

# III REHABILITATION AND MAINTENANCE OF EXISTING STRUCTURES

## III.1 INTRODUCTION

This section deals with the individual components of historic structures and offers guidelines on how these components can be restored and maintained.

First these guidelines will examine the *types of materials* used in the historic buildings of Chestertown: **masonry, wood, and metal**. *Individual building elements* will then be addressed, including **siding, doors, windows, shutters, porches, roofs, and cornices and trim**. If you believe that repair or replacement of an element on your building is required, please read relevant sections on both material and building element.

Whatever the concern, three basic rules should be remembered when working on older structures:

- Try to retain as much of the original materials, detail, and design as possible.
- Make sure that any modern elements introduced are appropriate and will not spoil the features that give the structure its character.
- Do not attempt to make a structure look older than it is by using details belonging to an earlier style.

Rehabilitation techniques that will assist the owner in making sound preservation decisions are listed in this section. Hopefully these decisions will be based on a better understanding of the variables that affect the task of revitalizing and maintaining any historic property.

## III.2 MASONRY

### III.2.1 Typical Materials

#### *Brick and Stone*

Brick is the most common masonry material used in Chestertown, although stone was sometimes used in foundations of both brick and wood buildings. Early brick was hand-formed and fired from local clays. Later brick, especially that from the late 19<sup>th</sup> and 20<sup>th</sup> centuries, was commercially made, more regularly formed and harder. When replacing brick, try to match it as closely as possible.



Stone Foundation

Some stone is reputed to have been carried to Chestertown in ship ballast, and the use of English ballast stone has been documented in parts of the Custom House. Other stone came from regional sources, as local stone was scarce. Quarries north of Baltimore provided much of this stone, and some types can be traced to specific locales such as Port Deposit. When replacing old stone in a foundation or wall, it is important to try and match the original materials as closely as possible.

### *Mortar*

Buildings constructed prior to about 1910 did not use Portland cement, but instead used a softer, lime-based mortar. When repointing a building that has lime mortar, it is important to avoid high proportions of Portland cement and to use mortar that matches the old material in texture, strength and hardness. If harder mortars are applied to softer brick or stone (and next to softer mortar), this non-resilient material will not respond to atmospheric changes such as temperature and humidity. All moisture will be held in the softer materials, and expansion and contraction due to freezing and thawing cycles will result in disintegration of the masonry. It is also important to try to match the color of the original mortar as closely as possible, so that repairs will be less visible. Color is affected by the various elements in the mortar mix such as sand and lime. Sometimes early builders used additives such as ground oyster shells, or ground coal as is found in the mortar at Wide Hall. An understanding of these constituents is essential if the rehabilitation is to be successful. Additional information on repointing will be found below in section III.2.5.

### *Bonds*



Flemish Bond with  
glazed header bricks

Other important characteristics of masonry are the method of *bonding* (the orientation of bricks or stones in the wall) and the size and shape of mortar joints. A successful rehabilitation project must match these characteristics. Bricks can be laid lengthwise in a wall or positioned so that only the end shows. If the long side of a brick is visible, it is called a *stretcher*. If only the end shows, it is referred to as a *header*. A single row of bricks is called a *course*. A common method of laying bricks in the 18<sup>th</sup> century was *English bond*, in which courses were alternately comprised of all headers and all stretchers. A fancier and more expensive approach was *Flemish bond*, in which a single course alternated headers and stretchers. In the next course up, headers were positioned so that they were directly above the center of a stretcher in the lower course, forming cruciform pattern of bricks. In early kilns, some bricks could be produced that had a beautiful bluish glaze on them. If only glazed headers were used, a diamond pattern could be formed



Common Bond

on a wall; other geometric patterns also could be produced. Yet another expensive 18<sup>th</sup> century bond was *header bond*, in which all bricks were laid as headers. The greater expense of Flemish and header bonds meant that they often were used only on the public facades of buildings; English bond was used elsewhere. By the end of the 18<sup>th</sup> century, Flemish and header bonds became less common (although Flemish bond saw a resurgence in the Neo-Classical style and may be used on public buildings today). Instead, masons shifted to *common* or *American bond*. Here a single course of headers was laid, followed by several courses of stretchers. Every sixth course, for example, may be comprised of headers. Although usage was highly variable, the number of stretcher courses to headers seems to have increased as time passed.

### *Mortar Joints*

Mortar joints on brick and stone walls can take a variety of forms. In general, mortar joints were thicker on older walls, simply because of the irregularities in hand-formed brick. As bricks became more uniform, thinner joints could be used. To disguise the thickness of early joints and make them appear more regular, masons sometimes scribed or tooled a groove through the center of the joint. Other types of joint treatments are shown at right, and rehabilitation projects should strive to match the original treatment. With older brick buildings, great care should be taken not to damage the brick, especially the outer surfaces, as this will expose the softer core to decay.



Grapevine, Concave, Flush, Raked and V mortar joints

The golden rule with masonry, as with other materials in a building, is to identify and preserve the character-defining elements. When features are too damaged to be retained, replacement should be done in kind, matching the original as closely as possible.

### **III.2.2 Cleaning**

The cleaning of historic masonry is discouraged unless it is undertaken to halt deterioration or to remove graffiti and stains. The stripping of painted masonry surfaces may not be appropriate if these surfaces were previously painted for aesthetic or practical reasons.

