Section 4

Additions and New Construction

4.1 Decks

This backyard deck incorporates a pergola on one side and its railing doubles as built-in seating.

Wooden decks like these, located on rear elevations with simple balustrades, skirt boards, and lattice infill panels between supports, are appropriate in the historic districts.

The outdoor deck is a contemporary exterior feature frequently introduced in the residential historic districts. Essentially an uncovered, private version of a back porch, the deck can be compared functionally with a more traditional patio or terrace. To maintain a building's historic character, deck additions are generally located unobtrusively on the rear elevation. Decks are usually built on posts to align with the first-floor level of a residence and can consequently stand considerably above the ground. Like any addition to a historic building, a deck should be compatible with but differentiated from the building and constructed to be structurally independent so that it could be removed in the future without damage to the building. A deck should never be so large that it overpowers the building or the site. Insetting a deck at least six inches from a building corner also helps to diminish its impact and differentiate it from the existing building.

Things to Consider As You Plan

In locating a deck, property owners should always consider the proposed location's impact on the historic structure, the site, and the district. Locations that are visible from the street or that would damage or diminish significant architectural elements or significant site features, such as mature trees, should not be considered.

Because decks are exposed to the elements, decay-resistant woods, such as cypress or redwood, or pressure-treated lumber should be used. Decks may be painted or stained to protect them from water and sunlight and to make them more compatible with the colors of the historic structure. Some pressure-treated wood may require six to twelve months of weathering before primer and paint will bond well to it. Opaque stains are a good option for exposed decks since they do not peel; stains are not an applied film like paint, but rather are a protective treatment that is absorbed into the wood surface. Galvanized nails and fasteners should be used in deck construction to avoid rust stains. If a deck is elevated more than 30 inches above grade, the State Building Code requires a railing or a balustrade for safety.

To relate a deck visually to a historic building, the structural framing should be screened with traditional materials such as skirt boards, lattice, masonry panels, or dense evergreen plantings. Because a deck is a contemporary feature, detailing it to duplicate the architectural detailing of the historic building is usually unwise. Instead, simple balustrades and other elements that reflect the materials and the proportions of the building and the district are appropriate.

4.1 Decks: Guidelines

.1 Locate and construct decks so that the historic fabric of the structure and its character-defining features and details are not damaged or obscured. Install decks so that they are structurally self-supporting and may be removed in the future without damage to the historic structure.

.2 Minimize the visibility of new residential decks from the street by introducing them in inconspicuous locations, usually on the building's rear elevation and inset from the rear corners.

.3 Design and detail decks and associated railings and steps to reflect the materials, scale, and proportions of the building.

.4 In rare occasions where it is appropriate to site a deck in a location visible to the public right-of-way (i.e. the side of a building), it should be treated in a more formally architectural way. Careful attention should be paid to details and finishes, including painting or staining the deck's rails and structural support elements in colors compatible with the colors of the building.

.5 Align decks generally with the height of the building's first-floor level. Visually tie the deck to the building by screening with compatible foundation materials such as skirt boards, lattice, masonry panels, and dense evergreen foundation plantings.

.6 Locate new decks so they do not require removal of a significant building element or site feature such as a porch or a mature tree.

.7 Ensure that new decks are sited and designed so they do not detract from the overall historic character of the building or the site.

.8 Design new decks to be of a size and scale that does not significantly change the proportion of original built area to open space for a specific property.

.9 It is appropriate to implement a tree protection plan prior to the commencement of construction activities.

A carefully detailed deck stairway.

4.2 Additions to Historic Buildings

A sensitively designed second-story addition to the front side elevation of this residence projects slightly beyond the screened porch over which it sits.

This contemporary rear addition with deck has been successfully differentiated from its principal structure, yet is compatible with the structure in design, materials, and details.

This upper floor attic addition echoes the design details of the original bungalow while respecting and retaining the original roof ridgeline and eaves.

