

# ARCHITECTURAL STANDARDS FOR MAJOR SUBDIVISIONS

## Prologue

The intent of the Architectural Standards for Major Subdivisions is to ensure that the Town's newest neighborhoods meet a required level of quality and reflect and enhance Carrboro's unique appeal. To that end, architectural design criteria are included in the review process for new subdivisions. These standards are not intended to dampen architectural creativity or diversity but rather to provide a framework within which to work.

Housing developed by nonprofit organizations intended for first-time homebuyers earning less than 80% of our area's median income is exempt from these provisions.

## Contents

1. Procedure
2. Definitions
3. General Design Standards for all major subdivisions
4. Vernacular Architectural Standards
5. Alternative Architectural Standards

Appendix: Glossary

A glossary of architectural terms and illustrations can be found in the Appendix. It is available for use by architects and developers in their interpretation of these standards.

## 1. Procedure

The applicant shall address the architectural design of houses in the proposed subdivision according to the General Residential Design Standards (GDS), and then shall meet either the Vernacular Architectural Standards (VAS) or Alternative Architectural Standards (AAS).

The Town's administrative staff and the Appearance Commission may consult a licensed architect to help them determine whether the plans submitted meet the intent of the General Design Standards, and whether they meet either the Vernacular Architectural Standards or Alternative Architectural Standards.

## 2. Definitions

Contemporary Architecture: describes a building that is derived from current ideas of architectural form, construction and detailing.

Context: the surrounding buildings and land forms, the social and the built history of the location.

Massing: the relationship of solids to voids, and the relationship of major components of the building such as roof, wall planes, and porches to one another, to surrounding buildings, and to the landscape in general.

Proportion: the relationship between the vertical and horizontal elements of the building.

Scale: the relationship of the size of the building, its components, and its architectural details to people as users and observers.

Vernacular: a building style that is historical and typical of a region and surrounding area. The predominant residential vernacular style in Carrboro and the surrounding area is the mill-era housing.

### **3. General Design Standards (GDS)**

The GDS address three components of residential design: landscape, context, and building. The following criteria must be addressed by developers in the design of buildings and will be used by the Town's administrative staff and the Appearance Commission in their review of major subdivision applications. The applicant's design narrative and plans must address and show compliance with each item (whether using the VAS or the AAS approach).

#### Landscape and site:

- Site buildings in a manner sensitive to the existing natural environment and land forms. Minimize clearing and alteration of existing topography.
- Site buildings or provide screening to avoid the visibility of buildings' rear facades from public streets.
- Avoid monolithic and unarticulated walls and buildings facing the public realm.
- Mechanical, communication, and electrical equipment shall be screened from neighbors and public ways through the use of landscaping or by fences/screens made of materials that complement the design of the house.
- Garage entries should not visually dominate the house's primary entrance, and shall have visual separation from the main façade.
- Locate and specify exterior and street lighting to minimize the impact on neighbors. Fixtures shall not project light above the horizontal plane.

- Address the transition between street and primary entrance through pathways that consider changes of light, sound, direction, surface, or grade level, i.e. through the use of benches, fencing, or low walls connected to the building.
- Use variable setbacks and modulate the streetscape.

Context:

- Address the overall plan of the subdivision in terms of rhythm, building heights, patterns, spacing, form, scale, massing, materials, and proportion.
- Address the placement of buildings in relationship to one another; their height, orientation, and spacing.
- Address the vertical-to-horizontal proportions of the elements of each individual house, and the relationship of these proportions from one house to another.
- Address the relationship of the roof of one building to the next in rhythm, form, texture, detail, and shelter, with attention to color, materials, and pitch and to features such as soffits, rafter ends, vaults, overhangs, dormers, cornices, vents, fascias, gutters, and eaves.
- Provide human scale in massing and building elements.

Building Design Elements:

- Provide a minimum of four significantly different sets of elevations if the subdivision contains five or six houses, five sets if seven or eight houses, six sets if nine or ten houses, and seven sets if eleven or twelve houses, and eight sets if thirteen or fourteen houses, to ensure variability of design. Subdivisions of fifteen or more houses must have a minimum of nine differing elevations.
- Create recognizable primary entrances, using, for example, entry placement, front and side porches, trellises, hedges, fences, and walls.
- Address the architectural rhythm of solids to voids in front façades, exterior walls, buildings on the streets, and entrance and/or porch projection.
- Address façade relief as provided by corner trim, porch trim, window and door trim, door panels, transoms, frames, surrounds, shutters, muntins, moldings, corbelling, cornices, gables, columns, casings, vents, fabric awnings, and roofs. Specify materials and dimensions.
- Specify the design of doors and windows, and their spacing, placement, proportion, scale, orientation, and size.

