



TECHNICAL APPENDIX C

FOCUS AREAS

INTRODUCTION

This appendix presents the results of several focus area studies conducted as part of the HoCo By Design General Plan update. The concept plans, illustrations, and precedent images presented in this appendix depict redevelopment and infill approaches in different settings. Focus areas presented include New Town Columbia, Gateway, and Rural Crossroads.

The illustrative design concepts are supplementary to the design-related policies presented in the Quality By Design chapter, as well as the character area descriptions presented in the Growth and Conservation Framework chapter and the Character Areas technical appendix. The concepts illustrate hypothetical approaches and do not represent proposals for development.

Information presented in this appendix should inform different implementation activities that will follow adoption of the General Plan, including, but not limited to, forthcoming regulation updates, a master plan for Gateway, and/or new design guidelines and character-based or form-based codes.

The Design Process

The design process for these focus areas varied; a brief summary of the process used for each area follows.

Columbia: New Town and Gateway

A series of design sessions for the New Town and Gateway areas in Columbia were held to study community character and possible approaches to redevelopment, should it occur. Each event built upon the previous effort to do the following: 1) identify design principles important for different areas; 2) present draft illustrative design concepts for comments, based on prior community feedback; and 3) present final illustrative design concepts.

Rural Crossroads

The HoCo By Design consultant team created two illustrative concepts to communicate potential design approaches for the Rural Crossroads character area. Public comments from a community workshop in the Rural West influenced some of the design principles depicted in the illustrations.



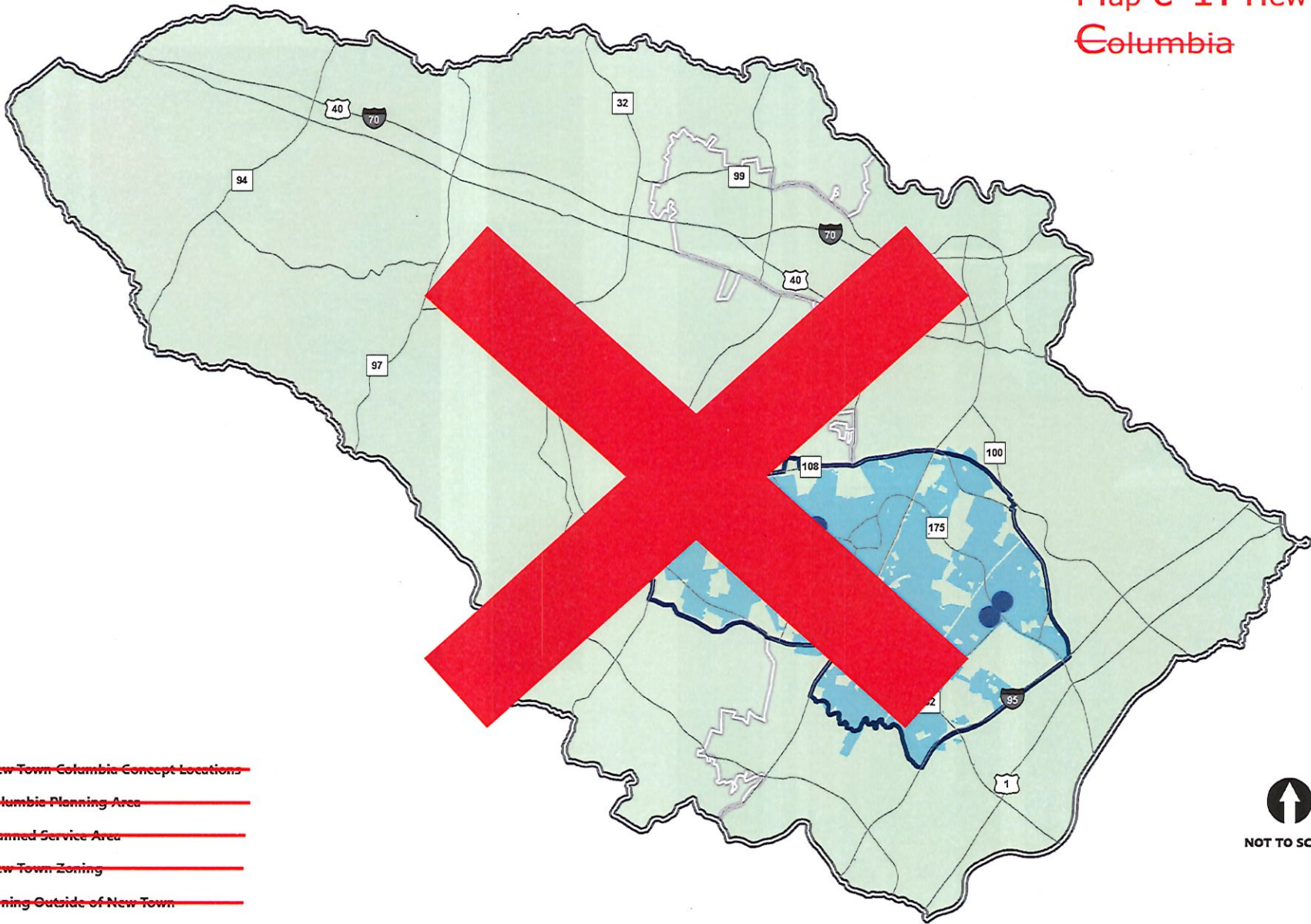
New Town Columbia

As more fully described in the Quality By Design chapter, Columbia is unique in Howard County as a large, planned "New Town" established by developer James Rouse.

The design concepts presented on the following pages illustrate hypothetical approaches to redevelopment and infill development. They comprise a variety of settings in Columbia: apartment complexes, parking lots, village centers, and commercial corridors. Design and planning principles illustrated in the concepts were influenced by ideas and input provided by participants in the New Town Columbia Design Sessions.



Map C-1: New Town Columbia



Apartment Complex Redevelopment Illustrative Concept



The concept illustrates how redevelopment of an older apartment complex could provide a variety of housing options organized around a meaningful public realm network that fosters a sense of community.

Design and Planning Principles Illustrated in the Concept

1. **Greater Housing Options**
 - a. Aging multi-family housing is replaced with a mix of housing types in the same connected community that includes many of the missing middle typologies: duplexes, triplexes, quadplexes, and live-work units.
2. **Designed with the Grade**
 - a. To maximize open space, the natural grade is used to incorporate some parking underneath multi-family structures.
 - b. Buildings are designed to fit the site's grade.
3. **More Meaningful Open Space**
 - a. In-place-of "left over" Preserve garden-style green space and large setback areas with frontage to the road as an important design feature of New Town, -the design consolidates a significant amount of open space into a useable village green community gathering space.
 - b. Public frontage for the village green is highly visible and accessible.
 - c. Buildings front onto open space, providing "eyes on the park" and helping activate the space.
 - d. Open spaces accommodate a mix of active and passive recreation.
4. **Enhanced Natural Systems and Energy Efficiency**
 - a. Natural open space corridors extend into the redevelopment site.
 - b. Stormwater management serves as an aesthetic and educational feature of the site design.
 - c. Tree canopy is increased and new woodland plantings extend into the site to connect to the broader woodland system.
 - d. Beneficial landscapes—including meadows, limited mow areas, and pollinator gardens—promote habitat diversity.
 - e. Mowed lawns are reserved for active open spaces and provide maintained edges to highlight that unique landscape typologies are intentional.
 - f. Solar panels and energy efficient or green building design may be used to reduce carbon footprints.
5. **Multi-modal Connections**
 - a. New street connections improve connectivity to destinations, including village centers.
 - b. Pathway networks link natural and useable open spaces with an internal walkable street network.
 - c. Complete streets support multiple modes of travel and provide bicycle amenities in open spaces.
6. **Sensitivity to Context and Development Transitions**
 - a. Taller and larger buildings are located adjacent to areas with similar heights or adjacent to woodlands.
 - b. Building heights and massing transition are sensitive to adjacent neighborhoods.



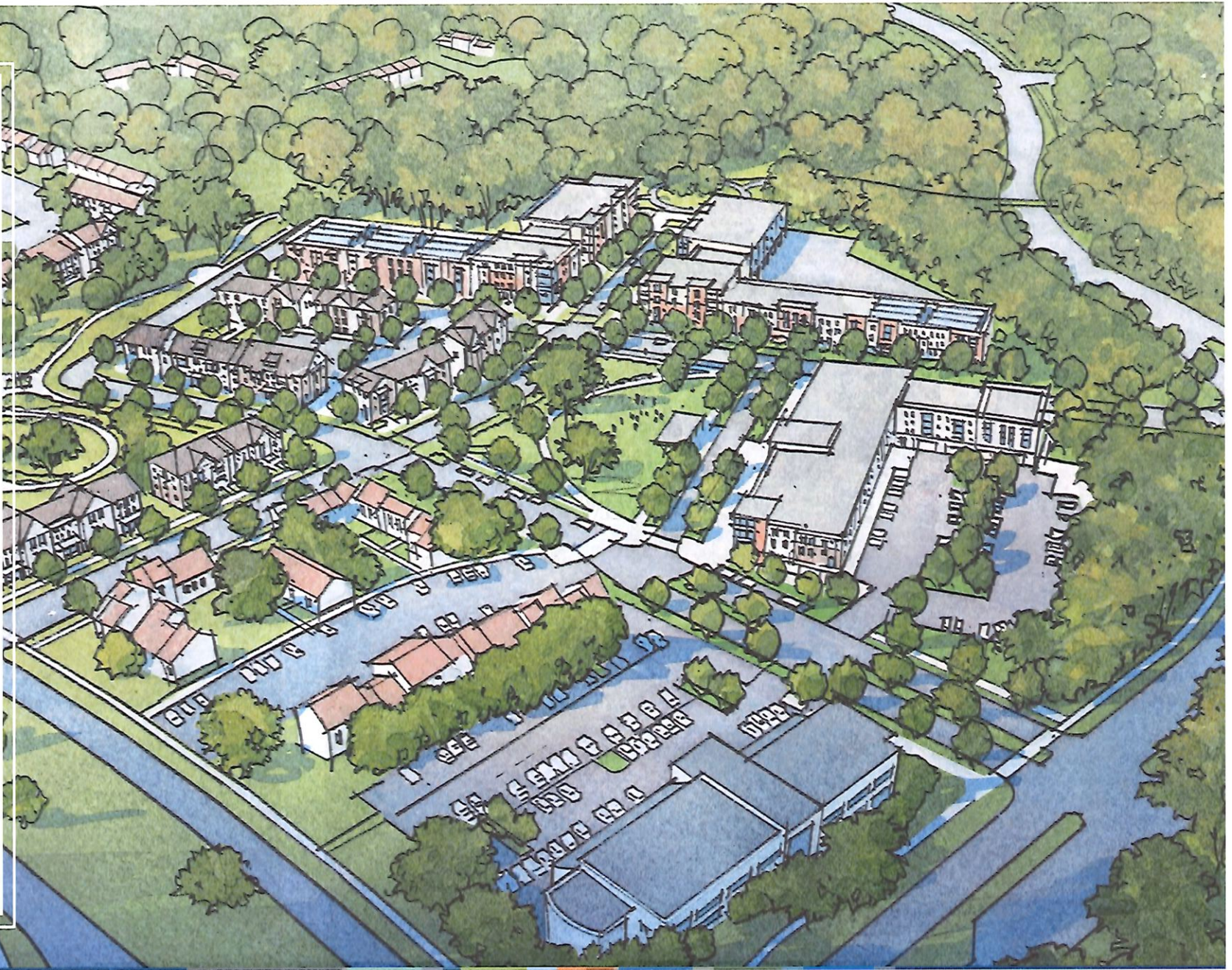
The concept plans and drawings in this appendix illustrate hypothetical approaches to redevelopment and infill, and do not represent proposals for development.

