

FORWARD

The Historic District Guidelines are used by the Historic Preservation Commission in reviewing applications for Certificates of Appropriateness. They are based on the Secretary of the Interior's Standards for Rehabilitation. Property owners should consult the guidelines when planning exterior repairs and home improvement projects.

The Guidelines are updated periodically to stay abreast of the latest innovations in preservation technology and emerging issues such as energy efficiency and lead safety. Meetings were held in each of Greensboro's Historic Districts during the fall of 2010 to get feedback from residents and property owners.

The revised Guidelines reflect a better understanding of the systems of an old house and how they work together. They recognize the value of "green"-friendly and sustainable approaches to preservation. They attempt to be more informative through the use of examples and illustrations. For the most part the examples are based on actual cases in Greensboro's historic districts.



Dunleith was the more than 100 acre estate of Robert P. Dick, a United States Senator and North Carolina Supreme Court Judge. Built in 1856 the house originally faced Milton Road, now North Church Street, roughly across from what is now Fisher Park. The house was razed in 1969.

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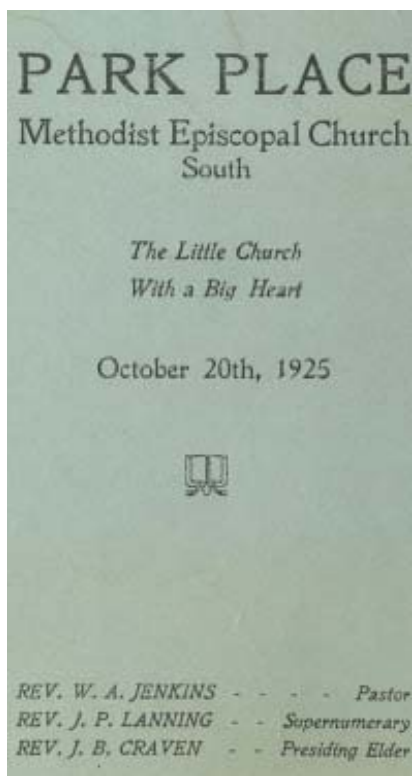
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Park Place Church was located on North Elm Street just south of Hendrix Street.



INTRODUCTION

The purpose of Greensboro's Historic District Program is to encourage the preservation of historic areas of the city for the education, pleasure, and enrichment of all citizens. Historic districts are part of what makes a great community. They are important to the economic well being of the city because they are a sign that Greensboro is a community that values its unique identity as reflected in historic areas and sites. Historic overlay zoning has been shown to protect property values and encourage investment in restoration of historic structures.

The Historic Preservation Commission is responsible for ensuring that changes to buildings and the neighborhood environment meet the Historic District Guidelines through the Certificate of Appropriateness process. Greensboro's program is based on the premise that the Historic Districts have evolved with the passage of time and will continue to evolve. They are not "frozen in time" like a museum district. They will continue to be popular places to go to school, raise a family or start a business. The Guidelines are written to accommodate the needs of the families, businesses and institutions that reside here. They recognize the special needs of churches, schools, and businesses as well as the practical problems encountered in adapting historic buildings to modern lifestyles. The Commission often must balance functional needs and costs with the historic and architectural value of the property.

Because Historic District rules place restrictions on private property the Commission must be mindful of the due process rights of property owners. Individual rights must be recognized and respected, and the full use of one's property guaranteed within the bounds of the Guidelines. When applying the Guidelines, the Commission will consider the potential impact of changes on the character of the neighborhood and be sensitive to the concerns of nearby property owners.

Greensboro's Historic Districts are composed primarily of single-family residences, but they also include parks, businesses, churches, schools and apartments. This variety is what makes them special places within the larger community and gives them their spirit and vitality. Residents can walk to work, to the park, to campus, to restaurants and to downtown. Each of the buildings in Greensboro's Historic Districts has a story to tell and should be recognized and valued in its own right. Structures in Greensboro's Historic Districts are categorized as either "Contributing" or "Non-Contributing". Non-Contributing structures are those that were built outside of the period of significance (or the original development period) or have been altered to the point that they have lost their architectural significance. Contributing structures are those that were built during the period of significance and their architectural integrity is intact. The commission may consider this distinction and allow flexibility when reviewing Certificate of Appropriateness applications for non-contributing buildings.

For a description of architectural styles found in Greensboro's Historic Districts see Appendix I.

THE CERTIFICATE OF APPROPRIATENESS PROCESS

A Certificate of Appropriateness (COA) is similar to a Building Permit and is required before beginning exterior work in the Historic Districts. An application form may be obtained by calling the Planning and Community Development Department 373-2349 or online at www.greensboro-nc.gov/hdprogram. The application must be accompanied by documentation that clearly shows what is being proposed in sufficient detail so that it can be reviewed for conformance with the Historic District Guidelines.

Appendix II provides examples of the documentation required with a COA application for most exterior work.

STAFF REVIEW

City staff may issue Certificates of Appropriateness for minor work. These are usually projects where there is little or no change in appearance to a structure such as replacing rotted porch flooring. Projects typically approved by staff are installing fences or removing dead or diseased trees. If the staff feels your application does not meet the Guidelines they will advise you about possible changes. But they may not turn down an application for a COA. Only the Historic Preservation Commission can do that. While many repair projects literally do not involve changes, on close inspection there may actually be changes in materials and design due to the differences between historic construction materials and today's standard dimensional lumber. The COA application should specify type and dimensions of proposed replacement materials.

COMMISSION REVIEW

Major projects must be reviewed by the Historic Preservation Commission (HPC) at their regular monthly meeting. Examples are alterations and additions to buildings, construction of new buildings and parking areas, and demolition and moving of structures. The meeting is held on the last Wednesday of each month and the deadline for submission of applications is two weeks prior to the meeting. COA applications are reviewed at a public hearing and surrounding property owners are notified. The HPC is a nine-member citizen board appointed by the City Council. Members are qualified based on interest or experience in historic preservation or related fields.

Appendix II breaks down exterior work into three categories: "No COA Required", Staff Approval", and "Commission Approval".

APPEALS

The Historic Preservation Commission is a quasi-judicial board which means that their decisions may be appealed. Appeals are made to the City's Board of Adjustments. Appeals are filed in the Planning and Community Development Department and the deadline is fifteen days after the HPC meeting. Subsequent appeals are taken to the Superior Court of Guilford County.

POSTING OF THE PROPERTY

When a COA is approved, it is mailed to the applicant along with a placard that should be posted in a window or elsewhere on the property where it is easily visible for the duration of the project. Posting of the placard is important because it signals that the work has been approved. This helps the City's enforcement staff by avoiding calls from concerned neighbors wondering if a Certificate of Appropriateness has been issued.



VIOLATIONS AND ENFORCEMENT

Violations of the Historic District rules, such as undertaking exterior work without a Certificate of Appropriateness, are violations of the City's Land Development Ordinance (LDO) and subject to civil penalties (fines). Violations may be reported to the City's Contact Center at 373-2489. When a violation is confirmed a Notice of Violation (NOV) is issued to the property owner. The property owner is allowed 15 days to correct the violation or submit a COA application or file a written appeal of the NOV. If the owner fails to comply with the NOV, then a \$50 fine will be assessed. Each day that a continuing violation is not corrected can be considered a separate offense and fine amounts can increase up to a maximum of \$500.

EXTERIOR WALLS

The materials and details of exterior walls provide much of the character and charm of a historic building. Homes in Greensboro's Historic Districts were constructed mostly of wood—beveled lap siding, wood shingles in both uniform and patterned shapes, as well as corner boards, window and door casings, etc. Other wall materials found in the Historic Districts include stucco, brick, and stone. Over the years the wood siding and trim of many homes were covered with various “maintenance free” products including asphalt and asbestos shingles, and aluminum and vinyl siding. The removal of artificial siding and repair of the original wall materials is often the most dramatic phase of a restoration project.

Wood siding and details of exterior walls require regular maintenance. An annual inspection may reveal isolated areas of peeling paint and trouble spots where siding meets corner boards, drip caps, and window and door casings. Openings at joints should be sealed with caulk, then primed and painted. Wood has the advantage of being easily repairable because it was likely sawn from old growth timber and is therefore more rot resistant and stable than what is available today. Wood can be repaired with the use of epoxy fillers and consolidants. Wholesale replacement of wood siding can result in walls and trim that are of inferior quality and much less resistant to the effects of weather.

Surface preparation is the key to a good paint job. Hand scraping and sanding and some thermal techniques are recommended because they are the least abrasive methods. Sandblasting, rotary sanders and other abrasive techniques can damage wood siding and trim. Water under high pressure will pit the surface and can force water inside the building. Products that seem to be “too good to be true” may be just that. Elastomeric and other “lifetime” coatings are advertised as “breathable” but their thick film can actually hold moisture and result in deterioration at joints where dormer walls meet the roof for example. They can also obscure the detail of architectural features because of the thickness of the coating. Carefully consider the pros and cons of paint versus elastomeric coatings before making your decision.

Color schemes that highlight architectural features and construction details add to the richness of the historic districts. For a discussion of historic paint colors see Appendix IV.

Buildings constructed prior to 1978 likely have lead-based paint and safe work practices are required to prevent health hazards especially for children. To learn more about lead paint hazards and safe renovation practices see Appendix V.



Removing substitute siding and repairing original wood siding and trim can restore the original character of an old house that was hidden for many years.



Wood siding that was damaged during installation of aluminum siding was replaced with new wood siding to match the original.

Restoring original wood siding allows the opportunity for new paint colors.





Seasonal maintenance of the exterior of your old house can extend the life of the paint job.

Exterior paint must resist the forces of weather and the environment and requires periodic maintenance. Routine cleaning, hand scraping and sanding and re-painting of trouble spots will extend the life of a paint job indefinitely.

Total repainting for cosmetic reasons is inadvisable because paint build up can be a problem in itself. Multiple layers of paint can become hard and brittle. One additional coat might be enough to cause total paint failure. Complete paint removal is expensive and potentially dangerous. Remove paint only to the next sound layer and repaint.

Paint failure is usually the result of interior and/or exterior moisture problems which can be not always easy to determine. They may have started when the heating system was replaced or air conditioning was added. This may have affected the equilibrium of air exchange and raised the level of moisture content. Unless the causes of moisture problems are identified and corrected, repainting is futile. Carefully inspect the exterior of your house to determine the condition of existing paint. Clean areas where mildew or grime has adhered to the surface. Painting over these areas can result in peeling paint. Prune back tree limbs and vegetation that may be encouraging mildew growth. Replace any decayed areas before repainting. The lack of rain gutters may be the reason water is not getting away from the structure and causing moisture problems. For a complete description of paint conditions see Preservation Brief #10.

Do not use mechanical methods to remove paint because they can damage the wood and be hazardous to the environment. Propane torches can be especially dangerous as dust in wall cavities can ignite.



Grime and mildew can adhere to siding and trim. Cleaning with a garden hose, a soft bristle brush and a mild detergent will remove most organic matter. A solution with household bleach or specially formulated products will remove mildew. Cleaning will “freshen up” the paint and sometimes postpone the need for a costly paint job.



Replacing the original steam heating system with a forced air system can change the interior moisture content of a house and result in exterior paint problems.

Water is collecting on this porch because there are no rain gutters to divert water away from the house. Unless this problem is corrected the deterioration will continue.





Abrasive paint removal methods can damage the surface of wood siding. Sandblasting removes the softer wood fibers while leaving harder fibers intact with a look similar to driftwood on a beach.

It is well known that most old houses have some lead paint and that lead poses serious health consequences especially for young children. Today contractors must become certified through training and follow lead-safe work practices. Do-it-yourselfers should also take precautions with projects that could disturb lead paint. Some key steps: keep children and pets away from the work area. Block off the work area with heavy duty plastic sheeting. Cover floors with plastic sheeting. Wear a HEPA filter respirator, safety goggles and disposable coveralls. Avoid abrasive sanding methods and dry sanding and scraping.

For a complete list of lead safe work practices see Appendix 00.



Removing paint using methods that allow paint chips, dust and residue to pollute the environment is hazardous and unacceptable.

