

# Borough of Media

Historic Architectural Review Board

## DESIGN GUIDELINES





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# TABLE OF CONTENTS

1. What is the Purpose of the Design Guidelines?.....	4
2. Protecting Media’s Historic Resources.....	6
3. Permit Process.....	13
4. General Guideline Principles.....	16
5. Guidelines for Restoration, Replacement and Repairs.....	18
6. Guidelines for Additions and New Construction.....	30
7. Working with Contractors, Architects and Other Building Professionals.....	34
8. Guidelines for Preservation: Preventive Maintenance.....	36
9. Resources for Property Owners.....	41



# 1. WHAT IS THE PURPOSE OF THE DESIGN GUIDELINES?

The Borough of Media is valued for its many assets by those who live and work here: a lively downtown, attractive residential neighborhoods, the seat of county government, arts and cultural venues. Schools, stores, public transportation, restaurants, parks, religious institutions, professional offices and services are all within convenient walking distance to residents and visitors alike.

The physical character of the Borough underpins all these assets and is, in itself, an intrinsic part of Media’s appeal as “Everyone’s Hometown”. And a significant part of this manmade environment is, of course, historic in nature. Well-built and attractive Victorian houses, rows of sturdy historic storefronts, and monumental religious, governmental and institutional landmarks all contribute to Media’s appeal.

In order to protect these assets from the loss of their historic character, the Media Borough Council has created three historic districts which not only protect the structures within them, but help stabilize property values throughout the Borough.

Historic structures within the districts are protected by law from demolition or insensitive alterations. Property owners must first receive a permit known as a “Certificate of Appropriateness” (see Section 2) in order to make changes (including demolition in whole or in part) of a protected structure(s) within a Media historic district. The Borough Council will approve, disapprove, or amend a “Certificate of Appropriateness” based, in part, on the recommendations of the Historic Architectural Review Board (hereafter known as the “HARB”).

The HARB strives to be “user-friendly”, a resource of advice and information for both property owners and the Borough Council.



The HARB bases its recommendations on the professional expertise of its members, and is also informed by Design Guidelines (hereafter known as the “Guidelines”) which encapsulate time-tested and widely accepted standards for the maintenance and repair of, alterations and additions to, or demolition of historic properties. The Guidelines provide both property owners and the HARB with acceptable norms so that recommendations for a Certificate of Appropriateness are not arbitrary but adhere to consistent principles.

#### THE GUIDELINES EXPLAIN:

- The intent and obligations of the historic district protections;
- How to identify the historic character-defining features of a property;
- The procedures for building project approvals;
- The guiding principles for rehabilitation, repair, and maintenance projects;
- The acceptable treatments for specific historic building materials such as brick, stone, roofing, wood, and metals;
- Recommendations for making alterations, adaptations, and additions that respect the historic appearance of the properties.

It is important to remember that design guidelines are a tool for property owners, design professionals, contractors, the HARB, and Borough Council. These guidelines help manage change and protect historic and architectural resources within a historic district. Guidelines are not meant to be rigid restrictions; they are meant to be used as guiding principles

that when taken into consideration, will result in preserving the distinct character of the historic district.

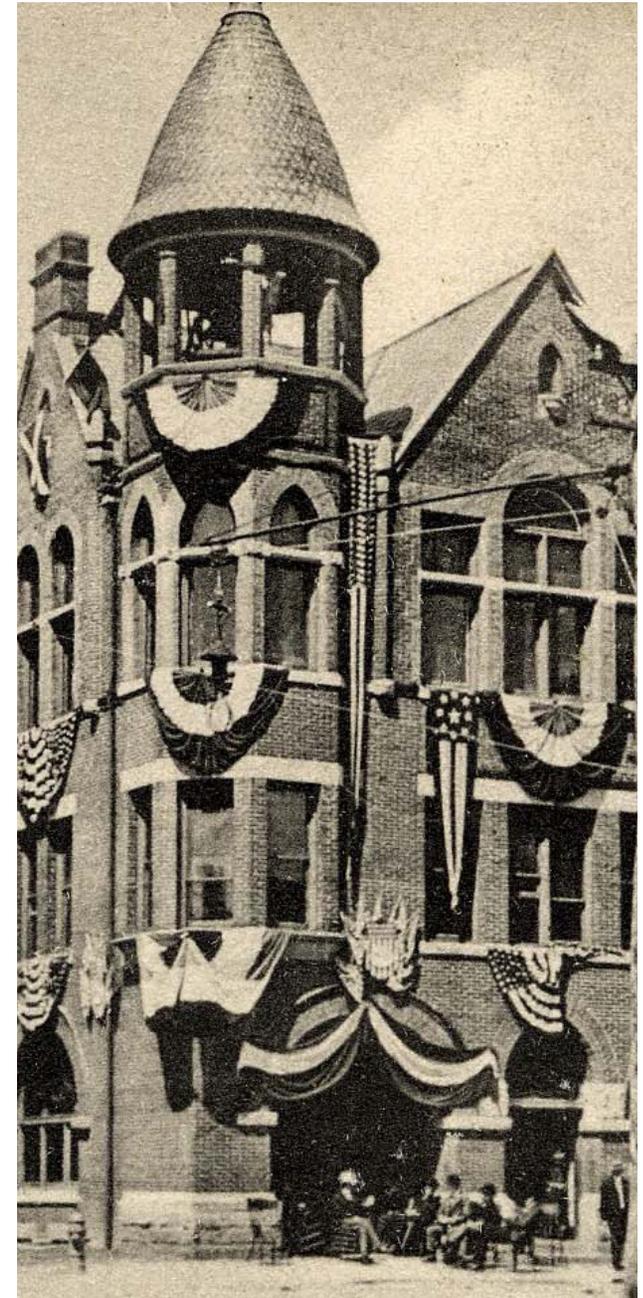
Design guidelines are also a means to educate the community and prevent hasty decisions about altering or demolishing historic buildings by identifying significant features, outlining preferred options, and specifying appropriate treatments. Guidelines are an important tool for the HARB and, along with local planning and zoning ordinances, can help in making reasonable and consistent decisions.

#### DESIGN GUIDELINES DO:

- Serve as a base for objective decision-making
- Protect existing architectural character
- Improve the quality of exterior physical changes
- Prevent incompatible new construction
- Increase public awareness of architectural quality
- Protect the value of investment in a historic structure

#### DESIGN GUIDELINES DO NOT:

- Regulate growth
- Restrict the uses of a property (that is the function of zoning regulations)
- Control interior changes to historic buildings



Former Media Borough Hall, circa 1900

## 2. PROTECTING MEDIA'S HISTORIC RESOURCES

Although Media has many properties that can be considered historic, only ones “officially” designated as such by the Media Borough Council are protected by local law in one of two ways: by the creation of Historic Districts (via Ordinance No. 638B which is shown as Chapter 183 of the Borough Code) OR inclusion in a Historic Resources Overlay District (via Ordinance No. 1051).

The two designations are different: properties designated as historic in the Overlay District are listed individually and scattered throughout the Borough. The overlay ordinance only regulates the demolition of historic resources.

Historic Districts protect a group of usually contiguous historic properties within certain boundaries. The Historic District ordinance not only regulates demolitions, but also changes to the historic appearance – including alterations and additions – of properties within the districts.

As its name implies the Overlay District is superimposed on the existing zoning map of the borough. Properties listed as historic on the Overlay may not be demolished (specifically, in an amount



The Media Inn, circa 1950

in excess of 25% of the façade or floor area) without first receiving a permit from the Borough Council. The Council will receive recommendations and advice from the HARB and the public on whether or not the property should be allowed to be demolished.

Because it does not regulate changes to the historic appearance of a property, or additions or alterations to a historic property, these Design Guidelines are not applicable to the properties listed in the Overlay District. An address list of properties currently protected under the Overlay District can be found on the Borough Zoning Map.

The Design Guidelines are more applicable to the Historic District ordinance because it empowers Borough Council to “determine whether or not the erection of new buildings or structures on the site, or the reconstruction, alteration, restoration,

demolition or razing of a building, whole or in part, shall have an adverse effect upon the general historic and architectural features which can be seen from a public way only.” The purposes and specifics of the Guidelines are explained in greater detail in the following sections.

Currently Media has three historic districts: the Courthouse Square District, the Providence Friends Meetinghouse District, and the Lemon Street District. (The Borough Council has the ability to add more historic districts in the future.) Here is a synopsis of each.

**THE PROVIDENCE FRIENDS MEETINGHOUSE DISTRICT** includes some of the oldest, surviving structures in Media, dating from the days before Media was founded. In this district is the circa 1750 Thomas Minshall House in which Quakers met for worship before erecting a meetinghouse (pictured) on property across “Great Providence Road”. The existing Friends Meetinghouse dates from 1814. Also in the district is the early, stone house of the Lewis family (in the mid-1900s Marion Lewis preserved and restored the neighboring Minshall House). The historic architecture of the district is typical of early Pennsylvania: stone construction and simple forms. The district boundaries and property addresses are shown on the following page.



Thomas Minshall House

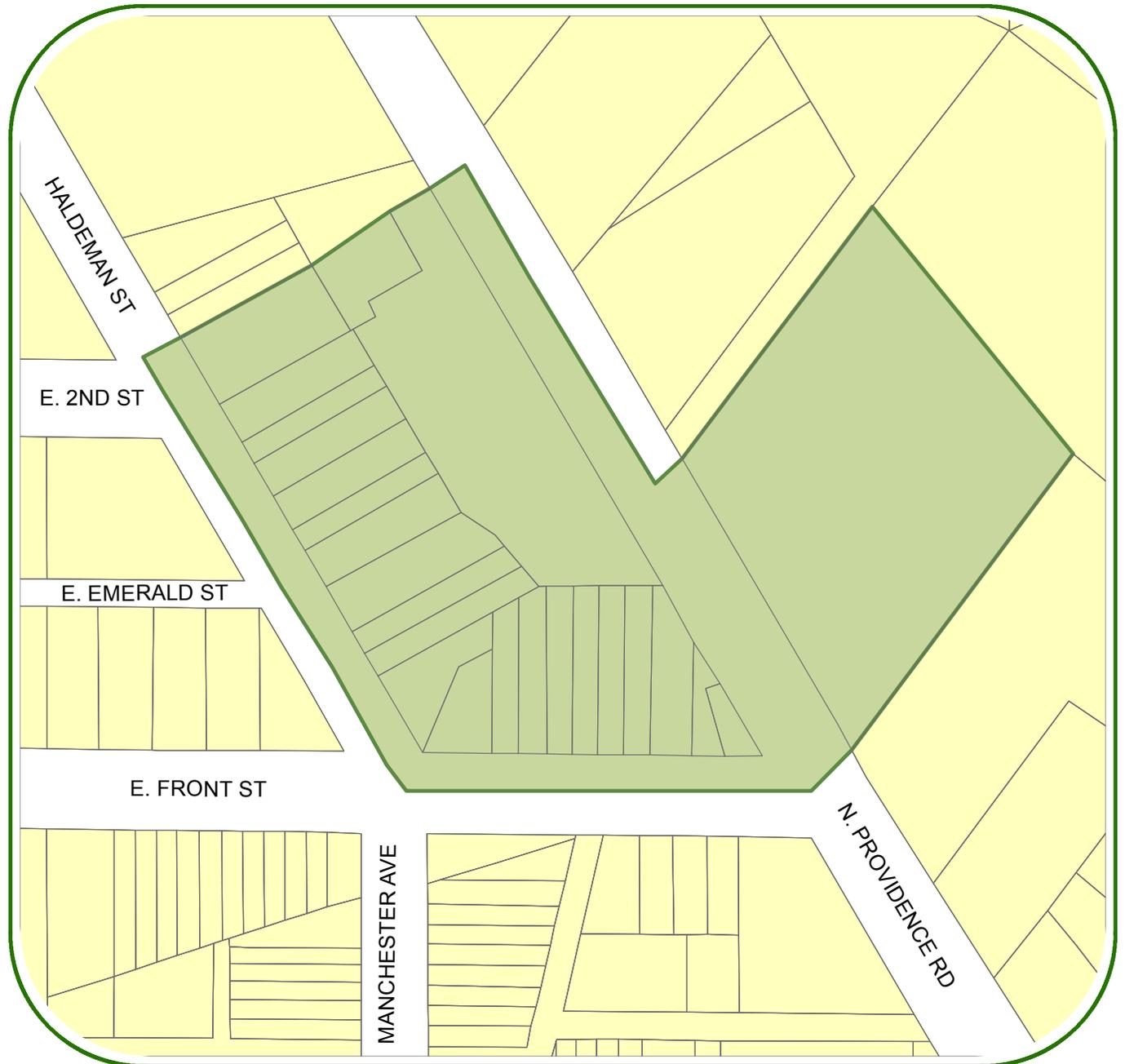


Friends Meetinghouse

THE PROVIDENCE FRIENDS  
MEETINGHOUSE DISTRICT

*District Parcels:*

- 101 Haldeman Street
- 103 Haldeman Street
- 105 Haldeman Street
- 107 Haldeman Street
- 109 Haldeman Street
- 111 Haldeman Street
- 113 Haldeman Street
- 115 Haldeman Street
- 117 Haldeman Street
- 119 Haldeman Street
- 401 E Front Street
- 403 E Front Street
- 405 E Front Street
- 407 E Front Street
- 409 E Front Street
- 411 E Front Street
- 413 E Front Street
- 415 E Front Street
- 417 E Front Street - Minshal House
- 100 N Providence Road
- 105 N Providence Road -  
Providence Friends Meeting



**THE COURTHOUSE SQUARE DISTRICT** centers on Media’s most recognizable structure – the Delaware County Courthouse (pictured, whose current appearance dates primarily from 1913), which is prominently sited on the Courthouse Square that also features several historic monuments and memorials. Along Front Street and facing the square is a row of townhouses which predate the existing courthouse. It is informally known as “Legal Row” because at one time many law offices were located in the three-story, brick rowhouses of that type also common in mid-1800s Philadelphia. Particularly notable is the 1850 Williamson building (218 W. Front Street) which has been variably used during its history as a residence, post office, grocery store, shoe factory and law offices. Also in the district is the Delaware County Institute of Science (pictured), one of the country’s first organizations of its type. It is housed in its 1867, two-story brick building in the Greek Revival style. The district boundaries and property addresses are shown on the following page.



