1970.[3] The construction quality of older houses makes them suitable for adaptation to the needs and requirements of twenty-first century families. Issues regarding the rehabilitation of older houses include updating mechanical features such as electrical, plumbing and HVAC, weatherization to conserve energy and retrofitting houses to accommodate smaller families.

Almost 72 percent of homes in the City of Harriman were built before 1970.[4] Many houses in Harriman are now 100 years old or older. Hundreds more will reach this milestone during the next two decades. During the past century, the coal-fired furnaces in these dwellings have generally been replaced with furnaces using natural gas. Original knob and tube electrical wiring has largely been replaced with modern wiring, and central air conditioning has been installed. Basements, crawl spaces, and attics generally afford room for continued retrofitting of modern mechanical upgrades. With proper care, these homes can last another century and more.

Inherent energy efficiency of older buildings

Building design factors that inherently incorporate the advantages of the natural environment include site orientation, construction and details of architectural components. Banks of windows on a south elevation, for example, optimize natural light on the interior and also passive solar heat during winter months. During summer months, these windows could be shaded with removable awnings to block heat. Additionally, shade trees can be added to the landscaping to block sunlight in the summer. Evergreen hedges can be added on north-western exposures to serve as wind blocks during winter. In construction, thick masonry walls of older buildings help retain interior heat in the winter and also help lengthen the time it takes for summer heat to penetrate the building. Architectural elements with form-to-function design include operable transoms and high ceilings, both allowing the escape of hot air. Several design guidelines specifically address how historic buildings use site and natural setting to their advantage.

2. "Better Buildings," City of Charleston, South Carolina, 29.

3.Harriman, Tennessee QuickLinks, "Housing Charcteristics," at webpage http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk

4. Ibid.

All homeowners are becoming increasingly concerned with energy consumption and costs. When seeking ways to increase energy efficiency, owners of historic buildings should be additionally attentive to the preservation and maintenance of their homes' historic building materials and character-defining elements such as windows and doors. To get started, an owner of a historic building can hire a professional energy auditor, who will spend a few hours assessing energy use of the building. Some companies offer an energy audit for free, with an estimate for performing repairs and services.

Owners of historic buildings should aim to achieve energy savings that do not negatively impact building character. Retaining original windows and adding storm windows can often offer the same thermal efficiency as replacement vinyl windows and be more cost effective. Additionally, homeowners should be aware of heat loss through their attics. A certified energy auditor will address attic insulation and ventilation, radiant barrier, HVAC and air duct leakage and the overall air-tightness of the building. The auditor will likely perform a Blower Door test, which measures the difference between pressure within and outside of a building to detect leakage through unsealed cracks and openings.

Windows

Typically, the first area addressed in energy efficiency is air leaks, which can be inexpensively fixed with weatherization, such as caulking around window and door frames to seal any leaks and installing storm windows. Historic windows are often considered the first culprits of inefficiency. Many homeowners are too quick to consider replacement with new windows over weatherization options. In fact, rebuilding historic wood windows and adding storm windows can make them as efficient as new vinyl windows and more than offsets the cost of replacement. Recent studies by the Preservation Green Lab and the Window Preservation Standards Collaborative found that a weatherized wood window with an added storm window was as energy efficient as most new vinyl thermo-pane windows. Summaries of these studies can be found at windowstandards.org and www.preservationnation.org/.../green-lab.

The concept of embodied energy applies to such building components. The old-growth lumber used in historic wood windows can last indefinitely, unlike new wood or vinyl windows. Furthermore, vinyl windows cannot be recycled and are detrimental to the environment when discarded in landfills. Therefore, retaining and weatherizing historic windows also eliminates potential waste. Thus, retaining historic windows that have been weatherized both increases their energy efficiency and allows the building to retain an important architectural component that helps convey its character and style.

In the 1950s and 1960s, aluminum windows were commonly installed with single glazing on large curtain walls resulting in poor energy efficiency. Metal windows are sometimes replaced due to concerns over energy conservation. The energy performance of metal windows can be enhanced by applying weather stripping and security fittings. Spring-metal, vinyl strips, compressible foam tapes and sealant beads are other weather stripping options. A window's original single glazed glass may also be replaced with thermal glass panes (3/8" to 5/8" thick) provided that the rolled metal sections are at least 1" wide and the design of the historic window is retained. Another option for improving energy efficient is the installation of storm windows.

Replacement Windows

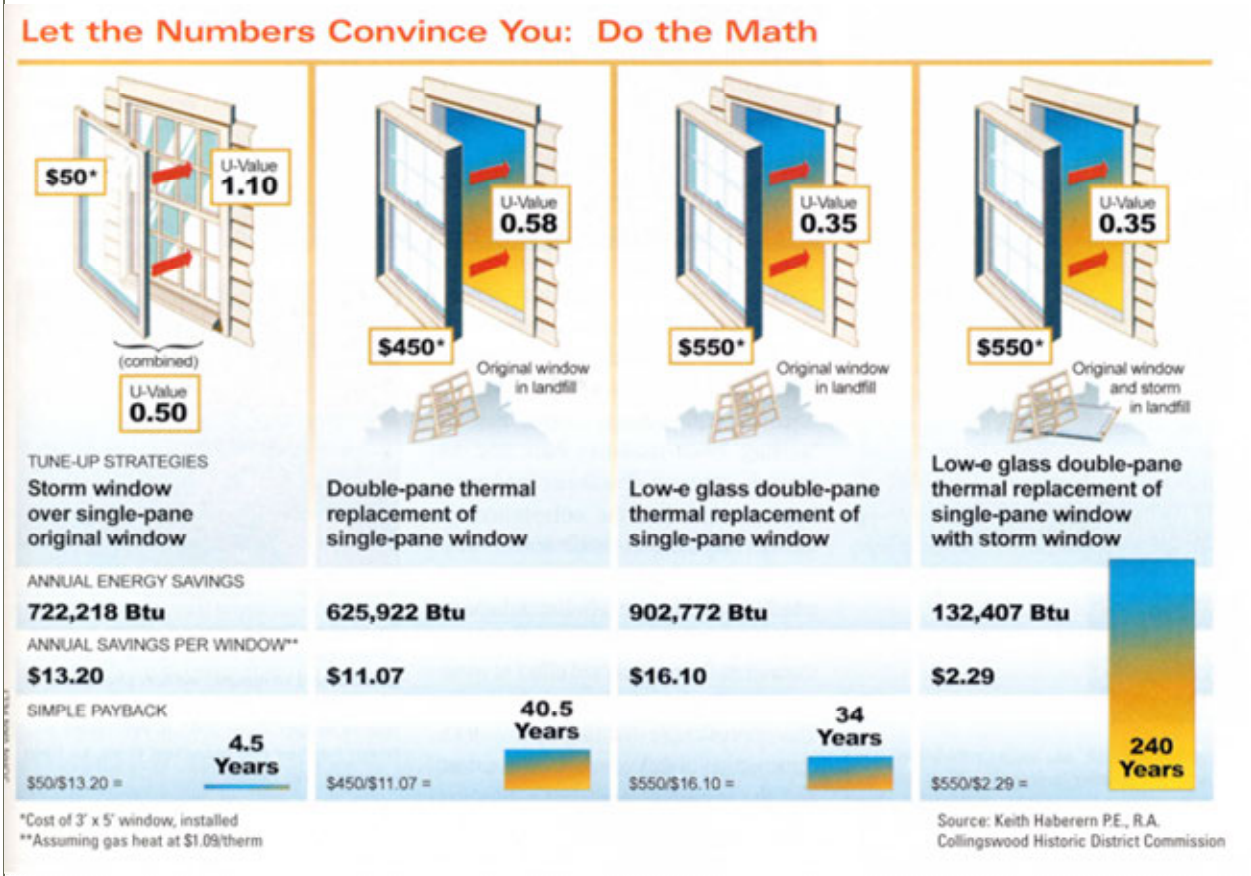
The retention and repair of original wood or metal casement windows is encouraged whenever possible. Wood windows, which are repaired and properly maintained, will have greatly extended service lives while contributing to the historic character of the house. It is not unusual for historic wood windows to remain serviceable for 100 – 150+ years when maintained properly.

Replacement of existing windows due to extreme deterioration requires careful consideration. Many times, original yet damaged wood windows are replaced with windows of lesser quality (such as aluminum or vinyl), which have a much shorter life span than the original windows, and in turn, will require replacement in short time. In most cases it is less expensive to repair and replace deteriorated components of the original window than to replace the windows in their entirety. Furthermore, vinyl windows are petroleum-based, meaning they are made from an un-renewable resource. Discarded vinyl windows are not biodegradable and will leach chemicals into the environment.

All windows expand and contract with temperature changes. However, vinyl expands more than twice as much as wood and seven times more than glass. The result is failed seals between the frame and glass and a significant performance reduction. Vinyl windows have a high failure rate – more than one-third of all windows requiring replacement today are less than ten years old. Any energy savings from replacing wood windows with vinyl seldom justifies the costs of installation. For most houses, it would take decades to recover the initial cost of installation and with a life expectancy of 25 years or less, installing new vinyl windows does not make good economic sense. Finally, vinyl windows simply lack the quality appearance of historic wood windows; their texture and thinness are incongruous with the overall appearance of historic buildings.

If original wood windows are beyond reasonable repair, a more acceptable alternative to vinyl replacement are aluminum-clad wood windows with baked enamel finishes. This kind of window offers a high insulation factor, as well as protection of wood from moisture. Wood windows can absorb moisture, swell, and rot, so they require greater attention to maintenance. Aluminum window manufacturers are addressing sustainability issues, with recycled content reaching 70%, of which 40-50% is post-consumer. Further, 100% of aluminum remnants can be melted and used for new products and aluminum production from scrap uses 95% less energy than new aluminum production. However, it is not a renewable resource, and aluminum windows have consistently been proven to have inferior insulating properties to wood and even vinyl windows.

When window replacement is absolutely necessary due to extreme deterioration, replace them with in-kind windows. They are to be replaced with wood windows that match in proportion, shape, location, pattern, size, materials, details and profile. These are to have ‘true divided lites’ where these occur. Similarly, if original steel casement windows are deteriorated beyond repair and require replacement, they are to be replaced with steel casement windows that match in proportion, shape, location, pattern, size, materials, details and profile.



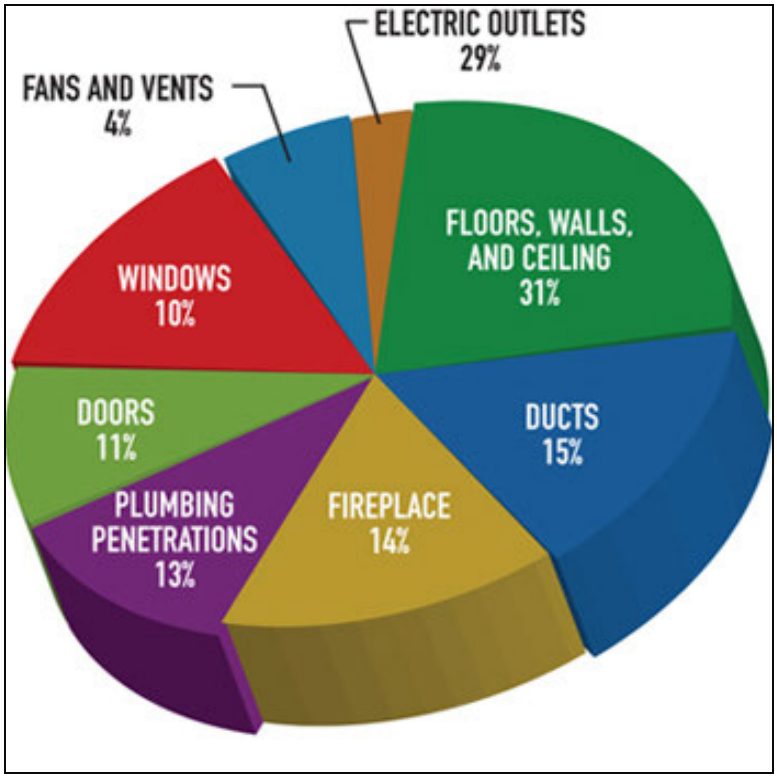
Adding storm windows to historic wood windows is a cost-effective tactic that preserves the original window and provides energy savings equal to new replacement windows. The payback of installing storm windows surpasses that of wholesale window replacement *(see above)*. Homeowners may also want to consider the installation of interior, insulating storm windows. These custom-fit designs drastically reduce energy consumption and result in solar heat gain. They reduce noise infiltration by 67% and air leakage by 75%. Installation of storm windows requires no disturbance to existing windows.

When replacing windows, it is important to understand U-value specifications of available products. The U-value is a measurement of heat transfer through a material, such as window glass. The lower the U-value, the better the insulation. A U-value of .40 or lower is recommended for a North/Central and South/Central climate. Manufacturers are required to affix label to their windows stating their U-values.

Retro-fitting and weatherization

Buildings of the late-nineteenth and early-twentieth centuries often have inherent energy-efficient design features. However, many of the residential and commercial buildings in Harriman are often large, with numerous windows and minimal insulation, posing particular challenges in the face of rising energy costs. Some homeowners have resorted to covering the building's original exterior with synthetic sidings, replacing original windows, and enclosing porches. These actions result in the loss of a property's historic character. However, historic character need not be compromised for improved energy efficiency. Common upgrades to historic buildings include the installation of attic insulation, storm windows and more efficient heating and cooling systems.

Every building will benefit from a systematic assessment of its energy-efficiency. Historic buildings can also be adapted to benefit from new technology such as geo-thermal heating/cooling systems and solar roof tiles. Furthermore, many of the methods for improving energy efficiency of a historic or older building can be performed without the need for review by the HHZC, whereas requests for replacement and removal of historic architectural components require review.



This energy loss chart illustrates how little energy is lost through windows versus ceilings, walls, floors, etc. A homeowner would improve energy efficiency more noticeably by increasing insulation, rather than replacing windows. Retaining original windows, improved with weather-stripping, makes economic sense and preserves historic features. (Source: US Department of Energy)

Sprawl & waste

Re-using older buildings not only sustains their embodied energy, it reduces waste and sprawl. Existing landfills eventually reach their capacity, and choosing locations for new ones is often controversial. It is estimated that debris from building demolition represents one-third of landfill material.[5] Over the last 30 years, landfills have been filling to capacity and have been "retired." Of the 20,000 landfills in use in 1978, approximately 25% were still taking in refuse ten years later. Of those landfills, the EPA estimated that 1,234 were still open in 2008. The U.S. generated 143.5 million tons of building-related construction and demolition debris in 2008, but only 28% (40.2 million tons) was reused, recycled or sent to waste-to-energy facilities. Demolition can be costly. In 2010, razing a residential building cost between $6 and $15 per square foot. Adding to demolition costs is the expense of hauling and dumping the debris in a landfill, where freight is weighed before dumping and charged accordingly.

Limiting sprawl benefits a municipality by containing the need for new infrastructure, including streets, water and power lines, schools, and emergency and law enforcement services. Demolition of a historic structure is always discouraged, and these design guidelines require review of a proposed demolition by the HHZC. In the past, preservation guidelines focused chiefly on the collective historic integrity of properties within a district, citing a demolition as detrimental to the overall character of the neighborhood. However, as the premise of sustainability gains momentum, design guidelines reinforce the idea that demolition also results in the squandering of embodied energy, produces waste and requires the use of new resources to build anew. Studies have shown that the infrastructure and services associated with building 100 new homes typical for the area would be three times the revenue produced by the new properties over a twenty-year period. Furthermore, left as farm or forest, the land will actually contribute more to local tax revenue than would be generated from development after offset by the cost of services.[6]

Debris from demolished buildings accounts for approximately 30% of the volume in landfills.



5. "Construction and Debris (C & D) Waste Facts", under Deconstruction of C & D Waste at http://www.advancedrestoration.com.

6. *SELC Report on Growth in Middle Tennessee,* 14, at http://www.southernenvironment.org/Cases/smart_growth_tn/growing_report.shtml .

Deconstruction

Deconstruction is the methodical dismantling of a building in an environmentally, socially and economical manner. The process is a time-consuming and labor-intensive endeavor requiring the separation of materials, resulting in the recycling of building components. Over the last decade, non-profit and for-profit groups have been successful in developing this industry, encouraging the enactment of state and local ordinances, the invention of new tools and equipment and the initiation of tax credits pertaining to deconstruction.

In the U.S., 95% of homes are wood frame. The average 2,000-square-foot wood-frame home has the potential to yield 6,000-board-feet of reusable lumber or about 85 percent of the wood framing. That amount of wood equates to 33 mature pine trees, the annual yield of 10 acres of planted pine. The same house demolished would add about 127 tons or 10,000 cubic feet, of debris to a landfill. For every three square feet of deconstruction, enough lumber can be salvaged to build one square foot of new construction. Aluminum can also be recycled before building demolition. Recovery of aluminum from demolition and replacement in the building industry is minimal compared to recovery from the consumer goods sector. Of the estimated 400 million pounds of aluminum potentially available, only 15 to 20 percent is recovered, according to the National Resources Defense Council. Brick and wood sash windows can be recycled, as can slate from roofs. These salvaged materials from older buildings can lend an organic quality to new buildings that synthetic siding, vinyl windows and standard asphalt roof shingles cannot. Though the embodied energy of the deconstructed building is lost, that of the building components remains, meaning fewer new resources are required.

New Construction

Encouraging the re-use of existing buildings is a priority, but since new construction is inevitable, design guidelines must also address and promote sustainable practices and materials in new buildings. Recommendations for new buildings begin with assessing the site and designing the building to maximize the natural benefits of the existing environment. For example, keeping the site's natural contour intact reduces erosion. Preserving existing trees or adding shade trees to shield the southern elevation from summer heat will reduce energy consumption within the building. Additionally, the design of the new building should include porches for shade and should be oriented for optimum ventilation. The use of recycled building materials is highly encouraged, and interior appliances should meet high energy-efficiency standards. Tankless water heaters, geothermal heating and solar panels should all be considered.

Standards in the construction of new buildings have adopted a "green building" approach. In 1988, the Green Building Council (USGBC) initiated the program Leadership in Energy Design (LEED). LEED is an international certification for construction of green buildings. It is a fully integrated rating system, addressing green design, construction, materials and maintenance solutions. LEED is the sustainability standard for the built environment in the United States, with a tiered ranking based on energy efficiency, impact on the environment, clean power generation, water usage, run-off prevention and integration of recycled materials. When considering new construction, a property owner should consult a LEED certified professional and incorporate the same principles of sustainability as recommended for owners of historic buildings.

BRIEF HISTORY OF HARRIMAN AND EVOLUTION OF ITS HISTORIC NEIGHBORHOODS

During the late eighteenth century, the area of present-day Roane County represented the American frontier in the region, anchored by Southwest Point, a key militia fortification. Roane County was established in1801. Until the Civil War, the Tennessee River was an important means of transportation through the area; post-war, railroad transportation was used for all goods except coal. At that time, northern investors arrived and quickly spurred a burgeoning economy via the natural resources of iron ore and coal, establishing the Roane Iron Company and its company town of Rockwood.

The 1879 completion of the Cincinnati-Southern Railroad, which passed through Roane County on its route to Chattanooga, further bolstered the local economy. The railroad at Emory River Gap created an ideal site for a town. In 1889, the East Tennessee Land Company, created by New York minister Frederick Gates, purchased 10,000 acres, formerly the plantation of Colonel Robert King Byrd, for the purpose of establishing a "utopia of temperance and industry." Among the investors in the company were publishers Isaac K. Funk and A. W. Wagnalls, Quaker Oats founder Ferdinand Schumacher, and General Clinton B. Fisk, namesake of Fisk University and 1888 presidential candidate for the Prohibition Party.



Downtown Harriman ca. 1900.

Ultimately, the company acquired hundreds of thousands of acres, selling 573 lots in the town. Some three thousand prohibitionists from eighteen states flocked to the new town of Harriman. Lots along the Emory River sold for $500 for industrial development and workers' dwellings. Lots on Roane Street, at the center of town, were more expensive, as were the lots on Clinton and Cumberland Streets, where more affluent residents later developed the neighborhood of Cornstalk Heights.

The Town of Harriman was founded on the ideology of abstinence. The premise of the town was to create industry and employment opportunities without the typical vice that characterized nineteenth-century company towns. Towards that end, the East Tennessee Land Company founded three subsidiaries: the East Tennessee Mining Company extracted coal and iron, the Harriman Coal & Iron Railroad Company developed a rail system for transporting the minerals, and the Harriman Manufacturing Company provided start-up capital for new industry. The Company's headquarters was an impressive brick building in the Romanesque Revival style. The building later was used by the American Temperance University, established in 1894, and later became Harriman City Hall.

The East Tennessee Land Company failed, but Harriman continued to flourish into the twentieth century. However, with the 1929 stock market crash, the Depression brought about the demise of the Roane Iron Company in 1930. The floundering economy was exacerbated by a severe flooding of the Emory River. Three years later, blight collapsed the local peach industry, killing off all the peach trees. However, a paper mill and a hosiery created jobs that stabilized the local economy.



Caldwell block on N. Roane Street, built 1891.

On July 1, 1933, textile workers at the Harriman Hosiery Mills (HHM) plant in Harriman organized a local union as part of the United Textile Workers of America (UTW). Over the next year, hundreds of workers, most of them women, became embroiled in a bitter strike against the town's largest employer, which produced nationally marketed women's silk stockings. The strike divided the town and revealed the fragile state of labor reform in the early 1930s. Key issues in the strike involved management resistance to union recognition, wages, hours, and working conditions, and confusing labor policies of the early New Deal under the National Industrial Recovery Act of 1933.

In 1940, the population of Roane County was just under 28,000. The county's urban population was 34.5%, based on the cities of Harriman (5,620), Rockwood (3,981), and Kingston (880). In 1942, the Corp of Engineers began taking possession of 56,000 acres of farm land, some in eastern Roane County, for the establishment of the Manhattan Project, the highly secretive research and development program that would produce the atomic bomb used in World War II. The war effort brought new industrial activity to Roane County, as Tennessee Products Corporation re-opened the Roane Iron Furnace for the production of ferromanganese, used in the production of steel. During the 1940s and 1950s, Harriman's economy was bolstered by through traffic on U.S. Highway 27, which was a north-south corridor for mobile Americans between the Great Lakes region and Florida.

The routing of Interstate 40 through southwestern Harriman connected the community more closely with Knoxville but never produced the kind of modern industrial development inside the town that community leaders expected. Today, Harriman still shows considerable evidence of its "planned community" origins, as the collapse of the East Tennessee Land Company in 1893 "froze" the city in its original developmental state. There remains a considerable number of homes—especially in Cornstalk Heights—displaying Victorian architecture as well—many of which have been either painstakingly maintained or restored. The Temperance heritage was slow to depart; there was no liquor store in Harriman until 1992.



Downtown Harriman, ca. 1950.

HISTORIC DISTRICTS and PROPERTIES IN HARRIMAN

Cumberland Street Historic District
Roughly bounded by Georgia Avenue, Sewanee Street, Morgan Avenue, and Trenton Street, this historic district was first developed when the East Tennessee Land Company established the city of Harriman in the 1890s and began selling lots. Probably the earliest homes constructed were for company founders; general manager William H. Russell's Queen Anne style house at 525 Cumberland Street is the oldest extant building in the district. In the district there are over 100 buildings, including nineteenth-century Queen Anne and Folk Victorian dwellings and twentieth-century Craftsman Bungalows, Colonial Revival and Tudor Revival dwellings.