GUIDELINES FOR EXTERIOR WALLS

- 1 Preserve the original materials and details of exterior walls. If replacement is necessary, selectively replace only the deteriorated element with new material to match the historic material in composition, size, shape, texture, pattern, and detail.
- 2 Replacement siding and trim should have the same characteristics and be of equal quality as the original siding and trimwork. New wood should be free of knots, usually C and better clear grade lumber. Piecing in new material to replace rotted areas is recommended.
- 3 It is not appropriate to cover or replace historic materials with substitute materials such as aluminum, vinyl, cement boards, or plywood panels. Substitute siding almost always compromises the character of a historic structure, and it can hide water infiltration, insect infestation and other problems that should be corrected as soon as possible.
- 4 Panelized wood shingles should not be used to replace original wood shingles because it does not provide the same appearance and character as individual wood shingles. Panelized wood shingles require a corner board which is inconsistent with historic wood shingle construction.
- 5 Cement board siding and other non-wood materials should not be used for replacement of beveled wood siding because it is different in thickness and design.
- 6 Preserve and maintain features such as cornices, brackets, bays, turrets, fascias, and decorative moldings. It is not appropriate to remove these features rather than repair or replace with matching features.
- 7 Vents or mechanical connections should be through walls that are not visible from the street or in inconspicuous locations and where they do not interfere with architectural details.
- 8 It is not appropriate to apply paint or other coatings to unpainted walls that were left unpainted historically.
- 9 It is not appropriate to use abrasive techniques such as sandblasting, high pressure water blasting, or other methods that may damage the surface, for cleaning or removing paint from exterior walls and trim.
- 10 It is not appropriate to introduce new features such as vents, bays, and window or door openings in exterior walls if they diminish the historic character of the structure.

FOUNDATIONS AND CHIMNEYS

The weathered appearance of timeworn brick foundations and chimneys is part of the character of the Historic Districts. Chimneys often help define the architectural style of a house and are usually prominently situated on the roof. Some chimneys were added later to vent a boiler or furnace and may not be as important.

Chimney safety should be a primary concern. Chimneys that have not been used for some time should be inspected before using. Many are unsafe because of creosote buildup, masonry deterioration due to gases eating away at the mortar, or they may not have flue liners. Only a chimney expert will know for sure but some unlined chimneys are so deteriorated that they must be taken down to the roof, the old bricks cleaned and the chimney rebuilt with a new clay tile liner. Hard-fired terra cotta flue liners became widely used in houses constructed after the turn-of-the-century. With regular maintenance these durable liners can last indefinitely. Two piece step flashing was part of the original chimney construction and consists of metal apron, base, and counter flashing that overlap to prevent water infiltration.

The foundation anchors the building and raises it above the ground. Foundations of historic houses can feature decorative grilles and vents, water tables, lattice panels, and access doors. Some houses were built on brick piers and later curtain walls were constructed between the piers. Foundations of historic houses were sometimes built directly on the ground without a footing.

Eventually foundations and chimneys will deteriorate if not maintained. Mortar is a sacrificial material and eventually breaks down over time. Repointing is the process of removing loose mortar and replacing with new mortar. Telltale signs of more serious problems are large cracks that go through the bricks, bulging or sagging walls, bricks not level from one corner to the next, and sagging interior floors and walls. Cracks can result from settling, poor drainage, tree roots, thermal expansion and contraction or from the weight of cars parked nearby. Before beginning repair work it is important to identify the cause of the problem and determine if it is active or dormant. Cracks and holes in masonry should be repaired to prevent water penetration and deterioration. Improper techniques such as applying water-proof coatings can make matters worse.

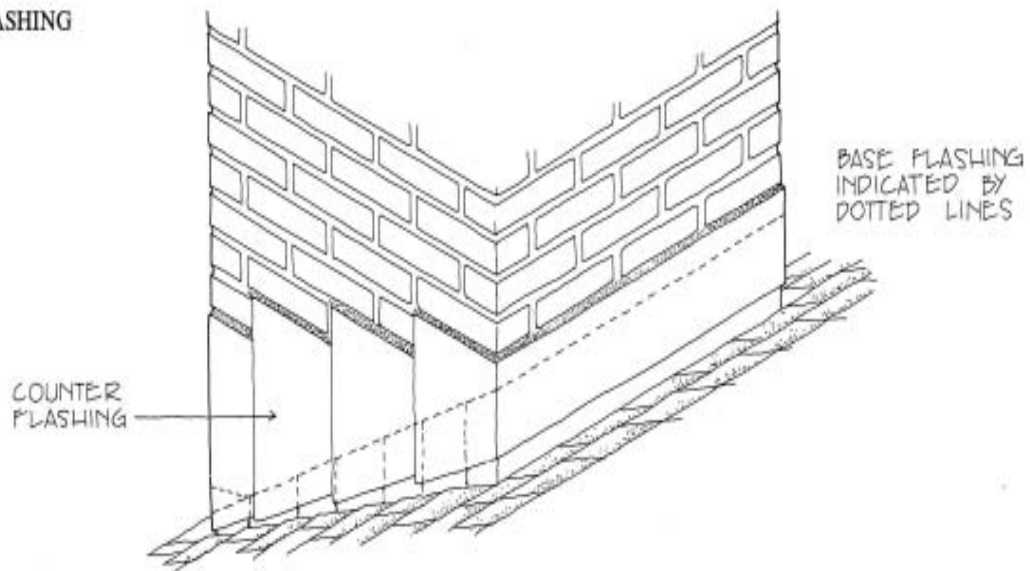
For information about maintaining historic masonry refer to National Park Service Preservation Brief #2 "Repointing Mortar Joints in Historic Brick Buildings" (available online at www2.cr.nps.gov/tps/).





Parging brick chimneys and foundations (covering with cement or other coatings) when the mortar fails instead of repointing the mortar joints makes the problem worse.

CHIMNEY FLASHING

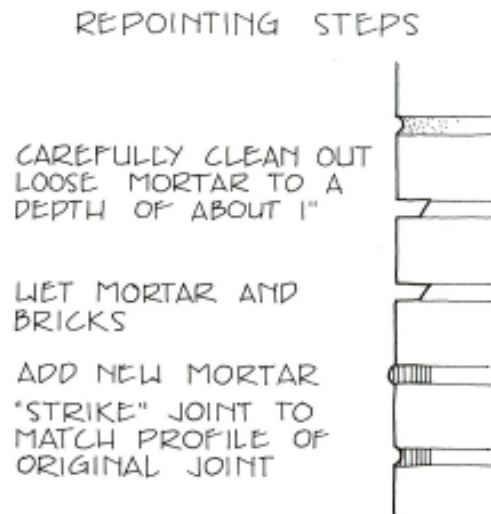


Flashing makes watertight joints at junctions between roof and walls, chimneys, vent pipes, and other protrusions through the roof. It is installed in an overlapping fashion with base and counter flashing so that water cannot penetrate the structure.

Repointing (sometimes incorrectly called tuck pointing) of masonry joints is a necessary part of maintaining an old house. If not done properly it can result in damage to foundations, chimneys and other brickwork. Repointing with incompatible mortar is a common mistake.

Masonry technology changed dramatically over the last decades of the 19th century and first decades of the 20th century. Early mortar was lime based and soft. Modern mortar is usually portland cement which is harder and more rigid. Modern bricks are fired at a much higher temperature and are harder than early bricks.

Bricks expand and contract causing stresses that are relieved by the mortar. Mortar that is falling out of a joint is not necessarily a bad thing if the masonry units are in good condition. The mortar has simply done its job and needs to be replaced through repointing. If the mortar is so hard that it cannot relieve the stress of expansion and contraction, damage to the masonry units is usually the result. Before repointing it is important to analyze the mortar to determine its composition. It is important to match the color and composition of old mortar as closely as possible.



When cleaning masonry surfaces use the gentlest methods possible to avoid damage. Abrasive and chemical stripping methods (such as sandblasting or water under high pressure) should never be used to clean or remove paint because they can remove the hard outer skin of old bricks. Sandblasted bricks are more water absorbent and susceptible to damage due to freezing and expansion. Dirt and stains can usually be removed using water and bristle brushes, or sometimes steam cleaning is effective. There are chemicals formulated specifically for cleaning or removing paint from historic masonry buildings. Chemical cleaning is best left to the experts.

GUIDELINES FOR FOUNDATIONS AND CHIMNEYS

- 1 Preserve the shape, size, materials, and details of chimneys, foundations and other masonry features. Repair details such as brick corbelling, terra cotta chimney pots, and decorative caps rather than replacing when they become deteriorated.
- 2 Applying concrete parging or waterproof coatings is not a good substitute for repointing and repairing deteriorated masonry. Besides obscuring the original brickwork, they can trap moisture and accelerate deterioration. Water-repellent coatings, on the other hand, are breathable and may be suitable in some instances where a specific masonry problem has been carefully studied and identified.
- 3 Maintenance of historic masonry should include careful repointing of deteriorated mortar joints to match the original mortar in composition, color, and joint profile. Mortar should be softer than the masonry units themselves.
- 4 Cleaning and removing paint from chimneys, foundations and other brickwork should be carefully considered to avoid damaging the historic masonry. Abrasive and mechanical stripping methods such as sandblasting can be particularly destructive. Water cleaning is the gentlest method while chemical products are available that are designed specifically for cleaning and removing paint from historic masonry. The use of chemicals should be carefully controlled to prevent adverse effects to the masonry and the environment.
- 5 When foundations or chimneys must be repaired or rebuilt, reuse original bricks or replace with new bricks that match the size, color and surface texture of the original as closely as possible.
- 6 Flashing for dormers and porch roofs should be installed under the roofing shingles and behind the exterior wall material. Chimney flashing should consist of base flashing and counter flashing, properly installed. Maintenance should include periodic inspection around chimneys, dormers, vents and other projections through the roof.
- 7 Carefully select locations for access doors and vents so that the character of the foundation is not diminished.
- 8 It is not appropriate to shorten or remove character-defining chimneys when they become deteriorated. Chimneys that are not essential to the character of the structure, or that were added later, may be removed if needed for practical reasons.
- 9 Construct new or replacement chimneys and foundations of historically appropriate materials such as brick or stone. It is not appropriate to use substitute materials that simulate brick or stone.
- 10 If metal chimney caps or other covers are necessary, install them so they can be removed without damaging the historic chimney materials.

ROOFS

The roof is often a defining feature of a historic structure. The most common roof forms in the Historic Districts are gable and hip, but combinations of gable, hip and gambrel can be found. Roofs may feature bracketed eaves, open rafters, or classical cornices with dentil moldings. Many roofs have generous overhangs, especially those on Craftsman houses.

Historically, wood shingles were cheap and readily available from nearby lumber mills and so were by far the most widely used roofing material. Other historic roofing materials included slate, terra cotta, pressed metal shingles and standing seam metal. Over time historic roofing materials were replaced with composition shingles of asphalt and fiberglass.

Roof maintenance is critical to the preservation of historic structures. A leaky roof can be ruinous to plaster or window parts in a very short time. It is a good idea to inspect your roof twice a year, both before and after the harsh weather of winter. Look for worn edges and ridges, bubbling of the shingle, nails popping up, or mold and moss forming on the surface. Mineral granules collecting in gutters or at the base of downspouts are also an indication that the shingles may need to be replaced.



Terra cotta, tiles are a defining feature of this house in Fisher Park. A slate or clay tile roof can last 100 years or longer with routine maintenance.

Gutters are important for good roof drainage, but malfunctioning gutters can cause more serious problems than if you had no gutters at all. Leaf-clogged gutters can allow water to back up under the roof edge and infiltrate the structure. Some houses with decorative rafter tails have a notch for gutters. Some houses have built-in gutters or gutters that are hidden behind a decorative metal cornice. Built-in and hidden gutters are problematic because they can fail without being noticed. Undetected leaks especially at the seams in the metal liners can allow water directly into the structure.

The roof system plays a key role in energy efficiency and sustainability. Studies suggest that the color of the roof is a factor in solar reflectance affecting heat gain inside the structure and cooling costs. Darker colored shingles generally are less reflective than lighter colors. Metal roofs are more reflective than composition roofs. Poor attic ventilation can shorten the lifespan of roofing shingles and affect heating and cooling costs. What is unclear is the extent of affect of roofing materials and ventilation on heating and cooling costs..The key will be to strike a balance between maximizing energy efficiency while at the same time preserving historic character.