When performed, cleaning must be accomplished using the gentlest means possible, without damaging the surface of the masonry. High-pressure washing is not appropriate since it can force water into a wall and cause deterioration both to the masonry and the mortar joints. It will not be approved. The use of low-pressure water (garden hose pressure or under 600 p.s.i.), mild detergent (liquid dishwashing detergent), and soft natural bristle brush is the recommended starting point. This method will remove surface dirt and general street grime, but may not remove

stains or graffiti. All non-masonry surfaces should be protected prior to cleaning.

Chemical cleaning should be considered only after mild cleaning methods have failed to produce acceptable results, although serious consideration should be given to allowing stains to weather away naturally. In no event should sodium hydroxide (more commonly known as caustic soda), muriatic acid or lye be used on historic brick, nor should acidic cleaners be used on historic marble or limestone. Strong chemical solutions are not appropriate and will not be approved.

Cleaning tests, whether using simple or complex methods, should be applied to an area of sufficient size (approximately 4 sq. ft.), in an inconspicuous location on the building. These test areas will help determine the degree of cleaning necessary to clean but not to damage the surface of the masonry. They also serve as a means to evaluate the skills of the contractor performing the work.

Finally, sandblasting, including dry and wet grit or other abrasives, is never an acceptable cleaning method because it erodes the surface of the masonry and accelerates deterioration. The outer surfaces of brick and of much stone are harder than the interior material; exposing the soft interior can greatly speed deterioration. Sandblasting is inappropriate and will not be approved.

### **III.2.3 Paint**

Where possible, the original color and texture of masonry surfaces should be retained. Painting previously unpainted masonry structures, or applying stucco and concrete veneers such as Formstone to previously uncoated structures, is not appropriate and will not be approved. Conversely, paint should not be indiscriminately removed from masonry surfaces, as some brick surfaces originally were intended to be painted. The low-fired and porous masonry of the pre-20<sup>th</sup> century was often painted to prevent water penetration. It is therefore inappropriate to remove paint from a building that was historically painted and it will not be approved.

### **III.2.4 Masonry Repair**

The repair of historic masonry, beyond simple repointing, may be necessary if the structural integrity of a wall has been weakened from movement or from the surface deterioration of masonry units. Repair may entail the limited placement of masonry units which match size, color, and texture of the extensively damaged or missing units.

### **III.2.5 Repointing**

Replacement of (or touching up) the mortar in a masonry wall is called “repointing.” The decision to repoint is often related to some obvious sign of deterioration such as failing mortar, cracks in the mortar joints, loose bricks, damp walls or damaged plasterwork. The true cause of the deterioration should be determined before beginning any repointing work. Leaking roofs or gutters, differential settlement of the building, capillary action causing the rising damp, or extreme weather exposure should all be dealt with immediately.

Before beginning any work, observe the profile of an existing mortar joint to determine the type of joint used (see section 2.1 above). Close examination of both the vertical and horizontal joints will reveal the sequence and method of tooling, which affects the finished appearance of the wall. The mortar used for repointing must match the color, texture, strength, joint width, and joint profile of the existing historic masonry.

The removal of the existing deteriorated mortar should be accomplished by hand, using a hammer and cold chisel. Power tools, including grinders and circular saws, are inappropriate and will not be approved. Remove the old mortar to a depth of one-half inch to one and one-half inches and spray away small loose particles with a light, quick stream of water.

A good starting point for most buildings constructed in the 1800's is a repointing mortar mix containing one part hydrated lime mixed with 2 parts (by volume) sand of historic color and enough water for a workable mix. This mixture can be modified if necessary, to improve drying and workability, by adding a small amount of white Portland cement. The Portland content should not exceed 20% of the combined volume of lime and cement. Mortar mixed with a high percentage of Portland cement should not be used on buildings constructed prior to 1900 and will not be approved.

The color of the repointing mortar should match the unweathered interior portions of the historic mortar. The simplest way to check the match is to make a small sample of the proposed mix and allow it to cure; this sample is then broken open and the broken surfaces compared to the unweathered interior portions of the historic mortar. If available sand does not produce an acceptable color match, it may be necessary to use some modern mortar pigment, and, in fact, some historic mortars did use such additives. Additional information on repointing can be found in the National Park Service's *Preservation Brief 2*, available on line at <http://www.nps.gov/tps/briefs>.

In choosing a contractor or mason, perhaps the best way to award the contract is for this individual to demonstrate his or her skill in a test panel: a small demonstration section of joint preparation and repointing actually done on historic masonry. The test panel should be carefully selected to include all types of problems to be encountered on the job. Usually a 3 foot by 6 foot area can be tested in an inconspicuous yet readily accessible place.

### **III.2.6 Sealants**

The use of sealants is discouraged, except in cases where exceptional conditions warrant their use. Although sealants have improved in recent years, the potential for discoloration and other changes in appearance requires that very careful testing be done to assure that there will be no detrimental impact. Requests to use sealants will be judged on a case-by-case basis.

### **III.2.7 Prevention**

Most damage to masonry is a direct result of water penetration. Water can cause expensive damage through freezing and expansion inside the walls or by causing destructive chemical reactions. Prevention is cheaper than repair, so it is important to keep roof flashing, drains, gutters,

and downspouts in good repair.