Delaware County Courthouse

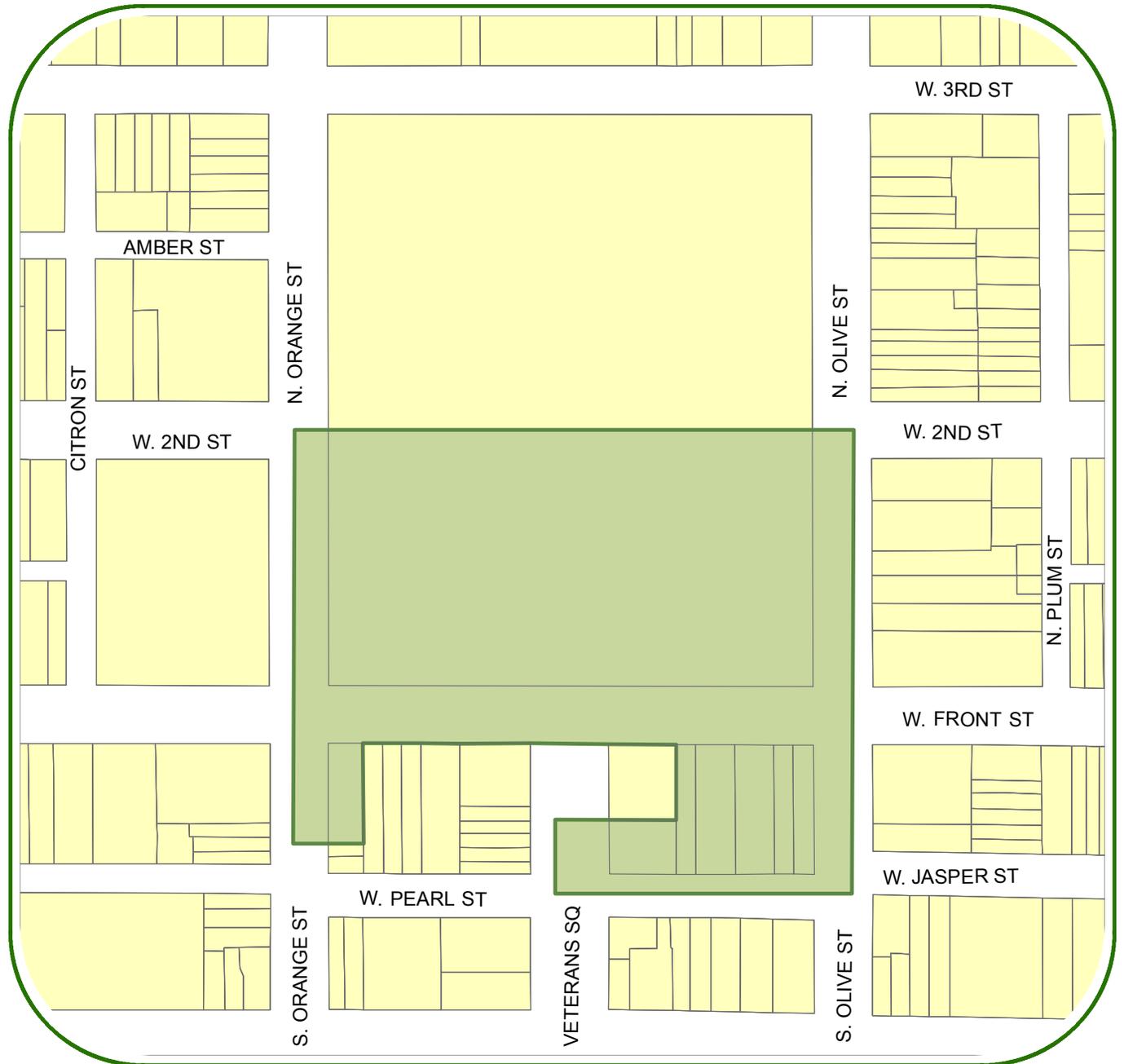


Delaware County Institute of Science

THE COURTHOUSE  
SQUARE DISTRICT

*District Parcels:*

- 218 W Front Street - Williamson House
- 11 Veterans Square - Delaware County Institute of Science
- 100 W Front Street
- 102 W Front Street
- 106 W Front Street
- 110 W Front Street
- 112 W Front Street
- 201 W Front Street - Delaware County Courthouse



**THE LEMON STREET DISTRICT**, despite its name, mostly includes the mid-1800s brick rowhouses along West State Street on the blocks flanking its intersection with Lemon Street. The 3- or 2-story brick townhouses are typical of the 1850s period and are some of the last undisturbed blocks of old Media. The 1855 Brooke Row (404-414 W. State St., pictured) is one of the first residential developments in the Borough. The row on the 300 block of West State dates from the 1860s and includes the Appleton House (#341) home of an early photographer. The first school house (1853) is located around the corner at 8 South Lemon Street. The district boundaries and property addresses are shown on the following page.

**REMEMBER**, if you own property in one of these districts you will need a Certificate of Appropriateness from the Borough before you make changes, including alterations and additions, to your structure. That procedure, the role of the Historic Architecture Review Board and Borough Council, and the Design Guidelines which help guide decisions for appropriate treatments of historic properties are detailed in the following sections.

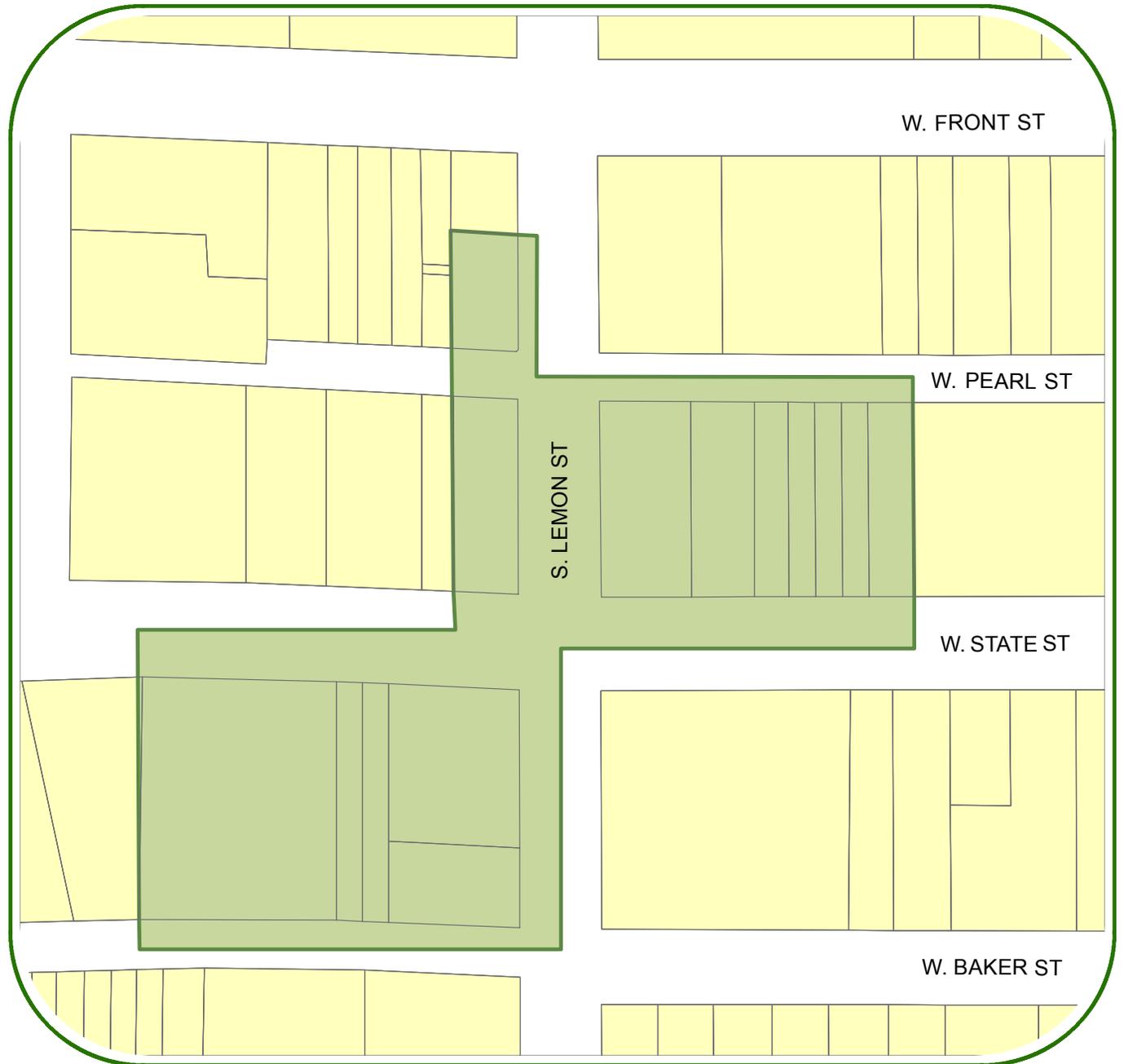


1855 Brooke Row (404-414 W. State St.)

LEMON STREET DISTRICT

*District Parcels:*

- 331 W State Street
- 333 W State Street
- 335 W State Street
- 337 W State Street
- 339 W State Street
- 341 W State Street
- 349 W State Street
- 401 W State Street
- 8 S Lemon Street
- 400 W State Street
- 401 W State Street
- 404 W State Street
- 406 W State Street
- 408 W State Street
- 410 W State Street
- 412 W State Street
- 414 W State Street



# 3.

## PERMIT PROCESS: CERTIFICATE OF APPROPRIATENESS AND WORKING WITH THE HARB

If you own property in one of Media’s local historic districts and intend to make changes – including repairs, rehabilitation, restoration, additions or demolition – to the exterior of a structure(s) that is visible from a public right-of-way, you are required by law to receive a Certificate of Appropriateness (the “Certificate” or COA) before you start any work.

The Certificate will be issued to the applicant by the Media Borough Council, which will be advised by the Historic Architectural Review Board (HARB). The Council may approve, deny, or amend the proposed work described in the property owner’s application.

### Procedures for Obtaining a Certificate of Appropriateness (also see flow chart on next page)

A. An applicant should contact the Borough Building Inspector (contact 610.566.5210 or [jim\\_jeffery@mediaborough.com](mailto:jim_jeffery@mediaborough.com)) for an application for a Certificate of Appropriateness on which the

proposed work will be described. The building inspector will submit the permit application, along with any plans, to the HARB. (Note that in addition to a Certificate, some projects may also require building or zoning permits; review of these are not the role of the HARB.)

B. The HARB will conduct a meeting (see details on next page) with the applicant within 30 days of the application for a Certificate. (Notice of the time and place of the meeting will be given by the Secretary of the Borough of Media to the applicant.)

C. The HARB will, after meeting and considering the plans, advise the Borough Council. If all or parts of the proposed work is not recommended by the HARB, the applicant may still require a certificate from council or may make changes and resubmit the application to the HARB for reconsideration, after which the HARB shall have 30 additional days to submit its recommendation to the Council. During the time of reconsideration, and prior to the issuance of a recommendation by the HARB to the Council, the applicant cannot perform any exterior work that is visible from a public way.