Because terra cotta and slate are such durable roofing materials they can last indefinitely. But they are only part of the roof system. Other components of the system, underlayment , flashing, fasteners, drip edge, etc. are just as important. The underlayment of this roof failed and is being replaced and the terra cotta tiles reinstalled. With reasonable care, this roof could last another 85 years or more.



This house in the Aycock Historic District was roofed originally with wood shingles. Over time the wood shingles were covered with asphalt shingles . Both layers of shingles were removed revealing the nailer strips for the wood shingles. Plywood sheathing was installed over the nailer strips and new fiberglass shingles put down.



Half round gutters were used on buildings with decorative crown molding. Because they are fastened to the roof itself they do not require a flat surface like modern K-style gutters and do not require removal of crown molding.

GUIDELINES FOR ROOFS

- 1. Retain and preserve original roof form, pitch, overhang, and significant features such as dormers, cornices, rooftop balustrades and cupolas*
- 2. Repair rather than replace roof details such as decorative rafter tails, crown molding, tongue-and-groove soffit, fascia and rooftop balustrades. Selectively replace only those elements that are deteriorated with new material that matches the characteristics of the original by piecing in and splicing whenever possible.*
- 3. Maintenance of historic roofing materials should include selective replacement of only deteriorated shingles or tiles with new shingles or tiles to match the original. Inspect flashing to ensure that it is properly installed and shedding water effectively.*
- 4. Preserve and maintain historic roofing materials that are essential in defining the architecture of a historic structure, such as clay “mission tiles” or patterned slate. It is desirable to retain historic roofing materials that are not essential to the historic character of a structure such as slate, asbestos or metal. However, because of the cost to replace these materials in kind, they may be replaced with fiberglass roofing shingles when they reach the end of their useful life.*
- 5. While dark roofing colors are recommended because they are more compatible with historic structures, light colors may be acceptable for energy saving purposes.*
- 6. Consider alternative materials for roofing materials that increase energy efficiency as long as their installation does not require the removal of historic features of the roof.*
- 7. Maintain traditional gutter and downspout systems. For example, repair concealed or built-in gutters rather than replacing them with exposed gutters. Install new gutters so that crown molding and other architectural details are not damaged or removed.*
- 8. Install seamless K-style gutters only where they will not cause the removal of crown molding or other architectural details. Half-round gutters are recommended for roofs with open rafters and where there is crown molding at the eaves. installed without removal of crown molding. Gutters and downspouts should be painted or pre-finished unless they are made of copper.*

WINDOWS AND DOORS

The arrangement of windows and doors in a building is called fenestration. The fenestration pattern reflects the period and style of the structure. The craftsmanship and quality of materials that is exhibited in original windows construction is a major part of the historic character of a building.

Double-hung, vertical sliding sash windows are the predominant type found in Greensboro's Historic Districts although casement windows and fixed windows are also found. The number and arrangement of lights (panes) varies with the style and period of the house. Most late-Victorian houses have windows that are taller than they are wide usually with two-over-two or one-over-one light divisions. Windows from the Colonial Revival period have multiple light divisions, often six-over-six or six-over-one patterns. Craftsman houses usually have long narrow lights in the upper sash and a single pane in the lower sash. Small fixed windows with a border of small panes can be found in the gable ends of Queen Anne style houses. Often the muntin pattern of the entrance door conforms with that of the windows. Some entrances combine solid wood doors with sidelights and fanlights.

Double-hung sash operate independently with the help of weights located behind the window casing and attached by sash cords or chains. Windows were designed to provide ventilation and indoor air quality. During hot weather, both the top and bottom sash could be opened to allow cooler air to enter at the bottom and warmer air to escape at the top. Front and back doors completed this simple yet ingenious air circulation system.

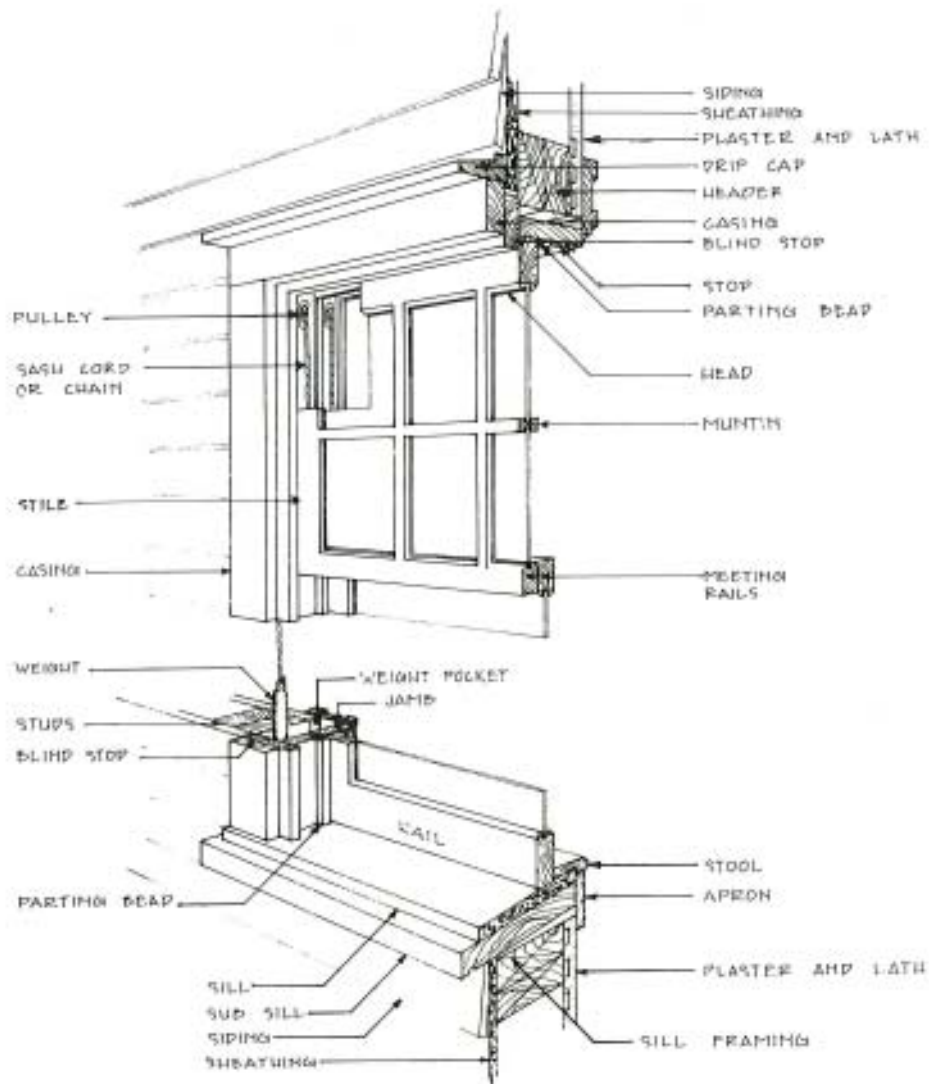
With the invention of indoor air conditioning people gradually stopped using their windows for ventilation. The top sash are often painted shut and sash cords broken. Window screens and screen doors, designed to keep insects out, are rare. Restoring original windows and making them operate as they were originally intended, not only helps preserve the character of an old house, it has the added benefit of improved indoor air quality and lower utility bills.

Replacement windows are nearly always a compromise to the integrity of a historic building. On close inspection there are significant differences in their design and operation. If they malfunction, they may not be repairable. Due to the superior quality of old growth wood, one hundred-year-old windows can be repaired and last another hundred years compared to replacements that may have a lifespan of 20 or 30 years. Adding a storm window will protect wood windows from the destructive effects of weather. When the embodied energy of original windows is part of the calculation, replacement win-

dows are an even more environmentally questionable choice. Simple repairs, caulking and weatherstripping can reduce energy loss of old windows significantly. Wood and aluminum storm windows can protect original windows from the damaging effects of weather, reduce air infiltration, and add an air space for better energy performance.

Front doors are the focal point of most historic houses. Because they are almost always of heavy wood construction, even badly neglected doors can be salvaged. With weatherstripping, good locks, and a storm door, old doors can be made energy efficient and secure. Shutters, both paneled and louvered, are commonly found on historic buildings. Their original purpose was to provide protection against storms. Later they were added for decoration. Shutters are attached to the window casings with hinges and anchors.

For a discussion of window repair methods and techniques see Appendix VI



Counter-weighted windows work in unison with gravity. Modern windows have abandoned counter-weighting in favor of spring-loaded or friction-fit sash which must constantly resist the force of gravity. Replacement windows may need repair someday or even replacement of costly manufactured components which may or may not be available.

Old windows may not be working properly simply because they have been neglected for a long period of time. The sash may stick or bind because they are warped or swollen due to moisture, or because of thick paint build-up. It may be a simple matter of broken sash cords or chains. Getting them to work again may be as simple as moving the stop moulding out a bit, scraping off excess paint, and replacing the sash cords. If the sash are too loose the stop may need to be moved in a bit. Reglazing, weatherstripping, and caulking will help stop air leaks. Wood consolidation products are available that can be used to restore even badly deteriorated windows.

While strongly discouraged window replacement applications will be considered on a case-by-case basis. The commission will seek to balance cost and other practical considerations with the potential for loss of historic character for the structure. Windows that are a defining feature of a historic structure should be repaired and retained.



Original windows (left) have a character that is missing in replacement windows (right). This character is derived from the wavy hand made glass, wood joinery, and the operating components.



These roughly 100 year-old windows had been neglected for years and were thought to be “beyond repair”. They are being refurbished by hand scraping, sanding, replacing glazing putty and fixing broken sash cords. Notice open pocket (left) for access to weights and sash cords.

Storm Windows

Storm windows made of aluminum or wood are an inexpensive way to protect original windows and reduce air infiltration. Low profile storm windows in a painted or factory finish have a minimal impact on the character of the building. The meeting rail of the storm window should match that of the window.

Shutters

Shutters were once commonplace on houses in the United States as they served a practical purpose. They protected the window from storm damage and provided ventilation when it rained during hot summer months. Today their original purpose has all but been forgotten and they are used for ornamentation. Modern shutters often don't match the window opening and are constructed of aluminum or vinyl. Shutters should be added only if there is documentation that they were once used on the house. They should be attached to the casing and not butted up to the casing and nailed to the wall of the house. They should match the dimensions of the window opening so they appear to be operable.



Historic shutters are attached to the window casing with traditional metal hinges and shutter dogs or tiebacks.

Awnings

Operable canvass awnings were popular during the first half of the twentieth century and are still used today. They provide shade and help keep the house cool during the summer without restricting light in the winter. Fabric awnings can add color and interest to a house. Aluminum awnings, on the other hand, are not operable, so do not have the same energy efficiency benefits. Aluminum is not in keeping with the character of historic structures.





Low profile aluminum storm windows are available today (above) that do not affect the appearance of the window as much as triple-track storm window (left). The triple-track consists of three moving sash and protrudes from the window opening while the storm window shown above is designed to fit flush within the window opening. Its construction

GUIDELINES FOR WINDOWS AND DOORS

- 1 *Retain the original pattern, arrangement, dimensions and details of window and door openings on principal elevations.*
- 2 *It is not appropriate to introduce new window or door openings into principal elevations of a historic structure.*
- 3 *If needed, locate new window or door openings on secondary elevations and where they would cause the least possible alteration to the historic structure. New windows and doors should match existing windows and doors in proportion, size, materials, and details.*
- 4 *Preserve original windows and doors, including elements such as sash, glass, sills, lintels, casings, muntins, trim, frames, thresholds, hardware and shutters. Replace deteriorated elements to match the original in size, composition, material and detail by patching, splicing, consolidating, or otherwise reinforcing the deteriorated section. Removal of historic materials rather than repairing is not recommended.*
- 5 *When repair is not feasible, true or simulated divided light (permanent muntins attached to interior and exterior of the glass) wood windows may be an acceptable replacement for original wood windows. Replacement windows should match the original in appearance, detail, material, and muntin profile.*
- 6 *It is not appropriate to replace original windows with vinyl windows or double-paned windows with grids between the glass (GBG) or interior snap-in muntins.*
- 7 *For commercial and institutional buildings, if window repair is not feasible, select replacement products that have as many of the characteristics of the original windows as possible.*
- 8 *Select exterior storm windows and doors that are wood or aluminum with a painted or coated finish, and that do not damage or obscure the original windows and doors. Low profile aluminum storm windows are available that have a minimal effect on the appearance of the original windows. Select storm doors with full glazing to maximize the view of the door. Unfinished aluminum storm windows and doors are not appropriate.*
- 9 *Fabric awnings of a traditional style are acceptable for windows and doors when installed so that they do not damage or conceal architectural details or historic materials.*
- 10 *Shutters may be added when it can be documented that they were used originally or are determined appropriate for the style of the house. Shutters should be wood and fit the window opening and appear to be operable. They should be attached to the window casing with metal shutter hardware. Simulated shutters of plastic or aluminum attached to the wall of the house for decorative purposes are not appropriate.*

PORCHES

The front porch is often the most prominent element of a historic house, featuring details that reinforce the architectural style of the house. Historically, the porch kept the entrance dry, provided a means to escape the summer heat, and was a place for socializing with neighbors. A porch that wrapped around two or three sides of the house would almost always have a spot for getting some breeze. A popular feature in the 1920s was the pergola that was part of the design of porches especially on Craftsman style houses. The open rafters of the pergola were covered with climbing vines to give



shade and privacy. Most of these pergola porches have been removed as an alternative to the regular maintenance they required.