### III.3. WOOD

Although most of the oldest surviving buildings in Chestertown have brick exteriors, other early buildings were constructed almost entirely of wood, and even brick structures have interior wood framing and utilize exterior wood trim for cornices, door surrounds, windows, porches, and stairways. The type of wood used, the way in which it was cut and molded, and the manner in which it was applied varied over time and can contribute significantly to the character of a building.

#### III.3.1 Character-defining Elements

The wood on early buildings came from trees felled by an ax, after which beams were hewn with a broadax and finished with an adze, leaving characteristic marks on the surface of the beam. Although these are rarely visible on the exterior of a building, they are characteristics that should be retained when visible. The wood siding on early buildings was cut with a pit saw; as the wood was forced along the saw by hand, the saw left irregular diagonal marks on the cut face. Somewhat later, mill-driven saws left more



Pearce House, 103 Maple Avenue (ca. 1895)

regularly spaced vertical marks, while much later circular saws left the type of marks seen on today's wood. Although the details may have been obscured over time by weathering and multiple coats of paint, exposed wood (such as siding) on earlier buildings will look less regular than that of later buildings, a characteristic that should be retained. This also is true for more detailed elements of a building such as trim or cornices, which might have been hand-planed or carved and should be retained.

In general, all character-defining wood elements of a building should be identified, retained, and preserved. These include, but are not limited to clapboards and other wood siding, brackets and trim, cornices, entablatures, porches, window frames and trim, shutters, doors and frames, and balustrades. Removal of character-defining wood elements will not be approved, as it will destroy irreplaceable features.

### III.3.2 Repair or Replacement

Wood elements should be kept in good repair and protected from damage by water, insects, and weather. This requires measures such as an adequate painting schedule, keeping gutters and downspouts in good repair, and inspection and remediation for insect damage.



Wood porch railing, High Street

When character-defining wood elements such as cornices or balustrades are missing, recreation of these elements is appropriate if historical, pictorial, or physical documentation exists. If such documentation does not exist, the best solution is a compatible approach using contemporary materials.

### III.3.3 Painting

Exterior paint provides important protection to wood. It provides a shield against the greatest enemy of wood, which is moisture penetration. Damage caused by moisture threatens not only the siding and trim of a building, which is where the paint is typically applied, but also the framing. It is essential to adopt a regular painting schedule to protect the wood, as a good paint job will last for more than ten years if proper procedures are followed.

Although the Chestertown HDC does not review paint colors, all wood elements on a structure must be finished, either painted or stained with an opaque stain.

The National Park Service has published a highly useful paper on exterior painting as *Preservation Brief 10* in their Technical Preservation Brief series. It is available on-line at <http://www2.cr.nps.gov/tps/briefs/brief10.htm> and a copy is on file at Town Hall.

### III.3.4 Wood Siding (also see Section III.5 below)

Wood siding should be retained and repaired. If replacement becomes necessary, the new siding should match the original in terms of material, type, size, profile, and application.

### III.3.5 Pressure-treated Lumber

Experience has demonstrated that the use of pressure treated lumber in buildings, whether for repair or replacement, is not cost-effective. In general, treated wood is of lower quality, with a high moisture content and many knots. As a result, it warps rapidly. It also must be painted or stained, both to ensure its longevity and appropriate appearance. Good quality paint or stain on untreated lumber will be just as effective a protectant, without the other problems induced by pressure-treated wood. The use of pressure treated wood in structures is therefore discouraged and is unlikely to be approved.

## III.4. METAL

Many of Maryland's commercial buildings from the turn of the 20<sup>th</sup> century utilized cast iron in storefront facades. Although this was not done in Chestertown, many buildings used smaller cast iron components, sheet metal, or iron fencing. Iron was used in a variety of other ways, such as the common use of wrought iron tie rods with decorative plates. More recent design influences have introduced metals such as porcelain steel, stainless steel, and aluminum to the Historic District.

#### **III.4.1 Character-defining Elements**

All character-defining metal components should be identified, retained, and preserved. These include but are not limited to tie-rods, railings, fences, standing-seam or metal shingled roofs, window hoods, and storefront elements. Removal of character-defining metal elements will not be approved, as it will destroy irreplaceable features.

#### **III.4.2 Repair or Replacement**

Repair of metal features is preferred over replacement. Replacement is only appropriate if the original material is damaged beyond repair. Period replacements may be available from architectural salvage firms, or replicas may be found in architectural restoration catalogs. If necessary, replacement pieces can be fabricated from sheet metal to match the existing materials. Intricate details can be reproduced in materials such as fiberglass.

When repairing or replacing metal elements, avoid physical contact between two different types of metal, as this can cause a chemical reaction leading to rapid corrosion.

Additional information is available in the National Park Service's *Preservation Brief 27*, available on-line at <http://www2.cr.nps.gov/tps/briefs/brief27.htm>.

#### **III.4.3 Painting**

Although the HDC does not review color, the use of historically appropriate colors is encouraged, and the methods used to clean metal surfaces must follow these Guidelines. If repainting is necessary, completely remove all loose, flaking, and peeling paint. Rust should also be removed.

- Sandblasting is not an appropriate method for removing paint or rust, as it causes irreparable damage to the historic fabric.
- Metal will be better preserved and a paint job will last longer if the metal is properly primed and if the primer and finish paints are compatible with one another.
- The joints between metal panels should be caulked and filled to avoid water penetration.