The illustration highlights one of many possible approaches to redevelop an aging apartment complex in Columbia so that it includes a variety of missing middle housing choices.

In this concept drawing, the existing multi-unit stacked apartments are razed and the site is reimagined with a variety of housing types mixed throughout the site. The site is oriented toward a comprehensive network of open space that features a large community green as a focal point.

The existing internal street network is extended in multiple directions to better connect portions of the site. The placement of streets, blocks, and buildings takes advantage of changing grades prevalent in some areas of Columbia. To better transition between existing and new residential densities, taller buildings are placed away from existing single-family neighborhoods at the edge of the new community and shorter buildings are placed closer to existing neighborhoods.

The redevelopment enhances environmental health by improving stormwater management, increasing native tree canopy, and creating diverse wildlife habitats. Renewable energy and energy efficient buildings also provide environmental benefits.



The illustration highlights one of many possible concepts to develop a large, active community green for a residential community.

In this concept drawing, the green is large enough to host events for community members and may include formal and informal gathering areas. Residential buildings along the community green help frame the space and provide "eyes on the street" during all periods of the day.



Parking Lot Infill Development Illustrative Concept

The concept illustrates how infill development could de-emphasize the automobile, replace underutilized surface parking lots, and add useable open spaces that reinforce connections to adjacent neighborhoods and the region's open space and pathway network.

Design and Planning Principles Illustrated in the Concept

1. New Land Uses

- Mixed-use buildings contain spaces for smaller format retail or service uses with office or residential above.
- Missing middle housing is introduced.
- Office workers can walk to retail and services, reducing automobile trips.
- Regardless of use, new buildings feature roof forms and massing that transition to adjacent neighborhoods (such as pitched roofs with asphalt shingles).

2. Infill Development

- New buildings anchor intersections and complement the parkway landscape.
- Infill buildings front public spaces and internal streets.
- New buildings and uses located near existing or potential transit/mobility stops support a broader range of mobility options.
- Grade changes are used to provide access to multi-level parking while minimizing its visual impact.
- Building massing, height, and form is complementary to adjacent development.

3. Parkway Frontage Design

- ~~Building and parking structure facades that face parkways are designed to contribute to a positive parkway experience.~~ Parkways are enhanced through continued understated commercial centers.
- Landscape and expanded tree canopy minimize visual impact of parking areas.

4. Enhanced Public Realm

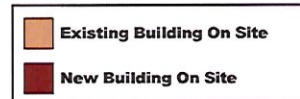
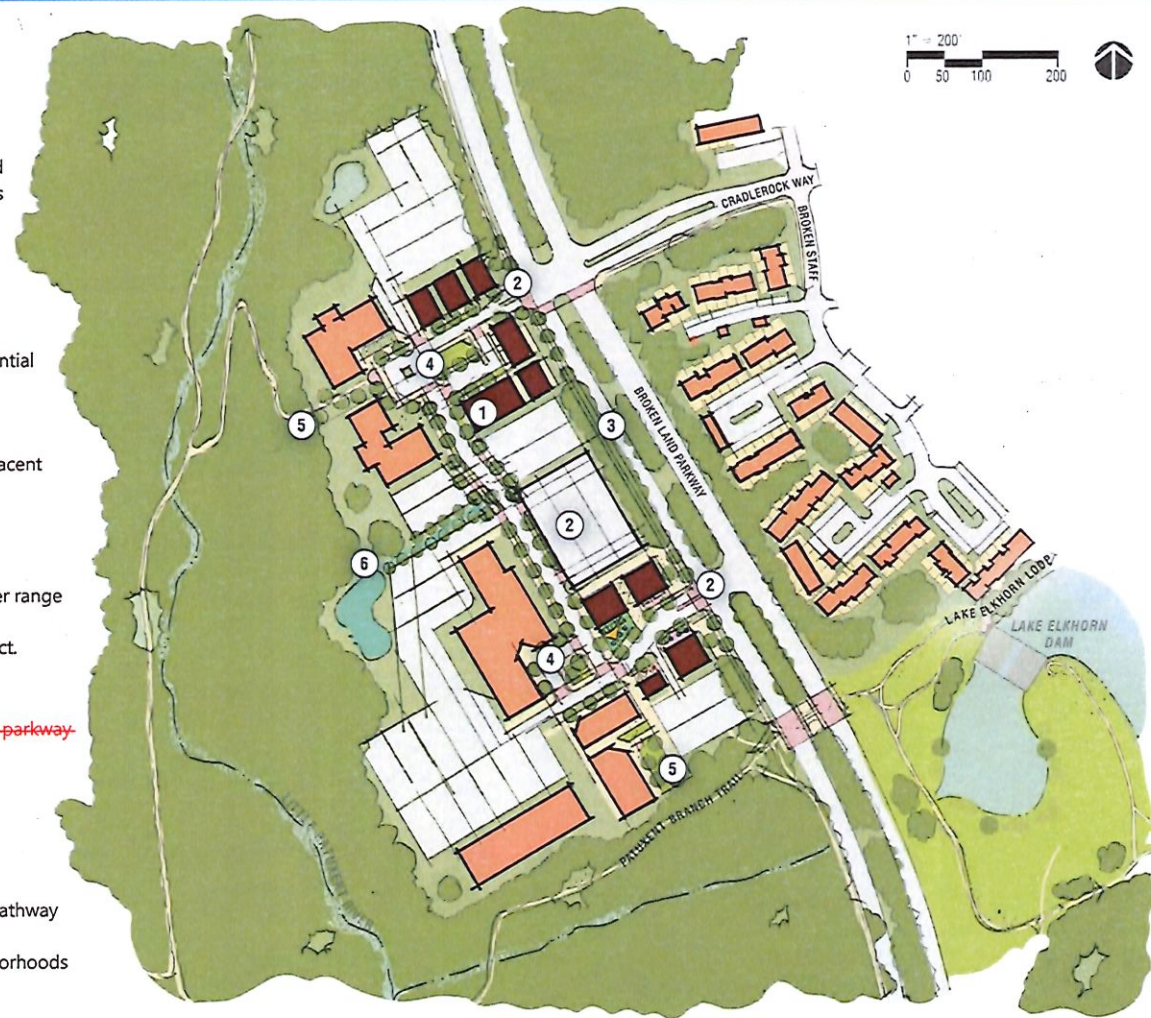
- Meaningful open spaces unite infill development with existing uses.
- Complete streets internal to the redevelopment areas promote walkability among uses.

5. Reinforced Connections

- Clear connections are provided between useable open spaces and the natural open space and pathway systems.
- To promote walkability, connections to nearby village centers, other activity centers, and neighborhoods are reinforced.

6. Enhanced Natural Systems and Energy Efficiency

- Native tree plantings and enhanced stream and wetland buffers improve environmental site conditions and benefit the Green Infrastructure Network corridor that runs to the south of the site.
- Environmental site design practices along internal street networks and throughout the site improve stormwater management.
- Some areas of underutilized parking are replaced with expanded green space and stormwater management.
- Solar panels and energy efficient or green buildings may be used to reduce carbon footprints.

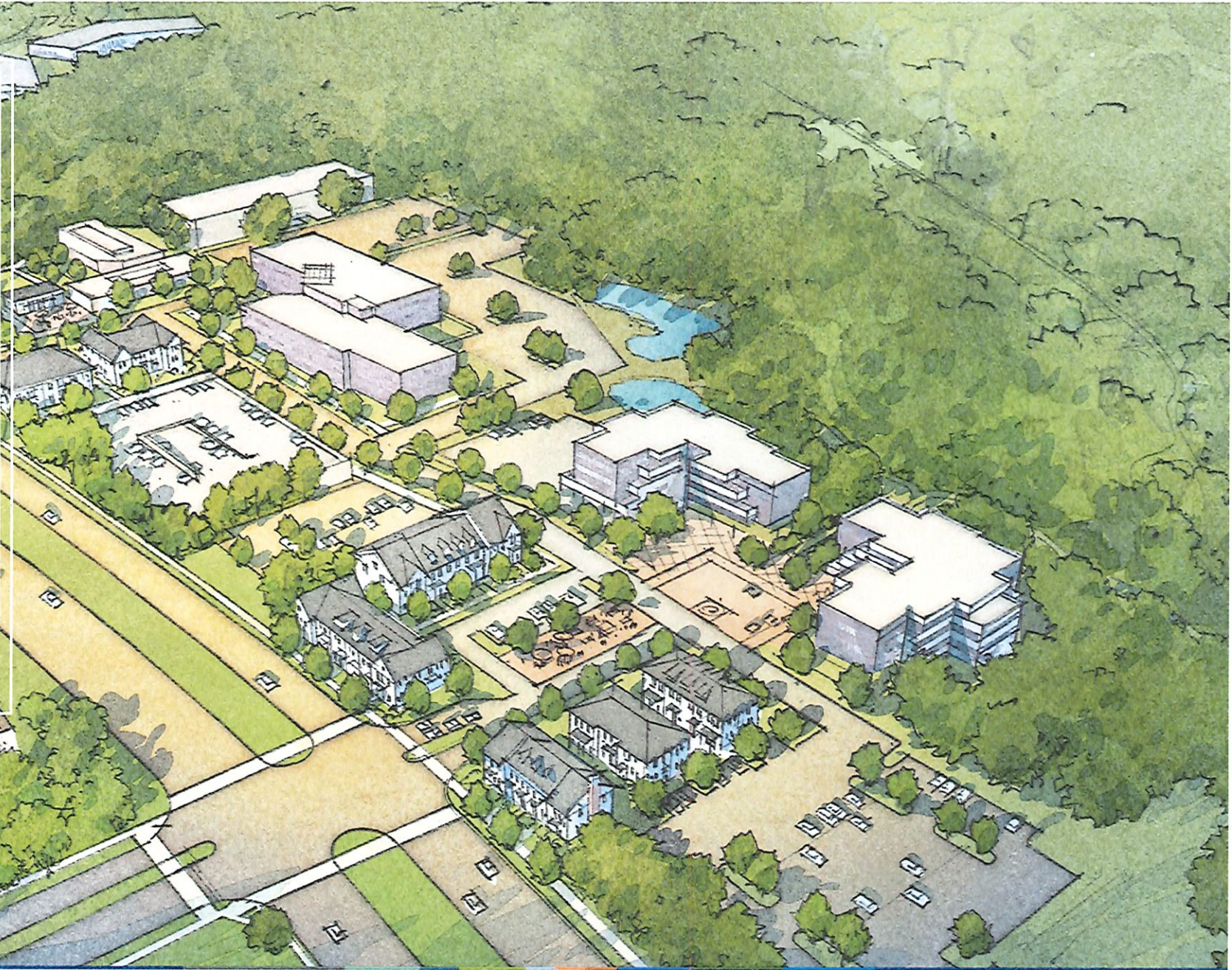


The concept plans and drawings in this appendix illustrate hypothetical approaches to redevelopment and infill, and do not represent proposals for development.

