Mass, Scale, and Proportion

Standards for Crossroads Activity Centers

Architecture shall be residential in form, scale, and detail, including pitched roof (minimum 9/12 pitch), fenestration with window surrounds, cornice detailing, and well-defined entryway. Siding materials and neutral colors commonly associated with residential buildings shall be used. Vinyl and aluminum siding materials as wall cladding and soffit/cornice construction are discouraged unless they closely replicate the appearance of their natural counterparts.

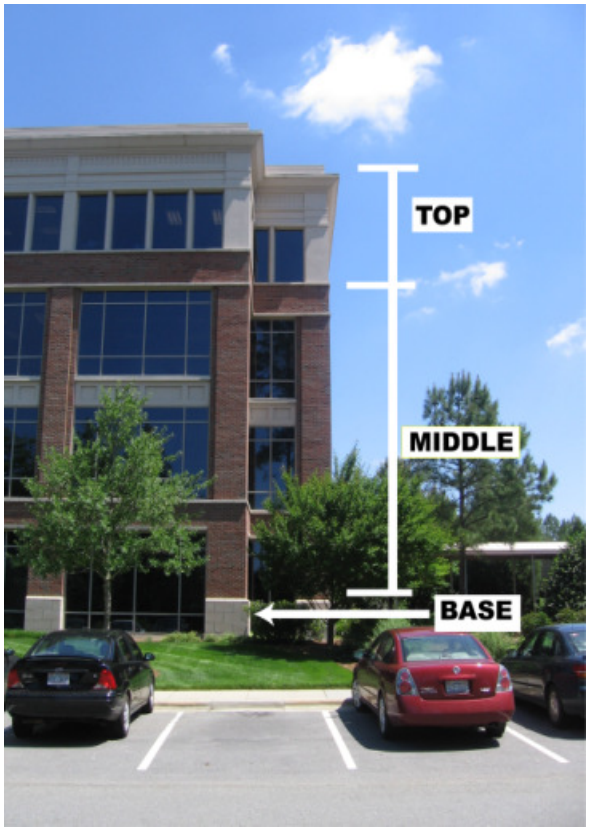

Figure 14: Top, Middle, Base Illustrative Architectural Concept

Standards for All Non-residential and multifamily residential buildings in Nodes Other Than Crossroads

(1) Ground floors and storefronts should be integrally designed with upper floors to be compatible with the overall façade character. All buildings shall have a dominant vertical proportion and all non-residential buildings will have a discernable top, middle, and bottom (see Figure 15: Top, Middle, Base Illustrative Architectural Concept). The first floor would be taller than upper floors, which may be set back from the street elevation. All sides of the building shall include material and design characteristics consistent with those on the front. Use of lesser quality materials for side or rear elevations shall be prohibited.

(2) On a given block, all buildings shall use approximately the same setback from the street; and voids between buildings along the street are discouraged. Exception: In a condition where a deeper setback from the street creates a pedestrian courtyard or café seating area.

(3) The enclosure ratio (relation of building height to street

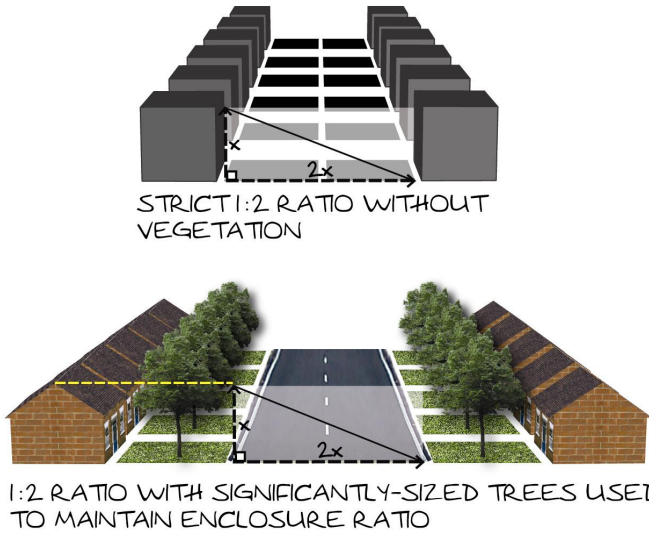

Figure 15: Enclosure Ratio Illustrations

width) shall be approximately 1:2 or 1:3. No building in a node shall exceed the mature height of the vegetative buffer at the corridor's edge as measured at the corridor's edge.