- Address the design and character of all exterior walls and foundations, including their functional and decorative features, materials, details, and proportions in relation to the entire building.
- The design of auxiliary buildings, fences, and privacy screens, and the materials used in their construction, should complement the design of the primary structure.

#### **4. Vernacular Architectural Standards (VAS)**

The goal of the VAS approach is to maintain and enhance Carrboro's historic mill-era architecture, which distinguishes it and is a primary element in defining Carrboro's unique sense of place. New subdivisions using the VAS approach should recognize and reflect the local architectural vernacular. This approach notes the defining elements of the vernacular and requires that those elements be used in conjunction with appropriate scale, proportion, massing, and texture. Proposed plans need not be copies of historic Carrboro houses; successful contextual design combines current design ideas with sensitivity and reference to the defining architecture of the locale.

Following is a list of the minimum criteria necessary to meet the Vernacular Architectural Standards and its goal of maintaining an architectural connection to Carrboro's past.

- Roof characteristics: 10-12 /12 upper roofs, 3/12 lower roofs, 16-24" eaves at all roof edges.
- Porches with a minimum depth of 6', across at least 80% of the primary street façade
- Windows must be rectangular; at least 90% must have a minimum vertical-to-horizontal proportion of two-to-one.
- Clapboard or shingle siding with 4½" reveal.
- Paired 4" corner boards.
- Garage, if any, to be detached and located behind the house's rear façade
- Chimney, if any, to be faced with brick or stone, interior to the building or located exterior, on a gable end
- Details such as columns, trim, vents, dormers, and eaves reflective of the character of the vernacular (see building types, below)

Four building types display most of the primary architectural elements characteristic of residences built in Carrboro's mill era. All photos are from Carrboro's Historic Inventory.

### One-story Mill House



The one-story mill house is modest in scale, with simple massing defined by a one-room deep “L”-shaped plan, gable roof, generous front porch, and moderate roof overhangs. It is characterized by symmetry in the gable ends and front and has windows of a vertical proportion placed singly in the wall plane. The exterior details generally consist of a false dormer, clapboard siding, 4” trim and corner boards, diamond gable vents, plain square porch posts with simple brackets, and simple pickets in porch rails. Garages were single-car gable-roofed buildings set behind the house.

### Two-story “I” House



The two-story “I” house is defined by its moderate massing, a one-room deep plan, two-story front and one-story “L”, gable roof, generous front porch, and moderate roof overhangs. It is symmetrical in its front elevation and gable ends and has windows of a vertical proportion placed singly in the wall plane. The exterior details generally consist of a false dormer, clapboard siding, 4” trim and corner boards, diamond gable vents, plain square porch posts

with simple brackets, and simple pickets in the porch rail. Garages were single-car, gable-roofed, and set behind the house.

### The Bungalow



The bungalow style house is a medium scale building with a solid massing defined by its square floor plan, gable roof, generous front porch, moderate roof overhangs, and large dormers. It is characterized by large articulated gable ends, windows of a vertical proportion spaced doubly or triply in the wall plane, and a porch roof contiguous with the main roof. The exterior details generally consist of clapboard siding or shakes, 4" trim and corner boards, generous two-part square porch posts, and large gable end brackets, rake, and eave boards.

### The Four-Square House



This is another medium-scale building type with a solid straight-forward massing defined by its square two-room deep plan, hip roof, moderate roof overhangs, dormers, and generous front porch. The defining characteristics are a symmetrical front elevation, windows of a vertical proportion placed singly in the wall plane, and a porch roof that is distinct from the main roof. The exterior details generally consist of clapboard siding, 4' trim and corner boards, modest brackets, and simple square porch pickets.

## **5. Alternative Architectural Standards (AAS)**

The AAS approach recognizes that architecture is constantly evolving and that changing needs, tastes, and technologies generate new styles. Carrboro welcomes new and varied architecture but does not want to open the door to developments that neglect thoughtful design. Applicants may therefore choose to submit plans to be evaluated using Alternative Architectural Standards. As with the Vernacular Architectural Standards, plans must be in compliance with the General Design Standards. The applicant shall submit as part of the application a detailed narrative describing compliance with the GDS and shall provide, in addition, a set of architectural standards for proposed and future construction within the subdivision.

