

PRELIMINARY DRAFT

October 5, 2017

EPHESUS/FORDHAM DISTRICT DESIGN GUIDELINES

TOWN OF CHAPEL HILL, NC

Readers Guide

This is the preliminary draft of the design guidelines for the Ephesus/Fordham District in Chapel Hill, NC. It provides Town staff, the Community Design Commission and the Planning Commission a working text document for review and comment prior to developing the first formal draft, which will be published for public comment.

The document is organized into two sections. Section 1 is a text-only document. This is in Microsoft Word to facilitate comments and edits. Section 2 provides figures, diagrams and other graphics that illustrate the concepts described in Section 1. These are linked to Section 1 through caption titles. When the public review draft is generated, it will be in desktop publishing format, in which text and graphics are combined. All graphic information located in Section 2 has been scaled to fit when combined with text into desktop publishing format in the subsequent draft. If any changes to the content or scale of a graphic example are expected in future versions, a description will be included in **RED**.

Developing design guidelines is an iterative process. Based on comments received, some text will be expanded while others may be modified or removed entirely. Occasionally in this current draft, text, placeholder graphics or blank frames are used. These will be filled after input from staff and the CDC and Planning Commission. For example, graphics are not included in the Introduction or Guiding Principles. Graphics will be included as these sections are further developed in later drafts. Some in-process items are **highlighted** to denote they are in-process or forthcoming. Areas that are in-process or have yet to be developed include some that require input from staff:

- Application of the design guidelines
- Administration of the design guidelines
- Design review process
- How potential design alternatives are identified
- Potential case studies

SECTION 1:

Preliminary Draft -Ephesus/Fordham Design Guidelines

Introduction:

These design guidelines apply to the Ephesus/Fordham District, as a supplement to its Form Based Code. They provide information to help in interpreting the provisions of the Form Based Code as they are applied by staff and the Community Design Commission. The objective is to guide investment in the area that will realize the vision for the District as a vibrant, pedestrian-friendly place all will enjoy. This document expands on the vision for the area and provides broad design principles that underlie the more specific design guidelines.

Town staff will use the guidelines as they interpret compliance with some of the base standards in the code. For example, the code requires that each project provide Public Amenity Space. The guidelines provide additional detail that will help in determining that a specific design meets the intent of this requirement.

Members of the Community Design Commission (CDC) will also use some of the guidelines when reviewing Design Elements as defined in the code, to assure that specific designs also meet the intent of the standards. For example, the code permits the use of an arcade as a design element to activate the street level of a building. These guidelines address some of the qualities that an arcade should have.

In other cases, the CDC will use the guidelines to evaluate proposals for Design Alternatives when applicants request them. For example, an applicant may ask to locate a Pass-through, as required by code, in a location that exceeds the limits mandated. These guidelines provide details about appropriate pass-through designs that would aid in determining the appropriateness of such an alternative.

The following sub-sections within the introduction chapter will be developed alongside future drafts based on input and assistance from Town staff:

Project Introduction

- Acknowledgements
- Table of Contents
- Maps (Area & Project Specific)
- Opportunity in this area
- Uniqueness of the area

Vision for the Ephesus/Fordham District

- Text Forthcoming

About this Document

- Purpose of the Design Guidelines
- Administering the Guidelines
- Process of Developing Design Guidelines

Policy & Regulatory Foundation/Related Plans

- Interaction with other documents
 - Chapel Hill Updated Zoning Code
 - Ephesus/Fordham Small Area Plan
 - Chapel Hill Public Works Engineering Design Manual
 - Ephesus/Fordham Mobility and Connectivity Plan

Application of the Design Guidelines

- How the Design Guidelines are Applied
- Who Uses Design Guidelines?
- Design Review Alternatives

Using the Design Guidelines

- Organization & Format
- Illustration of a Typical Design Guideline
(Diagram 0-1)
- Explanation of Design Guideline Elements
- Design Review Process

Chapter Overview

The document is organized into these chapters:

Chapter 1: Guiding Principles

This chapter sets forth “high level” aspirations that inform the guidelines. They are based on intent statements that appear in the Form Based Code and the Comprehensive Plan.

Chapter 2: Site Design Guidelines

This chapter establishes guidelines for streetscape, open space amenities and landscape design within a property, as well as for the arrangement of buildings and other features on a site. These include guidelines for parking and the way in which a development should establish a positive relationship to adjacent properties and abutting neighborhoods.

