



DOWNTOWN NORFOLK PATTERN BOOK



Architectural Guidelines for Place Making



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INTRODUCTION

OVERVIEW

The revitalization of Downtown Norfolk has been successful in large part due to the commitment of civic and business leaders and the way in which the City has used physical planning as an integral part of its economic development strategy. This has included both broad policy decisions and an intense focus on the physical design and quality of individual projects that have been developed.

The criteria used for guiding the design process have been related to the overall strategy. The results share a series of specific attributes:

A CONTINUOUS SEQUENCE OF PEDESTRIAN-SCALE SPACES

The goal has been to connect individual projects and areas with existing strengths to create a continuous urban environment. This has required careful attention to the way individual developments relate to the streets and public spaces, as well as the coordinated design of the public realm itself.

A DIVERSE RANGE OF ACTIVITIES AND USES

The strategy has been to attract a wide range of uses that contribute to downtown activity, rather than a single type or group of uses. Therefore, over the past fifteen years, there have been new offices, shops, restaurants, entertainment venues, civic buildings, cultural facilities, a baseball stadium, a major grocery store, Tidewater Community College, and housing developments.

RESIDENTIAL DEVELOPMENT INTEGRATED INTO THE DOWNTOWN FABRIC

Under the Mayor's Housing First Program, a significant number of new residential units have been added to Downtown. This is an essential ingredient in creating a sustainable, safe, and accessible Downtown.

ACTIVE USES ON THE LOWER FLOORS CREATING ACTIVE STREETS

The first and second floors of most structures, including parking structures,





Aerial view of the Norfolk 2020 Plan

have a mix of commercial, office, and residential uses. They have numerous doors for people to enter the street space and many windows to provide a sense of security by indicating the presence of people looking out on the street.

ARCHITECTURAL CHARACTER AND FRIENDLY URBAN SPACES

Downtown Norfolk's heritage includes a rich collection of late nineteenth, and early twentieth century buildings of various types which provide beautifully articulated and scaled street facades. Large or small, they have detail and ornament which contribute to the quality of urban spaces.

HARMONY AMONG ARCHITECTURAL VOCABULARIES

The wide range of buildings from different periods of time relate to each other through the consistent use of a palette of materials and the scale of elements.



THE NORFOLK DOWNTOWN MASTER PLAN

The Downtown Norfolk Master Plan continues to be updated and refined as the revitalization process continues. The current update of the plan focuses on continuing to infill within the central core of Downtown and extending the urban character across traditional barriers to the north and east.

EFFORTS UNDERWAY

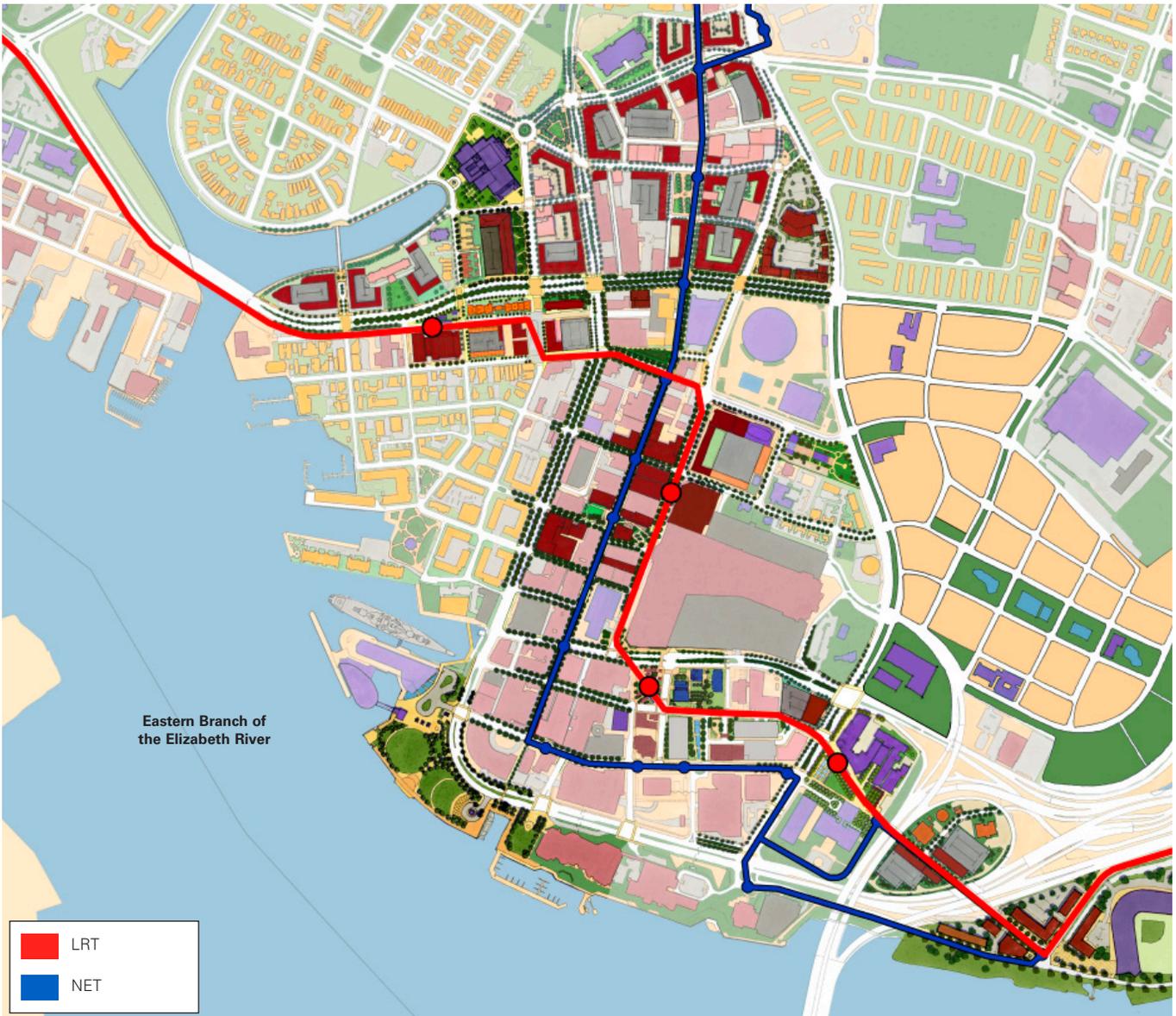
Within Downtown the following efforts are underway:

A Infill development at various scales The scale of Downtown construction is changing. Recent developments have been proposed that are over 25 stories tall. The challenge is to find ways of embedding these large scale elements into Downtown in a way that continues to support the most important attributes, especially those which influence the character of public spaces.

B Parking strategy Parking is not required on a site by site basis Downtown, which means that there is more flexibility in the design of individual sites. This makes it critical that the pedestrian spaces between parking areas and downtown buildings be well designed, since the people are expected to park in various locations around Downtown and walk to their destinations. The NET transit and shuttle from the transit center are additional transportation assets that relieve the need for parking.

C Light Rail Transit The Downtown Plan has been revised to reflect the impact of Light Rail Transit on Downtown.

D Transit oriented development With the construction of Light Rail Transit in Downtown, the City has an opportunity to provide more intense development in areas best served by the transit. Within a five or ten minute walk, residents and users of buildings will have more transportation options than they currently do. This access suggests modification of the parking requirements and site capacities in these areas. The design of the public realm, and the facades of buildings that define it, must provide the kind of comfortable pedestrian experience that will make the use of transit pleasant and convenient.



Plan of Downtown Norfolk

E Targeted initiatives The current initiatives within Downtown include: A new conference hotel, a new courts complex, several mixed use developments, a major residential tower, additional TCC buildings, and numerous housing projects in restored buildings.

CONNECTING WITH NEIGHBORING AREAS

The Plan also calls for connecting Downtown with neighboring areas across historic boundaries and barriers:

A North of Brambleton The area between Ghent and Downtown is considerably less developed than Downtown, in spite of its prime location and access to amenities. Brambleton Avenue is both a physical and psychological barrier, due in part to its traffic and configuration, but also because of the lack of urban-oriented development along the corridor. A key part of the Update is to encourage effective development in this area as an extension of Downtown. Key initiatives include improvements to Brambleton Avenue, a new parking strategy, developments on both the north and south sides of the Avenue, and a means of integrating transit into the area.

B St. Paul's Quadrant St. Paul's Quadrant, the area to the east of St. Paul's Boulevard and north of City Hall Avenue, is currently being planned as an independent area. Improved connections between Downtown and this area are critical. The area to the west of St. Paul's Boulevard includes a major development site, the Snyder Lot, which can serve as a gateway into Downtown from the expressway. The Government Center project calls for a new civic square that can serve as a focal point for a gateway into Downtown from Harbor Park. The design of streets and the integration of transit into these areas are both critical aspects of the plan.

THE DOWNTOWN PATTERN BOOK

The Downtown Pattern Book provides patterns for street design, urban space design, and architectural design to facilitate the implementation of the vision established in the Downtown Plan. Its purpose is to provide a set of goals, criteria, and tools to be used by the development community, city agencies, and citizens. It provides direction on the city's goals for the built environment to ensure a consistently high quality of development that supports the vision for the future of Downtown.

To do so, the Pattern Book first identifies the patterns that are the most important characteristics of Downtown. These include the qualities of five



Plan of Downtown Norfolk, indicating development areas and connections strengthened by LRT

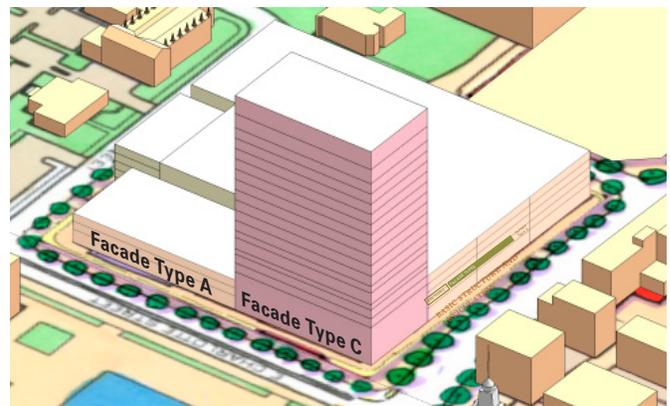
types of urban public space and three types of architectural facades. The specific attributes of each are documented and dimensioned. A palette of architectural styles is then presented that can be applied to any of the facade types. The Pattern Book concludes with a demonstration of actual project which reflect how the Pattern Book can be used.

SECTION D: Determine Building Massing and Facade Types

Massing should be presented in both a two dimensional drawing (plan and elevation) and a three dimensional view (aerial or axonometric views and elevations). Based on the massing of the building pieces, identify facade types, which help to determine the appropriate articulation guidelines to use. As with the urban spatial types, more than one category may be applicable. In the example to the right, the skyscraper is articulated following the dimensional guidelines for facade type C, while facade type A guidelines would be used to articulate the low-rise portion into a series of urban scale elements.

SECTION D:

Step Four: Determine block and building massing



Step Five: Articulate the facade

SECTION C: FACADE TYPES Facade Type C

BASIC STRUCTURE AND ARTICULATION

VERTICAL AND HORIZONTAL STRUCTURE
Basic building mass should be 4 to 12 stories for traditional high-rises and 10-30 stories for 20th century towers. Skyscraper towers should also have a 4-6 story base of the base.

HORIZONTAL ARTICULATION
Horizontal articulation should define a base, middle and top for each articulated facade element. This can be accomplished with window composition, ornament, and special features. For 20th century towers, horizontal articulation should define a 4-6 story base and a 2-4 story top for the main tower.

VERTICAL ARTICULATION
Vertical articulation on traditional towers is required for each element at a minimum of 30 feet wide and a maximum of 300 feet wide. Vertical articulation for skyscraper towers requires that no single plane be wider than 300 feet on the main tower. The base should be articulated with each element at a minimum of 20 feet wide and a maximum of 60 feet wide. All vertical elements over 40 feet wide must be further articulated. Each element can be distinguished by one from the others at the following changes:

- Material
- Color
- Architectural style
- Height
- Plane (for tower)
- Window type
- Facade composition
- Signature or entry type

Example of a base with a top and top
Example of base with top articulation
Example of modern tower articulation

VERTICAL AND HORIZONTAL STRUCTURE
HORIZONTAL ARTICULATION
VERTICAL ARTICULATION

SECTION E: Choose Architectural Style

Select the appropriate architectural style for articulating the facade composition based on the building's use and the context within which it is located. For example, in the Freemason District it will be important to select architectural elements that are compatible with the Georgian or Victorian buildings around it. The steps include: detailed facade articulation, windows, doors, special elements, and the selection of materials and colors.

SECTION E:

Step Six: Use architectural style for facade elements

SECTION E: ARCHITECTURAL STYLES Downtown Victorian

DOWNTOWN VICTORIAN

DOORS AND WINDOWS

DOORS
Building entry doors are placed within the regular rhythm of facade openings but are distinguished with ornate frames and other special details. Doors are often set in a recessed porch, such as a bay window or a porch. The maximum width of a pair of double doors is 7 feet for double doors 6 feet tall, and 8 feet for double pairs of double doors.

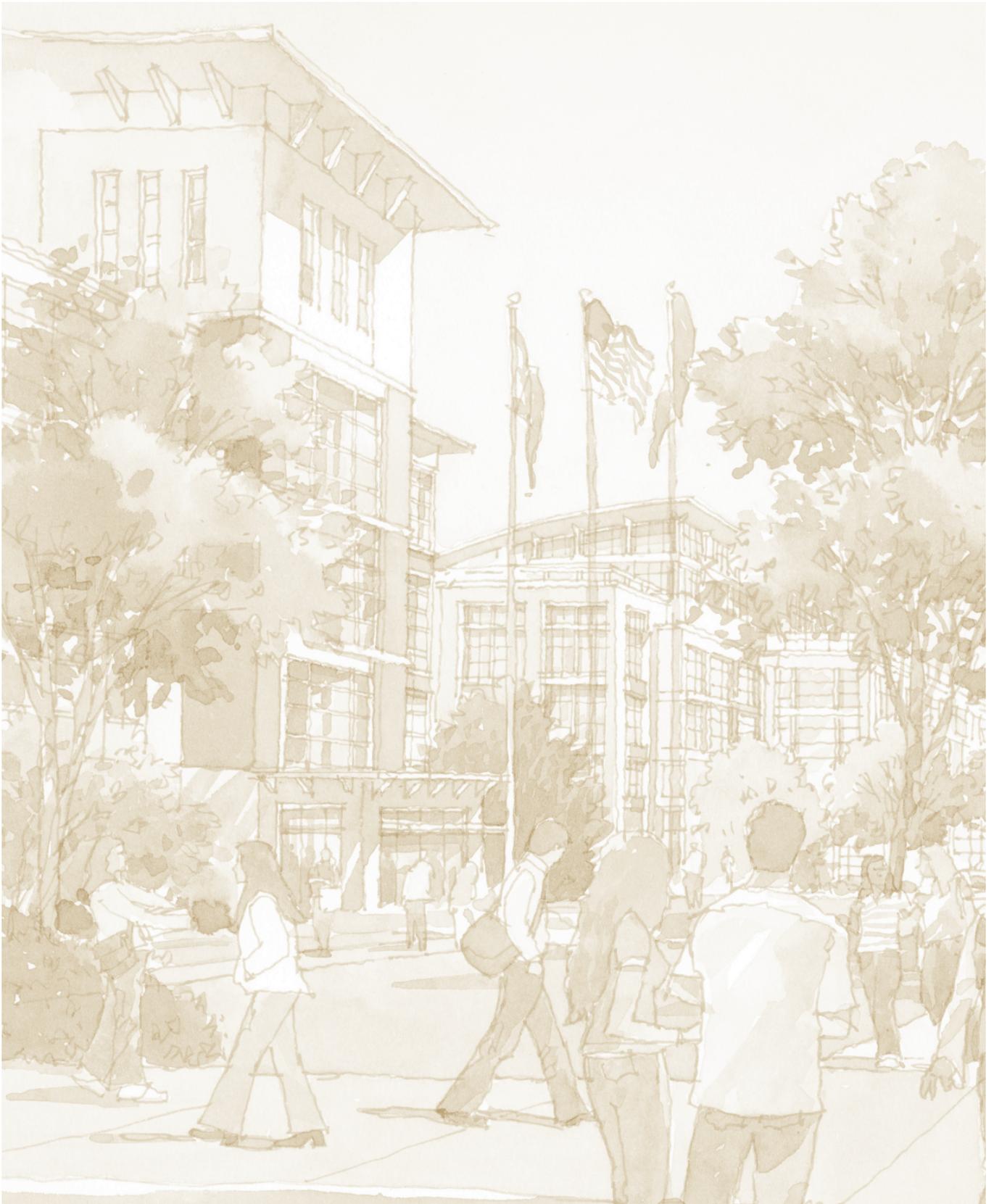
WINDOWS
Larger Victorian buildings are composed of a repeating pattern of large rectangular openings. Windows usually range from 40% to 50% of the vertical size of the facade.

SPECIAL WINDOWS
Special windows include grouped window openings or bay, special double windows and doors for smaller building types. Smaller buildings may also feature small bay windows, dormers, and fine and multiple top windows.

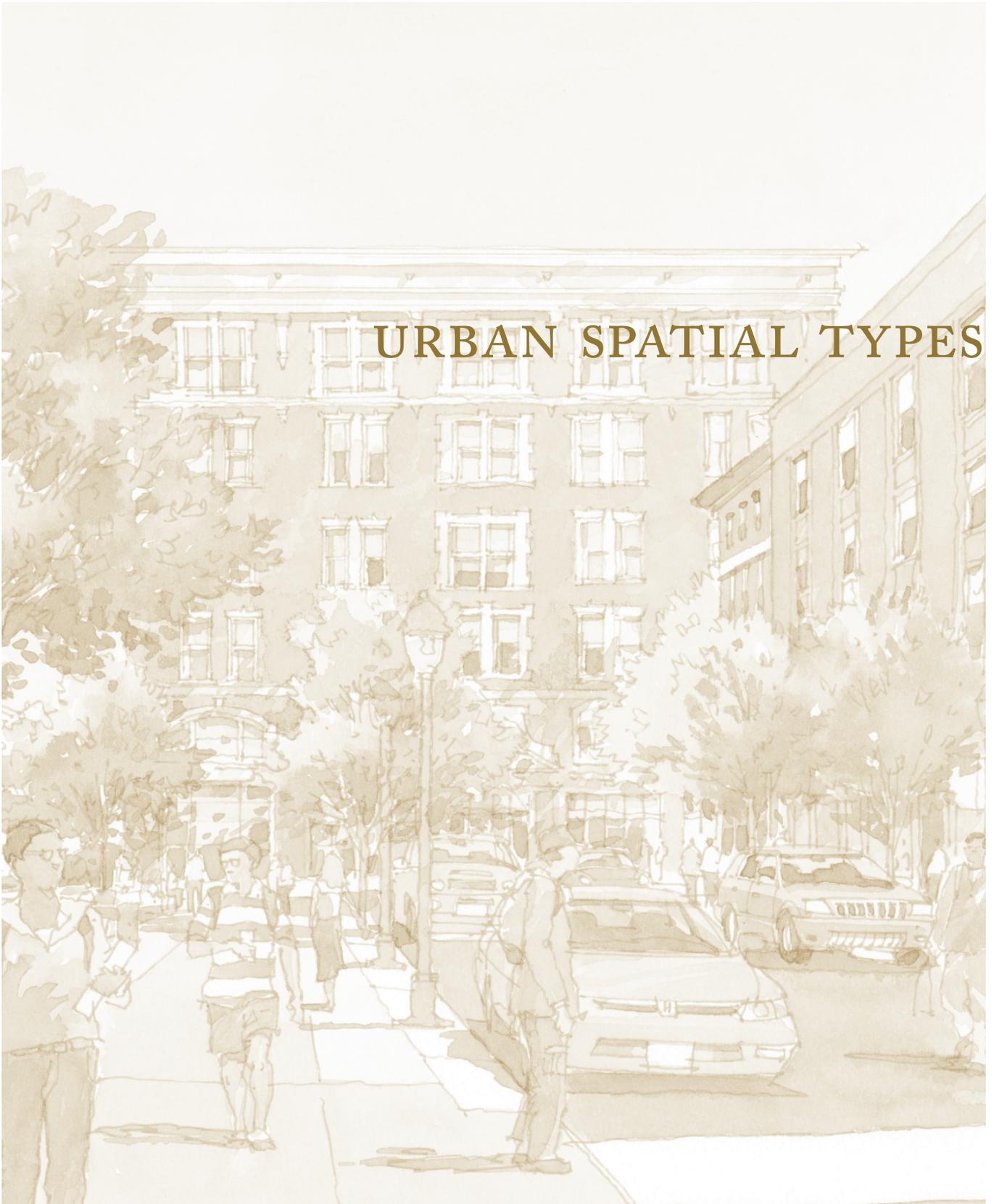
TYPE
Windows and doors have 6 inch trim with a single horizontal profile. Victorian windows and doors often feature a decorative crown and cap above; windows may feature an arched head.