The illustration highlights one of many possible approaches to infill new buildings and open space on surface parking lots, with sensitivity to existing neighborhoods across the street.

In this concept drawing, the large surface parking lot between Broken Land Parkway and the buildings at the Woodmere Office Park is replaced with a mix of residential and small format retail and office uses. A parking deck is added to accommodate parking needs. Small public spaces are added in between buildings.

Reimagining the area respects the parkway character (tree-lined streets) of Columbia with larger setbacks from the road. The building architecture used on the site complements the height, material, and roof design of the buildings in the lakeside neighborhood across the street (bottom left portion of the drawing).



VILLAGE CENTER REDEVELOPMENT ILLUSTRATIVE CONCEPT

The concept illustrates how a village center could be redeveloped with a mix of uses while strengthening connections to open space networks and nearby neighborhoods.

Design and Planning Principles Illustrated in the Concept

1. Open Space Brought to the Forefront

- A community gathering place is created with a visible public edge.
- Connections between usable open spaces and the natural open space/pathway network are improved.
- Stormwater management practices are integrated into the open space design and provide opportunities for interpretation and outdoor education.
- Tree canopy is increased, and lawn is converted to native landscaping, including pollinator gardens.

2. Leveraged Amenities

- Destination uses (restaurant, café, civic) are located where they can leverage the value of views to open space amenities.
- Active uses front open spaces to promote "eyes on the park" and natural surveillance by the users and occupants of those uses.

3. Destinations Created

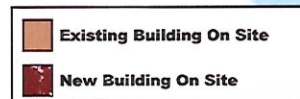
- The village center is established as a visible and meaningful destination along the open space and pathway network and from nearby neighborhoods.
- Multiple destinations are located within the village center, including gathering places adjacent to interfaith centers, places for cultural expression and public art, and an activated public realm along internal street networks.
- Infill development is designed with sensitivity to context in terms of building heights, form, and massing. Building height and mass gradually transition to adjacent lower-scale neighborhoods.

4. Transportation Choices

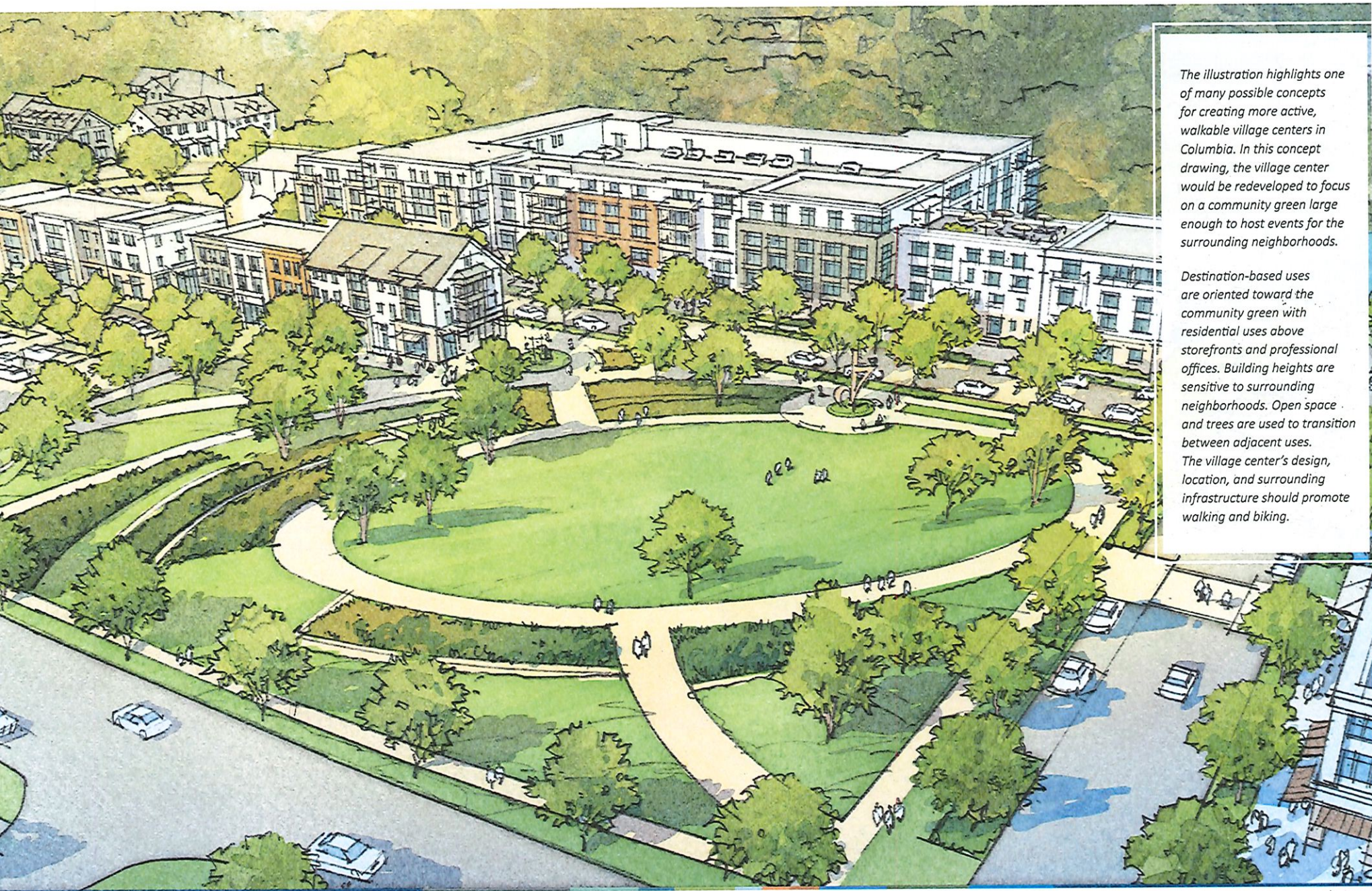
- Multi-modal pathway connections tie the village center into the broader transportation network.
- Complete streets accommodate multiple modes of transportation and green stormwater infrastructure.
- Clear and intuitive connections to adjacent neighborhoods and open spaces are provided.

5. Expanded Land Uses

- To the extent possible, a grocery store presence is maintained or a new anchor is provided.
- Retail and service uses contribute to a vibrant public realm.
- Residential uses support other uses, activate the open spaces, and provide housing options, including multi-family, townhouse, affordable/workforce, and missing middle housing (such as duplexes, triplexes, quadplexes, and live-work units).



The concept plans and drawings in this appendix illustrate hypothetical approaches to redevelopment and infill, and do not represent proposals for development.



The illustration highlights one of many possible concepts for creating more active, walkable village centers in Columbia. In this concept drawing, the village center would be redeveloped to focus on a community green large enough to host events for the surrounding neighborhoods.

Destination-based uses are oriented toward the community green with residential uses above storefronts and professional offices. Building heights are sensitive to surrounding neighborhoods. Open space and trees are used to transition between adjacent uses. The village center's design, location, and surrounding infrastructure should promote walking and biking.

Concept

The concept illustrates how commercial development along corridors can be reimagined to create activity centers that protect and improve the character of the corridor while providing a meaningful place connected to nearby neighborhoods.