Over the life of a building, its form may evolve as additional space is needed or new functions are accommodated. Many buildings in Raleigh's historic districts and some landmarks reflect their history through the series of previous alterations and additions that they exhibit. Consequently, such changes are significant to the history of the building and the district as they tell the story of the building's changes over time. Traditionally, additions were built onto the rear of a building and stepped in from the side walls as they extended the depth of the building to gain additional living area. Other times, side or rear porches were enclosed to become conditioned space. Such additions are easy to discern because they extend beyond the original building footprint with changes in wall planes and, often, rooflines.

New additions are appropriate as long as they do not destroy historic features, materials, and spatial relationships that are significant to the original building and site. Further, new additions should be differentiated from the original building and constructed so that they can be removed in the future without damage to the building.

Things to Consider As You Plan

New additions should never compromise the integrity of the original structure or site either directly through destruction of historic features and materials or indirectly through their location, size, height, or scale. The impact of an addition on the original building can be significantly diminished by locating it on the least-character-defining elevation and by keeping it deferential in volume. It should never overpower the original building through height or size. The form, design, relationship of openings, scale, and selection of materials, details, colors, and features of proposed new additions should be reviewed in terms of compatibility with the original building.

Although designed to be compatible with the original building, an addition should be discernible from it. For example, it can be differentiated from the original building through a break in roofline, cornice height, wall plane, materials, siding profile, or window type.

The impact of an addition on the building site must be considered as well. The addition should be designed and located so that significant site features, including mature trees, are not lost. The size of the addition should not overpower the site or dramatically alter its historic character.

4.2 Additions to Historic Buildings: Guidelines

.1 Construct additions, if feasible, to be structurally self-supporting to reduce any damage to the historic building. Sensitively attach them to the historic building so that the loss of historic materials and details is minimized.

.2 Design additions so that the overall character of the site, site topography, character-defining site features, trees, and significant district vistas and views are retained.

.3 Survey in advance and limit any disturbance to the site's terrain during construction to minimize the possibility of destroying unknown archaeological resources.

.4 Protect large trees and other significant site features from immediate damage during construction and from delayed damage due to construction activities, such as loss of root area or compaction of the soil by equipment. It is especially critical to avoid compaction of the soil within the critical root zone.

.5 It is appropriate to implement a tree protection plan prior to the commencement of construction activities.

.6 Locate a new addition on an inconspicuous elevation of the historic building, usually the rear one.

.7 Limit the size and the scale of an addition in relationship to the historic building so that it does not diminish or visually overpower the building.

.8 Design an addition to be compatible with the historic building in mass, materials, color, and relationship of solids to voids in the exterior walls, yet make the addition discernible from the original.

.9 Design additions so that the placement, configuration, materials, and overall proportion of windows and doors are compatible with those of the historic building. Select exterior surface materials and architectural details that are compatible with the existing building in terms of composition, module, texture, pattern, and detail.

.10 It is not appropriate to construct an addition if it will detract from the overall historic character of the principal building and the site, or if it will require the removal of a significant building element or site feature.

.11 It is not appropriate to construct an addition that significantly changes the proportion of original built mass to open space on the individual site.

Site features should be considered an integral part of a project when planning additions to buildings.

4.3 New Construction of Primary Buildings

New construction within a historic district can enhance the existing district character if the proposed design and its siting reflect an understanding of and a compatibility with the distinctive character of the district setting and buildings. In fact, the introduction of a compatible but contemporary new construction project can add depth and contribute interest to the district. It also can fill in the "gaps" in historic fabric from prior building losses.

This new residence achieves compatibility with its Oakwood neighbors through similarities in height, mass, proportion, and materials.

The compatible design of this new residence on a corner lot echoes the massing and the details of nearby Queen Anne–style structures.

Sensitive siting and massing of the condominium complex at New Bern Place make this large-scale project compatible with the scale and the character of its historic context.