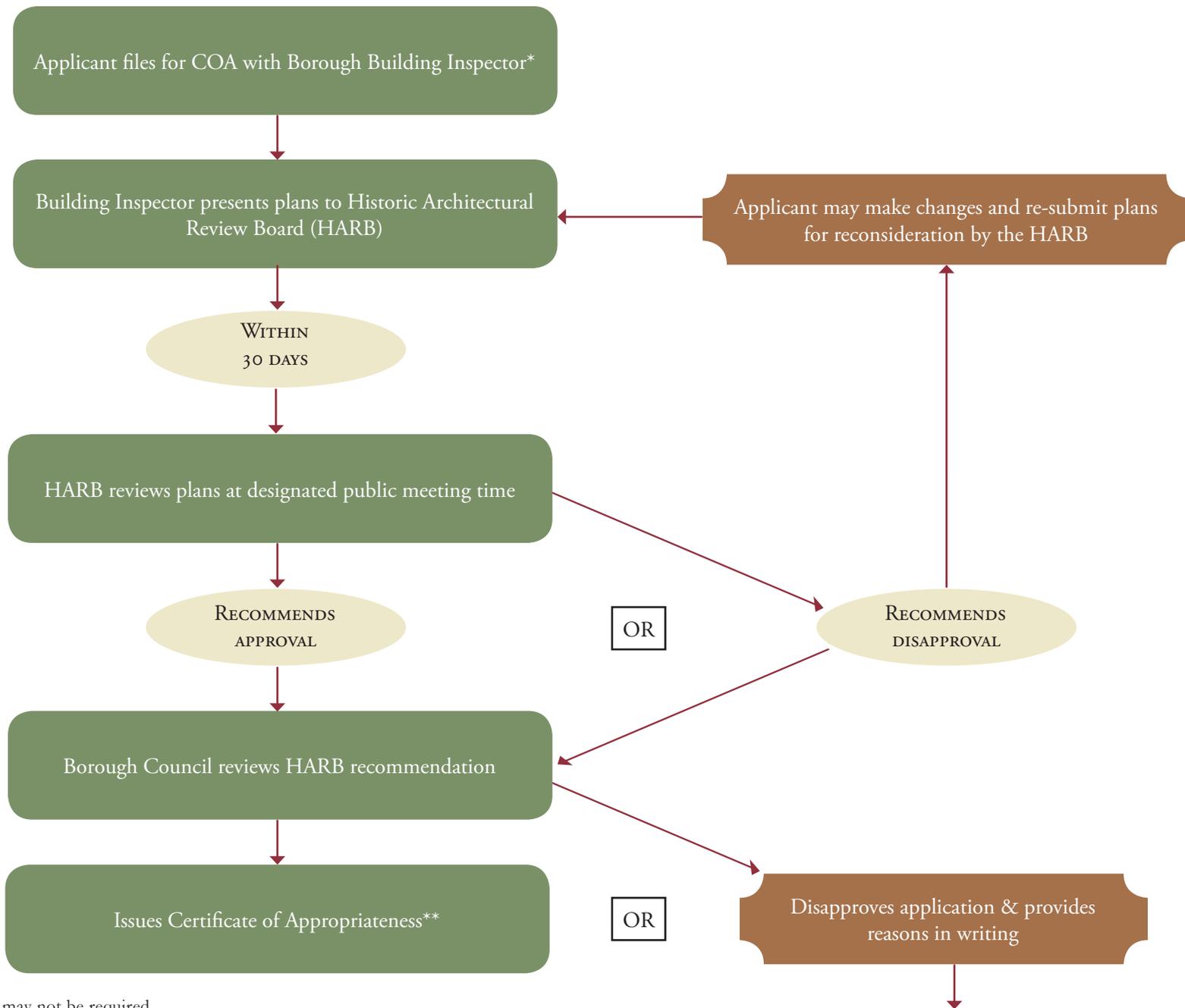
D. The Council, after reviewing the advice of the HARB will determine whether or not the proposed work will have an adverse effect on the general historic and architectural nature of the district. (The Council will pass upon the appropriateness only on exterior architectural features which can be seen from a public way.)

Council will consider the general design, arrangements, texture, material and color of the building or structure and the relation of such factors to similar features of buildings and structures in the district. The Council will not consider any matters not pertinent to the preservation of the historic nature of the district. No Certificate of Appropriateness will be denied where an unnecessary hardship will result to the property owner.

E. Upon giving the approval, the Council will issue a Certificate of Appropriateness authorizing the work, including the erection, reconstruction, alteration, restoration, demolition or razing of the building (in whole or in part).

F. Should the Council disapprove the application, such disapproval will be in writing giving the reasons for the disapproval, and a copy given to the applicant. If the Council disapproves the request for a Certificate of Appropriateness, the applicant may appeal to the Court of Common Pleas within the time specified by law.

G. Failure to receive or comply with a Certificate of Appropriateness may result in fines or penalties for the property owner in same manner and to the same degree as the enforcement provisions provide in Chapter 137, Construction Codes of the Borough of Media, as is presently enacted or as may be amended.



\*Building permit may not be required

\*\*Zoning and Planning Approvals may still be required

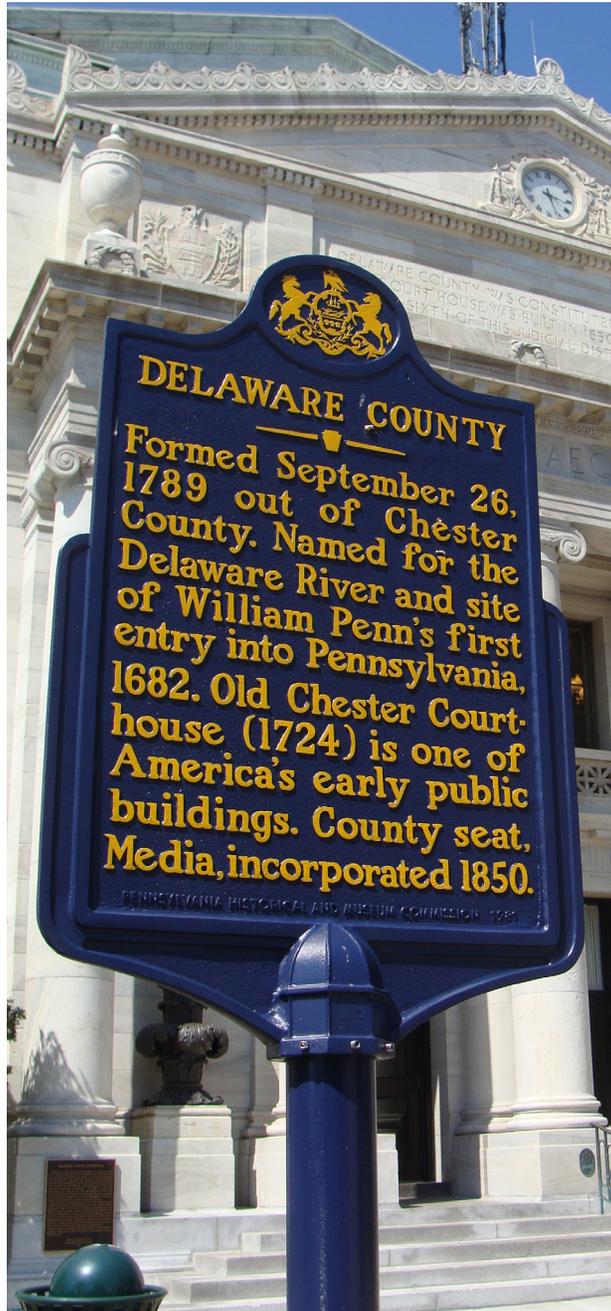
APPLICANT MAY APPEAL DECISIONS TO COURT OF COMMONS PLEAS

## The Role of the Historic Architectural Review Board

It is important to note that the Historic Architectural Review Board (HARB) is not only a review body, but also a valuable resource for owners of properties in the historic districts. Among its responsibilities is to educate the citizens of Media on the value of historic preservation, and the good practices and methodologies for the treatment of historic structures. HARB members have relevant professional backgrounds for advising historic-property owners. The Historic Architectural Review Board (HARB) makes recommendations to the Council regarding the advisability of issuing any Certificate of Appropriateness required in the historic districts in Media. The HARB will give its advice, counsel and opinion, in writing, to the Council within 30 days after receiving plans for review.

Property owners are encouraged to have early consultation with the HARB to:

- Understand the historic significance of their properties;
- Help define the scope of a project;
- Help identify appropriate materials and methods for restoration and repair work;
- Help identify appropriate designs for additions



Courthouse Marker

THE REPORT OF THE HARB TO THE COUNCIL CONTAINS THE FOLLOWING INFORMATION:

- The location of the area in which the work is to be done
- The exterior changes to be made or the exterior characteristics of a structure to be erected
- A list of the surrounding structures with their general exterior characteristics
- The effect of the proposed change upon the general historic and architectural nature of the district
- The appropriateness of the exterior architectural nature of the district
- The general design, arrangement, texture, material and color of the building or structure and the relationship of such factors to similar features of buildings or structures in the district and surrounding the district
- The opinion of the Board (including any dissent) as to the appropriateness of the work proposed as it will preserve or destroy these historic aspects and the nature of the district
- The opinion of the Board as to whether the application to raze any structure or erect a new structure will create any unnecessary hardship to the owner
- Specific advice of the Board as to the issuance or refusal by the Council of the Borough of Media to issue a Certificate of Appropriateness

# 4.

## GENERAL GUIDELINE PRINCIPLES

### Common Terms

There are many terms used to describe specific architectural features and styles, and repair or restoration procedures. Some of the terms used in these design guidelines may be unfamiliar to the reader. In those cases, refer the website glossary of the Pennsylvania Historical and Museum Commission:

For architectural terms:

[www.portal.state.pa.us/portal/server.pt/community/architectural\\_field\\_guide/2370/dictionary\\_of\\_architectural\\_terms/445407](http://www.portal.state.pa.us/portal/server.pt/community/architectural_field_guide/2370/dictionary_of_architectural_terms/445407)

For architectural styles:

[www.portal.state.pa.us/portal/server.pt/community/architectural\\_styles/2379](http://www.portal.state.pa.us/portal/server.pt/community/architectural_styles/2379)

There are, in addition, some important terms that are in common usage, but may have more specific meanings for the purposes of these Design Guidelines, namely:

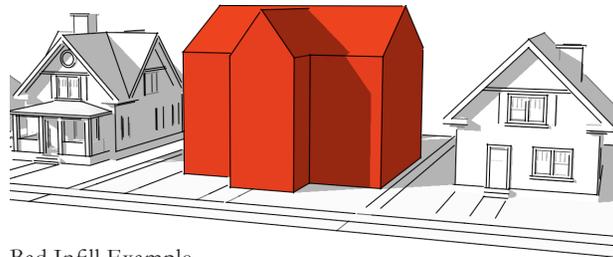
**ALTERATION** (visual) – any change that results in a significant change, particularly in a non-historic manner, in the visual appearance of a building as viewed from any street or sidewalk.

**COMPATIBLE** – describing an alteration that maintains or restores the historic and significant features and appearance of a building and does not detract from surrounding historic features, thereby maintaining a sense of visual harmony in the building, or between the building and neighboring buildings.

**DEMOLITION** – the razing or destruction, whether entirely or partially of the facade area or floor area of an historic resource. Demolition includes the removal of an historic resource from its site.

**FACADE** – the outside face – not necessarily only the front elevation - of the building given special architectural treatment.

**INFILL** – the enclosing of a building element, such as a porch or archway, that was originally open; or the construction of a structure on an open site that is amidst build-up, adjacent parcels.



Bad Infill Example

**MAINTENANCE** – the routine upkeep of a building or property, generally performed to combat the effects of weathering and deterioration due to aging.

**PRESERVATION** – the stabilization of a building or a material to protect it from deterioration, particularly the protection of historic features.

**RECONSTRUCTION** – duplicating the original materials, form, and appearance of a vanished structure, or its features, that was present at a particular historical moment based on historical research.

**REHABILITATION** – returning a building to a state of usefulness through repair or alteration. Historic rehabilitation returns a property, through repair or alteration, to a contemporary use while preserving those portions and features of the property that are significant to its historic and architectural values.

**RENOVATION** – the process of repairing and changing an existing building for modern use so that it is functionally equal to a new building.

**REPAIR** – to fix a deteriorated or damaged building element or material to make it functional and to halt further deterioration.

**RESTORATION** – returning a structure as nearly as possible to its appearance at a specific period of time in its history based on historical research, using the same construction materials and methods as the original.