Chapter 3: Building Design Guidelines

This chapter provides guidelines for buildings. They address the visual and functional character of new buildings as well as alterations and additions to existing buildings.

Appendix

The appendix will include a glossary for any terms that are not explained in the body of the document.

(Additional inclusions to be developed as necessary)

Chapter 1.0:

Guiding Principles

New construction and redevelopment in Chapel Hill's Ephesus/Fordham District will contribute to walkability and multi-modal connections within the area. All projects should meet these principles.

Achieve Excellence in Design

Each improvement in the Ephesus/Fordham District should express excellence in design and raise the bar for others to follow. This includes using high quality materials, industry-leading construction methods and paying attention to detail.

Promote Creativity

Innovation in design is welcomed throughout Chapel Hill, including the Ephesus/Fordham District. Exploring new ways of designing buildings and outdoor amenity spaces is appropriate when they contribute to a cohesive urban fabric. This type of creativity should be distinguished from simply being "different."

Design with Authenticity

The Ephesus/Fordham District should be defined by building and places that reflect their own time, including distinct construction techniques as well. The result is a sense of authenticity and "timelessness" in building and materials. All new improvements should convey this sense of authenticity.

Design with Consistency

Buildings and places in Chapel Hill that are highly valued are those which have a cohesive quality in their use of materials, organization of functions and overall design concept. Each new project in the Ephesus/Fordham District should embody a single, cohesive design concept in terms of its material palette and organization of design elements while connecting thoughtfully to the larger area.

Design for Durability

New buildings and public spaces throughout the Ephesus/Fordham District should be designed for the long term with high-quality, durable materials.

Design for Sustainability

Aspects of cultural, economic and environmental sustainability that relate to urban design and compatibility should be woven into all new improvements in the Ephesus/Fordham District. Sustainable design should become part of the District's character, leading the way for other parts of Town.

Draw Upon Local Design Traditions

Chapel Hill exemplifies a unique character and authenticity, with lessons for new designs. Many buildings may share similar features, materials and forms that reflect the Town's design traditions and should inspire new work. This does not mean copying earlier styles, but rather learning from them.

Enhance the Pedestrian Experience (Walkability)

Each improvement project should contribute to a pedestrian-friendly environment. This includes defining street edges with buildings and spaces that are visually interesting and attract pedestrian activity. Buildings that convey a sense of human scale and landscapes that invite walking are keys to successful design in the Ephesus/Fordham District. Designing sidewalks and other walkways to accommodate pedestrian traffic is also important. This includes providing sidewalks that support circulation and outdoor activities, and installing appropriate landscape treatments for shade, beautification and a buffered pedestrian experience.

Keep the Automobile Subordinate

Structures and parking lots should support other functions and should be attractive, and visually subordinate in the urban setting. Parking facilities should be well-integrated and visually buffered.

Provide Signature Open Spaces

Each project should incorporate signature open space elements, or open space amenities, for pedestrians to enjoy. These include public and private yards, promenades, plazas and courtyards. Linking these elements and spaces with streets, paths and greenways while enhancing existing natural resources will provide a valuable green network as an amenity for the public to experience.

Design Concepts

The Ephesus/Fordham District draws upon basic design concepts that promote urbanism, a sense of scale and placemaking. These are some key terms that appear in the body of the guidelines:

Sense of Place

Sense of place describes our relationship with a site, district or neighborhood. In urban design, distinctive characteristics of the built environment contribute to a sense of place. It results from a unique collection of qualities and characteristics – visual, cultural, social and environmental – that provide meaning to a location. Outdoor spaces that invite human activity, signature design features such as public art and iconic architectural features, as well as an overall sense of visual continuity contribute to a sense of place. This is a fundamental concept that underlies many of the design guidelines in this document.

(Figure 1-1)

Pedestrian Orientation

Buildings and places that are visually interesting and invite exploration by pedestrians are considered to have a pedestrian orientation. At the street level, this includes building fronts that are visually interesting, inviting and have a sense of scale. Walkways and outdoor spaces that are comfortable, active and safe also contribute to a pedestrian orientation. This concept appears in many of the design guidelines in this document.