Things to Consider As You Plan

The compatibility of new site development with the district setting depends on its compatibility with characteristic district features as well as the retention of the specific site's topography and character-defining site features. The descriptions and guidelines included in Section 2, Site and Setting, should be useful in determining the compatibility of proposed site development within a historic district. The guidelines for various site features, including driveways, fences, lighting, garages, and plantings, apply to both existing site features and proposed development. Because buildings within the historic districts generally display a clear consistency in setback, orientation, spacing, and distance between adjacent buildings, the compatibility of proposed new construction siting should be reviewed in those terms as well as in terms of the special character essay for the specific district.

The success of new construction within a historic district does not depend on direct duplication of existing building forms, features, materials, and details. Rather, it relies on understanding what the distinctive architectural character of the district is. Infill buildings must be compatible with that character. The special character essays for each historic district and the local landmark designation reports are excellent references for understanding the relevant character and context. Contemporary design generated from such understanding can enrich the architectural continuity of a historic district.

In considering the overall compatibility of a proposed structure, its height, form, massing, proportion, size, scale, and roof shape should first be reviewed. A careful analysis of historic buildings surrounding the site can be valuable in determining how consistent and, consequently, how significant each of these criteria is. The overall proportion of the building's front elevation is especially important to consider because it will have the most impact on the streetscape. For example, if the street facades of most nearby buildings are vertical in proportion, taller than they are wide, then maintaining the vertical orientation of the building facade will result in a more compatible design. A similar study of materials, building features, and details typical of existing buildings along the streetscape, block, or square will provide a vocabulary to draw on in designing a compatible building. Beyond the obvious study of prominent building elements such as porches and storefronts, particular attention should be given to the spacing, placement, scale, orientation, and size of window and door openings as well as the design of the doors and the windows themselves. Compatibility at the building skin level is also critical. Certainly the selection of appropriate exterior materials and finishes depends on an understanding of the compatibility of proposed materials and finishes in composition, scale, module, pattern, texture, color, and sheen. Section 3, Changes to the Building Exterior, also provides pertinent information on traditional materials, features, and details.

The incorporation of contemporary sustainability principles in new construction and related landscaping is encouraged within the historic districts, including retaining and protecting the critical root zone of mature trees on sites and the minimizing of ground disturbance.

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4.3 New Construction of Primary Buildings: Guidelines

.1 Site new construction to be compatible with surrounding historic buildings that contribute to the overall character of the historic district in terms of setback, orientation, spacing, and distance from adjacent historic buildings.

.2 Design new construction so that the overall character of the site, site topography, character-defining site features, trees, and significant district vistas and views are retained.

.3 Evaluate in advance and limit any disturbance to the site's terrain during construction to minimize the possibility of destroying unknown archaeological resources.

.4 Protect large trees and other significant site features from immediate damage during construction and from delayed damage due to construction activities, such as loss of root area or compaction of the soil by equipment. It is especially critical to avoid compaction of the soil within the critical root zone.

.5 It is appropriate to implement a tree protection plan prior to the commencement of construction activities.

.6 Conform to the design guidelines found in Section 2 regarding site and setting in developing a proposed site plan.

.7 Design new buildings to be compatible with surrounding buildings that contribute to the overall character of the historic district in terms of height, form, size, scale, massing, proportion, and roof shape. The height of new buildings should generally fall within 10% of well-related nearby buildings.

.8 Design the proportion of the proposed new building's front facade to be compatible with the front facade proportion of surrounding historic buildings.

.9 Design the spacing, placement, scale, orientation, proportion, and size of window and door openings in proposed new construction to be compatible with the surrounding buildings that contribute to the special character of the historic district.

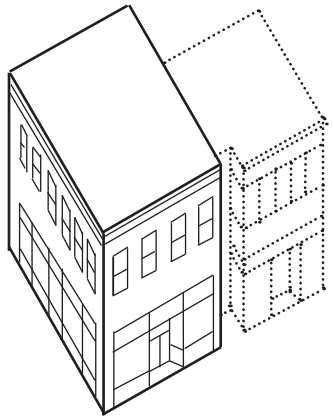
.10 Select materials and finishes for proposed new buildings that are compatible with historic materials and finishes found in the surrounding buildings that contribute to the special character of the historic district.

