City of Charleston

LOWCOUNTRY LOWLINE

DESIGN GUIDELINES & PHASING STRATEGY

A FRAMEWORK FOR IMPLEMENTATION

ENDORSED BY THE CITY OF CHARLESTON DESIGN REVIEW COMMITTEE

October, 2021









Kimley » Horn

LOWCOUNTRY LOWLINE DESIGN GUIDELINES & PHASING STRATEGY: A FRAMEWORK FOR IMPLEMENTATION

October, 2021

WELCOME

This report provides a "road map" to implement the adopted Conceptual Master Plan for the Lowcountry Lowline, a linear open space and safe, non-motorized transportation corridor running north-south along the center of the Charleston peninsula. This provides a framework for project design, phasing and implementations.

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INTRODUCTION

This document is a tool for implementing the Lowcountry Lowline.

The Lowcountry Lowline is an elevated highway and abandoned rail corridor that is planned to become a world-class linear open space. It will provide a safe, off-street north-south transportation route along the core of the Charleston peninsula. Pathways will weave key emerging areas of mixed-use development together, established neighborhoods, affordable housing sites, and the currently disconnected pedestrian-bicycle network.

While it has a significant transportation function, it is more than just a place to move through. The Lowline is an opportunity to provide a series of urban open spaces that reflect the scale, character, and needs of the areas immediately adjacent to it. The project activates the old rail corridor, enhances the areas along and beneath I-26, and creates numerous connection points at the edges of these spaces.

All residents of the city will benefit from this linear park system, not just those who live, work, and play nearby. These benefits include: active and passive recreation with several modes of access, affordable housing that reduces the need for private automobiles, revitalization of forgotten space dominated by unsightly infrastructure, flood management as recommended by the Dutch Dialogues, traffic congestion reduction, and public safety.

The project is incredibly challenging and complex. While much work has already gone into the design and planning of the Lowline, there is much more work that lies ahead. Funding, environmental remediation, detailed design review, land use agreements, city policies, public-private partnerships, incentive structures, and other tools for project delivery are complicated, difficult and take a great deal of time to complete. This document provides a "road map" for implementation through the following means: 1) design guidelines establish clear direct for public and private entities to ensure a cohesive, response and well-designed public realm that is appropriate to its context and can be maintained, 2) a clear phasing strategy that prioritizes the allocation of resources according to adjacent project-readiness, sources of capital, timing of relevant implementation efforts, and 3) clear guidance that expresses how the Lowline can and should be implemented in and around land area controlled by the South Carolina Department of Transportation (which constitutes about half of the project



HOW TO USE THIS DOCUMENT

A DESIGN GUIDELINES

Design guidelines provide design direction according to context and a cohesive plan without being overly specific. They are to be used by any City of Charleston entity that administers, reviews and approves the design and construction of the project, including, but not limited to:

MAYOR'S DESIGN REVIEW COMMITTEE
TECHNICAL REVIEW COMMITTEE
BOARD OF ARCHITECTURAL REVIEW

DOCUMENT SECTIONS

GENERAL DESIGN GUIDELINES

A baseline material palette and configurations that apply to the entire project area.

DESIGN GUIDELINES BY SEGMENT

Guidelines for each segment that respond to their unique contexts.

3 DESIGN GUIDELINES FOR INTERSECTIONS

How to design midblock crossings and street endings.

B PHASING STRATEGY

The phasing strategy breaks the project into several segments, provides information on relevant improvement projects and associated costs, delineates approaches to stormwater management and delivery of mid-block crossings, and outlines critical items for coordination among public, private, nonprofit and community entities.

4 PHASING STRATEGY

Interim and complete improvements divided by segment as described above.

C MIDBLOCK CROSSINGS & SCDOT LEASE AGREEMENT

The last part of this document deals with the delivery of midblock crossings, which are critical to ensuring the Lowline can be linked from one block to another to create a safe, comfortable user experience. This part of the document also outlines key coordination and design aspects of SCDOT land area leased by the City of Charleston.

5 MIDBLOCK CROSSING STRATEGIES

How to deliver midblock crossings by strategically taking over streets from SCDOT (where applicable) and using incentives to fund the improvements.

6 SCDOT LEASE AGREEMENT AREA

This section provides guidance as to how the City of Charelston's lease agreement with SCDOT affects the design and programming of the portions of the Lowline located on right-of-way controlled by SCDOT.

PROCESS

The Lowline is an ongoing, multi-faceted, complex effort that requires extensive collaboration.

PROJECT ACTIVITIES & GUIDING DOCUMENTS:

RECENT

Property acquisition and Memorandum of Agreement.

Conceptual Master Plan adopted by Charleston City Council.

Dutch Dialogues Charleston and Kimley-Horn Stormwater & Cost Estimate Study.

IMPLEMENTATION ROLES

This document guides the implementation of the adopted Conceptual Master Plan (see page 8) and the Memorandum of Agreement (MOA) between the City of Charleston and the Friends of the Lowline. Community engagement received so far has been incorporated into this approach and will remain essential for the life of the project (see the page 5 for further discussion on community engagement).

All project partners will work together to strengthen and affirm their roles. It is envisioned that the Friends of the Lowline will become an increasingly effective entity for project delivery, they will hire staff and recruit volunteers, and they will work to activate the space by managing its programming, and take on an advanced maintenance role. City staff and relevant review bodies will coordinate to ensure public and private construction projects adhere to the Design Guidelines. Fundraising, coordination, and other efforts will be required on an ongoing basis, even after the project is complete.

CURRENT

Project work done Friends of the Lowline board members, staff, and volunteers.

DESIGN GUIDELINES & PHASING STRATEGY

This document provides a road map to implementation.

Master lease agreement for SCDOT areas of the project.

Environmental study.

FUTURE

Friends of the Lowline will become a project delivery, programming, and maintenance entity.

City's plan review entities (DRC, TRC, etc.) will use the Design Guidelines for the Lowline.

Project partners will work together to deliver interim and complete project phases.

SCDOT master lease agreement and administration of midblock crossing strategies.

Environmental remediation.

Fundraising and complex coordination.

Community engagement.

Continued engagement, interim improvements and various activation efforts.

The City will create designs, incentives, policies and other tools to facilitate implementation.

ENGAGEMENT

What are people saying?

The community engagement is still underway, but here are a few of the comments have been provided. Most of the things we are hearing are already incorporated into the Conceptual Master Plan, while even more have been incorporated into this document. Community engagement will go from commenting on a plan to actively participating in its realization in the short and long term. Engagement will also mean staying involved in its programming and maintenance when the project is complete. There will be many ways people can volunteer and stay informed about the project.

Citizen **Excitement**

Citizen Concerns

- . The Skate Park
- 2. Housing and Gentrification
- 3. Safety

"Charleston has enough retail shops, there are plenty of markets that already struggle to compete with each other. Charleston needs more pedestrian friendly access that is not swamped with advertising and electricity. The Urban Core needs a dedicated green space where people can simply exist without being expected to spend money."

"Bike paths. All I want is a separate bike path so I can travel the peninsula safely."

"Keep it as natural as possible, areas for bird watching, etc. Don't commercialize it at all. We need quiet places to enjoy nature."

"Safe spaces mean spaces that all residents can enjoy without being made to feel unwelcome..."

"I hope there will be as much plant life as possible."

"The spaces adjacent to the residential areas should be designed to enhance the quality of life for existing residents and not serve to further displace them....As stakeholders, existing residents should be the targeted audience of the Lowline's development, not tourists/visitors."

Desired Features by Section Urban Core The Parks 1. Alternative Route to King 1. Open Green Spaces 2. Nature Trails Street 3. Public Art Installation 2. Bathrooms 3. Dining and Gathering Spaces **Neighborhood Corridor** 1. Access to Transportation 2. Open Air Markets

Most Wanted Features

- 2. Bike and Pedestrian

3. Sports Courts

Common Citizen Comments

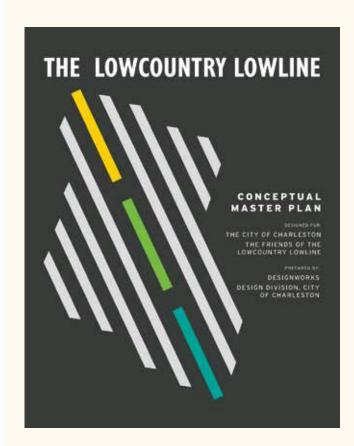
- 3. "Benches for sitting

LEARN MORE AT: www.lowcountrylowline.org

CONCEPTUAL MASTER PLAN

Conceptual study of possible design solutions and opportunities for improvement.

The adopted Conceptual Master Plan defines what the Lowline is, establishes it regional, district and neighborhood significance, and illuminates opportunities to solve large, complex problems in our city (flooding, transportation, affordable housing, open space, etc.).



Charleston City Council adopted the Conceptual Master Plan in December of 2020.



The Conceptual Master Plan was developed collaboratively among DesignWorks, LC and Design Division. DesignWorks created the plan illustration.

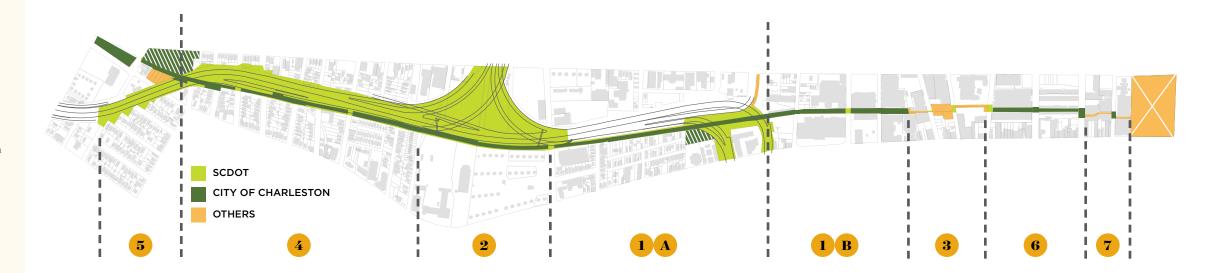


The Conceptual Master Plan was developed collaboratively among DesignWorks, LC and Design Division. DesignWorks created the plan illustration.

PHASING

Coordinated timing and location of improvements leveraging public and private capital.

The Lowcountry Lowline can be delivered in phased segments using a mix of public and private investment. The coordination of these investments can be timed according to various factors such as ownership, funding mechanisms, eminent private development, etc. We have created 7 distinct phases that account for these variables.



INTERIM IMPROVEMENTS

What can be done today to build and activate the Lowline?

The City of Charleston and the Friends of the Lowline have agreed to deliver interim improvements in the project area. A simple multi-use pathway and some fully-completed portions of the Lowline already exist and can be expanded. This phase proposes two types of interim improvements: 1) a simple paved pathway where none currently exists, and 2) programming that gets people out using the space immediately. Programming may include clean-ups, site tours, mountain biking, painting, fitness classes, outdoor markets, etc. Some of these events are already happening and provide great benefit.

Top Priorities for Interim Improvements

- COMPLET BIKE-PED PATHWAY SEGEMENTS FROM END TO END
- PROGRAMMING GRASSED SEGMENTS IN THE URBAN CORE
- BASKETBALL COURT NEAR **NORTH-CENTRAL**
- LITTER CLEANUPS AND INFORMAL RECREATION

LOWLINE PARK & TRAIL

This sub-phase involves a large central park, parking areas below I-26 and various related public street and stormwater improvements. It also includes the City's affordable housing site and connection the East Side via the Cooper River Bridge Redevelopment Area (CRBRA). The includes the CRBRA Tax Increment Financing (TIF) district, which can be used to pay for public improvements on the Lowline and the East Side as part of this phase.

URBAN CORE AREA

This sub-phase involves Lowline improvements on City owned properties, several blocks of dense urban mixed-use development, The City will work with private developers to identify incentives, such as using parts of the Lowline for stormwater management, in exchange for them to pay for and construct parts of the Lowline. The area will include three mid-block crossings, one of which is an SCDOT street.



NEW MARKET PARK AREA

This phase will leverage the funded improvements at King Street and Huger Street to develop a large water management open space system. This idea was recommended by the Dutch Dialogues Charleston report as a way to manage flooding on the peninsula. Improvements here will also include multi-purpose courts, a mid-block crossing at Huger Street, and fully improved pathway conditions for the Lowline up to Grove Street. The midblock crossing at Huger Street must be coordinated with other improvements on that corridor.