### **III.5. SIDING**

The siding or exterior surfacing of Chestertown's buildings has been done in a variety of ways, including wood clapboard, wood shingles, asbestos or artificial shingles, stucco, and vinyl

or aluminum siding. Sometimes these were used during the original construction, while at other times they have been introduced as replacement elements.

### III.5.1 Types of Wood Siding



Beveled lap siding



Beaded siding



German lap siding

The most common wood siding is known as *clapboard*, consisting of long horizontal boards that are nailed to the building's frame from the ground up. Only the tops of the boards are nailed, and the bottom of each board covered the top of the course below it. This method of nailing helps the siding to shed water. The exposed width of each clapboard (the "reveal") is an important characteristic of each individual building, as is the shape of the boards. In *beveled* siding, clapboards are thinner on their upper edge, whereas boards of equal thickness are known as *simple-drop* or *colonial* siding. In either case, the bottom edge could also be *beaded*. In *shiplap* siding, the edges are rabbeted and nailed so that the siding is flush. Sometimes the upper edge of such boards is also routed out or milled to produce what looks like a shallow horizontal groove between the boards, sometimes referred to as *V-rustic* or *German lap* siding.



Outbuilding with board and batten siding, Mill Street

Other techniques included *board-and-batten* siding and *shingling*. In board-and-batten siding, boards were nailed onto the frame vertically. The joint between boards was then covered by a much smaller vertical strip of wood referred to as a batten; this prevented the entry of moisture. Board-and-batten siding is not common in Chestertown. Shingling, on the other hand, is more frequently seen. Sometimes these were used to clad an entire structure. Elsewhere, shingles were used in conjunction with other types of siding to produce the complex surfaces and textures sought in Queen Anne style buildings. Such houses often made use of clapboard on lower stories or the first and second stories, while shingles covered gable ends, towers, or upper stories. Shingles could be cut in a variety of patterns, including rounded bottoms that produced a fish-scale effect. In the past, wood shingles were sometimes installed over existing clapboard to avoid the maintenance of painting.

## **5.2 Repair or Replacement**

Preserving historic siding materials begins with a routine maintenance program that generally involves the least amount of work needed to preserve the materials and features of the building. Maintenance of a frame building would include caulking and painting, or where paint is extensively cracking and peeling, its removal and the re-application of a protective paint.

Replacing sound or repairable historic siding material is never recommended. However, if the historic material cannot be repaired because of the extent of the deterioration or damage, then it will be necessary to replace it. The preferred treatment is always replacement in kind, and every effort should be made to replicate the material and its unique characteristics, such as shape, profile, reveal, and texture.

## **5.3 Resurfacing**

Resurfacing frame buildings with brick veneer, artificial stone, asbestos or asphalt shingles, and vinyl or aluminum siding is not appropriate. If a structure was previously resurfaced with inappropriate materials, the Commission encourages their removal and repair of underlying surfaces. Before undertaking removal of inappropriate siding, a small area should be tested for feasibility. When previously applied inappropriate materials reach the end of their useful life, they should be replaced with materials more appropriate to the original character of the structure.

## **5.4 Vinyl and Aluminum Siding**

Aluminum and vinyl siding are not appropriate in the Historic District because they conceal or obscure character-defining elements. In addition, they increase deterioration of buildings through rot (from moisture infiltration) and from the fasteners used, which penetrate the earlier sheathing. Monitoring the health and stability of the building hidden beneath the siding is quite difficult. In addition, even vinyl and aluminum siding must eventually be repainted; once this stage is reached, repainting must occur with the same frequency as wood. Because the color of these siding materials varies from batch to batch and weathers over time, replacement of small sections is very difficult to do unobtrusively.

Although such siding is often advertised a cost-saving measure, the hidden costs from possible deterioration often make it less cost-effective. It also offers little or no long-term gain over the cost of painting. Normally vinyl or aluminum will cost from two to three times as much as a good paint job on the same house (more if the application is sensitive to trim and historic detail), while paint should last from 8 to 10 years. For vinyl or aluminum to save money over the long haul then, it must last for 16 to 30 years and not require any painting. By themselves, vinyl and aluminum offer no increase in insulation, and the insulation backing applied to them is too thin to add appreciable savings. Finally, application of such siding results in loss of the unique qualities of a building, and this reduces property value.

For these reasons, the installation of vinyl or aluminum siding is strongly discouraged. In

certain circumstances, its use might be considered in new construction, when it is used on a wing or secondary elevation that is not readily visible to the public. Requests for its installation will be reviewed on a case-by-case basis.

## III.6. DOORS AND WINDOWS

### III.6.1 Doors

Whenever possible, try to retain the building's original doors. Deteriorated doors can be dismantled and refinished, cracks and holes can be filled, surfaces can be relaminated, hinges can be repaired, and rotted frames can be replaced. Any original hardware on the door should also be retained and repaired whenever possible.

If the present door is too deteriorated or is not original, several alternatives exist for replacement. A similar exterior door from a side or rear entrance could be removed and installed on the front. Salvage yards can be a good source for doors of the same period and profile. A custom door can be milled to the exact specifications of the old door. Lastly, if a new door must be purchased, an attempt must be made to duplicate as closely as possible the size, proportion, shape, and number of panels of the original door.