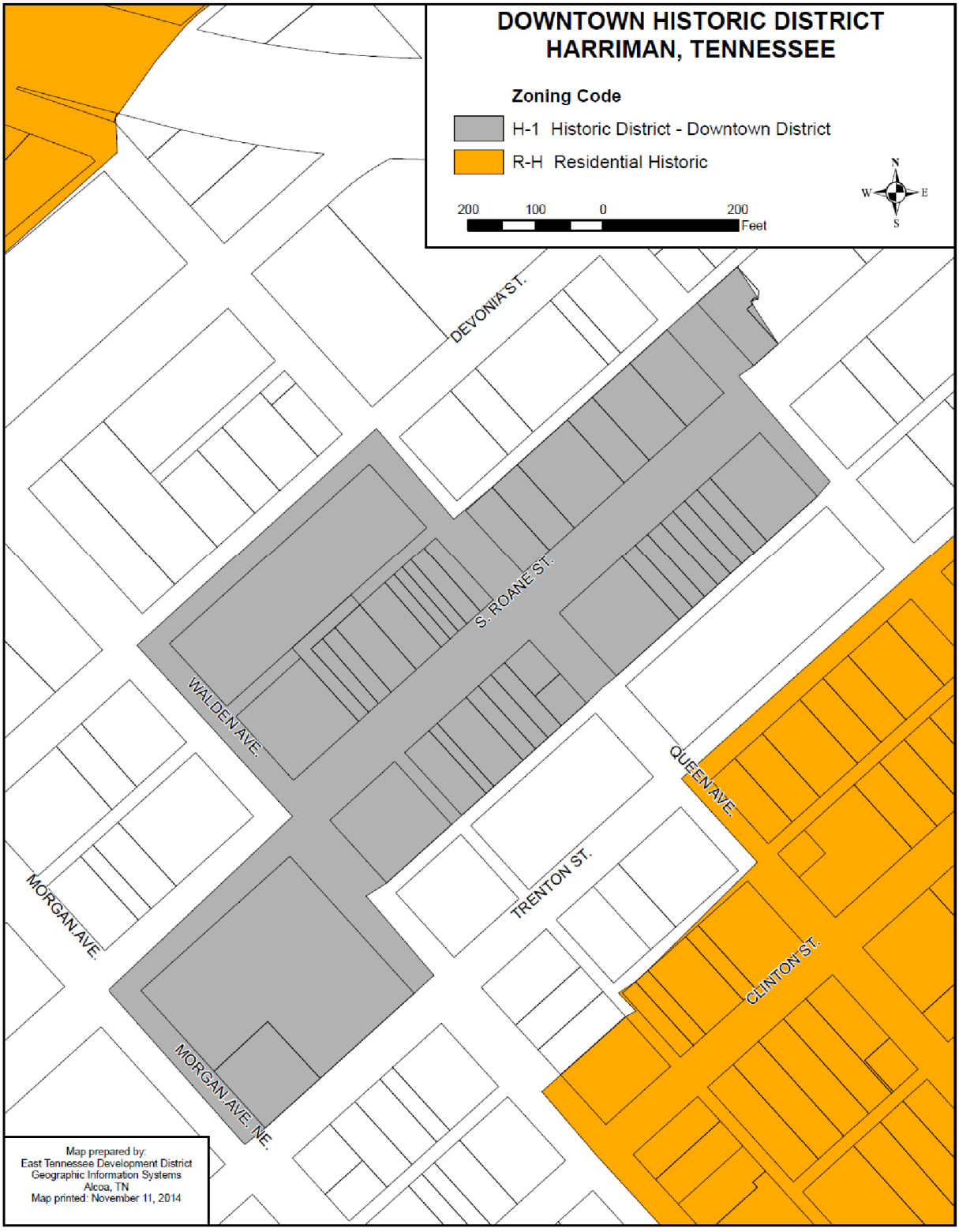


Harriman City Hall, ca. 1915

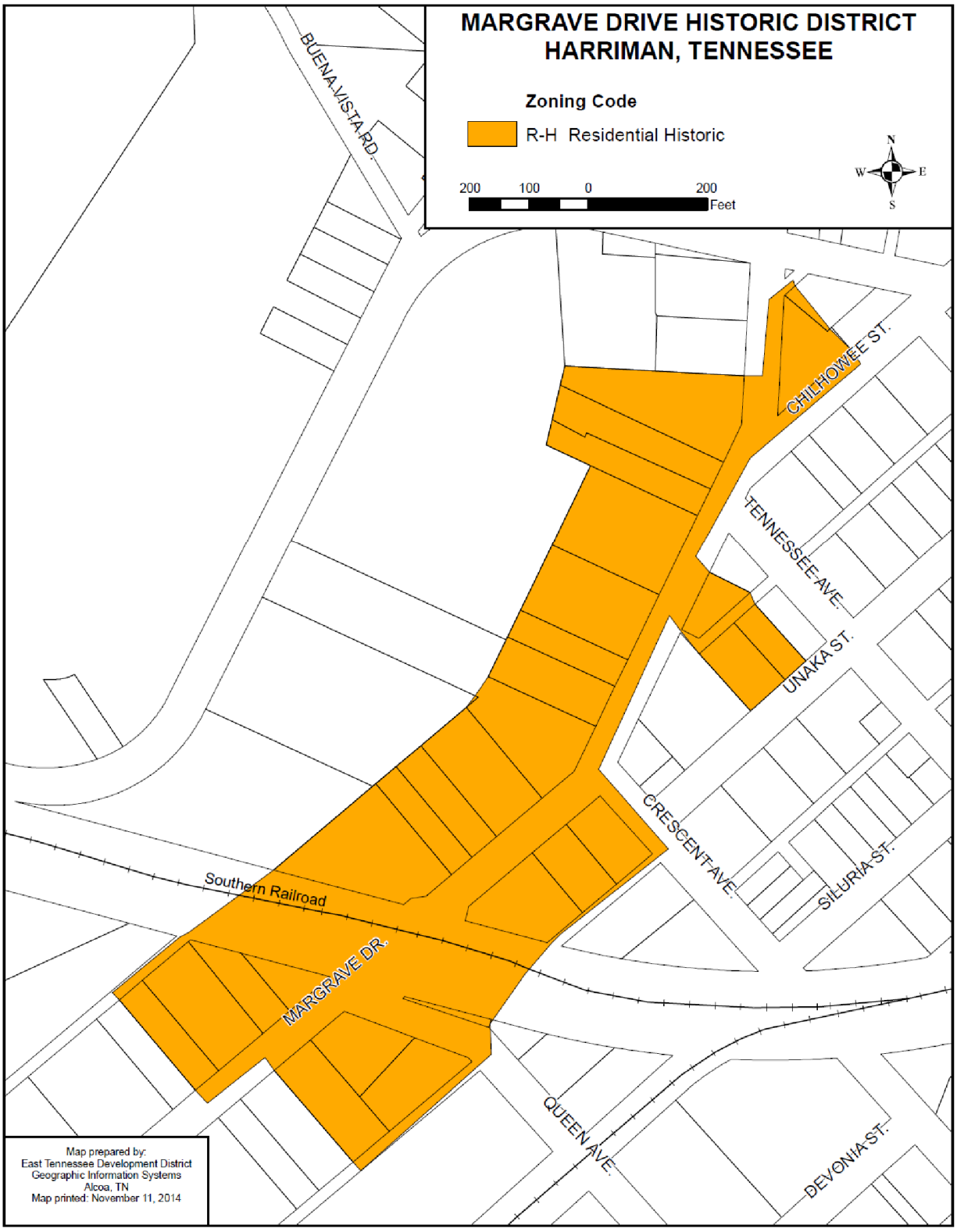
Harriman City Hall
Located at the corner of Walden Avenue and Roane Street, the 1890 Romanesque Revival building was originally the headquarters for the East Tennessee Land Company, which founded the city of Harriman as an industrial company town that upheld temperance beliefs. Due to the Panic of 1893, the company was unable to pay interest on its start-up loans and was forced to file for bankruptcy. The building was acquired by the American Temperance University, established in 1893. In its early years, the school enrolled approximately 350 pupils and remained in operation only until 1908. The City of Harriman then acquired the impressive building and converted it for City Hall offices.

Downtown Commercial Historic District
The Downtown Commercial Historic District roughly spans between Morgan and Crescent Avenues NW in Harriman. Its architecture dates from the late nineteenth century, when Harriman was established and quickly boomed. The district includes the impressive Romanesque Revival style Harriman City Hall, as well as examples of Beaux Arts and Neo-Classical architecture from the early twentieth century.

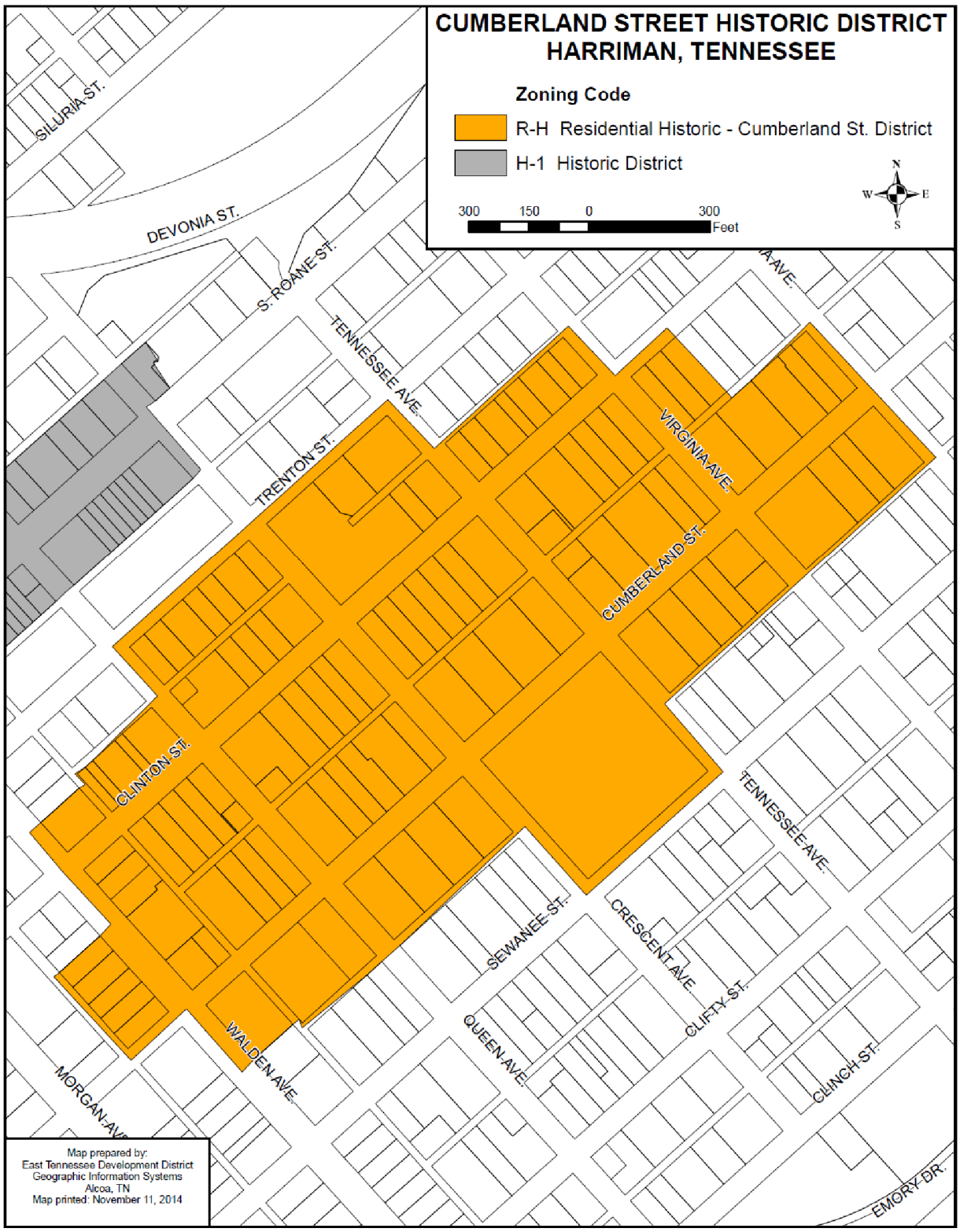
Margrave Drive Historic District
This residential district extends along two blocks and is located to the northwest of the Downtown Commercial Historic District. The district is composed of Queen Anne, Colonial Revival and Bungalow style dwellings from the late nineteenth and early twentieth centuries. These dwellings are adjacent to the nearby railroad and reflect the residential development of Harriman at the turn of the twentieth century.



Map of the Downtown Historic District which is subject to review by the HHZC.



Map of the Margrave Drive Historic District which is subject to review by the HHZC.



Map of the Cumberland Street Historic District which is subject to review by the HHZC.

COMMERCIAL ARCHITECTURE

Types:

Two-Part Commercial Block

Most of the commercial buildings in downtown Harriman can be characterized in form as "Two-Part" commercial blocks. These are buildings that have two primary components – storefronts and upper facades. Original storefronts are largely transparent and consist of display windows resting on bulkheads, transoms, and entrances with glass and wood doors. Upper facades have one or more floors of windows and decorative detailing such as brick corbelling, or terra cotta panels and cornices at rooflines.



429 N. Roane Street

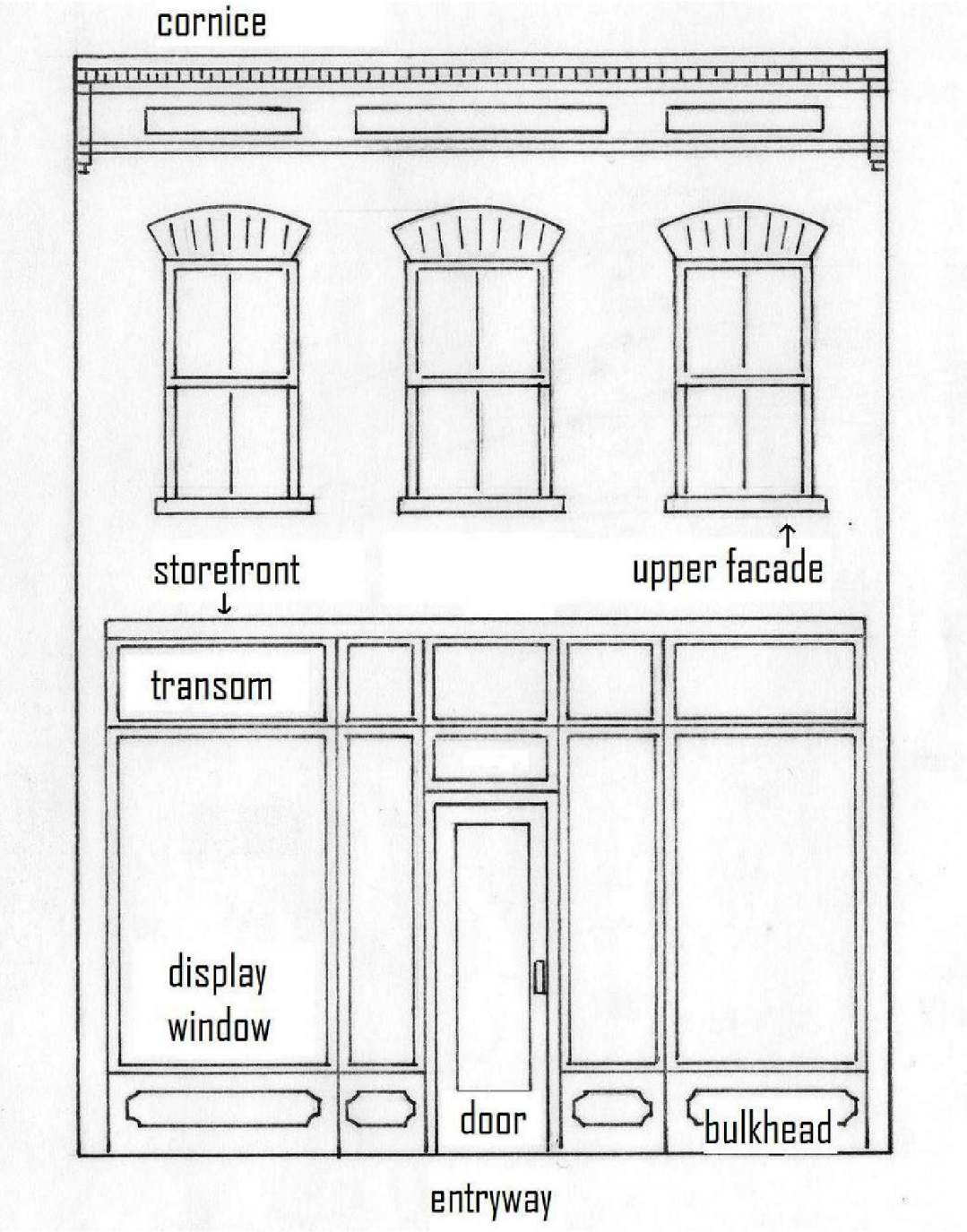
One-Part Commercial Block

The single story of this simpler commercial building type functions like the lower story of the two-part commercial block. This small building retains its original storefront with a single-light glass and wood door and upper façade of corbelled brick.



422 1/2 N. Roane Street

Commercial Building Details



This drawing shows a typical late nineteenth and early twentieth century commercial building and identifies some of its components.

Commercial Building Guidelines:

ALTERATIONS TO THE BUILDING FABRIC AND COMPONENTS OF HISTORIC BUILDINGS

MAINTENANCE, PRESERVATION AND REHABILITATION OF EXTERIOR BUILDING MATERIALS

GUIDELINE:
Maintain and preserve original exterior finishes and materials such as wood, brick, stone and stucco. When repair or replacement of materials is needed, consideration will be given to sustainable methods and materials.

JUSTIFICATION - DESIGN:
The form, materials and details of exterior walls and embellishments, as well as their scale, texture and variety, contribute to a building's historic character. The texture, patterns and finishes of historic materials such as brick, stone stucco and wood siding are important character-defining features, and obscuring or removing these features diminishes the significance of historic buildings and structures.

JUSTIFICATION - SUSTAINABILITY:
The exterior materials of a building represent embodied energy. Their preservation helps maintain not only a building's architectural integrity, but also its embodied energy. When maintained properly, these materials can last indefinitely, eliminating the need to use new resources for their replacement. When new materials are necessary, consideration should be given to sustainability, which includes the availability of raw resources, the method and energy used to extract, transport, and process the raw resources, the energy to manufacture and transport a commercial product, and longevity of installed materials.

Most commercial buildings are of masonry construction. Masonry materials include brick, native stone, granite, terra cotta, slate, concrete, and stucco. The texture, scale, color, bonding pattern, joints and details of masonry surfaces all contribute to the general character of a historic building and provide a source of permanent beauty. Brick is by far the most common masonry materials found in Harriman's commercial district. Foundations are often distinguished from the walls they support by a change in pattern or texture – a water table or distinctive band of bricks.

Masonry surfaces are quite durable and require minimal maintenance. Cleaning is recommended only if dirt or organic matter is actually accumulating and accelerating deterioration by holding moisture on the masonry surface.

RECOMMENDED

- Retaining and preserving original materials enhances the historic character of a property and sustains their embodied energy.
- Preserve historic materials and architectural features that define the historic character of buildings.
- Original wood finishes should be maintained and painted (if painted historically) or, when necessary, replaced in-kind.
- Up to 50% of an original feature or material on any one side of a building in a historic district may be repaired by replacement without review only if the alteration results in no change in dimensions, design, configuration, texture, surface coatings or visual appearance.

APPROVABLE

- The original natural finish of brick and stone is historically important and shall be preserved. Cleaning must only be undertaken to halt masonry deterioration. The use of any abrasive, strong chemical, sandblasting or high-pressure cleaning method is not permitted, as these permanently damage the surface and accelerate deterioration of historic masonry.
- Original masonry or stone surfaces are to be maintained and not be painted, unless severe deterioration of the brick or stone can be shown to require painting and other consolidation or stabilization methods cannot be shown to be appropriate.
- If masonry was previously painted, it is often not appropriate or possible to remove paint, and appropriate repainting should be considered. If color or texture of replacement brick or stone cannot be matched with existing material, as a last resort, painting may be an appropriate treatment.
- Repair masonry by replacement or patching with in-kind or similar material. When this is not possible, new materials matching in texture, color and detail are to be used.
- New mortar used in re-pointing must match the color and composition of the original. Incompatible mortar, too high in Portland cement content, may exceed the strength of historic brick and result in acceleration of deterioration of brickwork.





Stone and brick masonry at 413-415 N. Roane Street (left); formstone exterior at 518 N. Roane Street (center); rock-faced concrete block at 426 N. Roane Street (right).

NOT APPROVABLE

- Synthetic siding materials such as vinyl and aluminum bear little resemblance to historic siding materials and are not sustainable. The application of such materials is not appropriate.
- Exterior insulation finish systems, curtainwall, concrete block, imitative brick or stone or gravel aggregate materials shall not be used as replacement exterior wall materials. The only exception is to repair materials such as formstone with a compatible textured concrete.
- The removal of metal or vinyl siding may allow the recovery of original decorative elements such as cornices, brackets, and window and door trim that have been damaged or removed when the synthetic materials were installed. Recovery of such details should be based on physical or photographic evidence first, and based on similar details for buildings in the block or district second.
- Installation of fiber cement products may be appropriate but only for rear or side elevations not readily visible from the public right-of-way in order to replace wood siding that is deteriorated beyond repair.
- The use of composite wood siding is discouraged since these products do not appropriately imitate the appearance of wood siding, and toxins are used in their manufacturing.
- Products of polymer coatings ("liquid siding") should be avoided since the life expectancy and breathability of these coatings is unknown. The application of these coatings often requires the abrasive cleaning of the original surface which is not allowed.

Architectural Metals

Cast iron, wrought iron, pressed tin, copper, brass, bronze and aluminum are traditional architectural metals used on historic buildings in commercial districts. Metals found in downtown Harriman are primarily sheet metal cornices and cast iron columns or pilasters. They contribute to the character of historic buildings through their distinctive shapes, textures and details. Regular attention to the physical condition of metal surfaces will prevent deterioration due to corrosion, fatigue or water damage. Repair of damaged metal is always preferable to replacement. However, if replacement is necessary every effort is to be made to replace the metal in kind. If this is not possible, appropriate substitutions may be considered.

RECOMMENDED

- Retaining and preserving original architectural metal enhances the historic character of a property and sustains their embodied energy.
- Preserve historic metal architectural features that define the historic character of buildings.
- Maintain original metal surfaces, keeping them painted only if they were painted historically.
- Up to 50% of an original metal feature may be repaired by replacement without review only if the alteration results in no change in dimensions, design, configuration, texture, surface coatings or visual appearance.

APPROVABLE

- Original architectural metal is historically important and shall be preserved.

NOT APPROVABLE

- The use of any abrasive, strong chemical, sandblasting or high-pressure cleaning method is highly discouraged, as these permanently damage the surface and accelerate deterioration of historic metal.





Sheet metal cornice at 429 N. Roane Street (above); cast iron pilaster at 420 N. Roane Street (right).

Carrara glass

Carrara glass, also known by the trade name "Vitrolite" was widely used for storefront remodeling in the 1930s and 1940s in downtown Harriman. While these tinted glass panels are fragile and prone to damage, they are important to preserve and maintain. Salvaged Carrara glass panels are available from several companies to replace those which are missing or damaged.

RECOMMENDED

- Retaining and preserving original architectural glass enhances the historic character of a property and sustains their embodied energy.
- Preserve historic metal architectural features that define the historic character of buildings.
- Maintain historic glass surfaces and do not paint them.
- Up to 50% of an original glass feature may be repaired by replacement without review only if the alteration results in no change in dimensions, design, configuration, texture, surface coatings or visual appearance.

APPROVABLE

Original architectural glass panels are historically important and should be preserved.

NOT APPROVABLE

- Carrara glass is a distinctive exterior finish and adds to a building's historic character. Covering or removing Carrara glass is discouraged.





Carrara glass is found on various buildings in downtown Harriman, such as the Princess Theatre's first floor (left) and the storefront at 414 N. Roane Street (right).

EXTERIOR PAINT COLOR FOR EXTERIOR PAINTED SURFACES

GUIDELINE:
Paint colors are not subject to HHZC review but property owners are encouraged to research the specific historic colors of the exterior of the buildings on their property and record their findings for future reference and to select colors that are appropriate to the historic building and district.

JUSTIFICATION - DESIGN:
Property owners are encouraged to select exterior paint colors that best suit the architectural style and historic character of the building.

JUSTIFICATION - SUSTAINABILITY:
Paint and other building materials such as sealants, caulk and varnishes can emit hazardous gasses known as volatile organic compounds (VOCs). It is recommended that property owners seek out and use low-VOC products.

RECOMMENDED

- Selection of paint and stain colors based on research of specific historic finishes associated with a specific building is encouraged. While it is informative to know the historic paint colors used, these colors may be considered currently fashionable or appropriate. Paint, as a material finish on wood, is considered temporary and may reflect current trends and preferences of the current owner or district.
- If historic exterior paint colors are determined, it is encouraged that these be documented for future reference and as a historical record. Retain a sample at an exterior location hidden by landscaping or find a matching color swatch for historic body, trim and accent colors.
- Paint colors should complement each other and respectfully accentuate the building's significant features.
- In general, paint colors for commercial buildings are limited to wood features, such as storefront trim and doors.
- New technology has led to the availability of many low– or no-VOC (volatile organic compound) paints. However, the consumer should investigate claims of low-VOCs because there is not strict industry enforcement. Generally, when buying paint products, look for concentrations of 5-50 grams per liter (g/l). For products to be labeled low-VOC, actual EPA regulations allow a maximum of 250 g/l in flat finish paints and 380 g/l in non-flat finish paints.

APPROVABLE

- When repainting already painted brick or stone, colors may be selected to echo the original colors of the brick or stone. Repainting of previously painted masonry is encouraged, rather than attempts to remove paint, which may cause further damage to the underlying masonry surfaces.

NOT APPROVABLE

- Do not use metallic, fluorescent or neon paint colors on any surface.
- Painting of previously unpainted masonry (e.g. brick or stone) is strongly discouraged, as paint eliminates the inherent color variation of masonry that was a conscious part of the original design for the building and also initiates a continuing cycle of paint maintenance. Also, paint may trap moisture that can lead to the deterioration of masonry.