TYPICAL WINDOWS

TYPICAL DOORS AND ENTRANCES



URBAN SPATIAL TYPES



OVERVIEW

Much of Downtown Norfolk's appeal can be attributed to the scale and diversity of its urban spaces. They range from the friendly, domestic scale of historic Freemason Harbor with its Georgian architecture, to the high-rise buildings along Main Street and Waterside Drive. Norfolk's Downtown urban spaces are smaller in scale than those typically found in downtowns which serve a region the size of Hampton Roads. Probably due to the historic pattern of several downtowns separated by water, the scale of Downtown today is intimate and comfortable. This is further enhanced by the dimensions of the streets, and the way in which they are defined by buildings. Introduction of Light Rail Transit will strengthen connections and serve to reinforce these successful urban spaces Downtown. Downtown Norfolk enjoys a diverse range of urban spatial types; the most common of these is the street. The full range of urban spatial types includes:

DOWNTOWN NEIGHBORHOOD STREETS

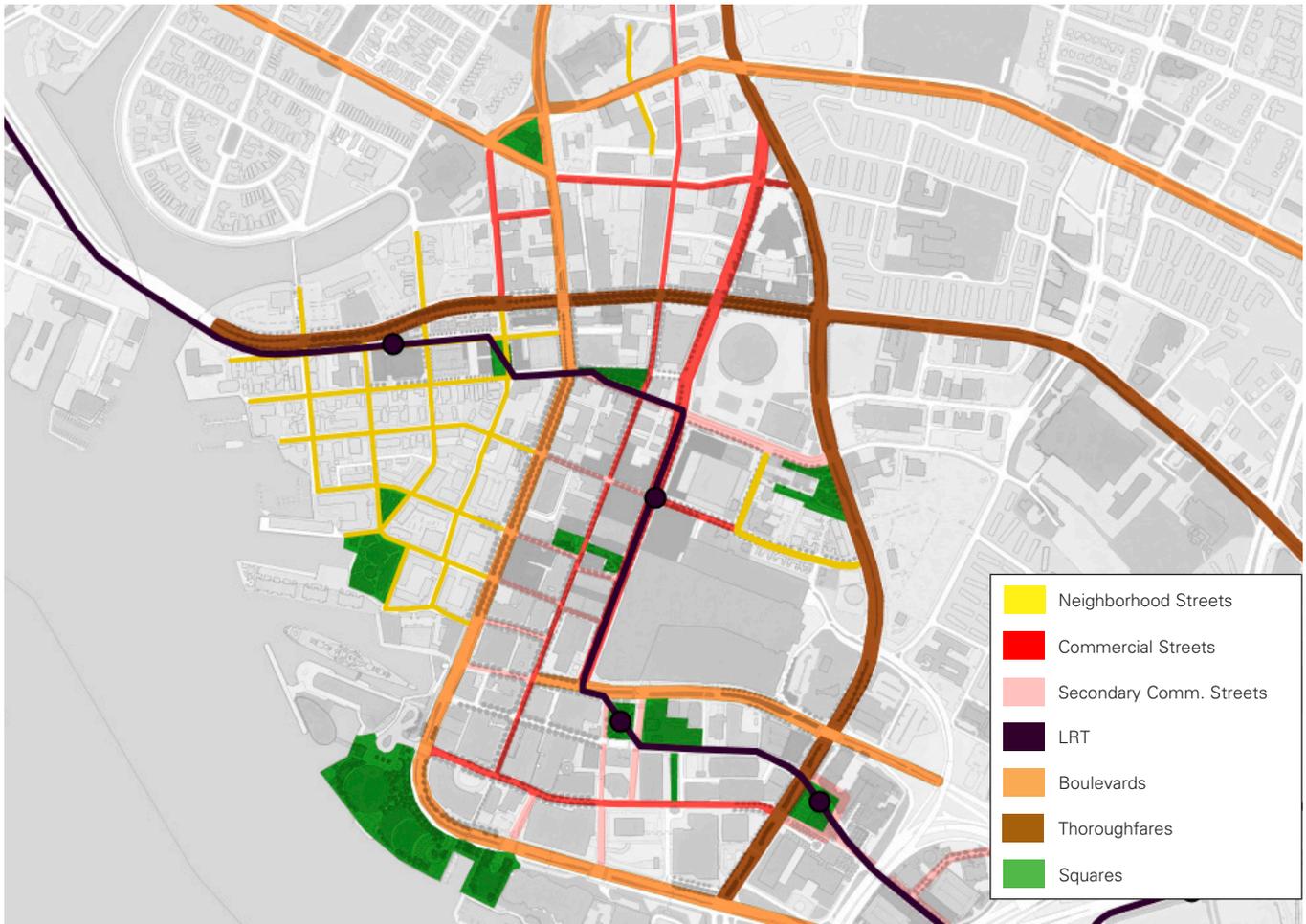
Lined with a variety of building types, these streets are generally small in scale and are defined by the facades of relatively small 2- to 4-story buildings. The presence of such a residential character in the middle of the City contributes to its appeal and sense of security.

DOWNTOWN COMMERCIAL STREETS

Individual buildings that line the commercial streets are relatively small in scale, which extends visual appeal and a sense of security into the business districts. Buildings vary in width and height, but tend to be narrow. The variety of architecture from one building to another produces an appealing and rich character for the street spaces.

DOWNTOWN BOULEVARDS

Downtown boulevards are relatively new urban public spaces and are best when appropriately landscaped and lined with buildings of sufficient height to create a unified space.



Downtown Norfolk Master Plan, locating urban spatial types. This diagram indicates a continuous character along the length of these urban spaces, which has not yet been achieved. In some locations, the spaces are well defined and complete, but there are gaps. The next generation of development should be designed to fill them.

DOWNTOWN THOROUGHFARES

The main through-traffic arteries Downtown are designed to facilitate vehicular movement, not to accommodate pedestrians. They need to be improved based on models elsewhere to cease serving as barriers and instead facilitate the movement of people.

DOWNTOWN GREENS AND SQUARES

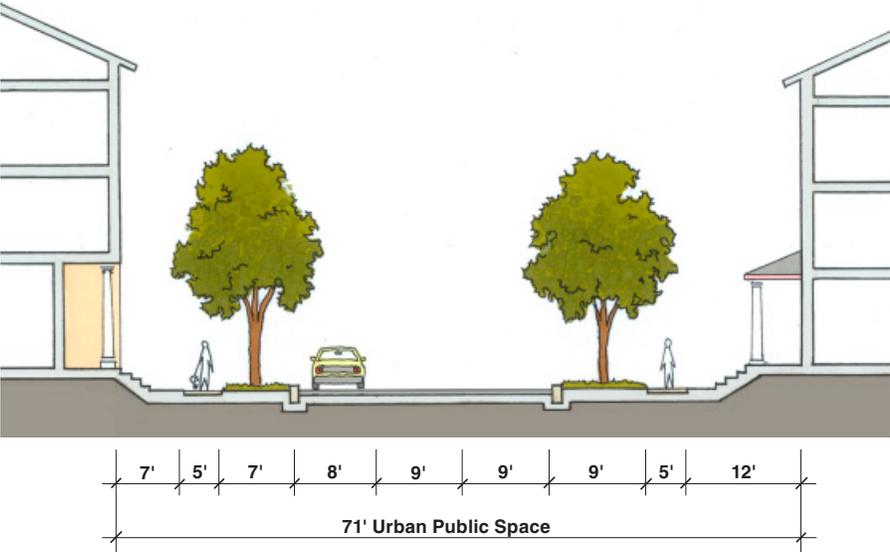
The green at Tidewater Community College, the plaza around the MacArthur Memorial, and the space around St. Paul's Church are more like yards or gardens than civic spaces. There are relatively few such greens or squares Downtown. Therefore, new types will need to be defined.

DOWNTOWN NEIGHBORHOOD STREET

Lined with a variety of building types, these streets are generally small in scale and are defined by the facades of relatively small 2- to 4-story buildings. The presence of such a residential character in the middle of the City contributes to its appeal and sense of security.

The cross section below demonstrates the relationship between buildings on both sides of the street and the width of the street itself. It also indicates the way in which ground floor uses should open to the street. One side illustrates a townhouse with a stoop, while the other shows an apartment building with ground floor residential uses. These units should have their own entry from the street, or at a minimum direct access to the front yard. As shown in these examples, the building should be 18 to 26 feet from the curb, with a 7- to 12-foot front yard to provide an effective transition for ground floor residential uses.

It is also possible to provide small scale retail or public uses on the ground floor. When retail is included, the front yard area should be treated as it is in the commercial street. If it is a social space, offices, or other residential related uses, a typical front yard could be used.



Section through a proposed neighborhood street



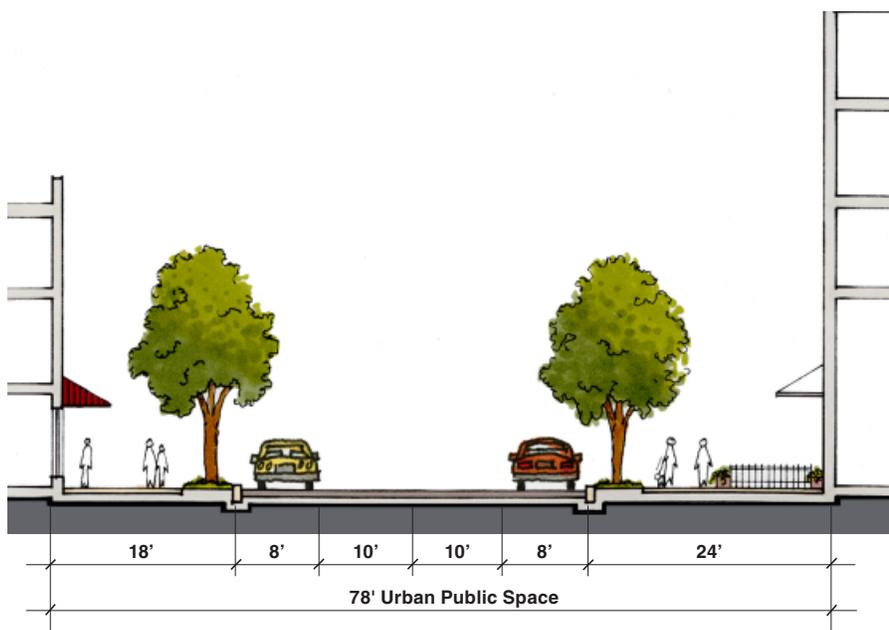
View of a proposed neighborhood street

DOWNTOWN COMMERCIAL STREET

The relatively small scale of the individual buildings that line the commercial streets extends visual appeal and a sense of security into the business districts. Buildings vary in width and height, but tend to be narrow. The variety of architecture from one building to another produces an appealing and rich character for the street spaces.

The cross section illustrates an ideal relationship of the buildings to each other and to the scale of the street. Two ground floor conditions are illustrated. In both there is an 18- to 24-foot distance between the curb and the building. The sidewalk includes tree planting areas and extends to the building facade. One building includes a ground floor shop-front with large areas of glass. The other side of the street is an office lobby, with a large, high ceiling space which extends the space of the street.

The facades should have active uses for at least 80% of the street frontage. Servicing and parking access should not be from the commercial street, but provided from a service alley or side street. This will limit any interruption to the continuity of retail frontage and pedestrian walkways.



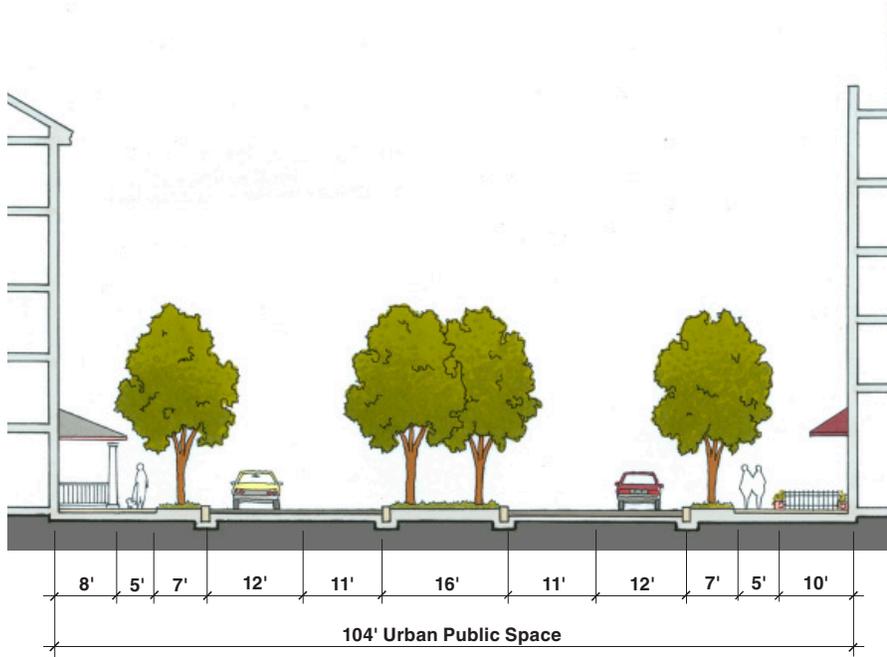
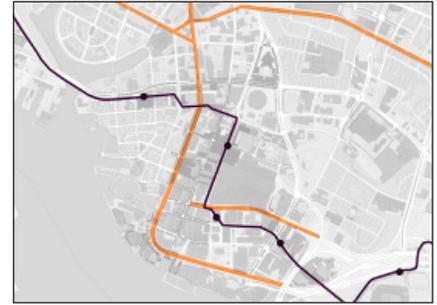
Section through proposed commercial street



View of a proposed commercial street

DOWNTOWN BOULEVARDS

Downtown boulevards are relatively new urban public spaces and are best when appropriately landscaped and lined with buildings of sufficient height to create a unified space. There can be a variety of building uses along a boulevard including residential, office, commercial, and civic. Ideally the distance from curb to building should be 20 to 25 feet to provide adequate space for street trees and landscaping. Ground floor residential uses should be set back with a front yard, and retail uses should have a wide sidewalk with tree planters. In existing conditions this may be difficult to achieve. In those cases, recesses in the building facade or setbacks, or arcades may be needed to provide the necessary separation from the street at ground level.



Section through proposed mixed-use boulevard



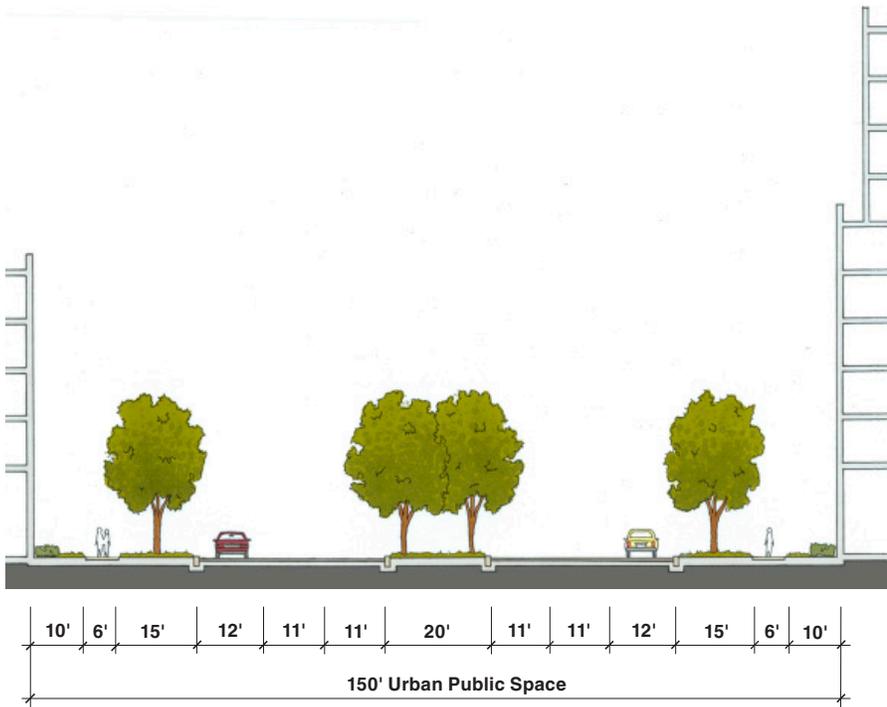
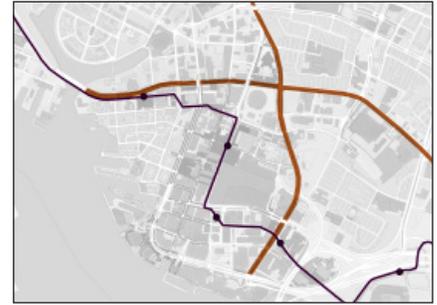
View of a proposed mixed-use boulevard

DOWNTOWN THOROUGHFARES

The main through-traffic arteries Downtown are designed to facilitate vehicular movement, rather than to accommodate pedestrians. However, they need to be improved based on models elsewhere to cease serving as barriers and instead facilitate the movement of people.

The key to achieving this goal is finding a way of insulating the uses in the building from the volume of traffic, and providing sufficient landscaping along the thoroughfare and in the median to produce pedestrian-safe zones. Consideration should be given to slowing traffic through the timing of traffic lights and other devices.

The scale of buildings can be much larger than along the more traditional and pedestrian scaled streets. The height of the building is often an advantage for defining the spaces, particularly at the main entrances into the City.



Section through a thoroughfare

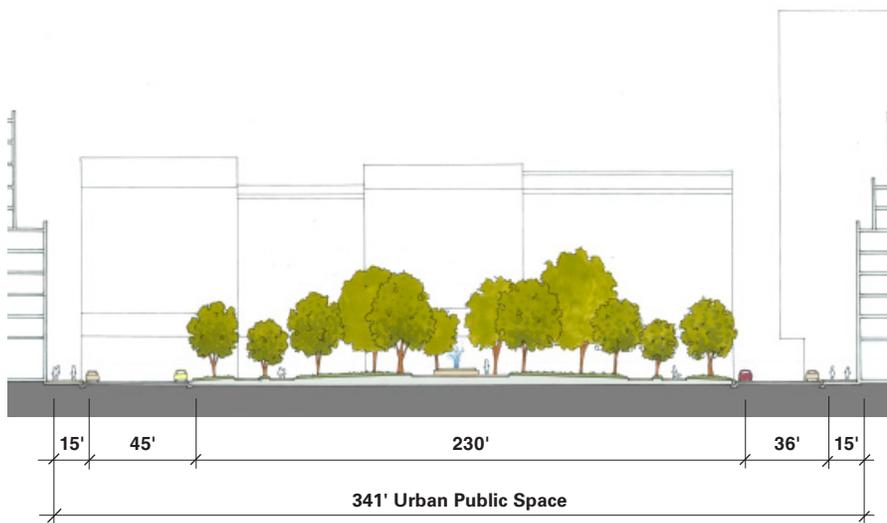


Perspective of thoroughfare

DOWNTOWN GREENS AND SQUARES

The green at Tidewater Community College, Duke Street Square, the plaza around the MacArthur Memorial, and the space around St. Paul's Church are more like yards or gardens than civic spaces. While Town Point Park, Freemason Harbor, and Friendship Park represent the major open spaces in Downtown, additional greens and squares should be introduced to create a more connected green network.