(4) Consistent proportioning systems are encouraged, preserving a width-to-height ratio along a façade. This ratio can differ among façades, but once chosen should be used for the entire façade. See the 1 to 1.75 example in Figure 17—the red dashed lines show the repetition of the ratio throughout the façade.

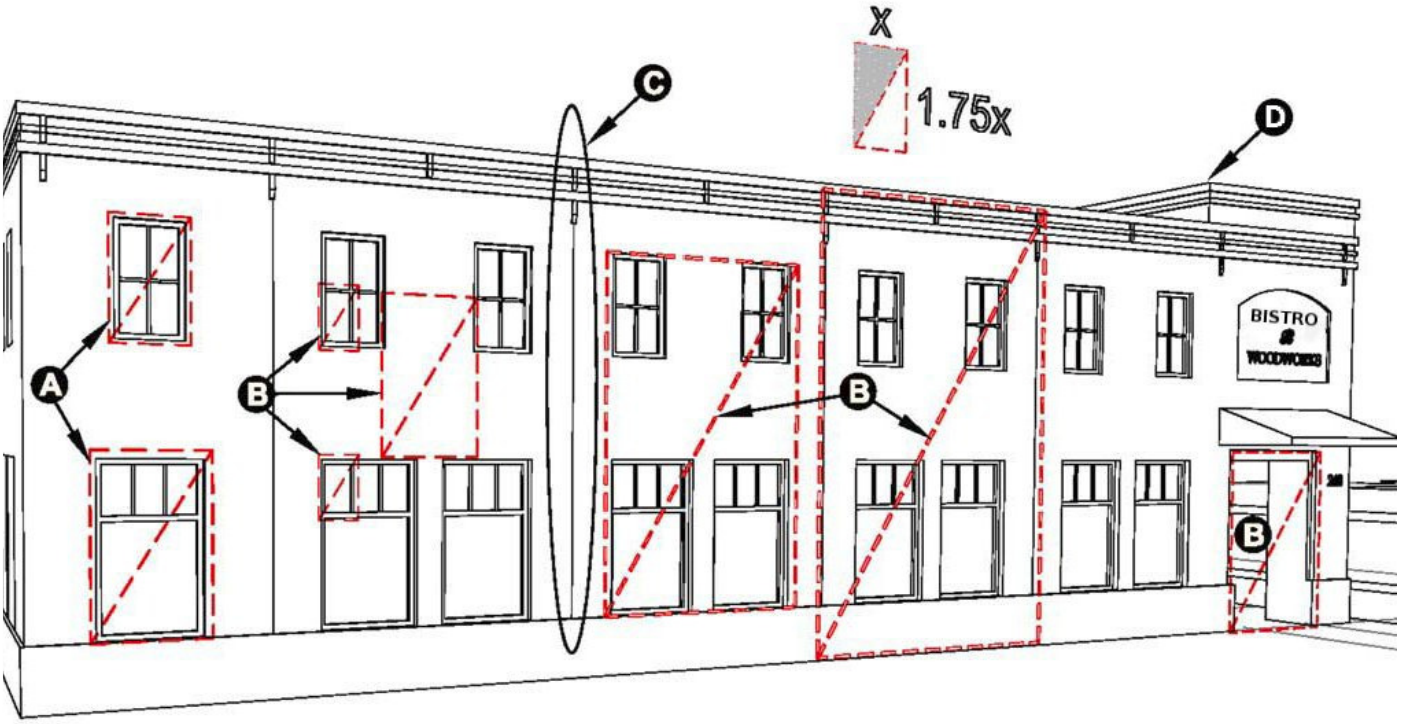

Figure 16: Consistent Proportioning System

(5) Generic corporate prototype buildings are prohibited; all structures should be built with "individual architectural merit" to allow for adaptive re-use and avoid future empty or abandoned structures.