Front door with transom

### III.6.2 Screen and Storm Doors



Doorway with appropriate storm door

Screen doors allow the solid doors to be left open during milder months, offering limited security and insect protection for the occupants, while allowing air and light into the entry-hall. Care should be taken when considering the installation of screen doors, however, since some architectural styles were not designed to incorporate them.

If a screen door is to be installed, select a simple wooden door with as much open screen area as possible to minimize the interference with the appearance of the main door. Paint it the same color as the main door to lessen contrast. Finally, keep the screen door the same size as the main door.

The same general considerations apply for storm doors. Screen and storm doors should not obscure the primary door or change the character of the entry. Storm doors also should have a large opening and should be painted to

match the main door. A good solution is a wood combination storm and screen door, with interchangeable inserts for winter and summer.

### III.6.3 Windows

Windows are important to the overall design and character of a structure. Most windows are double hung. The number of lights (or panes) in a window sash varies with the architectural style of the structure. In the late 1800s, the two over two and one over one sash were introduced, creating an elongated effect.

All original windows of a structure should be retained, with their defining elements repaired rather than replaced. Before assuming that an entire window frame must be replaced due to deterioration, examine it closely to determine if only the sill needs to be repaired or replaced. In many cases, the sill can be repaired by one of three methods, depending on the severity of the deterioration.



Bay window with decorative trim

- If the sill contains numerous holes and cracks, treat the sill for one day with a wood preservative containing pentachlorophenol, then paint it liberally with linseed oil and finally patch all the holes and cracks with putty.
- If the sill has begun to rot, use the marine epoxy to stop the spread of the rot and then apply an epoxy filler to smooth out the surface of the sill.
- If the deterioration is severe apply several layers of epoxy wood filler to build up the surface of the sill. Allow each layer to dry thoroughly between applications, then prime and paint.

If the entire window frame is so deteriorated that it cannot be saved, replace it with a window of the same size, shape, design, and number of light divisions as the original. The width and profile of the replacement window muntins should match those of the original muntins. Window openings should not be blocked down or reduced in size to accommodate a smaller, standard replacement window. Likewise, the substitution of horizontally-designed picture windows is not appropriate.

Six over six and other multi-light sashes should only be used when appropriate to the architectural style of the structure. Snap-on muntins, which simulate the subdivisions between the light, and vinyl windows are not recommended. The use of mirrored or tinted glass is not appropriate and should be avoided.

Many residential buildings have transom windows located over the entrance door. These windows should be preserved, and defining elements such as trim should be repaired rather than

replaced. If replacement is necessary, it should be consistent with the original window.

### III.6.4 Lead Paint

As the dangers of lead paint have become more widely recognized, homeowners have had to contend with new state and federal regulations during rehabilitation. This often prompts requests for complete removal and replacement of the windows in a building for lead abatement. This drastic measure, which is counter to the principles of these guidelines and the *Secretary of Interior's Standards*, can be avoided through a number of different methods.

A variety of new encapsulant paints and coatings have been developed to contain lead paint and prevent exposure. Lead paint frequently produces dust at friction points, such as window sashes, and this can be controlled with sash liners. If paint is deteriorating and must be scraped or removed, lead exposure can be controlled through wet sanding, controlled sanding, and the use of low temperature heat guns and chemical strippers. It also is possible to have window sashes removed for sanding off site under controlled circumstances. Care should be taken to avoid spreading lead dust throughout the house during any rehabilitation project, and it may sometimes be necessary to hire specially trained and certified professionals.

Additional information on lead paint abatement can be found in the National Park Service's *Preservation Brief 37*, which can be found on-line at <http://www2.cr.nps.gov/tps/briefs/brief27.htm>. The Department of Housing and Urban Development (HUD) offers additional resources at <http://hud.gov/lea>. The Maryland Historical Trust has produced a useful video entitled "The Best of Both Worlds: Lead Hazard Reduction in Historic Buildings." The Kent County Health Department also can provide information and literature, including current HUD recommendations.

### III.6.5 Shutters

Many historic structures are equipped with shutters, which served to protect the building from weather and could be left closed for extra security. When replacing or adding shutters to a building, be sure that they are installed so that they appear to actually function. In other words, the shutters, if they could be closed, would cover the entire window cavity. They should be attached to the window, not the adjacent wall surface. Vinyl and aluminum shutters are inappropriate for a historic house and will not be approved.

Installation of shutters in locations where they did not exist historically is inappropriate. If replacement becomes necessary, the replacement shutter should match the original in size, scale, detail, thickness, and hardware. Shutters should always be mounted to the window frame, not into the adjacent siding.



Sash window with louvered shutters



Storm window properly installed

### III.6.6 Storm Windows

The first step in reducing heat loss through windows should be installing or replacing damaged or inadequate weather stripping and caulking. The installation of exterior storm windows can also assist in energy conservation and is preferred over window replacement. Exterior storm windows permit the retention of existing historic wooden windows and dramatically reduce their maintenance needs. A wooden sash with exterior aluminum storm window can outperform a replacement unit with thermal break and can be far more cost-effective to install.

Triple track storm windows are recommended, and these should have a finish to match the color of the historic frame. The meeting rails of storm sash must align with those of the existing windows. Care should be taken not to allow the storm window to conceal details of the sash window. Interior storm windows should be used only when exterior windows significantly detract from the appearance of the building.