There are currently several greens and squares proposed. They should be defined by public rights of way, streets, or well-defined pedestrian ways, with water or significant buildings containing active facades found along the streets to define the perimeter of the space.

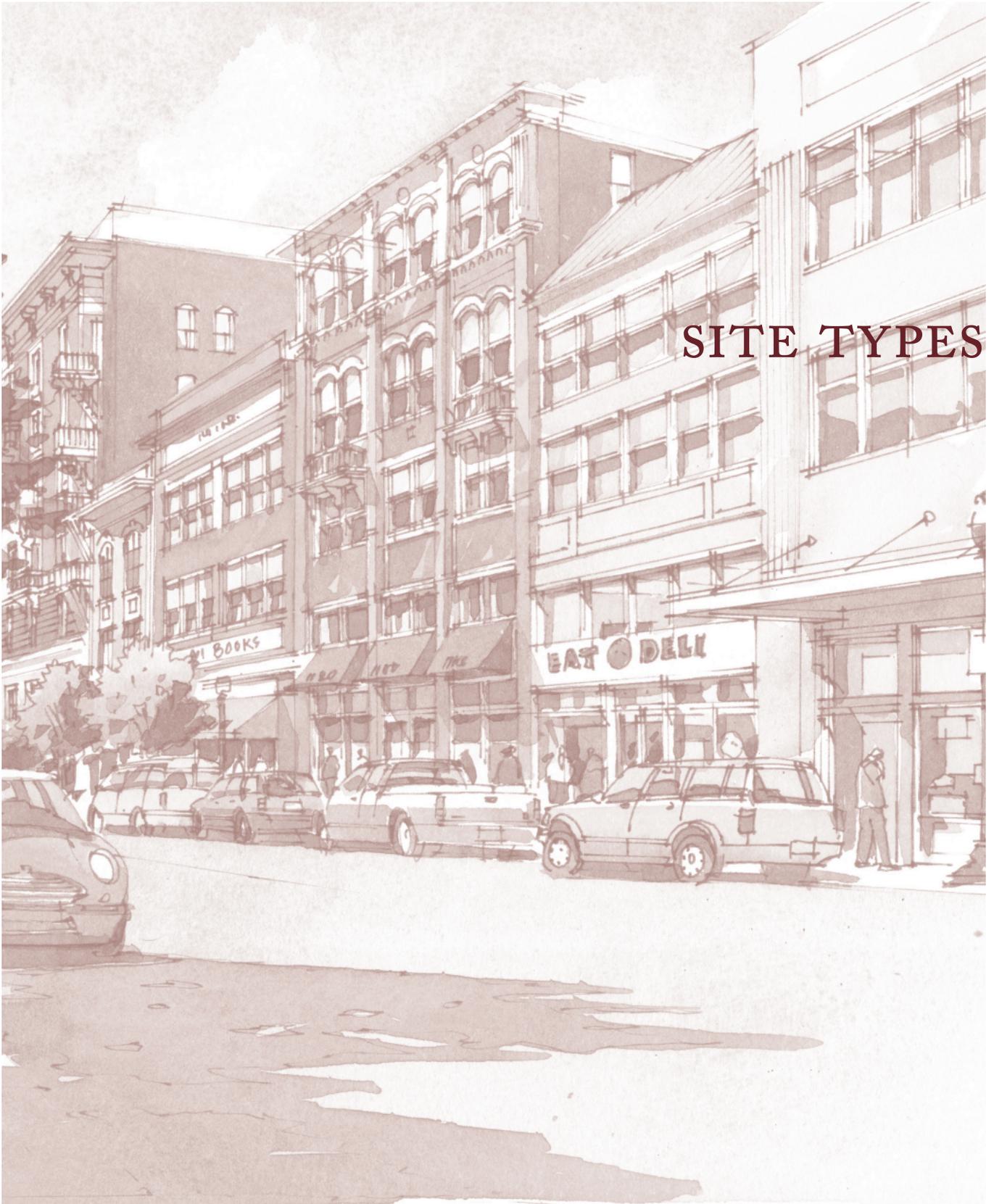


A view looking through a proposed square at City Hall.



View of the proposed square at T.C.C.





SITE TYPES

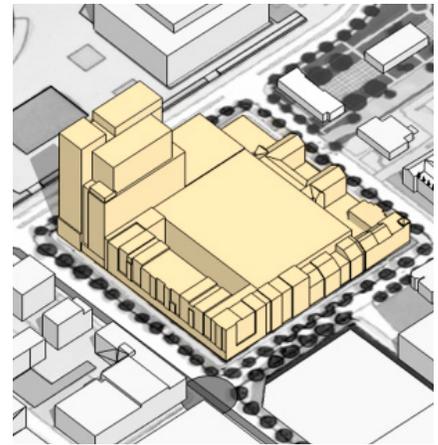
SITE TYPES

In order to ensure the quality and character of urban space, buildings and the blocks within which they are located should be configured to provide appropriately scaled facades with active uses opening to the urban space. The buildings that line existing urban spaces were built in a time in which each building was a small increment in the development of the urban block. There was consensus about the basic elements of the building, e.g.: ground floors were for entrances and storefronts, upper floors were lined with large vertical windows, and the tops of the buildings were articulated. More recently, whole blocks are being developed as single buildings, and parking and servicing require more space than in the past. Therefore, criteria are needed that can be applied to many different scales of buildings. The following section illustrates, in both plan and three dimensional diagrams, the way in which new development should be configured on blocks.

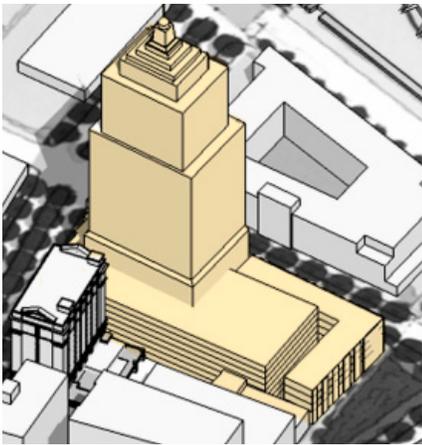
Large scale development with parking structures and with a combination of building types and heights can be accommodated on a variety of site types. In each of these site types, the tall buildings are absorbed into the composition of the block, either by being set back from the lower scale street facade or with the articulation of the lower floors. The five site types include:

- » Full Block Development
- » Block End Development
- » Partial Block Infill
- » Individual Building Infill
- » Tower Block Infill

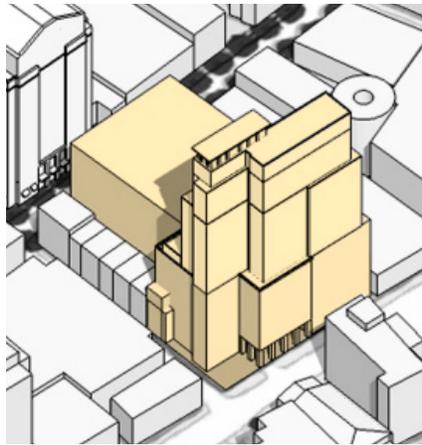
FULL BLOCK DEVELOPMENT



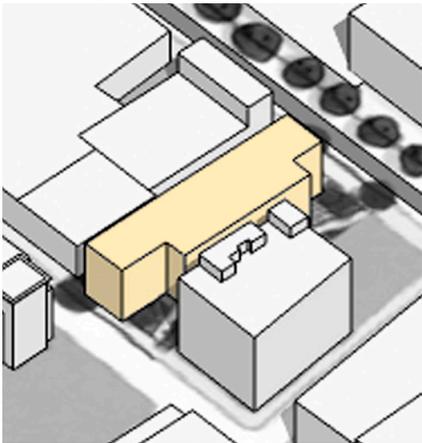
BLOCK END DEVELOPMENT



PARTIAL BLOCK INFILL



INDIVIDUAL BUILDING INFILL

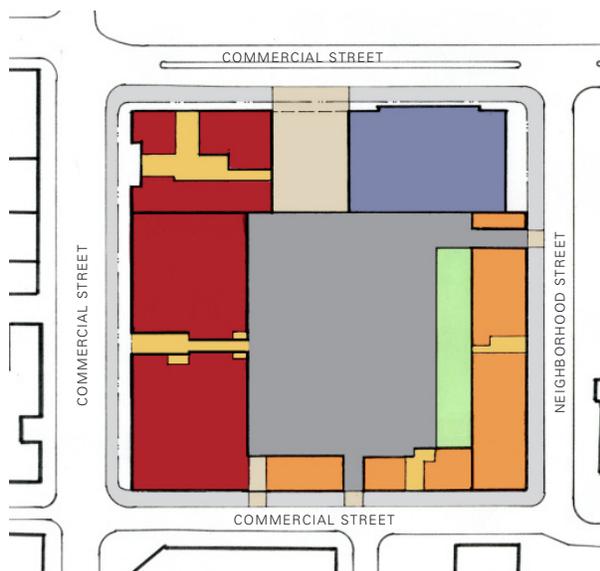


TOWER BLOCK INFILL



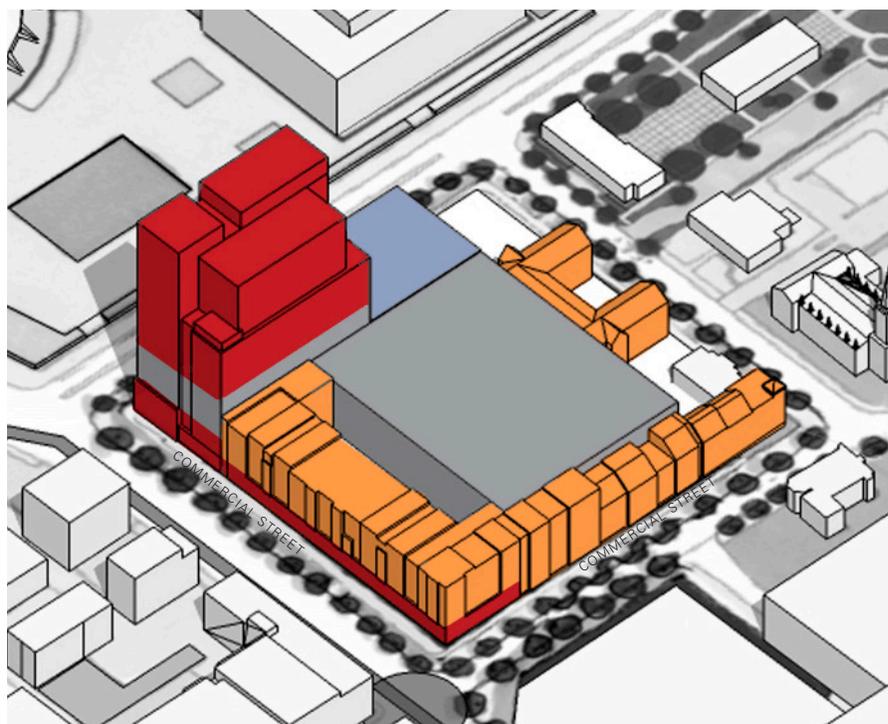
FULL BLOCK DEVELOPMENT

The Downtown Plan encourages developers to assemble properties that help to create large parcels in which it is possible to locate parking structures in the center of the block. Buildings can then line the outside of the block and create an active street facade. Active uses should occupy at least 80% of the perimeter of the block at ground level. The massing of the building blocks should be articulated according to principles which are described in the Downtown Facade Types Section of this Pattern Book.



Ground floor use diagram of a full block development proposal

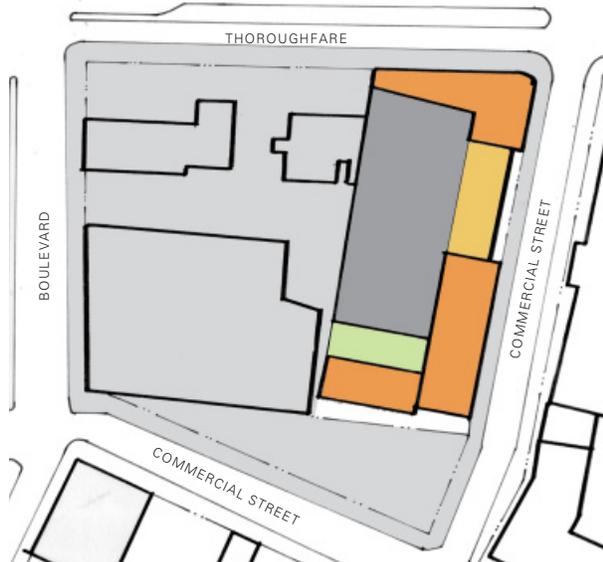
- Commercial
- Multi-Family
- Circulation
- Roof Terrace
- Institution
- Parking Garage
- Block Outline
- Loading Dock
- Surface Parking



Massing diagram of a full block development proposal

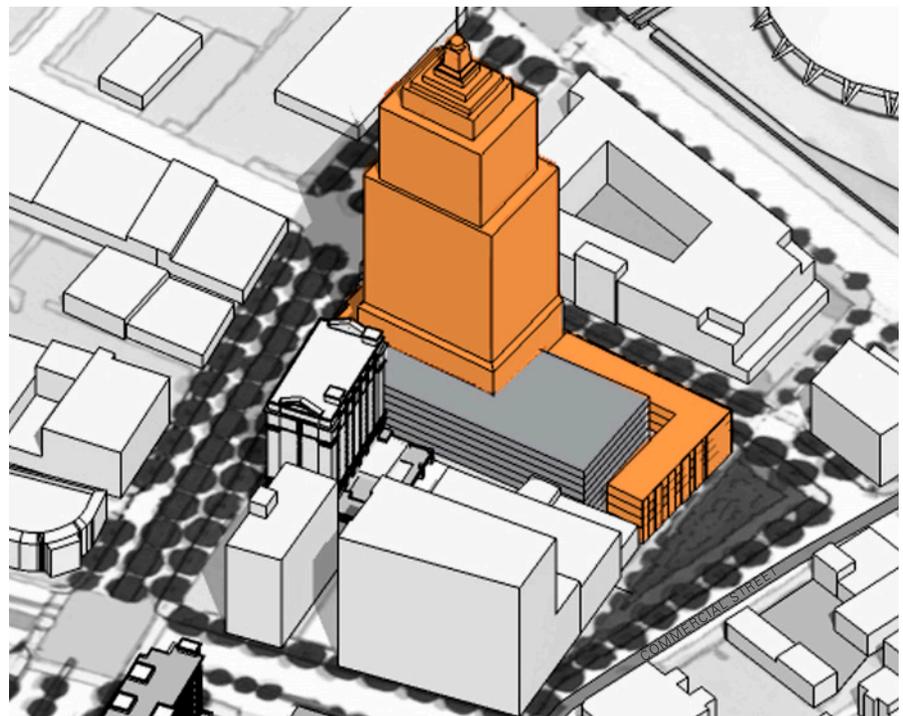
BLOCK END DEVELOPMENT

This type of new development uses the full end of a block with three facades exposed to the street. The parking structure should be screened from public view unless the block dimension is so severely restricted that such treatment is not possible. The garage should be lined on the first two floors by public uses, and exposed on floors 3 through 6 only when fronting on less active streets. The facade treatment of the garage exterior should also screen it from view.



Ground floor use diagram of an end block development proposal

- Commercial
- Multi-Family
- Circulation
- Roof Terrace
- Institution
- Parking Garage
- Block Outline
- Loading Dock
- Surface Parking



Massing diagram of an end block development proposal

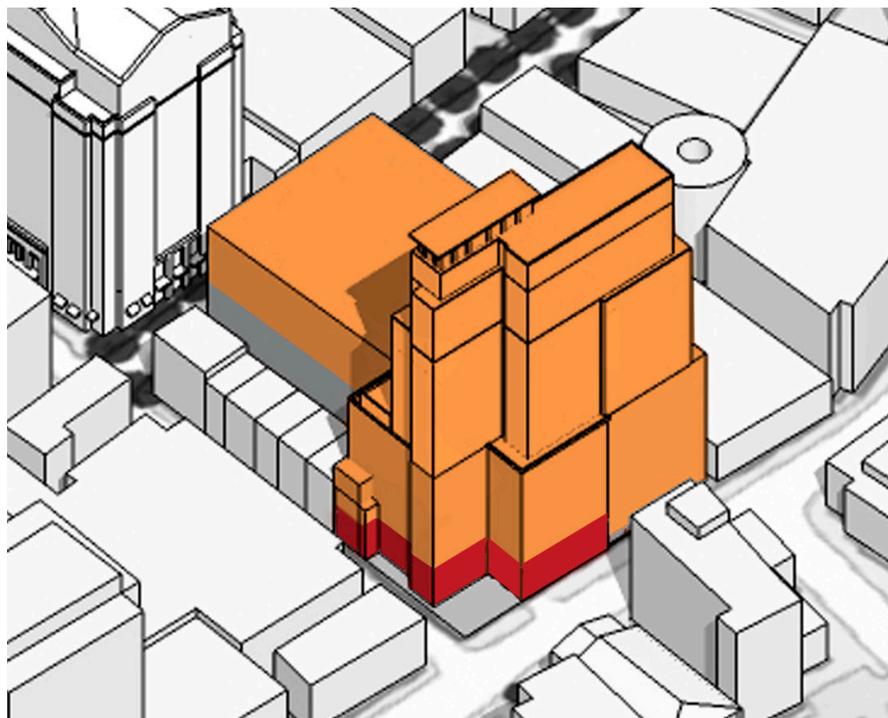
PARTIAL BLOCK INFILL

Infill development occurs adjacent to existing facades. The parking structure should be concealed from public view on the most significant streets. The character and scale of the existing buildings should be reflected in the massing of the infill building through design techniques such as setbacks and articulations.