At 425 N. Roane Street, the paint colors of the storefront are repeated at accent points in the upper façade; another example of painted wood trim for accent is found at 429 N. Roane Street.

STOREFRONTS

GUIDELINE:
Only a few of downtown Harriman's commercial buildings retain their original storefronts and most were remodeled in the mid– to late-twentieth century. Historic photos and other documentation may exist to show what the storefronts originally looked like. Original storefronts should be preserved and maintained and property owners are encouraged to rebuild altered storefronts with designs and materials to match the original.

JUSTIFICATION - DESIGN:
Historic storefronts are important to convey the character and design of the original building. When the original storefront is missing, recreating a storefront based on a traditional design or historic evidence is recommended.

JUSTIFICATION - SUSTAINABILITY:
Preserving and maintaining original storefronts and materials is a sustainable approach to the retention of original materials.

Through the years, storefronts were frequently modified by owners in an effort to present a more modern image. When these alterations conceal original features, such as transoms, bulkheads or display windows, owners are encouraged to consider their removal and return the storefront to its original state.

RECOMMENDED:

- Retain and preserve historic storefronts, including their design, dimension, pattern, color, texture and detail, that contribute to the overall character of a building, including their distinctive materials and features such as display windows, transoms recessed entries, signs and bulkhead panels.
- Maintain and protect historic storefront surfaces, materials, features and details through appropriate maintenance and repair methods for each material and finish as needed.
- Repair historic storefront features, materials, and surfaces using traditional preservation techniques, including patching splicing and reinforcing.



The building at 415 N. Roane Street has three distinct storefronts under a unifying upper façade.

APPROVABLE

- Replace deteriorated or damaged historic storefront materials and features, only if deteriorated beyond repair, in kind – matching the original in material, design, dimension, color and detail. Where possible, limit replacement to the deteriorated section only rather than the entire feature. Consider compatible substitute materials only if it is not technically feasible to replace in kind.
- Replace a missing historic storefront feature or entire storefront with a new feature or storefront based upon accurate documentation of the original or a new design compatible in material, design, color, size and scale with the historic building.
- Install fabric awnings over storefronts, if desired and where historically appropriate, so that historic features are not damaged or obscured.

NOT APPROVABLE

- It is not appropriate to introduce a storefront feature or detail in an attempt to create a false historic appearance.
- It is not appropriate to replace or cover over wooden storefront features with contemporary substitute materials such as vinyl, aluminum or masonite.





At 426 N. Roane Street an appropriate and simple shed-type canvas awning has been installed over the storefront. The storefront at 429 N. Roane Street has a recessed entrance flanked by display windows (right).

WINDOWS, SHUTTERS AND AWNINGS

GUIDELINE:
Windows are important character-defining features of a building. Original windows shall be retained and kept in good repair.

JUSTIFICATION - DESIGN:
The proportion, shape, location, positioning, pattern and size of windows contribute significantly to the historic character of a building and help convey the architectural style and period of the building. Their design, details and craftsmanship make them worthy of preservation. The presence or absence of shutters and awnings are significant to the visual character of a building.

JUSTIFICATION - SUSTAINABILITY:
Many buildings in the historic district retain old-growth wood windows which can last indefinitely if they are properly maintained, unlike new-growth wood or vinyl windows. In most cases, windows account for less than one-fourth of a home's heat loss. Insulating the attic, walls and basement is a more economical approach to reducing energy costs than replacing historic windows. Proper sealing of windows and added storm windows keep windows out of landfills and enhance a building's energy efficiency.

Windows contribute significantly to a commercial building's historic character and are particularly indicative of architectural style periods. Functionally, these openings allow for natural light and ventilation.

Insensitive treatment of the windows of a historic structure can result in the loss of historic character. Preserving an original old-growth window is always more desirable and more cost-effective than replacing it. Metal casement windows also contribute to the historic character of a commercial building and should be retained and maintained. The necessary routine maintenance and repair are usually easy and inexpensive. If a window cannot be saved, it is important that the replacement match the original in design, materials and dimensions. Adding or changing existing window openings on a historic building comprises integrity and is discouraged.



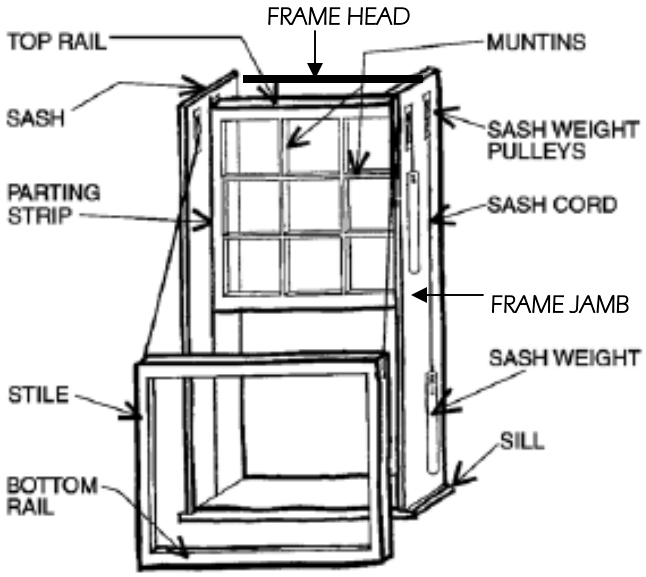
The historic steel windows at 532 N. Roane Street are an important architectural feature and should be preserved and maintained.

RECOMMENDED

- Regular maintenance and weatherstripping of historic windows ensures their preservation and improves the energy efficiency of a building.
- Retain and preserve original windows. Preserve and maintain original window framing and number and configuration of glass panes. Preserve original window openings on the front façade and front half of the side facades.
- Make repairs to an existing window rather than replacing the entire window unit, including replacement in kind of parts that are deteriorated beyond repair.

APPROVABLE

- Original windows more than 50% deteriorated may be replaced in kind.
- New window openings may be allowed on the back façade or the back half of the side elevations. New windows shall be compatible with historic or existing windows in proportion, shape, location, pattern, size, materials and details.
- If an original opening is presently blocked, consider reopening it. The replacement of non-historic incompatible windows with windows that are more historically appropriate is encouraged.
- The application of ultraviolet (UV) film to window glazing is the least costly option for reducing heat gain from sunlight and may be an acceptable addition to window glass. UV filters can have a service life of ten or more years; when replacement is required, great care should be taken not damage to historic glass and framing.



WINDOW COMPONENTS

Typical double-hung sash window components.

- When window replacement is necessary, do so within the existing historic opening. Use the same frame size to avoid filling in or enlarging the original opening.
- If original windows can be demonstrated to be deteriorated beyond repair, new windows to match all of the characteristics of the original are the most appropriate alternative.
- New windows made of aluminum clad wood with enameled finish may be appropriate as replacements for historic wood since these may have acceptable sustainable qualities and closely resemble a painted finish.

NOT APPROVABLE

- Vinyl is not an environmentally sustainable material, and the installation of vinyl-clad wood windows is not appropriate in the historic district. Vinyl windows are discouraged.
- Thermal pane (also known as insulated glazing) windows are discouraged, but acceptable as replacement windows if the historic windows in a building have been previously removed. When used, thermal pane windows shall have true divided lites.



Original one-over-one wood sash windows at 423 (left) and 428 (right) N. Roane Street



- Fanlights and sidelights at entrances can be retrofitted for improved thermal performance, but as these features are at eye level, the integration of films, new glazing or panels should be carefully detailed.
- Muntins sandwiched between layers of glass, snap-on muntins, and surface-applied muntins are not appropriate and are discouraged.
- Clear glass shall be used in all windows.
- If security bars are installed, they should be installed only on the interior of windows and doors.

Storm Windows

Many styles of storm windows are available to improve the thermal performance of existing windows. Exterior storm windows are thermally efficient, cost-effective, reversible, and allow the retention of original windows. Storm window frames should align with the existing window frames.

RECOMMENDED

- Existing storm windows should be regularly maintained and painted as needed.

APPROVABLE

- Storm window frames should have a narrow perimeter framing that conforms to the primary window opening.
- If metal storm windows are installed, paint to blend with surrounding elements (typically the window frame and sashes) to create minimal visual impact. The visual impact of storm windows may be minimized by selecting colors that match existing trim color and window styles.

NOT APPROVABLE

- Do not use unfinished or clear anodized aluminum frames storm windows. If these are already on a house, consider painting these to complement or match the window color.

Screened Windows

RECOMMENDED

- Historic screen windows should be preserved. If these are removed to allow the installation of storm windows, it is strongly encouraged these be retained for possible future use.

APPROVABLE

- New screen windows frames should be of wood, and match the profile, size and design of the historic frame or of typical window screen frames in the historic district.

Shutters

Shutters were generally not used for the upper stories of commercial buildings. The installation of decorative shutters on historic commercial buildings is discouraged

RECOMMENDED

- Shutters were generally not used for the upper floors of downtown buildings. The installation of decorative shutters is discouraged—consider the addition of canvas awnings instead.

Awnings

Awnings on windows shade and help reduce heat gain and the need to lower thermostat settings on hot days. Retractable awnings allow sunlight into windows for passive heat gain during the winter. An un-retracted awning can provide a wind break during the winter, reducing air filtration through windows.

RECOMMENDED

- Maintain and preserve historic awnings that contribute to the historic character of a building and help energy use.
- Retain and preserve the material integrity of existing historic awnings, which can be wood-, metal-, or fabric-covered.

APPROVABLE

- Awnings should be placed so as to avoid obscuring details of the building façade.
- New awnings installed at a property where awnings have not been documented before should be made of canvas or other fabric material on a metal frame, and may be either fixed, retractable or operable. Metal awnings may be used if the size, color and design are compatible with the district and architectural style of the building.
- Fabric or canvas awnings shall be a "drop-front" or "shed" style, except at arched window openings.
- Consider the longevity of the fabric selected for awnings. Woven acrylic fiber awnings usually last 8-12 years, compared with 5-6 years for polyester or vinyl awnings, and these types of awnings can withstand 25 mph winds.

NOT APPROVABLE

- Do not use plastic or metal awnings.



Appropriate canvas awning across the storefront at 415 N. Roane Street.

DOORS AND ENTRANCES

GUIDELINE:
Doors and windows are important aspects of the architectural character of a building. Historic doors and entries shall be retained and preserved.

JUSTIFICATION - DESIGN:
The proportion, shape, location, pattern and size of doors contribute significantly to the historic character of a building and help convey the style and period of the building.

JUSTIFICATION - SUSTAINABILITY:
Preserving original doors is part of the overall sustainability of the building. Original doors can be made as air-tight as new replacement doors through proper weatherstripping. The installation of storm doors is also appropriate for energy conservation. A blower-door test can be preformed as part of an energy audit to determine if there are any leaks that should be sealed.

Entrances and doors contribute to a commercial building's historic character and are particularly indicative of architectural style periods. The main entrance of a commercial storefront is the focal point of a historic building entrance and a key architectural feature.

Insensitive treatment of the doors of a historic structure can compromise integrity. Preserving the original entrance is always more desirable and usually more cost-effective than replacing it. Routine maintenance and repair is usually easy and inexpensive. When replacing door details be careful to maintain the original character. Doors, because of their solid construction, can almost always be salvaged. The original hardwood can be cleaned, repaired and maintained; weatherstripping and good locks can make old doors energy efficient and secure. Replace the deteriorated bottom rail of a wood door rather than replacing the entire door. Wood epoxy can be used to maintain and repair original wood doors. If an original door cannot be saved, it is important that the replacement match the original in design materials and dimensions.

RECOMMENDED

- Regular maintenance and weatherstripping of historic doors help to ensure their preservation and improves the energy efficiency of the building.

- Preserve original or historic doors, openings and architectural features. Preserve and protect sidelights, transoms and fanlights surrounding a more formal entry.

- Repairing original wood doors is preferred to replacement. Properly maintained, they will have greatly extended service lives while contributing to the historic character of the building.

APPROVABLE

- To allow for ease of entry by patrons and shoppers, storm doors are generally not recommended for the primary entrances facing the street. Storm doors at the rear of buildings may be installed for improved energy efficiency.
- Storm or screen doors should be stained or painted to match the building or trim. Storm doors should have full glazed panels (clear glass) to maximize the view of the existing door, while not damaging or obscuring the door and frame. Ensure storm doors have good weatherstripping.
- Preserve original historic screen doors. If these are removed to allow the installation of storm doors, it is strongly encouraged that these be retained for possible future use.
- New door openings at rear elevations are permitted and should minimize damage to the original design of the building and character-defining features.

NOT APPROVABLE

- Preserve existing door openings, do not enlarge or diminish to fit stock door sizes.
- New door openings in the front façade of a primary building are discouraged. Rear elevations of the downtown buildings are more appropriate locations for doors added for accessing upper floors or other code requirements. If new openings are necessary due to code requirements or other reasons, they should be compatible with the existing door opening in proportion, shape, location, pattern, size and material.



Preserve and maintain original doors such as at 503 N. Roane Street.

ROOFS

GUIDELINE:
Retain original roof shape, details, and materials when possible. When replacing roofing materials, consider the energy used in their manufacture and transportation, the reflectivity of the material and whether the material derives from a renewable or recyclable resource.

JUSTIFICATION - DESIGN:
By their shape, features, materials and details, roofs contribute significantly to the historic character of residential and multi-family buildings. Through variations in line, pitch and overhang, a historic roof can also reveal changes and additions to historic buildings over time. Chimneys, dormers and other roof features add to the diversity and character of historic residential buildings.

JUSTIFICATION - SUSTAINABILITY:
Many aspects of sustainability should be considered pertaining to roofs, such as service life, cost of manufacture and transportation, recycled content, and reflectivity of materials.

There are many considerations when choosing roofing material to replace original roofs, such as initial cost, lifetime cost, longevity, reflectivity and environmental impact of replacement. Most commercial buildings downtown have variations of rolled roofing materials or gravel and tar. Preventative maintenance is the key to prevent roof damage. Inspect roofs regularly for normal wear and damage from storms or wind. Inspect flashing at roofing, gutters, and chimneys yearly. Repair leaks promptly in roofs to prevent wall and interior damage. Clean and repair gutters and downspouts to prevent water damage to fascias, soffits and walls.

RECOMMENDED

- Maintain roof and roof elements and the addition of some roof elements, thereby preserving the historic building.
- Preserve the original shape, line, pitch and overhang of historic roofs, as well as architectural features such as stepped parapets and cornices.

APPROVABLE

- Match new roofing materials to original materials in appearance, style and composition.
- New roof features such as roof ventilators, antennas, satellite dishes and skylights may be installed, but shall be located so as not to be visible from the street.
- For ventilation of attic heat, roof vents should be located out of view on rear rooflines. Vents help improve the energy efficiency of the dwelling.
- Flashing should be copper or other metal with a finish to match the roof color. Unfinished, galvanized metal flashing shall not be used.

NOT APPROVABLE

- Adding gable or hipped roofs to commercial buildings which are visible from the street. Harriman's downtown commercial buildings traditionally had flat roofs which were not visible from the street.
- Roof materials such as asphalt, fiberglass, gravel and tar and metal are all appropriate for downtown commercial buildings as long as these materials are not readily visible from the street.

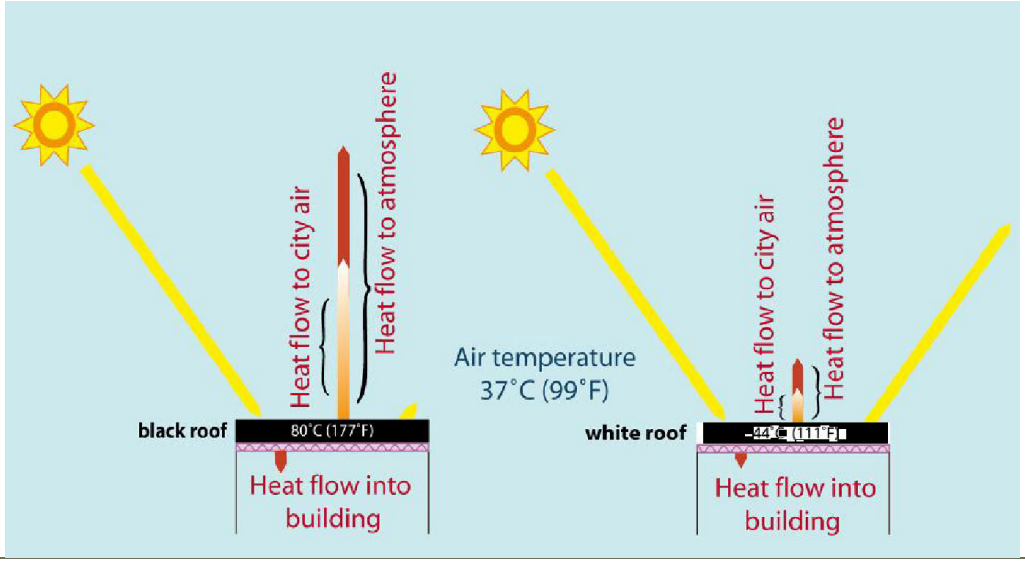
Gutters and Downspouts

NOT APPROVABLE

- Gutters and downspouts are always needed and should be unfinished copper or painted/powder finished metal unless historical precedent demonstrates historic use of alternative materials or finish. Exposed galvanized metal or non-painted gutters and downspouts are discouraged Do not remove historic fabric such as cornices to install gutters and downspout.



Energy efficiency can be increased for Harriman's downtown buildings through the use of reflective roof materials (above). The illustration below shows how reflective roofs can save energy in the summer months.



SIGNS

GUIDELINE:
Signs are to be in accordance with the city's overall sign ordinance. In addition to visibility and legibility, signs in the downtown area shall also be of appropriate materials and design.

JUSTIFICATION - DESIGN:
The downtown buildings traditionally had a wide variety of sign designs and locations. Signage in keeping with traditional designs and locations is encouraged.

JUSTIFICATION - SUSTAINABILITY:
As with building elements, signs should adhere to principles of sustainability in their materials. The use of wood from managed forests is encouraged. Plastic signs are not recommended since plastic is a petroleum based material, a non-renewable resource. Additionally, plastic is not compatible with the materials present in the downtown district.

Harriman's downtown commercial district historically displayed a wide variety of sign designs and sign locations. New signage should be compatible with the district and the specific site in terms of its proposed dimensions, materials, graphics, color, supports and placement. All new signs must comply with current city sign ordinances as well. Graphics should combine easy readability with good visibility. Smooth-surface wooden signs are more compatible in the historic district than contemporary, rough-textured, stained signs or signs of plastic. Signs and signposts should be painted.

Some commercial buildings historically incorporated their name into the façade either in the cornice, mid-cornice or frieze just above the main entrance. Other traditional means of announcement are the transom over the main entrance, where street address numbers can be painted on the glass; display windows; and fabric awnings, which can provide space for a sign or street numbers. It is important to review proposed new signage for commercial buildings for compatibility with the architectural design and style of the building façade and to ensure it does not interfere with historic features or details. Incompatible contemporary signs, including billboards, portable signs, internally illuminated signs and flashing signs, are inconsistent with the character of the district.

APPROVABLE

- Sign design and placement are to be in accordance with the City of Harriman Sign Ordinance.
- Signs shall not obscure historic building features such as cornices, gables, porches, balconies or other decorative, architectural building elements.
- Signs placed on the exterior of buildings shall be constructed of painted wood or metal.
- Lighting of signs can be done with incandescent bulbs on the sign, or gooseneck front lighting using fixtures appropriate to the style and period of the building. Internal illumination is only appropriate when the letters themselves rather than the background are illuminated.



Historically appropriate locations for signs include windows, walls, awning valences, storefront glazing, recessed masonry sign board, and signs that hang above the entrance or project from the face of the building.



Projecting or "blade" signs which are perpendicular to the face of the building are appropriate for Harriman's commercial buildings (416 N. Roane Street).

RECOMMENDED

- Maintain historic signs and materials using the appropriate methods for their materials (i.e., wood, metal).
- Repair historic signs and materials using the appropriate methods for their materials (i.e., wood, metal).

APPROVABLE

- Replace deteriorated historic sign materials in kind only when they are beyond repair.
- Replace missing signs using appropriate materials, dimensions, and locations.
- Signs placed on the exterior of buildings shall be constructed of painted wood or metal.
- Place new signs for historic commercial buildings in locations originally intended for signage, such as just below a projecting mid-cornice of a storefront.
- Lighting of signs can be done with incandescent bulbs on the sign, or gooseneck front lighting using fixtures appropriate to the style and period of the building. Internal illumination is only appropriate when the letters themselves rather than the background are illuminated.

NOT APPROVABLE

- PVC plastic, plywood or unfinished wood are not appropriate materials for sign construction in the historic district.
- Window signs should not exceed 20% of the total square footage of glass space, and should be proportional to the size of the glass.
- First floor wall signs should not exceed 20% of the total square footage of wall space with a maximum of 12 square feet.
- Signs should not obscure historic building features such as cornices, gables, porches, balconies or other decorative, architectural building elements.







Preserve original signs, including so-called "ghost "signs, which document historic wall advertising, as at 414 N. Roane Street (top);

Locate signs in historically appropriate areas such as windows as at 708 Queen Street (middle); projecting signs are also an appropriate sign type that allows for creative design (bottom, 503 N. Roane Street).

ACCESSIBILITY AND SAFETY

GUIDELINE:
Buildings open to the public must adhere to requirements set forth by the Americans with Disabilities Act of 1990. Owners of historic buildings in commercial districts must meet these requirements while also maintaining the historic character of their buildings. Public sidewalks and street curbs are also subject to ADA requirements.

JUSTIFICATION - DESIGN:
ADA requirements do not necessarily over-ride historic preservation principles. Property owners, HHZC staff and design professionals are encourages to seek designs that balance the greatest accessibility and attention to preservation of historic integrity.

JUSTIFICATION - SUSTAINABILITY:
Most of Harriman's commercial buildings have appropriate entrances that meet ADA requirements. Consider the use of temporary or portable ramps where needed rather than extensive removal of historic materials or the construction of features requiring new materials.

Most of the commercial buildings in the downtown area have entrances wide enough to meet ADA compliance. If needed, guidelines for the Americans with Disabilities Act of 1990 offer helpful flexibility in compliance for historic buildings. Owners are encouraged to contact HHZC staff early in the planning stages for professional assistance on such projects and to work with building code officials in investigating alternative methods of meeting safety code requirements.

RECOMMENDED

- Review all life safety code and accessibility requirements in deciding if the proposed change can be made without compromising the overall historic character of the historic building and its setting.

- Accommodate life safety and accessibility requirements in ways that maintain and preserve the historic character of the building and its setting.

- Future curb cuts in the downtown and commercial area should be designed in parallel or perpendicular forms rather than the current diagonal designs to promote safety.

APPROVABLE

- Introduce new or additional means of access, if needed, that are reversible and do not diminish the original design of a character-defining entrance or features.

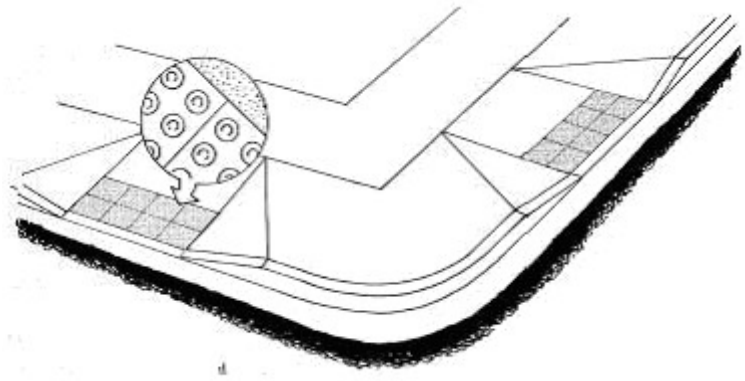
- Locate exterior fire stairs, fire doors or elevator additions on rear or inconspicuous side elevations. To diminish their impact, design these elements to be compatible with the architectural character, proportion, scale, materials and finish of the historic building.



If needed, commercial doors can be retrofitted with new hardware to meet ADA compliance.

Consider redesigning the existing ADA curb cuts in the downtown area from diagonal designs (right) to those which are parallel and perpendicular to the street such as shown on the illustration below. The parallel and perpendicular design curb ramps are less confusing and safer for drivers and pedestrians.





PARKING LOTS

POLICY:

Parking lots in downtown commercial area should be located and designed to minimize visual impact on the historic district's overall character. Historic concrete parking areas at the rear of buildings should be preserved. New lots should be located to the rear of buildings.

JUSTIFICATION - DESIGN:

Retaining the specific rhythm of a street is important to preserve historic character. Placing parking lots out of street view maintains historic patterns of pedestrian priority in front of commercial buildings.