(Figure 1-2)

Walkability

Walkability is the extent to which the built environment is friendly to the presence of people living, shopping, visiting and spending time in an area. It is a product of connected streets, sidewalks and paths, which are enhanced with attractive landscape features and outdoor spaces. These are framed with buildings that provide visual interest and access to activities that enliven the public realm. These are important considerations for design in the District, and especially when alternatives for extending block length are discussed.

(Figure 1-3)

View from the Public Way

The *Chapel Hill Land Use Management Ordinance* establishes District standards for design of buildings and site features that are visible from the public way. In many cases, this focuses on the fronts of buildings and other elements within the Street Frontages as defined in the code, but in some conditions, also relates to some features that are visible from other viewpoints along the public way. The visibility of all sides of a parking structure is an example.

(Figure 1-4)

Visual Continuity

The design guidelines promote a sense of visual continuity among properties, especially along their frontages. Visual continuity results when similar features align, such as awnings, canopies and sets of windows, and when similar materials are used. Buildings of similar scale and those that align at the sidewalk edge also can contribute to visual continuity. In landscape design, the repetition of similar elements, including plants and site furnishings, can also contribute to visual continuity. This does not mean, however, that designs should be copied along a street. Diversity and creativity can occur while also achieving visual continuity. Establishing a balance is a key objective in the Ephesus/Fordham District.

(Figure 1-5)

Scale

Scale refers to the overall perceived size of building elements and details, including the perception of floors, windows, doors and materials as they proportionally relate to each other and to people. Building elements include windows, doors and building materials. When these elements appear similar in size to those with which we are familiar, we can understand the size of a building in the context of our previous experience. The way in which individual parts of a project relate to each other, how the project relates to the size of the human body and how the project relates to its contextual scale, are all part of this concept. Conveying a sense of human scale is a key consideration in many of the design guidelines that follow. Building scale is not solely determined by height. For example, a mid-rise building can be designed to respect human scale through a combination of building elements and details.

(Figure 1-6)

Massing

Massing is a term which refers to the general shape and form as well as size of a building. Building mass is established by the arrangement and proportion of basic building components, including the main building volume, any wall offsets and projections, such as porches and arcades, as well as the roof and the foundation. Building massing that contributes to walkability is a key concept in the design guidelines.

(Figure 1-7)

Varied Massing

The design guidelines emphasize using variations in massing to help reduce the overall perceived mass of a building and to establish a sense of human scale. This may be achieved by changing the heights of different parts of a building and by creating offsets in wall planes to express individual building modules. Varying massing to express different building modules also is a key concept in the design guidelines.

(Figure 1-8)

Modularity

Varying the mass of a building can be expressed as a set of subordinate volumes, which although combined as a complete building, are distinct enough to read as a set of small forms linked together. These are considered building modules. Modularity also can be expressed by changes in wall planes, building materials and architectural details.

(Figure 1-9)

Articulation

Articulation is the design of a building wall to provide visual interest, reduce perceived mass and establish a sense of human scale. This may include variations in wall surfaces, changes in materials, and differences in fenestration patterns, as well as other design techniques that are described in the design guidelines.

(Figure 1-10)

Chapter 2.0:

Site Design Guidelines

New construction and redevelopment in Chapel Hill should incorporate high-quality site design to enhance community image and help create more pedestrian-oriented spaces and connections with a unique sense of place. This general principle is no different for to the Ephesus/Fordham area.

Site design refers to the arrangement, placement and orientation of buildings and site features on a parcel. This includes the relationship between components on one site to components of neighboring properties and the public realm. Site design also considers the location and function of vehicular access, lighting, service and utility areas, incorporating storm water management, parking and providing outdoor amenity spaces such as patios and plazas.

[Key Considerations of Site Design
\(Diagram 2-1\)](#)

A. Building Placement and Setback Character

Building placement addresses the distance between a building and the street or the sidewalk edge. Setback character refers to the area between a building and the sidewalk edge. Whenever possible, buildings should be aligned along the street to hide parking and promote active sidewalks. A uniform alignment of buildings helps to define a “street wall,” which provides a sense of enclosure and a comfortable scale for pedestrians. Additional context-sensitive guidelines for building frontages are provided in Chapter 4.