## **Appendix**

### **A GLOSSARY OF ARCHITECTURAL TERMS**

**ACCENT BLOCK** A masonry element, usually square or diamond shaped, used as a decorative element in Craftsman-style domestic and commercial architecture

**ARCH** A curved structural element that spans an opening. There are many varieties, which take their basic form from the arc of a circle.

**AWNINGS** Usually of fabric, can also be plastic or metal. Used primarily to give shade to windows. Usually adjustable. As a rule.

**BALANCE** Achieved by the assembly of separate elements to create the whole.

**BALCONY** A narrow platform projecting from and supported by the face of a building above ground.

**BAY** A division of the elevation of a building. For example, a house with a front door flanked by two windows would be described as having a three-bay façade.

**BOX CONSTRUCTION** A form of building that uses vertical wood boards or planks instead of studs for both structure and enclosure.

**BREEZEWAY** A short open-air passageway connecting a house to a area that may house an automobile, it is usually roofed.

**BRICK** A clay (or shale) masonry unit, solid or partly hollow, that is formed in a mold and fired until hard. When laid in a wall so it's long side is visible, referred to as a Stretcher Brick. When laid so that its short end is visible, referred to as a Header Brick. A closer brick is a partial brick used at the end of a course to even it up. A Gauged Brick is a brick that has been shaped to form part of a jack arch. (Gauged and Closer bricks are associated with early brick work.) The coursing or pattern of bricks in a wall is referred to as the Bond, and the divisions between bricks and courses are referred to as Mortar Joints. Stretcher bond is composed of Stretcher Bricks exclusively. Flemish bond is composed of alternating

Stretcher and Header Bricks and is associated with early and COLONIAL REVIVAL brickwork. English Bond is composed of courses of Stretcher Bricks alternating with courses of Header Bricks. A Soldier Course is formed by Stretcher Bricks standing on end and lined up over a window or parapet. Basketweave refers to Stretcher Brick laid horizontally and vertically to form a checkerboard pattern. Houndstooth refers to bricks set at an angle, creating a sawtooth appearance. Paving refers to bricks used like pavers to cover the sloped shoulders of early chimneys. Tumbling refers to bricks laid in diagonal courses to form chimney shoulders or edge of a gable; it associated with decorative mid 1800's chimneys' and with the Tudor Revival style. Penciling refers to the painting of a line (usually white) along mortar joints.

**BUNGALOW** A one-story or story-and-a-half house detailed in the CRAFTSMAN Style.

**CAPITAL** The top section of a column, often decorative. See also ORDER.

**CAS** Contemporary Architectural Standards.

**CHAMFER** The beveled edge or corner of a beam or post.

**CLASSICAL REVIVAL STYLE** An Architectural style characterized by use of classic Greek and Roman forms and ornament, especially monumental porticos. See also under ORDER....

**COLONIAL REVIVAL STYLE** An architectural style most popular from about 1920 to the present. Characterized by the use of classical forms and detailing (or, in more academic examples, allusions to Colonial - or Early National - Period American architecture) and symmetrical composition. Also referred to as the Georgian Revival style.

**COLUMNS** An upright supporting part, which may be structural or purely for decorative effects.

**CORBELLING** A block of masonry or material such as brick or wood, which projects from a wall and supports a beam or other feature.

**CORNER BLOCK** A decorative block-like element used to define the corner of a door or window surround.

**CORNICE RETURNS** Sections of cornice appearing in a gable or on the end of a building.

**CORNICES** A projecting horizontal part that crowns a architectural feature.

**COTTAGE** A small frame one-family house.

**COURSE** A horizontal row of bricks, tiles, stone, building blocks, etc.

**CRAFTSMAN** An architectural style most popular from about 1910 to 1950. Characterized by the use of broad, spreading forms; low-pitched gable roofs, often with gable and eaves brackets, decorative windows and other details. The bungalow house form is associated with this style. A Craftsman porch is usually supported by tapered wood columns on brick bases.

**CROWN MOLDING** A molding used at the top of an architectural element such as a porch post or wall.

**CUPOLA** A small structure built on top of a roof. It may be purely decorative or may be the base for a weathervane or antenna.