Ground floor use diagram of a partial block infill proposal

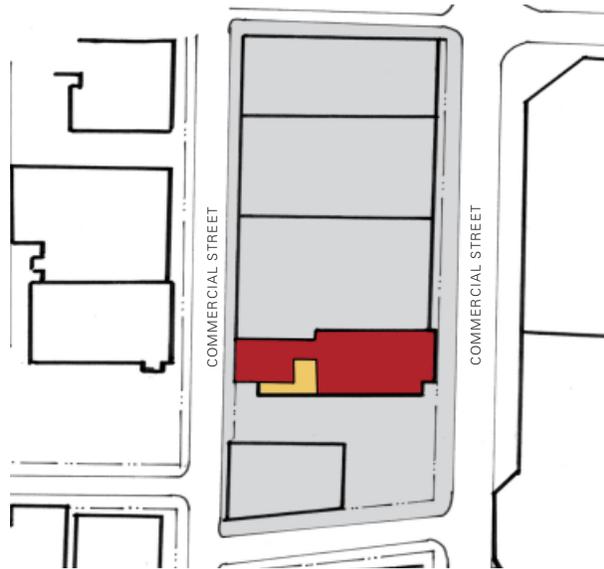
- Commercial
- Multi-Family
- Circulation
- Roof Terrace
- Institution
- Parking Garage
- Block Outline
- Loading Dock
- Surface Parking



Massing diagram of a partial block infill proposal

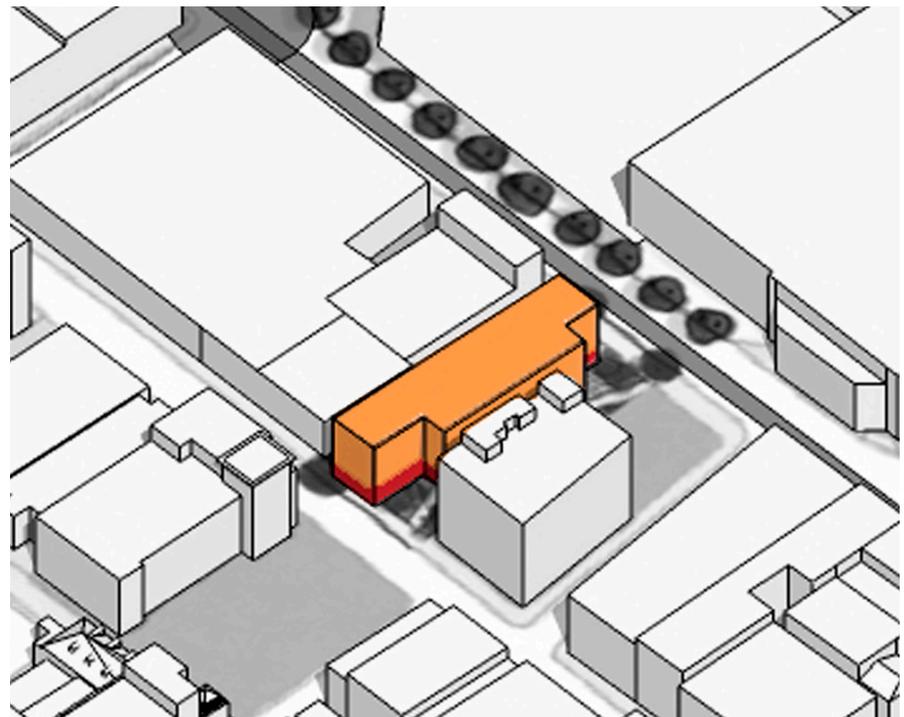
INDIVIDUAL BUILDING INFILL

The same principles used for full block infill sites can be applied to individual buildings to make sure they contribute to the character of the street front. Therefore, the scale of the building and the character of the architecture should relate to the surrounding context.



Ground floor use diagram of an individual building infill proposal

- Commercial
- Multi-Family
- Circulation
- Roof Terrace
- Institution
- Parking Garage
- Block Outline
- Loading Dock
- Surface Parking



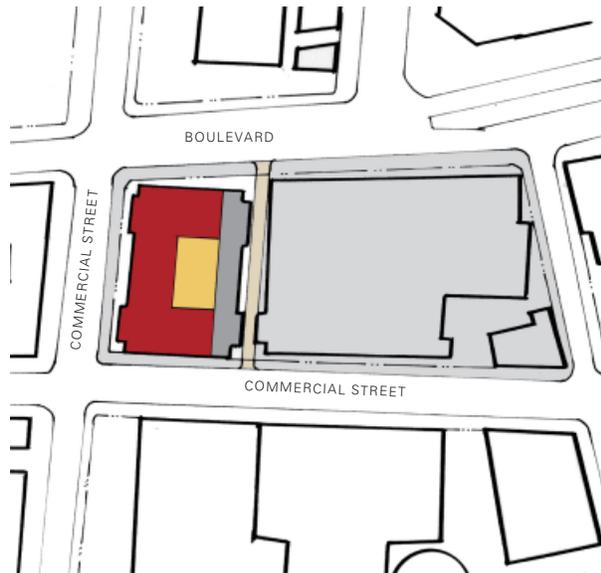
Massing diagram of an individual building infill proposal

TOWER BLOCK INFILL

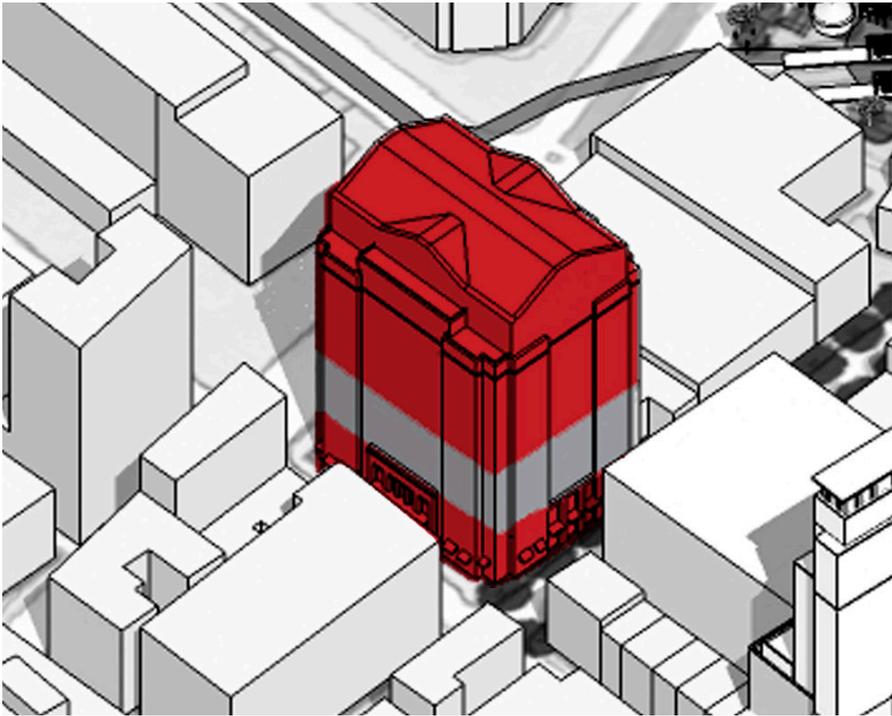
Downtown Norfolk's irregular street pattern has created an irregular block pattern, leaving some blocks quite small.

If a large scale building is to be placed on a small block, and there is a need to provide parking on site, the garage and servicing should be screened from the public spaces around the site. The first two floors should have active uses around the perimeter of the building on facades which face public streets and spaces.

If garage or service spaces are on the perimeter of the building above the first two levels, they should be screened through the use of facade designs which create the illusion of occupied space.



Ground floor use diagram of a tower block infill proposal

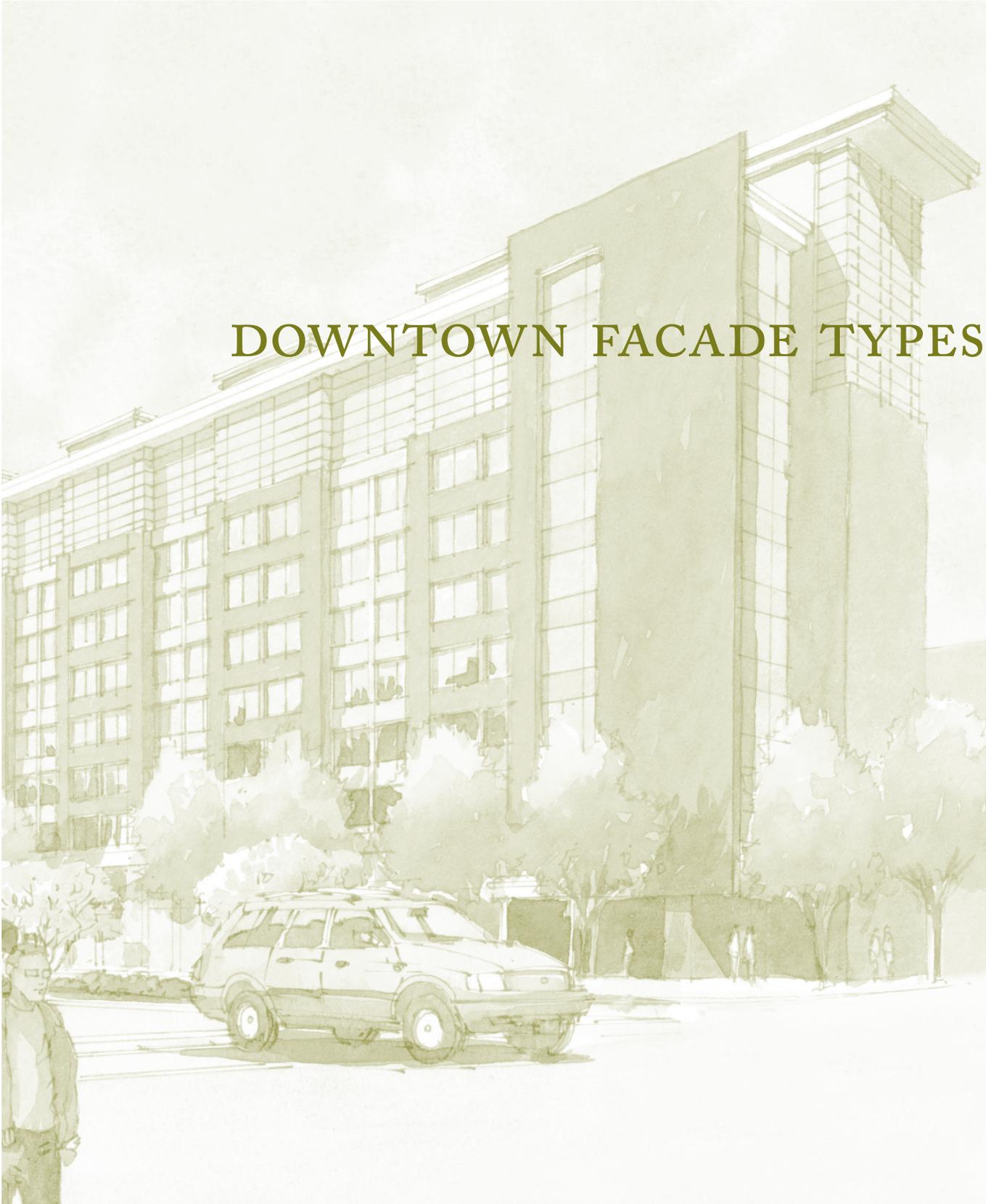


- Commercial
- Multi-Family
- Circulation
- Roof Terrace
- Institution
- Parking Garage
- Block Outline
- Loading Dock
- Surface Parking

Massing diagram of a tower block infill proposal



DOWNTOWN FACADE TYPES



OVERVIEW

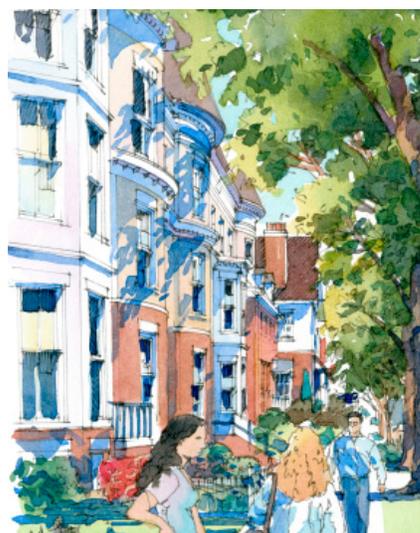
The character of the public spaces in Downtown is created by the architectural attributes of the buildings which contain them. The facades of these buildings serve not only to enclose a building, but also to create the “walls” of streets, boulevards, thoroughfares, and squares.

In Downtown Norfolk there are three general facade types, based on building height. For each type, there are specific principles of composition and articulation. This ensures buildings of appropriate scale and character for each type of public space. Many new buildings are larger and longer than traditional ones. To maintain human, urban scale, it is essential to articulate these longer, larger, and flatter facades as a series of smaller scale elements which fit comfortably into the fabric of the City. The pages that follow describe a five step process to define the massing and articulation of a building based on its facade type. Steps one through three describe the evolution of massing, while steps four and five provide guidelines regarding facade composition. Afterwards, the architectural section should be referenced to choose the desired style.

TYPE A - LOW-RISE: 2-4 STORIES

The traditional form of these facades range in width from 25 to 50 feet. Within the general type, there are two sub-categories:

- » Commercial: These are facades of buildings which have retail or business uses on the ground floor, and other uses including residential and office on the upper floors. The ground floor facade has wide shopfronts between wide piers capped with deep lintels. Above this base are smaller scale windows forming the body of the facade. The top is capped with a cornice or some form of top.
- » Residential: Traditional facades of houses, townhouses, and apartments, have smaller scale windows on all floors. Doorways on the ground floor are articulated. The top is defined either with a cornice or roof forms.



Type A: 2-4 stories, Residential



Type A: 2-4 stories, Commercial/Mixed-Use

TYPE B - MID-RISE: 4-12 STORIES

Traditional examples of mid-rise buildings include department stores, office buildings, loft buildings, hotels, and apartment buildings. Although their articulation is heavily influenced by building use, these facades should be articulated as three horizontal elements: a base, a middle, and a top. The one or two story base has larger openings along with special details and materials, while the top is articulated with a cornice or a one-story area of ornament. The middle is the simplest part and has a regular pattern of windows. The width of these facades ranges from 45 to 120 feet. Longer facades are articulated into smaller vertical elements.

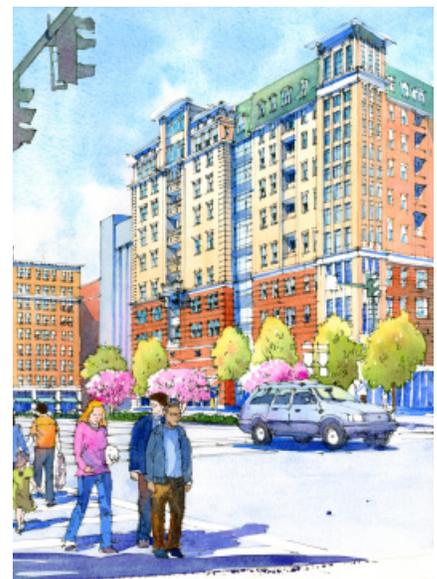
TYPE C - SKYSCRAPER: 12+ STORIES

With the invention of the elevator at the end of the 19th century, the skyscraper became popular for offices, hotels, and apartment buildings. In Norfolk, these were built on small lots with a small floor plate of 7,000-10,000 square feet and were 10-15 stories in height. The result is a collection of tall, elegant facades which fit comfortably among adjacent low-rise and mid-rise facades. The articulation of a base, middle, and top on the skyscraper is in scale with the same type of articulation on adjacent facades.

In the late 20th and early 21st Century, most high-rise buildings are not only taller, 12-30 stories in height, but also have much larger floor plates of 20,000-30,000 sf. The Pattern Book calls for articulating these as a series of tall slender vertical elements to harmonize with the traditional ones. They also must have a top, middle, and base that relate to adjacent facades and urban spatial types.



Type B: 4-7 stories



Type C: 12+ stories

FACADE TYPE A: LOW-RISE

Type A facades are 2 to 4 stories in height and are relatively small scale. Traditionally this type of street facade consisted of a collection of individual buildings, ranging in width along the street from 25 to 50 feet. They were the facades of residential buildings, as well as mixed use and commercial buildings.

For new development, which typically has longer street frontages, the facades should be articulated in a way which is harmonious with the scale of the traditional ones. Therefore, at intervals of 25 to 50 feet there is either a change of plane, material, architectural style, window pattern, or height. The ground floor facades of commercial and mixed-use buildings resemble traditional shop fronts, while residential buildings have ground floor facades with residential entrances, windows, and lobby entrances. The fenestration patterns on the upper floors of mixed use buildings can be larger and grouped together while residential uses should have domestic scaled windows. All facades should be articulated to have a one-story base and a top.

ESSENTIAL ELEMENTS OF FACADE TYPE A

- » Height is 2 to 4 stories
- » Small scale buildings that range from 25 to 50 feet
- » Facade divided into a smaller series of elements
- » Bay windows or grouped windows as accents



Historic postcard of traditional buildings



Townhouses in Freemason neighborhood



Duplex house in Freemason neighborhood



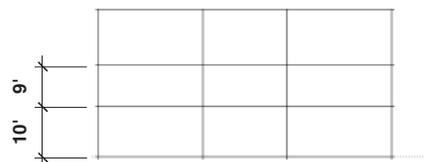
Commercial buildings on Granby Street

BASIC STRUCTURE AND ARTICULATION

Residential Use

STEP 1: MASSING/HEIGHT

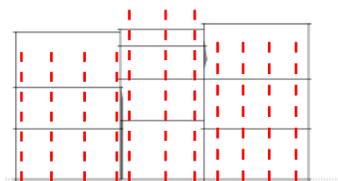
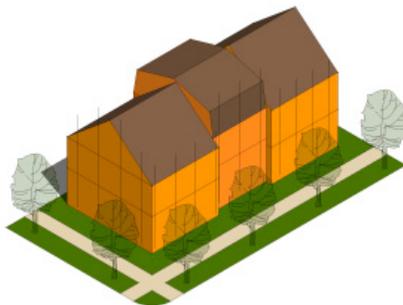
Basic building mass should be 2 to 4 stories. Vertical articulation is required for each element at a minimum of 18 feet wide and a maximum of 48 feet wide.



STEP 2: VERTICAL ARTICULATION

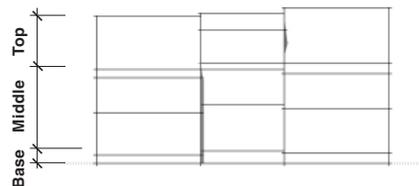
If the element is more than 36 feet wide, it must be further subdivided. Each element can be distinguished by not less than two of the following changes:

- » Material Color
- » Plane
- » Architectural style
- » Height
- » Roof configuration
- » Window types
- » Facade composition

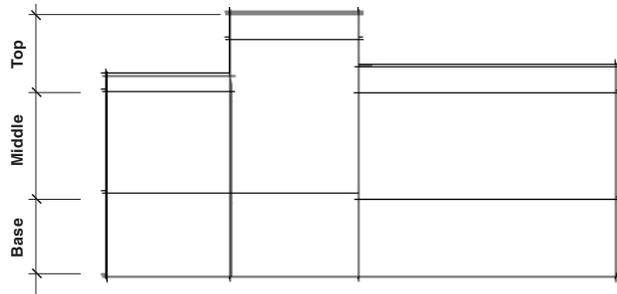
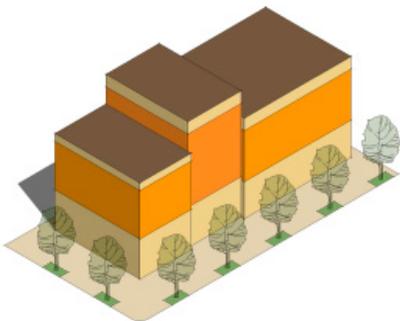
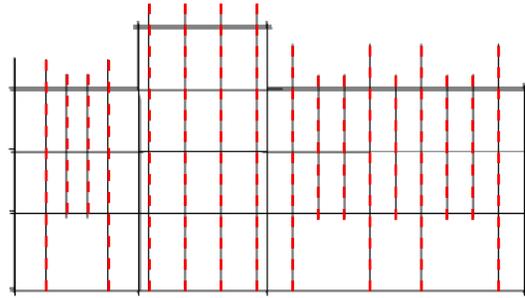
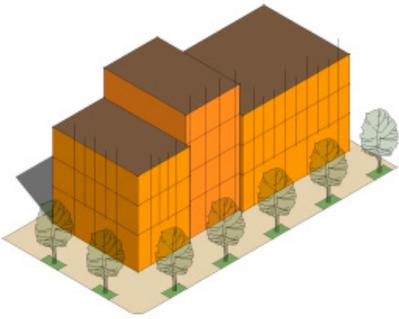
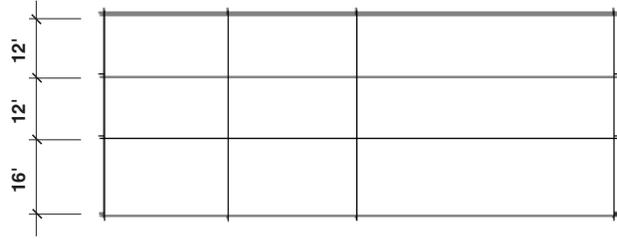
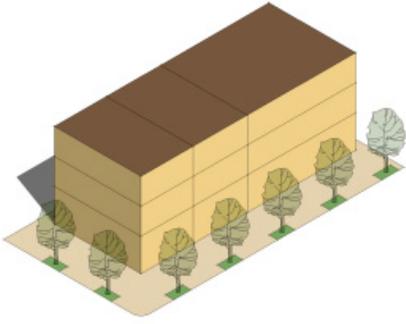


STEP 3: HORIZONTAL ARTICULATION

Horizontal articulation should define a base, middle and top for each articulated facade element. This can be accomplished with window composition, ornament, and special features.