.11 Design new buildings so that they are compatible with but discernible from historic buildings in the district.

Compatible contemporary infill.

4.4 Urban Commercial Additions

New additions to commercial properties within both the Downtown Overlay District (DOD) and the Historic Overlay District (HOD) require thoughtful analysis of their specific downtown context and an understanding of the visual impact the addition will have on the perceived experience of the downtown pedestrian. Building height, form, and the alignment of architectural features from one building to the next contribute to the sense of order and create a visual continuity throughout the downtown. Consideration must also be given to the visual impact an addition has on the character of the historic district as perceived from outside the downtown historic district.

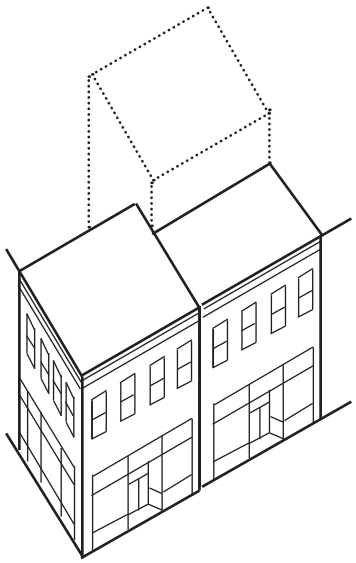


Maintaining the height and the alignment of architectural features such as storefronts, upper story windows and cornices in an addition will continue the visual continuity of the streetscape.

Things to Consider As You Plan

Many historic commercial buildings in downtown are three to four stories in height but there are also some one and two story historic commercial buildings. This variation makes it especially important to look at adjacent and nearby historic buildings, particularly those within the street block, when planning additions to buildings. The height and massing of additions should never overpower or compromise the integrity of the original building or site or the ability to perceive the district's historic sense of time and place. The impact of an addition on a historic building can be significantly diminished by locating it on the least character-defining elevation, setting it back from the street facade, and by keeping it deferential in volume and height.

It is especially important that additions do not interrupt the facade continuity of a downtown block. Building width, height, and setback should be consistent with well-related nearby buildings and structures and the pattern of the build-to line should be kept consistent for the entire length of a block to maintain continuity. Locating an addition within the interior of a city block so it does not front the street is one way to increase commercial square footage without disrupting the streetscape. In midblock locations, an addition may be a few stories higher than the original building as it steps back from the build-to line if the reverse setback limits its visibility. For additions that do front the street, their height should not be noticeably higher or lower than well-related buildings. In fact, the height variation at the build-to line should not exceed 10%. Additional height behind the build-to line can be accommodated by the use of design details that reduce the perceived building height and mass such as stepbacks, fenestrations, bay patterns, and street level details.



Additions to the rear of midblock buildings can gain additional height if they step back from the build-to line enough to be out of the sightlines of pedestrians on the street.

An addition constructed on property adjacent to a historic commercial building may be considered as a separate infill building and the proposed design should follow the guidelines for urban commercial infill in 4.5. The special character essays in the Appendix are excellent references for ensuring the scale, facade features, materials and details of the addition are compatible with the historic building and the special character of the district.

4.4 Urban Commercial Additions: Guidelines

.1 Conform to the design guidelines found in Section 4.2 regarding all other aspects of additions.

.2 Design commercial additions with an architectural and urban scale compatible with the character of the district and using details that contribute to the building's integration into the character of the site and district including: cornice lines, belt courses, fenestration bands, height, material selection, roof form, and street walls.

.3 Design commercial additions so that the pedestrian experience of the character of the district's historic sense of time and place is retained.

.4 Limit the height of additions in relationship to historic buildings so they do not diminish or visually overpower the historic building.

.5 Design additions to be compatible with the historic building in perceived height from the street, yet differentiate the addition from the historic building. Additions constructed on an site adjacent to a historic building may be treated as a separate or infill building.