The Chapel Hill LUMO uses a Regulating Plan to organize building placement and frontage design. This information can be found in Section 3.11.2.2- 3.11.2.5 of the LUMO. **SIDEBAR**

[Street Frontage Typologies
\(Diagram 2-2\)](#)

- A.1 **Place a building to promote a safe, interesting and comfortable pedestrian environment along the street. (Figure 2-1)**
 - a. When a building wall is set back from the public streetscape or a natural feature, design the intervening space to be attractive to pedestrians. (Figure 2-2)

A.2 Design the street frontage to promote pedestrian activity. Appropriate strategies include:

- Active uses along street frontages
- Pedestrian-oriented entries
- Windows facing the street
- Small public spaces linked to the sidewalk
- Urban streetscape design and landscaping

A.3 When a building front is set back from the build-to line, design the intervening space to enhance the pedestrian-friendly character of the street. (Figure 2-3)

- a. The space in the setback area should:
- Provide convenient access from the street
 - Provide some shading (such as an arcade, canopy or trees)
 - Include landscaping with “green” areas
 - Be differentiated from the public sidewalk with a change in paving, a railing or landscape features

A.4 Design the street frontage to be compatible with the surrounding context.

- a. Provide a landscaped front setback:
- Between a building or parking area and the sidewalk, where development will be oriented primarily toward an internal parking area
 - Where residential development with a landscaped setback is located across the street

B. Connectivity

Connectivity refers to the network of sidewalks, paths, lanes and streets that provide pedestrian, bicycle and vehicle routes within and between properties or neighborhoods. Future development should help create a more active and inter-connected environment throughout Ephesus/Fordham. Initially, individual sites will become more walkable, with better connections between buildings, sidewalks, parking areas and buildings. As additional sites redevelop, a network of connections should emerge between sites, and to adjacent neighborhoods.

Additional connectivity information on connectivity can be found in the *Ephesus/Fordham Mobility and Connectivity Plan*. **SIDEBAR**

Pedestrian & Bicycle Connections

A site should establish an internal pedestrian and bicycle circulation system that connects its different components and links with the public realm.

B.1 Connect a development to established pedestrian and bikeways.

- a. Provide a clearly defined, direct connection to adjoining public sidewalks, paths and greenways. Appropriate connections include:
 - Sidewalks
 - Internal walkways and mid-block passages
 - Multi-use alleys
 - Building pass-throughs
- b. Appropriate features with which to connect include:
 - Outdoor amenity spaces
 - Building entrances
 - Recreation spaces
 - Plazas and courtyards
 - Outdoor dining areas

B.2 Provide pedestrian and bicycle connections into and between properties. (Figure 2-4)

- a. Connect an internal circulation system to those of adjacent properties, when possible.
- b. Provide a mid-block connection for pedestrians and bicyclists, when possible.
- c. Use building pass-throughs to provide public connections between blocks.
- d. Route pedestrian connections through outdoor open spaces, when possible.
- e. Locate sidewalks and pedestrian paths to link with potential future development phases.
- f. Align sidewalks and pedestrian paths to potential future connections on adjoining properties.

**Strategies for Pedestrian Connections
(Diagram 2-3)**

Building Pass-Throughs

Building pass-throughs allow access from one side of a building to another in large developments. Pass-throughs should be designed to provide safe and enjoyable public passage.

Design standards for building pass-throughs and opportunities for design alternatives to be approved by the CDC can be found in Sec.3.11.2.7.S of the Chapel Hill LUMO. **SIDEBAR**

**Building Pass-through Options
(Diagram 2-4)**

B.3 Activate a building pass-through to a create safe, enjoyable public space. (Figure 2-5)

- a. Promote designs that keep “eyes on the street.” Possible design elements include:
 - Windows
 - Doors
 - Courtyards
 - Bridges
- b. Align a building pass-through to frame a clear view of an outdoor amenity space and buildings beyond.

- c. Activate pass-through walls to provide a pedestrian-friendly experience. See Design Options for Windowless Façade Areas (Diagram Forthcoming)

B.4 Design a building pass-through to be inviting and in proportion to its associated building. (Figure 2-6)

*Note: Amendment to Form Based Code may be required

- a. Increase the height and width of a building pass-through when greater pass-through lengths are necessary.
- b. Increase the height and width of a building pass-through when a building's height increases.
- c. Provide variation in massing and to create visual interest.
Possible tools include:
 - Height variation
 - Wall offset
 - Wall setback
 - Material change

Vehicular Access & Connectivity

Automobile access should be unobtrusive. Driveways should be designed to promote safety and minimize pedestrian-vehicle conflicts.