Commercial Use



FACADE COMPOSITION

STEP 4: WINDOWS AND ENTRANCES

RESIDENTIAL

- » Doorways should be spaced at a maximum of 36 feet on center.
- » Windows of vertical proportion should be used with a ratio of up to 50% solid to void in linear measurement.

MIXED-USE

- » Ground floor articulation should include Commercial Storefronts alternating with entries to upper floors. Bay

width should be a maximum of 24 feet with vertical proportioned mullion patterns. Doorways should be spaced at a maximum of 36 feet on center.

- » Windows should have vertical proportions, with a ratio of up to 60% solid to void in linear measurement. A wide variety of window types including clusters of up to six vertical windows are permitted.
- » Roof forms should be varied and may be either pitched roof or parapets.

STEP 5: SPECIAL ELEMENTS

RESIDENTIAL

- » Special elements such as bay windows, roof dormers, and ornamented doorways should be provided.

MIXED-USE

- » Special elements such as bay windows, cornice features, and towers should be added along the street.

WINDOWS AND ENTRANCES

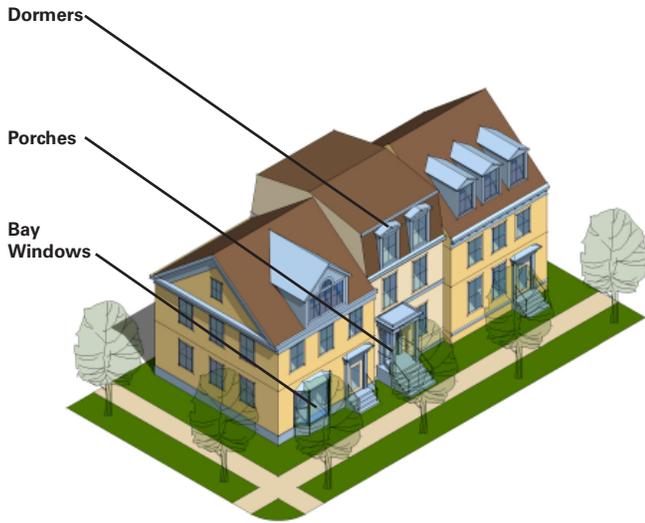


Residential Use

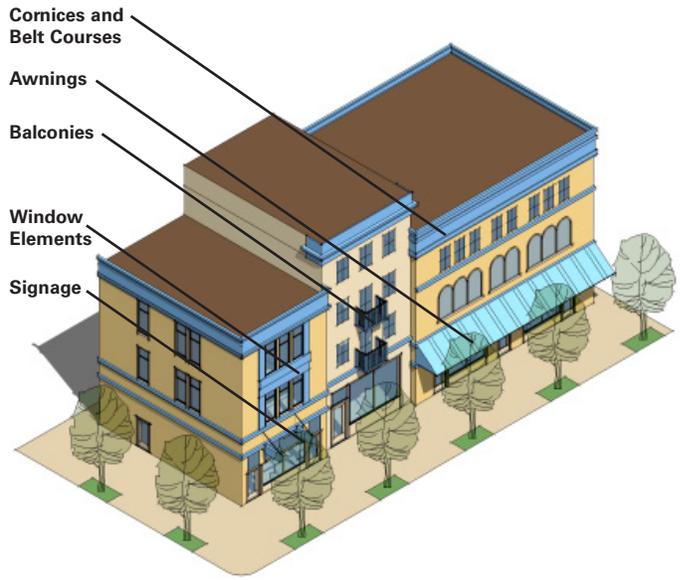


Commercial Use

SPECIAL ELEMENTS



Residential Use



Commercial Use

COMPOSITIONS



Residential composition



Commercial and Mixed-Use composition



Commercial buildings in Downtown Norfolk

FACADE TYPE B: MID-RISE

Type B facades are 4 to 12 stories in height and are slightly larger in scale. Traditionally this type of street facade consisted of apartment buildings in residential areas as well as department stores, lofts, small office buildings, or mixed-use buildings. Their frontage along the street ranged in width from 45 to 120 feet. The architectural character of mixed-use buildings, commercial buildings, and residential buildings were quite similar. In some cases the buildings had a collection of wings or separate elements above a two-story base.

For new development, which typically has longer street frontages, type B facades should be articulated to create the same scale of the traditional buildings. Therefore, at intervals of 45 to 120 feet there is either a change of plane, material, architectural style, window pattern, or height. There is a one- or two-story base, a middle area of several stories, and a top which can be either one or two stories in height. Ground floor facades of commercial and mixed-use buildings resemble traditional shop fronts, while residential buildings have ground floor facades with residential entrances, windows, or common lobby entrances. The fenestration patterns on the upper floors of mixed-use buildings can be larger and grouped together while residential buildings should have domestic scaled windows.

ESSENTIAL ELEMENTS OF FACADE TYPE B

- » Typically 4 to 12 stories
- » Composition divided into bays of 45 to 120 feet
- » A clearly articulated base
- » A clearly defined top



Mid-rise buildings in downtown Norfolk and the Freemason neighborhood

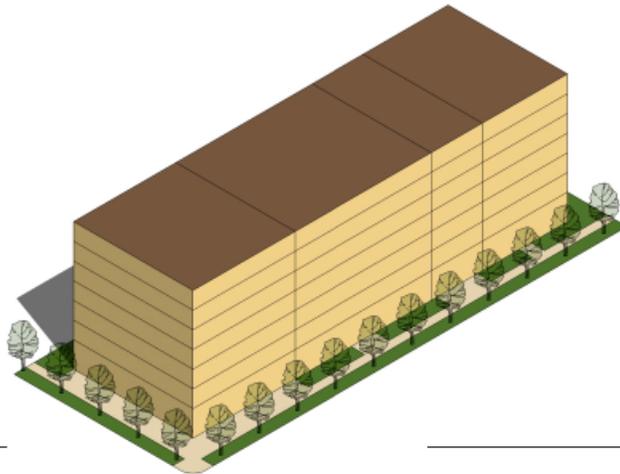


Historic downtown Norfolk building

BASIC STRUCTURE AND ARTICULATION

STEP 1: MASSING / HEIGHT

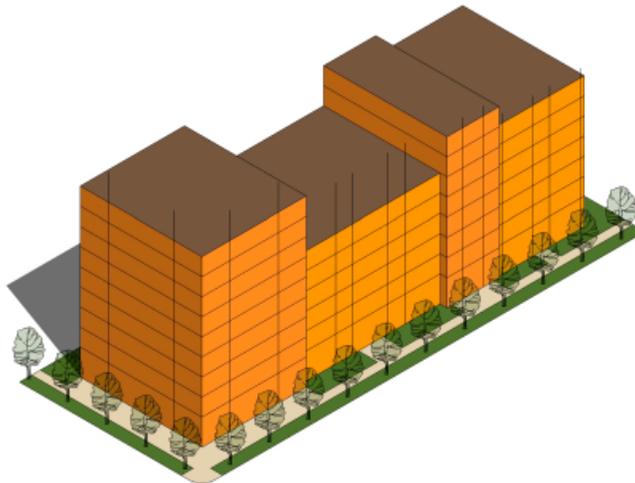
Basic building mass should be 4 to 12 stories. Vertical articulation is required for each element at a minimum of 45 feet wide and a maximum of 120 feet wide.



STEP 2: VERTICAL ARTICULATION

If an element is more than 60 feet wide, it must be further subdivided. Each element can be distinguished by not less than three of the following changes:

- » Material
- » Color
- » Architectural style
- » Height
- » Window types
- » Facade composition
- » Storefront or entry type

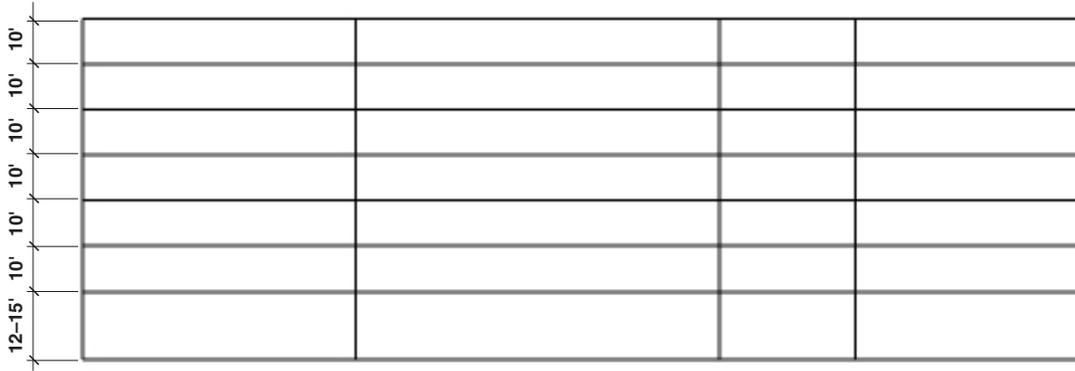


STEP 3: HORIZONTAL ARTICULATION

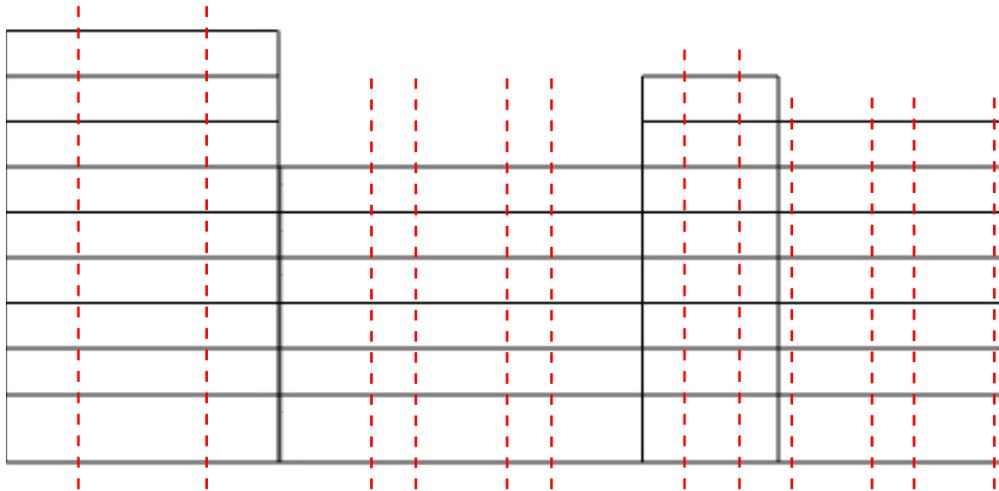
Horizontal articulation should define a base, middle and top for each articulated facade element. This can be accomplished with window composition, ornament, and special features.



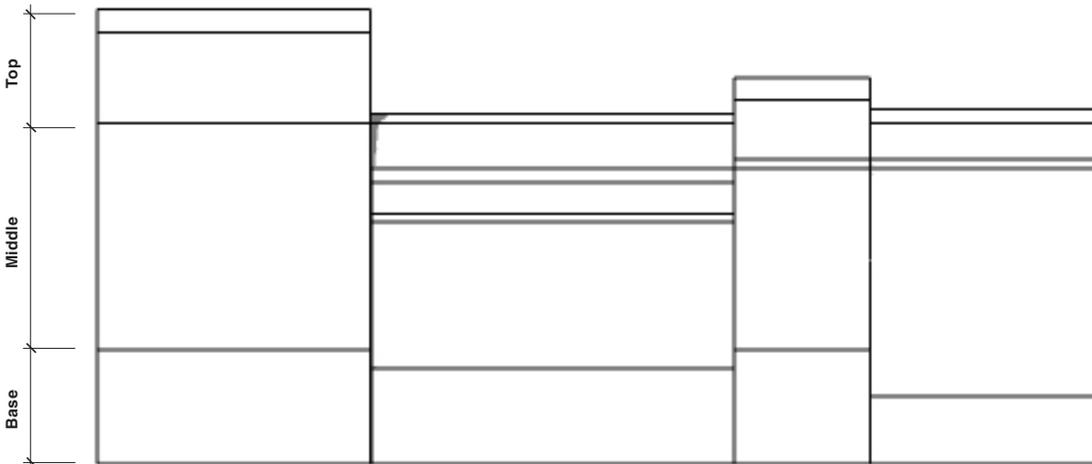
MASSING AND HEIGHT



VERTICAL ARTICULATION



HORIZONTAL ARTICULATION



FACADE COMPOSITION

STEP 4: WINDOWS AND ENTRANCES

Ground floors shall be articulated with Commercial Storefronts alternating with entries to upper floors. The maximum bay shall be 24 feet with vertical proportioned mullion patterns. Doorways shall be no further than 36 feet on center.

Windows of vertical proportion with ratio of up to 60% solid to void in linear measurement; a wide variety of window types including groups of tall windows to maximize glass areas.



STEP 5: SPECIAL ELEMENTS

The following elements may be applied to facade compositions:

- » Special roof elements
- » Quoining, belt courses
- » Cornices
- » Balconies
- » Bays



COMPOSITIONS



Asymmetrical Composition



Broad Composition



Possible composition resulting from using Type B guidelines



Commercial and mixed-use building



Residential loft building

FACADE TYPE C: SKYSCRAPER

Facades generally ranged between 7 and 12 stories for traditional high-rise buildings. Norfolk had a remarkable collection of these elegantly proportioned, small footprint towers, some of which remain today. They were built in an era in which 8,000 to 10,000 square feet per floor was perceived to be an efficient office or apartment building plan.

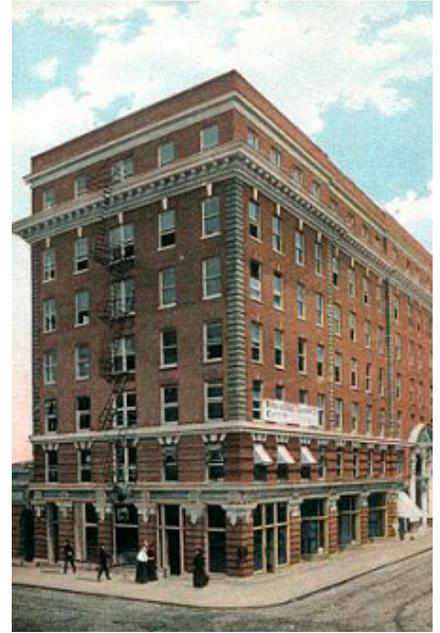
Current development practices call for larger footprints for both residential and office buildings. Therefore this facade type is articulated on larger building masses with a series of devices to create partial facades and tower elements with the proportions of traditional buildings. Portions of the tower element are set-back from the street, while a wing or portion of a facade remains in alignment with the base. In the traditional model, this facade type has a 2- or 3-story base, and 1- or 2-story top. Windows are generally found in a regular pattern, often grouped together in pairs or triples. Similar windows are used for office or residential use and are vertical in proportion. The facade composition expresses the structural grid through repetitive bays, while the piers are often expressed by various treatments of the spandrels. Simplified versions of Classical details can be used in the base of the building and door surrounds.

Today, high-rises are generally above 12 stories in height. Some towers are free standing in large open spaces, while others are flush with the property line along the street. Many of these towers have been designed to continue the scale of the traditional buildings at the street, and have an articulated base and a pattern of fenestration that is consistent with tradition.

Along major thoroughfares and at entries to the downtown, it is possible for large towers to rise in a single plane along the street edge. In smaller scale spaces, however, these towers should be set back from the base of the facade in order to create a smaller scale at the lower floors that is a continuation of the street facades of the core of Downtown. In both cases, the facades should be articulated to have a clear base and top.

ESSENTIAL ELEMENTS OF FACADE TYPE C

- » 12+ stories in height
- » A clearly defined top which has a height determined by building composition and overall building height
- » A clearly articulated base which is defined in relationship to overall building height
- » Base must respect scale of adjacent buildings in order to continue street fabric
- » Variety of materials and window patterns



Past and present views of skyscrapers in Downtown Norfolk and Freemason

BASIC STRUCTURE AND ARTICULATION

STEP 1: MASSING/ HEIGHT

Basic building mass should 12+ stories for skyscrapers. Towers should also have a 4-6 story massing of the base.

- » Zoning Envelope: Maximum dimensions in any direction on the tower element should not exceed 100 feet; maximum floor plate area should not exceed 8,000 square feet.

STEP 2: VERTICAL ARTICULATION

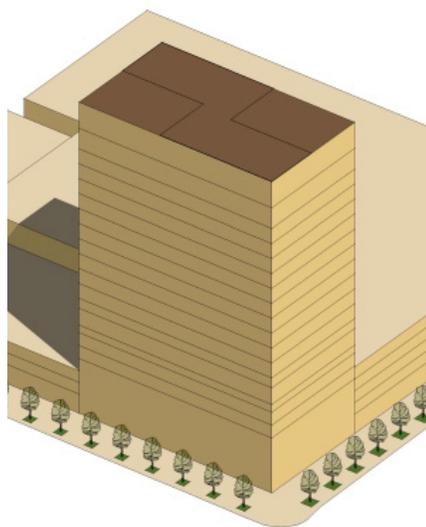
Vertical articulation for modern towers requires that no single plane be wider than 100 feet on the main tower. The base should be articulated with each element at a minimum of 24 feet wide and a maximum of 60 feet wide.

All vertical elements over 40 feet wide must be further subdivided. Each element can be distinguished by not less than three of the following changes:

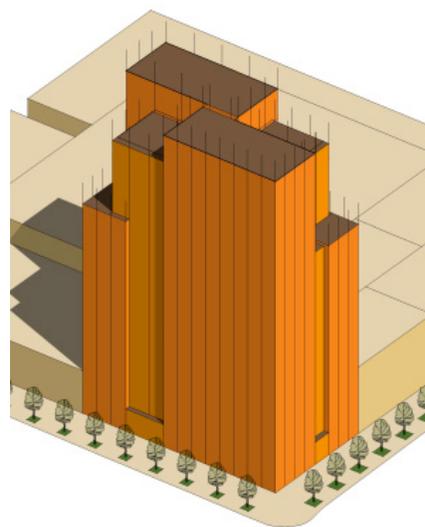
- » Material
- » Color
- » Architectural style
- » Height
- » Plane (for tower)
- » Window types
- » Facade composition
- » Storefront or entry type

STEP 3: HORIZONTAL ARTICULATION

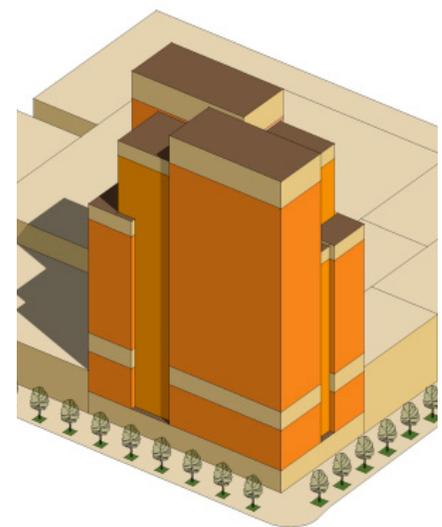
Horizontal articulation should define a base, middle and top for each articulated facade element. This can be accomplished with window composition, ornament, and special features. For skyscrapers, horizontal articulation should define a 4- to 5-story base and a 2- to 4-story top for the main masses.