Design and Planning Principles Illustrated in the Concept

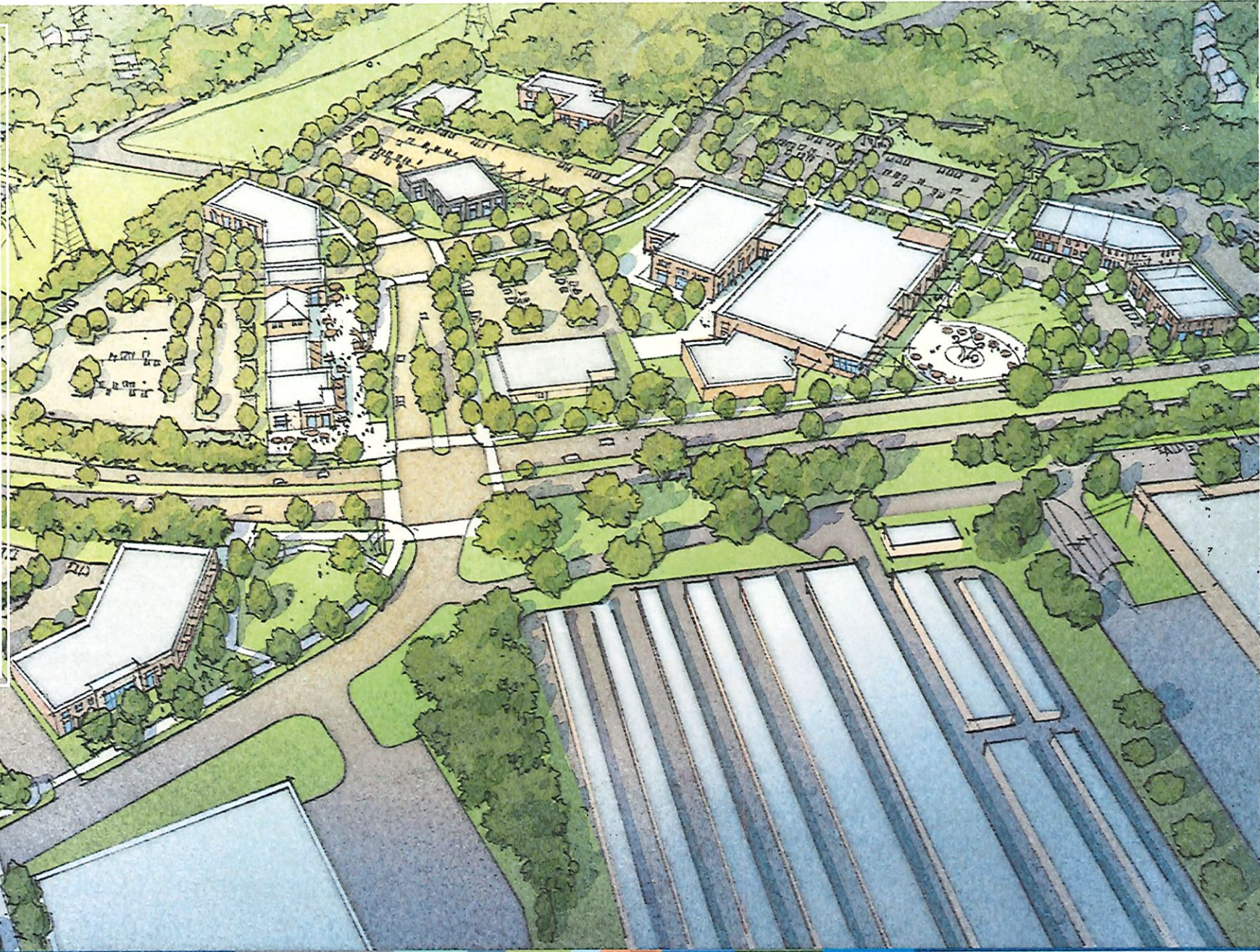
1. Focal Point Established for the Activity Center
 - a. A central gathering space serves as the focal point for the redevelopment area.
 - b. As existing community facilities and retail uses age, they are replaced with new facilities that activate the gathering space and public realm associated with the street network.
2. Expanded Land Uses
 - a. Residential or office uses are located above new first floor retail and may include missing middle housing types.
3. Walkable Public Realm
 - a. New land uses front onto the street and activate an existing street network.
 - b. New internal roads are complete streets that accommodate multiple modes and reinforce connections between land uses.
4. Local Transit and Mobility Options
 - a. Site is designed to anticipate long-term transportation choices (such as local bus, bus rapid transit, autonomous vehicles, bicycle, walking, or other options).
 - b. Land uses include densities that support transit ridership.
 - c. Decommissioned rail lines are converted into new cross-county greenway connectors that provide off-road connections to neighborhoods and nearby employment centers.
5. Parkway Character Enhanced
 - a. Parkway character is maintained with street trees and vegetative landscape to screen parking areas, rear building facades, and service areas.
 - ~~b. Buildings anchor parkway intersections.~~
 - ~~c. b.~~ Where new buildings and land uses about a parkway setback, the center of the development is designed to engage the overall landscape and contribute positively to the parkway character.
6. Future Flexibility
 - a. Surface parking retained through redevelopment allows for future infill development or replacement of surface parking with amenity space.
7. Enhanced Natural Systems and Energy Efficiency (not labeled on concept)
 - a. Environmental site conditions are improved through activities such as tree plantings and enhancements to stream and wetland buffers.
 - b. Environmental site design practices are used along internal street networks and throughout the site to improve stormwater management.
 - c. Some areas of underutilized parking are replaced with expanded green space and stormwater management.
 - d. Solar panels and energy efficient or green buildings may be used to reduce carbon footprints.



The illustration highlights one of many possible concepts for repurposing existing shopping centers as new walkable activity centers.

In this concept drawing, existing buildings on individual lots are reoriented to complement each other, and a connected network of open space is used to unify the site. A small green along Snowden River Parkway provides a focal point for the activity center, and an expanded mix of residential and nonresidential uses keeps the area active for longer periods of the day.

Reimagining the activity center respects the tree-lined parkway character with larger setbacks from the road. Site design elements and investments in infrastructure encourage visitors to park once and walk often after arriving at the center.



COMMERCIAL CORRIDOR INFILL DEVELOPMENT ILLUSTRATIVE CONCEPT

The concept illustrates how moderate infill development can occur on surface parking lots that serve existing suburban shopping centers or office parks; activate new open spaces; and foster connections between land uses and the broader open space/pathway network.

Design and Planning Principles Illustrated in the Concept

1. Strategic Infill Development

- a. New land uses leverage the value of activated space—whether natural open space or community gathering areas.

2. Extended Street Network

- a. New internal streets connect the activity center to surrounding neighborhoods and employment centers, provide internal connections to destinations within the activity center, and offer more options for automobiles, bicyclists, and pedestrians moving around the activity center.
- b. Internal streets are realigned to maximize opportunities for infill development and redevelopment.

3. Enhanced Connections

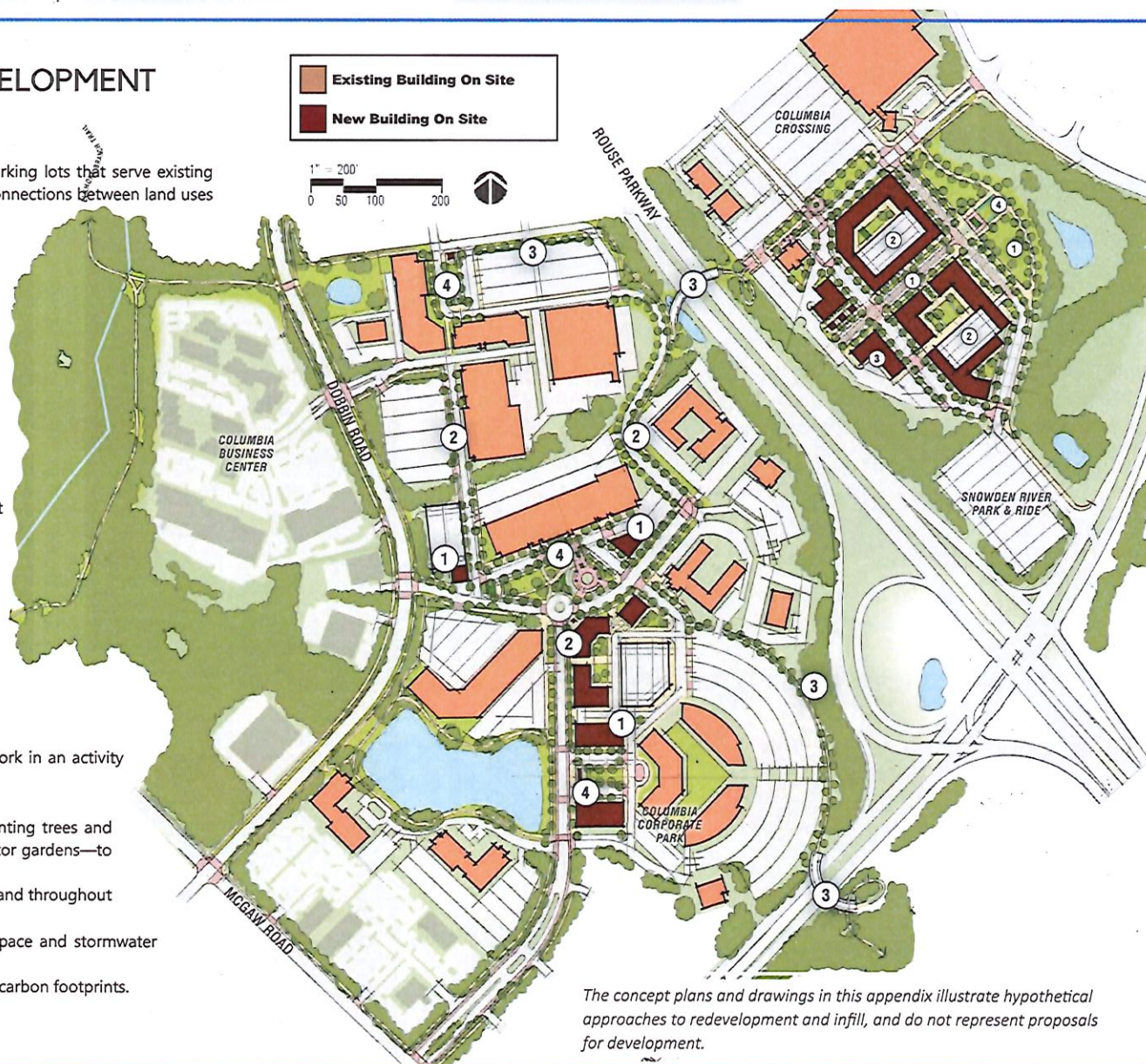
- a. Throughout the activity center, an open space and pathway network is created that connects to a larger regional network.
- b. Employment centers and neighborhoods are linked to new or reimagined activity centers to help reduce the County's dependency on automobiles for short trips.

4. Meaningful Open Spaces

- a. Surface parking lots are replaced with amenity areas where buildings or uses front and activate open spaces.
- b. Destinations and experiences are provided along the entire pathway network in an activity center.

5. Enhanced Natural Systems and Energy Efficiency (not labeled on concept)

- a. Environmental site conditions are improved through activities such as planting trees and beneficial landscapes—including meadows, limited mow areas, and pollinator gardens—to promote habitat diversity.
- b. Environmental site design practices are used along internal street networks and throughout the site to improve stormwater management.
- c. Some areas of underutilized parking are replaced with expanded green space and stormwater management.
- d. Solar panels and energy efficient or green buildings may be used to reduce carbon footprints.