(6) The principal entrance to a building, both functionally and architecturally, shall front the primary public street or internal focus "street" or a public open space such as a square, plaza, courtyard, or sidewalk. They shall be clearly defined, i.e., recessed or framed. Sheltering elements such as awnings, or a portico at a building corner, are encouraged. It is desirable that corner buildings have corner entrances where possible. Secondary entrances may be located off a rear parking area.

(7) Large buildings fronting multiple streets should provide multiple entrances. Entrances connecting to a central lobby should be accessible from each street-fronting façade of the building.

(8) Provide transitions between building types by using complementary architectural design and manipulated massing. Larger-scaled buildings shall respect the scale and form of adjacent lower-density spaces. Unbroken mass of more than 75 linear feet is prohibited; varying wall surfaces and depths and varying the façade height can break the mass. Putting smaller storefronts along the main street façade of large-scale buildings and structured parking buildings to reduce their massive appearance and create pedestrian scale is strongly encouraged.

Figure 17: Example of Break In Façade Massing. Note both horizontal setback variation (entrance) and vertical steps to break up the roofline.

(9) Architectural details such as pitched roofs, heavy cornices, ornamental window surrounds, shutters, awnings, detailed entrances, quoins, columns and vertical divisions between buildings may be incorporated into the design so as to create a sense of human scale and architectural interest.

(10) The part of the structure at a street intersection should have some architectural feature that accentuates the importance of the corner; this can include corner entrances, some kind of additional architectural detail, such as a entry portico or additional height see (D in Figure 17: Consistent Proportioning System).

(11) Building mechanical and accessory equipment attached to or protruding from the roof shall be incorporated into the design of the building and enclosed with building materials which are the same as the building, to screen all machinery from view.

(12) Conduit, meters, vents and other equipment attached to the building or protruding from the roof of the building shall be painted to match the surrounding building surface. Where practical, the use of a screen wall or landscape plants to further remove such elements from view is strongly encouraged. Individual antennas or satellite dishes shall be located behind parapet walls or similarly screened from view at ground level.

(13) Loading docks, solid waste facilities, and other service areas shall be visually unobtrusive and also screened by walls or vegetation from view of the public street. They may be recessed into or surrounded by the building envelope.

Window and Door Proportions and Design

(A) Ground level façades shall be designed to make the uses inside the building easily discernible by passersby. This applies to all street facing façades including internal "streets" as noted on the site plan elevations. A minimum of 50% of this elevation shall be some form

of transparent glass window, and framed with an architecturally compatible frame. Where practical, windows should functionally open to provide natural ventilation.

(B) Highly reflective or highly tinted glazing and awning-type windows are prohibited anywhere on the building. Shutters, if used, shall be sized to provide full coverage of the window they flank. Faux windows, if they are used, must closely replicate the fenestration pattern and detailing used elsewhere on the building.

(C) Second floor facades that face or can be seen from a "street" shall be made up of a minimum of 25% glazed area, at least half of which shall be able to be opened. An ornamental surround in proportion to the glazed area shall be provided, except where shutters are to be used. In those cases only an ornamental sill and lintel may be provided. Balconies, both functional and ornamental, are encouraged, providing the balustrade is detailed in a manner that adds to and is in keeping with the overall architecture of the building.

(D) Awnings: The use of awnings is encouraged, providing they contribute to the overall architecture of a building in a positive way, and do not interfere with the passage of pedestrians. Awnings shall be mounted in locations that respect the design of the building, including the arrangement of bays and openings. It is preferred that solid colors, and woven exterior-grade fabrics (not vinyl), be used. Retractable awnings, or those that appear to be retractable, are preferred.