**DETAIL** Paying particular attention to all elements of a specific project.

**DOORS** Front - usually the primary entry to a house. Door-Jamb - the upright piece forming the vertical surround of the door's opening.

**DORMERS** A window that projects from a sloping roof.

**EAVES** The lowest part of a roof, overhanging the top of the wall.

**ELEVATION** 1) The external faces of a building, e.g. front, side and back elevations. 2) Also a drawing of one side of a building, usually drawn to a specific scale. Also drawn in projection on a vertical plane.

**ENGAGED** Attached to or embedded in a wall (a pilaster is an engaged column), or embraced by another architectural element (as the front porch of a **COTTAGE** or **CRAFTSMAN BUNGALOW** is enclosed under the roof of the house).

**ENTABLATURE** In classical architecture, the section of the building elevation above columns or piers or at the top of a wall. Also used to describe the crowing element of a door or window.

**ENTRANCE** see **DOORS**.

**FAÇADE** Usually the front or street side of a building.

**FANLIGHT** A window above the head of a door. In some styles of architecture the panes are divided into a fan-like appearance, thus the name.

**FASCIA BOARD** Horizontal board (s) covering the joint between the top of a wall and the projecting eaves.

**FEDERAL STYLE** An architectural style occurring during the early nineteenth century.

**FLASHING** Material, usually metal used as a protective covering to joints between the roof finish and chimneys, dormers, gable walls, etc.

**FLUTING** Vertical concave indentations along the length of a column, giving the surface of the column a rippled or scalloped appearance. Usually occurring as straight-edged grooves on the surface of a door or window surround.

**FORM** To take a definitive shape or arrangement, which may be based on custom, rules or invention.

**FRAMES** A structural element that gives strength or a decorative appearance to doors or windows.

**GABLE** The triangle of wall surface formed by the meeting of two-sloping roof lines, at the end of a ridged roof.

**GDS** General Design Standards

**GEORGIAN STYLE** An architectural style dating to the early 1800's (and possibly the late 1700's). Characterized by the use of classical forms and detailing and symmetrical compositions.

**GIRDER** A supporting part which spans an opening and carries a load, which is subjected to transverse stress.

**GOTHIC REVIVAL STYLE** An architectural style characterized by allusions to medieval Gothic architecture: lancet arched openings, peaked mantel frieze profiles, vertical detailing and composition.

**GREEK REVIVAL STYLE** An architectural style characterized that emulated the simplicity and purity of classical Greek architecture, as typified by the Greek temple. Characterized by symmetrical composition and columnar or trabeated detailing, seen in corner pilasters. Two-panel doors and pilaster-and-frieze mantels.

**GUTTER BOARD** See **FASCIA BOARDS**

**GUTTERS** A small trough fixed under the eaves of a roof, to carry off rain water.

**HIP** The external angle formed by the meeting of two sloping roof surfaces.

**LINTEL** A horizontal part supported at each end, and carrying weight.

**MODERNIST** An architectural style most popular from the late 1930's to the present.

Characterized by the use of simple, geometric forms, modern materials (concrete, aluminum,

plate glass), and a general absence of ornament. The Craftsman, Art Deco, and Prairie styles may be considered precursors to Modernist architecture.

**MOLDING** Continuous projections or incisions used as a decorative band.

**MONOLITHIC** A massive structure.

**MULLION** The upright part dividing the lights of a window.

**MUNTINS** The central vertical part of a door, dividing the panels above and below the middle rail.

**ORDER** In classical architecture, the style or system of proportion and detail of a column and related elements. There are three principal orders of classical Greek and Roman architecture. The Doric Order is characterized by simplicity, with a molded column Capital. The Ionic Order has capitals with dominant spiraled volutes. The Corinthian Order, the most ornate, is characterized by delicate leaflike ornament and small volutes. Vernacular compositions based on the orders are used in local GREEK REVIVAL architecture.

**OUTRIGGER** A structural or ornamental element in a gable that supports or appears to support a roof.

**OVERHANG** Term used when a sloping roof is carried out beyond the top of the wall, forming an overhang.

**PEDIMENT** In classical architecture, the triangular end of a gable roof, defined by cornices. Used as a decorative element above a door or window opening in COLONIAL REVIVAL architecture, sometimes broken and/or scrolled at the center

**PITCH** The angle at which a roof slopes.

**PLAT** Drawing based on a Surveyors staking out a lot(s). A scale drawing of a specific piece of property.

**PORCH** The covered entrance to a building. Front - a covered area in the front of a house, which may share a common roof with the house or have a roof of its own. Also see

**WRAPAROUND PORCH**.

**PRAIRIE STYLE** An architectural style derived from the work of Frank Lloyd Wright and others, characterized by spreading forms, low-pitched hip roofs and geometric ornament.