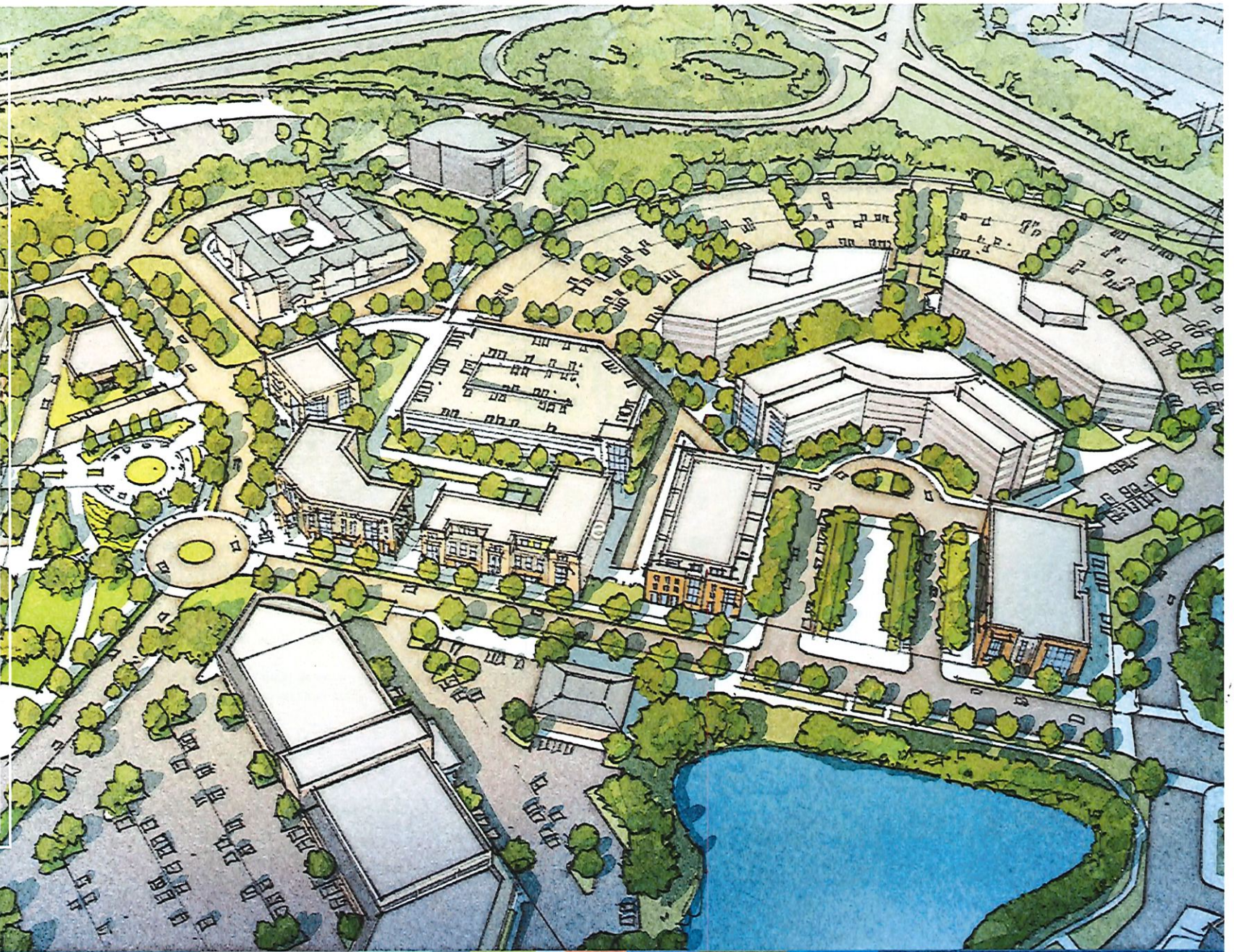


The concept plans and drawings in this appendix illustrate hypothetical approaches to redevelopment and infill, and do not represent proposals for development.

The illustration highlights one of many possible concepts to infill existing office parks with different uses that keep the areas active for longer periods of the day.

In this concept drawing, the existing internal street network is extended in several directions to create a more connected grid of streets that supports non-automobile travel between destinations. A community green provides a focal point for the reimagined activity center. A connected network of open space throughout the center unifies the site and, where appropriate, connects to adjacent development to expand the community's walkshed within and adjacent to the center (see pedestrian bridge over Rouse Parkway on the right side of the drawing).

Over time, changes in transportation technology (such as autonomous vehicles or other technologies that reduce parking demand) may free up more surface parking lots for redevelopment or conversion to green open space.



PARKING LOT REDEVELOPMENT ILLUSTRATIVE CONCEPT

The concept illustrates how large parking lots and underutilized big box uses can be repurposed with mixed-use development organized around an interconnected public realm.

Design and Planning Principles Illustrated in the Concept

1. The Public Realm Serves as an Organizing Element

- An internal Complete Street network is established around which redevelopment can occur.
- A network of meaningful and useable open spaces is introduced along the street network and connected to the broader natural open space system.
- The site is connected to the broader bicycle and pedestrian pathway network to promote mobility options.

2. Infill Development

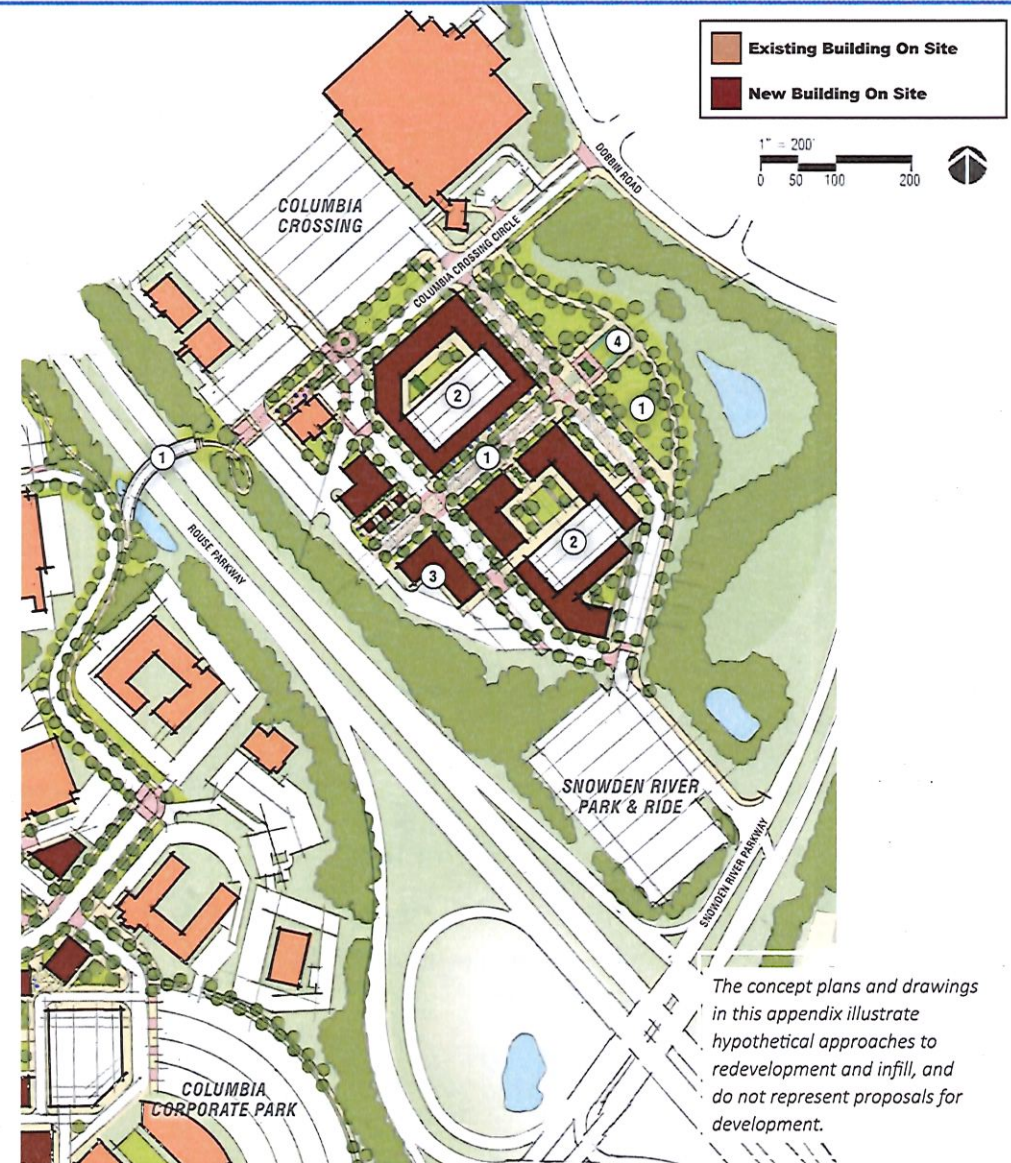
- Infill buildings are designed around and front onto the public realm network.
- Parking areas are located behind buildings or in parking structures wrapped with buildings.
- Buildings and uses are located near existing or potential transit/mobility stops to support a broader range of mobility options.
- Grade changes are used to provide access to multi-level parking while minimizing its visual impact.
- New development is sensitive to the context of adjacent development in terms of building massing, height, and form.

3. A Mix of Land Uses is Introduced

- Smaller-format retail, office, and a variety of housing choices, including missing middle housing types, are provided.
- Public uses may be part of the redevelopment of large sites through adaptive reuse of large buildings.

4. Enhanced Natural Systems and Energy Efficiency

- Environmental site conditions are improved through activities such as planting trees and enhancing stream and wetland buffers.
- Environmental site design practices are used along internal street networks and throughout the site to improve stormwater management.
- Some areas of underutilized parking are replaced with expanded green space and stormwater management (which can assist in reducing heat island effect).
- Solar panels and energy efficient or green buildings may be used to reduce carbon footprints.



The concept plans and drawings in this appendix illustrate hypothetical approaches to redevelopment and infill, and do not represent proposals for development.

The illustration highlights one of many possible concepts for infilling surface parking lots at existing suburban shopping centers, featuring new buildings and open space to create unique and recognizable activity centers.

In this concept drawing, the large surface parking lot between Columbia Crossing Shopping Center and the Snowden River Park and Ride Lot is converted into a new activity center with a mix of residential and small format retail and office uses. Parking decks are used to accommodate parking needs after redevelopment of the surface parking lots. Small public spaces throughout the reimagined center are connected by a network of walkable streets that lead to a large community green where a collection of large, sometimes multi-tenant buildings stand currently. The large green included on the site is designed to improve stormwater management in the area.

A large pedestrian bridge over Route 175 connects this activity center to the one immediately south of the limited-access freeway.



GaTewey

Gateway Strategy

Previous studies have determined that the Gateway area—generally north and west of Interstate 95 and Route 32, and south and east of Route 175 and Snowden River Parkway—represents one of the last large regional growth centers in Howard County (along with Downtown Columbia). The area comprises over 1,000 acres, of which approximately 40% is existing impervious surface area. Given the size and proximity to Interstate 95, Gateway should play a significant role in the future of Howard County for decades to come.



Transformation of Gateway starts with the vision and recommendations presented in the HoCo By Design General Plan, but full development of the area as an activity center is expected to extend well beyond the long-term planning horizon of the Plan in 2040. A master plan for Gateway will be needed to further develop early concepts and ideas presented in this appendix, and will include more detailed data analysis, design concepts, property owner engagement, and targeted community engagement.

Broad Vision for the Activity Center

The Future Land Use Map presented in the Growth and Conservation Framework chapter envisions Gateway as a Regional Activity Center, which represents a major hub for employment, entertainment, and innovation in the County with access from one or more transportation corridors. As a magnet to surrounding cities and neighborhoods, Gateway becomes an iconic model for sustainable and innovative development and infrastructure projects, making it an exciting new focal point for the Baltimore-Washington region.