The role of the front porch has been usurped by decks and patios as the focus of leisure activity has moved to the back yard. Because porches are exposed to the weather, they require regular maintenance to prevent deterioration. Over the years most have been replaced with masonry steps. The screening-in of porches was a logical extension of window screening before air conditioning.

For suggestions for properly maintaining historic porches see Appendix VII

Some houses feature porch roof balconies with decorative balustrades. There may be a door on the second floor that provides access to the balcony. When a balcony is accessible, the height of the railing must meet safety standards of the Building Code. In many

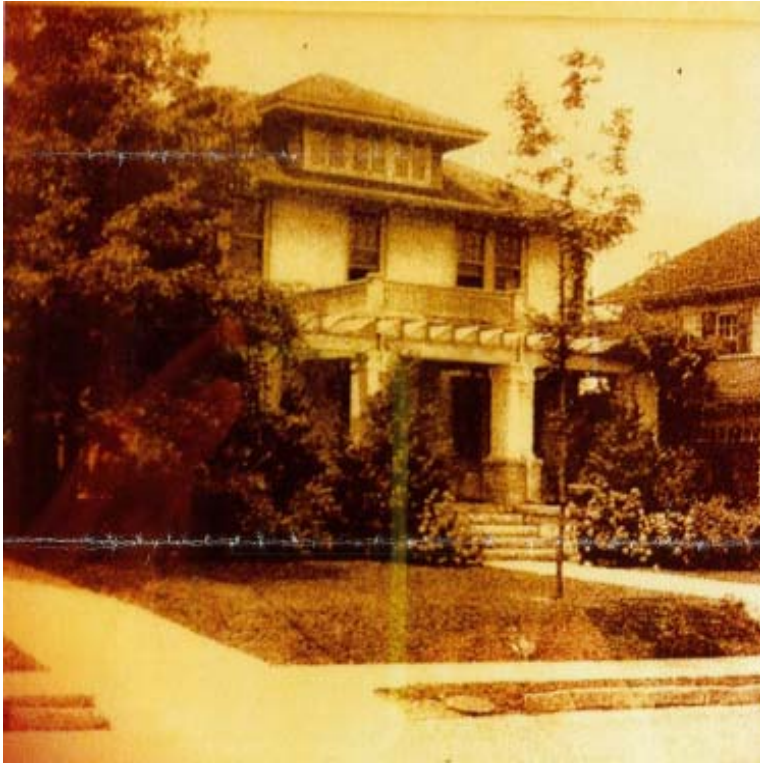
cases the original railing is lower than the required height. Fixing the door in place so that it is inoperable is one method of solving this problem. If the rooftop balcony is not accessible then the railing is considered ornamental and does not have to meet code specifications.



Front porch steps were designed and constructed to shed water with an overhanging lip on the tread. Replacement steps often forego the one-piece tread in favor of a two-piece tread which inevitably allows water infiltration and eventual deterioration..



The side porch of this house was enclosed to create a sunroom in a way that maintains the character of the house. Tall windows help retain the open feel and columns are still visible.



An old photograph shows that this house in Fisher Park featured a front porch with vine-covered pergolas flanking a central rooftop balcony.



The original tongue-and-groove porch flooring was replaced with treated deck boards. Besides losing some of the historic character of the porch, water can now leak through the spaces between the boards and cause deterioration for structural framing.

The owner of this house in the Aycock Historic District wanted a place to be outside in warm weather without the nuisance of mosquitoes and other insects. There was evidence that the front porch had been screened in at one time so this seemed to be a logical choice. Because the framing is recessed and cut to fit between columns and porch piers and behind the railing, the screening has little impact on the historic character of the house.



GUIDELINES

- 1 *Preserve and maintain historic porches, porticos, balconies, pergolas, and terraces.*
- 2 *Maintain and repair historic materials and features such as tongue-and-groove flooring, beaded tongue-and-groove ceiling boards, trimwork, railings, lattice, entablatures, columns, steps, rooftop balustrades, brackets, soffits, fascia, etc.*
- 3 *Selectively replace only the deteriorated element with new material to match the original in size, scale, texture and detail. For example, replace rotted tongue-and-groove porch floor boards with new tongue-and-groove floor boards to match the original.*
- 4 *Install porch flooring according to the original installation method. Tongue-and-groove porch flooring should be nailed through the tongue and not face nailed, for example. Porch flooring is usually installed perpendicular to the wall of the house.*
- 5 *It is not appropriate to replace deteriorated porch elements with incompatible materials such as metal supports and railings for wood columns and rails, or concrete for wooden steps.*
- 6 *If a deteriorated porch must be removed or is completely missing, replace it either with a reconstruction based on accurate documentation or a new design that is appropriate for the structure in terms of materials, roof form, detailing, scale, size and ornamentation.*
- 7 *It is not appropriate to add elements or details to porches to create a false historical appearance.*
- 8 *Screening a porch may be acceptable when it is constructed in a manner that does not alter or detract from the details of the original porch, and compatible materials are used. For example, porches may be screened if the framing is recessed, the screening placed behind columns or balustrades, and the framing can be removed in the future without damaging historic elements of the porch.*
- 9 *Because of their character-defining role, it is not appropriate to enclose front porches. Side and rear porches may be enclosed to create sunrooms if the design of the enclosure is compatible with the architecture of the structure, and does not result in a loss of historic fabric or architectural details.*

Alternative Construction Materials

Alternative materials have been approved for use in new construction projects and additions to buildings. They have also been approved on a limited basis in the restoration of historic structures. Generally when the material to be replaced is not original, an alternative material may be considered. Alternative materials may be considered in the case of lead or other hazardous conditions. The commission will consider alternative materials on a case-by-case basis and weigh the potential loss of historic character against the mitigating circumstances of the case. Construction materials and installation techniques that fundamentally depart from the historic character of the building, such as installing vinyl siding over original wood siding should be avoided.



When the enclosed front porch of this house in College Hill was reopened, the original columns were missing. Fiberglass columns of an appropriate style for the house were approved because they have the same characteristics as wood columns and are intended to be painted. They have proven to be exceptionally durable.



The decorative cornice of this building was decayed beyond repair. Composite material that exactly matches the original was used to reconstruct this important architectural feature. Once painted it will be impossible to know it is not the original material.

ADDITIONS

Many houses in the districts have additions that were constructed many years ago to meet the needs of growing families. Some of the earliest additions were for bathrooms as many nineteenth century houses did not have them originally. Early additions usually display great craftsmanship and respect for the original design and materials or the house. Some additions were so meticulously constructed that they are hard to recognize as additions. Later additions often did not maintain this level of craftsmanship, and incompatible construction materials were often employed.



GUIDELINES

- 1 Limit the size and scale of additions, so that the integrity of the original structure is not compromised. The proportion of built area to green area on the site should not be radically changed for an addition.
- 2 Changes in height that alter the character and scale of the existing building to accommodate an addition are not appropriate.
- 3 Minimize site disturbance for construction of additions to reduce the possibility of destroying site features and/or existing trees.
- 4 The possibility of archaeological resources should be considered before grading for an addition.
- 5 Brick, stone, wood, and stucco are acceptable wall materials for additions.
- 6 Synthetic and composite materials that are compatible with the character of the building and the district are acceptable for additions. Cement siding is an example of a compatible material for additions because it has many of the characteristics of wood siding
- 7 including design, dimension, and texture.
- 8 Additions should be located so that the character of the building is not compromised and designed so that character-defining architectural features are not obscured, damaged, or radically changed.
- 9 In terms of material, style, and detail, design additions to be compatible with the original structure rather than duplicating it exactly.
- 10 Distinguish additions from the original structure through change in roofline, wall plane, detailing, and/or material.

ENERGY EFFICIENCY AND SUSTAINABILITY

Sustainable renovation practices are based on sound preservation principles and are designed to extend the life of the building and make them more energy efficient. Old houses have a reputation for being drafty and expensive to heat. The reason is that they were not designed with energy efficiency in mind. Fossil fuels were cheap. Insulation was practically unheard of. Today, with ever-rising fuel costs, energy efficiency should be the first consideration when planning a restoration project. An energy audit, especially as part of planning for major renovations, can pay for itself in lower energy bills in a very short period of time.

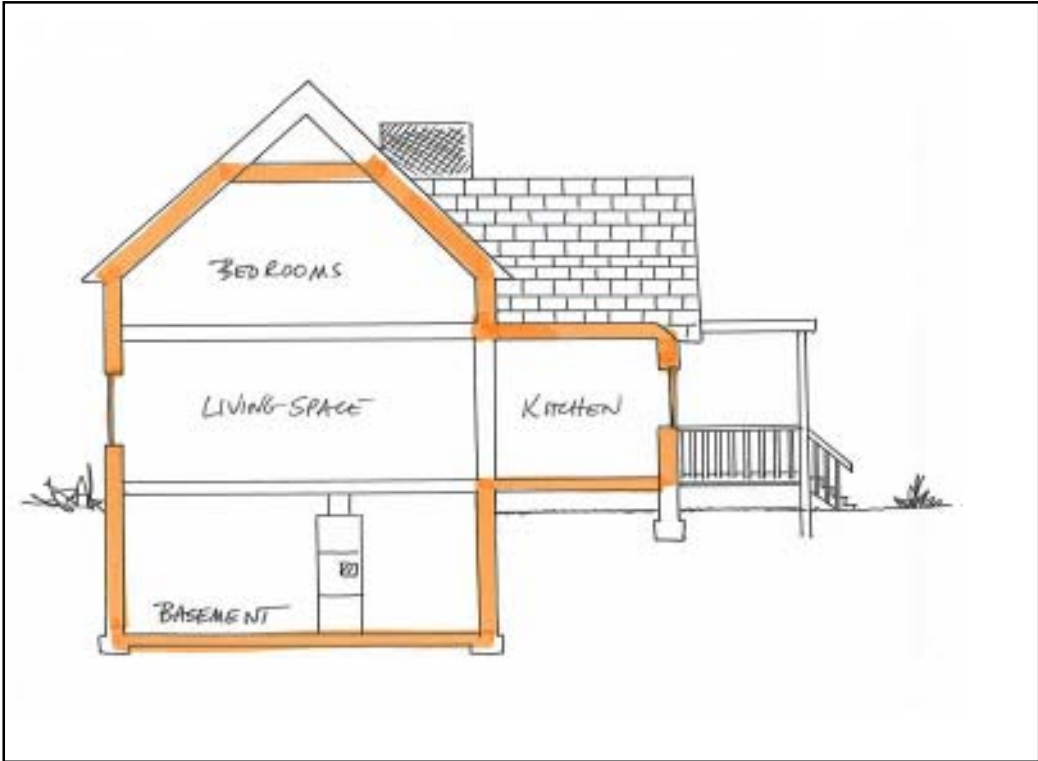
There are a number of inexpensive steps that can be taken to improve energy efficiency without sacrificing historic character. First, find and seal air leaks in the building envelope—the barrier between the interior and the exterior environment. The envelope can be different for each house as the illustrations show. Common sources of air leakage include attic scuttles, receptacles and switch boxes, plumbing vent chases, fireplaces, windows, and doors. Heated inside air is drawn into the attic or outside while cold air is drawn into the interior through leaks in the envelope. Look for cracks in foundations and walls and light escaping into dark areas. Thermal cameras and blower doors are high tech tools designed to find air leaks. Seal leaks with quality silicone caulk. Raising attic insulation to an R-value of 38 can dramatically improve the energy performance of your house.