THE PINCH

This area of the Lowline is privately-owned. Delivery of the Lowline will be through negotiations with individual properties for access easements, maintenance agreements and other legally-binding arrangements to ensure a high quality of design and public access to extend the Lowline through the middle of the block in these areas. Relevant review bodies and City staff will use the Lowline Design Guidelines to direct the design of physical improvements in this area. Any properties that are fenced off or otherwise privatized will be opened up, and, if deemed necessary by City staff, improved to be suitable for public access and use. City staff will develop a strategy to require or otherwise ensure the construction of essential mid-block pedestrian crossings in this location.



THE COLUMNS

Improvements from Grove Street to San Souci Street. In the near term, work with adjacent developers to construct a Service Street with parking on the east side of the Lowline south of Brigade Street and begin a community market just north of Brigade Street. The full extent of this phase will then involve the following: 1) complete the multi-use path to its fullest in this area, 2) installing as many stormwater storage areas and multipurpose courts beneath I-26 as possible, 3) extend the Service Street north of Brigade Street, 4) create neighborhood pocket parks at the end of each intersecting street, 4) install mid-block crossings, and 5) upgrade the outdoor market and surroundings to a longterm condition.



TRANSIT HUB

Redevelop the Parks Department and build the portion of the Lowline that runs through it using a public-private partnership (PPP). The PPP will take advantage of private investment to deliver the Lowline and other public benefits. Private development will be attracted to the site given its development capacity (available space, prime location, zoning, etc.) (while the Parks Department may operate more efficiently from a different location). Switch the development area with the path area, rerouting the path to connect to the intersection of Morrison Drive, Meeting Street and Mt Pleasant Streets. Leverage funding associated with the planned Lowcountry Rapid Transit project as part of a transit-oriented development.



BUS MALL & CAMDEN DEPOT

Using another public-private partnership (PPP), retrofit the existing bus mall to be part of the Lowline by getting the private sector involved. Incentive the private sector to construct and lease ground level commercial space in the existing parking garage at this location, perhaps in exchange for making physical improvements (converting the bus mall to the Lowline and constructing its relevant mid-block crossings.



HUTSON ALLEY EXTENSION

Construct mid-block crossings on John Street and Hutson Street. Convert the service alley behind Hotel Bennett to become a more pedestrian-oriented space leading from Hutson Alley to Marion Square.

1

GENERAL DESIGN GUIDELINES

These are the basic guidelines applicable to the entire project area. They are the very basic of material composition and quality to be implemented. Some segments may vary based on their unique context, as specified in Section 2: Design Guidelines by Segment.

These guidelines should also be used as a tool for sites and design proposals adjacent to the Lowline, so that each area can blend smoothly and be unified in appearance, materials, and scale.

GENERAL DIMENSIONS

Elements of a typical section configuration with appropriate materials.

The guidelines below demonstrate appropriate placement of key features. Given the variety of conditions along the Lowline, design of these features will vary on a case by case basis and are subject to approval by the Mayor's Design Review Committee, DRC.

PEDESTRIAN PATH

The path shall be no less than 10'-0". In pinch point areas, 8'-0" to 10'-0" is permitted. Furnishings shall exist outside of the path area.

BICYCLE TRAIL

The trail shall be 12'-0" wide. The trail shall be marked with appropriated symbols, painting, and signage.

COMBINED PATHWAY

When located in narrow spaces the bicycle and pedestrian pathways may be combined. In such instances, site design (and possibly signage) should be used to encourage cyclists to travel slowly or dismount and walk thier bicycles as a pedestrian. Additionally, alternative bicycle routes should be provided and well-connected to the Lowline via side streets and mid-block pathways.

PLANTED MEDIAN

The planting zone is the area between the pedestrian path and the bicycle trail. Low maintenance landscaping, tree planting, and furnishings are preferred. This continuous zone may be interrupted for pedestrian/ bicycle crossing, or approaching an intersection. May be excluded in pinch point areas or in the urban node sections on trail segments.

SCDOT I-26 LEASE AREA

When located alongside and/or below I-26 and other SCDOT/FHWA controlled areas, Lowline facilities may be expanded. This includes pathway alingments, recreation facilities and other elements permitted by SCDOT agreements.

COLUMN BUFFER

Column supports for I-26 shall be given a 5'-0" minimum buffer for any use other than ground cover landscaping.

EDGE CONDITION

Along private residential property, the pedestrian path, bicycle trail, and furnishings shall be set back a minimum of 5'-0" from the property line. Landscaping and tree planting are permitted.

TREE CANOPY BUFFER

The elevated highway surface of I-26 shall be given a 45' minimum buffer from new tree canopy for maintenance purposes.

EASEMENT AREAS

When the Lowcountry Lowline crosses private property along an easement, the minimum distance between (new) buildings shall be 20'-0".

BUILDING FRONTAGE

New and existing buildings and programs should engage the Lowline as a primary frontage. This does not include small residential properties located north of Line Street.

ADJACENT SPACE

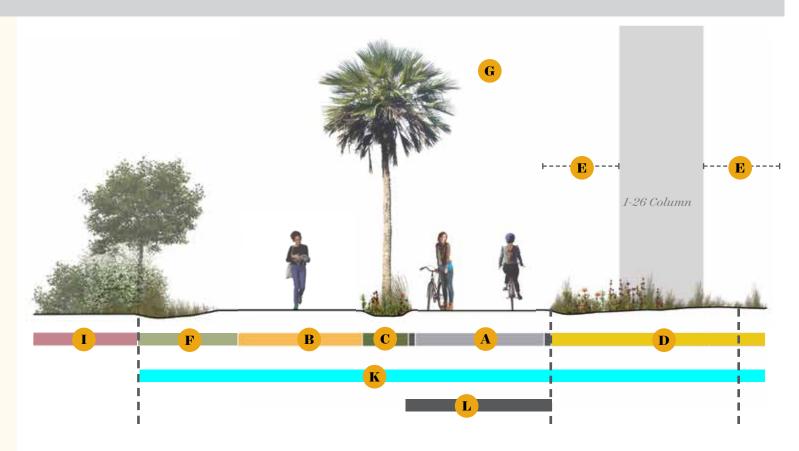
Private outdoor space adjacent to the Lowcountry Lowline shall be designed as an extension of the Lowline. It can be delineated differently, but it should function as an integrated outdoor space. Building set backs for new building entry, plaza, or an open gathering spaces fall under this category.

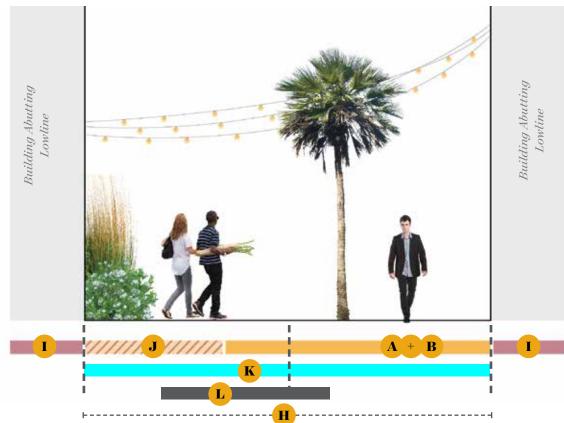
STORMWATER

Various facility types for stormwater management will be integrated into the Lowline. This includes underground facilities.

VEHICLE-RATED PATH

A vehicular-rated paving zone (4,000 PSI) with toedown edges is needed to access the Lowline. The width shall be at least 12' north of Line Street and 10' south of Line Street. Alignment may vary within the available space.





Property Lines (Vary by Location)

BASELINE CHARLESTON FURNISHINGS & MATERIALS

Materials to be used along Lowcountry Lowline.

In character, the Lowline will go from urban, having hardscapes and defined by the edges of buildings, to having more green features, landscape and open space elements.

The Lowline has notable qualities affecting its overall structure as it goes through the city.

The overall structure and function of the Lowline can be considered as having key transitional characteristics from its southernmost point at Marion Square to its northern reach just past Mount Pleasant Street. Moving south to north, it goes from being narrow and alley-like to more open and trail-like. This is a function of the available space and surrounding urban density.

Finally, where the Lowline is located in the historic core of the peninsula it will be composed of more traditional landscape materials and reflect the historic patterns of Charleston. As it goes north, there will be opportunity for creative, contemporary interventions like murals, sculpture and modern landscape elements.

THIS ESTABLISHES A

<u>BASELINE</u> OF MATERIALS,
FURNISHINGS AND
STANDARDS.

VARIANTS OF THESE
MAY BE PERMITTED BY
THE DESIGN REVIEW
COMMITTEE BASED ON
THE CONTEXT SEGMENT
DESCRIBED IN THE NEXT
SECTION.



CONCRETE SIDEWALK
Use perpendicular joints; avoid center joints.

Non-colored, broom finish.



BLUESTONE
When contextually a

When contextually appropriate in historic areas of the Lowcountry Lowline. Patterns should be city standard detail with flamed edges.



GRANITE FINES

With paver edge in high traffic areas to contain stones to specified path. Mix should be an appropriate mix of 789 granite and granite fines compacted for accessibility.



GRANITE CURB

6" Granite Curb.



BRICK PAVERS

With header course edge or similar. (Old Carolina Savannah Gray preferred. Standard bond or 90-degree herrringbone acceptable.)

Bricks can be butt joined or joined with a mortar joint.



PERVIOUS PAVERS

With header course edge or similar.



BELGIAN BLOCK

With header course edge or similar in block or brick.



PAVED BIKE PATH

Lane markings shall be clearly marked in as

1. Reflective paint centerline, dashed. May be white or yellow.

2. Bordered by a change in materials (ie: pavers, brick, concrete) at the path edges (the centerline may also use an alternative material for delineation).

Appropriate bicycle lane markings and signage are to be used in either condition. Please see Signage, Markings, and Wayfinding.

BASELINE CHARLESTON FURNISHINGS & MATERIALS

THIS ESTABLISHES A BASELINE OF MATERIALS. **FURNISHINGS AND** STANDARDS.

VARIANTS OF THESE MAY BE PERMITTED BY THE DESIGN REVIEW COMMITTEE BASED ON THE CONTEXT SEGMENT DESCRIBED IN THE NEXT SECTION.



INVERTED-U BIKE RACK

Can be stand alone or rail mounted in a series.



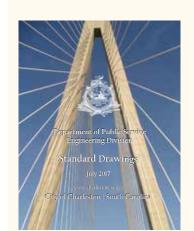
TRUNCATED DOMES

Elizabeth City Truncated Dome, charcoal. When used in a radius, stones should be cut in appropriate sized wedges to follow the adjacent radius. Must be in compliance with ADA requirements for detectable warning surfaces.



BIG BELLY GARBAGE CAN

Exterior design to be based on unified Lowline branding and wayfinding package.



STANDARD MANUALS

The City of Charleston's standards and other manuals should be used as

a starting point for design. Deviations from these and other standards may be permitted on a case-by-case basis in

keeping with the appropriate context or innovative landscape design solution.

PUBLIC SERVICES STANDARD DRAWINGS (2017)

STREET TREE MANUAL





STREET TREE MANUAL (2021)



RAIL ELEMENTS

Highlight past use of the space by incorporating rail elements such as tracks, ties, plates, etc. When the rails were removed, some were placed in storage and can be reused into the landscape of the Lowline.

Construction detailing for this use must comply with ADA requirements.



DRINKING FOUNTAIN

Lowcountry Lowline: Design Guidelines & Phasing Strategy

MDF 440SMFA Outdoor Drinking Fountain. Green. With attached pet fountain and water bottle filler.



WATERFRONT PARK BENCH

Variable length will be at the discretion of the DRC for final selection based on City standards.

BASELINE CHARLESTON FURNISHINGS & MATERIALS

THIS ESTABLISHES A

<u>BASELINE</u> OF MATERIALS,
FURNISHINGS AND
STANDARDS.

VARIANTS OF THESE
MAY BE PERMITTED BY
THE DESIGN REVIEW
COMMITTEE BASED ON
THE CONTEXT SEGMENT
DESCRIBED IN THE NEXT
SECTION.



Signage, markings, and wayfinding pertaining to identity will follow the Lowcountry Lowline branding specifications for color, aesthetic, and placement. Please refer to the adopted Lowcountry Lowline Conceptual Master Plan for details on this topic.