LANDSCAPING AND BUFFERING

Installation

This section identifies matters that should be addressed and describes procedures that should be used in connection with the installation of trees and shrubs in the landscaped buffers and in the parking lot islands.

Timing:

Preparation of planting beds and actual planting time will be after equipment, unloading of materials and other traffic is finished. Additionally, do not work frozen or saturated soil, and do not plant during periods of extreme drought and water restrictions.

Prior to planting, determine soil characteristics such as soil type and texture, pH, nutrient availability, and drainage.

Correct any drainage issues and add amendments as necessary. Example of preparation of plant bed areas in clay soils:

Prior to adding amendments, assure subsurface drainage and create a transition layer by deep plowing to a minimum of 12". Add 4" of shredded pine bark and/or compost and amendments such as the lowest suggested amount of rock phosphorous and gypsum. Mix thoroughly. Rake out plant debris, sticks, and stones 1 1/2" in any dimension and any materials harmful or toxic to plant growth. Test soil to determine further fertilizer needs and pH. Soil must be friable and weed free.

Example of preparation of individual planting holes:

Remove soil to approximate depth of root ball or container and 3 times the width. Scarify bottom and sides of hole. Soak roots if necessary to loosen any circling roots or heavy root masses to provide maximum root to soil contact. Place root ball such that the trunk flare or crown sits a minimum of two inches and a maximum of four inches above finished grade. For balled and burlapped plants, remove ties. Fold burlap and wire basket away from the top third of the root ball. Synthetic burlap must be removed completely. Completely break up backfill before use. After planting, create a ring of native soil around the root ball to retain water. Water thoroughly.

Mulch to ½ inch depth at trunk and to 2 ½ to 3 inches beyond. 5-6 inches is suggested for pine straw.

These methods are suggested examples and are considered best management practices (BMPs). Whatever method is chosen, the result must be healthy growth which meets screening expectations within the specified time limit.

Turfgrass

Mowable turfgrasses are strongly discouraged within parking areas, and shall be minimized elsewhere on site because of the high levels of maintenance they require, which contribute to pollution, and high energy and water consumption. Accordingly, the following are

recommended:

1. Use groundcovers instead of turfgrass.
2. Mow turfgrass higher during periods of drought.
3. If used at all, turfgrass should be used only sparingly for cooling effect and erosion control.

Irrigation

Given Chatham County's finite water resources, it is highly recommended that year round water conservation be practiced. The purpose of the following recommendations is to preserve our limited natural resources and to foster good growth rates of plantings in the landscape.

XERISCAPING

Xeriscaping is a landscaping concept that has water efficiency as its central principle. Some form of xeriscaping should be incorporated into the landscape plan.

1. Less water, less fertilizer equals less pests and diseases.

2. Selection of plants that are heat and drought tolerant. For a list of drought tolerant Trees, Shrubs, and Grasses go to: www.bae.ncsu.edu/bae/programs/extension/publicat/wqwm/ag508_3/

   A. Plants should be grouped together in zones that have similar water requirements and irrigated by separate zone control.

   B. Prudent use of mulches helps to reduce evaporation.

IRRIGATION

1. It is strongly recommended that appropriate irrigation be used to maintain new plantings, for example:

   A. Drip irrigation i.e. Gator Bags, line emitters, and bubblers.
   B. Overhead –
      i. Should be limited to turf or micro sprinklers for small areas
      ii. Strongly discourage watering from 10am-6pm.

3. All possible efforts should be made to recycle water and collect rainwater, for example:

   A. Use recycled water whenever possible.
   B. Rainbarrels and Cisterns
   C. Rain Gardens

4. Efficiency in irrigation.

   A. Water deeply and less frequently.
   B. Grass should not be watered daily except when establishing new turf and that watering should decrease after a 3-week period.
   C. Maintenance of system
      i. Rain sensors shall be installed with all irrigation systems.
      ii. No water runoff during irrigation periods.
      iii. No watering of walks, driveways, and streets.