In keeping with a whole building concepts, consider the potential effect of renovations on the moisture content in your home. Excess moisture can lead to mold and mildew. If not carefully planned, sealing leaks in the building envelope can trap moisture and cause mold and mildew.

Consider the potential effect of insulating and weatherization practices on the historic character of your home. Drilling holes or removing siding boards to install insulation inside the walls may hurt the appearance of the house and at the same time create the potential for moisture problems.

The heating system of your historic house may have been replaced more than once and this has a bearing on energy efficiency. Houses that started out with coal burning fireplaces or convection furnaces with wood floor grates, may have been converted to steam heat with radiators and boilers, and later to forced air systems with metal ductwork. Today central or zoned heating and cooling systems are the standard. Each time the heating system was replaced the dynamics of air movement in the house may have changed affecting energy performance and other systems of the building.

The guidelines recommend sustainable renovation practices. It begins with taking stock of what you have. Your old house was probably constructed of very high quality materials that are not readily available today: old growth wood used in framing, siding, trimwork and windows, masonry foundations and plaster walls. It was probably built with a passive ventilation system incorporating front and back doors in a pass through circulation pattern. By understanding how your old house worked originally, you can capitalize on inherent advantages as you plan your renovation projects.



There are two ways to lose heat in an old house. The first is through natural convection or air movement. The second is by heat and cold conduction through building components. Heat conduction is reduced with thermal resistance measures such as increasing insulation in attic, crawl space and walls. By far, attic insulation is the most significant thermal resistance measure, since the majority of heat loss is through the roof. Less important is insulation in walls, floors, etc. Probably the most cost effective step one can take is to stop air leaks. Inexpensive repairs to stop air leaks can reap major benefits in lowering energy costs. The goal is to reduce the rate of air exchange.

- Repair existing or install new window locks that pull upper and lower window sash together at the meeting rails.
- Adjust window stop mouldings, replace glazing putty, replace sash cords, sand and re-paint, and otherwise make window sash fit properly and operate smoothly.
- Add spring metal weatherstripping to window sash particularly at sills.
- Add wood or metal storm windows that are weatherstripped.
- Caulk and seal leaks around window and door casings.
- Add small molding strips (clear caulk) at joints between steps and risers of interior stairs.
- Install draft plate sealers to electrical outlets and switches.
- Install seals around hot and cold water lines in kitchens and bathrooms.
- Install weatherstripping at basement and crawlspace doors.
- Fill plumbing chases with insulation
- Caulk and paint unfinished closets and storage spaces
- Replace deteriorated glazing putty in windows
- Seal holes in foundations and walls for electrical, HVAC and other service lines and pipes.
- Test for leakage in HVAC ductwork.
- Add trim rings around radiator pipes.
- Tuck point deteriorated masonry joints in chimneys and foundation walls.
- Fill all chases for plumbing, electrical and HVAC services from crawlspace with foam insulation.

Adding storm windows can increase energy performance of original wood windows to a point that is comparable to replacement windows and at the same time protect the windows from the elements. Replacement windows are exposed to the elements.

Historic buildings are inherently sustainable. Windows and doors were custom made from old growth timber which is denser and more rot resistant than today's wood products. Repairs can be as simple as removing deteriorated putty or molding pieces, replacing

broken glass panes and reinstalling the molding or putty. Replacement windows and doors are constructed differently and broken glass often requires replacement of the entire unit. Plaster is one of the most durable and repairable material there is. Avoid the temptation to tear out original plaster and lathe in order to insulate walls. Adding overhead insulation and sealing penetrations in the building envelope are more cost effective measures to increase energy efficiency and do not result in the loss of historic character.

Retain original elements such as porch flooring because the boards were likely milled from old growth timber. Avoid removing the entire floor and replace only those deteriorated floor boards that are beyond repair to retain as much of the old growth material as possible. Today's flooring lumber does not hold up nearly as well.

The replacement window industry spends millions of dollars each year to convince the public that new windows with insulated glass will result in substantial energy savings. But the blower door test showed that the windows in an old house are not necessarily the major source of air infiltration. Therefore replacement windows alone may not reduce energy costs as much as might be expected. If that is the case then the argument that replacement windows "will pay for themselves" may be an exaggeration. Old wood windows have advantages that are often not fully considered. In the first place, they are constructed of old growth wood. The old growth or slow growth wood in an old window is far more stable than the wood in modern replacement windows. Windows that are 80, 100 or even 150 years old are repairable with simple, cost-effective techniques. Modern replacement windows are often constructed of new growth wood that is far less stable. Eventually they will need repair or, more likely, replacement of costly manufactured components - which may or may not be available.

The old-fashioned, counter-weighted windows had another advantage - they operate in unison with gravity. Modern windows have abandoned counter-weighting in favor of spring-loaded or friction-fit sash that must constantly resist the force of gravity. Old windows may not be working properly simply because they have been neglected for a long period of time. The sash may stick or bind because they are warped or swollen from moisture, or because of excessive paint build-up. It may be a simple case of broken sash cords or chains. Getting them to work again may be as simple as moving the stop moulding out a bit, scraping off excess paint, and replacing the sash cords. If the sash are too loose, the stop may need to be moved in slightly. Reglazing, weatherstripping, and caulking will help stop air leaks. Where rot has occurred wood consolidation products are available which can be used to restore even badly deteriorated windows.

Old windows don't have to be energy liabilities. Single glazed, primary wood sash with properly weatherstripped storm window, provides an approximate air gap of 1.75" compared to 1/4" to 5/8" for insulated glass. Because of heat resistance that this wider dead-air space provides, old windows with storms can actually outperform replacement windows with insulated glass.

Storm windows provide valuable protection for historic windows. Historically, windows and jamb components were never intended to take a direct hit from the weather. They were first protected by shutters and later by storms/screens. Today wood storm win-

dows are available with a full screen and glass panels that can be removed from the inside. Even if the original sash need to be replaced, the cost for matching original wood with single glazed replacements and the wood storm system is comparable to the cost of replacement windows.

Finally there is the question of historic and architectural significance. The most important reason for preserving original windows is that they are an essential part of what makes a building significant. They help define the historic character of a building. Replacement windows are almost always a compromise to the integrity of a historic structure.

Solar and other renewable energy systems will become more popular as energy costs continue to increase. It is important that preservationists recognize and accept alternative energy technologies much the same as past advancements in technology have been accepted. This might mean accepting solar panels that are in view from the street when no other location will work.

In May of 2004, the Historic Preservation Commission received an application for a Certificate of Appropriateness from a Fisher Park homeowner to replace the windows in the house. The homeowner suspected that the old windows were responsible for high heating and cooling bills. City staff suggested that a blower door test be conducted to determine if indeed the windows were the culprit. A blower door test measures the rate of air exchange and identify sources of air infiltration. The homeowner agreed to the test and it was conducted by the City's Housing Rehabilitation Program staff. The Historic Preservation Commission saw this as an opportunity to look deeper into the issue of windows and energy efficiency in historic houses.

A blower door test is a very simple procedure where a high performance fan is used to pressurize the structure. The fan forces air to simulate the temperature differential in cold or breezy weather. Unconditioned air is sucked into the house through cracks in the building envelope as conditioned air is exhausted. In this case the rate of air exchange was measured at just under 6000 cfm (cubic feet per minute).

While the house was pressurized a manual inspection of the structure was conducted. Sources of air movement were easily detected by hand. Because of its unusual roof design, the house had numerous nooks and crannies where air infiltration was not so obvious: for example, an attic storage space on the second floor. An unfinished closet in a first floor parlor had gaps in the floor boards where air was rushing through during the test. Other sources of air infiltration were more obvious: electrical outlets and switches, loose-fitting window sash, light fixtures, plumbing pipes, fireplaces, etc.

One of the most unusual sources turned out to be a dead bolt lock installed on the front door. The installer had cut a hole for the lock completely through the door jamb allowing air to be sucked from the crawl space through this cavity. In the process the spring metal weatherstripping was compressed by the lock creating a gap between the door and door jamb, and another hole in the building envelope.

SAFETY AND CODE REQUIREMENTS

It can be challenging to meet safety and code requirements when renovating an old house or commercial building. Careful planning is essential to make sure code requirements are considered on the front end of a project so that there are no surprises when it comes time for final inspections.

The Building Inspector is responsible for ensuring that life safety requirements of the code are met. The North Carolina State Building Code Volume IX—Existing Buildings gives the local building inspector some discretion with certified historic structures, as long as life safety requirements are met. Most structures in Greensboro's historic districts will qualify but a certification application (green sheet) must be submitted to the State Historic Preservation Office. For more information go to the SHPO website at <http://www.hpo.ncdcr.gov/bldgcode.htm>.

Every home must have a working smoke detector! It is recommended that each bedroom should have a smoke detector and at least one on each level of the home.

If you have oil or gas appliances – you must also have a carbon monoxide detector.

Changing the use of a structure, particularly from residential to non-residential, can trigger fire safety, building code, and accessibility requirements. Often the structural system of the building must be beefed up to accommodate heavier loads. Accessibility features are required under the Americans With Disabilities Act such as bathrooms that are accessible by wheelchairs. Handicap access ramps that meet ADA specifications must be provided, and a COA is required..

In 2010 the EPA and the State of North Carolina passed laws to address the problem of lead paint in renovation projects. Now, contractors must take training and become “certified renovators” in order to work on a house that was built prior to 1978. Lead safe work practices must be followed and the occupants must be provided information about lead paint hazards. The rules apply to renovation and/or painting involving more than six square feet of interior and more than twenty square feet of exterior painted surfaces apply. The rules apply only to contractors. However, do-it-yourselfers should educate themselves about the dangers of lead paint and learn how to work safely.

The Guilford County Health Department also plays a role in lead paint safety. Children with high blood levels of lead will trigger enforcement action. The County will require that the residence be made lead safe through remediation techniques before the child can once again reside in the home.

For more information about lead safe work practices see Appendix

Wheelchair ramps built for someone who has become disabled do not require a Building Permit, but they do require a COA. The COA can usually be approved by staff. More than most neighborhoods, the historic districts are home to a wide range of age groups including the elderly. Many older residents grew up in the neighborhood and want to remain in their homes as long as possible. The historic districts are becoming more attractive for retirees because of the parks and other amenities and because they are in close proximity to medical and other professional services. They are also well served by public transportation. The guidelines recognize the value of “aging in place” as a key component of a sustainable community. Wheelchair ramps will likely become more common in the historic districts.

For information about wheelchair ramps see Appendix 00.



Wheelchair ramps must meet the practical needs of the disabled family member. Their design should be carefully planned to minimize the visual impact on the character of the house and the district.



GUIDELINES FOR SAFETY AND CODE REQUIREMENTS

- 1 Design wheelchair ramps to minimize their visual impact and so they can be removed in the future without damaging the historic structure. Use materials that are compatible with the construction materials of the historic building.*
- 2 Consider addressing accessibility needs and requirements through portable or temporary ramps rather than permanent ramps.*
- 3 Choose locations for fire exits, stairs and landings at the rear of the building or inconspicuous side locations. Construct fire exits, stairs and landings so that they do not damage historic features and are compatible in terms of materials and design.*

MOVING BUILDINGS

Moving a historic structure is sometimes the only alternative to demolition. It should be undertaken only after all other preservation options have been exhausted, because it often results in a loss of integrity of the building setting.

GUIDELINES

- 1. Review site selection for compatibility of the relocated building to the architectural styles, materials, and scale of existing historic buildings along the street.*
- 2. Review the compatibility of site selection and proposed siting for a relocated building in terms of building spacing, setback, orientation, height, scale, and massing according to pertinent new construction guidelines.*
- 3. Review proposed site landscaping and site features according to pertinent design guidelines.*
- 4. Retain important architectural features when relocating a building within the Historic District.*
- 5. If possible retain important site features including large trees when relocating a building within the Historic District.*

DEMOLITION

The demolition or removal of any structure in a Historic District requires a Certificate of Appropriateness. The commission may not deny an application for demolition, but it may delay the effective date of the Certificate for up to 365 days in the case of a structure that contributes to the character of the Historic District. The purpose of the delay is to give time to explore alternatives to demolition.