# The Secretary of the Interior's Standards for the Treatment of Historic Properties

The National Park Service (a division of the U.S. Department of the Interior) has developed ten commonsense principles - a.k.a, "the Standards" - that are applicable for repairs, maintenance and alterations to historic properties. Both property owners and regulatory bodies (such as the HARB and the Media Borough Council) should be guided by the Standards when deciding the appropriate treatment of historic structures. The more specific Design Guidelines which are detailed in the following sections will also adhere to the broader principles of the Standards.

## The Ten Standards for Rehabilitation Are:

1. 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.
2. The historic character of a property will be retained and preserved. The removal of distinctive material or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.
3. 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.

4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.

5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.

6. 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 sustained by documentary and physical evidence.

7. 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.

8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.

9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work shall 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.

10. 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.

### FOR MORE INFORMATION:

On the Standards go to:

[www.nps.gov/hps/tps/standguide/rehab/rehab\\_standards.htm](http://www.nps.gov/hps/tps/standguide/rehab/rehab_standards.htm)

The National Park Service has also produced an excellent series of technical briefs on a wide variety of topics that elaborate on the practical applications of the Standards.

These can be found at:

[www.nps.gov/tps/how-to-preserve/briefs.htm](http://www.nps.gov/tps/how-to-preserve/briefs.htm)

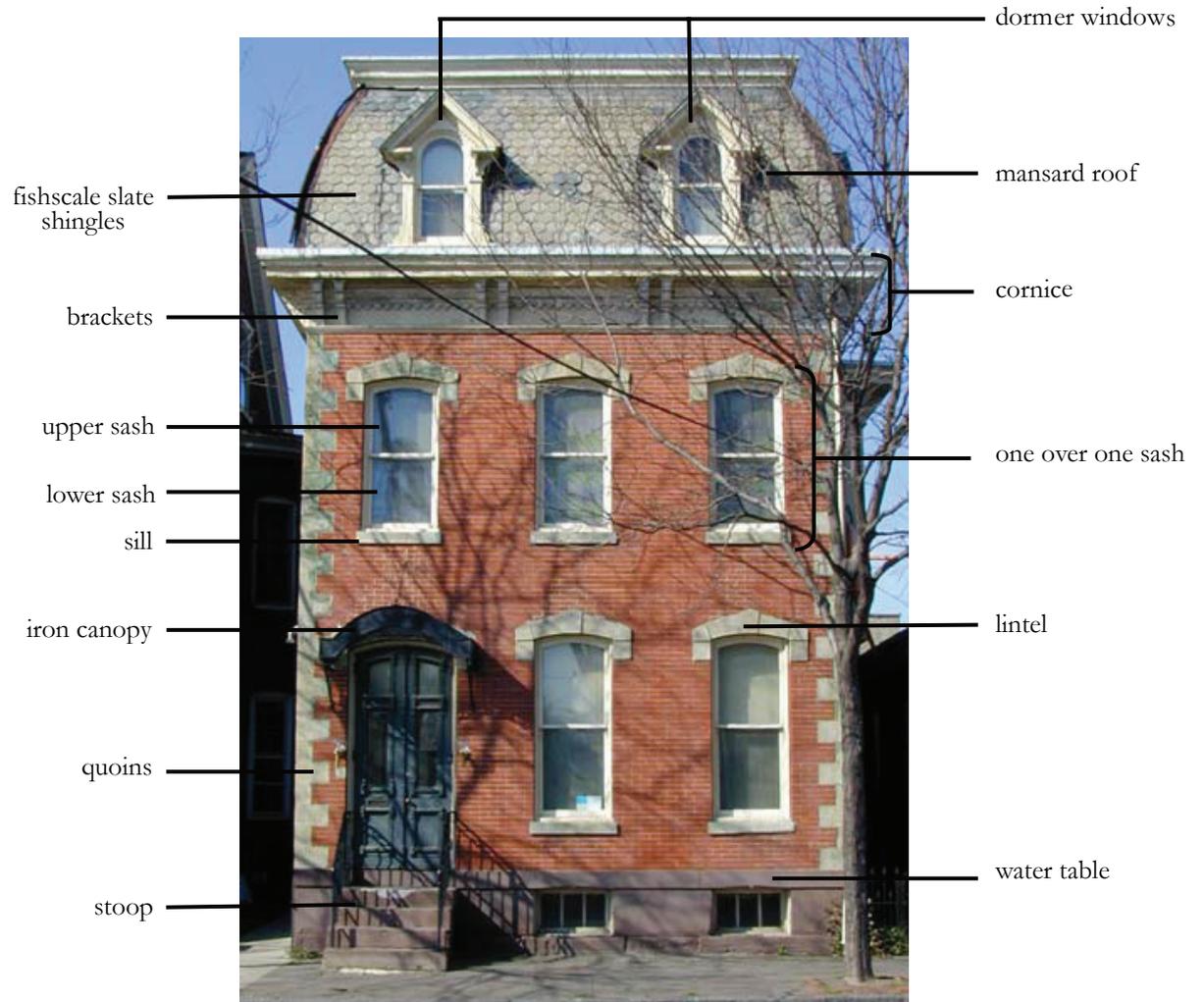
# 5.

## GUIDELINES FOR RESTORATION, REPLACEMENT AND REPAIRS

Any building, regardless of its age, requires repairs from time to time. Worn-out roof shingles need to be replaced, wood porches repainted, bricks repointed, broken glass or shutters repaired, failing gutters restored.

Historic materials and features often need specific treatments, and one role of the HARB is to advise property owners on the preferred approaches to repair and restoration. (The HARB will also ultimately recommend approval or disapproval of the repairs/restoration proposed by the owner as described in the application for a Certificate of Appropriateness.)

What follows in this section describes the recommended methodologies for the restoration/repair of historic building features. The guidelines are organized by major building components (such as roofs, or windows and doors), or by materials (masonry, and wood). The rehabilitation principles and repairs methods follow the Secretary of the Interior's Standards for the Treatment of Historic Properties (see Section 4).



## Roofs and Related Elements

The roof of a historic building, along with cornices, pediments, dormers, and other ornamental details, is critical to the architectural character of the structure. The shape, material, pattern, color, and texture of a roof greatly affect the building's appearance. Even on flat-roofed buildings, the cornices and parapets can be key style elements. (See Preservation Brief Roofing for Historic Buildings at <http://www.nps.gov/tps/how-to-preserve/briefs/4-roofing.htm>.)

The function of the roof is critical; it is the building's first line of defense against the weather, and takes a heavy beating from the sun, wind, rain, snow, and ice. The preservation of any structure is dependent upon a weathertight roof that protects the building from these elements, and a rainwater conduction system that directs water away from the exterior walls. Yet the roof and its associated structures are among the most vulnerable elements; they must be maintained vigilantly to prevent the destructive effects of water leaking into the building (see Section 8).

### Common Roofing Materials and Types in the Historic Districts

**FLAT** roofs – which actually have a slight pitch to direct rainwater to one or more drains – are usually covered with built-up roofing of alternating layers

of waterproof membranes and other bituminous materials. If well maintained, they might last twenty years before repairs or replacement is required.

Historic roofing materials for sloped roofs in the historic districts include slate, metal, and asphalt shingles.

**SLATE** roofs can last from 60 to 125 years depending on the type of slate. (See Preservation Brief The Repair, Replacement, and Maintenance of Historic Slate Roofs at <http://www.nps.gov/tps/how-to-preserve/briefs/29-slate-roofs.htm>.)

**METAL** roofs shed water effectively from a relatively shallow pitch. Historic metal roofs typically consist of sheets that are about two-feet wide, joined by a full-length soldered seam. The metal is usually lead, copper, sheet iron, or galvanized steel plated with tin. If painted every 8 to 10 years to prevent corrosion, a ferrous metal roof will last 60 to 80 years. Nonferrous metals (copper, lead) develop a natural, protective coating (patina) and don't need to be painted. Typical causes of deterioration include punctures and the breakdown of the metal by urban pollutants (see Architectural Metals, pg. 29).

**WOOD** shingles are not common in Media's historic districts, but may occasionally occur or be appropriate as a replacement material (see Wood Elements section, below, and The Repair and Replacement of Historic Wooden Shingle Roofs at <http://www.nps.gov/tps/how-to-preserve/briefs/19-wooden-shingle-roofs.htm>.)

**ASPHALT** and **FIBERGLASS** are relatively modern roofing materials, with a life span of 15 to 35 years depending on the quality of the shingle. Asbestos shingles were sometimes used in the early 1900s, and can be considered safe if left undisturbed, but proper disposal of asbestos shingles is a must if they are removed.

**CLAY** or **TERRA COTTA** tile roofs, although not common in Media's historic districts, may appear occasionally on porch roofs or, less commonly, on main roofs. If maintained properly, their life span is approximately 125 years. (See Preservation Brief #30: The Preservation and Repair of Historic Clay Tile Roofs at <http://www.nps.gov/tps/how-to-preserve/briefs/30-clay-tile-roofs.htm>)



Asphalt Shingles



Flat Built-up Roof



Metal Roof



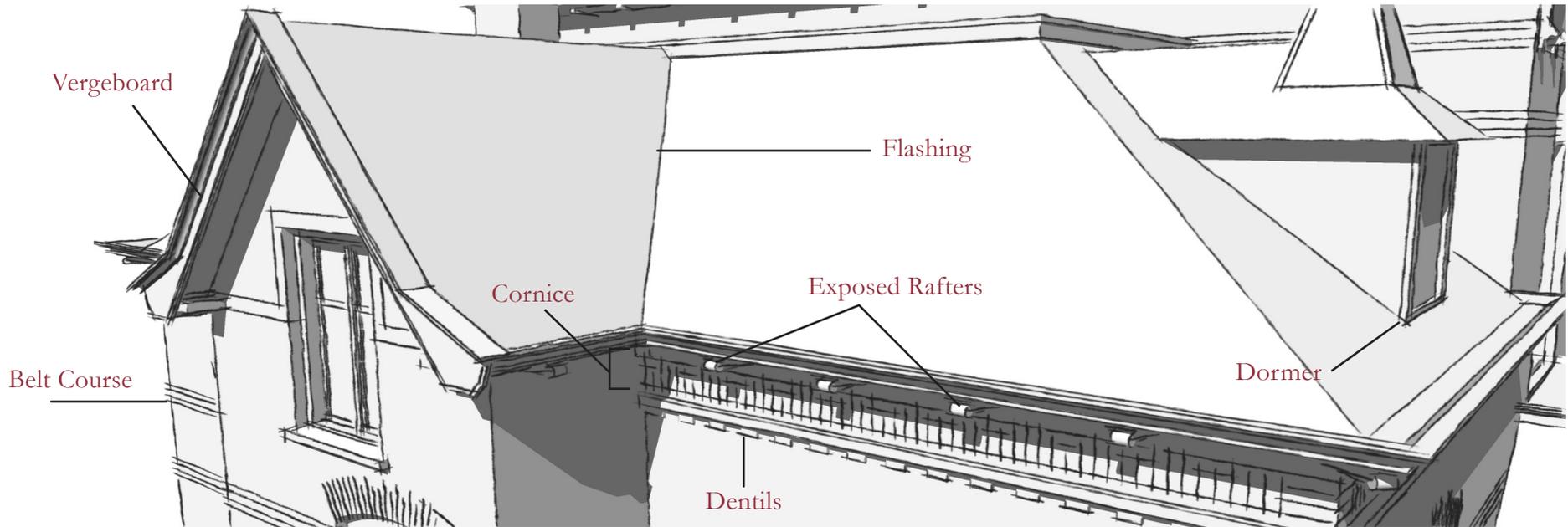
Slate Shingles



Clay Roof Tiles



Wood Shingles



## Repair and Replacement of Historic Roofing Systems

### The Most Common Repair and Replacement Projects are:

**A LEAKY ROOF** – The root cause of the leak should first be identified and fixed. Repairing the specific failure point is recommended and more effective and less expensive than widespread replacement of the roof.

Individual slates or terra cotta tiles may fall out from time to time. It is more cost effective to have an experienced roofer replace individual, dislodged slates or tiles or broken fasteners than to replace

the entire roof prematurely. Occasionally, it is possible to relocate original shingles from a less visible roof location to replace missing shingles on a more prominent location.

**NEW ROOFS** – When repair is no longer practical, the preferred action is to replace the roof with historically accurate materials compatible with the historic character of the building; original detailing should be saved or replicated. The replacement of a historic roof should be done only by a contractor experienced with the traditional materials and the proper methods of application.

If modern substitute roofing materials are proposed to the HARB, careful consideration should be given to match the scale, texture, configuration, profile, detailing, and color of the original to the extent possible.



This replacement historic terra cotta tile roof should last 100 years.