.6 Design rooftop additions to be subordinate to historic buildings, compatible and proportional, such that the massing and placement maintains the pedestrian experience of the district's historic sense of time and place. Generally, set back rooftop additions from the primary facade of the building. Set back new floors substantially so that the original building height and facade are clearly distinguishable from the new upper floor(s) as seen from the street.

.7 Generally limit the height of additions on the site of a contributing building as of the date of district designation to within 10% of the height of well-related nearby historic buildings.

.8 At the build-to line, generally limit the height of additions on a vacant lot and on sites of non-contributing buildings as of the date of district designation to within 10% of the height of well-related nearby buildings. Accommodate additional height behind the build-to line through the use of design details that reduce the perceived building height and mass including: stepbacks, fenestration, bay patterns, and street level details.

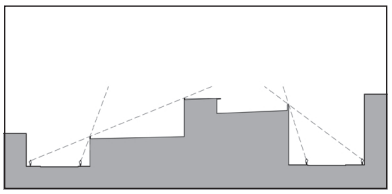
.9 Reduce the perceived height and mass of additions by relating buildings to the human scale through the use of architectural elements, proportion, materials, and surface articulation. Maintain a distinction between the upper levels and the street level. Select exterior materials that have a texture, pattern, and scale similar to those in the historic district.

.10 Incorporate the top of the building addition with the overall building design. Substantially setback additional building height from the primary street facade to preserve the pedestrian scale and urban proportions of the building.

.11 Regardless of the overall mass or height of an addition, maintain consistent massing and perceived building height at the street level.

.12 It is not appropriate to construct half-level or split-level first floors that extend both above and below the sidewalk grade.

The rooftop addition to the Carolina Trust Building is setback so far from the Fayetteville Street facade that it cannot be seen from the street. The cross section drawing below illustrates the shift in building height midblock. .



4.5 Urban Commercial Infill

This contemporary downtown building anchors the street corner and fits into the streetscape with its compatible height, appropriate breaks in its facade, and choice of materials.

The side elevation of this contemporary building also features a stepped wall clad in brick veneer, projecting corner sign, and a projecting glazed oculus.

New commercial construction within both the Downtown Overlay District (DOD) and the Historic Overlay District (HOD) requires careful consideration of its downtown context because in an urban setting buildings define the public space. New commercial construction in an urban historic district will be compatible if it reinforces the space defined by the surrounding contributing buildings.

Downtown Raleigh has a pedestrian-friendly scale to its buildings and streetscapes. Because of this for infill buildings, the building form, its fenestration, and its relationship to the street as perceived by the pedestrian are critical to maintaining the character of the district. Building height, form, and the alignment of architectural features from one building to the next contribute to the sense of order and create a visual continuity throughout the downtown. Less critical, but still important, is the impact an infill building has on the character of the historic district as perceived from outside the downtown historic district.

One of the most variable elements of a commercial building over its life is the street level facade and this variability can be key to the commercial success of the tenant within and the pedestrian experience without. The design of the facade must accommodate retention of historic elements and reinforce the character of the historic district. Respecting the urban form characteristic of the district is more important than replicating its architectural form or style. In fact, the introduction of a compatible, contemporary infill project can add depth and vitality to the district.

Things to Consider As You Plan

Many historic commercial buildings in downtown are three to four stories in height but there are also some one or two story historic commercial buildings. This variation makes it especially important to look at adjacent and nearby historic buildings, particularly within the street block, when planning infill buildings. For sites for which context is not provided due to the absence of adjacent contributing buildings, context should be drawn from the overall historic architectural character of the entire district. The special character essays in the appendix are excellent references for understanding the relevant character and context.

The height and massing of infill construction should never overpower or compromise the integrity of the original building or site or the ability to perceive the district's historic sense of time and place. To maintain the facade continuity of a downtown block, building width, height, and setback should be consistent with well-related nearby buildings and structures and the pattern of the build-to line should be kept consistent for the entire length of a block to maintain continuity.