Demolition is fundamentally contrary to the concepts of “green” and “sustainable”. An existing building represents “embodied” energy, or the energy expended during construction. Moreover, it will take energy to demolish the building, not to mention the cost to dispose of the materials in the landfill. Additional energy and resources will be used to build a new building in its place.

The decision to demolish a historic structure should be carefully considered, and all alternatives explored. During the delay period, every effort should be made to negotiate with the owner or other interested parties including State and local preservation organizations and seek answers to the following questions:

- Is there a well-developed proposal for the use of the site necessitating demolition?
- Could another site serve the purpose just as well?
- Could the existing structure be adapted to suit the owner’s needs?
- Could the property be sold to someone willing to preserve the building?
- As a last resort, could the building be moved to another location?
- Does the site have known or potential archaeological significance?
- Is the structure of national, state or local significance?

If alternatives to demolition are exhausted and approval for demolition is granted:

Record the structure thoroughly with photographs and other documentation, including identifying and recording any special architectural features of the building, important landscape features, structures, and archeological significance of the site.

Protect any large trees or other important landscape features during demolition.

If the site is to remain vacant for more than 60 days, it should be cleared of debris, reseeded and maintained in a manner consistent with other properties in the Historic District.



The Holleman House in Fisher Park was demolished after preservationists worked unsuccessfully with the property owner for months on possible reuse plans for the property.



This house in Fisher Park was rescued by the Preservation Greensboro Development Fund in 2011 during the demolition delay period.. It was slated for demolition under the Greensboro's Minimum Housing Standards Ordinance.

DEMOLITION BY NEGLECT

In 2000, Greensboro's Code of Ordinances was amended to provide an alternative to demolition of historic properties through Minimum Housing Standards enforcement. Historic properties located in overlay historic districts and individually designated county landmarks fall under the Ordinance To Prevent Demolition By Neglect. Neighborhood associations and individual property owners concerned about the condition of a property may submit a petition to the Historic Preservation Commission. These are properties that are showing signs of deterioration due to neglected maintenance that, left unchecked, could result in the demolition of the historic property. The City has the authority to make repairs and place a lien on the property to recover the costs or fine the property owner. Otherwise the City's only remedy is to order a substandard property vacated and if repairs are not made, eventually order demolition. When a petition is received City staff would inspect the property and the Historic Preservation Commission would hold a public hearing.

A copy of the Demolition By Neglect Petition may be found in Appendix 00.



The Ordinance To Prevent Demolition By Neglect resulted in the renovation of this house in Fisher Park. Maintenance of the house had been neglected to the point that roof soffits and fascia boards were badly rotted and the side porch floor and roof were coming apart. The petition was submitted by the Fisher Park Neighborhood Association



STREETS, SIDEWALKS AND ALLEYS

Narrow streets, cement sidewalks, granite curbs, brick gutters, and stone retaining walls are signature elements of the public right-of-way in the historic districts. Originally, most streets were paved with concrete. Gradually they were re-surfaced with asphalt and the brick gutters were covered in the process. Brick gutters have been exposed on some streets during more recent resurfacing projects.

A grass strip of varying widths separates streets from the sidewalk. Mature shade trees provide a green canopy along many streets. Standard streetlights have been replaced by period street lights in many areas, adding to the charm of the districts. On some streets granite walls survive from the original development period. They were used to retain soil for building lots on sloping land. These walls display “old world” craftsmanship and are a key ingredient of the character of the Historic Districts. Many of these walls are in need of repair. Some are leaning severely and some have come apart, to the point that they are at risk of being lost for good.

When the Historic District neighborhoods were first laid out alleyways were provided along the rear of building lots on most streets. The alleys provided access for services such as ice and coal delivery. Driveways from the front came later as automobiles gradually replaced trolleys and streetcars as the primary means of transportation. A few alleys are still in use today. Edgar Street in College Hill is a rare example of an alley that became an official City street.

Mail was delivered by a carrier to homes, apartments and businesses via letter boxes and mail slots. Freestanding mailboxes were not found along streets in the historic districts. Collection boxes were found on main routes but very few remain today.



There is an official process for closing an alley that is no longer used but still shows up in property deeds and subdivision plats. A petition must be filed with the Department of Planning and Community Development signed by all property owners abutting the alley.

GUIDELINES

1. *Maintain the historic character of the public right-of-way by preserving the pattern, width and materials of streets and sidewalks including brick gutters and granite curbs.*
2. *When they are disturbed for underground utility repair or other construction work, repair brick gutters, granite curbs, stone walls and other features with matching materials. Avoid repairs that diminish the historic character such as patching cuts in the granite curbing with concrete.*
3. *When possible, expose and restore brick gutters that have been covered by pavement.*
4. *Develop a program for inventorying and systematically repairing and maintaining the signature granite retaining walls.*
5. *Maintain the planting strip between the street and sidewalk. It is generally not appropriate to surface the strip with pavement or other materials. Brick or stone may be considered where a hard surface is needed.*
6. *Avoid grading that would change the topography of the public right-of-way.*
7. *Where possible, place cables and wires underground, and locate poles at the rear of lots. Add new poles, cables, and related equipment in the public right-of-way only when there is no other feasible way of meeting safety and code standards.*
8. *Consider painting items such as backflow preventers, signal control boxes, telecommunications, and other equipment that must be placed in the public right-of-way a dark green color so that it blends in with the historic surroundings as best as possible.*
9. *Introduce decorative street lighting of a human scale that is consistent with the design and the illumination level of existing special street lighting in the Historic Districts. Decorative streetlights may be constructed of cast iron, aluminum or fiberglass.*
10. *Replace standard streetlights and security lights with flat lens fixtures that prevent light being emitted horizontally, thereby reducing glare and light pollution. Where appropriate use lower level light fixtures to reduce light pollution.*
11. *Freestanding mailboxes are not in keeping with the historic character of the neighborhood and should be avoided.*
12. *Locate items such as street furniture, benches, trashcans, and publication racks*

so that they do not obstruct sidewalks or the streetscape.

13. *If feasible, repair rather replace historic bridges. Design new bridges to maintain the human scale and historic character of the district and enhance pedestrian safety.*
14. *Choose playground equipment of a design and color that blends with the park surroundings.*



Milling of the pavement prior to repaving West McGee Street in College Hill revealed the original brick gutter. Early street construction consisted of brick gutters and granite curbs. The brick gutters were left exposed after repaving. Leaving the brick gutters exposed necessitated repouring several concrete driveway aprons. The extra cost was paid for with Municipal Service District funds.



After they were taken up so that storm sewer pipes could be replaced in College Hill the granite curbing was re-set and the brick gutters re-laid.





When new traffic signal control panels were planned, a dark green color was used for those in the historic districts to make them less noticeable.

Too often the granite curbing is being lost through utility work such as replacement of poles or underground service lines.



GUIDELINES

- 1 Swimming pools, playground equipment, concrete pads and basketball goals, tree houses, and similar items are acceptable if they are located in the back yard and not easily visible from the street.
- 2 Dumpsters and trash receptacles should be located where they will not be easily visible from the street and screened from view from the public right-of-way and adjoining residences with shrubbery and/or fencing.
- 3 Retain fences and walls that contribute to the character of the property and the district where possible. If replacement is necessary, replace only the deteriorated element to match the original in dimension, proportion, material, texture, and detail.
- 4 Introduce new retaining walls constructed of brick, stone, or concrete in a design consistent with the property and the neighborhood. It is not appropriate to construct retaining walls of inappropriate materials such as landscape timbers, railroad ties, or concrete blocks where visible from the street.
- 5 While stone and other natural materials are the most compatible materials for walls in the districts, some precast concrete materials are available that have most of the characteristics of historic block walls and may be acceptable if they will not diminish the overall character of the property and the district.
- 6 Introduce new fences and walls compatible in material, design, scale, location, and size with original fences and walls in the Historic District.
- 7 Low picket fences, of an open design, constructed of wood or metal and finished in white or another color/stain compatible with the building, and low walls and hedges are appropriate for front and rear yard use. Front yard fences and walls should usually not exceed 42" in height.
- 8 Install utilitarian fences of woven wire or chain link in rear yards only. Where they are visible from the street, screen with climbing vines, ivy or shrubbery. (If chain-link fencing is needed, coated chain-link is preferable to raw aluminum.)
- 9 Privacy fences and privacy walls in rear yards only that must not exceed 72" in height. The midpoint of the house marks the division between the rear and front yard. (Note: fences may not be higher than 48" within fifteen feet of a property line that abuts a street, by City ordinance.)

NEW CONSTRUCTION

New Construction in Greensboro's Historic Districts should contribute to and emphasize the characteristics that make the neighborhood unique. The guidelines are written to ensure that new construction complements and never detracts from the historic character and features of the district. The guidelines are written to allow for design creativity by providing framework that will allow for new architecture, using criteria based on the compatibility of the new building's setback, scale, massing, and material.

When planning and designing for new construction projects, there are seven key principles that should be considered:

Site Planning: Regular setbacks and spacing of houses create a strong rhythm of building to open space along streets in the Historic Districts. New buildings should maintain this rhythm with similar setbacks and spacing, and lot coverage, which approximates the ratio of building to open space generally found in the neighborhood. Principle façades of new buildings should maintain the directional expression of nearby buildings. Buildings should not be sited at unusual angles with respect to the street, or with sidewalls facing the street.

Building Shape and Massing: New buildings should echo the massing of nearby structures. Mass is the overall bulk of a building, and footprint is the land area it covers. The mass and footprint of a building are directly related to a building's height, width and scale. The Historic Districts contain buildings of varying forms and shapes, and studying the context of the site in order to determine the proper relationship between new and existing buildings is critical. Using compatible roof forms and shapes is another way to relate new and old buildings

Scale: Scale refers to the size of an object in relation to other objects in close proximity. In the Historic Districts, scale is primarily the relationship between building size and human beings. The scale of new buildings should be consistent with nearby historic buildings in order to achieve a "human" scale.

Height: The height of new buildings should approximate the height of nearby buildings. Houses in the Historic Districts are generally taller than their modern counterparts. Most are built on raised foundations, and ceiling heights can be 9-10 feet. Some variance in height is acceptable since most block faces contain a mixture of one and two-story structures, with an occasional three-story building.

Fenestration: Fenestration refers to the pattern and arrangement of openings on the façade of a building. While windows and doors on new buildings do not have to duplicate historic windows, the dimensions and placement on the building should be similar. Blank walls should be avoided. The main entrance is usually the most prominent feature of structures in the Historic Districts, and should be emphasized in new construction as well.



Landscaping: Landscaping can be the key to a successful construction project. This is especially true in the Historic Districts where vegetation is well established. Heavy landscaping is essential if new buildings are to blend in with their surroundings. The site plan for new construction projects should identify existing trees, walls, walks, or other features, which could be incorporated into the landscape design, and every effort should be made to save existing trees, shrubbery, and hedges. Those that can be saved should be protected with some type of barricade during construction. The landscape plan for new buildings should include new shade trees, especially along street frontages.

Parking: Surfaces of either pavement or loose stone for new parking areas should be located to the rear of buildings where possible, and planting strips should be provided along the perimeter with either shrubbery or fencing to screen the cars from adjoining properties. Large areas of pavement should be broken into smaller components with interior planting strips. Shade trees should be started so that a tree canopy will eventually soften the impact of the parking area. Continuous or semi-continuous shrubs and trees, low walls, and decorative fencing are elements that can be used to enhance parking areas.

Proposals for new construction should also rely on the guidelines in this document pertaining to Neighborhood Setting. The sections within Neighborhood Setting will give guidance in the areas of Trees and Landscaping, Fences, Walls and Yard Features, Walkways, Driveways and Parking Areas, Lighting, and Signs.

Brick, stone, wood, and stucco exterior siding are acceptable materials. Fiber-cement siding (such as Hardi Plank Siding®) is an acceptable material for new construction additions when it holds a similar texture, appearance and reveal dimension to wood siding.



The guidelines encourage creative design for new construction projects. This new house in Fisher Park meets the needs of the homeowners while respecting the historic character of the neighborhood.