JUSTIFICATION - SUSTAINABILITY:

Existing parking areas represent embodied energy and should be preserved. Concrete is a long-lasting sustainable material, reflects solar heat and light and should be repaired or replaced as needed with new concrete to match. New parking lots should be of similar design, pattern, texture, dimensions and color.

Established in the 19th century, Harriman's commercial area gradually came to accommodate automobiles by paving streets, installing parking spaces and constructing large off-street parking lots. When located as inconspicuously as possible and buffered appropriately through the use of plant and fence screening, new parking areas can be better integrated into a sensitive historic environment. Existing trees and their root areas should be protected whenever possible with structural soils and permeable paving, and new trees can be planted to help with integration, and also with heat and noise.

RECOMMENDED

- Incorporate planting medians or islands into large paved areas to reduce their visual impact. Parking areas shall be paved with appropriate materials such as concrete, textured or colored concrete or brick.
- Parking lots should be located behind historic buildings and out of pedestrian view.
- Ideally, a parking lot should be shared by businesses or institutions with different peak use times. Side parking lots between businesses should be screened with landscaping.
- Clearly distinguish parking and pedestrian areas through landscaping such as fencing and plantings.
- Enhance and highlight the existing commercial parking lots with a unifying design and consistent landscaping.
- The City of Harriman and property owners are encouraged to consider the installation of permeable paving surfaces in future parking lot additions or improvements.

RESIDENTIAL ARCHITECTURE

ARCHITECTURAL STYLES AND TRADITIONS IN HARRIMAN

The architectural style of a house or apartment building is a way to summarize the form of the structure: its type or use, its scale, shape and interior arrangement, and its details, including materials and ornamentation. Most American dwellings can be categorized by one or more architectural styles. Historic properties in Harriman generally reflect the styles and fashions popular across the United States during the late nineteenth and early twentieth century.

A dwelling that was designed in a particular style is not a random collection of individual architectural parts, elements or details. The features of the building are combined to present a coherent image: windows and doors proportional to the dimensions of the house, building materials complementing the scale and shape of the building; porches, roofs and other details reflecting the time period and fashions influencing the builder. Technology, available materials, fashion trends, climate and environment, topography, transportation patterns, family needs and budget all affected the selection of an architectural style when a dwelling was constructed. Harriman is distinguished by its large, two-story Queen Anne and Colonial Revival dwellings in the Cumberland Street and Margrave Drive Historic Districts.



Harriman is well known for its many Victorian-era dwellings such as in the 500 block of Cumberland Street.

Queen Anne, 1880-1905

The emergence of the Queen Anne style coincided with the rise of balloon framing and mass production of wood ornamental features. These developments allowed for extravagant architectural designs with asymmetrical floor plans and irregular roof planes. By the early 1900s the Queen Anne style had generally fallen out of favor among designers and homeowners.

Characteristics

- Frame or brick construction
- Corner towers
- Asymmetrical floor plans
- Wrap-around porches
- Highly decorative wooden or brick elements
- Painted in rich, contrasting color schemes
- Oriole and stained glass windows
- Corbelled brick chimneys



Queen Anne style dwelling at 424 Walden Avenue.





One of the oldest Queen Anne style dwellings is the house at 629 Cumberland Street completed in 1893 (top). By the early 1900s some dwellings were built with influences of both the Queen Anne and Colonial Revival styles such as the dwelling at 514 Cumberland Street built in 1905 (below).

Colonial Revival, 1900-1955

The Philadelphia Centennial Exposition of 1876 is credited with first influencing American architects to look towards the country's own architectural roots. The houses in the Colonial Revival style constructed in Harriman before the 1920s were rarely historically correct copies but were interpretations of Colonial period precedents. Most Harriman examples are two-stories, of wood frame construction and with clapboard siding. A few Dutch Colonial houses also appear, differentiated from other Colonial Revival examples by their gambrel roofs with a full story of floor space within the roof.

Characteristics

- Symmetry, balance, order
- Classically-inspired elements
- Rectangular plan
- Dormers on a gabled, or hipped, roof
- Flush wall planes



Colonial Revival style dwelling at 709 Cumberland Street.

Bungalow/Craftsman, 1905-1930

Based on California architects Greene and Greene's high style versions of Arts and Crafts movement-inspired dwellings, the Craftsman bungalow is ornamented not with applied elements (like Queen Anne spindlework) but by the structural elements themselves, inspired by oriental timber construction. Some distinguished two-story examples of Craftsman design also appear in Harriman's historic districts.

Characteristics

- One– or one-and-one-half-story
- Low-pitched gable roof
- Exposed rafter tails
- Brackets under roof eaves
- Tapered porch posts on piers
- Decorative beams and brackets under roof eaves
- Typically wood frame construction
- Multi-light double-hung sash windows



Craftsman Bungalow at 722 Cumberland Street.

Tudor Revival, 1910-1940

The Tudor Revival style is based loosely on Medieval architecture. Peaking in popularity during the 1920s, the style was fashionable for single-family dwellings as well as small apartment buildings. Exteriors can be of stucco with half-timbering, brick veneer or weatherboard siding. Of particular note in several local historic districts is the generous use of fieldstone and clinker brick (irregularly shaped brick that was over-burned in the kiln) interspersed with face brick laid in tapestry, or subtly multi-colored, patterns.

Characteristics

- Highly pitched roof, often cross gabled
- Entrance is in a project bay with a gable front roof
- Entrance may have an arched door
- Examples may include a tower
- Windows may be multi-light wood sash or casements.
- Exterior wall chimney on façade
- Chimneys with decorative chimney pots
- May include faux half-timbering in stucco



Tudor Revival dwelling at 619 Cumberland Street.

Ranch, 1945-1970

After World War II-era embargoes on building materials were lifted, houses based on historical precedents, such as Tudor Revival, were largely abandoned in favor of more modern and simplified styles. The Ranch style became widely popular on large suburban lots, as city residents opted for family life outside of town.

Characteristics

- Built of brick or wood
- One-story with an open floor plan
- Horizontal emphasis
- Roof of moderate pitch
- Large picture windows
- Prominent chimneys



Ranch-style dwelling at 501 Cumberland Street.

Residential Building Guidelines:
SITE AND LANDSCAPE CONSIDERATIONS

LOT SIZE

GUIDELINE:
Each historic property consists of the site, or "lot," and the buildings or structures placed within the site. The relationship of buildings and structures to their respective site, to adjacent sites and to the public rights-of-way is an important character-defining feature of historic properties and districts and should be an integral part of planning for every project.

JUSTIFICATION - DESIGN:
The historic relationships between buildings, structures, sidewalks, streets, landscaping features and open space together create the character of a district and should be retained.

JUSTIFICATION - SUSTAINABILITY:
Maintaining historic spatial arrangement ensures the preservation of its components, sustaining their embodied energy and negating the need for replacement with new resources.

In a historic district, there is a uniform and unifying orientation of a site to its elements and to adjacent sites. A typical lot size helps define this commonality. Such maintenance will not require administrative or HHZC review.

RECOMMENDED

- Retain the historic lot size and configuration at the property.
- If new lots are created, they should have a width no less than 90 per cent and no more than 110 per cent of the average width of all lots in both the same blockface and the opposite blockface.

APPROVABLE

- Development or redevelopment of vacant lots should respect the historic development of the property and district neighborhood in terms of lot size and relationship between public and private spaces.

SETBACKS

GUIDELINE:
Maintaining historical patterns of development including front and corner side-yard setbacks is an important character-defining feature of a district.

JUSTIFICATION - DESIGN:
Historic setback patterns are important for maintaining an authentic streetscape and protecting vistas from, and views to, a historic property and district.

JUSTIFICATION - SUSTAINABILITY:
Maintaining historic front and side-yard setbacks ensures the preservation of a district's components, sustaining their embodied energy and negating the need for replacement with new resources.

RECOMMENDED

Along a streetscape in a historic district, there is often a uniform and unifying setback of buildings from the street. This setback provides consistency with historic development and original subdivision patterns.

- Maintain building orientation patterns, for example, with front facades of primary buildings facing and perpendicular to the street.
- Maintain established side-yard setbacks and spacing patterns between buildings to reinforce the sequence of individual structures along the streetscape.
- Maintain established setbacks for accessory buildings.



The 800 block of Clinton Street illustrates consistent setback of houses from the street.





The original garage at 517 Margrave Drive (left) and shed at 509 Cumberland Street (right) illustrate the traditional setback of secondary buildings to the back of the primary building.

APPROVABLE

- Development of vacant lots must respect the historic development of the property and the district in terms of setbacks and relationship between public and private spaces.
- Accessory buildings shall follow the historic setback patterns of the property or other accessory buildings in the streetscape or district when replaced in kind.
- New construction should be reviewed not only for architectural design, but also for historic rear and side-yard setbacks.



Uniform setbacks from the street, retaining walls and sidewalks are all spatial elements that should be preserved and maintained (400 block of Walden Avenue).

SIDEWALKS, DRIVEWAYS, PARKING LOTS, CURBS AND VACANT SITES

GUIDELINE:

Sidewalks, driveways and off-street parking in residential historic areas should not interrupt the continuity of landscaped front or corner side yards. Existing concrete sidewalks and walkways should be preserved and repaired with concrete consistent in pattern, size, texture and color. Existing concrete driveways should be preserved and new driveways should also be of concrete rather than asphalt. Historic concrete parking areas at the rear of buildings should be preserved.

JUSTIFICATION - DESIGN:

The consistency and repetition of sidewalk and driveway spacing, placement, dimension and materials create a rhythm to the street in historic districts. Retaining the specific rhythm of a street is important to preserve historic character. The Cumberland Street Historic District is distinguished by its retention of many sections of historic brick sidewalks.

JUSTIFICATION - SUSTAINABILITY:

Existing brick and concrete sidewalks, steps and driveways represent embodied energy and should be preserved. Brick and concrete are both long-lasting sustainable material, reflect solar heat and light and should be repaired or replaced as needed with new materials to match. New driveways should be of similar design, pattern, texture, dimensions and color as the historic driveway. The use of permeable paving surfaces for new driveways, sidewalks and parking areas is recommended.



Maintain original sidewalk surfaces such as the brick sidewalk in the 400 block of Walden Avenue.



Many walkways, sidewalks and steps in the city's historic districts are of original grey concrete and are important visual elements to preserve and maintain (418 Clinton Street).

RECOMMENDED

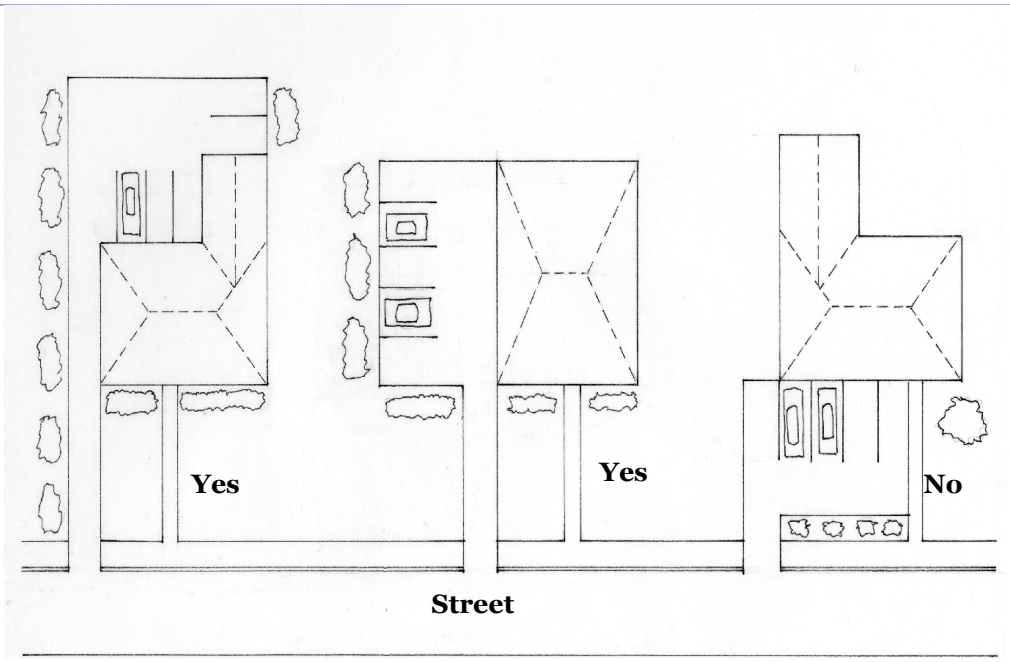
- Regular maintenance of site features such as walkways, sidewalks and driveways is encouraged and should employ non-abrasive methods such as sweeping and low-pressure water cleaning.
- Routine maintenance ensures the preservation of such site elements, sustaining their embodied energy and negating the need for replacement.
- Retain and preserve historic sidewalks and driveways, including those that are shared by two adjacent properties.

APPROVABLE

- Sidewalks and driveways are to be oriented perpendicular to the street. Curvilinear designs are acceptable if historical documentation is available and if such designs conform to the topography of the specific property.
- Maintain the continuity of existing sidewalks and the curb cut radius or curved approach in the districts when introducing new driveways.
- New sidewalks and driveways shall be constructed of brick or brush-finished concrete in medium grey tones to maintain the continuity of materials and character of the district. If historical evidence demonstrates previous existence of stone or other materials, these materials may be appropriate for replacement.

NOT APPROVABLE

- Circular drives that connect to the street by two or more curb cut openings shall not be located in front or corner side yards unless demonstrated as historically present on the specific property.
- New driveways and sidewalks shall not damage significant landscape features, such as mature trees and their root area root area.
- Residential parking lots for multi-family properties shall not be located in front yards.



Residential parking lots shall be sited at rear or side elevations, not in front yards.

NOT APPROVABLE

- Driveways of asphalt are not consistent with the historic materials of the districts and are discouraged.



Repair of original concrete surfaces should be with new concrete to match the existing in color and texture (517 Cumberland Street.

SERVICE AND MECHANICAL AREAS

GUIDELINE:
Mechanical equipment, such as HVAC units and satellite dishes, shall be located out of public view. They shall be screened with landscaping (best) or fencing (acceptable).

JUSTIFICATION - DESIGN:
Most mechanical units and equipment are non-historic additions to buildings, and their visual impact should be minimized.

JUSTIFICATION - SUSTAINABILITY:
Maintaining equipment ensures its continued use, which conserves materials required for replacement. Screening with landscaping is preferred over fencing, as plants absorb carbon dioxide, and fencing of any materials requires new resources and energy to manufacture, transport and install.

RECOMMENDED

As service and mechanical equipment are not historical features, their presence should not detract from the historic character of a site.

- Maintain mechanical equipment to operate efficiently and for continued use, as to not require to replacement that could damage or disturb the historic building or site.

APPROVABLE

Service and mechanical equipment are commonplace, but their presence is to be minimized by appropriate placement and/or screening.

- Screen mechanical units with landscaping or fencing to minimize their visual impact.

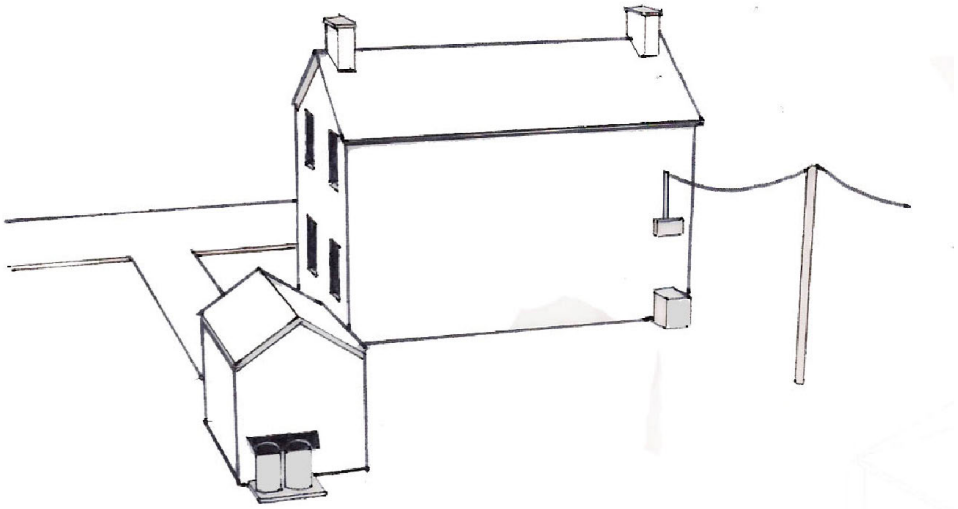


HVAC units should be screened through landscaping (left) or through a combination of lattice, fencing and landscaping (right).

- Service equipment, mechanical areas and trash receptacles shall be screened from the street and other pedestrian areas. Loading areas shall be located away from primary facades and be well maintained.

NOT APPROVABLE

- New window air-conditioning units are to be located on the front or corner side façade of a structure. Existing window units located on the front or corner side façade may be replaced in kind in the same location, although it is preferred that a less obtrusive location be selected.
- Roof-mounted equipment is to be located on front- or corner sideyard-facing roof planes and shall be set back from the edges of roofs and screened, so that it is not visible to pedestrians and does not detract from the historic character of buildings.



Mechanical systems and HVAC units should be sited at rear elevations.

LANDSCAPING & LANDSCAPE ELEMENTS

GUIDELINE:
The term "landscape" comprises the exterior environment of a historic property. Landscape elements can be natural or constructed features, including decks, patios, landforms, site furniture, pools, fountains, terraces, sculptures, planters, trellises, pergolas, outdoor lighting and other features, which generally should be located out of public view. Landscape features should be restrained on the fronts of dwellings to allow viewing of the "public face" of the property and maintain historic streetscapes.

JUSTIFICATION - DESIGN:
Just as the site, context and environment are critical to the character of a historic building, property and neighborhood, the landscape is also an important character-defining feature of a historic property. Original landscape elements may be important character-defining features of a historic property and should be preserved. Added landscape features are more appropriate in rear or side yards.

JUSTIFICATION - SUSTAINABILITY:
Retain existing elements that represent embodied energy and/or impart some degree of energy efficiency to the building (e.g., a shading pergola). Address sustainability standards when installing new elements, such as light fixtures with solar cells. Screening with landscaping is preferred over fencing, as fencing requires new resources and energy to manufacture and transport.

RECOMMENDED

Maintenance of existing landscape and landscape features helps preserve a historic setting as a whole and generally requires no review. Modern introductions, such as pools or playground sets, do not require review when they are shielded from public view.

- Retain and preserve existing historic retaining walls, as they enhance the historic character of the property and represent embodied energy.
- Preserve and maintain any original light fixtures in front yards. Preserve existing pergolas or trellis.
- Maintain existing, successful drainage patterns to minimize run-off and erosion.



Original retaining walls should be preserved and maintained. (left: 518 Clinton Street; right: 428 Walden Avenue)



APPROVABLE

- Landscape elements in rear yards, not visible from any street or adjacent property and less than six feet in height (except for pool slides, play equipment or treehouses), are not subject to review.
- Unobtrusive foot-lighting may be installed along pathways. Solar-powered fixtures are encouraged.
- New retaining walls may be approved to preserve a natural or existing slope in the front and side yards if an earlier retaining wall on the property can be documented.





Solar-powered footlights are encouraged for walkways if new lighting is desired.

NOT APPROVABLE

Actions beyond maintenance have the potential to alter a site or building, which could effect their historic character. Additionally, whenever new materials may be introduced, there will likely be sustainability considerations. Therefore, such actions may require administrative review.

- Adding a pergola to a rear elevation can help shade an outdoor space and can offer some degree of shade to the interior, which means added energy efficiency. However, adding a pergola or trellis to a prominent elevation where none historically existed is discouraged. Reconstruction of a missing pergola or trellis should be based on accurate evidence of the original design.
- Significant alteration of the topography of a property through extensive grading, removal or alteration of rolled terraces and similar character-defining features, filling or excavating, or relocation of drainage features, is discouraged.
- It is not appropriate to alter the residential character of historic districts by substantially reducing the ratio of open space to built space on any site through new construction, additions or introduction of surface paving or other hardscape features.
- Landscape elements such as stone or masonry edging materials for raised planting beds exceeding 18 inches in height are discouraged.
- The height of a new retaining wall should not exceed the height of the slope it retains. A retaining wall should be constructed of unpainted natural stone, brick or finished concrete that is compatible in texture, color and style to the main building.

PLANTS AND PLANTING RECOMMENDATIONS

GUIDELINE:
Landscaping with trees and plants, generally does not require HHZC review. However, it is recommended that mature planting patterns and designs be respected for their historic character, and that new trees and plants be placed so as not to obscure or damage, presently or in future, significant character-defining features of the property, primary structure or overall site.

JUSTIFICATION - DESIGN:
Landscaping in the city's historic districts includes traditional patterns such as hedges along property lines, shade trees in yards and use of indigenous plants. As these landscape features have matured they are important aspects of the district's character. Trees on the primary facades should be limited so as to not overly obscure the dwelling itself.

JUSTIFICATION - SUSTAINABILITY:
Shade trees on south facing elevations can assist in cooling dwellings in summer. Native deciduous trees are recommended for shade while evergreens are recommended along side lot lines for wind breaks. Plant native species, which are acclimated to local weather patterns, including hot summers and harsh winters. Use of drought-tolerant plant species minimizes watering requirements.

RECOMMENDED

Maintaining plantings, especially native species, reflects patterns of historic use and also the local climate. The addition of shade trees can enhance the setting and improve the energy efficiency of the home.

- Protect and maintain existing mature trees. When selecting new landscape stock, consider local seasonal extremes. Native plants tolerate local conditions, requiring less water.
- Collect rain water in cisterns and rain barrels via gutters and downspouts to water plants. Conceal cisterns with landscaping. Or, install a drip irrigation system in landscape beds, which conserves water better than hose watering.

APPROVABLE

- Trees and plantings should reflect the historic landscape design appropriate for the residential historic building. Landscaping should be appropriate to the historic building and neighborhood and enhance the building and its surroundings.
- Tree spacing should coordinate with existing and proposed street lighting installation.
- A properly designed, installed, and maintained turf irrigation system conserves water usage far better than hand- or sprinkler-watering. Set the irrigation controller to run the system during early morning hours, to decrease evaporation and risk of fungus on plants up against the building.

FENCES AND WALLS

GUIDELINE:
Preserve original fences and walls and new fences should be of renewable materials such as wood, woven wire or brick. Vinyl fences are not appropriate for the city's historic districts.

JUSTIFICATION - DESIGN:
Walls and fences historically shielded private areas from public view; following this historic practice reinforces the character of the district. Historic materials such as wire, wood and brick are compatible with the city's historic districts but vinyl introduces an incompatible artificial appearance.

JUSTIFICATION - SUSTAINABILITY:
Preserving existing fences and walls saves resources. New wood fences constructed of lumber from managed forests represents use of a renewable resource. Petroleum-based vinyl fencing is not a sustainable material and its appearance can change over time after exposure to ultra-violet rays.

RECOMMENDED

Routine maintenance of historic fences and walls ensures their preservation; these features enhance the historic character of the property and represent embodied energy.

- Original historic fences and walls are important character-defining features and should be preserved and maintained.

APPROVABLE

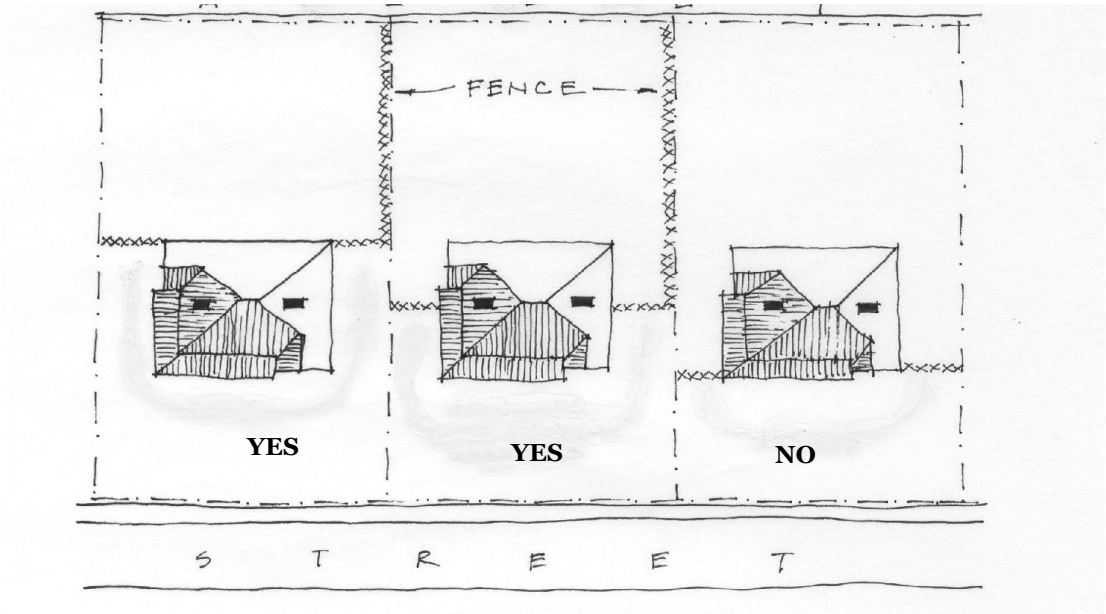
- Any further action may be approved by administrative review. Review of appropriate fences is more flexible for rear elevations, which are regarded with more leniency than primary facades that are visible from the street.