**PRISM GLASS** Small squares of textured and often tinted glass used to form a transom over a store front.

**PURLIN** A horizontal roof member, either one that spans between the gables or one that spans between the gables or one supported by rafters. Also used historically to describe a horizontal member in a crib.

**RAFTER ENDS** Covering for the parallel beams that support the roof.

**RETAINING WALL** A wall which supports and retains a mass of earth or water.

**REVEAL** Part of a vertical surface, or jamb of a window, or door opening, which is not covered by the frame.

**RHYTHM** An ordered recurrent order or flow of related elements.

**ROOF** Flat - having a pitch of less than 20 degrees. Hipped - a roof in which the end is formed by a sloping surface face enclosed by hips. Lean to Roof - having one sloping surface only, built against the side of another building.

**ROSETTE** A circular ornament

**RUSTIC STYLE** An architectural style popular from the 1920's to the present.

Characterized by the use of traditional, "pioneer;" or natural forms, materials, and building techniques such as log construction, rubble masonry, and unfinished surfaces.

**RUSTICATED** Used to describe horizontally banded masonry.

**SCALE** 1) As the building or project under consideration relates to neighboring buildings and/or the area around it. 2) in the drawing of plans, reducing measurements to fit on paper capable of viewing. e.g. 1/8 inch = 1foot. Written as 1/8" = 1'.

**SENSE OF SHELTER** An awareness of belonging, a home that feels and looks right, and is welcoming.

**SHOULDER** The point at which the body of a chimney narrows, usually at the level of the eaves. Most chimney shoulders are stepped, some paved. Some early chimneys are double-shouldered, with shoulders above the fireplaces at the first and second-story levels.

**SHUTTERS** A covering for an external window, can be made of various materials, and may be purely non-functioning as decoration.

**SIDINGS** The material used to forming the outside wall of framed buildings. Usually so pitched as to throw off rainwater.

**SOFFITS** The under surface of a building feature, such as roof, cornice, window or door head

**SPECIFICATION** A statement containing exact details of and precise instructions for carrying out a piece of building work.

**SPLAYED** Having sloped or cantered surfaces. The sides of door or window openings are sometimes splayed to emphasize the thickness of the wall penetrated by the opening.

**STUCCO** Material of cement or a plastic compound applied to an exterior wall, to provide a smooth or rustic surface, which may be painted.

**STYLE** Is a term used to define a whole body of work with certain common characteristics

**SURROUNDS** Encircling trims, decorative or structural.

**TEXTURE** Visual or tactile surface characteristics.

**TRANSOMS** The window over a door, usually the front door, which may or may not be functional. See Fanlight

**TRELLISES** A frame of lattice used generally as a screen or to support climbing plants.

**TRIMS** Materials used for ornament, that may also be used for minor structural supports.

**UNARTICULATED** Not carefully planned, reasoned or analyzed.

**VAS ARCHITECTURAL STANDARDS**

**VAULTS** An arched structure

**VENTS** An opening (usually covered by a grid) which allows the escape of gases or hot air for example.

**VERNACULAR** 1) Relating to a common building style. 2) Relating to a common phraseology (jargon).

**VICTORIAN** Used to describe buildings constructed during the late 1800's and early 1900's that usually exhibit combinations of the following: asymmetrical composition, complex massing and roof lines, architectural details that distantly reflect medieval prototypes, and the liberal use of machined ornament. Typical Victorian features include hip-and-gable roofs, bay windows, porches supported by chamfered or turned posts with sawn brackets, wood-shingle sheathing, decorative roof vents, and intricate mantles. The Queen Anne style is a form of Victorian styling. Masonry commercial buildings that are Victorian in inspiration often feature decorative parapet brickwork and segmental-arched windows.

**WEATHERING** A canted surface on a buttress wall, or chimney shoulder designed to shed water.

**WINDOW** An opening in a building to admit light and/or air that may be opened and closed. Various architectural styles include, Bay, Bow, Casement (window hinged vertically, which may open inward or outward), Double-hung and etc.

**WRAP AROUND PORCH** A porch that extends to two or more sides of a building.