Alternative materials are acceptable in new construction as long as they are compatible with the character of the historic district. Building materials such as porch flooring and ceiling are available in composite materials that match the design and dimensions of historic materials. They are more durable than some of the wood products available today.



Composite materials, such as porch flooring, columns and railings have been approved for use in new construction projects because they have most of the characteristics of historic construction materials.

GUIDELINES

1. *Site new buildings so that the setback, spacing and orientation to the street are consistent with historic buildings within the district.*
2. *New construction should have a similar height and width of existing buildings within a block or street.*
3. *Relate the roof form, pitch, and overhang of new construction buildings to historic roofs within the district within the district.*
4. *Design the spacing, pattern, proportion, size, and detailing of windows, doors, and vents to be compatible with existing historic examples within the district.*
5. *Incorporate architectural elements and details that provide human scale to proposed new buildings. Design new buildings using exterior materials typical of historic buildings in the districts including brick, wood, stucco, and stone. Materials such as steel, cast stone, fiber cement, and concrete are appropriate for new construction if they are used in a manner compatible with construction techniques and finishes used for historic buildings in the district. It is not appropriate to substitute vinyl or aluminum siding in place of traditional materials typical of the district.*
6. *Incorporate existing large trees and historic landscape features, such as retaining walls and gardens, into the proposed site plan. During construction protect trees and site features to be retained by temporary fencing, and do not disturb or contaminate the soil or store construction materials within the root zone of trees to be saved.*



Trees should be protect trees during construction.

WALKWAYS, DRIVEWAYS, AND PARKING AREAS

Early development in the historic districts predated the automobile. Driveways were usually not part of early building lots. Driveways and garages were added gradually as automobiles became more popular. A single driveway often served two adjoining residences. Shared driveways often cross over property lines and represent an encroachment from a real estate standpoint. Usually there is no record of the “gentlemen’s agreement” between adjoining property owners to create a shared driveway. Subsequent homeowners often wanted their own driveway. So driveways were squeezed in to the narrow space between houses as best as possible. There are examples of driveways that lead to garages constructed next to one another at the back of the lot, barely separated by the property line. Shared driveways can be challenging but historic district residents have been cooperating with their neighbors in this manner for decades.

Early driveways were sometimes surfaced with gravel or coal cinders. Two parallel concrete runners with a grassy strip in between was a popular choice for a driveway in the 1920s and 1930s. Concrete, macadam and later asphalt were also used to surface driveways.

Most houses feature a cement walkway leading directly from the public sidewalk to the front porch steps. Sometimes a set of cement steps are found at the sidewalk depending on the topography. Curved or serpentine walkways are found occasionally. Some walkways are surfaced with slate or flagstone stepping stones to reinforce the natural quality of particular style or period of a house. Maintaining the historic configuration and materials of driveways and walkways is essential to preserving the character of the districts.



Greensboro's Land Development Ordinance prohibits parking in front yards in residential areas unless it is in a driveway or other designated parking area. Additionally, unless otherwise authorized by a Certificate of Appropriateness, all off street parking in the Historic Districts shall be located to the rear of the principal building with the exception of existing driveways and parking lots.



Shared driveways are common in the historic districts. Early building lots usually did not include driveways. Access to the property was by a rear alley. Most alleys are no longer in use.



Concrete pavers are similar in character to historic paving materials and are an easily repairable material.



Parking areas should be located at the rear of the building and screened from view with shrubbery. Existing trees should be incorporated into the plan for new parking areas.



Off-street parking is very limited in some parts of the historic districts. In this case the Historic Preservation Commission granted a COA for a driveway constructed of parallel concrete runners so that the homeowner could have off-street parking with as little impact to the character of the neighborhood as possible.

GUIDELINES

- 1 *Retain historic driveways and walkways, including steps and sidewalks, in their original locations. When deteriorated, repair with materials that match or are similar to the original.*
- 2 *Select appropriate paving materials for new walkways, including concrete, brick, and stone. Simulations of natural materials such as stamped concrete are not recommended.*
- 3 *When needed, introduce new driveways and walkways that are compatible with existing driveways and walkways in terms of width, location, materials, and design. Generally, double width driveways and circular driveways are not appropriate.*
- 4 *Remove deteriorated walkway and driveway pavement before installing new paving materials to ensure that the surface will be flush with the grade of the yard and the public sidewalk.*
- 5 *Repair deteriorated cement steps by patching with new cement to match the existing as closely as possible. Installing brick pavers directly over cement steps can change the tread and riser dimensions and result in a tripping hazard.*
- 6 *Construct new driveways and walkways in locations that require minimal disturbance of historic site features and landscaping. Usually driveways should lead directly to the rear of buildings, and walkways should lead directly to the front steps of the house.*
- 8 *Select appropriate materials for new driveways including concrete tracks (narrow strips), macadam, brick, concrete pavers and crushed stone. Conceal edging materials used for gravel driveways. Keep new driveway aprons and curb cuts to the minimum width possible.*
- 9 *Pavers that have the same characteristics as brick or stone pavers are acceptable. Loose laid pavers have the advantage of being replaceable. Permeable pavers are an environmentally friendly and aesthetically pleasing solution to pavement needs.*
- 10 *Parking for residential areas should be located behind the house and screened with shrubbery where visible from the street.*
- 11 *In cases where parking must be located in front of a building, for a handicapped space for example, the parking area should be designed and landscaped to minimize the impact on the property and the district.*

- 12 *Design new parking lots to minimize their impact upon the neighborhood environment. Grading should be minimal to avoid changing the topography of the site or disturb existing vegetation. Screen from view with shrubbery and soften the visual impact with new trees.*
- 13 *Divide large expanses of pavement into smaller components with planting areas. Incorporate existing large trees and shrubs into the landscaping for new parking areas when possible.*
- 14 *Select appropriate materials, such as concrete, brick, asphalt, or crushed stone for surfacing parking areas.*

LIGHTING

Because lots are small and buildings are closely spaced in the historic districts, light trespass can be an issue more so than other neighborhoods. Lights for parking lots for businesses, churches and schools can invade surrounding residential properties if not carefully designed and located. Greensboro's Land Development Ordinance requires that security lighting does not spill over onto surrounding residential properties.

Lighting of a relatively low height and of low or moderate intensity is typically most suited for Greensboro's Historic Districts. Typical security lighting usually is inappropriate for most residential locations because it tends to trespass onto surrounding properties.





When better security lighting was needed at Aycock Middle School, a type of fixture was chosen that produces very little light trespass and glare for nearby homes. The fixture is a full cutoff flat lens that does not emit light horizontally. The fixture itself is a simple design and finished in a dark color so that it is not easily noticeable during the daytime.



The “drop lens” security light fixture shown above produces glare and light trespass. The “flat lens” shown below is fully contained in the fixture which reduces the amount of glare and light trespass.



GUIDELINES

- 1 *Introduce low level lighting and concealed lighting to provide light and security without diminishing the character of the historic property or district. Carefully choose locations and types of home security lights to avoid glare and light trespass for surrounding properties.*
- 2 *It is generally not appropriate to install drop-lens cobra-head lights on tall poles in most residential locations in the Historic Districts.*
- 3 *Indiscriminate area lighting is not appropriate. Carefully choose site lighting and security lighting so that it does not invade surrounding properties. Forward-throw flood light fixtures project light horizontally onto a site and cause significant glare and are not appropriate for most locations in the Historic Districts.*
- 4 *Carefully consider site lighting for non-residential properties that are adjacent to residential properties. Choose fixtures and light levels that will have a minimal effect on surrounding properties. For security lighting, choose flat lens fixtures that prevent light being emitted horizontally, thereby reducing glare and light trespass. Shield fixtures that may otherwise cause glare for surrounding properties.*
- 5 *Locate utility poles for security lights at the rear of the site when possible, and place electrical service lines underground if feasible.*
- 6 *Retain and preserve fixtures original to a historic building. If replacement of original fixtures is needed, consider selecting a style that is similar or that will complement that of the original fixtures.*
- 7 *Typically entrances were lighted by fixtures mounted on the porch ceilings or attached beside the front door.*
- 8 *Floodlights should not be used to illuminate the façades of historic buildings.*

SIGNS

Traditionally, signs in the Historic Districts were relatively small, of simple designs, and constructed of wood or metal with a smooth painted sign face. Signs were often located beside the front walk near the public sidewalk. Historic commercial buildings normally had a sign frieze or other location intended for a sign. Signs were usually illuminated by hidden spotlights and were not internally illuminated.

Signs designed to attract the attention of passing motorists were usually not found in the historic districts.

A Sign Permit is required for all signs.





An informational sign was approved for Aycock Middle School. It is consistent with signs at other schools in the system, it is made of brick similar to that of the school building, it is relatively low in height, and it is not internally illuminated.

GUIDELINES

- 1 *Introduce simple, straightforward, signage of a traditional design in the historic districts.*
- 2 *Freestanding signs should be no larger than necessary to identify the building they serve, be relatively low in height, and located so that they do not block pedestrian views along the street.*
- 3 *Select traditional materials for new signs including wood, metal, stone, and masonry. Carved or sandblasted signboards are generally not appropriate.*
- 4 *Signs should be painted, and may be lighted with concealed spotlights.*
- 5 *An appropriate location for a freestanding sign in a residential area is close to the front walk and near the public sidewalk.*
- 6 *Billboards (outdoor advertising signs) and other tall freestanding signs, portable signs, flashing or lighted message signs, plastic signs, and signs with internally illuminated letters are not appropriate.*
- 7 *It is not appropriate to attach signs to a building in a manner that conceals, damages, or causes the removal of architectural features or details.*
- 8 *It is not historically appropriate to install signs directly on façades or porch roofs of residential buildings.*
- 9 *Place signs for historic commercial buildings in locations originally intended for signage, such as at the top of the storefront or on windows, doors, or awnings.*

ACCESSORY STRUCTURES AND GARAGES

A number of early garages, sheds, and even a few carriage barns survive in the Historic Districts. Accessory structures range from simple hand built sheds to architect-designed homes with matching garages. Some garages feature attached maid's quarters. These outbuildings provide a glimpse of life during a bygone era, and add to the charm of the districts.

The need for carriage barns no longer exists and today most are gone. Early garages have largely fallen out of use because they are often too small to accommodate modern automobiles. Maintenance of these structures is often neglected and many are in a deteriorated state. One-by-one these early structures are disappearing from the landscape.



Carriage barn that once stood behind 919 Spring Garden Street. Notice hayloft access door.

Portable storage units, trailers, containers, etc. do not require a COA as long as they meet City standards and are removed within 45 days.



Early garages were designed for automobiles that were smaller than modern vehicles. They were usually not built on foundations so they were prone to deterioration.



Maids quarters were often provided in garages sometimes above the parking bay.



Garage behind house at 115 North Park Drive. Sided in wood shingles to match the house, it is considered a contributing structure in the Fisher Park National Register Historic District.



This new garage has many of the characteristics of early garages found in the historic districts: low hip roof, double bays and broad roof overhangs.



A new accessory structure uses materials and design techniques that are compatible with the neighborhood.

GUIDELINES

- 1 *Garages and accessory buildings require regular maintenance just like houses. Make garage maintenance part of the regular property maintenance cycle.*
- 2 *Retain the original materials and features of historic garages and outbuildings including windows, doors, siding, trim, and latticework. If replacement of an element is necessary, match the original in design and materials.*
- 3 *Design new garages and outbuildings to be compatible with the main structure on the lot in material and design, using existing historic outbuildings in the districts as an example. Consider generous roof overhangs and exposed rafters, lap siding or board-and-batten siding as these are characteristics of early garages and sheds.*
- 4 *Limit the size and scale of new garages and accessory structures so that the integrity of the primary structure and the historic character of the property is not compromised.*
- 5 *New garages and accessory buildings should be located in rear yards and sited in a manner that is consistent with historic siting patterns for the neighborhood.*
- 6 *Prefabricated accessory structures are acceptable when they are compatible in materials and design with the principal structure on the site, and with other outbuildings in the district. Other prefab outdoor storage structures are acceptable if they are constructed of wood or fiber cement and located where they are not easily visible from the street.*

UTILITIES AND MECHANICAL EQUIPMENT

Advancements in technology have had a dramatic impact on historic preservation. Integrating alternative energy systems or telecommunications equipment into a restoration project requires careful planning to ensure that the character of the historic structure is not sacrificed. The location and placement of utility and mechanical equipment should be determined early in the planning phase. Included in this section are heating and air-conditioning equipment, electrical panels and meters, telecommunications equipment, satellite dishes, solar heating equipment and freestanding antennas.