STORMWATER SWALES
Urban stormwater solutions such as bioswales,
green roofs, etc. are encouraged.



VERTICAL BOLLARDS
Sleak, removable safty bollards without lights.



LIGHT POLES

Jefferson lamp, one of several approved fixtures by Dominon Energy for the City of Charleston.

Street light selection to be by City of Charleston in coordination with Dominion Energy.



OVERHEAD LIGHTING
Strongly encouraged, especially in narrow
portions of the Lowline to avoid pole-mounted
lamps in the pathway or too close to a building.



SOLAR LIGHTING
Currently in inital testing, SELS (Smart Era
Lighting Systems) products: ST9760 (currently
installed on the West Ashley greenway), the
SP9557 and SP9570.

Street light selection to be by City of Charleston in coordination with Dominion Energy.

STORMWATER DESIGN

Stormwater management devices will be integrated into the Lowline. Design should use the Low Impact Development in Coastal South Carolina: A Planning and Design Guide as a starting point for the Lowline. Stormwater facilities will involve a mix of solution types, including, but not limited to: bioswales, pervious paving, underground storage cells, etc.



LOW IMPACT DEVELOPMENT IN COASTAL SOUTH CAROLINA



LOW IMPACT
DEVELOPMENT IN
COASTAL SOUTH
CAROLINA: A PLANNING
AND DESIGN GUIDE

TREATMENT UNDER AN ELEVATED HIGHWAY

The I-26 elevated highway is a special context along the Lowcountry Lowline and provides a unique pedestrian experience found nowhere else on the peninsula.

The space needs special attention to activate, enliven and make safe (especially at night). The area available for intervention is substantial. The images here indicate the types of design solutions that can be used below the elevated highway, especially where the Conceptual Master Plan calls for "multi-purpose courts," pathway alignments and stormwater management landscapes. (Please see Section 7 for more information on how these areas could be used.)

LIGHTING

Lighting of many types are critical here. While the Lowline path will have pedestrian-scale lamp posts at regular intervals that may cast light beneath the overpasses, those spaces must also have lighting for safety and access of use. Lighting will be needed for sports courts, markets, and plazas with an evening time function. Lighting is also critical where the Lowline intersects city streets near an overpass to ensure visibility and safe nonmotorized travel. Lighting of various colors is strongly encouraged. (Photometric analysis should be performed to determine the appropriate quantity of light proposed.)

PROGRAM

Activate, activate, activate. Programs and their design plans should introduce uses and spaces that bring people and encourage a healthy, fun, positive public realm. Active and passive recreation spaces should be balanced to generate natural surveillance ("eyes on the street").

STORMWATER

Even though a majority of I-26 is positioned along the ridge line of the Peninsula, the area underneath can be used to slow and store stormwater runoff from the highway itself. This will reduce the stress on adjacent drainage basins and pump systems.

MATERIALS

Materials can be contemporary, vibrant, and artistic.

Natural conditions and planting schemes can also be used, which can be nicely contrasted with colorful hardscapes.

Material palates should focus primarily on contrasting and mitigating the overwhelming dull, grey, brutal nature of the overpass and its many columns. Murals and other artistic interventions, including temporary installations, are strongly encouraged.



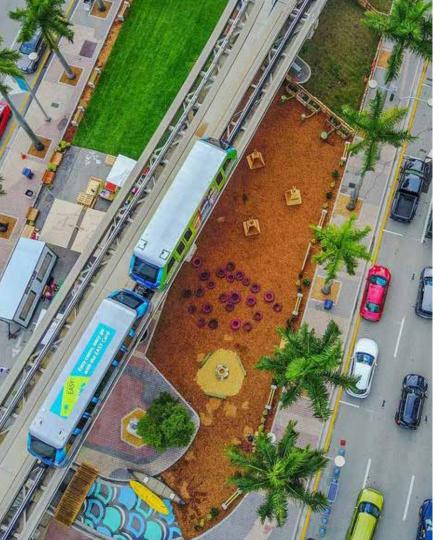












2

DESIGN GUIDELINES BY SEGMENT

The unique character and context of each segment along the Lowline warrants special design treatment and guidance that reflects its special conditions. In general, the areas to the north to be more contemporary in style while the areas to the south are to be more traditional.

MATERIALS, FURNISHINGS
AND CONFIGURATIONS
SHOWN IN THIS SECTION
ARE INSPIRATIONAL AND
BASED ON CONTEXT.

CHARACTER SEGMENTS

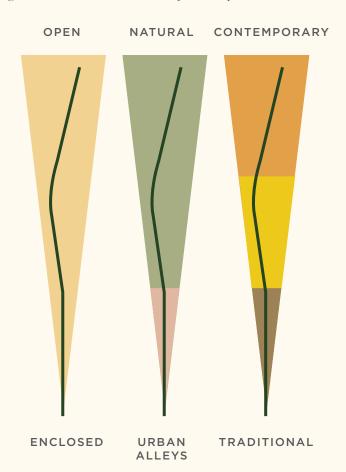
Character segments reflect the unique context areas found along the Lowline and directs design to respond accordingly.

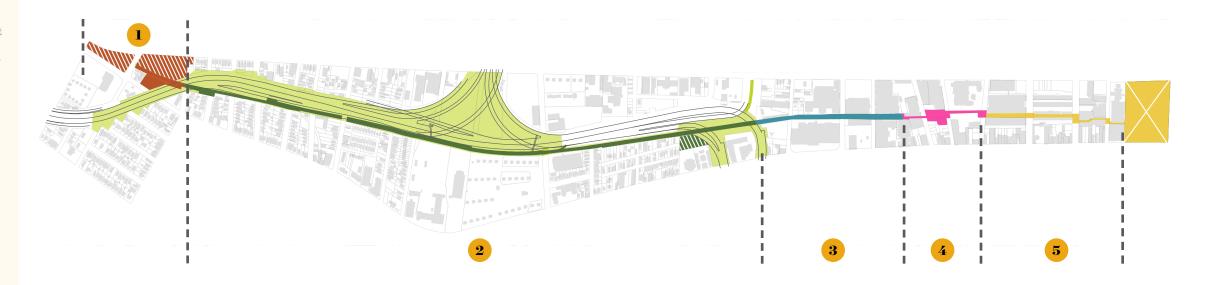
The northernmost portion of the Lowline will be much different than the southernmost portion. As the Lowline moves along the center of the Charleston peninsula, it goes from a system of tightly-spaced urban alleys to a new high density development area to a freeway and trail system to a postindustrial redevelopment site. In doing so it goes from the core of the historic city to the Upper Peninsula and touches numerous neighborhoods along the way.

Each character segment provides design direction imagery, configurations and materials unique to the area shown.

Conceptual framework diagram.

From south to north, the Lowline area will transition from a more enclosed system of urban alleys that are more traditional in character, to a more open, natural area with contemporary design matierals, configurations and spaces. The design guidelines are based on this simple conceptual framework.





MT. PLEASANT TOD

Portion of the Lowline north of I-26. Connects to Mount Pleasant Street and future Lowcountry Rapid Transit station. Contains a large-scale, transit oriented redevelopment opportunity.

TRAIL SEGMENT

Portion of the Lowline running along I-26 from King Street to just north of Line Street. Thin linear park with neighborhood access and opportunities for large, centrally-located open space. Urban Nodes throughout this segment can occur at key intersections.

URBAN CORE

A consistently-wide portion of the Lowline bound on both sides by large mixed-use developments fronting directly onto the path. Adjacent high-density developments are in various stages of completion.

THE PINCH

The Lowline begins to meander and jog, while also becoming much narrower, at this location. Since this is not public right-of-way, the City is working with individual developers to dedicate portions of private property to the Lowcountry Lowline. Ideally, a 20' wide area will be maintained.

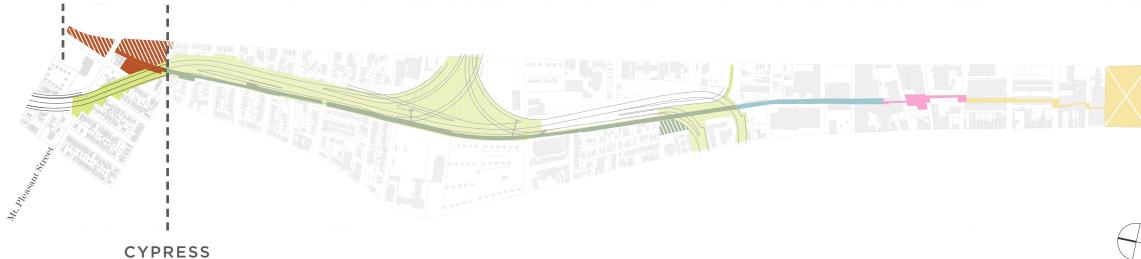
ALLEY SEGMENT

An existing mid-block linear pathway lined with active retail, bars, restaurants, and landscaping. It includes the southernmost portion of the Lowcountry Lowline, from Camden Depot to Marion Square.



MT. PLEASANT TOD SEGMENT

This portion of the Lowline is north of I-26 and connects to Mt Pleasant Street and the future Lowcountry Rapid Transit station. Given property ownership, location, and size, there is an opportunity for a large-scale, transit oriented redevelopment.





MATERIALS, FURNISHINGS AND CONFIGURATIONS SHOWN IN THIS SECTION ARE INSPIRATIONAL AND BASED ON CONTEXT.

THE DESIGN REVIEW
COMMITTEE WILL
DETERMINE THE
APPROPRIATENES OF
VARIATIONS FROM THE
BASELINE GUIDELINES
ESTABLISHED IN PART 1.



STREET













MT. PLEASANT TOD SEGMENT

This segment is characterized by the possible future redevelopment of the City Parks facility.

A Transit Oriented Development for this area combines the proximity of the Lowline and the future Lowcountry Rapid Transit Route (LCRT). This unique location can benefit from a new mixed use development. The Lowcountry Lowline would function as a public plaza in this location. Trees in tree wells and subtitle bollards can take the place of veigetated planting zones and curbs (for the bike trail). Stormwater storage and infiltration should be a top priority at this location.

DESIGN OBJECTIVES

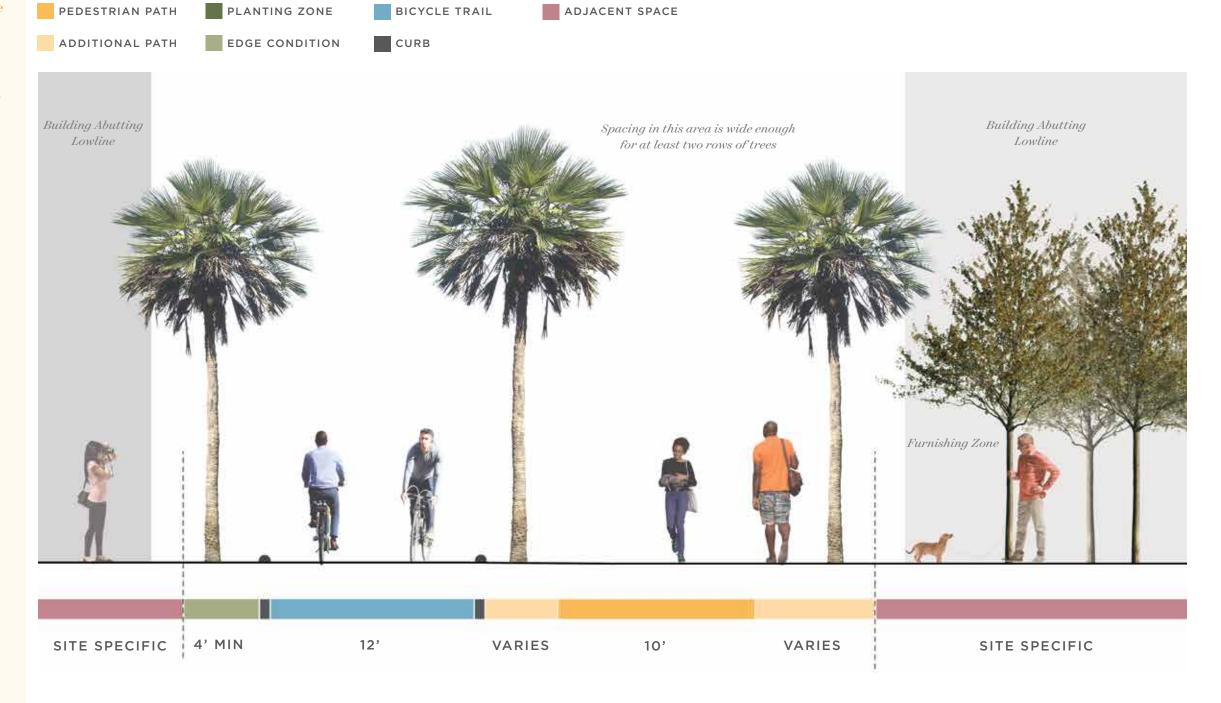
A TOD segment can be described as one of the following:

TYPICAL PATH WIDTH

- 30'-45'
- · Adjacent private property on both sides

I-26 UNDERPASS

• 5' -10' setback from I-26 Column reduces available space on City-Owned Lowcountry Lowline parcel to 25'-0" or less



MT. PLEASANT TOD SEGMENT

This segment is characterized by the potential redevelopment of the City Parks facility.