K gutter



Water diverter



Half-round gutter



Pole gutter

### THE RAINWATER CONDUCTION SYSTEM

composed of gutters, downspouts and drains which collects water from the roof and directs it down and away from the building walls is critical to the effectiveness of any roof system. Keeping the rainwater conduction system in proper working order should be a priority maintenance item (see Section VIII on Maintenance). The replacement or repair of specific, individual failed elements is preferred, rather than abandoning prematurely the entire original rainwater conduction system. It is preferred that replacement components match the profile, materials, and dimensions of the original elements. Additional gutters and downspouts should be visually unobtrusive, constructed of historically appropriate forms, not obscure the architectural detail of the building, and should be painted to blend with the facade or other trim.

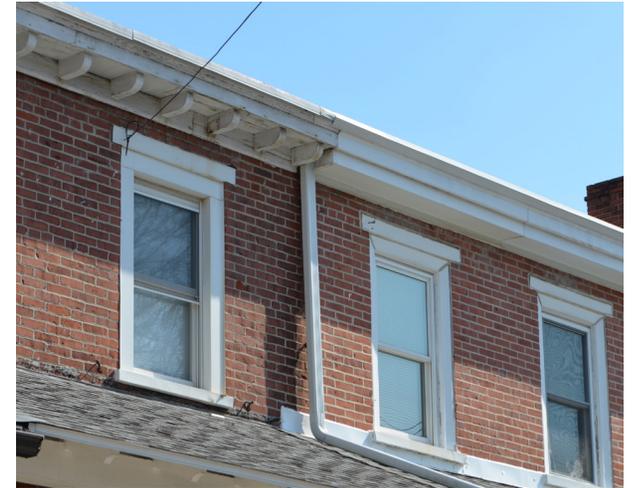
**FLASHING** – Failure of the flashing at the intersection of roof planes, at parapet walls, or penetrations such as dormers, vents, or chimneys, is one of the major causes of roof deterioration and water leaks. All deteriorated or unfastened flashing should be replaced or repaired immediately. Replacement of flashing on an existing roof may require the removal of large sections of the roof surface. When installing a new roof, the roofing contractor should be fully knowledgeable about the importance of flashing in maintaining a watertight roof.

**CORNICES AND PARAPETS** – Roof cornices and parapets are major architectural features. It is not recommended to remove or cover them with aluminum or vinyl siding. Deteriorated cornice elements – typically masonry, wood, or pressed metal – should be replaced with in-kind material.

**CHIMNEYS, DORMERS, SKYLIGHTS AND OTHER ROOF ELEMENTS** such as finials, cresting, ornamental terra cotta, and dormer brackets – give character and style to buildings and should not be removed or altered. Any penetration of the roof will require special attention to the flashing that protects the juncture between the roof and the chimney, dormer, etc., from water intrusion (see Flashing, above).

Replacement elements should match the profile and detailing of the original. Covering masonry chimneys with tar, cement, or stucco is not recommended. A chimney cap and a properly installed flue liner protect both the interior and exterior chimney

brick, and ensure safe chimney operation. Consult a qualified professional for chimney work.



Note the original brackets on left and the inappropriately covered brackets on right.



Poor Flashing: Covers too much of historic chimney.

# Masonry (Brick, Stone, Concrete)

Brick and stone are commonly used in the Media historic districts as wall materials. In addition chimneys, arches, porch foundations and stairs, pediments, window and door sills and lintels can be made of brick, stone and concrete. Carved stone, terra cotta or cast stone is often used for decorative features.

Masonry is one of the most durable building materials and, properly maintained, can last indefinitely. It is, however, susceptible to deterioration from acid rain, airborne pollutants, wind, salts used for snow melting, and organic growth, all of which can leave masonry vulnerable to water penetration and subsequent freezing and thawing which will ultimately damage any kind of masonry.

## Common Masonry Materials in the Historic Districts

**BRICK** is the predominant exterior building material throughout the Media historic districts. The hardest, best quality bricks were usually reserved to face exposed facades, while interior bricks might be softer. There are various styles of brick bonding patterns used throughout the historic districts.

**STONE** – Various types of stone have been traditionally used in wall construction. Granite is a natural stone, prized for its hardness and durability.

Its visual characteristics include a wide range of color from gray to red to black, a glossy or matte finish, and a speckled appearance. Granite is often used only as a foundation material or as trim.

**LIMESTONE, SANDSTONE AND MARBLE** can be used for lintels, window sills, and water tables and as a face material on some of the historic districts buildings.

**CONCRETE** is a common masonry material in 20th-century buildings. It is a cast material consisting of Portland cement, sand, and aggregates such as gravel. Iron rods – “rebar” – are often embedded in concrete walls to provide strength. (Refer to Preservation Brief Preservation of Historic Concrete at <http://www.nps.gov/tps/how-to-preserve/briefs/15-concrete.htm>.)

**CAST** stone, commonly used as a trim material, is actually concrete used to imitate stone. It can be cast in virtually any shape, including ornamental designs.

**STUCCO** is an exterior wall covering consisting of Portland cement, lime, sand, and water. Stucco is traditionally applied in three coats directly over brick or stone rubble walls with a finish that is smooth. Stucco tolerates movement and allows moisture to pass to the wall surface and evaporate. Nevertheless, it is not advisable to add stucco to an exposed brick facade, since it hides the original facade, may damage the brick, and conceals structural problems.

(See Preservation Brief The Preservation and Repair of Historic Stucco at <http://www.nps.gov/tps/how-to-preserve/briefs/22-stucco.htm>.)



Before: Stucco has come off, exposing the stone to weather conditions.



After: The masonry has been restored and the structural integrity of the wall is ensured.

## Typical Masonry Repairs and Treatments

**KEEPING MASONRY DRY** – Moisture is enemy #1 of masonry, therefore keep masonry as dry as possible and make sure that it is allowed to dry if it does get wet. Roofs, gutters, cornices, and downspouts should be routinely maintained to prevent moisture from penetrating walls, and storm drains should be kept clear to help keep foundations dry. It is also essential that the mortar joints surrounding masonry units be kept in good repair to prevent moisture penetration. (See Preservation Brief Holding the Line: Controlling Unwanted Moisture in Historic Buildings at <http://www.nps.gov/tps/how-to-preserve/briefs/39-control-unwanted-moisture.htm>.)

**CLEANING MASONRY** – In most instances masonry walls should not need cleaning. Masonry cleaning, when done incorrectly, can result in serious problems that outweigh any aesthetic gains. Brick, especially, has a hard, protective



Sandblast or use of high-pressure power washing to clean masonry can scar masonry surfaces, allowing moisture to penetrate.

surface formed during the manufacturing process which can be damaged by cleaning, leaving the wall vulnerable to moisture. If, however, cleaning is necessary to remove graffiti, grime, or staining from metal or organic growth, the gentlest method should be used. Test a section first. Often, scrubbing the masonry with a soft bristle brush with warm water and common household detergent will work.

Under no circumstances should aggressive blasting methods -- e.g., sand blasting -- be done. This will cause irreparable damage to older brick, and even stone. (See Preservation Brief Dangers of Abrasive Cleaning to Historic Buildings at <http://www.nps.gov/tps/how-to-preserve/briefs/6-dangers-abrasive-cleaning.htm>.) Other methods such as low-pressure washes, chemical cleaners, or so-called “soft-blasting” may be acceptable, but should only be used with the prior approval of the Media HARB.

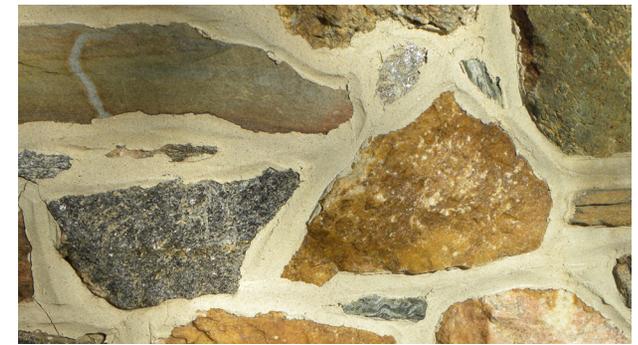
**MASONRY COATINGS** – In most cases, so-called protective “waterproof” coatings — including waterproofing sealers, water repellents, graffiti protectors — are not recommended. These water



An example of improper joint width, color, and joint profile on left.

repellents seldom work for more than a couple years, often create a shiny or milky appearance to the masonry surface, and in some cases may even entrap moisture. Masonry needs to “breathe” so that moisture in or behind the masonry can escape through the surface, rather than migrate back to the interior, causing interior damage. More effective is to correct the root causes of excessive moisture in masonry walls. (See Preservation Brief Assessing Cleaning and Water-Repellent Treatments for Historic Masonry Buildings at <http://www.nps.gov/tps/how-to-preserve/briefs/1-cleaning-water-repellent.htm>.)

**MASONRY PAINTS** – Paint, too, can create an impermeable film and cause serious moisture problems and spalling. Painting also creates unnecessary maintenance; like all surfaces, masonry, once painted, will need periodic repainting. And, of course, paint radically changes the appearance of historic masonry. If masonry has already been painted, and needs repainting, it is important to use a paint that is designed for masonry that does not create an impermeable film.



An example of appropriate repointing in this stone wall.

**MASONRY PATCHING** – Repair of damaged masonry is a specialized job for a skilled professional. Masonry consolidants such as silanes and epoxies penetrate the pores of the stone, making it stronger and resistant to further deterioration. Consolidants can bring disintegrating and spalling masonry back together and increase the masonry’s strength and resistance to further deterioration. Cement-based patching materials are used to repair sections of failed masonry. The patching material should be compatible with the masonry in texture, thermal-expansion characteristics and color. The masonry patch should replace only the material that is missing.

**REPLACING MASONRY UNITS** – A particularly effective repair method is to remove the unit of masonry that is damaged to its full depth or to sound subsurface material. Replace with the new or salvaged material using a traditional mortar. The brick should match in size and color. Again, care should be taken to maintain the mortar joint.

**REPOINTING** – The process of replacing deteriorated mortar joints with new mortar is called repointing. All loose and deteriorated mortar is carefully raked out of the joint by hand, and new mortar is inserted. In most cases, repointing should be a routine maintenance procedure necessitated by the inevitable, but natural weathering away of the original mortar. (Also see Preservation Brief Repointing Mortar Joints in Historic Masonry Buildings at <http://www.nps.gov/tps/how-to-preserve/briefs/2-repoint-mortar-joints.htm>.)

**KEEP THESE POINTS IN MIND WHEN REPOINTING:**

- First determine if there are causes of mortar deterioration that should be corrected before repointing. In some cases the erosion of mortar joints is exacerbated by excessive water infiltration caused by leaking roofs or gutters, missing or disconnected downspouts, damp foundation conditions, or differential settlement of the building.
- Use a mason experienced in repointing historic masonry.
- Repoint only those joints which have eroded; this is known as spot pointing.
- Thoroughly rake out deteriorated old mortar before repointing. Hand-raking the joints is preferred. Using powered saws, hammers or chisels can easily damage old brick or stone. Care should be taken to remove only the old mortar without damaging the edges of the masonry units.
- Use a repointing mortar that duplicates the strength, composition, color and texture of the original mortar. Repointing mortar should be tried on a test patch, and evaluated after it has cured for how well it matches the original in color, hardness, and joint profile.

**MASONRY STEPS** – The joints on masonry steps should always be mortared to prevent moisture from getting behind the stones where it may freeze and expand, dislodging the stones. Masonry steps can be taken apart and reassembled if they have shifted dangerously out of position, although additional structural support may also be required.



Before: Wood lintel has rotted, causing brick to settle.



After: New wood lintel and brick reinstalled.

## Windows, Doors, and Other Openings

Windows and doors, by their proportion, shape, location, and patterns, can contribute significantly to a building's historic character. These openings in a building's exterior also provide opportunities for natural light, ventilation, and visual connections to the interior.

**PREVENTIVE MAINTENANCE** – Windows and doors will require maintenance and repairs to reestablish their smooth operation and improve their energy efficiency. The two major causes of damage are exposure to the exterior elements and interior condensation. To minimize these problems, areas vulnerable to water should be inspected regularly and sealed when necessary.

Minimal recommended window and door maintenance items include: maintaining caulking, glazing putty, and weather-stripping windows and doors; check sills and thresholds to ensure that water runs off; repair cracked window panes; and remove all chipping and peeling paint before repainting.

**REPAIRS** – Original window and door units are complex architectural features made up of many components. An experienced carpenter can patch, splice, consolidate, or otherwise reinforce parts as needed. These types of repairs are preferred to total replacement.

Damage or rot to wood windows and doors is relatively easily to repair. Dents and surface marks can be fixed with glue, plastic wood, small wood shims, and household tools. Stiles and rails can be matched by experienced mills and new panels and moldings can be made to replace missing and damaged parts.