**Strategies for Vehicular Connections
(Diagram 2-5)**

B.5 Provide vehicular connections into and between adjoining properties.

- a. Ensure that developments have more than one vehicular entrance/exit.
- b. Provide direct vehicular connections to streets and lanes on adjoining properties to reduce traffic and pedestrian impacts on surrounding streets.
- c. Align internal drive aisles to allow for future connections to adjoining properties.

B.6 Create a consistent streetscape experience within a development. (Figure 2-7)

- a. Coordinate streetscape improvements within a development with those on surrounding streets, whenever possible.

B.7 Where a curb cut is to be installed, minimize its width.

- a. Consider using shared driveways between properties to reduce the number of conflict points along a frontage.

Additional information and vehicular access design standards are provided in the *Chapel Hill Public Works Engineering Design Manual*, Section 3.11-Parking and Loading. **SIDEBAR**

B.8 Design a service drive to be a visual asset. (Figure 2-8)

- a. Use decorative and porous paving materials.
- b. Include landscape materials to buffer views and soften appearance.

C. Outdoor Amenity Space

Outdoor amenity space occurs in a variety of public and semi-public areas such as plazas, courtyards, patios, small park spaces, rooftops or landscaped features. These provide places for people to gather, engage in activities and enjoy a sense of community. Outdoor amenity space should be provided throughout the Ephesus/Fordham District.

A new development should incorporate outdoor amenity space that projects a vibrant image and invites pedestrian activity. It should be planned to activate streets and buildings while enhancing the pedestrian experience within the site. The outdoor amenity space should be of sufficient size to accommodate the intended social functions and located to encourage active use. It should not be over-sized, such that the space will appear to be under-utilized.

The LUMO (Sec. 3.11.2.7.F) provides design provisions, alternatives and standards for outdoor amenity spaces. These guidelines address qualitative aspects that support a pedestrian-friendly experience and the relationship of an amenity space to buildings and other site features.

Design Options for Outdoor Amenity Space (Diagram 2-6)

Outdoor Amenity Space Location

In a large development, an outdoor amenity space can be a focal point. An outdoor amenity space may also be an accent within a small project. It should be located to encourage active use.

- C.1 Locate an outdoor amenity space to provide a focal point on a site. (Figure 2-9)**
 - a. Locate an outdoor amenity space to highlight key building features.
 - b. Position an outdoor amenity space to link adjoining buildings, when possible.

- C.2 Locate an orient outdoor amenity space to encourage active use. (Figure 2-10)**
 - a. Provide clear connections from an outdoor amenity space to pedestrian circulation routes and building entrances.
 - b. Orient an outdoor amenity space to link with other cultural resources, natural features, and to extend existing view corridors.

- c. Orient an outdoor amenity space to views of other active spaces or to architectural landmarks to provide visual interest.
- d. Consider locating an outdoor amenity space along an active pedestrian circulation path, as opposed to the interior of a property.
- e. Consider locating an outdoor amenity space on a rooftop, where it is reasonable to provide public access.

C.3 Locate outdoor amenity space where it will be shaded in summer months. (Figure 2-11)

- a. Design an outdoor amenity space to be cool in the summer months and warm in the winter months.
- b. The opportunity to include shade trees should be a determining factor when locating an outdoor amenity space.

Outdoor Amenity Space Design Elements

An outdoor amenity space should be designed and furnished to encourage activity and create a comfortable space for all to enjoy. Where possible, it may also be integrated into an on-site stormwater management system.

C.4 Design an outdoor amenity space to be inviting. (Figure 2-12)

- a. Size the space to provide a comfortable scale for pedestrians.
- b. Design the space to invite public use.
- c. Create a sense of enclosure for an outdoor amenity space area by positioning buildings to frame the space.
- d. Use landscaping to create an inviting and comfortable experience.
- e. Consider using public art to add interest to an outdoor amenity space. See “Public Art” (Chapter XX) for more information.

C.5 Furnish an outdoor amenity space to encourage passive use and public enjoyment. (Figure 2-13)

- a. Provide benches, tables, shelters and landscape features.

See Site Furnishings (Chapter XX) for additional information.
SIDEBAR

C.6 Create a coordinated design palette for an outdoor open space.