### III.7. ROOFS

A variety of roof shapes, pitches and sheathing types have been used in the Historic District. These include double-pitched, hipped, gable, mansard, and a single-slope shed forms. Roofs are an essential element in defining building styles and for these reasons it is not appropriate to alter or obscure them. Much of a building's historic character derives from its roof.



Detail of Boyd House showing metal standing seam roof

The original roof shape should be preserved and the original roofing materials retained unless deteriorated. When partially re-roofing, deteriorated roof coverings should be replaced with new materials that match the old in composition, size, shape, color, and texture. Materials (slate or metal) should not only be the same, but the form should be the same. Corrugated sheet metal, for example, is no substitute for the original standing seam panels found on many Chestertown roofs. When entirely re-roofing, new materials should not be used which differ to such an extent from the old composition, size, shape, color, or texture that the appearance is altered.

Wood shingles are appropriate only if there is pictorial, historical, or physical evidence that they were once used on the historic building, or if they were typical of a certain style. Functional and decorative features such as cupolas or lanterns, dormers, cresting, finials, weathervanes, and chimneys should be preserved.



Detail of Pearce House showing slate roofing

In certain circumstances (for example on non-character-defining portions of a building or in areas that are not visible from the public way), modern alternative products may be appropriate, as long as they are compatible in appearance. These types of shingles will be reviewed on a case-by-case basis.

Alterations or modifications that substantially change, damage, or destroy a roof's defining historic characteristics are not appropriate. New additions such as skylights, antennas, and mechanical equipment should be installed in such a manner that they are screened or not visible from the public view. Bubble-shaped, faceted, or dome skylights are not appropriate and should be avoided. Flat, sloped skylights may be approved on a case-by-case basis for elevations that are not character-defining.

The maintenance of roofs on historic properties can be costly and require frequent inspections. However, there is no substitute for the durability and appearance of slate and patterned or seamed tin. These materials should be valued by the property owner as an asset that contributes to property value.

### III.8 PORCHES

Many older residential structures have covered entrances, ranging from bracketed hoods to porches which wrap half-way around the structure. Large porches became popular during the late 19<sup>th</sup> century and were often added to older homes.

The porch structure itself includes the landing and other elements, which support the roofed open area. Ornamentation, such as turned or sawn wooden balusters, fretwork, and columns, helps to define the character of most porches, along with size, scale and placement.

Every effort should be made to retain as much of the original porch materials as possible. If a porch must be replaced, it should be built to its original configuration. The usual set back distance and overall width of the original porch should also be maintained.



Porch on Queen Street

Most porches originally were constructed of wood and supported by brick piers. Rehabilitation efforts should incorporate the use of these



Porch with lattice screen

materials. Porches should not be replaced with inappropriate materials such as brick, concrete, concrete block, or inexpensive ironwork. Doing so would destroy the historical integrity of the structure as well as interrupt the rhythm of the streetscape. It is better to embark on a slow rebuilding project using original materials than to use unsuitable substitutes.

Many porches have lattice screens installed between the support piers. For most historic periods, lattice would have been installed with battens running horizontally and vertically, rather than on a diagonal, and this approach is preferred. The use of high quality wood is recommended for porches, rather than pressure treated wood. High quality untreated wood, properly painted and cared for, will outlast pressure treated wood. Treated wood is made of an inferior grade of wood that warps easily and contains knots and other irregularities.

Porches must be kept painted or stained, and new porches and repairs must be painted within six months of construction to ensure the porch's longevity and appropriate appearance.

### III.9 COMMERCIAL BUILDINGS

Chestertown's historic commercial core is concentrated along High Street, Cross Street, and Park Row. These commercial buildings, like their residential counterparts, are low in scale and seldom exceed three stories in height. Also like their residential counterparts, they reflect the changing styles that were popular in different periods. Their storefronts are a character-defining element of the buildings and of the District as a whole, so they are worthy of preservation.

The rehabilitation guidelines in preceding sections apply equally to commercial properties, but commercial architecture differs in form. The storefront level typically is differentiated from the upper stories, and storefronts often have elements that are unique to commercial buildings. These character-defining elements include bulkheads, piers, display windows, transoms, entrances, friezes, and parapets. What-



Commercial building in the Historic District



Store front on High Street

ever the current use of these buildings, the defining elements should be identified, retained, and preserved.

### **III.9.1 Bulkheads**

A bulkhead is the base that supports the storefront window, and they were constructed of a variety of materials. Intact bulkheads should be preserved, and repair is always preferable to replacement. If replacement should become necessary, the original should be replicated as closely as possible. Plywood or rough wood paneling requires more frequent maintenance and replacement and should not be used to replace original wood bulkheads. Vinyl, aluminum, and imitation brick or stone are not appropriate and should not be used.

### **III.9.2 Piers**

Above the bulkhead is a vertical piece that frames window or door openings. This vertical component is called a pier, and they were often designed as a flat column or pilaster. Intact piers should be preserved, and defining elements and materials should be repaired rather than replaced. If replacement becomes necessary, it should be done with materials and techniques that match the original as closely as possible. It is inappropriate to cover or obscure piers with unsympathetic materials such as plywood, rough or sawn wood, imitation stone or vinyl.