Preserve original iron fences such as at 417 Clinton Street (left). The wood privacy fence at the rear of 817 Cumberland Street (right) is located and designed appropriately.

- Fences or walls should not exceed eight feet in height at the rear property line or alley, or six feet on side or front facing locations. Twisted wire fences are not to exceed four feet in height. Where residential properties are adjacent to commercial or other incompatible uses, alternative fence heights may be acceptable.
- Chain link fences are not appropriate in front yards. If added in rear or side yards, chain link fences should be at least 15 feet behind the plane of the primary façade. Chain link fences should have top and bottom rails and may be galvanized or clad in green or black vinyl. Landscaping can help soften the appearance of chain link fences.
- Fences and walls shall be constructed of wood, brick, stone, stucco, cast iron, iron, chain link, twisted wire or a combination of these materials, as these are consistent with fence materials used during the periods of significance of the historic districts.
- Stone or brick used in walls shall be compatible in size, pattern and color to that used elsewhere in the historic district, or typical of residential structures of this type, age and location.
- A life cost analysis, a means of comparing the longevity and cost of different materials, can help a homeowner select building materials for a fence or wall. Though comparatively inexpensive upon installation, wood fences deteriorate, having a short life span of 15-20 years. Masonry walls are durable for 50-75 years, or longer, and require little maintenance.
- A fence in a corner side yard located outside the public right of way shall be setback a minimum of two feet from the inner edge of a public sidewalk, or six feet from the curb where there is no public sidewalk. Consideration shall be given to aligning a fence or wall to the same setback as an existing corner side yard fence of the adjacent property to the rear.



Privacy fences should be set back from the front façade of the dwelling, not in line with the front wall.

- Corner side yard fences or walls are encouraged to be partially "transparent" or open to avoid complete visual enclosure along side streets.
- New wood fences may be painted in colors and finishes appropriate to the style and period of the property and the district, or stained grey or brown or left unfinished.
- Fences should be located behind any open front porch of the building AND the open front porch of any adjacent main building, or behind any significant side elevation architectural feature (such as a bay window or building projection) of the building, whichever is the greater distance from the front elevation of the building.
- Tops of new fences may be horizontal, stepped, scooped, arched or parallel with the grade, as appropriate to the style and period of the main structure or the district.

NOT APPROVABLE

- Exposed CMU (concrete masonry units), concrete block or vinyl fences and walls are discouraged.
- Avoid decorative painting or murals on fence or wall surfaces visible from the public way.
- Fences should not obscure views from the public right-of-way to any significant architectural feature of a historic building visible on the front or side facades.



Side yard fences should have appropriate setback from the street, as at 527 Cumberland Street.

PUBLIC PROPERTY AND RIGHT-OF-WAY IMPROVEMENTS

GUIDELINE:
The public spaces within historic districts – the streets and sidewalks, parks and parkways – are character-defining features and shall be preserved and maintained. The Harriman city government, utility companies and neighborhood residents all play roles in maintenance, and the introduction of new features shall be as compatible as possible with the historic districts

JUSTIFICATION - DESIGN:
The existing concrete streets and sidewalks are important character defining features of the city's historic districts. The introduction of new elements in the districts such as utility meters, switching boxes or postal service mailboxes shall be carefully reviewed for compatibility with the streetscapes and overall character.

JUSTIFICATION - SUSTAINABILITY:
Altering curb cuts can disturb proper drainage patterns. Maintaining parks and parkways provides permeable ground surface for rain absorption and plants for shade.

APPROVABLE

By definition, improvements to streetscape are actions beyond maintenance and have the potential to alter the setting of a historic district. Therefore, such actions may require approval by the HHZC.

- Plans for any proposed changes to the public right of way in historic districts, including those of telecommunications or utility providers and changes to the street locations and sizes, shall be submitted to the HHZC who shall determine the impact of the change on historically significant properties and the character of the district as a whole, and its compatibility.
- New utility components such as meters, transformers, switching boxes, satellite dishes and other such elements shall be located at the rear of properties as far as possible from sidewalks, curbs and curb cuts, be of minimal height, painted to blend with the immediate environment and screened with appropriately scaled landscaping.
- Lighting in the public right of way should be uniform, and new fixtures are to be compatible with the style, period and character of the district.

NOT APPROVABLE

Some proposed actions could have more drastic effects on the appearance of a historic site or the districts as a whole. These actions would require review by the HHZC,

- Neither existing street pavement widths nor existing street right of way widths shall be increased or decreased except by review and approval by the HHZC.
- Street medians or esplanades shall not be added or removed except by review and approval by the HHZC.

Residential Building Guidelines:

ALTERATIONS TO THE BUILDING FABRIC AND COMPONENTS OF HISTORIC BUILDINGS

MAINTENANCE, PRESERVATION AND REHABILITATION OF EXTERIOR BUILDING MATERIALS

GUIDELINE:
Maintain and preserve original exterior finishes and materials such as wood, brick, stone and stucco. When repair or replacement of materials is needed, consideration will be given to sustainable methods and materials.

JUSTIFICATION - DESIGN:
The form, materials and details of exterior walls and embellishments, as well as their scale, texture and variety, contribute to a building's historic character. The texture, patterns and finishes of historic materials such as brick, stone stucco and wood siding are important character-defining features, and obscuring or removing these features diminishes the significance of historic buildings and structures.

JUSTIFICATION - SUSTAINABILITY:
The exterior materials of a building represent embodied energy. Their preservation helps maintain not only a building's architectural integrity, but also its embodied energy. When maintained properly, these materials can last indefinitely, eliminating the need to use new resources for their replacement. When new materials are necessary, consideration should be given to sustainability, which includes the availability of raw resources, the method and energy used to extract, transport, and process the raw resources, the energy to manufacture and transport a commercial product, and longevity of installed materials.

RECOMMENDED

- Retaining and preserving original materials enhances the historic character of a property and sustains their embodied energy.
- Preserve historic materials and architectural features that define the historic character of buildings.
- Original wood finishes should be maintained and painted (if painted historically) or, when necessary, replaced in-kind.
- Up to 50% of an original feature or material on any one side of a building in a historic district may be repaired by replacement without review only if the alteration results in no change in dimensions, design, configuration, texture, surface coatings or visual appearance.

APPROVABLE

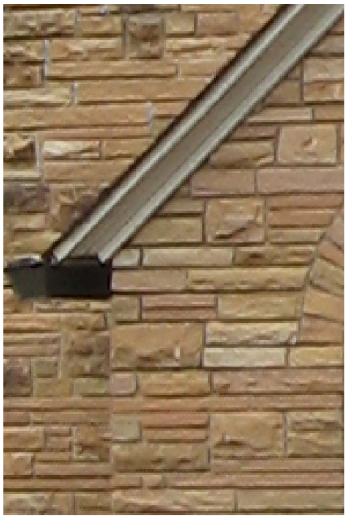
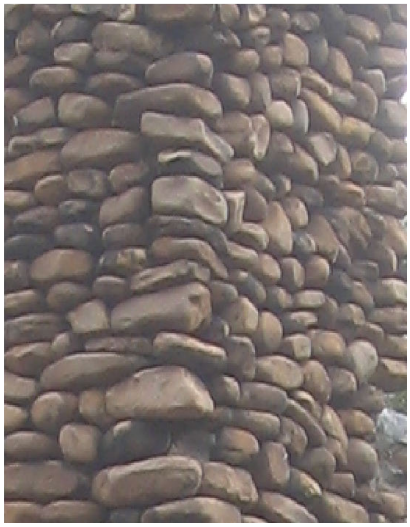
- The original natural finish of brick and stone is historically important and is to be preserved. Cleaning should only be undertaken to halt masonry deterioration.
- Original masonry or stone surfaces is to be maintained and not be painted, unless severe deterioration of the brick or stone can be shown to require painting and other consolidation or stabilization methods cannot be shown to be appropriate.
- If masonry was previously painted, it is often not appropriate or possible to remove paint, and appropriate repainting should be considered. If color or texture of replacement brick or stone cannot be matched with existing material, as a last resort, painting may be an appropriate treatment.
- Repair masonry by replacement or patching with in-kind or similar material. When this is not possible, new materials matching in texture, color and detail should be used.
- New mortar used in re-pointing should match the color and composition of the original. Incompatible mortar, too high in Portland cement content, may exceed the strength of historic brick and result in acceleration of deterioration of brickwork.





Harriman's historic districts display a wide variety of original materials such as: wood siding (left, 415 Walden Avenue); stucco and half-timbering (center, 619 Cumberland Street) and wood shingle siding (right, 722 Cumberland Street).

- Peeling, flaking or failing paint surfaces is to be removed from historic wood siding by the gentlest means possible to protect the integrity of the historic wood surface. Acceptable methods for paint removal include scraping and sanding, thermal removal and mild chemical strippers.
- Removal of existing synthetic materials is strongly encouraged, to recover authentic historic finish and appearance of a building and its components.
- The removal of metal or vinyl siding may allow the recovery of original decorative elements such as cornices, brackets, and window and door trim that have been damaged or removed when the synthetic materials were installed. Recovery of such details should be based on physical or photographic evidence first, and based on similar details for buildings in the block or district second.
- Installation of fiber cement products may be appropriate for rear or side elevations not readily visible from the street as replacement of wood siding that is deteriorated beyond repair. Fiber cement siding should be consistent with the dimensions and texture of the original wood siding.


Exteriors of formstone (left, 717 Clinton Street), cobblestone (center, 722 Cumberland Street) and brick (right, 619 Cumberland Street) illustrate the rich variety of masonry textures found in Harriman's historic districts.

NOT APPROVABLE

- Sandblasting, high pressure power washing, the use of blow torch methods and any abrasive cleaning or striping methods must never be used because of the resultant permanent damage.
- Synthetic siding materials such as vinyl and aluminum bear little resemblance to historic siding materials and are not sustainable. The application of such materials is discouraged for primary facades in historic districts.
- Exterior insulation finish systems, curtainwall, concrete block, imitative brick or stone or gravel aggregate materials should not be used as replacement exterior wall materials.

- The use of composite wood siding is discouraged since these products do not appropriately imitate the appearance of wood siding, and toxins are used in their manufacturing.
- Products of polymer coatings ("liquid siding") should be avoided since the life expectancy and breathability of these coatings is unknown. The application of these coatings often requires the abrasive cleaning of the original surface which is not allowed.
- The use of any abrasive, strong chemical, sandblasting or high-pressure cleaning method is highly discouraged, as these permanently damage the surface and accelerate deterioration of historic masonry.

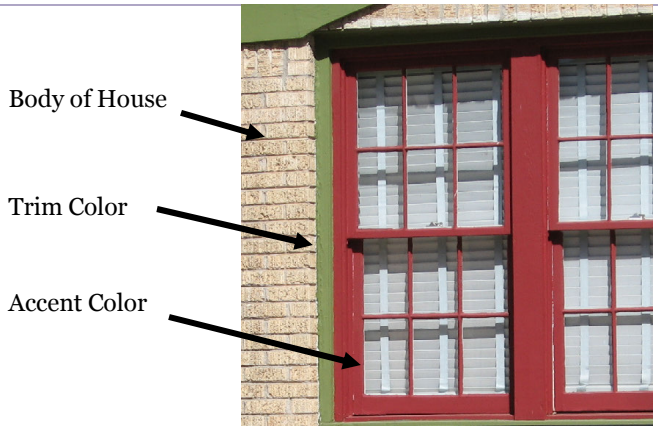




The application of vinyl siding does not allow for proper breathability of a frame dwelling and is not a sustainable material (left). After only two years, the applied polymer coating on this dwelling is already peeling (right) and the life expectancy of these materials is questionable.



The use of cement and wood siding products may be appropriate to replace deteriorated wood siding on rear elevations or those not readily visible from the street.



Example: Paint vocabulary for windows.

- Do not use metallic, fluorescent or neon paint colors on any surface of a historic building.
- Painting of previously unpainted masonry (e.g. brick or stone) is highly discouraged, as paint eliminates the inherent color variation of masonry that was a conscious part of the original design for the building and also initiates a continuing cycle of paint maintenance. Also, paint may trap moisture that can lead to the deterioration of masonry.
- When repainting brick or stone that has been previously painted, colors may be selected to echo the original colors of the brick or stone. Repainting of previously painted masonry is encouraged, rather than attempts to remove paint, which may cause further damage to the underlying masonry surfaces.
- Most paint manufacturers produce palettes of historic colors that were typically found on homes of specific time periods or architectural styles. These palettes are useful, research-based guides to historically accurate paint schemes, are tools to learn more about appropriate painting schemes, and can provide good reference information for selection of paint colors.



Three paint colors are used on the dwelling at 706 Clinton Street to highlight windows and trim, the body of the house, and milled wood details.

EXTERIOR PAINT COLOR FOR EXTERIOR PAINTED SURFACES

GUIDELINE:
Paint colors are not subject to HHZC review. Property owners are encouraged to research the specific historic colors of the exterior of the buildings on their property and record their findings for future reference and to select colors that are appropriate to the historic building and district.

JUSTIFICATION - DESIGN:
Property owners are encouraged to select exterior paint colors that best suit the architectural style and historic character of the building.

JUSTIFICATION - SUSTAINABILITY:
Paint and other building materials such as sealants, caulk and varnishes can emit hazardous gasses known as volatile organic compounds (VOCs). It is recommended that property owners seek out and use low-VOC products.

RECOMMENDED

- Selection of paint and stain colors based on research of specific historic finishes associated with a specific building is encouraged. Paint, as a material finish on wood, is considered temporary and may reflect current trends and preferences of the current owner or district.
- If historic exterior paint colors are determined, it is encouraged that these be documented for future reference and as a historical record. Retain a sample at an exterior location hidden by landscaping or find a matching color swatch for historic body, trim and accent colors.
- In general, Queen Anne dwellings were highlighted by multi-color paint schemes in deep rich hues, while the soft, pastel body colors of Colonial Revival houses were usually trimmed with white or cream. Craftsman style residences often combined exterior colors in warm, rich earth tones.
- Use variations in paint color to reflect variations in material on a building's exterior. Paint colors should complement each other and respectfully accentuate the building's significant features.



Paint color can be used to accent decorative architectural features, as on the roof gable at 725 Cumberland Street.

PORCHES and BALCONIES

GUIDELINE:
Historic porches and balconies are important features and are often the dominant characteristic of a building. These features are visible to the public right-of-way and are not to be altered.

JUSTIFICATION - DESIGN:
Porches and balconies connect a building to its context by orientating the primary entrance to the street. The various components of porches and balconies, including steps, railings and columns, provide scale and detail to historic buildings.

JUSTIFICATION - SUSTAINABILITY:
Porches and balconies protect entrances and provide shade, enhancing a building's energy efficiency.

RECOMMENDED

- Preserve existing historic porches, canopies, balconies and their elements, as they are character-defining features of a building.
- Routine maintenance ensures the preservation of porches and canopies.
- Regular maintenance such as cleaning, painting and minor repair with like materials is encouraged.
- Preserve historic components of porches including steps, ceiling, flooring, railings and columns.

APPROVABLE

- Screening a side porch was frequently done to create space that could be used year-round and provide some privacy and protection from insects. Such enclosures may appropriate if designed in a manner that is compatible with the style of the building and if the historic fabric is not obscured.





This Queen Anne wrap-around porch (424 Walden Avenue, left) and the gable-front porch on this bungalow (722 Cumberland Street, right) are character-defining features and should be preserved.

- Reconstruction of a missing porch, canopy or balcony is encouraged and should be based on accurate physical evidence of the original configuration, placement and detail of the feature and supplemented with historic photographs that show the original feature.
- If no photographs or other documentation exist, the design of a replacement porch should be compatible with the historic building in height, proportion, style, roof shape, material, texture, detail and color. Dwellings of a similar architectural style can provide examples of appropriate design.

NOT APPROVABLE

- Enclosing a historic front porch significantly alters the character of a building and is highly discouraged. Creating a false historical appearance through the application of new elements and details to a porch or balcony is inappropriate.
- Enclosing historic side or back porches or balconies with glazing changes the historic character of a building and should be avoided. However, while not encouraged, such enclosures at side or back porches not connected to a front or primary porch or balcony may be allowed. The details of such enclosures should be minimal and not obscure or detract from the historic details of the porch or building.



Example of an appropriately screened porch at 717 Cumberland Street.

Porch Elements – Columns & Railings, Ceiling & Flooring, Stairs

The columns and railing of a porch contribute greatly to the historic character of the porch and the house. These elements may be simple in design (typical in Folk Victorian dwellings), more ornate as in Queen Anne styles, or articulated as in Bungalow dwellings.





Porch components are character-defining features: left, 530 Clinton Street, milled wood posts and railing are typical details for Queen Anne or other Victorian-era styles; center, tapered, wood posts on brick piers at 710 Clinton Street are characteristic of Bungalows; right, 601 Cumberland Street, Ionic columns reflect Classical styles.

RECOMMENDED

- Routine maintenance ensures the preservation of such elements, sustaining their embodied energy and negating the need for replacement with new resources.

APPROVABLE

If more than 50% of a material or component is beyond repair, replacement may be required. Additionally, whenever new materials may be introduced, there will likely be sustainability considerations.

- New or replacement columns should be of materials appropriate to the style and design of the porch and dwelling. New columns should match the original columns in scale, massing, materials and details.
- The proportion of replacement balusters must match the original porch. The spacing and height of railing balusters is important to the character of the house; these were typically spaced closely together and the railings were relatively low (30” or less in height). Although this height may not conform with current codes, existing railings are ‘grandfathered.’

NOT APPROVABLE

- Porch columns of vinyl, hollow core aluminum and wrought iron are not appropriate for primary facades. These materials may be approved for rear or side elevations not readily visible from the street.





Original porch balusters (530 Clinton Street, left, and 631 Clinton Street, right) are character-defining and should be preserved and maintained.

Ceilings & Floors

RECOMMENDED

- Preserve and maintain original porch ceiling and flooring materials.
- Ceilings and soffits were often finished with painted beaded board or other types of tongue and groove boards. Such materials provide important scale and detail and should be preserved and maintained. Common colors for porch ceilings were 'sky blue' or white.
- Preserve and maintain original porch floors such wood, concrete or tile. Do not cover original porch floors with carpet or other surface materials.

APPROVABLE

- If more than 50% of a porch ceiling or soffit requires repair by replacement, use materials to match the historic materials.
- If more than 50% of a porch floor requires repair by replacement, first consider replacement in-kind with a new wood floor.

- Replacement wood porch flooring should closely match the details and dimensions of the original wood flooring. For example, do not use over-sized materials such as two-inch thick boards for porch floors that would have historically been ¾" to 1" thick tongue-and-groove boards.
- Alternative materials such as plastic-wood composites may be appropriate for porch floors. Although derived from plastic, many companies use substantial amounts of recycled plastic and these materials often have lengthy warranties. The appropriateness of composite floors will be dependent upon their visibility from the street and ability to match the color, texture and dimensions of the original porch surface.



Composite porch surfaces may be appropriate since they are generally not readily visible from the street and can closely approximate the appearance of wood.

NOT APPROVABLE

- Do not paint historically unpainted porch floors.

Porch Stairs

RECOMMENDED

- Preserve and maintain and preserve existing historic stairs leading to porches. Minor repairs do not require review.
- Whether concrete, brick, wrought iron or wood, regular maintenance of original stairs will prevent the need for review and replacement.

APPROVABLE

- Replacement equates with removal of more than 50% of the original material of any porch element. Replacement materials should be in-kind (use wood to replace wood stairs, concrete to replace concrete stairs, etc.).

NOT APPROVABLE

- Original porch stairs should not be removed. If repair by replacement is needed because the stairs are deteriorated beyond repair, replacement should be in kind. New porch stairs should match the original as closely as possible in appearance, design, size, detail and materials. If new stairs are needed where not located originally, the design should be simple and be appropriate for the style of the building.



Maintain original porch stairs and railings (above, 629 Cumberland). If replacement is necessary, new railings should match the original design (622 Clinton Street, below).



DOORS AND ENTRIES

GUIDELINE:
Doors and entrance details are important aspects of the architectural character of a building. Historic doors and entries should be retained and preserved.

JUSTIFICATION - DESIGN:
The proportion, shape, location, pattern and size of doors contribute significantly to the historic character of a building and help convey the style and period of the building.

JUSTIFICATION - SUSTAINABILITY:
Preserving original doors is part of the overall sustainability of the building. Original doors can be made as air-tight as new replacement doors through proper weatherstripping. The installation of storm doors is also appropriate for energy conservation. A blower-door test can be preformed as part of an energy audit to determine if there are any leaks that should be sealed.



Character-defining doors: 710 Clinton Street, left; arched Tudor Revival style at 619 Cumberland Street, center; single-light, two-panel door at 536 Margrave Drive, right.

RECOMMENDED

- Regular maintenance and weatherstripping of historic doors help to ensure their preservation and improves the energy efficiency of the building.
- Preserve original or historic doors, openings and architectural features. Preserve and protect sidelights, transoms and fanlights surrounding a more formal entry.
- Repairing original wood doors is preferred to replacement. Properly maintained, they will have greatly extended service lives while contributing to the historic character of the building.

APPROVABLE

- Install full-view storm doors for improved energy efficiency.
- Storm or screen doors should be stained or painted to match the building or trim. Storm doors should have full glazed panels (clear glass) to maximize the view of the existing door, while not damaging or obscuring the door and frame. Ensure storm doors have good weatherstripping.
- Preserve original historic screen doors. If these are removed to allow the installation of storm doors, it is strongly encouraged that these be retained for possible future use.
- New door openings at back elevations are permitted and should minimize damage to the original design of the building and character-defining features.

NOT APPROVABLE

- Preserve existing door openings, do not enlarge or diminish to fit stock door sizes.
- New door openings in the front façade of a primary building are discouraged. If new openings are necessary due to code requirements or other reasons, they should be compatible with the existing door opening in proportion, shape, location, pattern, size and material.
- Avoid new door openings on side elevations other than within the back 30% of the length of the side elevations; new door opening on street-facing side elevation of corner properties are altogether discouraged.



Storm doors added on front facades should be of full-view design and fit the door opening such as at 522 Clinton Street.

WINDOWS, SHUTTERS AND AWNINGS

GUIDELINE:
Windows are important character-defining features of a building. Original windows should be retained and kept in good repair.

JUSTIFICATION - DESIGN:
The proportion, shape, location, positioning, pattern and size of windows contribute significantly to the historic character of a building and help convey the architectural style and period of the building. Their design, details and craftsmanship make them worthy of preservation. The presence or absence of shutters and awnings are significant to the visual character of a building.

JUSTIFICATION - SUSTAINABILITY:
Many buildings in historic districts retain old-growth wood windows which can last indefinitely if they are properly maintained, unlike new-growth wood or vinyl windows. In most cases, windows account for less than one-fourth of a home's heat loss. Insulating the attic, walls and basement is a more economical approach to reducing energy costs than replacing historic windows. Proper sealing of windows and added storm windows keep windows out of landfills and enhance a building's energy efficiency.





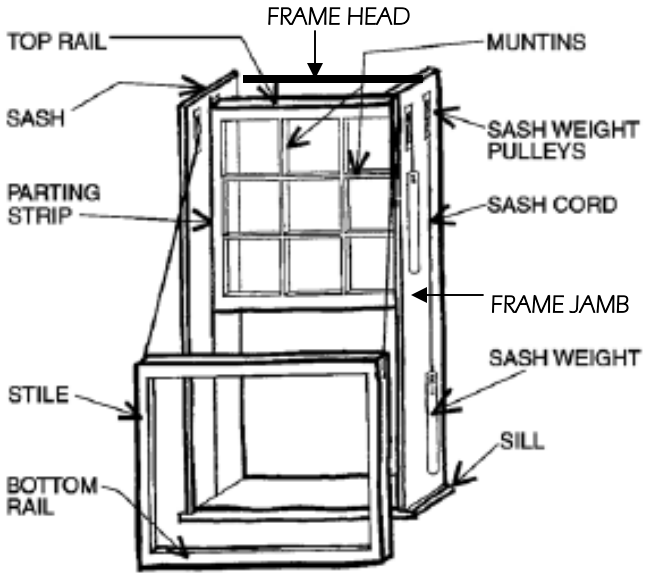
Original windows help define the architectural style and character of a building. At left is an original multi-light sash window at 802 Clinton Street and at right is an original two-over-two sash window at 517 Cumberland Street.