MATERIALS

This segment can be the most modern of all the character segment in terms of materials, furnishings, and building forms. Creative use of fun, contemporary materials is encouraged.

This page lists examples of the general aesthetic direction, and is a starting point for the desired condition in this character segment.

As with anywhere on the peninsula, traditional Charleston materials can be included here. It would be appropriate in this segment to experiment with the application of these traditional materials in new and creative ways. Please refer to the Baseline Charleston Materials page at the beginning of this document for more information.

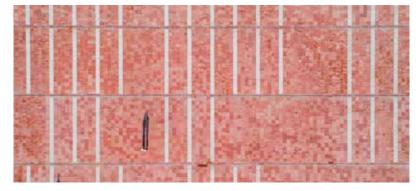
MATERIALS, FURNISHINGS AND CONFIGURATIONS SHOWN IN THIS SECTION ARE INSPIRATIONAL AND BASED ON CONTEXT.



















TRAIL SEGMENT

Portion of the Lowline running along I-26 from San Souci Street to Sheppard Street (just north of Line Street). Thin linear park with neighborhood access and opportunities for large, centrally-located open space. Urban Nodes throughout this segment can occur at key intersections.

TWO CONDITIONS

Open Fields Areas

Areas of the Trail Segment that are not, and are liklely never to have, buildings fronting directly onto the Lowline from adjacent private parcels. These areas are less likley to be crowded by users of those adjacent buildings who may be eating, drinking, resting, etc. on the Lowline. In these areas, edge conditions will likely be composed of vegetated buffers, residential fences and SCDOT infrastructure. The look and feel of this will be open, green and heavily related to the conditions beneath I-26.

Urban Nodes

These are areas of the trail segment fronted upon by buildings, which should be strongly encouraged to have an active ground floor use along the Lowline. These are areas where people may congregate on and frequently cross the Lowline, so design should encourage lower travel speeds. These may also be good locations for bicycle parking and/or repair stations, seating areas, hardscape and other specific materials and configurations conducive to a gathering, rest and activity area. Urban nodes may also be created by conditions beneath I-26 and any kiosks, mobile food vending, or other activating elements set up along the Lowline.







Lowcountry Lowline: Design Guidelines & Phasing Strategy













TRAIL SEGMENT OPEN FIELDS AREA

This segment is characterized by an open former rail corridor between residential properties and an elevated highway.

DESIGN OBJECTIVES

This segment should emphasize the park and recreation components of the Lowline; walking and biking options, sports courts, gardens, trees, and small to large programed park areas.

A trail segment can be described as one of the following:

I-26 COLUMN INCLUDED

- 30'-50'
- Adjacent residential property (West Side)
- 1-26 Column within City-Owned Lowcountry Lowline parcel (East Side)

TYPICAL PARCEL WIDTH

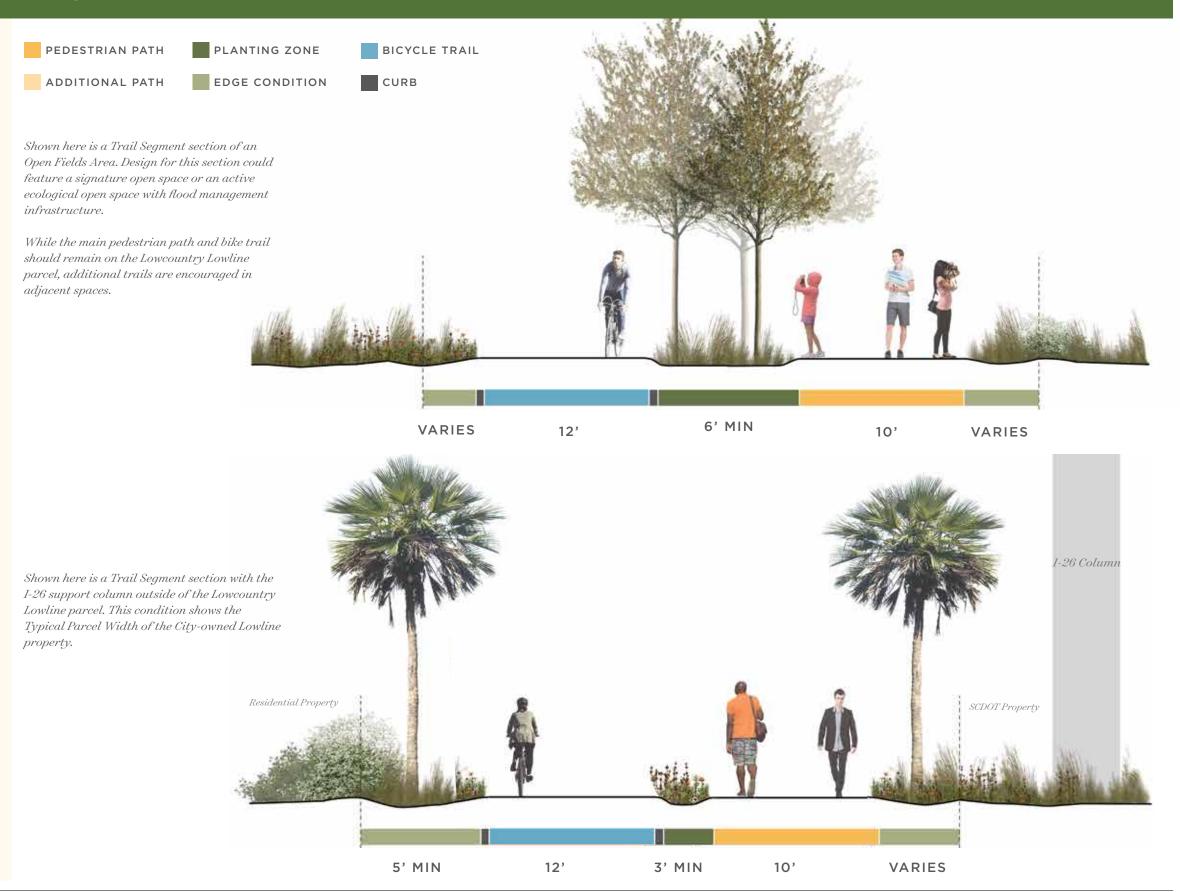
- 30'-45
- Adjacent residential property (West Side)
- Adjacent SCDOT property and/or I-26 Column within 15' of property line (East Side)

PINCH POINT (TRAIL)

• 5' -10' setback from I-26 Column reduces available space on City-Owned Lowcountry Lowline parcel to 25'-0" or less

OPEN FIELD AREAS

- 30'-50
- No adjacent private residential property AND / OR
- Nearest I-26 Columns are 15' or more away from City-Owned Lowcountry Lowline parcel OR
- Large open space available on the East Side of I-26



TRAIL SEGMENT URBAN NODE

This segment is characterized by an open former rail corridor between residential property and an elevated highway.

Activated outdoor space adjacent to the Lowline and minimized parking at the street frontage is encouraged in these areas.

DESIGN OBJECTIVES

An Urban Node segment can be described as one of the following:

TYPICAL PARCEL WIDTH

- 30'-45
- Adjacent commercial property (West Side)
- Adjacent SCDOT property and/or I-26 Column within 15' of property line (East Side)

PINCH POINT (TRAIL)

• 5'-10' setback from I-26 Column reduces available space on City-Owned Lowcountry Lowline parcel to 25'-0" or less



TRAIL SEGMENT

This segment is characterized by an open former rail corridor between residential property and an elevated highway.

ALTERNATIVE PATH ALIGNMENTS ALONGSIDE 1-26

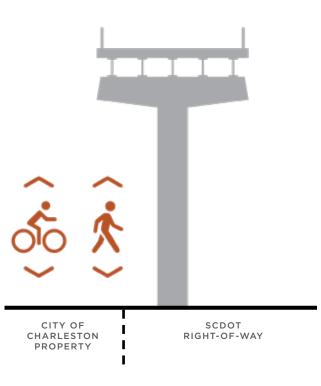
As stated in the Lowline Concept Plan, when the Lowline was originally imagined, it was assumed that the limitation would be the Norfolk Southern rail right-of-way. As the process has developed, it has become evident that through lease agreements with SCDOT, the Lowline can extend under the adjacent I-26 overpass. This has allowed greater flexibility in the design of the Lowline north of Huger Street.

The following minimum design criteria have been established for the design of the Lowline pathways:

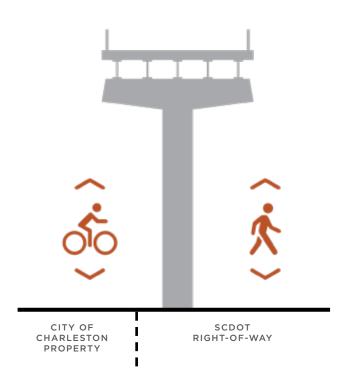
- The bikeway will be a minimum of 12' wide, allowing for two 6' lanes of travel.
- The pedestrian path will be a minimum of 10' wide.
- Except for areas near street intersections, bikeway and pedestrian paths should be separated by a 6' minimum planted median to minimize pedestrian-bicyle conflict
- There will be designated pedestrian crossings to allow for safe access across the bikeway.

In certain areas where the Lowline is narrow and in conflict with SCDOT restrictions, these criteria may be adjusted.

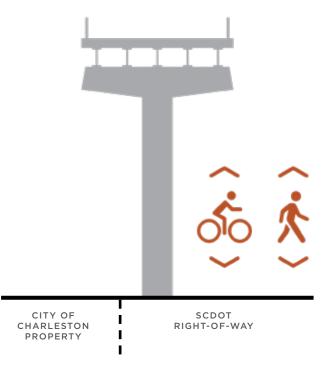
OPTION 1
ALL PATHWAYS LOCATED
IN FORMER RAILWAY



OPTION 2
SPLIT AMONG FORMER RAILWAY AND
ADJACENT SCDOT AREA



OPTION 3
ALL PATHWAYS BELOW I-26 IN
ADJACENT SCDOT AREA



Graphics from the Lowline Conceptual Master Plan are reflectd in these guidelines. The pathway may take on any of the above alignments. All graphics are looking north.

TRAIL SEGMENT

This segment is characterized by an open former rail corridor between residential property and an elevated highway.

MATERIALS

This segment will be the most natural character segment based on existing landscape features and opportunities for new parks, plantings, and gardens. Materials and furnishings should play up the contrast between these natural elements with the infrastructure of the elevated highway. Creative use of natural materials in fun and vibrant ways is encouraged. Paint, lighting, and textures can be used to differentiate unique spaces along the path.

This page shows examples of the general aesthetic direction, and is a starting point for the desired condition in this character

As with anywhere on the peninsula, traditional Charleston materials can be included here. It would be appropriate in this segment to experiment with the application of these traditional materials in new and creative ways. Please refer to the Baseline Charleston Materials page at the beginning of this document for more information.

MATERIALS, FURNISHINGS AND CONFIGURATIONS SHOWN IN THIS SECTION ARE INSPIRATIONAL AND BASED ON CONTEXT.

THE DESIGN REVIEW COMMITTEE WILL **DETERMINE THE** APPROPRIATENES OF VARIATIONS FROM THE **BASELINE GUIDELINES** ESTABLISHED IN PART 1.

