- a. Coordinate landscape and site design elements within a development, to create a consistent visual design.
- b. Use site furniture, public art and streetscape elements to help establish a sense of identity within the development.

C.7 Promote a “green” experience in all outdoor amenity spaces.

- a. Increase the amount of plant material used in outdoor amenity spaces, whenever possible.
- b. Use trees to provide shade in an outdoor amenity space.
- c. Use landscape plantings to balance hardscape areas.

See [Landscaping guidelines \(Chapter XX\)](#), for more information.
SIDEBAR

C.8 Design a rooftop outdoor amenity space to capitalize on views of natural features and active social spaces. (Figure 2-14)

***Note: Amendment to Form Based Code may be required**

- a. Orient a rooftop space to take advantage of nearby natural features such as Booker Creek.
- b. Orient a rooftop space toward pedestrian activity, such as a plaza, courtyard or other outdoor amenity space on the ground level.
- c. Avoid orienting a rooftop space toward a parking lot or highway.

C.9 Design outdoor amenity space to incorporate Low Impact Development (LID) principles for stormwater management. (Figure 2-15)

- a. Design and locate larger stormwater management systems such as bioretention areas to serve as usable open space or as a site amenity.
- b. Use permeable surfaces and paving systems to assist with stormwater drainage.

See [“Stormwater Management & Low-Impact Development” \(Chapter XX\)](#) for more information. **SIDEBAR**

D. Recreation Space

Recreation spaces will be developed in conjunction with new residential and mixed-use housing. These indoor or outdoor areas will provide common, semi-private, active spaces to be enjoyed by residents.

The Chapel Hill LUMO provides general standards and alternatives for a recreation space in Sec.3.11.2.7.G. These guidelines address quality and features for a recreation amenity. **SIDEBAR**

D.1 Design a recreation space to provide options for a variety of users. (Figure 2-16)

- a. Provide active recreation for a variety of ages and fitness levels. Options include combinations of:
 - Basketball courts
 - Tennis courts
 - Fitness courses
 - Playgrounds
 - Shuffleboards
 - Horseshoe pits
- b. A recreation space may abut an outdoor amenity space, provided that the two are safely delineated.

D.2 Design and furnish a recreation space to fit with the context of its development. (Figure 2-17)

- a. Materials and colors should match those found on the site and buildings within the development, when possible.
- b. Landscape materials and site furnishings should match those found throughout the site.

E. Outdoor Dining Space

Outdoor dining spaces and sidewalk cafes located within a private property can help animate the public realm and are welcomed throughout the Ephesus/Fordham District. An outdoor dining space or sidewalk café typically involves a grouping of tables and/or seating for the purpose of eating, drinking or social gathering.

Coordinate with Chapter 17, Article VI of the Chapel Hill Code of Ordinances. Applicants should also consult the North Carolina Building Code for outdoor dining standards and safety requirements.

- E.1 Locate an outdoor dining area to accommodate pedestrian traffic along the sidewalk. (Figure 2-18)**
- a. Locate a dining area immediately adjacent to a building front to maintain a public walkway along the curb side.
 - b. Maintain a clear path along the sidewalk for pedestrians.
 - c. Use a railing, detectable barrier, or similar edge treatment to define the perimeter of a permanent outdoor dining area.
 - d. Design a railing or detectable barrier to be sturdy and of durable materials.

F. Sensitive Site Design Transitions

Sensitive site design transitions should be developed to reduce conflicts between adjacent sites with different uses. The most typical condition in the Ephesus/Fordham District is a commercial property adjacent to a residential property. Where a potential conflict occurs, the impacts of a commercial activity should be mitigated. Site design adjacent to an existing or future residential neighborhood should provide a compatible transition that minimizes potential negative impacts while promoting positive connections. Designs that incorporate compatible uses and designs, and which link commercial and mixed-use areas with the adjacent residential neighborhoods are generally preferred as illustrated in “Strategies to Promote a Compatible Transition to Adjacent Neighborhoods” **(Diagram Forthcoming)**

Sensitive transitions are also important for a project’s interface with Booker Creek. A building should be placed to sensitively transition to this natural feature.

F.1 Design a site to be compatible with adjacent neighborhoods.