RECOMMENDED

- Regular maintenance and weatherstripping of historic windows ensures their preservation and improves the energy efficiency of a building.
- Retain and preserve original windows. Preserve and maintain original window framing and number and configuration of glass panes. Preserve original window openings on the front façade and front half of the side facades.
- Make repairs to an existing window rather than replacing the entire window unit, including replacement in kind of parts that are deteriorated beyond repair.

APPROVABLE

- Original windows more than 50% deteriorated may be replaced in kind.
- New window openings may be allowed on the back façade or the back half of the side elevations. New windows should be compatible with historic or existing windows in proportion, shape, location, pattern, size, materials and details.
- If an original opening is presently blocked, consider reopening it. The replacement of non-historic incompatible windows with windows that are more historically appropriate is encouraged.
- The application of ultraviolet (UV) film to window glazing is the least costly option for reducing heat gain from sunlight and may be an acceptable addition to window glass. UV filters can have a service life of ten or more years; when replacement is required, great care should be taken not damage to historic glass and framing.



WINDOW COMPONENTS

Primary components of a window.

- When window replacement is necessary, do so within the existing historic opening. Use the same frame size to avoid filling in or enlarging the original opening.
- If original windows can be demonstrated to be deteriorated beyond repair, new windows to match all of the characteristics of the original are the most appropriate alternative.
- New windows made of aluminum clad wood with enameled finish may be appropriate as replacements for historic wood since these may have acceptable sustainable qualities and closely resemble a painted finish.

NOT APPROVABLE

- Vinyl is not an environmentally sustainable material, and the installation of vinyl-clad wood windows is not appropriate in historic districts. Vinyl windows are discouraged.
- Thermal pane (also known as insulated glazing) windows are discouraged, but acceptable as replacement windows if the historic windows in a building have been previously removed. When used, thermal pane windows must have true divided lites.



Original casement windows (left: 619 Cumberland Street) and a Palladian window (424 Walden Avenue, right)



- Fanlights and sidelights at entrances can be retrofitted for improved thermal performance, but as these features are at eye level, the integration of films, new glazing or panels should be carefully detailed.
- Muntins sandwiched between layers of glass, snap-on muntins, and surface-applied muntins are not appropriate and are discouraged.
- Clear glass should be used in all windows. Do not use reflective, tinted, patterned or sandblasted glass in windows, except that patterned, leaded or colored glass can be used in transoms and sidelights when appropriate and established by the architectural style of the building.
- If security bars are installed, they should be installed only on the interior of windows and doors.



This storm window and the old-growth wood window behind it at 717 Cumberland Street provides thermal efficiency equivalent to that of most new replacement windows. Storm windows should be of full-view design or have the structural framework align with the original window meeting rail.

Storm Windows

Many styles of storm windows are available to improve the thermal performance of existing windows. Exterior storm windows are thermally efficient, cost-effective, reversible, and allow the retention of original windows. Storm window frames should align with the existing window frames.

RECOMMENDED

- Existing storm windows should be regularly maintained and painted as needed.

APPROVABLE

- Storm window frames should have a narrow perimeter framing that conforms to the primary window opening.
- If metal storm windows are installed, paint to blend with surrounding elements (typically the window frame and sashes) to create minimal visual impact. The visual impact of storm windows may be minimized by selecting colors that match existing trim color and window styles.

NOT APPROVABLE

- Do not use unfinished or clear anodized aluminum frames storm windows. If these are already on a house, consider painting these to complement or match the window color.

Screened Windows

Most historic houses originally had window screens to allow ventilation and keep out insects. Screens also assisted in providing security for the house. Historic window screens had a wood frame with inset wire screening that could be removed and replaced when worn out or damaged.

RECOMMENDED

- Historic screen windows should be preserved. If these are removed to allow the installation of storm windows, it is strongly encouraged these be retained for possible future use.

APPROVABLE

- New screen windows frames should be of wood, and match the profile, size and design of the historic frame or of typical window screen frames in the historic district.

Shutters

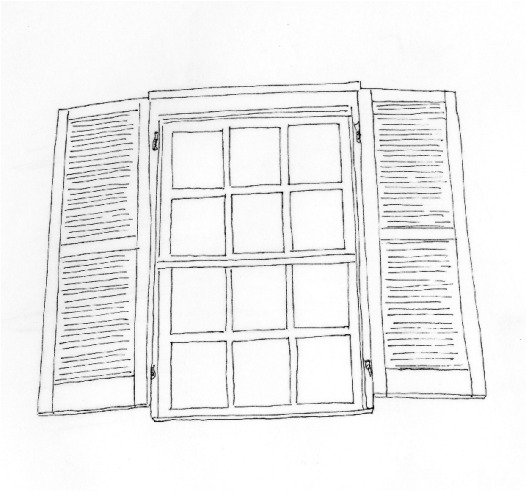
Shutters on historic buildings were both functional and decorative in design. Some dwellings were built with operable shutters so they could be closed during summer days to reduce light and heat.

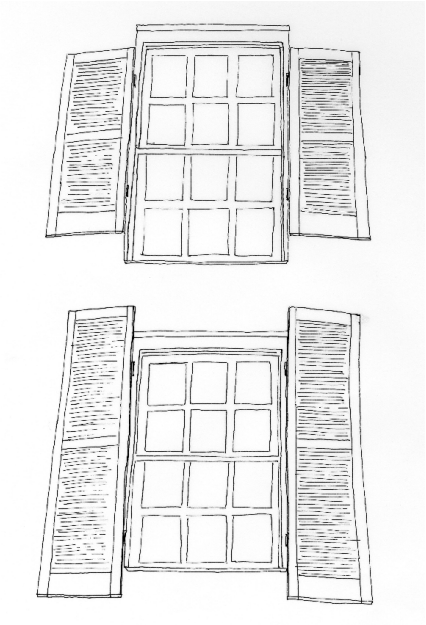
RECOMMENDED

- Historic shutters should be preserved and maintained.

APPROVABLE

- Shutters are acceptable where they existed historically, and where they are appropriate to the style and character of the house.
- Shutters should be half the width of the window and mounted to be or appear operational.





Window shutters should be sized to fit the opening (above) and not be too tall or short (right).

Awnings

Awnings on windows and doors shade and help reduce heat gain and the need to lower thermostat settings on hot days. Retractable awnings allow sunlight into windows for passive heat gain during the winter. An un-retracted awning can provide a wind break during the winter, reducing air filtration through windows and doors.

RECOMMENDED

- Maintain and preserve historic awnings that contribute to the historic character of a building and help energy use.
- Retain and preserve the material integrity of existing historic awnings, which can be wood-, metal-, or fabric-covered.

APPROVABLE

- Awnings should be placed so as to avoid obscuring details of the building façade.
- New awnings installed at a property where awnings have not been documented before should be made of canvas or other fabric material on a metal frame, and may be either fixed, retractable or operable. Metal awnings may be used if the size, color and design are compatible with the district and architectural style of the building.
- Fabric or canvas awnings should be a "drop-front" or "shed" style, except at arched window openings.
- Consider the longevity of the fabric selected for awnings. Woven acrylic fiber awnings usually last 8-12 years, compared with 5-6 years for polyester or vinyl awnings, and these types of awnings can withstand 25 mph winds.

NOT APPROVABLE

- Do not use plastic awnings.





The use of canvas canopies is appropriate to provide shade for entries and windows as at 825 Cumberland Street (left) and 723 Clinton Street (right).

ROOFS

GUIDELINE:
Retain original roof shape, details, and materials when possible. When replacing roofing materials, consider the energy used in their manufacture and transportation, the reflectivity of the material and whether the material derives from a renewable or recyclable resource.

JUSTIFICATION - DESIGN:
By their shape, features, materials and details, roofs contribute significantly to the historic character of residential and multi-family buildings. Through variations in line, pitch and overhang, a historic roof can also reveal changes and additions to historic buildings over time. Chimneys, dormers and other roof features add to the diversity and character of historic residential buildings.

JUSTIFICATION - SUSTAINABILITY:
Many aspects of sustainability should be considered pertaining to roofs, such as service life, cost of manufacture and transportation, recycled content, and reflectivity of materials. Replacement materials should be appropriate to the style of the house as well as long lasting as possible.

There are many considerations when choosing roofing material to replace original roofs, such as initial cost, lifetime cost, longevity, reflectivity and environmental impact of replacement. Asphalt shingles are the most common choice for roofing across the country, due to their low initial cost. However, they are not durable, requiring frequent replacement, and they are not recyclable, contributing to landfill volume significantly. This may change as communities and states explore the potential of recycling asphalt shingles into road-building materials. Asphalt and fiberglass shingles are both petroleum-based with very little recycled content.



Preserve and maintain original roof materials such as the slate roof at 619 Cumberland Street.

Concrete and clay tiles require the most energy to manufacture. The weight of these products, as well as of natural slate, results in higher transportation costs. However, all three materials have very long life cycles, reducing their overall impacts. Fiber-cement composites include some amount of wood scrap or waste materials, reducing the amount of cement and concrete used. They are lighter weight than concrete tiles, reducing transportation energy requirements. Metal roofs were not widely used in the historic districts, and their installation is not appropriate unless documented.

Preventative maintenance is the key to prevent roof damage. Inspect roofs regularly for normal wear and damage from storms or wind. Inspect flashing at roofing, gutters, and chimneys yearly. Repair leaks promptly in roofs to prevent wall and interior damage. Clean and repair gutters and downspouts to prevent water damage to fascias, soffits and walls.

RECOMMENDED

- Maintain roof and roof elements and the addition of some roof elements, thereby preserving the historic building.
- Preserve the original shape, line, pitch and overhang of historic roofs, as well as architectural features such as dormers, chimneys and turrets. Distinctive features such as open eaves with exposed rafters and decorative or plain rafter tails, flared eaves or decorative purlins and brackets with shaped ends shall be preserved and repaired when necessary. Preserve flat roofs and parapets.
- Retain and preserve roof details such as ridge cresting, exposed rafters, and brackets.



Preserve original roof features such as eave brackets and exposed rafter tails (429 Cumberland Street).

APPROVABLE

- Match new roofing materials to original materials in appearance, style and composition.
- New roof features such as roof ventilators, antennas, satellite dishes and skylights may be installed, but are to be located on rear slopes so as not to be visible from the street.
- For ventilation of attic heat, roof vents should be located out of view on rear rooflines. Vents help improve the energy efficiency of the dwelling.
- Flashing should be copper or other metal with a finish to match the roof color. Unfinished, galvanized metal flashing should not be used.

NOT APPROVABLE

- Metal roofing shall not be used unless it can be historically documented at a given dwelling. White roofs are also discouraged.
- When large-scale replacement of roof materials other than asphalt shingles is required, historic fabric (such as slate, tile, wood shingles) that retains its integrity shall be salvaged and installed on prominent areas of the house in public view. Use of new, appropriate materials shall be used on roof areas that are unobtrusive, preferably rear elevation locations.
- New dormers are discouraged on the primary façade; if needed to make attic space usable, new dormers shall be located only on non-primary facades. It is not appropriate to locate new features on front or street-facing elevations.



Preserve and maintain original roof features such as dormers (631 Clinton Street).

Wood shingles

APPROVABLE

- Faux wood shingles of weathered wood color may be used to replace real wood shingles if consistent with the original in texture, dimensions, design and color. Modern wood shake roofing products do not match historic wood shingles and therefore are discouraged in historic districts.
- Replace historic wood shingles with #1 cedar shingles. The surface texture should be smooth, sawn-cut rather than the linear texture resulting from the hand-split process typical of shakes.
- Shingles should be laid in a horizontal row with the bottom edge either in alignment with the adjacent shingle or staggered to match the historic condition. Decorative cut wood shingles may be installed only in areas of the roof or walls where documentation indicates their historic use.
- Where asphalt shingles have been added on top of original wood shingles, removing the asphalt shingles to reveal the original wood shingles is encouraged.

Gutters and Downspouts

NOT APPROVABLE

- Gutters and downspouts may be installed, but should be unfinished copper or painted/powder finished metal unless historical precedent demonstrates historic use of alternative materials or finish. Exposed galvanized metal or non-painted gutters and downspouts are discouraged Do not remove historic fabric such as brackets or fascia board to install gutters and downspout.
- New gutters should be painted/powder finished to match the fascia color of the house. Downspouts may be painted/powder finished to match the trim or body of the house. Do not install unfinished copper gutters and down spouts where the color and shade of the adjacent material does not match the copper's natural patina finish color or where inappropriate for the style of the property.
- The original shape, line, pitch and overhang of historic roofs are significant to the overall character of the building. Altering the original roof shape and form is highly discouraged.



Gutters and downspouts should be painted to blend with the main house color (710 Clinton Street).



***NO** - Elevating a roof to provide for additional living space would be a significant alteration to dwelling's original design and would not be allowed.*





***YES** - Add additional living space through shed roof or gable dormers on rear elevations not readily visible from the street.*

FOUNDATIONS

GUIDELINE:
Visible foundation walls and decorative features may be character-defining and should be retained and preserved. Do not cover, conceal or obscure foundations.

JUSTIFICATION - DESIGN:
The foundation ties the historic building to its site. Its materials reflect building trends and help convey the architectural style and period of the building.

JUSTIFICATION - SUSTAINABILITY:
Proper maintenance of historic foundations ensures that the embodied energy of an existing building is retained, eliminating the need for new resources and new energy to be used.

RECOMMENDED

- The preservation and maintenance of foundations ensures the stability and preservation of a building.
- Preserve the height, materials, features and details of a visible foundation wall including components such as vents and grilles, lattice skirting, and steps.





Preserve and leave exposed original foundation materials such as the cobblestone and rock-faced concrete block at 429 Cumberland Street (left) and stone at 417 Walden Avenue (right).

- Occasionally the foundation of a historic building may require adjustment of the installation of piers/ jacks for leveling. Work that will not result in a visible change to the exterior appearance of the historic building does not require review.
- Ensure downspouts direct water away from foundations to prevent water and moisture damage.

APPROVABLE

- Skirting at residential buildings should be appropriate to the structure. Lattice that is 'framed' may be an appropriate skirting material.
- Foundations should be vented to control moisture underneath the dwelling. Moisture encourages rot and termites. Adjustable vents can seasonally help improve the dwelling's energy efficiency.
- Design of new or replacement vents should be compatible with the age and style of the building.

Site drainage

RECOMMENDED

Poor site drainage can result in moisture or water collecting under the house. This may adversely affect the building foundation. Sites should be graded so water drains away from the residence and does not pool near the building.



This dwelling has appropriately designed and placed lattice panels in the porch foundation (530 Clinton Street).

ACCESSORY BUILDINGS, INCLUDING GARAGES

GUIDELINE:
Accessory buildings in historic districts may include a wide variety of building types, such as secondary dwellings, carriage houses, garages, and sheds. Accessory buildings original to a property or added within the past fifty years should be preserved and maintained.

JUSTIFICATION - DESIGN:
The primary materials used at historic garages structures were most often wood siding – both horizontal and vertical board and batten – or brick that matched the main house, with metal or wood shingle roofs. These structures had gabled, hip, or shed roofs. Traditionally, accessory buildings, especially garages, were important elements of a property and were often designed to be simpler, match and compliment the associated buildings.

JUSTIFICATION - SUSTAINABILITY:
Like primary buildings, accessory buildings represent embodied energy. Continued use of an older accessory building is a sustainable approach and reduces the need for new materials.

RECOMMENDED

- Retain and preserve historic secondary buildings, which enhance the historic character of a property and represent embodied energy.
- Retain and preserve accessory buildings that contribute to the overall historic character of the primary building on the site and in the district.
- Repairs to an accessory building should be made with historic materials such as stone, brick, wood and other materials used on the original structure. Ordinary maintenance and repair, which does not require review, should be less than 50% of a material, component, or feature on any one side of a structure.



Historic frame garage at 526 Clinton Street).

APPROVABLE

- Garage doors should typically be painted to match the color of the garage. In garages that are 'high style,' it may be appropriate to use the color of the garage doors as a complementary or accent color to the overall color scheme. Ideally, color schemes should be verified (if possible) with historic photographs.
- Garage door openers may be added to new or existing garage doors.
- Pre-fabricated buildings (such as garden sheds) that are less than six feet in height should be located in back yards no closer than three feet to a side or rear property line.
- Locate ramps, railings or other accessibility-related installations on the back or side elevation of an accessory building and in an unobtrusive location. If locating a ramp on the primary façade of an accessory building is necessary, the ramp and railing should be installed in a way that does not damage the historic fabric and is as unobtrusive as possible.
- Spacing and sizes of new window and door openings in a garage or other accessory building should be compatible with the existing accessory building and similar to their historic counterparts within the property, streetscape, or district, as must the proportion of window to wall space, without duplicating them.
- If it is necessary to replace the existing doors or other deteriorated or missing elements or details at a garage or other accessory structure, replace with a design based on accurate historical documentation. A new design that is compatible in style, form, scale, size, placement and finish with the primary structure or other historic garages and accessory buildings in the district may be used when no physical or photographic documentation exists otherwise.



Some garages were built with apartments on the second floor such as at 602 Clinton Street).

SIGNS

GUIDELINE:
Signs should be in accordance with the city's overall sign ordinance. In addition to visibility and legibility, signs in historic districts or for historic landmarks must also be of appropriate materials and design.

JUSTIFICATION - DESIGN:
Permanent signs were not traditionally used in the city's residential areas and new signs should be limited in size and of appropriate materials.

JUSTIFICATION - SUSTAINABILITY:
As with building elements, signs should adhere to principles of sustainability in their materials. The use of wood from managed forests is encouraged. Plastic signs are not allowed since plastic is a petroleum based material, a non-renewable resource. Additionally, plastic is not compatible with the materials present in the historic districts.

APPROVABLE

- Sign design and placement should be reviewed by the HHZC and should be in accordance with the City of Harriman Sign Ordinance.
- Applied signs installed at appropriate locations on buildings or free-standing, monument-style signs placed in front yard areas are the appropriate type of sign for multi-family residential properties, when appropriately scaled and placed to minimize visual interference with the significant features of the property.
- Signs should not obscure historic building features such as cornices, gables, porches, balconies or other decorative, architectural building elements.
- Signs placed on the exterior of buildings should be constructed of painted wood or metal.
- Lighting of signs can be done with incandescent bulbs on the sign, or gooseneck front lighting using fixtures appropriate to the style and period of the building. Internal illumination is only appropriate when the letters themselves rather than the background are illuminated.

LIGHTING

GUIDELINE:
Retain original light fixtures whenever possible. If replacement is required, select appropriate styles, based on the architectural style of the building.

JUSTIFICATION - DESIGN:
Original light fixtures help convey a building's style and add to overall historic character.

JUSTIFICATION - SUSTAINABILITY:
Preserving existing light fixtures preserves resources and will not require the use of new materials. Using long-lasting bulbs will make historic fixtures more energy efficient.

RECOMMENDED

- Historic light fixtures should be retained and maintained.
- Regular maintenance and minor repair of original light fixtures is recommended.

APPROVABLE

- The electrical components of historic fixtures may be replaced or modified to preserve the fixture and enhance its energy efficiency.
- Deteriorated or damaged historic light fixtures should be repaired using methods that allow them to retain their historic appearance.
- Replace missing or severely damaged historic light fixtures with fixtures that replicate the original or other appropriate fixtures that closely match the appearance and materials of the original.
- If a compatible replacement fixture cannot be located, then a modern design with modest detailing that is compatible with the architecture of the building may be used.
- If new light fixtures are needed where they previously did not exist, the new fixtures should be unobtrusive, conceal the light source and direct light toward the building.



Original light fixtures should be preserved and maintained (916 Cumberland Street.

Guidelines for New Construction in Historic Districts:

NEW CONSTRUCTION (Stand-Alone)

GUIDELINE:
New construction and additions should not destroy historic materials or general features that characterize a historic building or property. The new work should be differentiated from existing, historic structures and protect the historic integrity of the property and the historic district. Additions to historic structures should be done in such a manner that the historic character of the structure is retained and, if removed in the future, the essential form and integrity of the original structure and site would be unimpaired.

JUSTIFICATION - DESIGN:
New construction and its integration with existing buildings in historic districts should be compatible with the existing architecture on the block. Compatibility may include the size, shape, massing and materials of new construction. The relationship of the form of new construction to the historic district in which it is located or to adjacent structures is critical to maintaining the character of a historic district.

JUSTIFICATION - SUSTAINABILITY:
Effective resource conservation includes consideration of the renewability of resources, the manufacturing processes used to create the materials and the recycled construction materials, energy costs associated in the manufacture and shipping of construction materials, and the ways selected materials can help make the new building, as a whole, energy efficient.

Structures and Additions to Existing Buildings

New construction may include a new, stand-alone residential or accessory building (infill), a new garage, an addition to an existing residential building or a substantial renovation to an existing building. Particulars for each are provided in this section. Refer to the 'Alterations to Building Fabric and Component' section within these Guidelines and Standards for specific elements or components of new construction such as doors, windows, roofs, etc. at new, stand alone construction, additions, accessory buildings and garages.

NEW COMMERCIAL CONSTRUCTION

GUIDELINE:
New commercial building construction should complement and not detract from the overall historic character of the historic district.

JUSTIFICATION - DESIGN:
The way in which existing and new buildings relate is important in maintaining the overall historic character of a historic district. Architectural design directly affects the integrity of the district as a whole. For this reason, new, stand-alone buildings should maintain the continuity of a historic district's character.

JUSTIFICATION - SUSTAINABILITY:
New construction should adhere to principles of sustainability in design, materials, and energy efficiency.

Construction of new buildings in downtown Harriman should respect the historic visual character of the streetscape. If designed appropriately, new buildings can contribute to the historic district's ambiance and provide the opportunity to eliminate vacant lots and missing gaps in the streetscape. New buildings do not need to copy historic building designs, but they should adhere to established downtown design principles. Compatibility of the overall design of a proposed building should first be reviewed in terms of its scale, height, massing, proportion and roof form. By analyzing the buildings surrounding a proposed site in these terms, it is possible to discover how consistent and, therefore, significant each of these criteria is to the district character. Building features, openings, details, materials and textures characteristic of the downtown area provide additional criteria for evaluating the compatibility of proposed new construction. New commercial buildings should maintain the pedestrian orientation of downtown and have storefronts or other compatible openings on the street level.



This vacant lot in the 500 block of N. Roane Street is an opportunity for compatible infill.

APPROVABLE

- Site new construction to be compatible with nearby historic buildings that contribute to the overall character of the district in terms of setback, spacing, orientation to the street and lot coverage.

- Design the new construction so that the overall visual and physical character of the building site, including its topography and significant site features, is retained.

- Design new construction to be compatible with nearby historic buildings that contribute to the overall character of the district in terms of building scale, height, massing, proportion and roof form.

- Design new construction to be compatible with nearby historic buildings that contribute to district character.

- With respect to height-to-width ratios, design new buildings' windows and doors to be compatible with historic buildings that contribute to the district character.

- Design new buildings with solid-to-void rhythms and open-to-solid proportions compatible with historic buildings that contribute to the overall district character.

- Select materials and textures for new buildings that relate to the extent such materials and textures are used in the surrounding area and are compatible with historic buildings that contribute to the overall character of the district. In areas where strong continuity of materials and textures is a factor, the continued use of those materials should be strongly considered.

- Select colors for a new building that relate to the use of color in the surrounding area and are compatible with historic buildings that contribute to district character.

- New architectural details and articulation should be compatible with historic buildings that contribute to the overall character of the district. Such details may include lintels, cornices, arches, chimneys, and ironwork.

- Windows should be designed with divided lights and not have snap-in or flush muntin bars.



New commercial buildings in the downtown area should be compatible in design and detailing with traditional storefronts. A one-story example is shown above and two-story below. These buildings are of masonry construction and are designed to complement the adjacent historic commercial buildings.



NEW RESIDENTIAL CONSTRUCTION

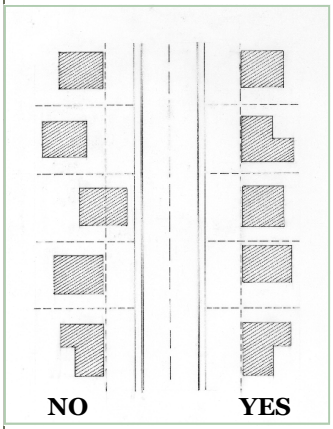
GUIDELINE:
New stand-alone residential construction should complement and not detract from the overall historic character of the historic district.

JUSTIFICATION - DESIGN:
The way in which existing and new buildings relate is important in maintaining the overall historic character of a historic district. Architectural design directly affects the integrity of the district as a whole. For this reason, new, stand-alone buildings should maintain the continuity of a historic district's character.