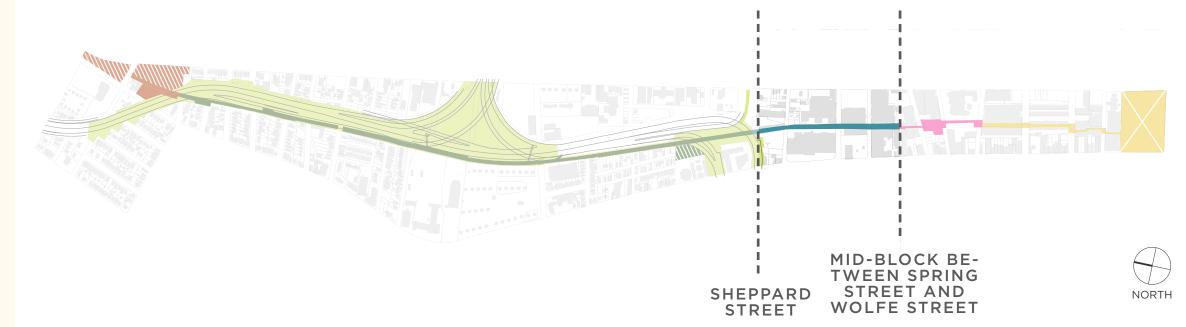
Lowcountry Lowline: Design Guidelines & Phasing Strategy





URBAN CORE SEGMENT

A consistently-wide portion of the Lowline bound on both sides by large mixed-use developments fronting directly onto the path. The adjacent high-density developments are in various stages of completion.



MATERIALS, FURNISHINGS AND CONFIGURATIONS SHOWN IN THIS SECTION ARE INSPIRATIONAL AND BASED ON CONTEXT.











URBAN CORE SEGMENT

This segment is characterized by large open space between planned and existing buildings.

Most existing buildings along the Lowline in this segment have direct access. New construction should follow this precedent.

DESIGN OBJECTIVES

An Urban Core segment can be described as one of the following:

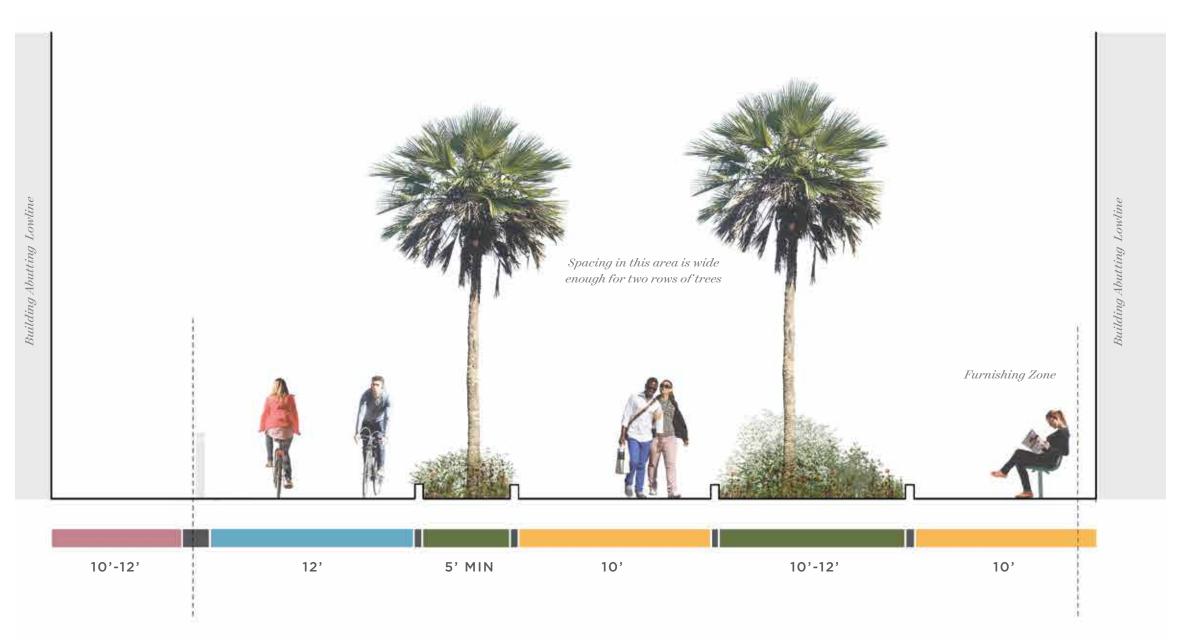
TYPICAL PARCEL WIDTH

- Typical parcel width: 40'-55'
- · Adjacent commercial property on both sides.
- Existing and/or planned commercial, residential, and mixed-use developments adjacent to Lowcountry Lowline parcel.

LIKLEY ADJACENT BUILDING CONDITIONS

- Average Lowline parcel width 45'-55' allows for buildings constructed abruptly along the property line
- · Adjacent commercial property on both sides.
- Existing commercial, residential, and mixed-use developments adjacent to Lowcountry Lowline parcel.
- Existing buildings front the Lowcountry Lowline and/or provide pedestrian access.





Shown above is an Urban Core section between the Courier Square and the Guild sites. The Lowcountry Lowline parcel is wide enough in the section for multiple walking areas AND/OR significant green space. Design for this segment could feature a linear park, small gardens, or an outdoor event area.

URBAN CORE SEGMENT

This segment is characterized by large open spaces between planned and existing buildings.

MATERIALS

This segment will be the transitional area between the contemporary northern segments and the traditional southern segments. Materials and furnishing should be a blend of the basic Charleston vernacular and modern elements from the northern segments.

Given the proximity of residential buildings and office space, this segment will be highly trafficked. Furniture should include a healthy mix of fixed and movable furniture to keep the space flexible. Path areas should be smooth and wide; contrasted by raised planting areas with trees and diverse vegetation. Hardscape areas should be offset by robust stormwater infrastructure.

This page shows examples of the general aesthetic direction, and is a starting point for the desired condition in this character segment.

Traditional Charleston materials should be included here. It would be appropriate in this segment to experiment with the application and combination of these materials in creative ways. Please refer to the Baseline Charleston Materials page at the beginning of this document for more information.

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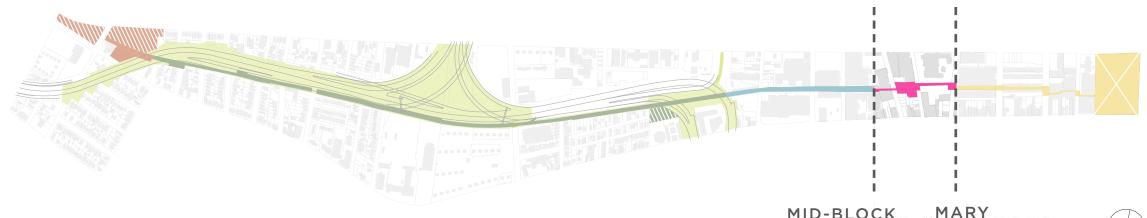






THE PINCH SEGMENT

The Lowline begins to meander and jog, while also becoming much narrower, at this location. Since this is not public right-of-way, the City is working with individual developers to dedicate portions of private property to the Lowcountry Lowline. Ideally, a 20' wide area will be maintained.



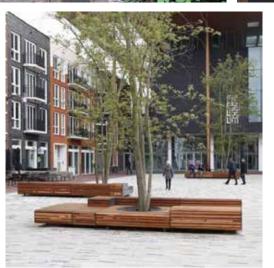
MID-BLOCK BETWEEN SPRING STREET AND WOLFE STREET MARY STREET



MATERIALS, FURNISHINGS AND CONFIGURATIONS SHOWN IN THIS SECTION ARE INSPIRATIONAL AND BASED ON CONTEXT.















THE PINCH SEGMENT

This segment is characterized by tight urban spaces between buildings on private property.

Easements on private property provide the space for the Lowline path, a 20' wide area or larger for future construction.

DESIGN OBJECTIVES

Material consistency is important through this area as the width of the Lowline changes from block to block.

A Pinch segment can be described as one of the following:

EXISTING BUILDINGS

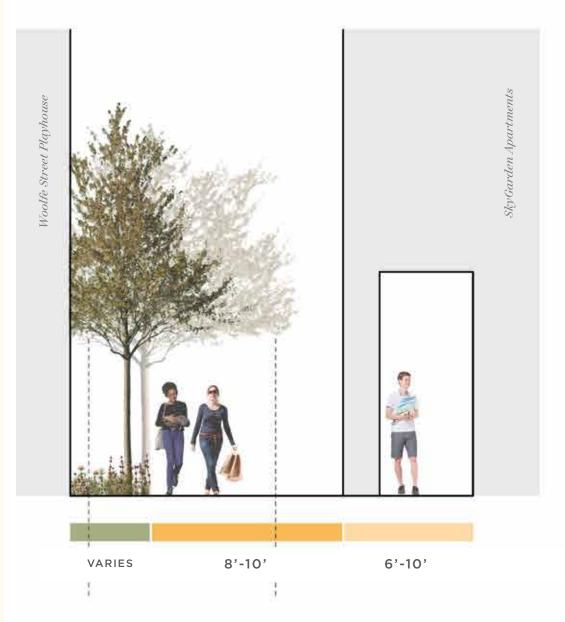
- Applicable to Skygarden north of Wolfe Street
- · Less than 20' between building edges.

FUTURE DEVELOPMENT BLOCKS

- Likely space between buildings: 20'
- $\bullet \quad \text{Adjacent commercial property on both sides.} \\$
- Existing commercial, residential, and mixed-use developments adjacent to Lowcountry Lowline parcel.
- Existing buildings front the Lowcountry Lowline and/or provide pedestrian access.

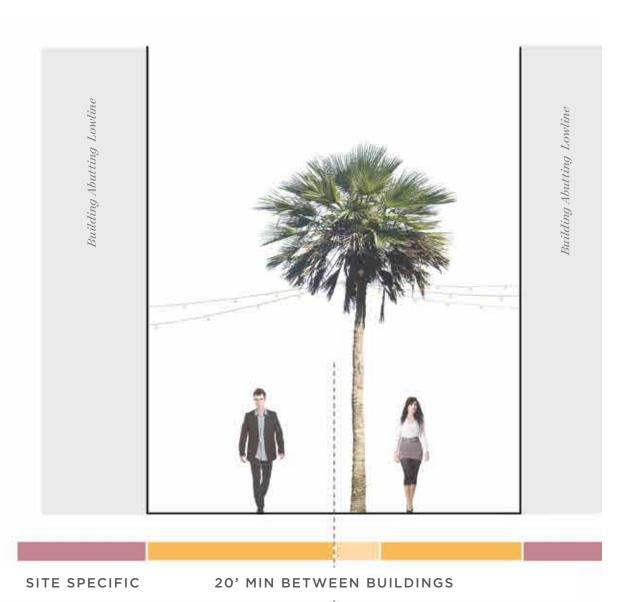
When located in narrow spaces the bicycle and pedestrian pathways may be combined. In such instances, site design (and possibly signage) should be used to encourage cyclists to travel slowly or dismount and walk thier bicycles as a pedestrian. Additionally, alternative bicycle routes should be provided and well-connected to the Lowline via side streets and mid-block pathways.





EXISTING BUILDINGS (SKYGARDEN)

Shown above is a Pinch section between the "Meddin Building" and the Skygarden Apartments. The Lowcountry Lowline exists on a easement in this area and is constrained by the existing buildings.



FUTURE DEVELOPMENT BLOCKS

Shown above is a Pinch section in the middle of the blocks between Mary Street and Wolfe Street. The Lowcountry Lowline will likely exist on dedicated easements in this area where the planned buildings will be set back to allow space for the Lowcountry Lowline on private property.

THE PINCH SEGMENT

This segment is characterized by tight urban space between buildings on private property.

MATERIALS

This segment is the most spatially constrained character segment. Materials and furnishing should be a blend of the basic Charleston vernacular and unique elements specific to each adjacent property. Furniture should line the path, rather than interrupt it. Tree wells with flush grates are preferable to raised planting areas.

This page lists examples of the general aesthetic direction, and is a starting point for the desired condition in this character segment.

Traditional Charleston materials should be included here. It would be appropriate in this segment to experiment with the application and combination of these materials in creative ways. Deviations from the traditional palette should be tasteful and intentional. Please refer to the Baseline Charleston Materials page at the beginning of this document for more information.

MATERIALS, FURNISHINGS AND CONFIGURATIONS SHOWN IN THIS SECTION ARE INSPIRATIONAL AND BASED ON CONTEXT.