### **III.9.3 Display Windows**

Display windows usually extend from the bulkhead up to the transom, and are framed by piers. They are essential and character-defining elements in a storefront. Display windows should therefore be preserved, along with defining elements and materials such as trim, reveals, and muntins. Should replacement of the display window become necessary, the new window should match the original in size, material and configuration. Display windows should never be fully or partially filled, blocked off, or concealed. Glass block is not compatible with the original function and design of display windows.

### **III.9.4 Transoms**

As in residential structures, a transom is a window or series of windows located above a door or display window, and they are usually made of glass. Transoms should be preserved, along with their character-defining elements such as trim and material. If replacement becomes necessary, the replacement



Cross Street office front

should match the original in all character-defining aspects and be consistent with existing transom windows. Depending upon the date and construction style of the building, stained or lead glass may not be appropriate and therefore might not be approved. Like display windows, transoms should never be fully or partially filled, blocked off, or concealed, and this will not be approved. Glass block and masonry filling are generally not appropriate and will not be approved.

### III.9.5 Entrances

Entrances can be flush with the façade or recessed to provide shelter from the elements. In either case, they are an important part of the building. If the entrance originally was recessed, retention of this feature is recommended. Other elements of an entrance, such as columns, pilasters, and above-door entablatures, should also be preserved and repaired, rather than replaced or removed. If replacement is necessary, materials and form should be as close to the original as possible. Major alterations to entrances are unlikely to be approved, however the HDC recognizes that modern needs and uses may sometimes require alterations. These are handled on a case-by-case basis. Doors that are flush with the sidewalk should be avoided.



Chestertown Bank entrance

### III.9.6 Doors

Original doors also contribute greatly to the character of historic buildings, and they should be identified, preserved and repaired. If doors are so deteriorated that they must be replaced, the replacement should match the original as closely as possible; if a modern door is to be replaced, pictorial, historical, or physical evidence should be used to identify the original door type. If no such evidence exists, the style should be appropriate to the building's style and function. Hardware should also match the original or be compatible, and commercial buildings should utilize glass panels to fit with their function and provide visual access to the interior. Steel-covered hollow core doors have a poor finish appearance and often cannot be found in sizes and styles appropriate for historic buildings. Storm doors should not obscure the details of the original door and should be of an appropriate style.

### III.9.7 Friezes and Parapets

A frieze is a horizontal band, frequently combined with a cornice, that sets off horizontal divisions in a façade. A parapet is a low protective wall that extends above the roof of a building.

Friezes often set the ground floor storefront apart from an upper story, or they may provide a decorative element to the parapet. First floor friezes often were used for signs, and this practice is encouraged. Intact friezes should be maintained. Obscuring or removing all or part of a frieze is inappropriate and will not be approved. The use of incompatible materials such as aluminum or

vinyl on friezes is inappropriate. If a frieze is missing, a replacement can be installed based on pictorial, historical or other reliable evidence. Awnings (if themselves appropriate) should be installed below the frieze, rather than on or into it.

Existing parapets should be preserved, repaired and restored. Water damage is a primary cause of damage to parapets, so maintenance of flashing and coping is important, along with regular painting or sealing. Repairs should match the original as closely as possible, and replacement should be considered only if repair is not feasible. Replacements should be based on sound evidence and match the original as closely as possible.



Parapet wall, Cross Street

### III.10. ACCESSORY OR AUXILIARY BUILDINGS

Garages, sheds, and other small accessory structures are common historically. Such accessory buildings are usually associated with residential structures, and they contribute to the overall character of a property and the district. More modern accessory structures such as patios and pools also may be important elements of a property.



Smoke House on Spring Street

Accessory buildings that significantly contribute to the principal structure or the character of a property of the District are significant in their own right and should be preserved. Their siting, orientation, design, scale, materials of construction, and detailing also are worthy of preservation. Deteriorated accessory buildings and their distinctive features and details should be repaired if necessary, using the same materials or ones that are similar to the originals in scale, form, color, and texture. If missing accessory buildings or those deteriorated beyond repair are to be replaced, they should be replaced with new ones that are compatible with the principal structure in siting, scale, proportion, fenestration, materials and colors. Proposed changes to modern accessory structures or non-significant elements must likewise be compatible with the char-

acter of the property and the Historic District.

### **III.11 LIGHTING**

If original lighting fixtures are present, these should be preserved and repaired. If original fixtures are not present, period lighting should be installed only if there is sound evidence supporting its use on the structure originally. Fixtures should be appropriate to the style and scale of the building and the element to which it is attached. New fixtures should be attached to the mortar of masonry buildings to avoid damage to historic masonry.

All exterior architectural lighting must be reviewed and approved by the HDC, including street and sidewalk lights. Sodium vapor lamps should be avoided because of their harsh light; incandescent lights are preferred because of their warmth, effect on color, and non-glaring qualities. Lighting should not adversely affect neighboring buildings, pedestrians, or automobile traffic. In general, lower levels of lighting are more appropriate than higher ones and existing or historic lighting colors and intensities should be matched wherever possible.