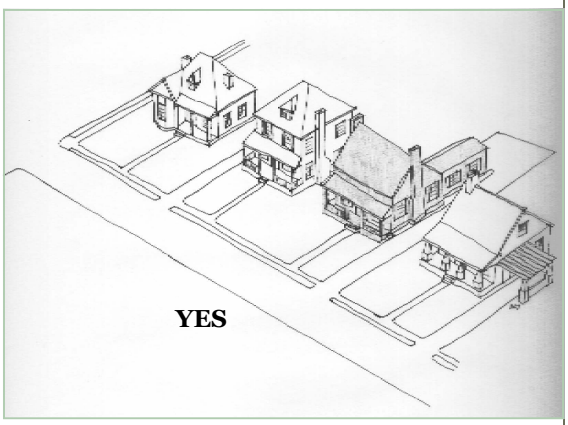
JUSTIFICATION - SUSTAINABILITY:
New construction should adhere to principles of sustainability in design, materials, and energy efficiency.

APPROVABLE

- New buildings must follow historic setback patterns of the street.

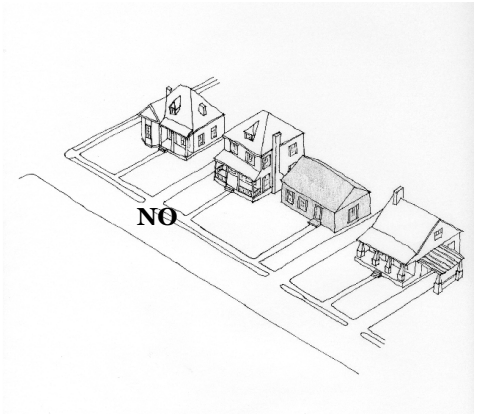


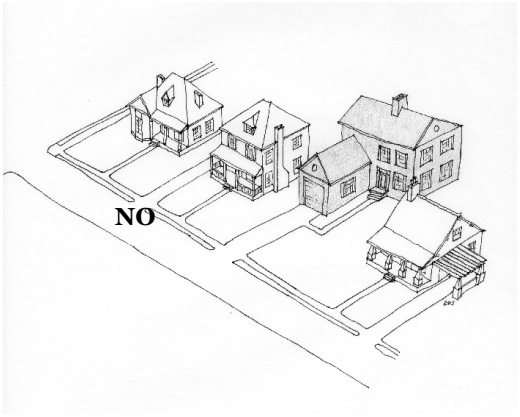
(Left) inappropriate setbacks on the left side of the street contrast with uniform setbacks on the right side. (Right) appropriate setback of new construction (shaded).



- New stand-alone and infill buildings should be consistent with historical patterns of development for the property, block and district.
- Construction of stand-alone and infill buildings should be compatible in size, scale, proportion, spacing, texture, setbacks, height, materials, color and detail to adjacent or nearby buildings and streetscapes.

- New residential buildings should fill the same proportion of lot area as other buildings on the streetscape. The pattern created by spaces between buildings should be continued.





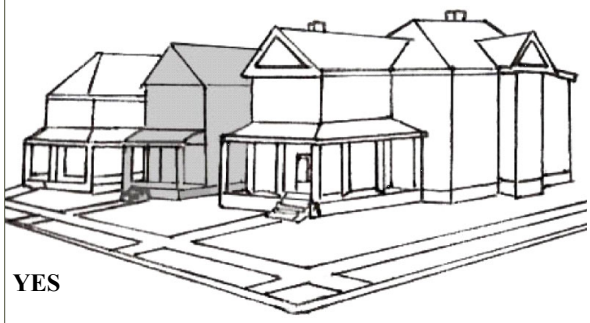
Inappropriate examples of new infill buildings that are not consistent with the massing, size, proportion and scale of the nearby historic multi-storied, square-plan dwellings with full-width front porches.

- New construction must respect the architectural integrity and context of surrounding buildings. Existing adjacent historic structures and streetscapes should be taken into consideration before designing new construction. Incorporating existing architectural features with new design elements can add interest and enhance the compatibility of the new building in the district or the other buildings on a property.
- The height of new buildings should relate to the heights, roof-form and cornice lines of adjacent structures and to those of other buildings on the streetscape. The height of new buildings should conform to the following unless historical development patterns are documented otherwise:
    - √ In streetscapes with uniform building heights, new buildings should match this height. For example, on a streetscape of all one-story residential structures, any new building should also be one story in height.
    - √ In streetscapes with varied building heights, the height of new buildings should align with the existing buildings on the streetscape, with particular attention paid to the predominant height of the adjacent structures and other structures on the streetscape.

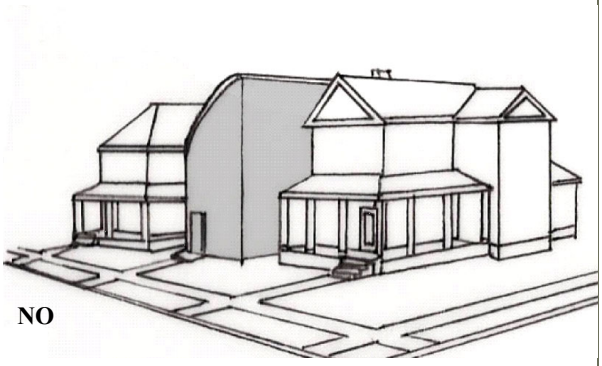
√ The floor-to-floor heights of new residential buildings should closely align with the floor-to-floor heights of the adjacent or nearby historic structures.

√ The height of porches of new residential buildings should closely align with the porch heights of other residential buildings on the streetscape, with particular attention paid to porch heights of adjacent structures.

- The design of new construction should be compatible with historic styles within the district yet not imitate them so as to provide distinction between the historic structure and new construction.



YES



NO

New construction should be consistent with the predominate shapes and roof forms on the block.

- In new construction, the use of materials similar to those of the adjacent historic structures is encouraged. Actual replication of these materials is not encouraged. This approach ensures the design compatibility of the historic structures while clearly differentiating between old and new.
- Similar shapes that are repeated in many buildings within a streetscape are encouraged to be incorporated in the design of a new residential building. Replication of historic detailing is discouraged; however, the repetition of similar shapes and elements can help provide continuity and enhance compatibility between new and old structures.
- Spacing and size of window and door openings should be similar to their historic counterparts within the streetscape or district, or be typical of structures of this type, age and location. The proportion of window to wall space should also be similar to their historic counterparts, without duplicating them.
- Ramps or other accessibility-related installations should be located on the rear or side elevation of the new construction and in as unobtrusive a location as possible. If locating a ramp on the primary façade is required, it should be installed in a way that does not damage the building's historic fabric and is as unobtrusive as possible.
- Only when a previously demolished historic residence can be accurately replicated may a reproduction be considered at that site.
- Facades of new construction facing an alley may be simplified and secondary in design to that of the primary facades. The same materials should be utilized at alley facades as that of the primary façade, unless this varies from the typical historic condition within the districts.

BUILDING ADDITIONS

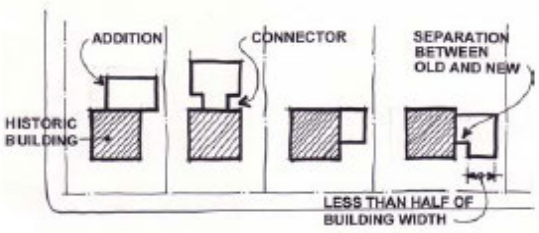
GUIDELINE:
Additions should complement and not detract from the overall historic character of the historic districts.

JUSTIFICATION - DESIGN:
The way in which a historic building and an addition to it relate is important in historic districts. The addition directly affects the integrity of the building as a whole. For this reason, building additions should not detract from the historic character of the historic building.

JUSTIFICATION - SUSTAINABILITY:
New construction shall adhere to principles of sustainability in their materials, design and energy efficiency. If construction of additions results in the removal of original fabric, consideration should be given to maximizing the retention or re-use of existing historic features, details and materials.

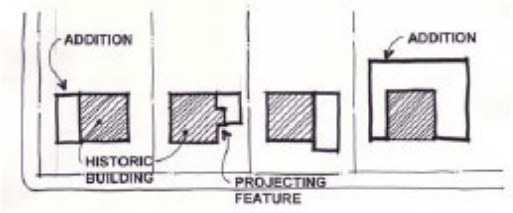
APPROVABLE

- Additions shall be compatible in design, proportion, size, texture, color, and detail to adjacent buildings and streetscapes, and shall be appropriate to the architectural style of the existing building. The incorporation of existing architectural features with new design elements can contribute added interest and compatibility.
- New additions should be planned so that they are constructed to the back of the property or on a non-character-defining elevation preferably not visible from the public right-of-way. Character-defining features of buildings shall not be radically changed, obscured, damaged or destroyed by an addition.



YES

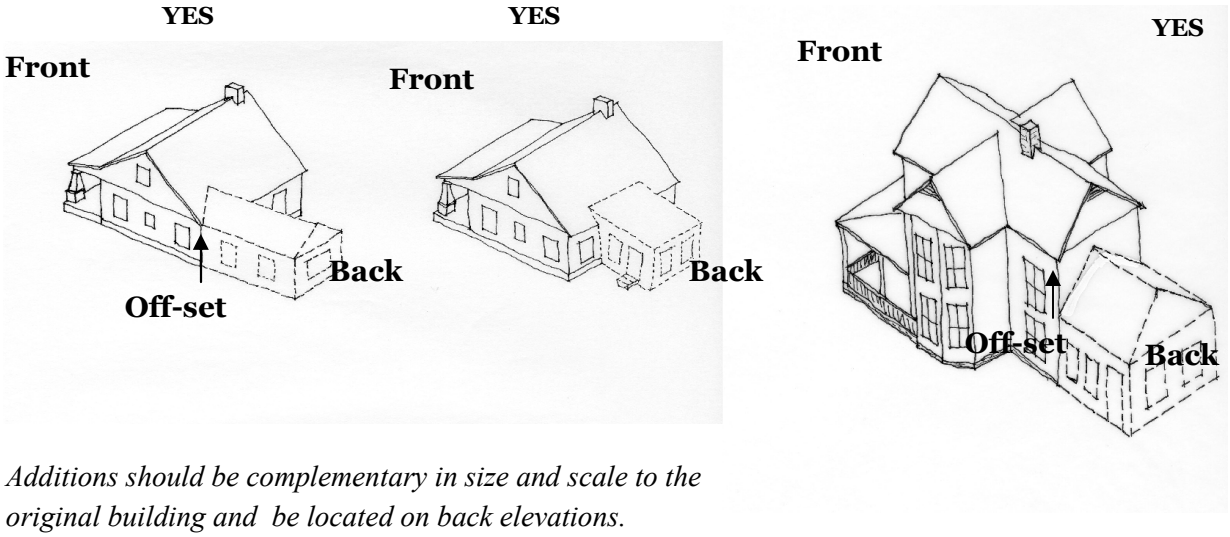
ACCEPTABLE LOCATIONS FOR ADDITIONS



NO

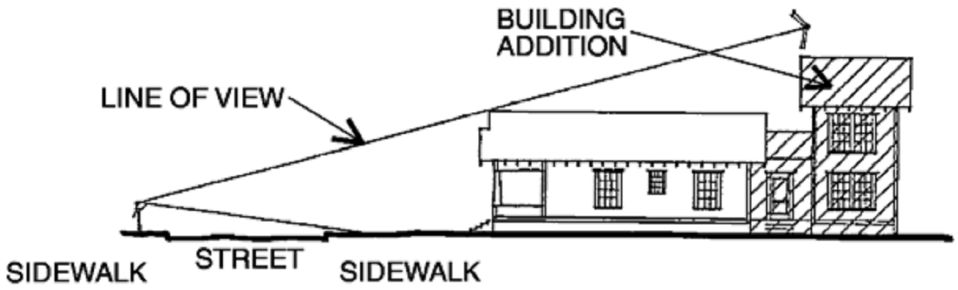
UNACCEPTABLE LOCATIONS FOR ADDITIONS

- Additions to historic or non-historic buildings are to relate to and complement the style of the main building, and preferably relate to the general style of the streetscape.
- An addition to a historic building should be designed to be visibly distinguishable from the original historic building; differentiation between the historic building and an addition is desired.
- Additions to historic buildings should be designed so that connections between new construction and historic structures are clearly discernable. A clear definition of the transition between the new addition and the historic structure should be established and maintained.
- An addition may be differentiated from the historic building by connecting the two with a modest connector, designed to be as transparent and unobtrusive as possible.



Additions should be complementary in size and scale to the original building and be located on back elevations.

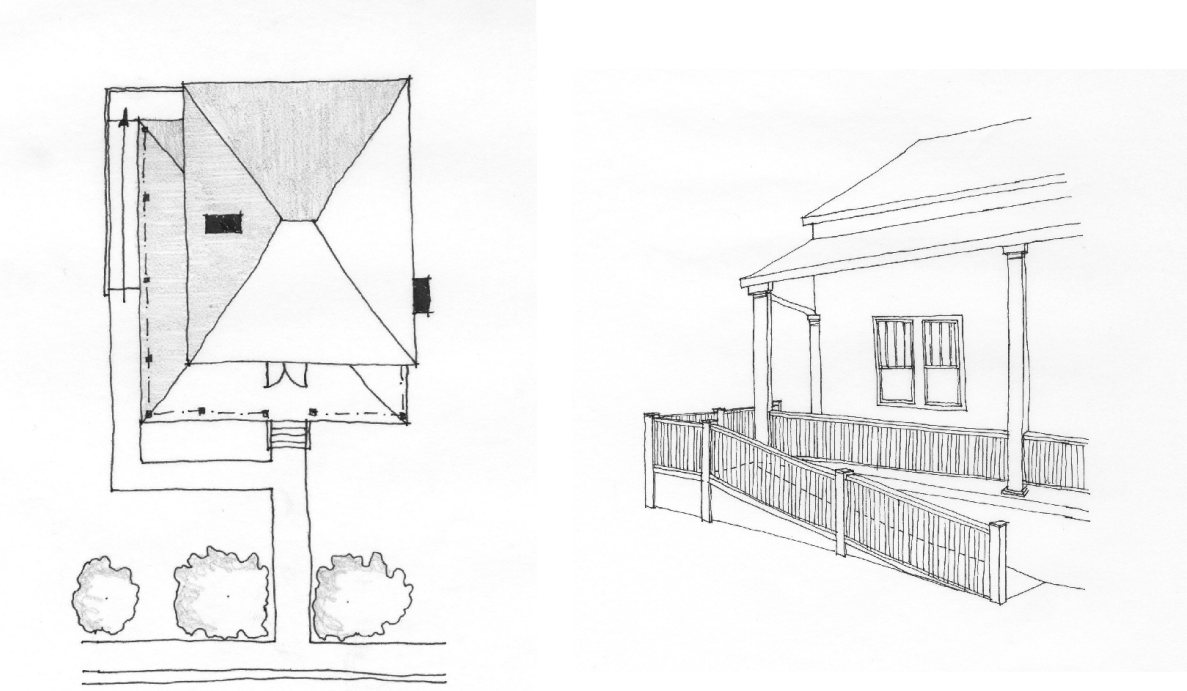
- Historic details in the coping, eaves and parapet of the historic building may be continued at the point where the historic structure connects to the addition.
- Additions should be clearly secondary to and distinct from the original building. This can be accomplished by providing a clear visual break between the historic building and the addition, by setting the façade of the addition back from that of the historic building, or by constructing a recessed area at the point at which the addition and the historic building join together.
- Use of different but compatible materials or different (simplified) detailing is also appropriate to differentiate a new addition from the historic building.
- The design of a new addition should consider and respect the massing, roof shape, bay spacing, cornice lines and materials of the building to which it is being added. An addition may be horizontal (added to a side or back elevation) or vertical (a second story added to an existing one-story building).



An appropriate vertical addition to a building will not be visible to a person standing across the street .

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- Vertical additions to buildings should be located so that they are not visible to a person standing at ground level on the opposite side of an adjacent right-of-way. Vertical additions are discouraged at corner lots, as such additions would be visible from the side streets.
- Facades of additions facing an alley or rear property line may be simplified and secondary in design to that of facades that are more visible from adjacent properties or the streetscape public right-of-way. The same materials should be used for alley-facing facades as that of the other facades unless this varies from the typical historic condition within the district.
- Ramps or other accessibility-related installations should be unobtrusive and located on the back or side elevation. If a ramp is required to be on the primary or highly visible façade of a building or addition, it should be designed to be as unobtrusive as possible.



Wheelchair and access ramps should be located at back or side elevations, not on primary facades (left) and should be of compatible design and materials with an existing porch or other features or other features of the historic building (right).

GARAGES

GUIDELINE:
New garages are permitted where a house does not have a garage or where a new garage is necessary. As with other accessory buildings, garages should have their own form and should generally appear as secondary structures and not visually overwhelm or compete with the other historic buildings of the property.

JUSTIFICATION - DESIGN:
The way in which a new garage relates to other historic buildings of a property is important in historic districts. A new garage directly affects the integrity of the property as a whole. For this reason, a new garage is to not detract from the historic character of the property. Preferably the garage is not to be visible from the street.

JUSTIFICATION - SUSTAINABILITY:
New construction should adhere to principles of sustainability in their materials, design, and energy efficiency.

RECOMMENDED

- Garage doors should typically be painted to match the color of the garage. In garages that are 'high style,' it may be appropriate to use the color of the garage doors as a complementary or accent color to the building color scheme.
- Electronic garage door openers are acceptable.

APPROVABLE

- New garages should follow the historic setback for a garage on the property or patterns of other garages in the streetscape or historic district.
- Reconstruction of a missing or replacement garage should be based on accurate evidence of the original configuration, form, massing, style, placement and detail and supplemented with photographs or other documentation that show the original garage.
- The design of new garages should be secondary to that of the main historic building.
- New garages should be compatible in size, scale, proportion, spacing, texture, setbacks, height, materials, color and detail to the primary building and should relate to similar garages within the historic district, as appropriate.
- Materials used at new garages should reflect historical development of the property and the use and function of the garage. Materials used at exterior facades of garages were often different (and less costly) than that of the main building.

- Garages may be of 'modest' or 'high-style' design to complement the historical development of the property. In many instances, new garages should be modest, with a simple rectangular plan and form with a low-pitched roof. Doors and windows may have little or no ornamentation .
- A new one-story garage should be similar in height to other similar, historic one-story garages in the streetscape and historic district. A new two-story garage should be similar in height to other similar, historic two-story garages in the streetscape and historic district.
- A replacement garage may be two-stories in height when the original garage was 2-stories, or if located in a block where two-story garages are dominant or occur on adjoining property. In those blocks that contain only one-story garages, new garages shall be one-story in height.

Garage Door Openings and Doors

- Spacing and size of window and door openings in a new garage should be consistent with the historical development of the property and similar to their historic counterparts within the streetscape or historic district, as should the proportion of window to wall space.
- At double garages, consideration should be given to the use of two single garage doors rather than one larger, double door. This will maintain the scale and rhythm of older structures, making a two-car garage seem smaller and more compatible with the primary building.
- If a historic garage is to be demolished to allow the construction of a new garage, it is encouraged that the historic doors be salvaged and re-used at the new garage, or if this is not possible, that the historic garage door be replicated in the new garage design.
- Doors at new high style garages should complement the garage in design and materials. The use of paneled wood garage doors or custom garage doors is encouraged at these locations.

Accessory Buildings

RECOMMENDED

- Pre-fabricated storage units less than six feet in height may be located in back yards.
- Such pre-fabricated units should be set back be a minimum of three feet from a side or back property line.

APPROVABLE

- The appearance and location of a new accessory building should be based on the appearance of the historic accessory building if such existed. Use historic photographs and other documentation such as Sanborn Fire Insurance maps for guidance as to size and location of a previous accessory building on the property.
- If documentation of a historical accessory building at the site is not available, the size, design and location of a new accessory building should be in keeping with other accessory buildings in the block and historic district.
- Design of new accessory buildings should be secondary to that of the main historic building.

EXTERIOR MATERIALS FOR NEW CONSTRUCTION

Wall Materials

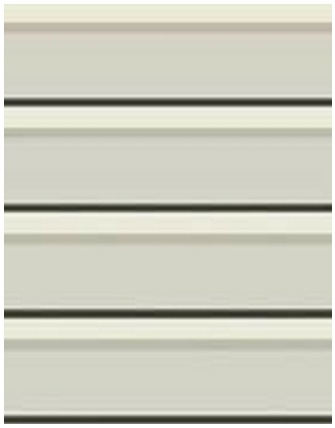
APPROVABLE

- Materials for new construction should be consistent with those at other buildings within the property, block and historic district. Consideration should be given to the pattern of development of the lot.
- Wood siding may be tongue and groove, shiplap, novelty or other compatible type. Board and batten may also be appropriate for use on accessory buildings; it is rarely used on primary buildings.
- Stone is an appropriate material that can be incorporated into new construction. Stone patterns, sizes and color should be similar to those found at the property or in historic buildings in the districts.
- Cementitious siding (smooth finish) of an appropriate profile may be used at new construction of stand-alone primary buildings, garages and other accessory buildings. Masonry bonding patterns, sizes and color should be similar to those found at the property or in historic buildings in the historic district and typical of structures of the same type, age and location.

AVOID

- Exterior insulation finish systems (also known as EIFS or Dryvit), metal and vinyl siding, concrete block, imitative brick or stone or gravel aggregate materials are discouraged as wall materials.





Cementitious siding in a smooth finish (top) is more appropriate and sustainable for new construction than vinyl siding (below).

Windows

- Windows in additions to existing buildings are to match or complement the proportion, shape, pattern, size, details and profile of the windows in the historic building. If the historic windows are wood, the windows of the addition may be wood, vinyl-clad wood or aluminum-clad wood. If the historic windows are steel, the windows of the addition should be steel or other compatible metal. All windows in new additions should be of a profile similar to the windows in the historic building.
- Windows in new construction should be similar to their counterparts within the block or historic district. These windows may be wood, vinyl clad wood, metal clad wood, or metal with a profile similar to the windows in the historic house.
- New windows may have a simpler window pane pattern than their historic counterparts; for example, if the historic windows are 6/1, then 1/1 windows of the same overall size may be used.
- Clear glass should be used in all windows. Reflective, tinted, patterned or sandblasted glass in windows is generally not appropriate or permitted. Patterned, leaded or colored glass can be appropriately used in transoms and sidelights when established by the architectural style of the building or when supported by historic documentation for a specific property or structure.
- Thermal pane (also known as insulate glass) windows are acceptable for additions or new construction. When used, these should have true 'divided' lights.





Windows for new construction should be of wood (left) or aluminum clad wood with baked enamel finishes (center and right).

NOT APPROVABLE

- Windows constructed entirely of clear or anodized aluminum, and windows constructed entirely of vinyl are discouraged unless supported by historic documentation for a specific property or structure. Muntins sandwiched between layers of glass in thermal windows, snap-on muntins, and surface-applied muntins should not be used.

IMPROVING ENERGY EFFICIENCY IN NEW CONSTRUCTION

GUIDELINE:
New features to improve energy efficiency are appropriate as long as their installation does not detract from the historic appearance of the property or district.

JUSTIFICATION - DESIGN:
Contemporary energy features should be placed out of public view and not to detract from the historic character of a building or district.

JUSTIFICATION - SUSTAINABILITY:
The installation of alternative energy sources where practical and economical, are encouraged to conserve energy and aid sustainability efforts.

The practical applications of alternative energy methods continues to progress, and the cost-benefit ratios of applying this technology to older homes is expected to become more attractive in coming years. In particular, the use of solar panels and solar shingles is growing in popularity. Geothermal heat pumps, also known as ground-source heat pumps, are also gaining acceptance and this technology uses the earth's constant temperature, rather than outdoor air, as an exchange medium.

APPROVABLE

Solar panels

- To supplement a building's use of electricity, solar panels are encouraged. These should be added to the rear roof lines, or freestanding in rear yards where they are not in public view.





Left: an appropriate location for solar panels, out of public view and screened in a rear yard; right: solar panels should not be sited on readily visible rooflines.



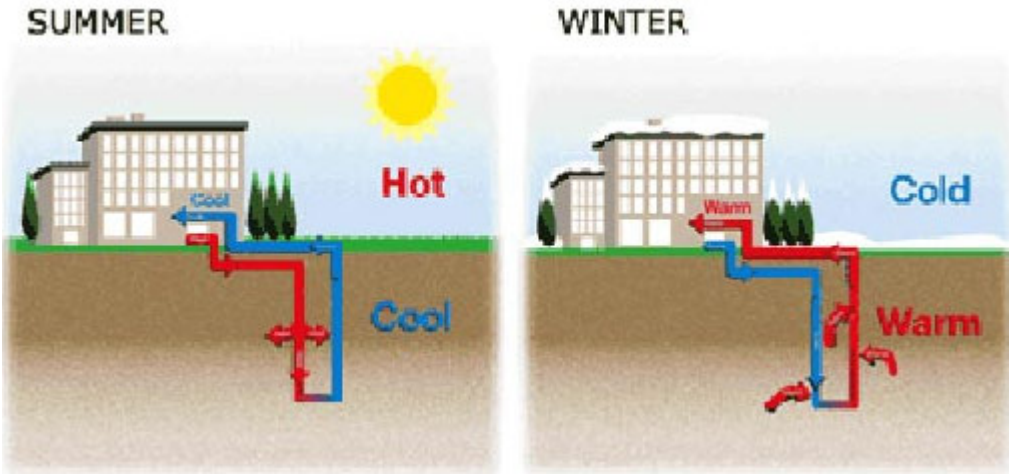
Appropriately placed solar panels (left) and solar shingles (right) at rear roof lines.