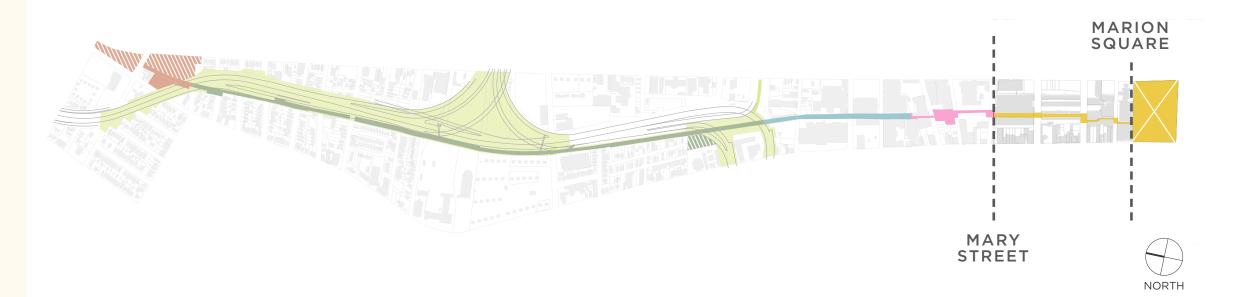






ALLEY SEGMENT

An existing mid-block linear pathway lined with active retail, bars, restaurants, and landscaping. It includes the southern most portion of the Lowcountry Lowline, from the bus mall at Mary Street, through Camden Depot to Marion Square.



MATERIALS, FURNISHINGS AND CONFIGURATIONS SHOWN IN THIS SECTION ARE INSPIRATIONAL AND BASED ON CONTEXT.

















ALLEY SEGMENT

This segment is characterized by existing alley conditions in need of modest retrofitting and midblock crossings.

DESIGN OBJECTIVES

The Alley Segment capitalizes on existing alley conditions. Midblock crossings, signage, and furnishings will express the continuity of the Lowline in these area.

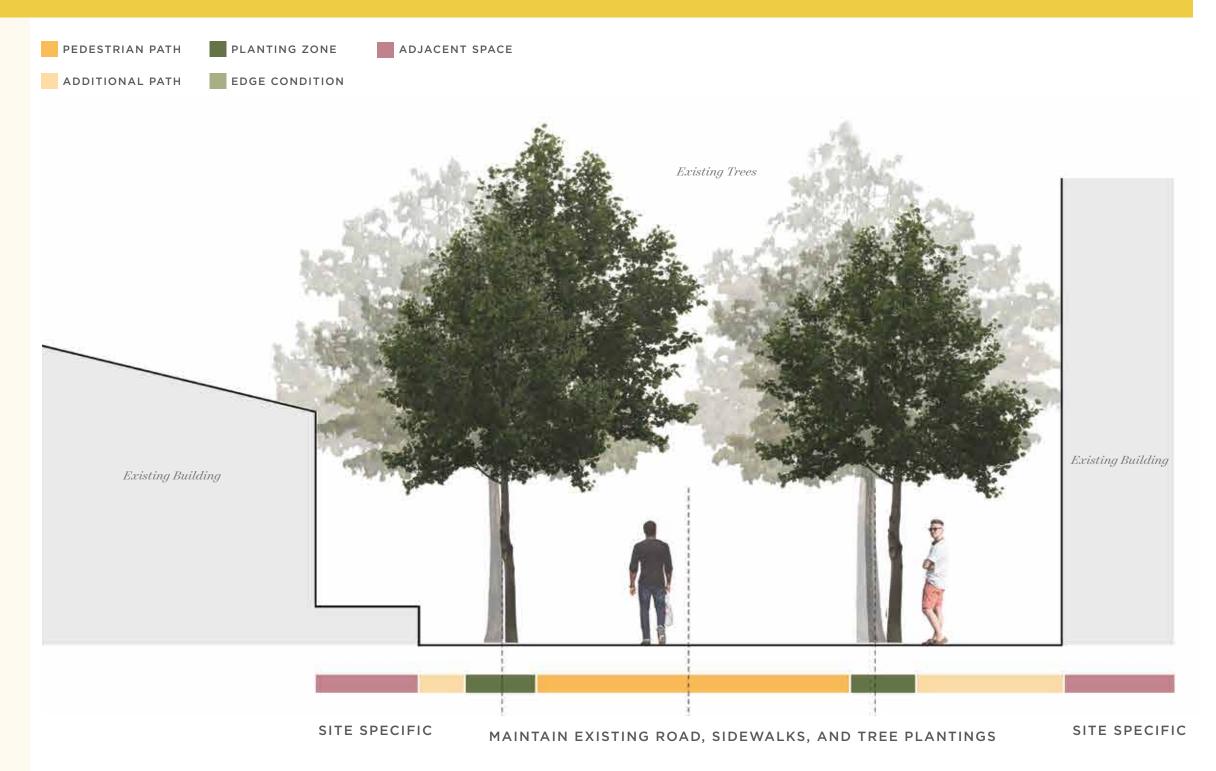
An Alley segment can be described as one of the following:

RETROFIT EXISTING BUILDINGS

- Existing public space widths: 25'-40'
- Adjacent commercial property on both sides.
- · Retrofit first floor of existing buildings to front the Lowcountry Lowline recommended.
- · Existing trees and planting adjacent to path.

IMPROVE EXISTING

- Adjacent commercial property on both sides.
- Existing mixed-use buildings adjacent to Lowcountry Lowline parcel.
- · May have trees, plantings, and lighting.



Shown above is an Alley Segment section at Camden Depot. The Lowcountry Lowline follows an existing mid-block linear pathway lined with retail, landscaping, and the Children's Museum along the renovated former railyard. An adjacent bus mall will be closed to automobiles and incorporated into the Camden Depot complex.

ALLEY SEGMENT

This segment is characterized by existing alley conditions in need of modest retrofitting and midblock crossings.

MATERIALS

This segment requires the least intervention of any character segment. However, in the locations that do need retrofitting, traditional Charleston materials should be used. Deviations from the traditional palette should be tasteful and intentional. Furniture should reflect the use of adjacent buildings. Tree wells with flush grates are preferable in tight areas, but wider areas a large enough for raised plantings.

This page lists examples of the general aesthetic direction, and is a starting point for the desired condition in this character segment.

Please refer to the Baseline Charleston Materials page at the beginning of this document for more information.

MATERIALS, FURNISHINGS AND CONFIGURATIONS SHOWN IN THIS SECTION ARE INSPIRATIONAL AND BASED ON CONTEXT.

















3

DESIGN GUIDELINES FOR INTERSECTIONS

There are two types of intersections along the Lowline: the ending of neighborhood streets at the Lowline (one type) and where streets completely intersect the Lowline (a second type, with two variations). Design direction is provided for each type according to geographic context. Conditions where streets completely intersect the Lowline employ two variations of mid-block crossings to accommodate safe, continuous bicycle and pedestrian movement.

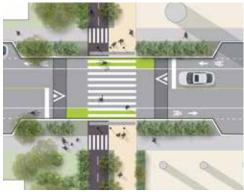
INTERSECTION FEATURES BY REGULATING SEGMENT

Intersections are special conditions that require focused attention.

There are generally three types of special intersection along the Lowline: two are applicable north of Sheppard Street and one is applicable south of Sheppard Street.



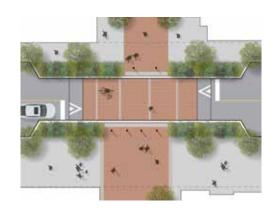








B STREET END ACCESS & POCKET PARK



C MIDBLOCK CROSSING

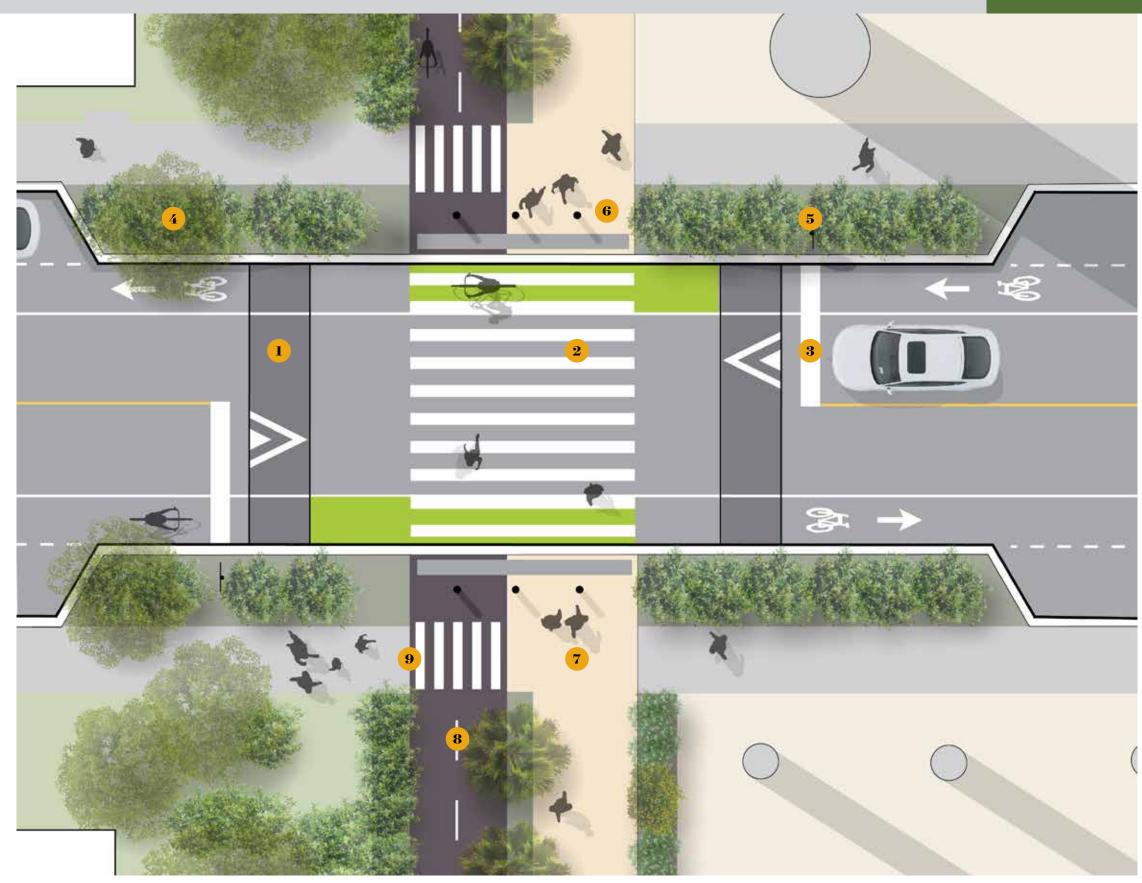
MIDBLOCK CROSSING

TRAIL
SEGMENT

Every intersection of the Lowcountry Lowline and a street end is unique. This detail is typical for regulating segment 2; *Trail Segment*.

Midblock crossings provide a dedicated space for bicyclists and pedestrians to cross at a desired location rather than walking to a nearby intersection.