Solar panels and related equipment should be designed and installed to have the least possible impact on the historic structure. In some cases it will be impossible to locate solar panels where they are not visible from the street. In those cases, it is reasonable for the Historic Preservation Commission to ask about other measures the property owner has taken to improve energy efficiency. Installing solar panels on a house that has little or no attic insulation is not a cost effective solution. If other energy efficiency steps have been taken solar panels may be installed where they are in view from the street. Panels that are visible should be of a low profile design and of a color similar to the roof color to be as inconspicuous as possible.



GUIDELINES

- 1. Install gas and electric meters, service panels and other mechanical equipment in areas and spaces that will require minimal alteration to the building.*
- 2. Choose heating and air conditioning condensers and other outside units that are painted or finished in a color that blends in with the property.*
- 3. Locate utilities, satellite dishes, and antennae as low to the ground as possible, at the rear and side of the structure where it is not readily visible from the street. Smaller satellite dishes of 18 inches are most appropriate and create the least amount of visible impact on the district.*
- 4. Install mechanical equipment, such as electrical panels or gas meters, at grade level when they are visible from the street, and screen with shrubbery or other landscaping.*
- 5. Locate new mechanical supply lines, pipes, and ductwork on the interior of the structure. If an interior location is not feasible, place in inconspicuous locations and/or conceal with architectural elements such as downspouts.*
- 6. Place utility service lines underground where possible, to eliminate overhead lines and poles.*
- 7. Air Conditioning units and other similar mechanical equipment should be placed in the rear and side yards, with as little visibility from the street as possible. When equipment can be seen from the street, it should be screened with shrubbery or fencing.*
- 8. The installation of telecommunication towers is not appropriate within the boundaries of Greensboro's Historic Districts.*
- 9. Install solar panels and related equipment in the least conspicuous location possible. Solar panels should be installed low against the roof surface. If the only location for solar panels is on a roof slope that is visible from the street, low profile units of a color that blends with the roof is acceptable.*

PATIOS AND DECKS

Patios and decks are popular additions to houses for outside leisure activity. While terraces and patios may be more compatible with the character of a historic structure, decks are acceptable when they are of a compatible design and located at the rear of the house.



GUIDELINES

- 1. When designing a deck or patio, keep in mind the overall size of the rear yard, and the impact it may have on reduction in green space.*
- 2. Choose materials for patios that are found elsewhere on the property—a new brick patio would complement an original brick walkway.*
- 3. Locate decks at the rear of the structure, or in a location not readily visible from the street. Decks that are visible from the street should be screened with shrubbery or other landscaping materials.*
- 4. Decks should be of wood construction, and of dimensions that do not monopolize the rear elevation or significantly detract from the architecture of the building.*
- 5. It is not appropriate to install decks that require the removal of historic materials, or otherwise damage or obscure architectural features. Design and construct decks so that they may be removed in the future without damage to the historic structure.*

6. *Select appropriate materials for patios, including concrete, brick and stone. Simulations of natural materials, such as stamped concrete or interlocking pavers, are not appropriate. If feasible, remove deteriorated pavement before installing new paving materials to ensure that the walk will be flush with the grade of the yard and public sidewalk.*



TREES AND LANDSCAPING

Mature deciduous trees provide shade for homes in the historic districts, reducing energy costs and making the summer months more pleasant. However, the tree canopy has shrunk noticeably in recent years as storms, drought and disease have taken their toll especially on the Elms and Oaks that once towered over the neighborhood.



Tall Oaks and Elms once provided a lush green canopy over the historic districts and framed the view of most houses. Shade trees can help reduce energy costs.

Topping and indiscriminate cutting of tree branches has further reduced the quality of the tree canopy. Tree pruning along utility lines is necessary to ensure reliable electric service but can affect the tree canopy as well.

Overhead and underground utility lines restrict the available space for planting Oak trees and other species that provide canopy to the historic districts.

Different types of trees vary in their height and width. Based on the measurements in the areas where you would like trees, consider the following:

Short and wide trees: Grow up to 25 feet tall and 40 feet wide. They can grow above the roof of a single-story house. They can be planted under overhead utility lines, and as a street tree if the branches won't interfere with traffic. They need lots of room.

Short and skinny trees: Grow up to 25 feet tall and about 20 feet wide. They are great for small areas or under overhead utility wires.

Medium and wide trees: Grow 25 to 45 feet tall and 40 feet wide. They provide shade for the entire roof area of a single-story house and walls and windows of a two-story home. They need lots of room.



Improper pruning can harm the tree. This type of pruning is usually followed by disease as stumps allow an entry point for insects and other harmful organisms. Limbs should be cut flush with the trunk or connecting branches. Remove injured branches before they die to prevent insect infestation.

Medium and skinny trees: Grow 25 to 45 feet tall and about 20 feet wide. They are great for areas near fences and smaller places.

Tall and wide trees: Grow higher than 45 feet tall and 40 feet wide. They provide the most shade for homes, driveways and other large, hot areas.

Tall and skinny trees: Grow higher than 45 feet tall and about 20 feet wide. They provide shade in areas that do not have a lot of room.

For information about proper tree care see Appendix VIII

Consider sustainable landscaping and gardening practices in order to conserve water and reduce air pollution. While most houses in the historic districts have grass lawns, other landscape approaches are compatible with the historic character of the neighborhood and more environmentally friendly.

Xeriscaping is a way of maintaining your yard that reduces the amount of water needed. It also reduces the need for chemical fertilizers and pesticides. Reducing the amount of grass in your yard can eliminate the need for a gasoline powered mower.



Urban gardening has grown more popular in recent years. In the historic districts suitable spots in the back yard are limited so gardeners have moved to less traditional places for gardens.

community gardens



These Bradford Pear trees in College Hill were growing into overhead utility lines and could have resulted in disruption of electrical service. Twenty-five years ago the Bradford Pear was supposed to be the ideal street tree and many were planted in College Hill. Not only were these particular trees planted in the wrong place, the Bradford has proven to be susceptible to wind and ice damage and most have lost major branches..



Choose locations for new trees that will not interfere with power lines.

GUIDELINES

- 1 Start new trees in strategic locations to provide shade as part of an energy savings plan.
- 2 Start new trees in the public right-of-way and on private property to replenish the tree canopy. Replace trees that were part of the canopy on a regular basis.
- 3 Trees should be pruned according to ANSI Tree Pruning Standards. Avoid “topping” of trees which is the practice of cutting back limbs where they come in contact with houses, utility wires, etc. Topping actually harms trees and makes them more susceptible to disease and storm hazard. Limbs should be removed at the trunk or the next lateral branch..
- 4 Select locations for new trees that will not interfere with utility lines, block or cause damage to walkways and sidewalks, or obstruct the vision of motorists at street intersections.
- 5 Common edging materials for landscaping in early 1900’s neighborhoods were slate, brick, and stone.

FENCES, WALLS AND SITE FEATURES

Original features such as masonry walls, fences, garden paths, trellises, arbors, and fish-ponds are unique elements that are part of the charm of the districts.

Many masonry retaining walls in the historic districts are deteriorating for a variety of reasons. Some because of faulty original construction, some because of the cumulative effect of 100+ years of hydrostatic pressure, some because of the weight of large volunteers trees that have been allowed to grow up too close to a wall. Masonry walls of brick, stone or cement are a key ingredient of the setting for the historic districts. They are failing throughout the districts. Unless they are repaired they will be lost and the character of the districts will change forever.

Retaining walls along street frontages may sometimes be located partly in the public right-of-way. However, it is the responsibility of the property owner to maintain these walls.





Early retaining walls were often constructed without footings and proper drainage. Retaining walls are subject to a number of forces including hydrostatic pressure. Without adequate drainage water is stored behind the wall and expansion occurs when it freezes exerting pressure on the wall.



When this wall in Fisher Park fell it was rebuilt with better engineering and drainage to resist the force of hydrostatic pressure.



This vinyl coated chain link fence was installed along Oakland Avenue and the railroad tracks that border the neighborhood on the south in the College Hill Historic District.



GUIDELINES

1. Swimming pools, playground equipment, concrete pads and basketball goals, tree houses, and similar items are acceptable if they are located in the back yard and not easily visible from the street.
2. *Dumpsters and trash receptacles should be located where they will not be easily visible from the street and screened from view from the public right-of-way and adjoining residences with shrubbery and/or fencing.*
3. *Retain fences and walls that contribute to the character of the property and the district where possible. If replacement is necessary, replace only the deteriorated element to match the original in dimension, proportion, material, texture, and detail.*
4. *Introduce new retaining walls constructed of brick, stone, or concrete in a design consistent with the property and the neighborhood. It is not appropriate to construct retaining walls of inappropriate materials such as landscape timbers, railroad ties, or concrete blocks where visible from the street.*
5. *While stone and other natural materials are the most compatible materials for walls in the districts, some precast concrete materials are available that have most of the characteristics of historic block walls and may be acceptable if they will not diminish the overall character of the property and the district.*
6. *Introduce new fences and walls compatible in material, design, scale, location, and size with original fences and walls in the Historic District.*
7. *Low picket fences, of an open design, constructed of wood or metal and finished in white or another color/stain compatible with the building, and low walls and hedges are appropriate for front and rear yard use. Front yard fences and walls should usually not exceed 42" in height.*
8. *Install utilitarian fences of woven wire or chain link in rear yards only. Where they are visible from the street, screen with climbing vines, ivy or shrubbery. (If chain-link fencing is needed, coated chain-link is preferable to raw aluminum.)*
9. *Privacy fences and privacy walls should be confined to rear yards and should generally not exceed 72" in height. The "back yard" is usually considered to be that part of the lot completely behind the house.*

Note: fences may not be higher than 48" within fifteen feet of a property line that abuts a street, by City ordinance.

PARKS

Public parks are found in each of Greensboro's historic districts. Neighborhood residents take great pride in their parks and participate in their care and maintenance. There are children's playgrounds in each of the parks.



Non-Residential Properties

Greensboro's historic districts are composed primarily of residential properties. However, they also include churches, office and commercial properties and Greensboro College. While the guidelines apply to all properties in the districts, it should be understood that the needs of Greensboro College are different than those of a homeowner. Those differences should be recognized and respected. It is in everyone's interest that businesses and institutions are able to maintain their properties at a high level. To that they must be successful in their mission. When considering applications for Certificates of Appropriateness the Historic Preservation Commission should take into consideration the special needs of Greensboro College as well as churches and businesses. The guidelines should be applied in a way that restricts non-residential properties only so much as is necessary to maintain the special character of the historic dis-





MUNICIPAL SERVICE DISTRICT PROGRAM

Streets, parks, and other public spaces are important to the character of historic district neighborhoods. Often special treatment is necessary to maintain public right-of-way areas in a manner that is consistent with the guidelines for the historic districts. Municipal Service District (MSD) designation provides an equitable method for funding special improvements to public right-of-way areas because property owners share in the cost. In return, citizens decide for themselves what projects will be funded in their neighborhood and then participate in planning those projects.

Special taxation districts or "service districts" have been used as a financing tool for downtown revitalization and for other purposes for many years in North Carolina cities. In 1987, the Municipal Service District Act was amended to allow certain cities, including Greensboro, to create service districts to finance "streetscape" projects in local historic districts. Eligible projects include period lighting, special street signage, landscaping and street furniture, and similar public right-of-way improvements which are intended to enhance the historic character of the neighborhood, and which are not ordinarily provided by the City. The funds may also be used for related planning and design work, and for promotional activities. Currently, property owners in College Hill and Charles B. Aycock Historic Districts pay \$.05 more per \$100 of valuation.

MSD projects in College Hill include a barrier fence along the railroad tracks, trash receptacles along sidewalks, street trees and decorative street lights, and monetary contribution to a large infrastructure project along Spring Garden Street completed in 2004. In the Charles B. Aycock district, MSD funds have been used to landscape the approaches to the Hendrix Street pedestrian bridge (recently renamed the Max Thompson Memorial Bridge), the renovation of Sternberger Park, and decorative streetlights.