Basic massing and horizontal Structure



Vertical Articulation



Horizontal Articulation



Example of a clearly articulated base and top.

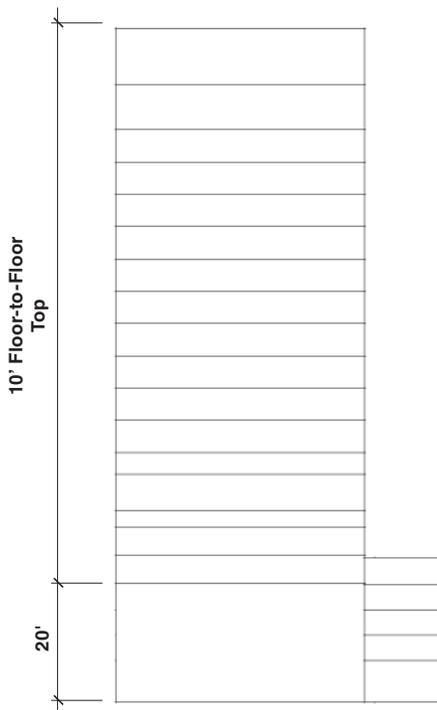


Example of clear vertical bay rhythm.

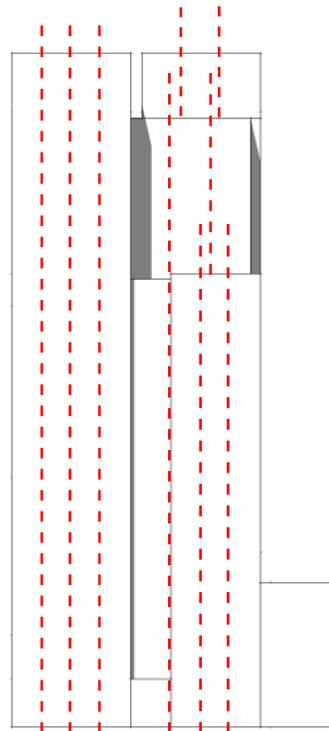


Example of modern tower articulation

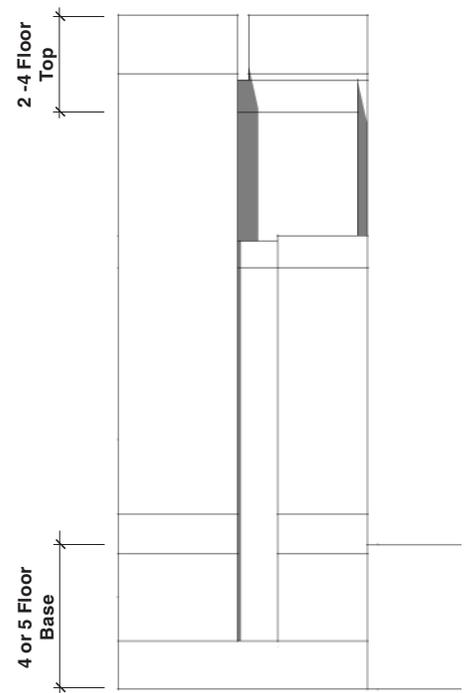
MASSING AND HEIGHT



VERTICAL ARTICULATION



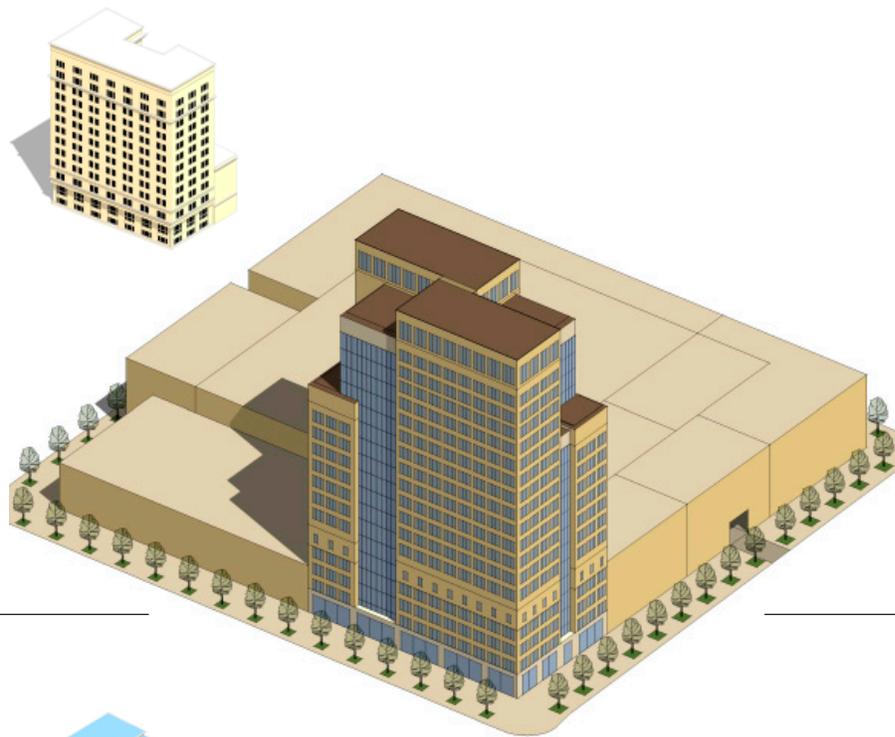
HORIZONTAL ARTICULATION



FACADE COMPOSITION

STEP 4: WINDOWS AND ENTRANCES

Windows shall be vertical proportioned with a ratio of up to 60% solid to void in linear measurement and use a wide variety of window types including groups of tall windows to maximize glass areas. Ground floor shall be articulated by commercial storefronts alternating with entries to upper floors. Maximum bay should be no more than 24 feet with vertical proportioned mullion patterns; doorways should be no further apart than 36 feet on center.

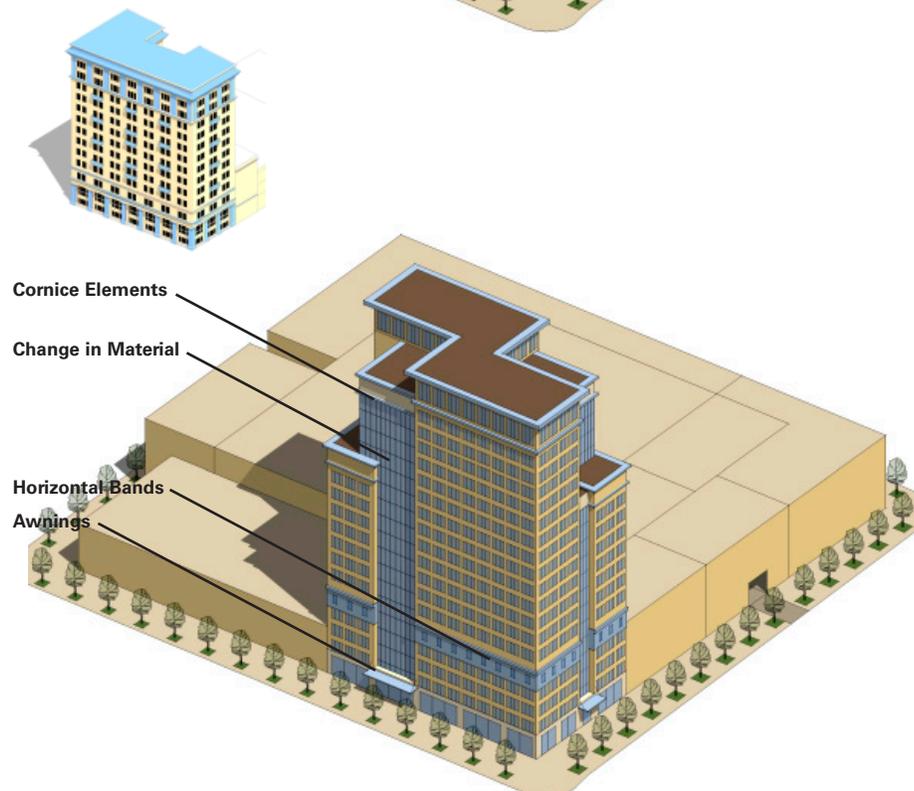


STEP 5: SPECIAL ELEMENTS

The following elements may be applied in some combination to ensure diversity within the window composition:

- › Cornice elements
- › Piers
- › Balconies
- › Columns
- › Materials

This kit of parts is used to further strengthen the reading of the tower massing and is accomplished with systems that include masonry wall surfaces with punched openings, continuous glass curtain walls with a range of panels from clear glazing to opaque metal, floor-to-ceiling wall systems with exposed slab edges, and voids created for balconies where the basic structure is exposed.



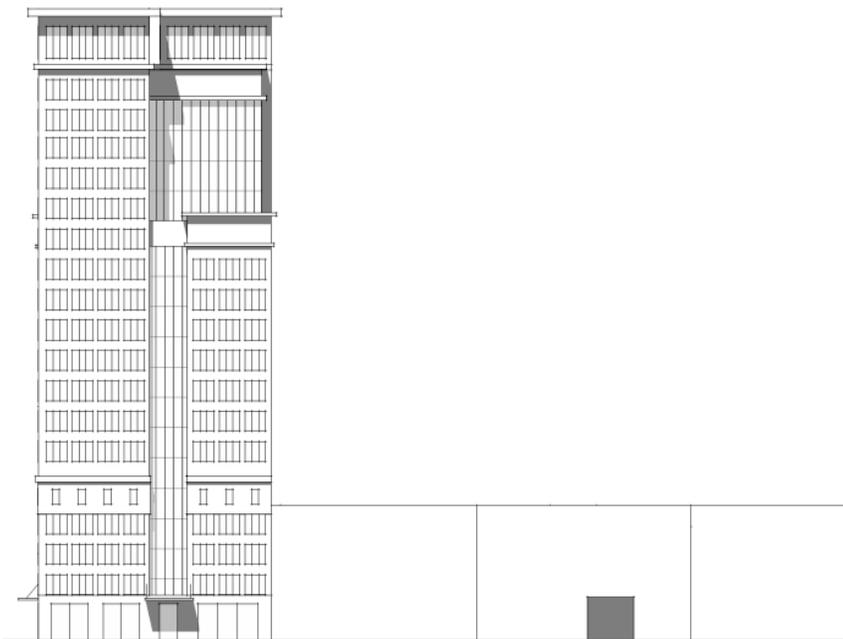


Examples of towers that relate to smaller scale fabric buildings

MATERIALS

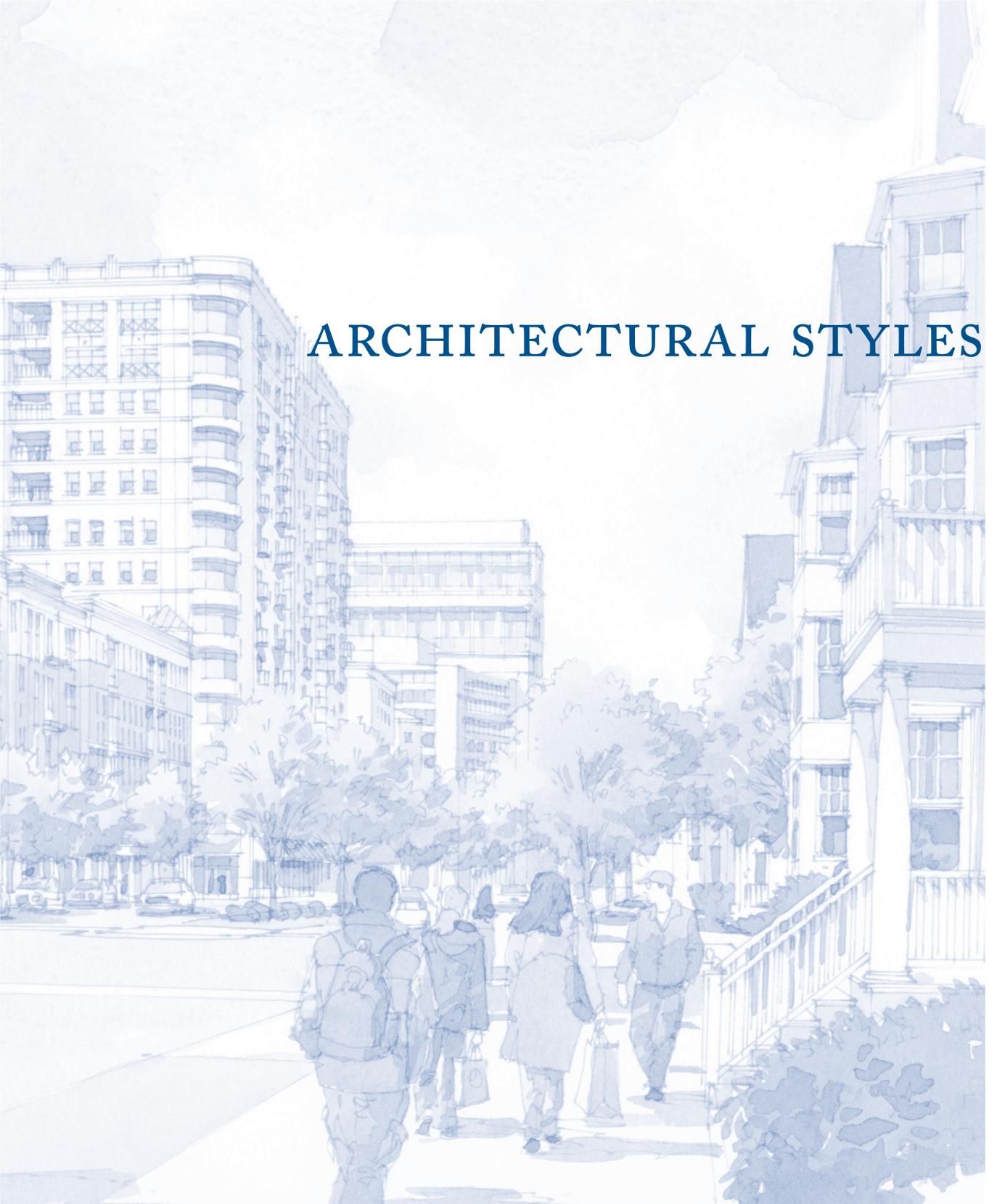
The massing of modern towers is further defined by the selection of cladding systems and materials. Degrees of transparency, texture, and colors are used to reinforce the reading of the tower's form. The base of the tower is clad in masonry with punched openings to integrate the tower with the adjacent four-story residential buildings. The shaft of the tower is composed of vertical arrangements of materials and systems to reduce the bulk and mass of the building. The top of the tower diminishes in size with stepbacks, sculptural penthouse massing, and roof forms. Often the top of towers are glazed and light in appearance.

COMPOSITIONS



Possible composition resulting from using skyscraper design guidelines





ARCHITECTURAL STYLES

OVERVIEW

Each facade type can be designed in a variety of architectural styles. Once the basic articulation of the facades have been determined, elements such as horizontal and vertical banding, windows, doors, and roof elements of various types can be used. This is often based on the use of the building as a whole, but it is especially critical for the design of the ground floor. Norfolk’s catalog of buildings can be broken down into the following four styles.

DOWNTOWN GEORGIAN

The earliest architectural style in Downtown, it can be seen in historic civic buildings and in the majority of smaller scale residential buildings. The Moses Meyers House and St. Paul’s School Building are examples of this style.

DOWNTOWN VICTORIAN

The most exuberant of the Downtown buildings used Classical Elements and rich colors. The 100 block of Granby and the Wheat Building are commercial examples of this style.

DOWNTOWN CLASSICAL REVIVAL

Many of the civic buildings such as the Norfolk Academy building, and traditional office towers were designed with various interpretations of the Classical Style. It uses larger scale elements to create a framework on the facades within which elements fit comfortably. The Customs House, Virginia Club Building, and the Royster Building are other prototypical examples.

DOWNTOWN MODERN

Beginning with the Art Deco period, various mercantile buildings were designed with simpler elements while following the same compositional patterns as the traditional styles. The best of the most recent modern buildings, such as the Federal Courthouse and Marriott Conference Center, continue to respect those patterns.





Downtown Georgian



Downtown Classical Revival



Downtown Victorian



Downtown Modern

DOWNTOWN GEORGIAN

DOORS AND WINDOWS

DOORS

Doors include 6- and 8-panel patterns, typically with sidelights and/or transoms. Tall, 3/4 or full-lite doors are used with balconies.

TYPICAL WINDOWS

Windows are typically vertical in proportion, double hung, with wide trim. Georgian style windows have 6 over 6, 6 over 9, or 9 over 9 muntin patterns. Stone or brick lintels are typical.

SPECIAL WINDOWS

Arched accent windows in gable ends, dormers with gable roofs, and triple windows with broad center sash are common.

SHUTTERS

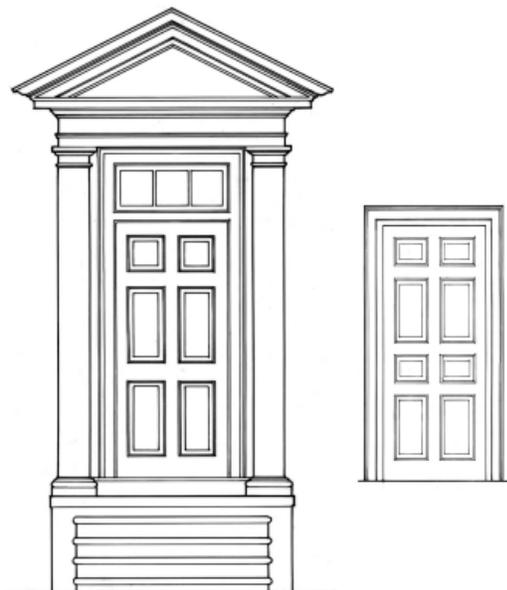
Painted shutters, either paneled or louvered, are common. They should be sized and mounted with hardware to appear operable.

TRIM

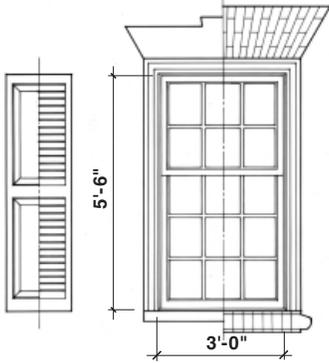
Windows and doors typically have 4-inch-wide profiled trim.



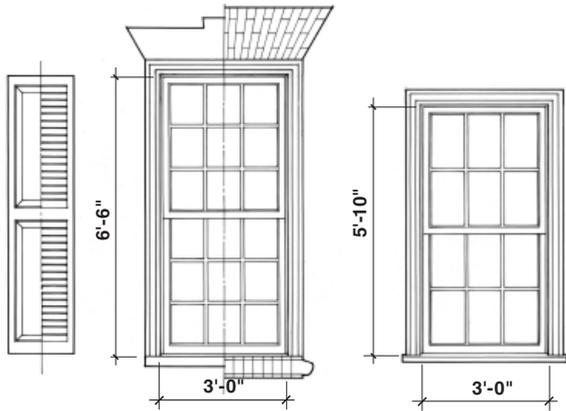
DOORS



TYPICAL WINDOWS



Second Floor Windows

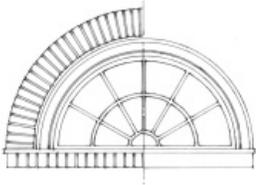


First Floor Windows

SINGLE WINDOW EXAMPLES



SPECIAL WINDOWS



Accent Window



SPECIAL ELEMENTS

PORCHES AND PORTICOS

Porches are typically 8 to 12 feet deep and one or two stories in height with either flat, shallow, gabled, or hipped roofs. Column types include 8 to 12 inch-diameter Doric and Ionic order columns and 8 to 12 inch-square box columns.