- RAISED MIDBLOCK CROSSING
- 2 CO-LOCATED BICYCLE AND PEDESTRIAN CROSSWALK
- 3 CARS YIELD TO LOWLINE TRAFFIC
- 4 ADD OR CONTINUE STREET TREE, MATCHING TYPE AND SPACING
- 5 PLANTED CURB EXTENSIONS
- 6 REMOVABLE BOLLARDS
- 7 LOWLINE PATH MATERIAL TO BE DIFFERENT FROM SIDEWALK
- 8 DEDICATED BICYCLE TRAIL
- 9 PEDESTRIAN CROSSING AT BICYCLE TRAIL

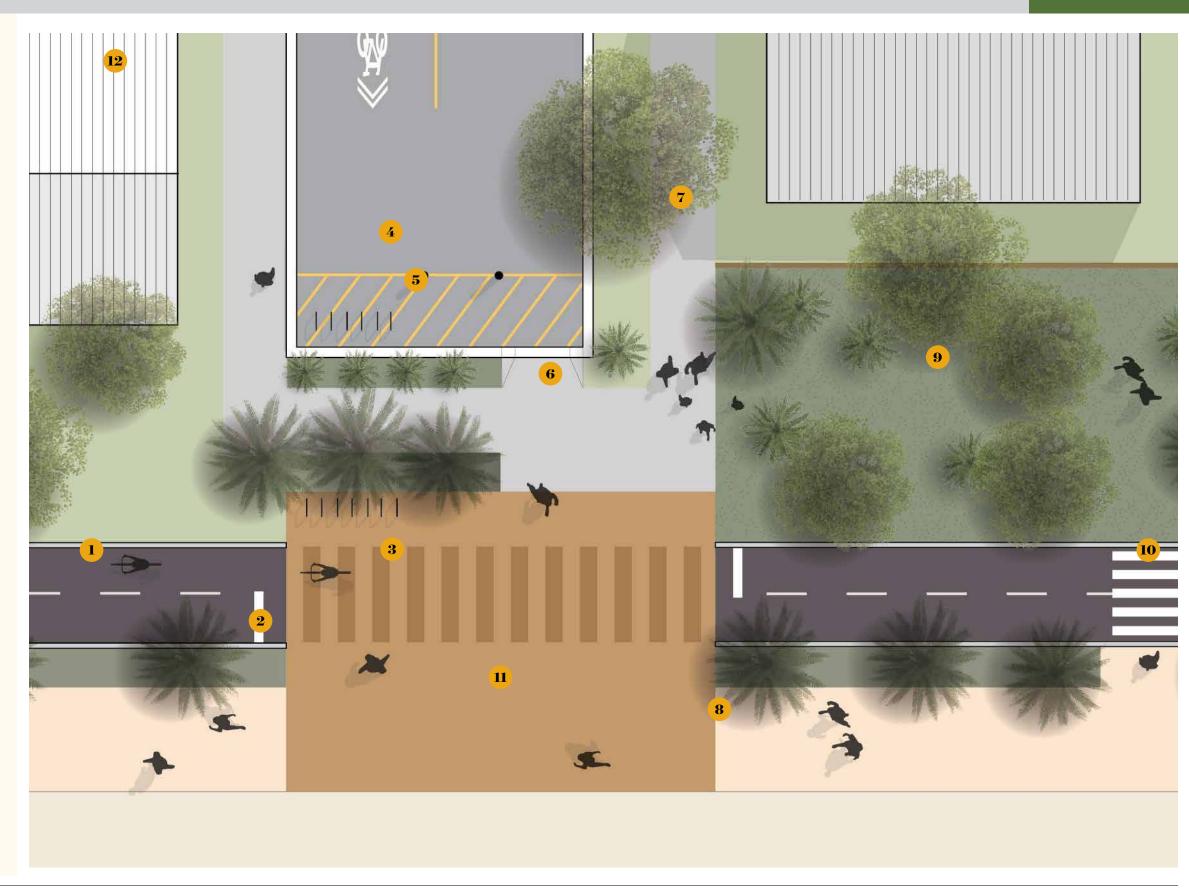


STREET END ACCESS & POCKET PARK

Every intersection of the Lowcountry Lowline and a street end is unique. This detail is typical for regulating segment 2; *Trail Segment*.

Street ends act as a neighborhood access point to the Lowcountry Lowline, and as such should accommodate pedestrians and bicyclists.

- DEDICATED BICYCLE TRAIL
- 2 BICYCLES YIELD TO PEDESTRIANS
- 3 BIKE CROSSING AT PLAZA
- 4 REMOVABLE BOLLARDS
- 5 BIKE RACKS
- 6 CONNECTING SIDEWALK ACCESS
- 7 SIDEWALK ACCESS TO LOWLINE FROM ADJACENT STREETS
- 8 PLAZA MATERIAL TO BE DIFFERENT FROM LOWLINE
- 9 PARK ADJACENT TO LOWLINE
- 10 PEDESTRIAN CROSSING AT BICYCLE TRAIL
- 11 PLAZA
- RESIDENTIAL NEIGHBORHOOD



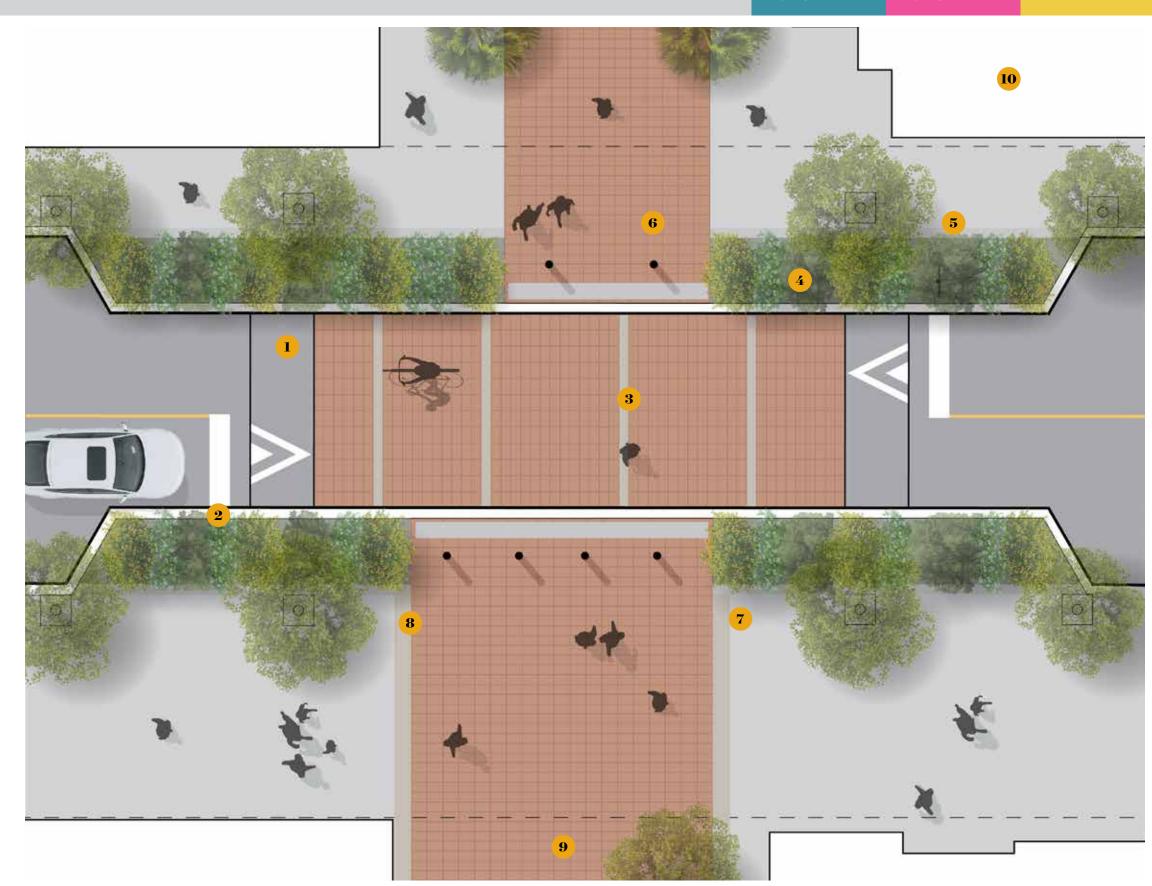
URBAN CORE SEGMENT

PINCH SEGMENT ALLEY SEGMENT

Every intersection of the Lowcountry Lowline and a street is a midblock crossing. This detail is typical for regulating segments 3-5; *Urban Core*, *The Pinch*, and Alley Segment.

Midblock crossings provide a dedicated space for bicyclists and pedestrians to cross at a desired location rather than walking to a nearby intersection.

- 1 RAISED MIDBLOCK CROSSING
- 2 CARS YIELD TO LOWLINE TRAFFIC
- BRICK PAVER PEDESTRIAN CROSSING
- 4 ADD OR CONTINUE STREET TREE, MATCHING TYPE AND SPACING
- 5 PLANTED CURB EXTENSIONS
- 6 REMOVABLE BOLLARDS
- 7 LOWLINE PATH MATERIAL TO BE DIFFERENT FROM SIDEWALK
- 8 PAVER EDGE OF LOWLINE PATH
- 9 LOWLINE
- 10 ADJACENT BUILDINGS



4

PHASING STRATEGY

Phasing is a critical aspect of project implementation. The Lowline is divided into several segments for phased implementation. Physical improvements using a mix of public and private capital, allocations of incentives and responsibilities for stormwater and mid-block crossings, and critical action steps for detailed coordination (planning, policy, funding, agreements, etc.) are established in each phase.

PHASING

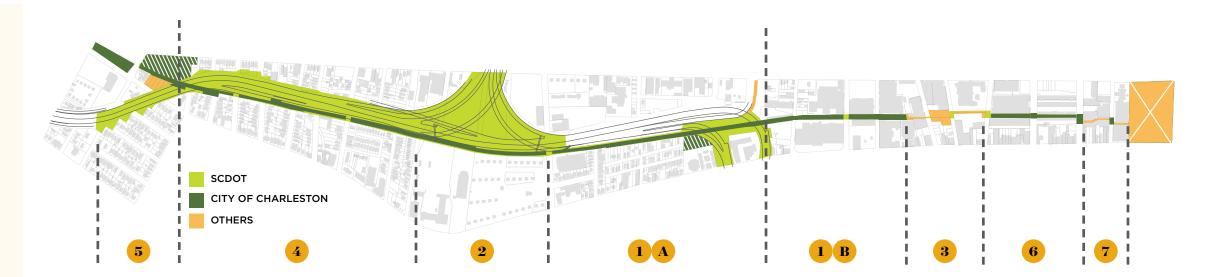
Coordinated timing and location of improvements leveraging public and private capital.

The Lowcountry Lowline can be delivered in phased segments using a mix of public and private investment. The coordination of these investments can be timed according to various factors such as ownership, funding mechanisms, eminent private development, etc. We have created 7 distinct phases that account for these variables.

BALANCED BENEFITS

The phasing strategy results in public improvements that benefit existing neighborhoods and residents, as well as future residents, businesses and visitors of the urban mixeduse development area between King Street and Meeting Street. This approach demonstrates that the Lowline is not just for those living in new apartment buildings, but is a public open space and transportation corridor that is for everyone. The first two phases provide large scale public parks, safety features such as lighting and landscaping, and much-needed street and stormwater improvements.

THIS IS A GENERAL
PHASING STRATEGY; IT
SERVES TO ANNOTATE
THE CONCEPTUAL
MASTER PLAN TO
GENERALLY DIRECT
IMPLEMENTION
ACTIVITIES. ACTUAL
PHASING AND
IMPLEMENTATION MAY
CHANGE FOLLOWING THE
COMPLETION OF THIS
DOCUMENT





LOWLINE PARK & TRAIL

This sub-phase involves a large central park, parking areas below I-26 and various related public street and stormwater improvements. It also includes the City's affordable housing site and connection the East Side via the Cooper River Bridge Redevelopment Area (CRBRA). The includes the CRBRA Tax Increment Financing (TIF) district, which can be used to pay for public improvements on the Lowline and the East Side as part of this phase.



URBAN CORE AREA

This sub-phase involves Lowline improvements on City owned properties, several blocks of dense urban mixed-use development, The City will work with private developers to identify incentives, such as using parts of the Lowline for stormwater management, in exchange for them to pay for and construct parts of the Lowline. The area will include three mid-block crossings, one of which is an SCDOT street.



NEW MARKET PARK AREA

This phase will leverage the funded improvements at King Street and Huger Street to develop a large water management open space system. This idea was recommended by the Dutch Dialogues Charleston report as a way to manage flooding on the peninsula. Improvements here will also include multi-purpose courts, a mid-block crossing at Huger Street, and fully improved pathway conditions for the Lowline up to Grove Street. The mid-block crossing at Huger Street must be coordinated with other improvements on that corridor.



THE PINCH

This area of the Lowline is privately-owned. Delivery of the Lowline will be through negotiations with individual properties for access easements, maintenance agreements and other legally-binding arrangements to ensure a high quality of design and public access to extend the Lowline through the middle of the block in these areas. Relevant review bodies and City staff will use the Lowline Design Guidelines to direct the design of physical improvements in this area. Any properties that are fenced off or otherwise privatized will be opened up, and, if deemed necessary by City staff, improved to be suitable for public access and use. City staff will develop a strategy to require or otherwise ensure the construction of essential mid-block pedestrian crossings in this location.