Wood windows and doors that exhibit surface deterioration, but appear to be sound upon testing with a probe, can be repaired in a cost-effective manner by treatment with an epoxy consolidant, with replacement limited only to those sections that exhibit severe deterioration. (See Preservation Brief The Repair of Historic Wooden Windows at <http://www.nps.gov/tps/how-to-preserve/briefs/9-wooden-windows.htm>.)

Rotting areas of the frame, often at the window or door's bottom where the end grain has absorbed water, can also be consolidated with epoxy resins, and missing areas can be reconstituted and molded out of epoxy paste fillers. Or, a replacement piece of wood can be mortised in place by an experienced carpenter. Such "Dutchman" patches are also useful when locksets or hinges are changed and the mortises of the former hardware exposed.



Before reglazing and painting



After restoration



Not Recommended: vinyl replacement window with inserted grid lacks articulation of a true divided-lite window or appropriate trim.



Recommended: This new storm window protects the original window while matching its shape.

### REPLACEMENT DOORS AND WINDOWS –

Replacement of original windows and doors should be a last resort, only when the severity and extent of deterioration warrants. If replacement doors or window sash and frames are installed on primary or highly visible facades, it is recommended that they match the original in materials, operation, configuration (the pattern of glass panes or panels), molding profile and detail. Matching historic windows and doors maintains the historic character of the building and helps retain the sense of scale and rhythm of the structure.

Vinyl-clad windows or doors, snap-in window muntin grilles, and mirrored or tinted window glass are examples of alterations that are discouraged. Plans for replacement windows and doors will be submitted to the HARB for review and approval.

### STORM WINDOWS AND WEATHERIZING -

Storm windows and doors insulate against noise and drafts, and exterior storms protect windows and doors from weathering. A variety of cost-effective options exist to improve the energy efficiency of historic windows. The first – and often least expensive and most effective – strategy should be to replace deteriorated caulk and glazing putty; repair damaged, loose or missing wood elements; and install new weather stripping around the sash and frames and at the meeting rails of windows to prevent drafts. Weather stripping is one of the least expensive means of improving energy efficiency, yet it can increase energy performance by as much as fifty percent.

Exterior storm windows should be of a design that does not overwhelm the appearance of the underlying window. The meeting rails and stiles of the storm window – whether applied to the exterior or interior of the historic window – align with those of the historic window and the color match the color of the window frame.

Interior storm windows are considered more historically sensitive, especially on primary facades.



Before: Inappropriate mock Colonial aluminum storm door.



After: Wooden replacement in appropriate style.

## Wood Elements (Porches, Siding, Eaves, Cornices, Trimwork, Roof or Wall Shingles)

Although the historic buildings in the historic district are predominantly brick and other masonry materials, most still have some important exterior elements made of wood, and some have wood siding on the walls.

Among the wooden elements may be doors and windows, porches, stairs and railings, cornices, and decorative features such as brackets and finials.

These wood elements were fabricated in a variety of ways: they were carved, sawn, planed, or turned on a lathe. Many wooden elements – such as a wooden cornice – consist of many wooden pieces nailed, screwed and/or glued together.

Some exterior walls in the historic districts have original wood siding, e.g., clapboards or shingles, and these should be preserved or repaired. If replacement is necessary, new materials should match the original ones to the extent possible. Modern replacement materials such as vinyl or aluminum are discouraged.

**KEEPING WOOD DRY** – Exterior woodwork can last a long time if properly maintained. Minimal means of keeping the wood dry are providing a protective coat of paint, keeping joints well sealed

with caulk or sealants, and ensuring that rainwater runs off properly. Horizontal surfaces are particularly prone to decay. Be sure that susceptible areas such as window sills, porch floors, or stair treads retain the almost imperceptible, but critical forward pitch which will shed rainwater.

**ROTTED WOOD** – Where wood is rotted, one means of repair is to replace only the sections decayed rather than scrapping a whole architectural element that is otherwise sound. An experienced carpenter can “piece in” new sections of wood that replace the rotted parts. Partly rotted elements can also be saved by using special wood fillers or chemical consolidants. This can be particularly successful for window sills in which the wood grain is severely eroded. Often, it’s feasible to carefully disassemble the parts of wooden elements and replace only those parts that are unsalvageable. Replacement parts should match the original in dimensions, details, materials, and workmanship.

**REPLACEMENT OF WOODEN ELEMENTS** – If a wooden architectural element is beyond repair, replacement may be the only recourse. Matching the dimensions, materials, details, workmanship and finish of the original is preferred. “Off-the-shelf” replacement parts rarely match these qualities.

There may be acceptable deviations, however. For example, if both the original and replacement wooden element was/is painted, a different wood species (or even fiberglass) might be used if all other details match.



Before: Minshall House cornice repair



After: Minshall House cornice repair

### FOR MORE INFORMATION:

See Preserving Wooden Porches at <http://www.nps.gov/tps/how-to-preserve/briefs/45-wooden-porches.htm>.

See Siding on Historic Buildings: The Appropriateness of Substitute Materials for Resurfacing Historic Wood Frame Buildings at <http://www.nps.gov/tps/how-to-preserve/briefs/8-aluminum-vinyl-siding.htm>.

## Finishes (Paint, Stain)

**PAINTING** – Most exterior wood is protected from water and sunlight with paint. Regular inspections of the condition of the paint surfaces will reveal when the paint is peeling, flaking, bubbling, or chalking. If the deterioration is limited, it's often possible to do spot painting, but if damage is widespread, it's probably time to re-paint all wood surfaces.

See Preservation Brief Exterior Paint Problems on Historic Woodwork at <http://www.nps.gov/tps/how-to-preserve/briefs/10-paint-problems.htm>.

The proper preparation of wood prior to painting is as important as the painting itself, and the paint manufacturer's or other professional guidelines should be followed. Before painting it is recommended that sources of water infiltration, rot, or insect infestation, are corrected, and that fungal and vegetative growth is removed. In addition, open joints between wood elements should be filled with the appropriate sealants.

New paint should be applied to ensure that it will properly bond. Use a primer that is compatible with the finish coats and follow the paint manufacturer's instructions regarding application procedures, coverage and the acceptable weather conditions for painting. Most paint manufacturers recommend high-gloss and semi-gloss paints for exterior applications.



Regular painting protects wood surfaces. Paint failure has led to rotting wood siding.



View of repaired and repainted wood siding.

### CHOOSING PAINT COLORS:

Specific paint colors are not required in the historic district. However, colors that were traditional for the era of the building will be considered appropriate. Guidance for traditional colors and schemes can be found at:

[www.oldhousejournal.com/magazine/2001/march\\_april/exterior\\_paint/default.shtml](http://www.oldhousejournal.com/magazine/2001/march_april/exterior_paint/default.shtml)

[www.oldhousejournal.com/magazine/1522](http://www.oldhousejournal.com/magazine/1522)

<http://oldhousecolors.com/>

## Architectural Metals (Railings, fixtures, cornices or windows)

Distinctive metal elements – including fences, gates, columns, balustrades, hardware, lighting fixtures, gutters, downspouts, standing-seam roofs, and flashing – are often found in the Media historic districts. These metal components will have been cast, wrought, pressed, or rolled of various metals. The traditional metals include cast iron, wrought iron, copper, tin, sheet metal, aluminum, steel, and bronze all of which contribute to the architectural character of historic buildings.

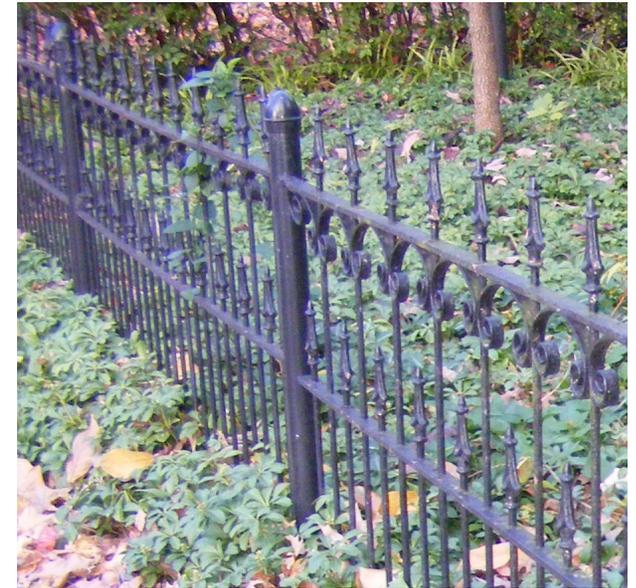
**FERROUS METALS** – Metals that rust – iron and steel – when exposed to air and moisture should be protected with coating products (e.g., paint) specified for that purpose. The manufacturer’s specifications should be carefully followed.

Routine maintenance of metal surfaces includes prompt attention to any signs of deterioration of the coatings to deter subsequent corrosion. If the metal surface shows evidence of rust or pitting, it must be thoroughly cleaned before recoating. Because the corrosion continues as long as the metal is exposed to air, immediate painting with a metal primer after cleaning is essential to prevent continued deterioration of the metal.



Not recommended: Original wood posts should not be replaced by decorative metal.

**OTHER (NONFERROUS) METALS**, notably copper and bronze develop a naturally occurring corrosive surface – sometimes referred to as “patina” – which over time actually provides natural protection against the elements. It is generally desirable to maintain this patina and the protection that it provides, particularly on any artistic works such as monuments or commemorative plaques, such as those found on the grounds of the Courthouse. There are several methods for the protection and cleaning of patinated metals, but this is usually not a task for nonprofessionals; the work should be performed by an experienced metals conservator.



Recommended: Original fence posts have been replaced to support original wrought iron fence.

**GALVANIC REACTIONS** – If repair of a deteriorated metal element requires replacement of a metal section, be aware that galvanic reactions can occur when two dissimilar metals come in contact. Introducing incompatible metal fasteners or flashing on a metal roof or gutter/downspout system can result in galvanic corrosion, and patching metal roofs with roofing tar accelerates the deterioration of the metal.

# 6.

## GUIDELINES FOR ADDITIONS AND NEW CONSTRUCTION

Over time, most buildings, even historic ones, change: to create more space, to “update” to changing architectural tastes, to incorporate new building technologies and conveniences, or to adapt to new uses that supersede old ones. The latter is especially true in Media where many historic buildings, originally private houses, now have commercial purposes such as offices, apartments or stores. The practice of altering historic structures to accommodate new, economically viable uses is called adaptive re-use.

It is not the intent the Media Historic District Ordinance to prevent such changes, but to ensure that additions are sensitive to both the individual historic property and to the district in which it is situated.

The challenge is to respect the original character of the historic buildings while, at the same time, to provide spaces that meet the technological, environmental, accessibility, and building-code requirements and amenities of a modern world. Fortunately, there are some time-tested guiding principles that can direct owners toward the design of additions that are sensitive to the authenticity

of the original architecture. The following recommendations adhere to The Secretary of the Interior’s Standard for the Treatment of Historic Properties (see Section 5).

### New Construction and Additions to Historic Structures

The first question should be: is an addition really needed? Can additional space be used in another building? Or can re-configuring the existing spaces achieve the same goal (often at a lesser cost as well). A professional design team can advise on making the most efficient use of existing space.

It is best to confer with the HARB during the early stages of developing a proposal for additional space. Although the HARB’s principal goal will be to ensure that the character of a historic building will be preserved, it can also provide ideas on how to do this while accommodating the property owner’s needs.

If it is determined that an addition is necessary, there are three guiding principles to consider when planning an addition to an historic building (these principles are elaborated upon in Preservation Brief #14: New Exterior Additions to Historic Buildings at <http://www.nps.gov/tps/how-to-preserve/briefs/14-exterior-additions.htm>.):

- Preserve significant historic materials, features and form;

- Be compatible; and
- Be differentiated from the historic building.

### Three Guiding Principles

1. **PRESERVE SIGNIFICANT HISTORIC MATERIALS AND FEATURES** – Avoid constructing an addition on a primary or other character-defining elevation in order to ensure the preservation of significant materials and features. Rooftop additions are usually highly visible and incompatible with the mass and scale of the historic building and, therefore, discouraged. Rear additions are often the least visually and physically damaging to the original structure, while side additions – depending on their public visibility – can also be considered. (See Preservation Briefs #17, Architectural Character - Identifying the Visual Aspects of Historic Buildings as an Aid to Preserving Their Character, at <http://www.nps.gov/tps/how-to-preserve/briefs/17-architectural-character.htm>)

Connecting a new exterior addition always involves some degree of material loss to an external wall of a historic building, but the loss can be minimized by limiting the size of additions, and the size and number of new openings between the addition and the original building. Often an addition can be attached to the historic building in a manner so that much of the original exterior area affected by the “attachment point” is retained as an interior, yet still visible, feature in the addition. A new addition should also be designed to be reversible, that is, removed in the future without leaving significant “scars” on the remaining historic building.