Imperial Hotel lighting

### **III.12 MECHANICAL EQUIPMENT & ACCESSORIES**

#### **III.12.1 Heating and Cooling Equipment**

Heating and cooling equipment has components that often are installed on the exterior of a building. They can have both visual and audible impacts, and installation can have an impact on the historic fabric of structures. The installation of all exterior mechanical equipment must therefore be reviewed and approved by the HDC. Mechanical equipment should be installed in such a way that it does not damage or destroy a building's character-defining elements or fabric. Rooftop mechanical equipment must be installed in such a manner that it is not visible from the public way. If it is not possible to install rooftop equipment so that it is invisible from the street, it must be screened from view using appropriate and sympathetic materials. Window air conditioning units are discouraged and should not be used on the front elevations of buildings. They should instead be placed on the sides or rear of structures and screened from view wherever possible. Heat pumps and other HVAC units that are placed on the ground should be located to the sides or rear of a property and screened from view. It is also recommended that the affects of equipment noise on neighbors be considered when determining placement.

#### **III.12.2 Satellite Dishes and Antennas**

Satellite dishes and radio and television antennas require HDC approval before installation. These additions are incompatible with the District's character and the Commission therefore strongly discourages their use in visible areas. If they must be used, the smallest possible equipment should be installed, and this must be done as unobtrusively as possible. Satellite dishes will

not be approved on the front elevations of buildings. If it must be placed on another significant elevation, it should be screened with fencing materials or vegetation. Rooftop antennas should be mounted as far back from the roofline as possible. Other ordinances may also apply, so applicants should consult with the Town Office.

### III.12.3 Utilities

Electrical, telephone and cable service should be placed underground wherever possible. Where this is not possible, side or rear placement is preferred. Utility boxes such as gas and electric meters or cable boxes should be installed on secondary facades rather than primary facades. Boxes that are visible should be painted to match the building.

### III.12.4 Vending Machines

Any vending machine installed in the public way must be approved by the Historic District Commission. These items are not compatible with the Historic District and have an adverse impact on the streetscape.

### III.12.5 Automated Teller Machines (ATMs)

Automated teller machines (ATMs) proposed for the exterior of a building require HDC approval. In general, these devices are not compatible with the character of the District, but the Commission recognizes their importance to businesses and residents. ATMs should be installed on the least important façade, wherever possible, and installation in building recesses and entryways is encouraged. ATMs should be installed in a manner that causes the least amount of damage to the building's historic fabric. They also should be as small in scale as possible while meeting banking needs, and lighting should be provided by unobtrusive fixtures. Light emitted should be at the lowest level possible while ensuring customer safety. Litter receptacles are required elements in all ATMs.

## III.13 SIGNS

This section of the Design Guidelines is intended primarily for historic areas which are commercially zoned. Generally, signs should be compatible with the character of the neighborhood and blend with the character of the structures on or near which they are placed. In evaluating permit applications for signs, the following guidelines will be used:

- Signs should not conceal architectural detail, clutter the building's image, or distract from the unity of the façade, but rather should compliment the overall design.
- Sign materials should compliment the materials of



Hanging sign with molding on High Street

the related building and/or the adjacent buildings. Surface design elements should not detract from or conflict with the related structure's age and design.

- Panel and hanging signs should have a molding applied around the edges, which will help resist deterioration and fading of the sign.
- No façade should be damaged in the application of signs. On masonry buildings, fasteners must be used only in mortar, not in the masonry itself.
- Internally illuminated cabinet signs, neon "Open" signs, and flashing or blinking lights will not be approved.
- Building directories are encouraged for multi-tenanted buildings, rather than individual signs for each business.

Chestertown has a separate sign ordinance, with requirements that vary by zoning district. These are available on the Town Office, and all applications must also meet these requirements.

### III.14 ACCESS TO THE DISABLED

Providing disabled access to commercial buildings in the Historic District is by the federal Americans with Disabilities Act (ADA). It can be very challenging to create handicap access while while preserving the aesthetics of a historic building.

ADA requirements should be met with the least amount of damage to historic fabric and distinctive elements. The HDC recognizes the importance of equal access and encourages creative solutions to these challenges. The National Park Service's *Preservation Brief 32* (<http://www2.cr.nps.gov/tps/briefs/brief27.htm>) provides much useful guidance in complying with ADA requirements. Basic questions about ADA requirements can be obtained from the Department of Justice's hotline, although this information is not necessarily authoritative. The hotline telephone number is 800.872.2253.

### III.15 Archeological Impacts

Chestertown's Historic Zoning ordinance specifically calls for the preservation and protection of archeological resources in the Historic District. The best preservation method is leaving these resources in the ground, undisturbed. Rehabilitation sometimes requires significant ground disturbance, including trenching for utilities and footers, excavation for landscaping, and grading for driveways and parking areas.

For any major rehabilitation project, it is recommended that a professional archeologist assess or survey the



Archeological dig at the Custom House (Summer 2000)

area prior to construction. If important resources are likely to be disturbed, the best course of action is to design the project to avoid them. If avoidance is the option chosen, steps should also be taken to ensure that equipment does not damage remains that are being left in the ground. If it is not possible to design the project to avoid archeological resources, archeology and recording should be done according to best practices prior to construction. Archeological investigations should conform to the Maryland Historical Trust's *Standards and Guidelines for Archeological Investigations in Maryland*. The Trust also maintains a list of professional archeologists that can conduct assessments and excavations. The list and the *Standards and Guidelines* are available on line at <http://www.marylandhistoricaltrust.net> under "Documents." Archeologists at local or regional colleges and universities also are sometimes available to conduct archeological assessments.



Excavation at Custom House showing oak bulkheading and redware pottery