- a. Place and orient buildings to minimize potential negative impacts on an adjacent residential neighborhood. **(Figure 2-19)**
- b. Avoid orienting the rear of a building toward an adjacent residential neighborhood.
- c. Avoid creating an impassible barrier between a newly developed site and an adjacent neighborhood.
- d. Avoid orienting a blank rear wall toward an adjacent residential neighborhood.
- e. Do not locate a mechanical or service area directly adjacent to a residential neighborhood.

**Strategies to Promote a Compatible Transition to Adjacent Neighborhood Developments
(Diagram 2-7)**

F.2 Minimize negative impacts of a commercial operation on an adjacent residential property. (Figure 2-20)

- a. Locate a commercial activity that generates noise, odor or other similar impacts away from the shared lot line with a residential property.
- b. Where a commercial use is adjacent to a residential use, buffer or screen the commercial activities. This may include a buffer area with landscaping and an amenity such as an exercise area, picnic area or pedestrian walkway.

F.3 Provide pedestrian, bike and vehicular connections to adjacent neighborhoods. (Figure 2-21)

- a. Where possible, extend paths or small vehicular lanes to connect with streets and paths in an adjacent neighborhood.
- b. Design pedestrian and vehicular circulation systems to consider potential future connections to adjacent neighborhoods.
- c. Incorporate breaks in a landscape buffer to allow for pedestrian and bicycle connections.
- d. Avoid continuous walls, fences or planted barriers that prevent pedestrian or bicycle connections across a landscaped buffer area.

F.4 Design site transitions to connect to future or proposed development.

- a. A transition area should be pedestrian-friendly and allow access between properties.
- b. Site transitions should be designed to be compatible with adjacent public and private landscape areas.

F.5 Design a landscape buffer area to include shared amenities. Option include: (Figure 2-22)

- Multi-use paths
- Picnic areas
- Exercise areas
- Playgrounds
- Water features, including landscaped stormwater management facilities
- Other landscape features

F.6 If a property is located along a curved portion of Booker Creek, place a building edge(s) to respond to the Creek's curvilinear shape. Appropriate placements include:

Building Placement Along Booker Creek (Diagram 2-8)

- Curved
- Angled
- Rectilinear
- Stepped

Chapter 3.0:

Building Design Guidelines

This section addresses design of new buildings in the Ephesus/Fordham District. The objective is to promote designs that enhance the pedestrian experience and create a sense of place throughout the District. High quality, innovative designs are preferred and they should appear in scale. Active ground floor uses that enhance the pedestrian experience are especially welcomed.

Building design addresses the visual and functional character of a building, including its relationship to surrounding development. Key design topics include: character, height, scale and materials.

A. Building Mass & Scale

The overall size, height and form of a building help determine how large it appears, and whether it is compatible with the surrounding context. Although a new building may be larger than adjacent buildings, it should not be monolithic in scale or jarringly contrast with neighboring development. A new building should use building articulation techniques to provide a sense of scale. These include varied heights, smaller building masses and articulated façades.

Building height and placement for each of the zone subdistricts are identified in the Chapel Hill LUMO (Sec.3.11.2.3-3.11.2.4). The following guidelines provide further clarification on how the design of a building can enhance the pedestrian environment through varied massing, height and a combination of building articulation methods.

**Building Massing Examples
(Diagram 3-1)**

Building Height

New development must meet zoning requirements in Ephesus/Fordham while stepping down to create smooth transitions with adjacent lower-scale residential buildings.

Measuring building and story height is addressed by the Chapel Hill LUMO (Sec.3.11.2.7.K). **SIDEBAR**

A.1 Provide variation in building heights. (Figure 3-1)

- a. Incorporate height variations to reduce the perceived scale of a building.
- b. Use variation in building and parapet heights to add visual interest and reduce boxy or monolithic building masses.

A.2 Locate the taller portion of a structure away from neighboring residential buildings of lower scale or other sensitive edges. (Figure 3-2)

- a. Step down a taller, new building toward existing, lower-scaled neighbors.
- b. Where permitted by the base zoning, locate towers and other taller structures to minimize looming effects and shading of lower-scaled neighbors.

Building Articulation

Building articulation includes vertical or horizontal changes in materials, texture or wall plane that influence perceived building scale. New development in the Ephesus/Fordham District should incorporate articulation techniques that promote a sense of human scale and divide the mass and scale of a larger building into smaller parts.