Taller or wider infill buildings can use techniques to reduce their perceived mass. For example a change in material or texture above the first or second floor can help to reinforce the street-level base (scaled to humans) while diminishing the portion above to reduce the perceived height. Likewise, the overall length of a facade can be broken by repeating the rhythm of breaks in well-related nearby historic buildings. Other techniques include the use of aligning cornice lines above the second or third floor, incorporation of wall place projections or recesses, or inclusion of a repeating pattern using color, texture, or materials. Compatibility may be enhanced by aligning such features with well-related nearby buildings. Whatever the approach, the level and quality of detail within the nominal sightlines and the areas most in view of the pedestrian are of utmost importance in preserving the scale and character of the district.

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4.5 Urban Commercial Infill: Guidelines

.1 Conform to the design guidelines found in Section 4.3 regarding all other aspects of new construction.

.2 Design commercial infill with an architectural and urban scale compatible with the character of the district and using details that contribute to the building's integration into the character of the site and district including: cornice lines, belt courses, fenestration bands, height, material selection, roof form, and street walls.

.3 Design commercial infill so that the pedestrian experience of the character of the district's historic sense of time and place is retained.

.4 Generally limit the height of infill construction on the site of a contributing building as of the date of district designation to within 10% of the height of well-related nearby historic buildings

.5 At the build-to line, generally limit the height of new construction on a vacant lot and on sites of non-contributing buildings as of the date of district designation to within 10% of the height of well-related nearby buildings. Accommodate additional height behind the build-to line through the use of design details that reduce the perceived building height and mass including: stepbacks, fenestration, bay patterns, and street level details.

.6 Reduce the perceived height and mass of new construction by relating buildings to the human scale through the use of architectural elements, proportion, materials, and surface articulation. Maintain a distinction between the upper levels and the street level. Select exterior materials that have a texture, pattern, and scale similar to those in the historic district.

.7 Incorporate the top of the infill building with the overall building design. Substantially setback additional building height from the primary street facade to preserve the pedestrian scale and urban proportions of the building.

.8 Regardless of the overall mass or height of infill construction, maintain consistent massing and perceived building height at the street level.

.9 It is not appropriate to construct half-level or split-level first floors that extend both above and below the sidewalk grade.

.10 It is not appropriate to create a monolithic effect to the building exterior either vertically or horizontally, except when characteristic of a district.

At street level, the corner of this building is recessed on the diagonal. yet a hefty concrete column establishes the building corner. Above it, the two brick veneer walls stop just short of meeting in the corner—another detail that differentiates this building from historic buildings in the downtown.