Another particularly successful method to reduce the material loss of original historic building is to link the new addition to the historic building by means of a “hyphen” or a narrow connector. In this way, only the connecting passageway penetrates a historic side wall; the new addition can be visually and functionally related while historic materials remain essentially intact and historic exteriors remain uncovered.

**2. BE COMPATIBLE** – A new addition ought to be compatible with the size, scale, color, material, and character of the building to which it is attached or its particular neighborhood or district.

Although a new addition will always change the size or actual bulk of the historic building, an addition that bears no relationship to the proportions and massing of the historic building – in other words, one that overpowers the historic form and changes the scale – will compromise the historic character as well. The size, scale, massing, and proportions of the new addition should be compatible with the historic building to ensure that the historic form is not expanded or changed to an unacceptable degree.

A new addition placed on an inconspicuous side or rear elevation is less likely to result in a radical change to the form and character of the historic building.

Simple designs for an addition often work best. Additions that are too fussy or pretentious will distract from, and perhaps overwhelm the character

of the original building. The design and placement of the addition should be subservient to the original building.

### 3. PROTECT THE HISTORICAL SIGNIFICANCE

– Make a Visual Distinction Between Old and New. The new addition ought to be designed in a manner that provides some differentiation in material, color, and detailing so that the new work does not appear to be an original part of the historic building and thereby be unclear as to which features are historic and which are new, thus confusing the authenticity of the historic resource itself.

The goal is to create an addition which is, at the same time, clearly different than the original (not a copycat design), but not so different in form and materials so as to visually compete or overwhelm the original building. Both compatibility – the design of the new addition should coexist in harmony with the historic building – and differentiation – the addition should be readily distinguishable from the older architecture – are both important design goals.

For example, the window and door fenestration of the addition could roughly approximate the fenestration – i.e., placement, rhythm, proportion – of the original, but not replicate the exact details. Or, the roofs of new additions can be similar to the old ones in respect to pitch, type (e.g., hipped, flat, gabled) and material but, again, differ in perceptible ways (such as a lower ridge line).



Good example of a compatible addition and adaptive reuse of historic building

FOR MORE INFORMATION:

<http://www.oldhouseonline.com/additions-101/>

<http://www.oldhousejournal.com/npsbriefs2/brief14.shtml>

## Adding Modern Elements to Historic Structures

Sometimes an existing, historic building is not efficient for modern needs. Perhaps handicapped-accessible entries, elevators, or additional mechanical/electrical/heating equipment are required.

But added elements needn't diminish the character of the original architecture. First, consider alternative design options which will have minimal impact on the original architecture. Make necessary alterations at the least visible or architecturally significant areas. Avoid destroying or obscuring historic building materials and details to the extent possible. Example: if the fire code requires new means of egress it is preferable that it be located on a rear elevation, or at an otherwise out-of-public-view location.

**ROOFTOPS** – Additions to the rooftops, and other highly visible locations, should be kept to a minimum. If necessary, introduce new skylights, vents, solar panels, and rooftop mechanical equipment toward the rear of the building, back from the edges of flat roof areas, and low in profile.

**EXTERIOR MECHANICAL EQUIPMENT (Heating, Ventilating and Air-conditioning)** – Locate these away from major elevations. In addition, camouflaging grade-level equipment on concrete pads can be achieved with landscaping, berms or unobtrusive screens.

**PORCHES** – Many of the residential-scaled buildings in Media had open porches at the front, side or rear entrances. These porches are important design features and should be preserved and maintained in their original form if possible, especially if they are part of a contiguous row of porches. Porches should not be enclosed (infilled) without the prior approval of the HARB. Alternative design solutions to enclosure should be considered first. But when enclosure is considered, keep these points in mind:

- Retain original porch features to the extent possible.
- Enclosure walls should be as unobtrusive as possible. One design solution is to place new enclosure walls behind the imaginary vertical plane determined by the row of original porch columns, so that the columns are still prominently visible, and the new enclosure walls are physically recessed, and visually subservient to the principal porch features.
- The design and materials of the new enclosure walls should be simple, and to the extent possible, transparent.

**SURFACE-MOUNTED EQUIPMENT AND DEVICES USED FOR TELECOMMUNICATION, SECURITY, UTILITIES, LIGHTING, ETC.** – It is recommended that exterior fixtures be attached to historic building surfaces according to these guidelines:

- Locate the fixtures in the least conspicuous sites possible.
- Use fixtures whose design, size, colors, materials

are the least obtrusive.

- Use attachment mechanisms that do minimal damage to the historic building materials (e.g., do not insert anchors into the face of bricks, but rather into mortar joints).
- To the extent possible, run electrical and telecommunication wires behind the walls, not in surface-mounted conduit.

**LIFE SAFETY AND ACCESSIBILITY ISSUES** – A new use or rehabilitation of a historic building can result in requirements to meet current codes and regulations for both life safety and accessibility to people with disabilities. Consult your design professional team to ensure that all codes and regulations are adhered to and, at the same time, are designed in a manner that cause the least loss of the historic character of the building. However, the State of Pennsylvania may allow variances to the design standards of the Americans with Disabilities Act if alternative solutions can accommodate both the purposes of historic preservation and accessibility for the disabled.

An excellent source of information on this topic is Preservation Brief #32: Making Historic Properties Accessible available at <http://www.nps.gov/tps/how-to-preserve/briefs/32-accessibility.htm>.

## Infill Construction in a Historic Neighborhood

Sometimes there will be a vacant plot in a historic district and the property owner may wish to construct a new structure on that plot. This is known as “infill” construction and the role of the HARB is review the design of the infill in historic districts to assure that it respects the character of the surrounding historic properties. The same guiding principles that apply to additions on historic structures are also relevant for infill design, balancing the twin objectives of being compatible with, yet differentiated from the historic context.

Of principal importance is the siting of the infill structure on its site. The new building’s orientation and set-back from the street should conform to the adjacent structures. This is especially true, for example, for a row of historic buildings that have a uniform setback from the street: new infill on a lot within that row that is noticeably set further closer or away from the street will disturb the uniform rhythm of the streetscape.

### Other Issues of Compatibility Include:

- Scale (particularly height) and massing
- Exterior materials

- Fenestration (the rhythm of window and door openings)
- Common features, such as porches, entryways, or roof shapes

However the goal is not to design an imitation of the adjacent properties in the historic district. The infill structure should be visually distinct from its historic neighbors. For an elaboration on this point, refer the section above “Make a Visual Distinction Between Old and New”.



Olive Street: A good example of new residential infill project.



Edgemont Street: Another example of infill that is compatible with the existing adjacent properties.

# 7.

## WORKING WITH CONTRACTORS, ARCHITECTS AND OTHER BUILDING PROFESSIONALS

The owner of an historic property is often capable of completing many home maintenance projects and even routine repairs. There are instances, however, when property owners should get help from building professionals.

Some of the areas in which professionals can prove invaluable are: the assessment and correction of structural problems (e.g., why is a wall bulging?); the assessment and determination of proper procedures for major repairs (e.g., the replacement of a roof); and the design and construction of additions and alterations.

The Media HARB members include building professionals and welcomes property owners to seek advice from it, especially in the early planning stages of a project, before an application for a Certificate of Appropriateness is made. Individually and collectively, HARB members possess useful knowledge regarding the repair, rehabilitation, restoration or alteration of historic properties.

The HARB will work with property owners to find reasonable and appropriate treatments and designs. Contact the Media HARB to request a no-cost consultation.

Architects and engineers can diagnose problems with and proscribe remedies for historic properties. Although their services will, in most cases, require a fee, it will be money well spent because in the long run money is saved by preventing costly mistakes and unnecessary or inappropriate work. In some cases, such as when structural issues are involved, the local building code may require the involvement of architects or engineers (contact the Media Code Enforcement Director at 610.566.5210 or [jim\\_jeffery@mediaborough.com](mailto:jim_jeffery@mediaborough.com)).

### Some areas in which an architect or engineer can help are:

- Assessing the overall building's condition.
- Assessing specific problems especially structural issues, deterioration of materials, or electrical or mechanical systems.
- Writing contract documents and specifications (instructions to contractors) for repair/restoration projects.
- Designing appropriate additions or alterations.
- Supervising and programming multi-faceted projects.

It is important to select an architect or other building professional with experience and appreciation for historic buildings. Request that a prospective architect supply references for similar projects, and

check these references for the client's satisfaction with the services of the architect.

#### WHERE DO YOU FIND AN APPROPRIATE ARCHITECT OR ENGINEER?

The HARB may make suggestions, or ask neighbors who have used the services of building professionals for similar projects. Also check on-line sources such as:

[www.preservationalliance.com/directories/restoration.php](http://www.preservationalliance.com/directories/restoration.php)

[www.oldhousejournal.com/restoration\\_directory/rd\\_home.shtml](http://www.oldhousejournal.com/restoration_directory/rd_home.shtml)

[www.thebluebook.com/pa](http://www.thebluebook.com/pa)

[www.aia.org](http://www.aia.org)

Remember, however, the choice is ultimately that of the property owner who must check references and have all relevant questions satisfactorily answered by prospective professionals.

Contractors carry out the actual repair, restoration or construction work. Except for routine repair work, contractors should not be asked to provide design services; this is the role of an architect. And, although contractors can help determine the exact scope and nature of the work, these tasks are also best done by an independent architect. Alternatively, a detailed job description produced by a contractor can be reviewed and revised by an architect.

Although a contractor commonly obtains the necessary building permits on behalf of the property owner, ultimately it is the responsibility of the owner to ensure that proper permits are obtained.

### Keep these points in mind when choosing a contractor:

- Choose contractors experienced with the special needs of older properties, and an understanding of and appreciation for historic materials.
- Ask for references for several, recent and similar projects. Check these projects for customer satisfaction, timeliness, adhering to a budget, and quality of the work.
- Competitive bids are helpful, but the lowest bid is not always the best (see above).
- Get it in writing!

### Have a signed contract that includes at least:

- The full price of the work
- The specific scope of work to be done, including the type and quality of the materials and methods to be used
- A time schedule including start and finish dates
- A schedule of payments. Generally, don't advance a payment before the work begins, except for maybe the contractor's upfront cost to purchase materials needed to start the project. Retain at least ten percent of the total cost until all the work (including clean-up) has been finished to satisfaction

Like architects, qualified contractors can be found from the recommendations of the HARB, friends and neighbors, or on-line sites such as those listed above.



An experienced contractor will have an understanding of and appreciation for historic materials.

# 8.

## GUIDELINES FOR PRESERVATION: PREVENTIVE MAINTENANCE



Neglecting to clean gutters seasonally will eventually lead to more costly maintenance.

Although the Media Historic District Ordinance does not explicitly require the pro-active maintenance of protected historic properties, the HARB provides the information in this section as part of its educational purposes.

“An ounce of prevention is worth a pound of cure” said Ben Franklin, and nowhere is his adage truer as when providing consistent and conscientious ongoing maintenance to older properties.

The upkeep of an older property can seem like a daunting and never-ending task. Many property owners feel trapped in an endless cycle one repair crisis after another. A better, more efficient and less costly approach is to commit to a systematic inspection schedule and routine maintenance program that addresses problems before they become serious and pricey. This is known as preventive maintenance and is the best tool for historic preservation.

Any building, even a new one, is in a constant, but slow state of deterioration. This is not only due to the wear and tear of daily use, but primarily to the negative effects of the natural environment – wind, sun, pollutants, animals and plants and, especially, rain, ground water and other forms of moisture.

At times architectural elements become so deteriorated by lack of maintenance that those features are forever lost, sometimes referred as “demolition by neglect”. Better to maintain those historic features now rather than have to re-create them in the future. Uncorrected deterioration can

lead to loss of historic features.

Consider one common situation: falling leaves clog a property’s gutters and downspouts. Without a regular clean-out, the rainwater conduction system will fail: rainwater backs up in downspouts and overflows gutters. This misdirected rainwater will find its way behind eaves and cornices, under shingles, and even migrate to roof rafters and behind wall exterior surfaces. Often a property owner’s first indication of the problem will be damaged plaster on interior walls or peeling paint on soffits. Further investigation may reveal rotted cornices, rafters and siding materials. What was initially a simple maintenance job – cleaning out the gutters regularly – has mushroomed into an expensive and widespread repair.

Prolonging the useful life of original historic building materials – through routine maintenance – versus replacement with newer materials not only preserves the historic appearance, but also makes economic sense. Many original materials – such as slate, copper, stone, old-growth wood – can outperform and outlast today’s replacement materials.