Residential units or office spaces may be found above storefronts. The public spaces between buildings should be designed for walkability, community gathering, and interesting street life. Homes in and surrounding the center of development may reflect a variety of housing types. Industrial, warehouse, and flex space buildings should be considered for specific areas in Gateway. Future plans for Gateway should consider airplane operations from nearby Baltimore/Washington International Thurgood Marshall Airport (BWI) and design provisions for noise mitigation including, but not limited to, noise reduction design elements.

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Redevelopment of properties in the (Gateway) Regional Activity Center must adhere to a master plan established through a public process, which specifies the uses, urban form, densities or intensities, building scale, building heights and types, and design features or controls intended for the area.

— Excerpt from the Regional Activity Center character area description provided in the Character Areas technical appendix

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— Excerpt from the Regional Activity Center character area description provided in the Character Areas technical appendix

A gridded network of walkable streets should connect destinations within the activity center and surrounding neighborhoods. Parking should be satisfied using on-street parking, structured parking, and shared rear lot parking strategies. A comprehensive and connected network of open space throughout Gateway accommodates recreation facilities, small parks, greenways, or gathering places; preserves natural resources; and helps manage stormwater runoff.

Infrastructure needed to support future development, including new schools, fire stations, parks, or recreation facilities, should be accommodated within the Regional Activity Center to the maximum extent possible. Impacts to infrastructure outside Gateway should be minimized using innovative land use and site design elements within the center. These could include mobility options that reduce the number of vehicle trips entering or exiting the site, low-flow technologies that reduce sewer demands, or native landscaping and vegetation that reduce water demands.

The design, scale, character, and intensity of development in the Regional Activity Center should be compatible with, and transition to, adjacent land uses; and the character of existing adjacent neighborhoods should be preserved.

General Considerations

General considerations for Gateway to explore during the master plan process are presented as a list next to the illustrative concept map on the following page. Narrative guidance associated with each principle is provided following the map.

Gateway Illustrative Concept Map

The concept map offers an illustrative framework, subject to further exploration and refinement in the master plan process, to transform Gateway into a major hub for employment, entertainment, and innovation in Howard County while emphasizing housing, open space, transportation mobility, environmental stewardship, and civic principles that make the activity center a "complete community".

General Considerations

- 1. Plan for Significant Growth and Development in Gateway (not keyed to a specific location on the map)
- 2. Showcase Industrial Uses in a Reimagined Gateway (not keyed to a specific location on the map)
- 3. Create a Public Realm Framework for Organizing New Development and Open Space in Gateway
- 4. Consider Impacts of Flight Paths for BWI Airport in the Design of Gateway (not keyed to a specific location on the map)
- 5. Take Green Design to the Next Level (not keyed to a specific location on the map)
- 6. Emphasize Civic Uses, Educational Facilities and Infrastructure, and Community Facilities (not keyed to a specific location on the map)
- 7. Increase Mobility Options in and Leading to Gateway
- 8. Build an Interconnected Street Network that Follows Existing Property Lines and Creates Walkable Blocks
- 9. Phase Development with Consideration for Existing Development Patterns and Property Ownership
- 10. Provide a Mix of Housing Options in Gateway (not keyed to a specific location on the map)
- 11. Showcase Innovative Design and Insist on High-Quality Building Architecture Throughout Gateway (not keyed to a specific location on the map)



The concept plans and drawings in this appendix illustrate hypothetical approaches to redevelopment and infill, and do not represent proposals for development.

General Considerations for a Future Master Plan at Gateway

1. Plan for Significant Growth and Development in Gateway

Gateway is referred to by some as “the last frontier” for significant growth in Howard County. The County should maximize its development potential as a major employment hub and plan for housing, open space, and civic uses as essential components to building a “complete community” for the twenty-first century. The footprint of Gateway—over 1,000 acres—offers a significant opportunity to plan a special place in Howard County that will evolve over decades.

Building heights and development densities in Gateway should be comparable to Downtown Columbia in some areas within the activity center. Taller buildings with smaller footprints could provide more land for open space or civic uses. One goal for the Gateway Master Plan should be to accommodate a population that could readily support the businesses within the activity center.

2. Showcase Industrial Uses in a Reimagined Gateway

Industrial, warehouse, and flex space uses in Gateway should be considered important to the long-term economic viability of the activity center—and the County as a whole. The master plan should evaluate opportunities to incorporate industrial uses into the overall development framework, with an emphasis on new or emerging industries and technologies where the County has, or can gain, a competitive advantage for business recruitment in the Baltimore-Washington region.

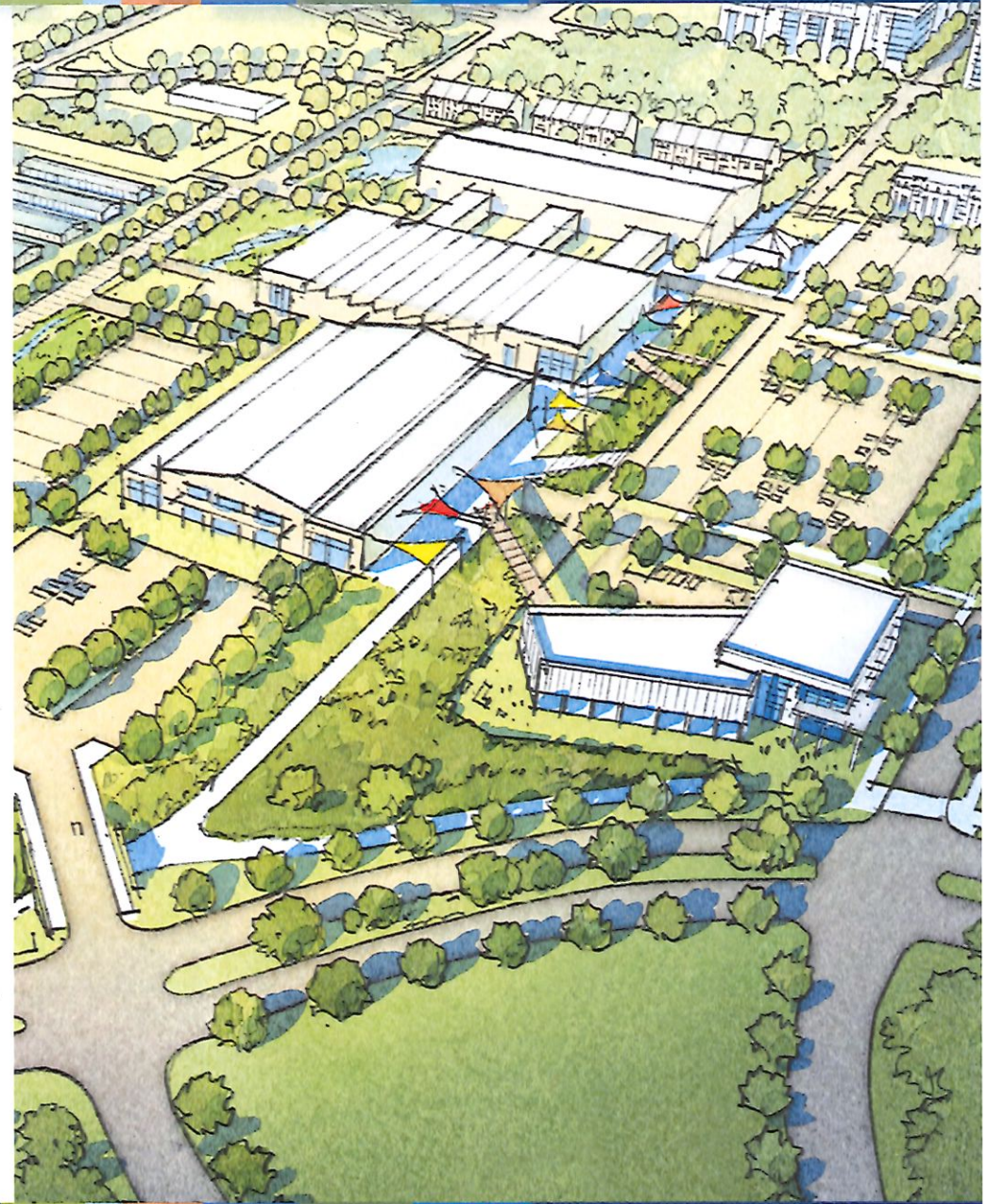
New or improved industrial areas in Gateway should include amenities that better integrate the sites into the overall development framework for the activity center. Small event venues, parks, greenways, or streets accessible to the public will energize the spaces between buildings and offer opportunities to build better relationships between some businesses and customers (such as breweries and food halls).

Considerations in the master plan should still accommodate needs for routine industrial operations (such as truck traffic and outdoor storage).

3. Create a Public Realm Framework for Organizing New Development and Open Space in Gateway

The public realm, which includes the spaces around, between, and extending from buildings, helps instill a specific impression or sense of place for a visitor and a distinct identity for an area. Factors important to the public realm may include the street network; size and scale of buildings; number and quality of public spaces; connections between destinations; and streetscape elements such as outdoor seating, lighting, landscaping, and public art.

The Gateway Master Plan should address the public realm. It should emphasize logical extensions or expansions of natural spaces in the activity center, including opportunities to reintroduce natural spaces or stormwater features on redeveloped parcels. A hierarchy of useable parks and open space in the activity center should also be identified with destinations connected via a network of open space corridors or tree-lined streets. Open space in Gateway should be leveraged to activate specific areas in the center, with public street frontage or buildings that front onto an energized community green or public plaza.





Green streets in the area may be used to manage stormwater and add new design elements. Other elements of green stormwater infrastructure—such as bioswales, planter boxes, rain gardens, vegetative walls, and green roofs—should be used in the public realm or individual building designs. In addition to environmental benefits, these elements can include interpretive displays that educate the public about green stormwater management. Canopy trees may be used to define spaces in the activity center while increasing overall canopy for the area. Open space designs may increase habitat diversity through beneficial landscape elements like meadows, pollinator gardens, and limited mow areas. These open space elements could provide habitat connections to the Green Infrastructure Network’s Guilford Branch Forest Hub on the southern border of Gateway. Solar panels and energy efficient or green buildings should be used as well to reduce carbon footprints.



4. Consider Impacts of Flight Paths for BWI Airport in the Design of Gateway

Gateway is located within certain flight paths for Baltimore/Washington International Thurgood Marshall Airport. The master plan should consider the impact of low-flying airplanes when siting specific land uses or densities for the activity center, especially in light of new policies, procedures, and technologies being introduced by the Federal Aviation Administration for the Next Generation Air Transportation System (NextGen).