4.3 New Construction of Primary Buildings

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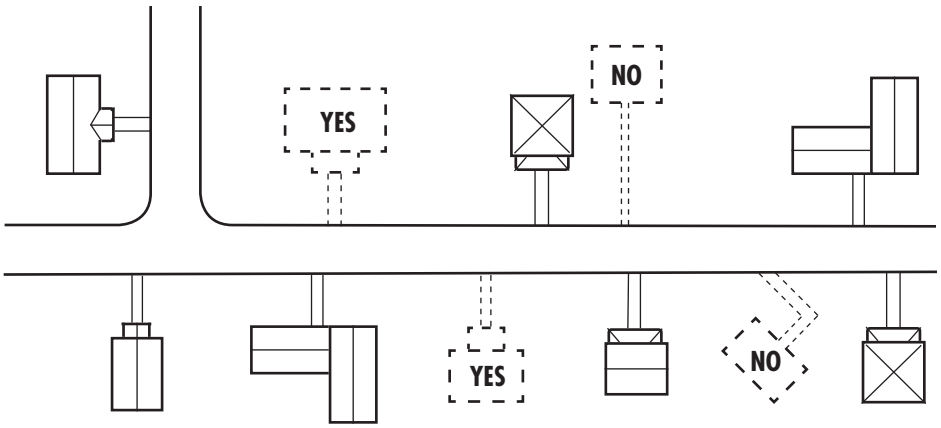
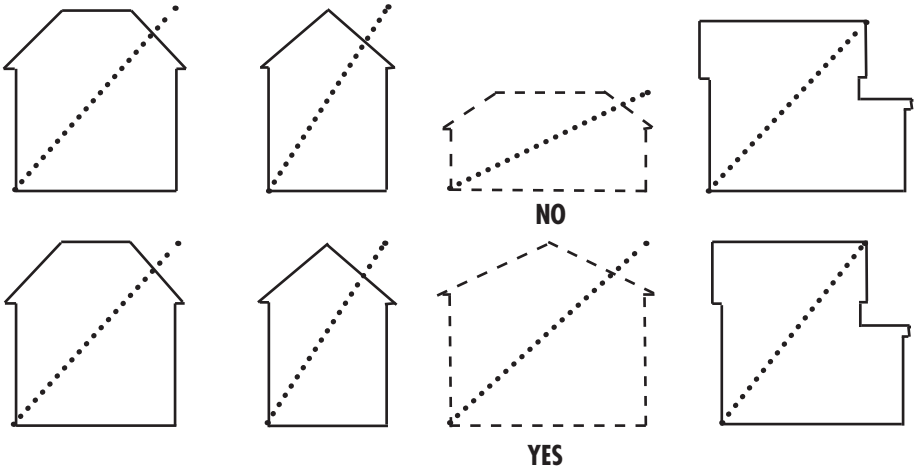
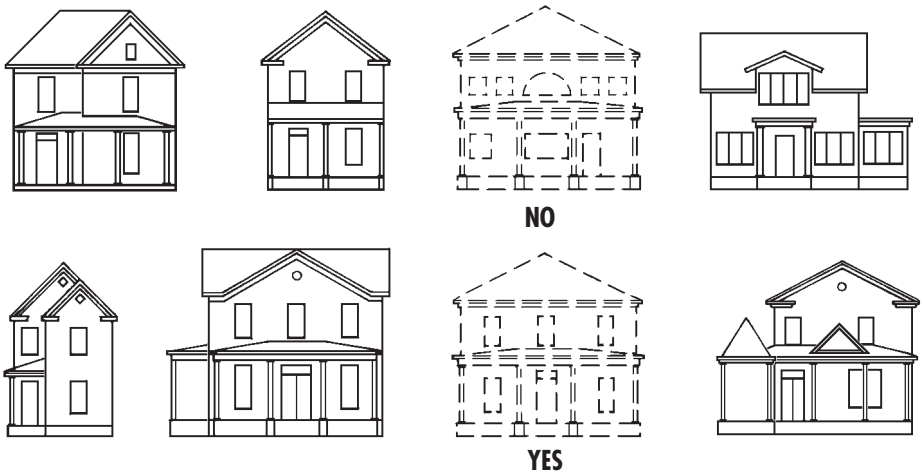


The proposed siting for new buildings should be compatible with the setback, orientation, and spacing of existing district buildings. Inconsistent spacing and setback make the proposed siting of a new building inappropriate. A clear change in orientation to the street makes the proposed siting of the house on the lower right inappropriate as well.



Proposed new buildings should be compatible in height and proportion of front elevation with surrounding buildings that contribute to the district character. The dotted diagonal lines indicate the implied proportion of the street facades. The proposed house on the top row is clearly lower in height and its facade proportion is horizontal instead of vertical like the others.



The windows and the doors for proposed new buildings should be compatible in proportion and pattern with the windows and the doors of surrounding buildings that contribute to the district character. The center windows for the proposed house on the top row are inconsistent in proportion with other district windows and the placement of the front door is also inconsistent with the pattern of center front doors for houses of similar form.