- Southern exposures receive sunlight during the entire day, making them the ideal location for solar panels or shingles. However, they are only appropriate on north-facing dwellings, where they may be installed on the rear (south-facing) roof.
- South-facing dwellings are encouraged to consider free-standing solar panels installed in a back yard, out of public view.

Geothermal

- Geothermal heating and cooling systems can save 20-70% of energy costs, depending on the season. Installation of such a system, involving drilling of holes in the ground, does not effect the exterior of a building and offers significant energy savings.



Geothermal systems use the constant temperature of the earth to exchange hot and cold air.

Wind Turbines

- Due to the current size and appearance of wind turbines, this technology is not appropriate for the city's residential historic districts. The HHZC may reconsider this approach if sufficient advances are made in this technology to ensure compatibility with historic buildings and neighborhoods.

APPENDIX A

DEFINITIONS

The following terms are used throughout these Standards and Guidelines and they also may be found in the Harriman Municipal Code, 2010, Chapter 59—Zoning and Planning Code, Article II. Definitions:

ACCESSORY BUILDING means a subordinate building or a portion of the main building, the use of which is located on the same lot and is incidental to the dominant use of the main building or premises.

ADDITION or EXPANSION means an increase in floor area of a building, or a modification to the roof line of a building, such as the construction of a dormer, that increases the amount of floor space devoted to human use or occupancy.

ALLEY means a public right-of-way that normally affords a secondary means of access to abutting property.

ALTERATION means any change in size, shape, character, occupancy or use of a building or structure.

Major Alteration means an alteration, which affects the historic, cultural, or architectural integrity, interpretability, or character of a building, structure, site or district. Generally includes the kind of work which is normally done with the aid of a professional drafter or professional quality plans.

Minor alteration means an alteration, which does not significantly affect the historic, cultural, or architectural integrity, interpretability, or character or a building, structure, site or district. Generally includes the kind of work, which is normally done without the aid of a professional drafter or professional quality plans.

APPROPRIATE means typical of the historic architectural style, compatible with the character of the historic district, and consistent with these preservation criteria.

ARCHITECTURAL SHINGLES means composition asphalt roof shingles that are heavier weight and are irregularly sized that resemble the random textured look of wood shingles.

ARCHITECTURAL STYLE means a category of architecture of similar buildings distinguished by similar characteristics of construction, design, materials, etc. Typical styles in Harriman include Vernacular, Classical Revival, Craftsman, Queen Anne and Mission.

AWNING means a fixed shelter of any material, and of any length, not supported by a column or posts from the ground and attached to a building.

BALCONY means a platform that projects from the exterior wall of a building above the ground floor, which is exposed to the open air, has direct access to the interior of the building, and is not supported by posts of columns extending to the ground.

BOARD AND BATTEN means a type of wall cladding where applied boards are closely spaced, usually placed vertically, the joints of which are covered by narrow wood strips.

BRIDGE means a structure that spans over a depression or waterway; typically carries a transportation way such as a footpath, road or railway.

BUILDING FAÇADE means the exterior elevation of a building, extending from grade to the top of the eaves, wall, or parapet, extending the entire length of the building and fronting on public or private streets.

CANOPY means any structure other than an awning, made of cloth, metal, or other materials with a frame either attached to, or projecting from, a building, and carried by a frame supported by the ground or sidewalk.

CERTIFICATE OF APPROPRIATENESS (CA) means the official document issued by the Historic Harriman Zoning Commission approving any application for permission to construct, erect, demolish, relocate, reconstruct, restore or alter any structure designated by the authority of this chapter.

CHARACTER means attributes, qualities and features that make up and distinguish a particular place or development and give such a place a sense of definition, purpose and uniqueness.

CHARACTER-DEFINING means those architectural materials and features of a building that define the historic nature or character of the building. Such elements may include the form of the building, exterior cladding, roof materials, door and window design, exterior features such as canopies and porches, exterior and interior trim, etc.

COLUMN means a slender, vertical element that supports part of a building or structure.

COMMISSION means the Harriman Historic Zoning Commission of the City of Harriman, Tennessee.

COMPATIBILITY means the characteristics of different uses or activities that permit them to be located near each other in harmony and without conflict.

CONSTRUCTION means the act or business of building a structure or part of a structure.

CONTRIBUTING STRUCTURE means a structure that retains its essential architectural integrity of design and whose architectural style is typical of or integral to a historic district.

CORNER SIDE FAÇADE means a façade facing a side street.

CORNER SIDE FENCE means a fence adjacent to a side street.

CORNER SIDE YARD means a side yard abutting a street.

CORNICE means a horizontal projecting band that caps a building parapet or roof.

CONTRIBUTING BUILDING/STRUCTURE/SITE means a building or site which reinforces the visual integrity or interpretability of a historic district. A contributing building is not necessarily "historic" (50 years old or older). A contributing building may lack individual distinction but may add to the historic district's status as a significant and distinguishable socio-cultural entity.

COPING means a protective cap, top or cover of a wall or parapet, often of stone, terra cotta, concrete, metal or wood. This may be flat, but commonly is sloping to shed water.

DEMOLITION means an act or process that destroys or razes a structure or its appurtenances in part or in whole, or permanently impairs its structural integrity, including its ruin by neglect of necessary maintenance and repairs.

DEMOLITION BY NEGLECT means the act or process of neglecting the maintenance and repairs of a building, thus allowing the building to deteriorate to the point where demolition may be necessary.

DIRECTOR means the Development Services Director, Planning Director, or Public Works Director, as context dictates.

DISPLAY WINDOW means a large area of glass within a storefront opening.

DISTRICT: See "Zoning District."

EAVE means the projecting lower edges of a roof, overhanging the wall of a building.

ENTRANCE AREA means the point of entry into a building or storefront to provide weather protection and protection from the outward swing of a door. Made up of the following components: door, transom window (above the door), sidelights or display windows and floor area.

ENTRY means a door, gate or passage used to enter a building.

ERECT means to construct or build.

FASCIA means a wide, flat horizontal band or molding on a wall surface with little projection.

FENCE means an artificially constructed barrier of any material, or combination of materials, erected to enclose, screen or separate areas.

FENESTRATION means the proportion and size of window and door openings and the rhythm, order and arrangement on a building façade.

FLASHING means sheet metal or other flexible material formed to prevent water from entering a building or structure at joints or intersections, such as where a roof intersects a wall or chimney.

HARDSCAPE means portions of the exterior environment of a site, district, or region that is constructed with masonry or other impermeable materials, including sidewalks, driveways or patios.

HEIGHT means the vertical distance from the average grade level to the average level of the roof.

HIGH STYLE means the more ornately detailed version of a particular architectural style; used in contrast to simpler examples, both from different periods or the same period; the opposite of vernacular.

HISTORIC means important in history. Distinguished from "historical," which conveys the sense of things or events related to the past, while "historic" conveys a sense of importance.

HISTORIC BUILDING means a building important because of its association with a historic event or with the history of a locality.

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HISTORIC DISTRICT means a definable geographic area that contains a number of related historic structures, features or objects united by past events or aesthetically by plan or physical development. These historic districts may or may not have been designated on a state level or included in the National Register of Historic Places.

HISTORIC FABRIC means those elements and features of a historic building that are original and contribute to the integrity of the historic building.

HISTORIC PRESERVATION OFFICER means the chief staff person responsible for preservation in the municipality or at the state level.

INFILL CONSTRUCTION means new construction, or the move of existing structures, on vacant lots or replacement of blighted or thoroughly deteriorated structures within existing neighborhoods or developments.

IN KIND means to replace existing materials or features with materials of identical appearance and/or composition.

INTEGRITY means a measure of the authenticity of a property's historic identity, evidenced by the survival of physical characteristics that existed during the property's historic period in comparison with its unaltered state.

INTERIOR SIDE FACADE means a facade not facing a street or alley.

INTERIOR SIDE FENCE means a fence not adjacent to a street or alley.

INTERIOR SIDE YARD means a side yard not abutting a street or alley.

KICKPLATE means a metal plate (usually brass) attached to the bottom of a door to protect the door from damage.

LANDMARK means an individual structure, building, site or monument which contributes to the historical, architectural or archeological heritage of the City.

LANDSCAPE means the whole of the exterior environment of a site, district, or region, including landforms, trees, plants, rivers and lakes and the built environment.

LANDSCAPE ELEMENTS means those elements that contribute to the landscape such as exterior furniture, decks, patios, outdoor lighting and other elements that may be located in conjunction with a landscape.

LINTEL means a horizontal structural element (wood framing or a steel beam), which spans a door, window or cased opening and supports the wall above the opening.

LOT means a parcel of land having fixed boundaries and designated on a plat, or by a metes and bounds description, and of sufficient size to meet minimum use regulations and development standards.

MAIN BUILDING means the primary historic building in an individual historic site.

MAINTENANCE means conformance of a building, and its facilities, to the code under which the building was constructed or to another applicable maintenance code.

MODIFY or MODIFICATION means to make changes to an existing structure.

MORTAR means the materials used to fill the joints of masonry.

MORTAR JOINT means masonry joint between masonry units, such as brick or stone, filled with mortar to transfer the load, provide a bond between the units and keep out the weather.

MORTAR MIX means the chemical composition (and proportions of these ingredients) of the mortar used in masonry.

MOVING means the relocation of a structure on its site or to another site.

NATURAL FEATURES means features or elements of the exterior environment that are substantially unaltered by human activity such as landforms, trees, plants, rivers and lakes.

NEW CONSTRUCTION means the act of adding to an existing structure or erecting a new principal or accessory structure or appurtenances to a structure, including but not limited to buildings, extensions, outbuildings, fire escapes and retaining walls.

NON-CONTRIBUTING (BUILDING/STRUCTURE/SITE) means a building, structure or site that does not add to the historic significance of a property or district, and which detracts from the visual integrity or interpretability of a historic district.

ORDINARY MAINTENANCE AND REPAIR means any work meant to remedy damage or deterioration of site elements or a structure or its appurtenances that involves no change in materials, dimensions, design, configuration, texture, surface coating or visual appearance.

ORNAMENTATION means any decorative objects or series of objects, which are added to the basic structure to enhance its visual appearance.

PARAPET means the part of an exterior wall, which extends entirely above the roof.

PARKING LOT means any off-street, unenclosed, ground-level facility used for the purpose of temporary storage of vehicles, which cannot exceed seven days. Enclosed parking facilities, such as multi-story garages or parking facilities constructed within the confines of a larger building or structure, or parking facilities associated with single-family and two-family residential developments are not included within this definition.

PARKING STRUCTURE means a structure (building), which houses parked vehicles.

PERGOLA means an open grid, supported by rows of columns, for growing vines; most often a series of wood beams supporting narrow boards supported by wood columns; may be attached to a building or covering a garden or walkway.

PORCH means a covered and floored area of a building, especially a house, that is open at the front and usually the sides.

PORTE-COCHERE means a covered or uncovered platform that projects from the exterior wall of a building, has direct access to the street level of the building, and has no roof supporting walls on three sides, and which may be supported by posts.

PRESERVATION means the adaptive use, conservation, protection, reconstruction, restoration, rehabilitation or stabilization of sites, buildings, districts, structures or monuments significant to the heritage of the people of Tennessee . The following definitions shall apply:

A. *Adaptive use*: The restrained alteration of an historical or architectural resource to accommodate uses for which the resource was not originally constructed, but in such a way so as to maintain the general historical and architectural character.

B. *Conservation*: In terms of historical preservation, the sustained use and appearance of a structure or area, maintained essentially in its existing state.

C. *Protection:* In terms of historical preservation, the security of a resource as it exists through the establishment of the mechanisms of this chapter.

D. *Reconstruction*: In terms of historical preservation, the act or process of duplicating the original structure, building form and materials by means of new construction based on documentation of the historic condition.

E. *Rehabilitation*: See "Rehabilitation."

F. *Restoration*: The process of accurately recovering all, or part of the form and detail of a resource and its setting, as it appeared at a particular period of time, by means of the removal of later work and the replacement of missing earlier work.

G. *Stabilization*: The process of applying measures designated to halt deterioration and to establish the structural stability of an unsafe or deteriorated resource while maintaining the essential form as it presently exists without noticeably changing the exterior appearance of the resource.

PROPORTION means the dimensional relationship between one part of a structure or appurtenance and another. Facade proportions involve relationships such as height to width, the percent of the facade given to window and door openings, the size of these openings, and floor-to-ceiling heights. Often described as a ratio, proportions may be vertical (taller than wide), horizontal (wider than tall) or non-directional (equally tall and wide).

PROTECTED means an architectural or landscaping feature that should be retained and its' historic appearance maintained, as near as practical, in all aspects.

RAFTER means any of the parallel beams that support a roof.

RAMP means a sloped surface that makes a transition between two different levels; typically used in provide access to a building or raised surface for those persons with disabilities.

REAL ESTATE SIGN means a sign that advertises the sale or lease of an interest in real property.

RECONSTRUCTION means the act or process of duplicating the original structure, building form and materials by means of new construction.

REHABILITATION means the act or process of making possible a compatible use for a property thru repair, alterations and additions, while preserving those portions or features, which convey its historic, cultural or architectural values.

RENOVATION means the act or process of repairing and/or changing an existing building for new use, or to make it functional; this may involve replacement of minor parts.

REPAIR means fixing a deteriorated part of a building, structure or object, including mechanical or electrical systems or equipment, so that it is functional; may involve replacement of minor parts.

REPLACEMENT means to interchange a deteriorated element of a building, structure or object with a new one that matches the original element.

REPLICATE means to copy or reproduce an historic building or element.

REPOINTING means repairing existing masonry joints by removing defective mortar and installing new mortar.

RESTORATION means the act or process of accurately depicting the form, features and character of a project as it appeared at a particular period of time.

RHYTHM means a regular pattern of shapes including but not limited to windows, doors, projections, and heights within a building, structure, or monument, or a group of the same.

RIGHT OF WAY means the land used for a transportation corridor, such as a street, alley or railroad; typically owned and maintained by the government.

SCALE means the harmonious proportions of parts of a building, structure or monument to one another and to the human figure.

SCREENING means construction or vegetation whose essential function is to separate, protect, conceal, or shield from view but not support.

SETBACK means the required distance between every structure and the lot line of the lot on which it is located. See “Yard,” “Yard, Corner Side,” “Yard, Front,” “Yard, Rear,” and “Yard, Side.”

SHUTTER means a hinged panel that closes a window or door opening in addition to the standard door or window, may be solid, or with cutouts or ventilation slats.

SIGN means any structure or part thereof or any device, permanently or temporarily attached to, painted on, supported by, or represented on a building, fence, post, or other structure which is used or intended to be used to attract attention. “Sign” shall not include flag, pennant, or insignia of any nation, association of nations, State, City, or other political unit.

SIGNIFICANT CHARACTERISTICS of HISTORICAL or ARCHITECTURAL RESOURCES: Those characteristics that are important to or expressive of the historical, architectural or cultural quality and integrity of the resource and the setting and includes but is not limited to building material, detail, height, mass, proportion, rhythm, scale, setback, setting, shape, street accessories, and workmanship. The following definitions shall reply.

A. *Building Materials*: The physical characteristics that create the aesthetic and structural appearance of the resource including but not limited to a consideration of the texture and style of the components and their combinations such as brick, stone, shingle, wood, concrete or stucco.

B. *Detail*: Architectural aspects that, due to particular treatment, draw attention to certain parts or features of a structure.

C. *Height*: The vertical distance from the average grade level to the average level of the roof.

D. *Proportion*: The dimensional relationship between one part of a structure or appurtenance and another.

E. *Rhythm*: See "Rhythm."

F. *Scale:* The harmonious proportion of parts of a building, structure or monument to one another and to the human figure.

G. *Setting*: The surrounding buildings, structures, monuments, or landscaping that provides visual aesthetics or auditory quality to historic or architectural resources.

H. *Shape:* The physical configuration of structures of building or monuments and their component parts, including but not limited to roofs, doors, windows, and facades.

I. *Street Accessories*: Those sidewalks or street fixtures that provide cleanliness, comfort, direction, or safety and are compatible in design to their surroundings and include but are not limited to garbage receptacles, benches, signs, lights, hydrants and landscaping, including but not limited to trees, shrubbery and planters.

SILL means the horizontal bottom member of a window frame or other frame.

SITE means the land on which a building or other feature is located.

SOFFIT means the exposed undersurface of any overhead component of a building, such as an arch, balcony, beam, cornice or roof overhang.

STAND ALONE means a building or structure that is separate from, and not attached to any existing or adjacent structure or building.

STOREFRONT means a ground level façade of a commercial building with display windows with minimal mullions or columns; this is often with a recessed entrance. Storefronts were typically provided at retail establishments.

STOREFRONT COLUMN means slender vertical elements within the storefront opening that help support the lintel.

STORY means the space between two floors of a structure, or between a floor and roof.

STREETFRONT means the environment encompassing a street or road within one block, and includes buildings, landscaping, street furniture and signage.

STRUCTURE means anything constructed or erected, the use of which requires permanent location on the ground or which is attached to something having a permanent location on the ground. This includes but not limited to main and accessory buildings, advertising signs, billboards, poster panels, fences, walls, driveways, sidewalks and parking areas.

SYNTHETIC MATERIALS means building materials that are manufactured with man-made or artificial components as opposed to materials derived from nature sources, such as plants, trees or earth.

TRANSOM means a glass panel above a horizontal frame bar (transom bar) atop a display window or door, used to allow greater light into an interior room or building interior.

TRELLIS means an open grating or latticework of either wood or metal placed vertically on a site and typically supported by wood columns, and often used as a screen and usually supporting climbing vines.

UPPER FAÇADE means the mostly solid part of the wall above the display window. May be a plain surface on a one-story building, or contain rows of windows defining the number and location of floors in a multi-story building, and may include decorative bands or patterns.

VERNACULAR means a building built without being designed by an architect or someone with similar formal training; often based on traditional or regional forms; not high style.

VISIBILITY FROM A PUBLIC WAY means able to be seen from any public right-of-way, or other place, whether privately or publicly owned, upon which the public is regularly allowed or invited to be.

WALL means a structure or hedgerow that provides a physical barrier, typically constructed of a solid material such as stone or rock.

YARD: means an open space at grade, other than a court or plaza, between a structure and the adjacent lot lines, unoccupied and unobstructed by any portion of a structure from the ground upward, except where otherwise specifically provided in this chapter. In measuring a yard for the purpose of determining the depth of the front yard, rear yard or side yard, the minimum horizontal depth between the lot line and a building or structure shall be used.

YARD, CORNER SIDE*:* means a side yard on a corner lot which abuts a street.

YARD, FRONT:

A. An open area facing and abutting a street and extending across the front of the lot between the side lot lines and having a minimum horizontal depth measured from the street equal to the depth of the minimum front yard specified for the district in which the lot is located. The

required front yard line represents the line in front of which no building or structure may be erected, other than steps, unenclosed porches, canopies, marquees and carports as may be permitted in this chapter.

B. In commercial or industrial uses, the front yard shall always be adjacent to an expressway or arterial if the lot abuts such a facility.

YARD, REAR*:* An open area that extends across the rear of the lot between side lot lines and which has a minimum depth measured from the rear lot line as specified for the zoning district in which the lot is located. Steps, unenclosed porches and unenclosed balconies may extend into the rear yard as may be permitted in this chapter. On both corner lots and interior lots, the rear yard shall, in all cases, be at the opposite end of the lot from the front yard.

YARD, SIDE*:* An open area which extends between the required front yard and the required rear yard, and has a minimum width measured from the side lot line as specified for the zoning district in which the lot is located. Steps may extend into a side yard as may be permitted in this chapter.

ZONING DISTRICTS*:* A section of the City designated in the text of this chapter and delineated on the Official Zoning Districts Map, for which land use requirements, and building and development standards are prescribed.

APPENDIX B

Secretary of the Interior's *STANDARDS FOR THE TREATMENT OF HISTORIC PROPERTIES*, 1995

These Secretary of the Interior's Standards have been developed to guide work undertaken on historic structures; the intent is to assist with the long-term preservation of a property's significance through the preservation, restoration, rehabilitation or reconstruction of historic materials and features. These Standards apply to approaches, treatments, and techniques that are consistent with the Preservation, Restoration, Rehabilitation and Reconstruction of historic properties, and examples are provided for recommended work. Examples that adversely affect the historic character of a historic property are listed as 'not recommended'. These Standards are reproduced here for use by property owners in determining the appropriate treatment for a historic property.

PRESERVATION is defined as the act or process of applying measures necessary to sustain the existing form, integrity and materials of an historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction. New exterior additions are not within the scope of this treatment; however, the limited and sensitive upgrading of mechanical, electrical and plumbing systems and other code-required work to make the properties functional is appropriate within a preservation project.

- A property will be used as it was historically, or be given a new use that maximizes the retention of distinctive materials, features, spaces and spatial relationships. Where a treatment and use have not been identified, a property will be protected and, if necessary, stabilized until additional work may be undertaken.
- The historic character of a property will be retained and preserved. The replacement of intact or repairable historic materials or alteration of features, spaces and spatial relationships that characterize a property will be avoided.
- Each property will be recognized as a physical record of its time, place and use. Work needed to stabilize, consolidate and conserve existing historic materials and features will be physically and visually compatible, identifiable upon close inspection, and properly documented for future research.
- Changes to a property that have acquired historic significance in their own right will be retained and preserved.
- Distinctive materials, features, finishes and construction techniques or examples of craftsmanship that characterize a property will be preserved.
- The existing condition of historic features will be evaluated to determine the appropriate level of intervention needed. Where the severity of deterioration requires repair or limited replacement of a distinctive feature, the new material will match the old in composition, design, color and texture.

- Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
- Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.

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 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. The limited and sensitive upgrading of mechanical, electrical and plumbing systems and other code-required work to make properties functional is appropriate within a restoration project.

- A property will be used as it was historically or be given a new use which reflects the property's restoration period.
- Materials and features from the restoration period will be retained and preserved. The removal of materials or alteration of features, spaces and spatial relationships that characterize the period will not be undertaken.
- Each property will be recognized as a physical record of its time, place and use. Work needed to stabilize, consolidate and conserve materials and features from the restoration period will be physically and visually compatible, identifiable upon close inspection, and properly documented for future research.
- Materials, features, spaces and finishes that characterize other historical periods will be documented prior to their alteration or removal.
- Distinctive materials, features, finishes and construction techniques or examples of craftsmanship that characterize the restoration period will be preserved.
- Deteriorated features from the restoration period will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture and where possible, materials.
- Replacement of missing features from the restoration period will be substantiated by documentary and physical evidence. A false sense of history will not be created by adding conjectural features, features from other properties, or by combining features that never existed together historically.
- Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
- Archeological resources affected by a project will be protected and preserved in place. If such resources should be disturbed, mitigation measures will be undertaken.

- Designs that were never executed historically will not be constructed.

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, cultural or architectural values.

- A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces and spatial relationships.
- The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces and spatial relationships that characterize a property will be avoided.
- Each property will 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 elements from other historic properties, will not be undertaken.
- Changes to a property that have acquired historic significance in their own right will be retained and preserved.

  •Distinctive materials, features, finishes and construction techniques or examples of craftsmanship that characterize a property will be preserved.
- Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture and where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.
- Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
- Archeological resources will be protected and preserved in place. If such resources should be disturbed, mitigation measures will be undertaken.
- New additions, exterior alterations or related new construction will not destroy historic materials, features and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion and massing to protect the integrity of the property and its environment.
- New additions and adjacent or related new construction will 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.

RECONSTRUCTION is defined as 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 and in its historic location.

- Reconstruction will be used to depict vanished or non-surviving portions of a property when documentary and physical evidence is available to permit accurate reconstruction with minimal conjecture and such reconstruction is essential to the public understanding of the property.
- Reconstruction of a landscape, building, structure, or an object in its historic location will be preceded by a thorough archeological investigation to identify and evaluate those features and artifacts which are essential to an accurate reconstruction. If such resources should be disturbed, mitigation measures will be undertaken.
- Reconstruction will include measures to preserve any remaining historic materials, features and spatial relationships.
- Reconstruction will be based on the accurate duplication of historic features and elements substantiated by documentary or physical evidence rather than on conjectural designs or the availability of different features from other historic properties. A reconstructed property will re-create the appearance of the non-surviving historic property in materials, design, color and texture.
- A reconstruction will be clearly identified as a contemporary re-creation.
- Designs that were never executed historically will not be constructed.

APPENDIX C - BIBLIOGRAPHY AND SOURCES

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