A.3 Establish a sense of human scale in the design of a new building. (Figure 3-3)

- a. Use vertical and horizontal articulation techniques to reduce the apparent scale of a larger building mass.
- b. Develop articulation techniques in proportion to a building's overall mass. For example, deeper insets are needed as a building's length increases.
- c. Apply materials in units, panels or modules that help to convey a sense of scale.
- d. Create a sense of texture through shadow lines which also provide a sense of depth and visual interest.

**Human Scale Building Design
(Diagram 3-2)**

A.4 Incorporate horizontal expression lines to establish a sense of scale. (Figure 3-4)

- a. Use moldings, a change in material, or an offset in the wall plane to define the scale of lower floors in relation to the street.
- b. Align architectural features with similar ones along the street, where a distinct alignment pattern exists.

A.5 Provide vertical articulation in a larger building mass to establish a sense of scale. (Figure 3-5)

- a. Use moldings, columns, a change in material or an offset in the wall plane to define different building modules.
- b. Organize modules to reflect traditional lots widths or façade dimensions.

**Design Options for Building Articulation
(Diagram 3-3)**

A.6 Use materials to convey a sense of human scale and visual interest to pedestrians. (Figure 3-6)

A.7 Incorporate balconies to create depth and interest on a building façade. (Figure 3-7)

- a. Arrange balconies to express different modules.
- b. Use a balcony to provide shade for the sidewalk below or for lower decks or balconies.

A.8 Vary cornice lines to create visual interest. (Figure 3-8)

- a. Create a sense of visual interest by using a variety of cornice heights for individual modules.

A.9 Create a sense of visual interest by using a variety of roof heights along the street. (Figure 3-9)

- a. Vary roof heights through differences in roof form and parapet height.
- b. Vary the roof profile by steeping down some parts of the façade.

**A.10 Incorporate a roof form that provides a “cap.”
(Figure 3-10)**

- a. Define a flat roof form with a distinct parapet or cornice line. This can help reinforce a vertical base, middle and cap building articulation, and contribute to a sense of iconic design.
- b. Use an overhang on sloped roof form on a multi-family building. This helps to define the roof as a building cap.

**Base, Middle, Cap Design
(Diagram 3-4)**

B. Building Elements

Building elements in the Ephesus/Fordham District should be human scaled to encourage increased pedestrian activity. These include forecourts, building arcades and front porches. They should be designed to connect buildings to the public realm, create visual continuity along the street and provide a cohesive transition from building to building.

Additional information on Building Elements design can be found in the Chapel Hill LUMO (Sec.3.11.2.6.). **SIDEBAR**

B.1 Include building elements to create a street edge that invites pedestrian activity. Suggested building elements include: (Figure 3-11)

- Forecourts
- Plazas
- Arcades
- Porches

B.2 Design a forecourt to enhance the pedestrian experience. (Figure 3-12)

- Define the street edge with site walls and other landscape features.
- Use features that will engage the street, including plant materials and site furnishings that relate to those in the public realm.
- Incorporate landscape elements that will provide interest and invite activity.
- Design the forecourt to be conveniently accessible by its intended users.

B.3 Expanding the size of a forecourt may be considered as a design alternative when the street edge is clearly defined. (Figure 3-13)

***Note: Amendment to Form Based Code may be required**

- a. An expanded forecourt should be designed to enhance pedestrian interest as viewed from the street. Include additional landscaping, site furnishing and public art.
- b. Design a forecourt to provide architectural interest and variation in the design of a building.
- c. Clearly defining the street edge of a forecourt is especially important if an expanded area is to be considered.

See "Alternative Strategies to Promote an Active Frontage" on page XX **SIDEBAR TO BE DEVELOPED**

B.4 Encourage consistency in arcade and building design.

- a. Integrate a building arcade into the design of a building.
- b. Use materials that are compatible with the primary building.

B.5 Design an arcade to enhance the pedestrian experience:

- Protection from the weather
 - A human-scaled building element
 - Increased building articulation and interest
- a. Design an arcade to provide architectural interest and variation in the building face. **(Figure 3-14)**
 - b. Use an arcade to create a more transparent appearance.

B.6 Incorporate a front porch to create a visual and functional connection between a residential building and the street. (Figure 3-15)

- a. Locate a front porch to define a residential entry.
- b. Orient a front porch towards the street and sidewalk.