5. Take Green Design to the Next Level

Embrace the opportunity to substantially improve existing environmental conditions through future redevelopment of Gateway, and integrate green design throughout the 1,000-acre activity center. As Gateway redevelops, sensitive resources—floodplains, streams, wetlands, and steep slopes—will be protected, stormwater management will be enhanced, and there will be opportunities to increase native tree canopy.

6. Emphasize Civic Uses and Community Facilities

The long-term vision for Gateway should include schools, libraries, cultural facilities, parks, recreation areas, and other community amenities located inside the activity center that will serve a growing residential population. Some facilities may be developed and operated through public-private partnerships.

The community, elected officials, and design professionals should consider new and interesting methods for providing civic services in the area to help make Gateway a center of excellence and innovation during the master plan process.



7. Increase Mobility Options Within and Leading to Gateway

Transforming Gateway into a self-sustaining community should emphasize an environment where people prefer to walk, bike, or take transit between destinations instead of driving by automobile. In the master plan, a comprehensive and connected network should be identified that addresses each transportation mode. This network should include a combination of off-street facilities and on-street space prioritized for different travel modes. Conscious decisions about the type and location of parking provided in the activity center may also influence walking and driving patterns in the area.

Destinations in Gateway should be connected to the larger pedestrian, bicycle, and transit networks envisioned for Howard County, following recommendations in the Walk Howard and Bike Howard Master Plans. The CSX rail corridor immediately



south of Gateway provides promising opportunities to connect the activity center with Downtown Columbia, Route 1, and Fort Meade by foot, bicycle, or transit. Bridge crossings for bicycles and pedestrians along Snowden River Parkway or Route 175 near Dobbin Center also promote non-automobile visits to Gateway. Autonomous transit should be considered a viable long-term solution for moving people to and within the Gateway area.

8. Build an Interconnected Street Network that Follows Existing Property Lines and Creates Walkable Blocks

Use and enhance the existing parkway street system in Gateway to create a gridded network of connected, walkable streets throughout the activity center that are designed in accordance with the County's Complete Streets Policy and design standards. New streets should be located with sensitivity to existing property lines. Larger redevelopment sites in Gateway may consider one or more new internal streets to create smaller, more walkable blocks. New streets should stub out to adjacent properties that will redevelop in the future to extend the network incrementally.

Additional connections between Gateway and the regional transportation system should also be considered, including new or improved access to Route 108 or Route 1 via Mission Road or the CSX rail corridor no longer in service.

9. Phase Development with Consideration for Existing Development Patterns and Property Ownership

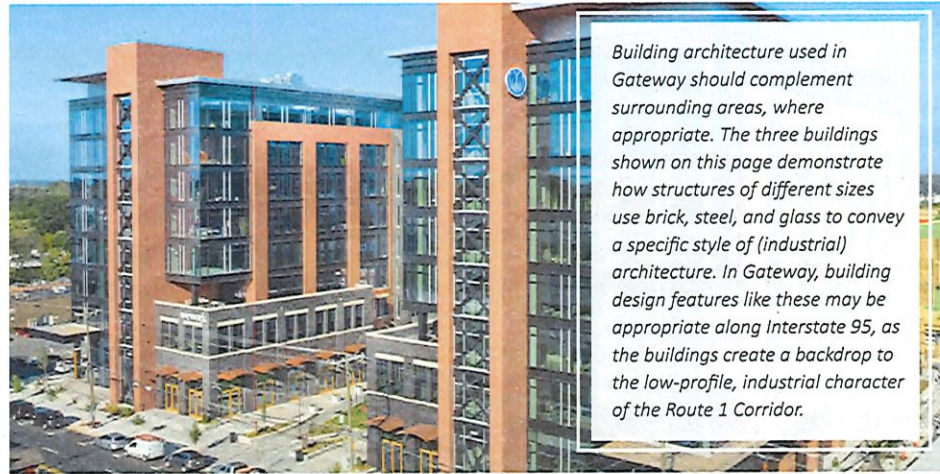
Reimagining the future of Gateway will occur incrementally as property owners decide to infill or redevelop their properties over time. The long-term framework of streets, open space, or topography envisioned for the activity center should be planned with this understanding in mind and recognize that development may occur as a patchwork of individual projects that must fit into an overall vision and framework at the end.

Redevelopment of obsolete buildings or underutilized parcels (surface parking lots) in the area should be considered for a long-term, phased development plan. Similarly, high-performing buildings in the area should be protected and integrated alongside new buildings in Gateway.

10. Provide a Mix of Housing Options in Gateway

Residential development should be considered essential to the long-term viability of Gateway as a self-sustaining community within Howard County. A housing strategy for the area created in the master plan should focus on different home choices and price points, including, but not limited to, high-rise apartments or condominiums, medium- to low-profile multiplex buildings, and stacked townhomes. Home options described in the master plan should also target workforce and affordable housing needs.

The location and design of homes in Gateway should emphasize site integration versus isolated neighborhoods with perimeter buffers. Home sites should be physically connected to complementary land uses and promote walking and bicycling between destinations. To provide a range of home choices in the same neighborhood, residential development in Gateway is encouraged to provide different home types on a variety of lot sizes.



Building architecture used in Gateway should complement surrounding areas, where appropriate. The three buildings shown on this page demonstrate how structures of different sizes use brick, steel, and glass to convey a specific style of (industrial) architecture. In Gateway, building design features like these may be appropriate along Interstate 95, as the buildings create a backdrop to the low-profile, industrial character of the Route 1 Corridor.

11. Showcase Innovative Design and Insist on High-Quality Building Architecture Throughout Gateway

The County's vision of Gateway as a center of excellence and innovation should be exemplified by high-quality site design and building architecture. Rules or incentives to encourage high-quality site design and building architecture should target all land uses envisioned for the development framework.

Improvements targeted for specific sites may vary in type, scale, or technology. Investments in the public realm adjacent to certain properties or uses may reinforce intended outcomes, which showcase technologies or demonstrate best practices for a specific business line, industry sector, or environmental initiative. For example, a short segment of the street network may be designed as a "smart street," which can be used to test and demonstrate innovative ideas for solar lighting, wind power, digital communication, and other technologies being developed by adjacent or nearby businesses.

Building architecture used in Gateway should reinforce creativity and innovation. In some cases, buildings at the edge of the activity center may incorporate specific design elements from adjacent areas to better support transitional uses, site design principles, or nearby building architecture.



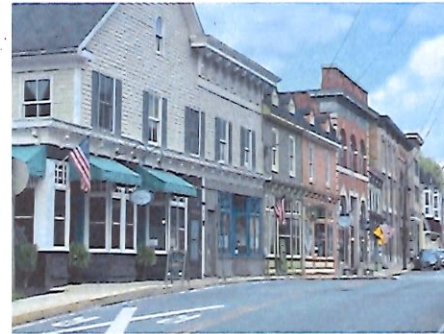
RURAL CROSSROADS

Rural Crossroads Strategy

The Future Land Use Map presented in the Growth and Conservation Framework chapter identifies opportunities for several Rural Crossroads in the Rural West, which represent small nodes of mixed-use areas focusing on commercial activity along rural highways at important intersections. Small-scale, compact businesses in a crossroads are oriented toward a main street, intersection, parking area, or green space, and serve as gathering places for the community or as nearby destinations to meet some of the daily needs of the surrounding rural population.

The compact, walkable design of a Rural Crossroads encourages walking between buildings. Industrial or manufacturing uses are not allowed in these areas. In some cases, Rural Crossroads may offer the opportunity to include a limited number of residential units or offices above storefronts, that provide choices for residents to live near and experience these destinations—including, but not limited to, missing middle home choices.

Residential uses in a Rural Crossroads are secondary to commercial uses in terms of the size, scale, footprint, or intensity of development. Residential and nonresidential buildings in a Rural Crossroads are connected using a comprehensive network of walkable streets.



Special Design Considerations

The layout and character of a Rural Crossroads should reinforce the surrounding rural landscape. These crossroads are an opportunity for new infill architecture and site designs to depart from traditional suburban prototypes and highlight their rural location. Buildings should be small-scale, consistent with the historic design of crossroads in farming communities. Landowners, developers, and their hired design professionals are encouraged to visit Sykesville or Old Ellicott City for design inspiration—with the understanding that modern day land use or development standards cannot exactly replicate elements of these historic communities.

Each crossroads in the Rural West should be unique and different. As part of the process to update the Zoning Regulations, Subdivision and Land Development Regulations, and design guidelines and manuals, the County should explore character-based or form-based code elements for the Rural Crossroads.

RURAL CROSSROADS, MAIN STREET ILLUSTRATIVE CONCEPT

The concept illustrates how new buildings could be added to a Rural Crossroads, while preserving its character as a “main street” community that serves the needs of nearby residents.

Design and Planning Principles Illustrated in the Concept

1. Agriculture Character is Showcased

- Views to farm fields from different locations in the crossroads are preserved.
- Existing hedge rows are preserved and new hedge rows screen less compatible land uses.
- Stormwater management practices are integrated into open space design and provide opportunities for interpretation, as well as outdoor education.
- An agriculture education center or kiosk in the crossroads celebrates the farming heritage of western Howard County.