4.5 Downtown Urban Commercial Infill

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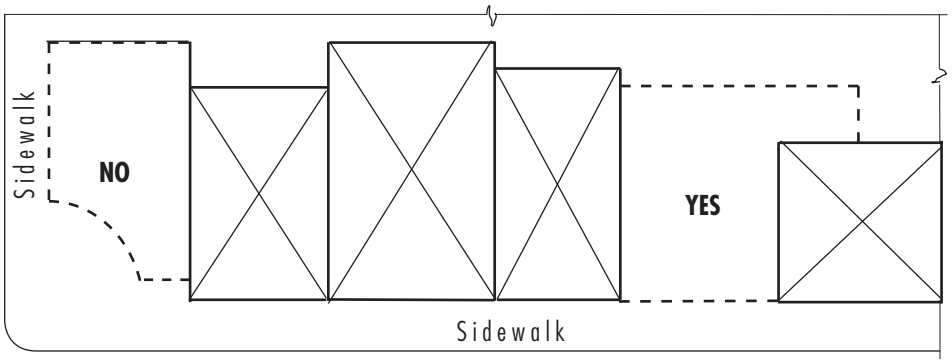
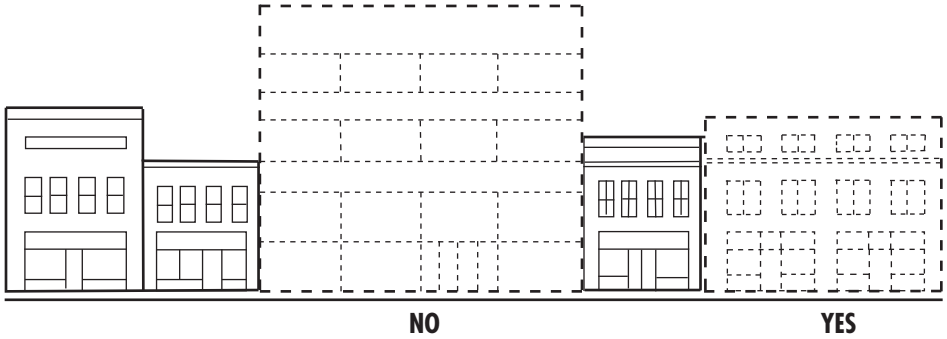
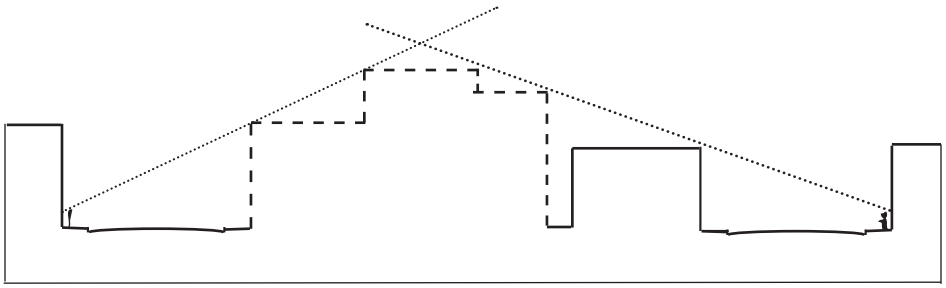


The proposed siting for new commercial infill buildings should be compatible with the setback, orientation, and spacing of well-related nearby buildings. Above, the proposed building on the right aligns with the setback of adjacent buildings and completely fills the "gap" between the adjacent buildings. However, the proposed building on the left is not appropriate. It doesn't anchor the block corner because its footprint pulls back significantly from the build-to line of the streetscape.



The proposed commercial infill building in the center of the streetscape above significantly exceeds the height of well-related nearby buildings at the build-to line. Its horizontal bands of upper story windows and the monumental height of the fully glazed first floor, are also not compatible with the scale and proportion of the adjacent windows and storefronts. The height of the proposed infill building on the right is compatible. Although twice as wide as well-related nearby buildings, the implied subdivision of its facade into two bays and the scale and proportion of its windows and storefronts are also compatible with the special character of the streetscape. Additional height may be accommodated behind the build-to line as illustrated below.



The diagram above is a cross section through the middle of a commercial block. It illustrates how an infill building can align with the height of well-related nearby buildings at the build-to line of the sidewalk but increase in height as it steps back towards the center of the block, out of the sightline of pedestrians in the public right of way on both sides of the block.