Column heights are typically 8 feet to 9 feet for a single-story porch. Temple front porches typically have classically proportioned entablatures and a 5 in 12 or 6 in 12 roof pitch. Shed or hip porches are typically 3 to 4 in 12 roof pitch.

Entry porticos and three-bay front porches are common. Entry porticos are typically 5 to 8 feet deep.

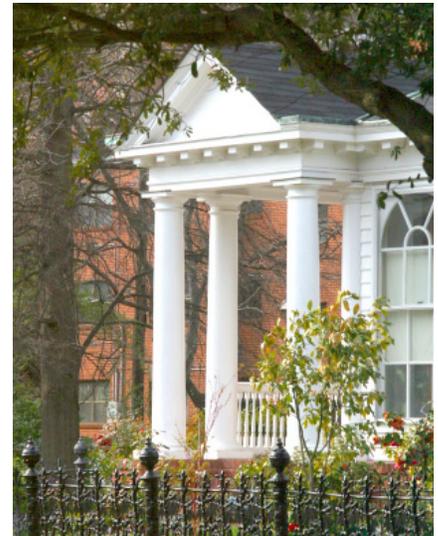
EAVES AND CORNICES

Georgian buildings have either sloped roofs with decorative roof eaves or parapets with cornice expressions.

BAYS

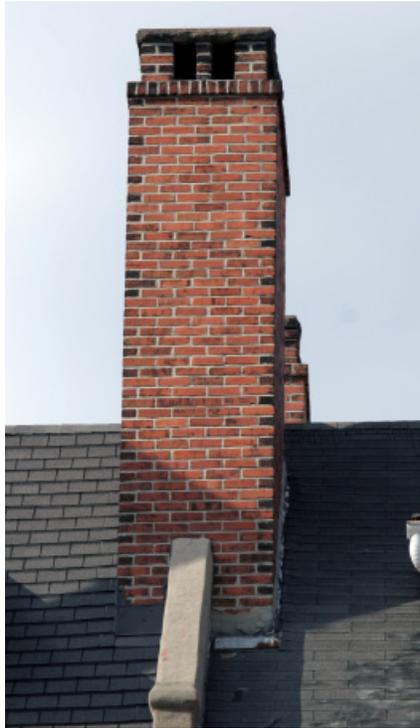
Bay windows are common in Georgian buildings and are used on primary facades or on side facades facing streets. Bays may be two stories in height and made of wood or masonry. Only one bay is appropriate for each townhouse expression. Bays can be found with chamfered corners or as box bays and are usually composed of multiple double hung windows.

PORCHES AND PORTICOS





CHIMNEYS



EAVES



BAYS



MATERIALS AND APPLICATIONS

MATERIALS

Cladding: Moulded brick, painted brick, smooth finish stucco, pre-cast or cut stone

Roofing: Standing seam metal, slate (including manufactured slate products), or composition shingles with a slate profile; flat roofing systems

Windows: Wood, cellular PVC or aluminum clad wood with traditional wood window profile; true divided light or simulated divided light (SDL) sashes with traditional exterior muntin profiles ($\frac{7}{8}$ inches wide)

Trim: Stucco, stone, cast stone, wood, fiber cement, or composite millwork for built-up sections

Columns: Architecturally correct Classical proportions; wood, fiber-glass, or composite material

Steps: Stone, brick or concrete

Railings: Wrought iron, steel, or aluminum, with square or decorative pickets

Soffits: Smooth surface composition board, tongue-and-groove wood boards, fiber-cement, or pre-finished aluminum

Gutters: Half-round in primed or prefinished metal or copper

Downspouts: Round in primed or prefinished metal or copper

Shutters: Wood or composite; mounted with hardware

Foundations: Brick or stone veneer, or stucco

Chimneys: Stucco, brick, or stone

COLORS

Cladding, Windows, and Trim: White; other colors to subject to approval through the design review process

Roof Materials: Black, red, or dark green for metal; black, dark gray, or a mixed gray/green palette for slate and composition shingles

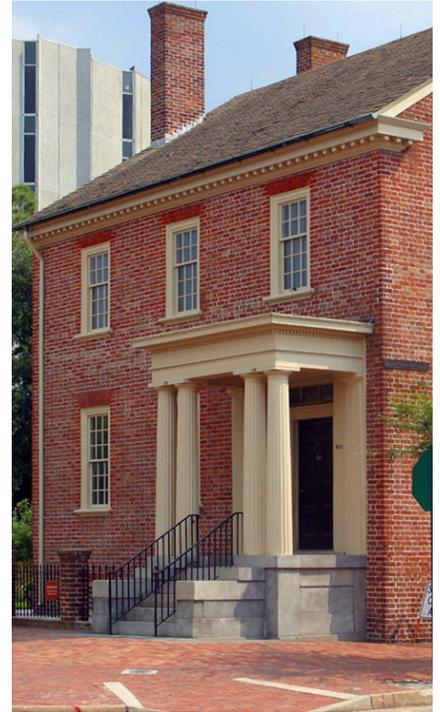
Gutters and Downspouts: Match trim color, or copper.

Shutters: Black, white, dark green, or other colors subject to approval through the design review process.

Fencing: Metal, either black or dark green



GALLERY OF EXAMPLES



DOWNTOWN VICTORIAN

DOORS AND WINDOWS

DOORS

Building entry doors are placed within the regular rhythm of facade openings but are distinguished with masonry frames and other special elements. Doors are vertical in proportion, such as two- and four-panel doors. The maximum width of a pair of double doors is 5 feet for doors at least 8 feet tall, and 4 feet for shorter pairs of double doors.

WINDOWS

Larger Victorian buildings are composed of a repeating pattern of large rectangular openings. Windows usually comprise 40% to 55% of the surface area of the facade.

Double-hung windows are often groups of two or three composed in windows with muntins arranged in 1 over 1, or 2 over 2, or 4 over 4 patterns. Panes are always taller than they are wide. Some buildings may have windows with rounded upper sashes. The windows are either operable double-hung or awning units. Window wall systems are subdivided by aluminum framing into multiple lites. Glazing systems may start at the floor level and use spandrel panels up to the sill height.

SPECIAL WINDOWS

Special windows include grouped window systems or bays, special storefront windows and dormers for smaller building types. Norfolk buildings may also feature round top windows, dormers, and box and angled bay windows.

TRIM

Windows and doors have 6-inch trim with a simple backband profile. Victorian window and door trim carries a decorative crown and cap above; windows may feature an ornate hood.

TYPICAL DOORS AND ENTRANCES



TYPICAL WINDOWS



Single Windows

Grouped Windows

SPECIAL WINDOWS



SHOPFRONTS

SPECIAL ELEMENTS

VERTICAL AND HORIZONTAL ELEMENTS

Cornices can be used to separate the divisions of the facade or terminate the facade at the top of the wall. Cornices can be built up with precast units or synthetic materials, or designed with metal brackets and metal overhangs. This era of buildings typically exhibits heavy ornamentation, and the use of contrasting materials and colors for additional variation in the facade.

PORCHES AND CANOPIES

These elements accent the building entry and are characterized by intricate metal work and ornamentation.

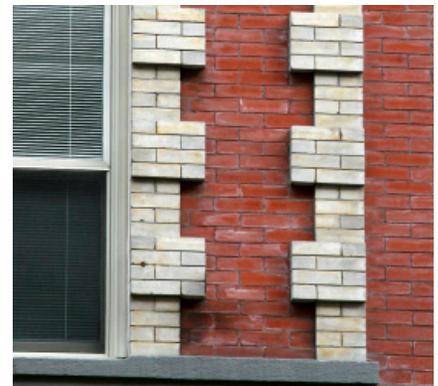
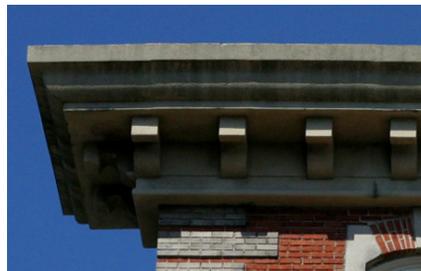
BALCONIES

Common on historic commercial and residential buildings, metal and masonry balconies are used frequently as special features that project off the building.

BAYS

Bay windows are common and are used on primary facades facing streets. Bay windows must project a minimum of 8 inches from the main structure. Bay windows have a continuous base to the ground, and two-story bays are common.

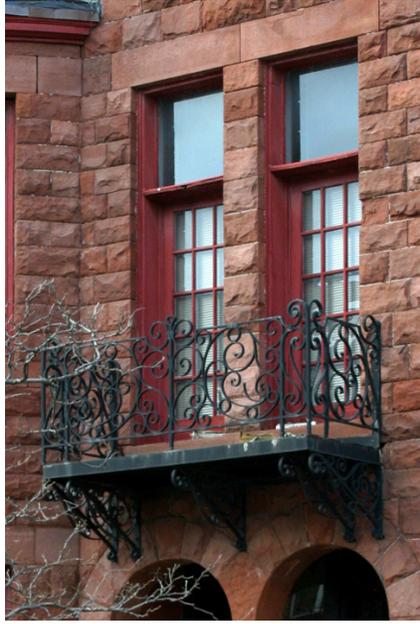
VERTICAL AND HORIZONTAL ELEMENTS



PORCHES AND CANOPIES



BALCONIES



BAYS



MATERIALS AND APPLICATIONS

MATERIALS

Cladding: Brick, painted brick, smooth finish stucco, pre-cast or cut stone

Roofing: Standing seam metal, slate (including manufactured slate products), or composition shingles with a slate profile; flat roofing systems

Window Walls: Aluminum framing system with clear glazing and aluminum or composite spandrel panels

Windows: Wood, cellular PVC, aluminum clad wood and aluminum window systems with traditional wood window profile; true divided light or simulated divided light (SDL) sashes with traditional exterior muntin profiles ($\frac{7}{8}$ inches wide)

Trim: Stone, cast stone, wood, fiber-cement, or composite millwork for built-up sections; and stone or cast stone string courses, lintels and sills; prefinished aluminum window panning

Columns: Architecturally correct Classical proportions in wood, fiberglass, cast stone or composite material; thin posts of turned wood, cast metal or composite material; brick, stone or cast stone piers with ornamental capitals

Balconies: Exposed steel frame with ornamental steel or aluminum railings; stone, cast stone or glass fiber-reinforced cement with ornamental brackets and balusters

Soffits: Smooth surface composition board, tongue-and-groove wood boards, fiber-cement, or prefinished aluminum

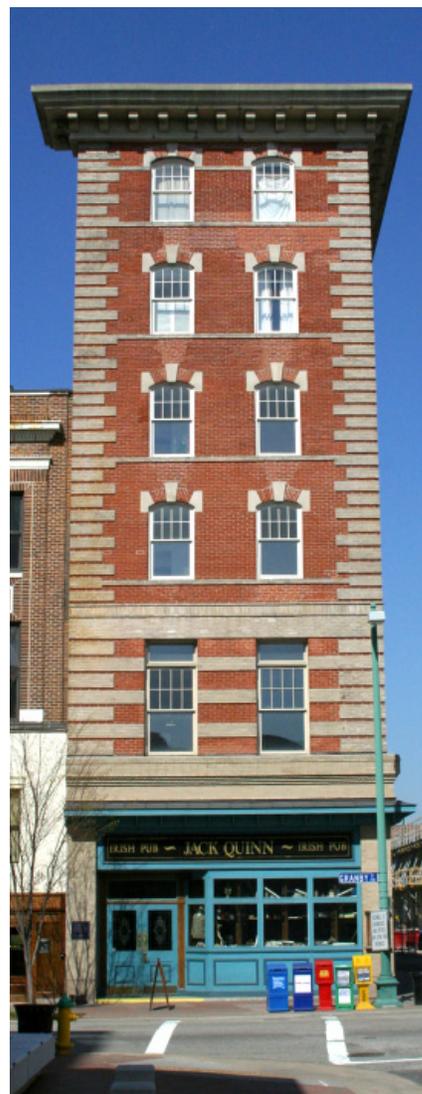
Gutters: Half-round in primed or prefinished metal or copper

Downspouts: Round in primed or prefinished metal or copper

Awnings: Canvas, metal or glazed awnings

Foundations: Brick or stone veneer, or stucco

Chimneys: Stucco, brick, or stone



GALLERY OF EXAMPLES



DOWNTOWN CLASSICAL REVIVAL

DOORS AND WINDOWS

STANDARD DOORS

Doors include four- and six-panel patterns. The four-panel can have an integral transom. Doors often have sidelights and transom surrounds of clear glass which can be rectangular or a segmented arch form.

SPECIAL WINDOWS

Special windows include angled bay windows, triple windows, and paired windows. Small square, rectangular, and round-top windows are often used in various combinations over the entry door on two-story houses.

SHUTTERS

Painted, operable shutters are encouraged on single windows. Shutter can either be paneled or louvered.

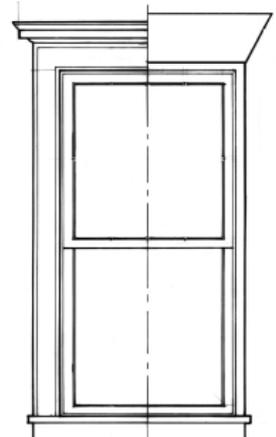
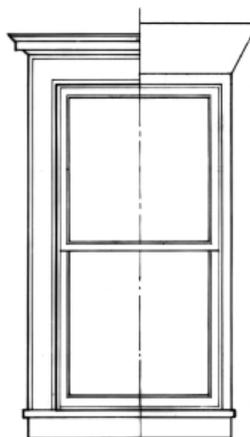
STANDARD WINDOWS

Windows are typically vertical in proportion. Muntin patterns are 1 over 1 for double hung with wide trim, or casement windows. Windows often have a decorative header, and are sometimes paired.

TRIM

Windows and doors typically have a 5½-inch-wide trim with a cap molding.

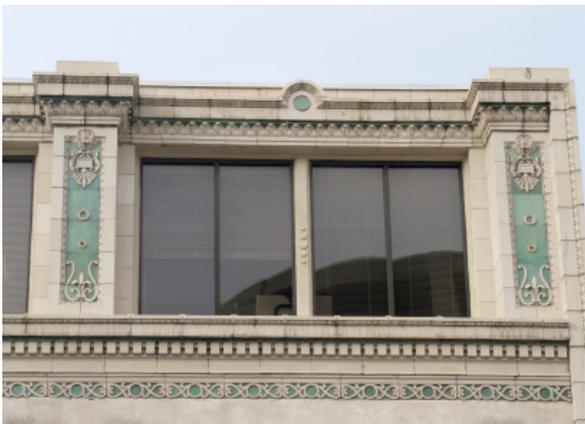
TYPICAL WINDOWS



Single Windows



Grouped Windows



Paired Windows



Special Windows



TYPICAL DOORS



SPECIAL ELEMENTS

CORNICES AND TOP ELEMENTS

Cornices and other horizontal expressions help to define the base and middle of the building, while accenting the top.

BALCONIES AND PORTICOS

Masonry balconies are often used to accent the primary facades of a building. Porticoes reinforce the architecture in a similar way by celebrating entries.

BASE ELEMENTS

Base elements transition between the facade and the ground plane. They relate to the pedestrian realm and are contextual to surrounding architecture.

PORCHES

Porches can be one or two stories with either flat or shallow hipped roofs. Column types include 10- and 12-inch-diameter Doric and Ionic order columns, special stucco round columns 20–22 inches in diameter, and 12- to 16-inch-square box columns. Balusters can be either turned or square.

Column heights are typically 9 feet for the first floor of a two-story porch and 8 feet to 9 feet for

a single-story porch. Temple front porches typically have 14-inch-square columns and classically proportioned entablatures with a 5 in 12 or 6 in 12 roof pitch. Shed or hip porches are typically 3 to 4 in 12 pitch.

Full front porches are encouraged on the Downtown Classic houses. The Dutch Colonial types typically have a portico instead of a deep front porch, but may have a side porch.

BASE ELEMENTS



CORNICES AND TOP ELEMENTS



BALCONIES AND PORTICOS



PORCHES



MATERIALS AND APPLICATIONS

MATERIALS

Cladding: Brick, painted brick, smooth finish stucco, pre-cast or cut stone

Roofing: Standing seam metal, slate (including manufactured slate products), or composition shingles with a slate profile; flat roofing systems

Window Walls: Aluminum framing system with clear glazing and aluminum or composite spandrel panels

Windows: Wood, cellular PVC, aluminum clad wood with traditional wood window profile; steel or aluminum windows

Trim: Stone, cast stone, wood, fiber-cement, or composite millwork for built-up sections; and stone or cast stone string courses, lintels and sills; prefinished aluminum window panning

Columns: Architecturally correct Classical proportions in wood, fiberglass, cast stone or composite material; brick, stone or cast stone piers with Classical capitals and bases

Balconies: Wood or composite railings with turned pickets; steel or aluminum railings with square pickets; stone, cast stone or glass fiber-reinforced cement with ornamental brackets and balusters

Soffits: Smooth surface composition board, tongue-and-groove wood boards, fiber-cement, or prefinished aluminum

Gutters: Ogee or half-round in primed or prefinished metal or copper

Downspouts: Rectangular or round in primed or prefinished metal or copper

Awnings: Canvas, metal or glazed awnings

Foundations: Brick or stone veneer, or stucco

Chimneys: Stucco, brick, or stone



GALLERY OF EXAMPLES



DOWNTOWN MODERN

CLADDING AND WALL SYSTEMS

CLADDING SYSTEMS

The towers are designed using a range of wall cladding systems to organize and express the massing of the tower as a series of smaller components. This approach allows the observer to visualize the location of units in the tower and the character of rooms and spaces. Human scale is introduced with the modeling of the facades using a range of special elements that is not found in towers with continuous, uninterrupted wall systems. The choice of wall systems is influenced by views and solar orientation.

MASONRY WALL SYSTEMS

Masonry wall systems are required at the first four levels of the towers

when adjacent to masonry three and four-story mixed-use buildings. Masonry walls with punched openings can be integrated into the composition of both tower facades by following the regulating lines that govern the placement of windows and panels in the wall systems described above. Masonry can be extended as a compositional element across the entire height of the towers to give them color and solidity.

GLASS CURTAIN WALLS

The best glass curtain wall systems use non-reflective glazing for window areas and introduce spandrel glazing and metal panels to give the curtain wall a richness of depth

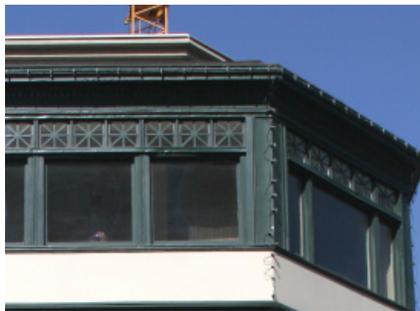
and color. Glazing systems that are reflective and seek uniformity should be avoided. Curtain wall systems can have varying degrees of transparency from floor-to-ceiling windows to small window areas. These systems are often used to create dramatic glazed corners and window bays.