2. Context-Sensitive Design

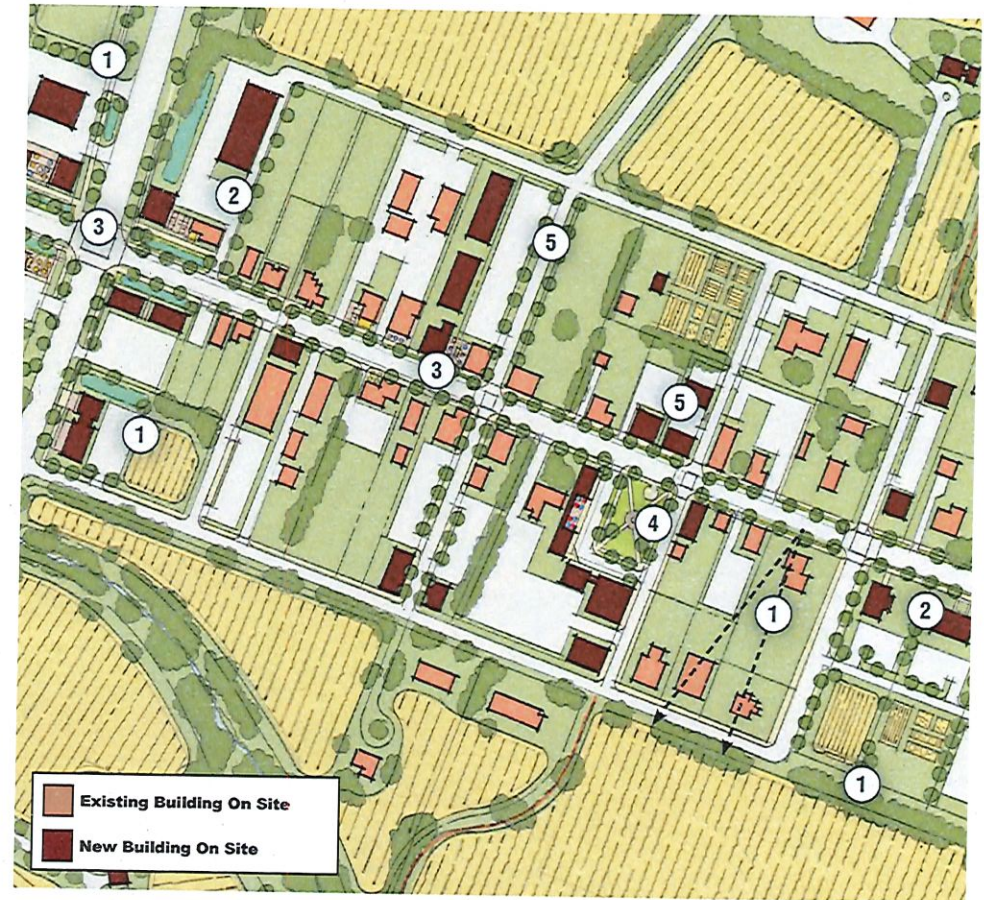
- New development setbacks match existing building setbacks.
- New buildings complement area building form, massing, and architecture.
- Two-story buildings allow for live-work units.
- Spaces between buildings provide views to adjacent farm fields.
- New, larger buildings use more agrarian forms of architecture and materials.
- Similar lot sizes and configurations are maintained when existing lots are subdivided.
- Parking or service areas important to a specific land use (like fueling pumps for a gas station) are located to the side and rear of buildings.

3. More Walkable Environment

- Streets within the core blocks of a crossroads have curb and gutter, sidewalks, and street trees, and transition quickly to streets with shoulders, drainage swales, and no landscaping immediately outside the core blocks.
- New streets are added, where feasible, within the core blocks of a crossroads to reinforce a grid network of streets and form small blocks (400-500' block lengths) for walking between destinations.
- Crosswalks are provided at intersections. Bulb-outs are created at key intersections to shorten crossing distances and calm traffic in high-traffic pedestrian areas.
- Crossroads connect to the rest of the Rural West via existing or proposed trails or greenways.

4. Formal Public Green or Square in the Crossroads

- A formal public green or public square in the heart of the crossroads serves as a community gathering space that can accommodate special events.
- Buildings are situated in locations where they can frame the public green or square and offer space for activating uses such as restaurants, bars, and coffee shops.
- The public green or square connects to the rest of the crossroads with continuous sidewalks or greenways.



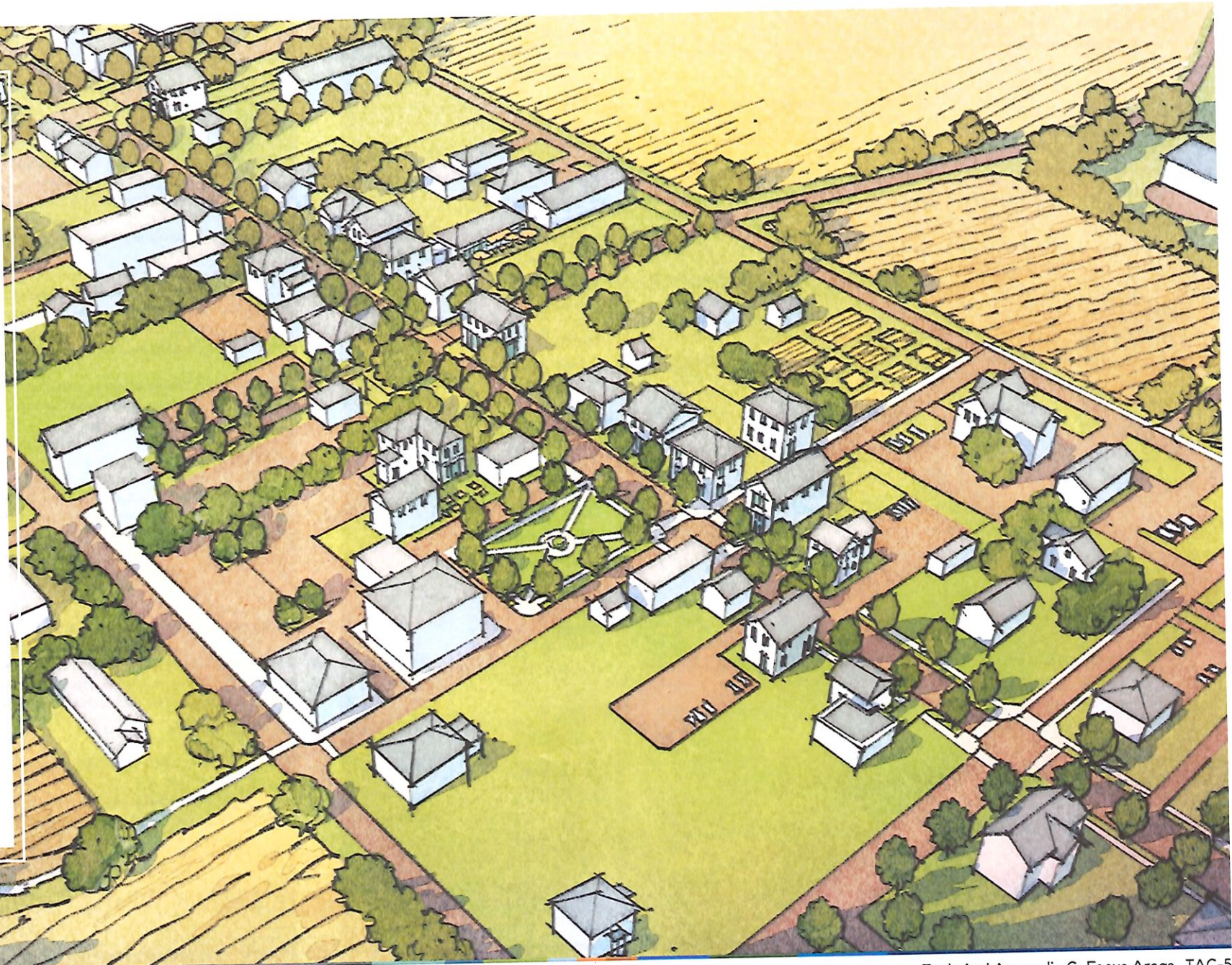
The concept plans and drawings in this appendix illustrate hypothetical approaches to redevelopment and infill, and do not represent proposals for development.

5. A Mix of Land Uses in the Crossroads

- Small-format retail or office uses—including shops, restaurants, or professional offices—are located along the “main street.”
- In two-story buildings, upper floors can accommodate residential units above first floor shops or offices.
- Small strip commercial shopping centers are located internal to the parcel and include more active liner buildings and public open space along adjacent streets.

The illustration highlights one of many possible concepts for building a Rural Crossroads that is oriented toward a rural highway "main street" with a network of side streets connected to it that form short, walkable blocks. The size and number of blocks created for a Rural Crossroads would be different by location.

In this concept drawing, a public square creates a formal gathering space for community events, and new buildings located along the perimeter of the square keep the space active all week. New low-profile buildings added to the crossroads complement the size, scale, and architecture of existing buildings. The location of new buildings in the crossroads is intentionally less structured than a more urban environment. Open space between buildings may offer views to nearby farm fields adjacent to the crossroads or, in some cases, provide opportunities to integrate farm uses or activities with buildings in the crossroads itself.



RURAL CROSSROADS, FOUR CORNERS ILLUSTRATIVE CONCEPT

The concept illustrates how new buildings could be added to a Rural Crossroads while preserving its character as a “four corners” community that serves the needs of nearby residents.

Design and Planning Principles Illustrated in the Concept

1. **Primary Intersection Reinforced as a Formal Place**
 - a. Buildings are located on all four corners of the intersection to frame the public space.
 - b. Parking or service areas important to a specific land use (like fueling pumps for a gas station) are located to the side and rear of buildings.
 - c. Design treatments are incorporated at the intersection that announce it as a special place along the rural highway.
2. **Context-Sensitive Design**
 - a. Architecture is designed to reflect the local vernacular of the crossroad.
 - b. New development setbacks match existing building setbacks.
 - c. New buildings complement area building form, massing, and architecture.
 - d. Two-story buildings allow for live-work units.
 - e. Spaces between buildings provide views to adjacent farm fields, natural areas, or tree stands.
 - f. New, larger buildings use more agrarian forms of architecture and materials.
 - g. Similar lot sizes and configurations are maintained when existing lots are subdivided.
3. **More Walkable Environments**
 - a. Crosswalks are provided at the primary intersection for the crossroads. Bulb-outs are created to shorten crossing distances and calm traffic in the high-traffic pedestrian area.
4. **A Mix of Land Uses in the Crossroads**
 - a. Small-format retail or office uses—including shops, restaurants, or professional offices—are located along the “main street.”
 - b. In two-story buildings, upper floors can accommodate residential units above first floor shops or offices—offering opportunities to serve as live-work units.
 - c. New missing middle housing types (such as duplexes, triplexes, quadplexes, or accessory dwelling units) are added as secondary uses to small format retail and office uses at a crossroads.
5. **Natural Environment Showcased**
 - a. Stormwater management practices are integrated into open space design (and provide opportunities for interpretation and outdoor education).
 - b. Portions of large lawn areas in and around the crossroads are converted to more natural landscapes, including meadow landscapes with native plants for pollinators.
 - c. Forest canopy is expanded in and around the crossroads with afforestation of large lawn areas.



The concept plans and drawings in this appendix illustrate hypothetical approaches to redevelopment and infill, and do not represent proposals for development.

The illustration highlights one of many possible concepts for building a Rural Crossroads that is oriented toward an important intersection of two rural highways. The size and scale of the crossroads is much smaller than the main street illustrative concept presented earlier.

In this concept drawing, new low-profile buildings added to the crossroads complement the size, scale, and architecture of existing buildings. Buildings are oriented toward the street with parking or service areas (like gas pumps) placed to the side or behind buildings. One or more new buildings in the crossroads may provide different home choices for new residents living above storefronts or in small multiplex buildings mixed in with commercial buildings.

The crossroads, as presented, also offer opportunities to showcase environmental stewardship principles, including stormwater management features, protected tree canopy areas, and conversion of some mowed lawn areas back to natural meadow landscapes.