The first step in building maintenance is undertaking and inspecting the building’s existing conditions. Remember, if deterioration is discovered, track down its root causes. Also, don’t defer: **fix the problems as soon as possible.**

Included in this section are two additional resources:

**1. An inspection and maintenance chart.**

The chart is a “year at a glance” guide that indicates which inspection and maintenance tasks are recommended each month. Note that some items – fire detection and security systems, for example – should be inspected often, while others – exterior finishes, for example – can be inspected annually.

**2. An inspection and maintenance checklist.**

The checklist consists of guidelines that correspond to the items in the chart, and tell building maintenance personnel what to look at, how to identify particular problems, and what kind of repairs may be needed.

The items addressed pertain primarily to the exterior of buildings. (Also see Maintaining the Exterior of Historic Buildings at <http://www.nps.gov/tps/how-to-preserve/briefs/47-maintaining-exteriors.htm>.)

“A Year at a Glance”:  
Exterior Inspection and Maintenance Chart

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
Roof, dormers				•						•		
Water conduction systems	•			•			•			•		
Cornice, eaves				•						•		
Chimney, fireplace				•						•		
Walls, foundation				•							•	
Pest control				•					•			
Siding materials				•						•		
Doors, windows					•						•	
Exterior finishes					•						•	
Exterior stairs			•			•				•		
Organic growth				•					•	•		
Exterior paving						•						
Vegetations, lawns, gardens					•		•				•	
Fire detection, security system	•	•	•	•	•	•	•	•	•	•	•	•
Fire control, extinguish system		•										

# Inspection and Maintenance Checklist for Historic Buildings

## Roofs

A sound, tight roof is the first line of defense against the number-one enemy of an older building: water. If the roof is in overall bad shape, plan to repair or replace it soon. Binoculars will be useful in inspecting roofs.

### ROOFING MATERIALS

1. What is the roofing material? flat roof (e.g., built-up or elastomeric materials); slate; terra cotta; asphalt shingle; other.
2. Flat roofs: Are there signs of bubbles or cracks in the asphalt or roofing felt? Any signs of standing water? If so, positive drainage must be reinstated.
3. Asphalt shingles: are mineral granules getting thin? Are there loose granules accumulating in the gutters? Are the shingles cupping? These are signs of aging.
4. Are slate, terra cotta or asphalt shingles missing, broken, or warped? If so, check for water damage in the attic, and have a professional assess condition of the roof (individual shingles or entire roof may need to be replaced).

5. Any corroded, loose, split or missing flashing around chimneys, in valleys, or on ridges? Flashing is often the weakest, but most critical part of the roof system, and damage should be corrected quickly.

### WATER CONDUCTION SYSTEM

1. Are gutters and downspouts loose, deteriorated, or missing? Are there holes or cracks in the gutters and downspouts? Replace or repair as necessary.
2. Are leaves or debris clogging the gutters, downspouts, or drains? Clean out system semi-annually.
3. Are there low spots in the gutters? Does rainwater drain properly to the downspouts? Re-hanging gutters with proper drainage may be needed.
4. Is there evidence of ice damming during the winter? Mounds of ice at the eaves and extremely long icicles are two signs.
5. Do overhanging tree branches impede proper rainwater conduction? Trim back, if necessary.
6. Are there window wells at foundation-level windows? Are the side walls of the wells structurally sound? Are the sub-surface drains at the bottom of the wells functioning properly? Clean debris from bottom of wells.

### ROOF STRUCTURE

1. Does the ridge or any other part of the roof sag? This could be a normal aging condition, or the result of rotted rafters. If so, have a professional inspect.
2. Are the roof rafters (visible in attic) rotted, especially at ends, or cracked? Is there evidence of damp spots in attic? If so, determine source of moisture.
3. Is the attic ventilated with a soffit, gable, or ridge vent? Unvented attics retain moisture, and shorten the life of roofing materials.
4. Do the eaves or cornices have rot, loose pieces, or show signs of badly peeling paint? These are signs of roof leaks that are allowing water into the cornice. Determine source of, and correct water infiltration.

### CHIMNEYS AND OTHER ROOF STACKS

1. Is the brick or stone loose, cracked or crumbling? Is mortar missing or loose? If so, have a mason inspect and correct.
2. Does the chimney flue need cleaning? Do old chimneys flues have tile linings? (Old chimneys can be relined without having to rebuild the chimney.)
3. Is the chimney leaning? If so, it may need to be rebuilt from the roof up.

## Walls (Exterior and Interior) and Other Structural Checkpoints

### STRUCTURE

1. Are the walls plumb? Are there bulges in the walls (sight along walls to determine)? Check for cracks in masonry or collapsing areas or other signs of uneven settlement or structural deterioration.
2. Do doors and windows line up squarely in their frames?
3. Does the exterior siding (clapboards or shingles) undulate?
4. Are porches or steps sagging or pulling away from the building?
5. Are there cracks, crumbled plaster, gaps, or other signs of movement on interior wall surfaces at upper levels. Pay particular attention to joints between side and front and rear walls, between floors and end walls, and between partitions and ceilings.
6. All the above conditions may indicate structural flaws. Consult with a professional to ascertain underlying cause.

### WATER AND TERMITE DAMAGE

1. Any signs of termite mud tunnels on exterior walls or in cellars? Any evidence of insect holes or hives? If so, have an exterminator inspect.

2. Any signs of rotted, "punky" wood? Water stains? Split or cracked wood or stucco? Check soundness of suspicious areas by probing pen knife into the wood surface. Problem areas can be wood siding and sills at or near foundations, basement windows and light wells, porches and steps. If water damage is evident, determine sources of moisture.

3. Is vegetation too close to the building, or climbing on walls? This may trap water and promote rot. Remove or trim plants away from exterior walls.

### EXTERIOR SIDING MATERIALS (IF ANY)

1. Are there loose, cracked or missing clapboards or wood shingles? Reattach or replace as required.
2. Is sheet metal (e.g., corrugated) siding damaged, corroded, or loose?
3. Are stuccoed surfaces cracked, loose, or crumbling?

## Exterior Masonry and Foundations

### BRICK, STONE, TERRA COTTA, CONCRETE

1. Are there cracks in masonry walls? Horizontal or hairline cracks in mortar are usually not a problem; but cracks that run vertically through bricks may be more serious. Enlist a professional to determine cause.
2. Any sign of spalling (chips or fragments falling from face of masonry) or rotting (crumbling) on brick, stone, or terra cotta? These are usually signs

of a moisture problem or other distress.

3. Any other signs of moisture problems such as moss or fungal growth, stains, or efflorescence (a white, salt-like powder). Determine moisture source, and correct.

4. Are terra cotta elements spalled, have rust stains, cracks, deformation, missing or loose units, exposed metal anchors? If these conditions are found, review condition of terra cotta with professional experienced in methods of evaluating and preserving architectural terra cotta.

### FOUNDATIONS

1. Any signs of differential settlement (low spots) along the foundation? If so, have a professional determine cause.
2. Is ground water and downspout water properly diverted away from building with correct grading and splash blocks under downspout leaders? Regrade soil away from building if necessary.
3. Are masonry porch footings or piers sinking or leaning? If so, they may need to be rebuilt or stabilized.

## MASONRY JOINTS

1. Is mortar in joints soft and crumbling, loose or missing? If so, determine root cause (e.g., moisture problem, aging), and repoint as necessary. Note: it is essential that repointing match the composition (usually soft, lime mortar for pre-1920s buildings), color, texture and tooled finish of the original.
2. Any open joints between masonry walls and doors, windows, etc? If so, caulk joints. (Note: flexible caulks or sealants – not cements – should be used in joints between two dissimilar materials, e.g., wood and brick.)

## Woodwork

### (DOORS, WINDOWS, PORCHES, SOFFITS, TRIM, SHUTTERS)

1. Is decorative woodwork firmly attached, and tightly caulked at joints to prevent water penetration? Problem areas include porch balustrades, columns and bases, and around door and window frames. Are stair treads and railings secured? Reattach or repair as necessary.
2. Is there any wood rot, especially at window sills and rails, door thresholds and lower rails? If so, determine cause of moisture.
3. Is window glass intact and secure? Are window panes properly glazed with glazing putty intact, and painted? If not, replace glazing putty, and paint.
4. Is there debris trapped behind storm windows or

doors? Are weep holes in storm windows clogged? If so, open weep holes to permit drainage and evaporation.

## Finishes (PAINT AND STAINS)

1. Is paint powdering or chalking to a dull, powdery surface? This is usually sign of aging, and it may be time to repaint.
2. Is paint peeling, curling or blistering? This is usually a sign of a moisture problem, or of incompatible paint layers. Determine cause and correct before repainting.
3. Are there signs of mildew on finish surfaces? This is sign of excessive moisture. Correct cause, and use fungicide before repainting.
4. Are there signs of "alligatoring", checking or heavy, uneven paint surfaces? This is sign of too many old paint layers; paint may have to be stripped before repainting.

## Metals

### (FLASHING, STANDING-SEAM ROOFS, DECORATIVE CORNICES, WINDOW FRAMES AND SASHES, FIXTURES SUCH AS LIGHTING)

1. Are there cracks, warps or weak areas, loose seams or attachments, rust, or deteriorated finishes?
2. Are there loose, damaged or missing sections?

Check substrate underneath for moisture damage, especially at attachment points.

3. Replace damaged or missing sections to match existing sections using appropriate methods for specific metals. Reattach loosened metals to masonry or wood substrate. Remove rust using appropriate methods and materials.

## Site Elements

### (LANDSCAPE STRUCTURES, E.G., WALKWAYS, PATHS, PATIOS, RETAINING AND OTHER WALLS)

1. Are there cracks, loose elements, loose mortar joints, moist or bulging areas? Repair as necessary. Rebuild any unstable sections of walkways, walls, or patios with particular attention to tripping or other safety hazards.
2. Are drains through walls, in catch basins, or in impervious surface areas cleared of debris?

## VEGETATION AND LANDSCAPING

1. Is ivy or other vines growing onto roof cornices, rainwater conduction systems, or window and door openings? Prune back.
2. Are there puddles, or soggy areas in flat areas including lawns, particularly adjacent to building walls? Regrade so water does not pond in low spots or near building walls.

# 9.

## RESOURCES FOR PROPERTY OWNERS

There are many resources – professional and product directories, technical information, organizations - available for owners of historic properties. Here are some web links to some of the more useful ones:

### Governmental

Media Borough Historic Architectural Review Board: <http://www.mediaborough.com/boardsandcommissions/historic-architectural-review-board-harb>

Delaware County Planning Commission (Historic Preservation): <http://www.co.delaware.pa.us/planning/historicpreservation/geninfo.html>

Delaware County Heritage Commission: <http://www.co.delaware.pa.us/planning/historicpreservation/heritagecomm.html>

Pennsylvania Bureau for Historic Preservation: [http://www.portal.state.pa.us/portal/server.pt/community/historic\\_preservation/3741](http://www.portal.state.pa.us/portal/server.pt/community/historic_preservation/3741)

National Park Service Historic Preservation: <http://www.nps.gov/history/preservation.htm>

### Non-Governmental Historic Preservation Organizations

Delaware County Historic and Preservation Network: <https://sites.google.com/site/dchpnpa/>

Media Historical Society: <http://www.mediahistoricalsociety.com/>

Preservation Pennsylvania: <http://www.preservationpa.org/>

National Trust for Historic Preservation: <http://www.preservationnation.org/>

Preservation Alliance for Greater Philadelphia: <http://www.preservationalliance.com/>

Delaware County Historical Society: <http://www.dchs-pa.org/>

### Technical

Technical briefs on dozens of topics by the National Park Service: <http://www.nps.gov/tps/how-to-preserve/briefs.htm>

Searchable database of hundreds of restoration articles by Old-House Journal: <http://www.magazine-agent.com-sub.info/Old-House-Journal/Welcome>

Preservation Directory: <http://www.preservationdirectory.com/HistoricalPreservation/Home.aspx>

Traditional Building: <http://www.traditional-building.com/>

Philadelphia and Regional Restoration Directory: <http://www.preservationalliance.com/directories/restoration.php>

### Financial Incentives and Assistance

Federal tax incentives for preserving historic properties: <http://www.nps.gov/tps/tax-incentives.htm>

Pennsylvania Historic Tax Credits: <http://www.preservationpa.org/page.asp?id=15>

Pennsylvania Historic Preservation Keystone Grants: [http://www.portal.state.pa.us/portal/server.pt/community/grants/3794/keystone\\_historic\\_preservation\\_construction\\_grant\\_program/417951](http://www.portal.state.pa.us/portal/server.pt/community/grants/3794/keystone_historic_preservation_construction_grant_program/417951)

Low Interest Loans for Media Businesses: <http://www.mediaborough.com/business/resources-media-businesses>