FLOOR-TO-CEILING GLAZING SYSTEMS

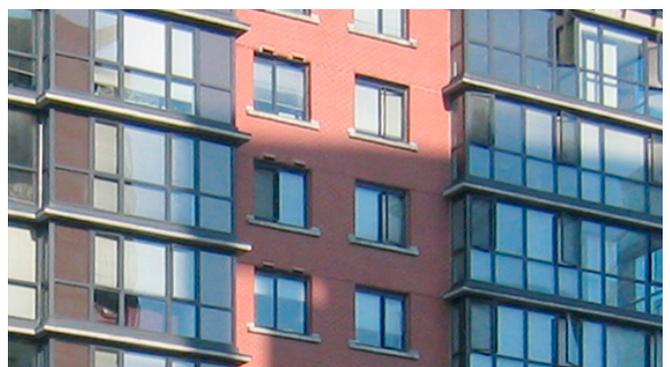
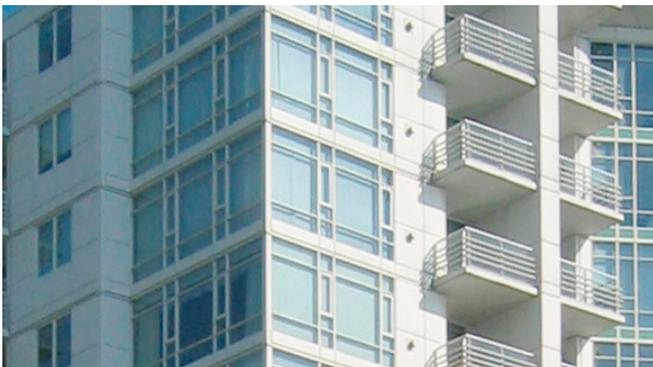
These systems are framed between concrete floor slabs at balconies and in walls where articulation of the floors is desired. The structure of the tower is exposed and used to create interesting visual effects in combination with continuous curtain walls.

TYPICAL DOORS AND ENTRANCES





CLADDING SYSTEMS



SPECIAL ELEMENTS

BUILDING BASE

In the case of modern high-rise buildings, the base should be clad in masonry. It should be differentiated from the tower shaft at the fourth level with a horizontal facade element such as a cornice, change in material, or other technique. Buildings should have main entrances facing public streets. Retail shops and common amenities should be integrated into the base of the building with street entrances and shop windows.

BALCONIES

Balconies provide outdoor living space for high-rise units. Although not prevalent, when balconies are used, they should have a minimum dimension in any direction of 4 feet. They may be fully recessed, partially recessed or projecting and include metal and glazed railing systems.

BAY WINDOWS

Bay windows are often created at highly visible corners oriented to important views. Often built of curtain wall systems, bay windows have a high degree of transparency. They are usually associated with living and dining areas and are often paired with balconies.

BUILDING TOP

Tops should be carefully composed to give the building a unique identity. A wealth of possibilities exists for modeling the tops of buildings to make them visually striking and to accommodate unique units and mechanical systems. In the case of high-rise buildings, the tops of towers may have larger special units with terraces and unique spaces.

BAYS



BASE ELEMENTS



BALCONIES



TOP ELEMENTS



MATERIALS AND APPLICATIONS

MATERIALS

Cladding: Brick, stone, cast stone, precast concrete, glass fiber-reinforced cement, metal or composite panel systems, or aluminum and glass curtain wall

Roofing: Flat roofing systems, standing seam roofing on penthouse elements, stone or cast stone or precast parapets

Window Walls: Aluminum framing system with clear glazing, spandrel glass, metal panels

Windows: Aluminum window systems, coated steel window systems, clear glazing, spandrel glass, metal panels

Trim: Stone, cast stone, and stone string courses, lintels and sills

Columns: Stone, cast stone, precast concrete, glass fiber-reinforced cement, aluminum, or steel

Balconies: Concrete or steel with aluminum, steel or glass railing systems

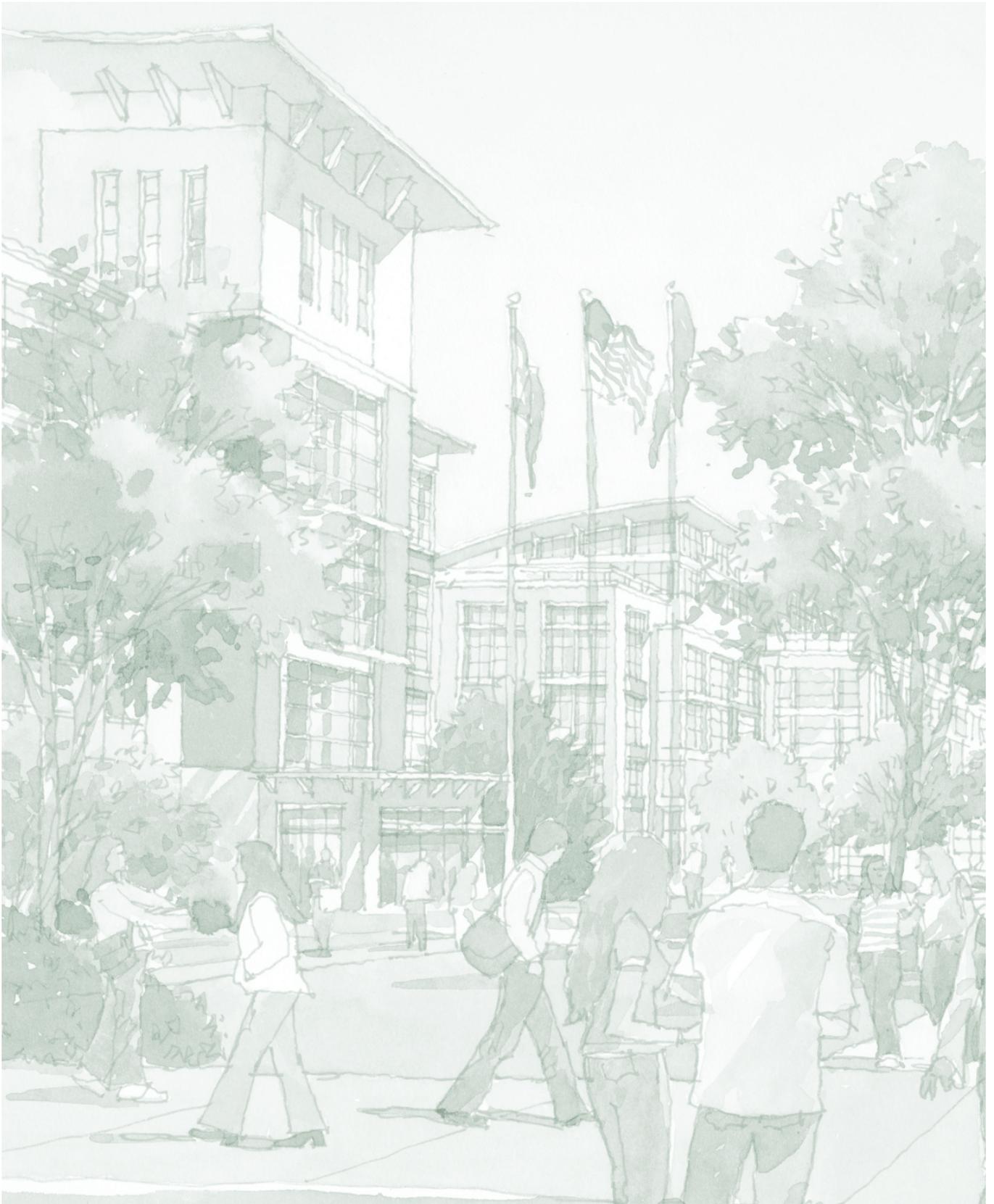
Soffits: Concrete, stucco, fiber-cement or prefinished aluminum

Canopies: Metal, glass, or canvas awnings



GALLERY OF EXAMPLES







TRANSFORMATIONS

TRANSFORMATIONS

Downtown Norfolk has a diverse range of urban spatial types which affect the way in which buildings shall be designed to harmonize with the urban fabric. Projects proposed for the City shall be informed both by the spatial type upon which the building is located, and the programmatic elements. The section that follows describes two processes by which the Pattern Book was applied to recently proposed projects. Case Study I describes how the City and its urban design consultant responded to the schematic design of a proposed hotel. Case Studies II and III are projects that were designed from the early stages with the Pattern Book as a prime consideration.

The projects described in this section include:

- » Hampton Inn, Brambleton Avenue
- » Wachovia Center, Monticello Avenue
- » Norfolk Hotel and Convention Center, Main Street and Granby Street

CASE STUDY I: HAMPTON INN

A 14 story, 125 room hotel on Brambleton Avenue

- » **Spatial Type:** Downtown Thoroughfare
- » **Site Type:** Partial Block Infill
- » **Facade Type:** Skyscraper
- » **Architectural Style:** Downtown Classical Revival

STEP 1: DEFINE SPATIAL TYPE

This development has one prominent address along the southern side of Brambleton Avenue. Brambleton Avenue is identified as a Downtown Thoroughfare in the Pattern Book. The new building is located mid-block directly between Granby Street and Boush Avenue.

STEP 2: CONFIGURE PROGRAMMATIC ELEMENTS

Active uses have been located along Brambleton Avenue, including the hotel lobby and a restaurant. Parking is located in the rear along York Street and is screened from public view.

STEP 3: MASSING AND FACADE ARTICULATION

The building is a single mass due to programmatic and site constraints. It is articulated with a base, middle and top as required by the Pattern Book.

STEP 4: DEVELOP ARCHITECTURAL STYLE

The developer preferred a traditional look for the building and

selected Downtown Classical for the architectural style. The 14 story height and single mass is appropriate for the style.

STEP 5: DESIGN REVIEW SUBMISSION

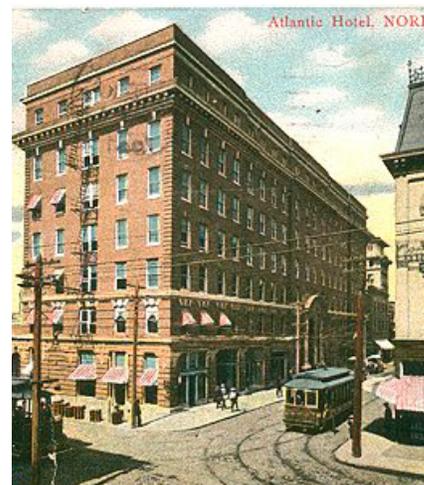
The CAD elevation on Page 100 was submitted to the Department of Planning and Urban Design Associates, the City's urban design consultant, for design review.

Downtown Classical Revival was selected by the developer for the architectural style of the building. The building's architect has articulated the building with a base, middle, and top as required by the Downtown Pattern Book. The top is also articulated by a large cornice.

The design review revealed several problems with the building elevations. First, the internal program is based on a standard module as required by the hotel chain. Because of this, windows were placed in the center of each room without regard to the composition of exterior elevations. In addition, the cornice and other architectural elements were applied in a manner not authentic to the Classical Revival Style.

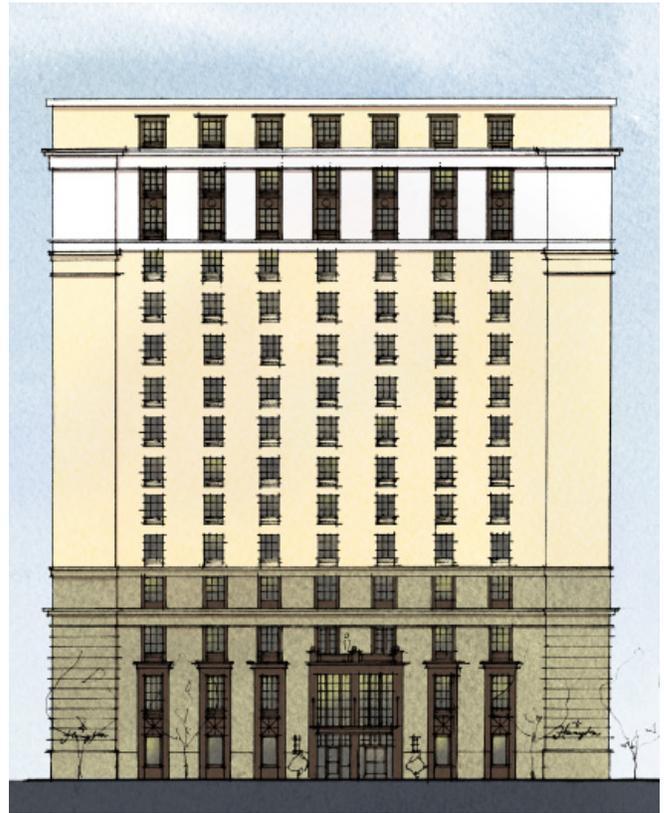
In a working session with the developers architect and UDA, the plan was modified to allow for a symmetrical arrangement of windows while still adhering to the hotel chain's stan-

dard room module. UDA also provided historical references and details so that the building would conform to the style.





Preliminary Design submitted for design review before transformation.



Transformation sketch of primary elevation by UDA.

The following is an excerpt of Urban Design Associates' design review for the Hampton Inn.

UDA has performed a design review of the Norfolk Hampton Inn on Brambleton Avenue to test compatibility with the Downtown Norfolk Pattern Book. The following design revisions are recommended:

- 1 Simplify the tower mass by incorporating stair towers into the main mass.
- 2 Modify window placement by positioning windows in a uniform and symmetrical pattern. Windows in the "King/Sofa" rooms should move slightly off

room center towards the east. One window in the corner "Double Queen" rooms should be placed on the East Elevation or eliminated altogether. Entry windows and doors at the base will need to be repositioned slightly to align with the new window pattern above.

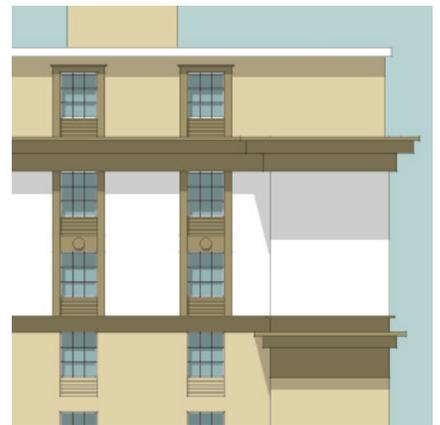
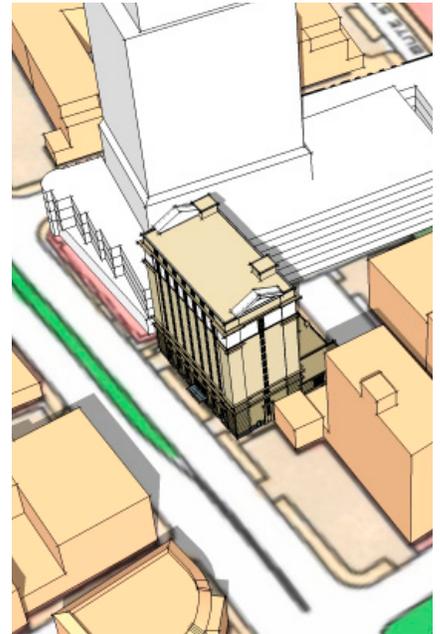
- 3 Add simple horizontal bands and cornices (synthetic stucco) as illustrated to articulate the mass and reduce scale.
- 4 Windows at the base of the building (levels 1-3) should be aligned with the windows above, they should be taller to accentuate the lobby and con-

ference center spaces. Windows at the base and top are "framed" with simple synthetic stucco trim.

- 5 Add rustication bands at the corners of the base as illustrated.
- 6 Emphasize hotel and restaurant entrances by incorporating special design elements such as ornamental grilles at the spandrel and a glass canopy at the hotel entrance.
- 7 Windows on all elevations should incorporate a traditional grille/lite pattern as illustrated. Louvers for the mechanical units should be incorporated into the window frame. Consider using an ornamental grille if feasible.
- 8 Materials: Stone or precast concrete is preferred for levels 1-3. Buff brick is an acceptable alternative. Synthetic stucco is acceptable for all other surfaces.
- 9 Accent lighting for the base (levels 1-3) and for the span between levels 13-14 will provide a distinctive appearance on the skyline.
- 10 Signage is recommended at each corner and on the canopy. Individual bronze or brass letters with lighting behind is encouraged. Backlit plastic signage is not appropriate.



UDA SketchUp™ model looking east down Brambleton Avenue



Elevations and details produced by UDA for design review.

CASE II: WACHOVIA CENTER

A 27-story mixed-use office building with concealed parking garage wrapped in a residential liner.

- » **Spatial Types:** Commercial Street, Secondary commercial street, residential street
- » **Site Type:** Full Block
- » **Facade Type:** Multiple
- » **Architectural Style:** Modern

STEP 1: SPATIAL TYPES

This development's two most prominent addresses are on Monticello Street and Charlotte Street. Given that both function as commercial streets, the building was designed to provide adequate sidewalks for commercial uses. Buildings along the street are five to seven stories tall with the expression of multiple buildings along the street.

STEP 2: CONFIGURE PROGRAMMATIC ELEMENTS

This site is classified as a full block development. Parking shall therefore be completely screened from public view in order to have active uses along the street facade.

STEP 3: MASSING AND FACADE ARTICULATION

The facade is broken down based on the facade types in the Pattern Book.

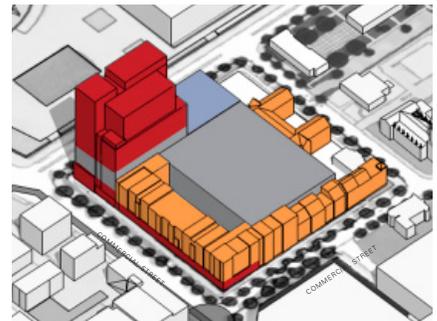
STEP 4: DEVELOP ARCHITECTURAL STYLE

This site is sited between three spatial types; a commercial street, a secondary commercial street, and a residential street. Lined with a variety of building types, these streets are generally small scale and are defined by the facades of relatively small 2 to 4 story buildings. The presence of such a residential character in the middle of the City contributes to its appeal and sense of security.

The cross section indicates the relationship of buildings on both sides of the street to the width of the street. It also indicates the way in which ground floor uses open to the street. One side illustrates a town house with a stoop. The building is 22 to 25 feet from the curb. There is a 10 to 12 foot front yard to provide an effective transition for ground floor residential uses. A similar detail is illustrated for the other side of the street which has an apartment building with ground floor residential uses. It should have its own entry from the street, or at least to the front yard.



Step 1: evaluate spatial types



Massing diagram of a full block development proposal

- Commercial
- Multi-Family
- Parking Garage
- Institution



Perspective of proposed neighborhood street

CASE STUDY III: HOTEL AND CONVENTION CENTER

A 31 story hotel and conference center on Main Street.

- » **Spatial types:** Downtown Thoroughfare
- » **Site Type:** Full Block Infill
- » **Facade Type:** Skyscraper
- » **Architectural Style:** Modern

The Downtown Pattern Book includes a set of architectural patterns that make it possible for new buildings to fit into the scale and character of Downtown Norfolk. Modern hotels, especially those with large meeting and conference facilities, tend to have a bulky mass that is not compatible with the more delicate scale of the historic buildings in Downtown. The patterns indicate ways in which these large building masses can be articulated to be consistent with tradition. There are 6 types of patterns on the following pages. The large mass of the hotel is adjacent to the lower scale of adjacent historic buildings. The Hotel Tower is articulated into two parts, one of which is set back from Main Street. Each of these tower elements is further articulated as a series of small footprint, tall towers. This should be expressed with different materials.

The resultant proportions are the same as some of the best traditional towers in downtown. A corner element reflects the traditional

scale of buildings along Granby Street. Each tower element has a base middle and top. The structure of the building determines the rhythm of facade elements such as pilasters and window openings. Windows and doors are composed in a variety of ways within each of the tower elements.





Perspective drawing emphasizing base articulation of proposed hotel.