THE COLUMNS

Improvements from Grove Street to San Souci Street. In the near term, work with adjacent developers to construct a Service Street with parking on the east side of the Lowline south of Brigade Street and begin a community market just north of Brigade Street. The full extent of this phase will then involve the following: 1) complete the multi-use path to its fullest in this area, 2) installing as many stormwater storage areas and multipurpose courts beneath I-26 as possible, 3) extend the Service Street north of Brigade Street, 4) create neighborhood pocket parks at the end of each intersecting street, 4) install mid-block crossings, and 5) upgrade the outdoor market and surroundings to a long-term condition.



TRANSIT HUB

Redevelop the Parks Department and build the portion of the Lowline that runs through it using a public-private partnership (PPP). The PPP will take advantage of private investment to deliver the Lowline and other public benefits. Private development will be attracted to the site given its development capacity (available space, prime location, zoning, etc.) (while the Parks Department may operate more efficiently from a different location). Switch the development area with the path area, rerouting the path to connect to the intersection of Morrison Drive, Meeting Street and Mt Pleasant Streets. Leverage funding associated with the planned Lowcountry Rapid Transit project as part of a transit-oriented development.



BUS MALL & CAMDEN DEPOT

Using another public-private partnership (PPP), retrofit the existing bus mall to be part of the Lowline by getting the private sector involved. Incentive the private sector to construct and lease ground level commercial space in the existing parking garage at this location, perhaps in exchange for making physical improvements (converting the bus mall to the Lowline and constructing its relevant mid-block crossings.



HUTSON ALLEY EXTENSION

Construct mid-block crossings on John Street and Hutson Street. Convert the service alley behind Hotel Bennett to become a more pedestrian-oriented space leading from Hutson Alley to Marion Square.

PHASE A INTERIM IMPROVEMENTS

What can be done today to build and activate the Lowline?

The City of Charleston and the Friends of the Lowline have agreed to deliver interim improvements in the project area. A simple multi-use pathway and some fully-completed portions of the Lowline already exist and can be expanded. This phase proposes two types of interim improvements: 1) a simple paved pathway where none currently exists, and 2) programming that gets people out using the space immediately. Programming may include clean-ups, site tours, mountain biking, painting, fitness classes, outdoor markets, etc. Some of these events are already happening and provide great benefit.

Top Priorities for Interim Improvements

- 1 COMPLET BIKE-PED PATHWAY SEGEMENTS FROM END TO END
- PROGRAMMING GRASSED SEGMENTS IN THE URBAN CORE
- BASKETBALL COURT **NEAR NORTH-CENTRAL**
- LITTER CLEANUPS AND INFORMAL RECREATION

IN ORDER TO BEGIN USING THE LOWLINE, THE CITY AND ITS PARTNERS WILL STRIVE TO CREATE A PATH FROM MOUNT PLEASANT STREET TO MARY STREET AS SOON AS POSSIBLE

















Possible Interim Lowline Pathway Segments

LINE STREET
TO HUGER STREET

Construct a simple paved pathway connecting Line Street to Huger Street, thus connecting a majority of the Lowline with an multi-use path. This will also connect to Meeting Street, linking the Lowline with the Ravenel Bridge via Cooper Street in the Eastside neighborhood.

- 2 URBAN CORE CONNECTOR
 Encourage and allow adjacent stakeholders to develop temporary features, including pathways, plazas, landscaping, and grass areas. This is preferable to surface parking. Lighting and temporary mid-block crossings are encouraged.
- MOUNT PLEASANT STREET TO BRIGADE STREET

A simple paved pathway will be needed here, since the current I-26 path does not extend this far north. Route the pathway along the former Norfolk Southern corridor until Phase 5 can be completed.

Make minor improvements to the existing multi-use pathway beneath I-26. Consider connecting it to interval and future Lowline path alignments, especially at midblock crossings.

Possible Interim Improvements and Activation Strategies

BEGIN A COMMUNITY MARKET
Work with community members to launch an informal,

open air community members to launch an informal, open air community marketplace below I-26 north of Romney Street. This should be grown into an ongoing, permanent fixture as shown in the Opportunities Study.

2 CONNECT AND CLEAN UP THE STREET ENDS

Encourage and allow residents along a particular street to make short-term improvement at the ending of their streets that meet the Lowline. Create stewardship teams, landscape plans and cleanup/installation events. Remove fences that separate the neighborhood from the Lowline.

REVITALIZE THE MULTIPURPOSE COURTS

Refresh all of the existing paved area that were created in the late 1970s as "multipurpose courts." Add basketball hoops and court lines, tennis nets, paint, seating and other amenities in a targeted manner. Work with the existing "Bridge Spot" skatepark to safely improve and expand. Add temporary lighting whenever possible. CLEANUPS AND POPUPS AT LOWLINE PARK

Cleanups and pop-ups should happen all over the Lowline, but Lowline Park is especially important because of its large size and visibility. All trash and indoor furniture should be removed. Temporary landscaping should be installed around the edges and the grass should be mowed on a regular basis. Large events should take place here, like food truck festivals, outdoor movies and the like.

5 POP-UP LOWLINE AT THE GUILD & HYATT

The Guild Apartments on Meeting Street have planted grass on the open area of the Lowline behind their building. The area between the Hyatt and Elan Midtown is ready to be used for something right now. These spaces could be transformed into something more until the full Lowline and neighboring development can be completed. Consider a midblock crossing to the Alley and doing something with that block as well.

6 TEMPORARY MID-BLOCK CROSSINGS ON CITY STREETS

THESE ARE JUST A FEW IDEAS. MORE IDEAS SHOULD COME FROM THE COMMUNITY AND

BE ENCOURAGED (AND APPROVED) BY THE

Use "tactical urbanism" and more permanent approaches to paint midblock crossings on City streets. Include curb extension, flexible bollards and other short-term traffic devices that also reflect the geometry and configurations of the permanent conditions expressed in Chapter 5.

CITY AND ITS PARTNERS

7 BEGIN USING THE BUS MALL DIFFERENTLY

Consider holding events in the segment between Ann Street and Mary Street, especially those that bring activity and attention to the businesses and Children's Museum at Camden Depot. Explore ways to use the ground floor of the parking garage for vending out onto the sidewalk. This activity and relationship is encouraged in the final Lowline condition (see page 67).

8 NATURE TRAIL SYSTEM

Install walking/jogging trails in the future Newmarket Park area. Create a nature park using low cost materials, signage, etc. Lead tours and use the space for outdoor education.

PHASE 1 A LOWLINE PARK & TRAIL

Incentives & Improvements

1 PATH TO EASTSIDE UNDER CONSTRUCTION

Create a pathway along the I-26 exit to connect Meeting Street to the future Lowline. This will connect the Lowline to the East Side and the Ravenel Bridge.

2 LOWLINE PARK

SCDOT MASTER LEASE AREA + CITY-OWNED LOWLINE

Create a large central park in as much SCDOT and City of Charleston land as possible beneath the curved overpasses of I-26 and Septima Clark Parkway. The park will manage stormwater for multiple sites and the overpasses, as recommended by the Dutch Dialogues. Connect to as many parts of the surrounding city as possible.

AFFORDABLE HOUSING

The City of Charleston will work with a private-sector design and development team to construct affordable housing on a city-owned parcel at this location. Various Lowline-related improvements will be delivered, including parking areas, bike-ped connections, landscaping and lighting.

4 CONNECT TO KING STREET

As part of the Lowline Affordable Housing project, upgrade an existing driveway with sidewalks and a plaza below the billboard that connects to Lowline. Explore options to connect to adjacent neighborhood streets, allowing them to be connected to the Lowline.

5 I-26 PARKING AREA A SCDOT MASTER LEASE AREA

Improve as part of Lowline Affordable Housing effort. Connect to Lowline, add landscaping and lighting, and improve conditions along King Street. Allocate parking needed for affordable housing and allow for general public parking to access the Lowline.

6 I-26 PARKING AREA B
SCDOT MASTER LEASE AREA

Improve for general public parking. Include a service area for adjacent private development to the south (in order to avoid using the Lowline for such activities).

7 LOWLINE PATHWAY SCDOT MASTER LEASE AREA

Construct the Lowline along the former Norfolk-Southern railway corridor from Line Street to Huger Street. This will link an existing multi-use path with a planned interim improvement. A sliver of SCDOT lease area will be needed to widen the corridor alongside I-26. (See pages X and X for more information.)

8 BILLBOARD CONNECTION

Explore a simple pathway connection beneath the existing billboard at this location. This may be the only way to connect the neighborhood and the King Street commercial area at Race Street to the Lowline. The pathway may extent further into the neighborhood using vacant land.

9 STREET END CONNECTION
Connect the end of Congress Street to the Lowline. (See page X for more information about neighborhood plazas at street endings.)



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Stormwater Management Approach

1 LOWLINE PARK
SCDOT MASTER LEASE AREA

Regardless of ownership, this park should be designed to handle stormwater for as much of the surrounding urban environment as possible. This was recommended in Dutch Dialogues Charleston.

2 I-26 PARKING AREA A SCDOT MASTER LEASE AREA

Work with SCDOT to use other parts of the master lease area to manage stormwater for this parking area. Some of the City-owned Lowline may also be used here.

3 I-26 PARKING AREA B SCDOT MASTER LEASE AREA

Work with SCDOT to use other parts of the master lease area to manage stormwater for this parking area. Some of the City-owned Lowline may also be used here.

4 LOWLINE
The Lowline may be used to man

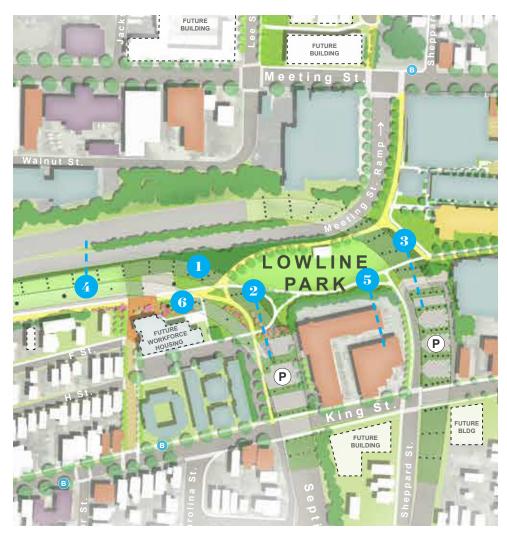
The Lowline may be used to manage stormwater runoff from I-26. This also applies to Lowline Park and remaining phases.

5 ADJACENT DEVELOPMENT

The City may allow adjacent development at this location to use the City-owned portion of the Lowline for stormwater management.

6 AFFORDABLE HOUSING

The City-owned affordable housing project can manage its own stormwater in the required elevated highway setback area and the plaza area connecting to the Lowline.



Primary Stormwater Strategies FLOODABLE PARK BIORETENTION AREAS BIOSWALES UNDERGROUND DETENTION FLOOD MANAGEMENT AREA GREEN INFRASTRUCTURE PERMEABLE PAVERS REVITALIZED STORMWATER WETLAND I-26 STORMWATER COLLECTION & MANAGEMENT

EXISTING INFRASTRUCTURE

IMPROVEMENTS

PHASE 1 A LOWLINE PARK & TRAIL

Critical Path Coordination Items

ENVIRONMENTAL REMEDIATION
 CITY OF CHARLESTON

Complete an environmental study to determine any soil contamination. Develop a remediation strategy. Determine impacts to funding and project design.

2 LOWLINE CONNECTION & PARKING AGREEMENTS
CITY OF CHARLESTON & CHARLESTON HOUSING AUTHORITY
Secure all agreements needed to allow planned driveway and Lowline connection through

Secure all agreements needed to allow planned driveway and Lowline connection through Charleston Housing Authority property. Explore opportunities to share parking and reconnect neighborhood street grid.

3 LOWLINE HOUSING
CITY OF CHARLESTON & DEVELOPMENT PARTNER

Construct affordable housing, a connection to the Lowline from King Street, and all planned surrounding off-site improvements (part of which are already funded by the Cooper River Bridge Redevelopment Area TIF). Construct the SCDOT Parking Area A as part of this project.

1 COOPER STREET EXTENSION

CITY OF CHARLESTON

Connect Cooper Street to Meeting Street for cyclists and pedestrians using City-owned property.

BILLBOARD PATHWAY

CITY OF CHARLESTON & PROPERTY OWNER

Engage property owner to secure, plan and design a simple pathway and landscape area beneath the existing billboard. Enhance access for billboard maintenance, which would no longer occur on the Lowline.

NEW COOPER RIVER BRIDGE AREA TIF BOND

Propose a new TIF bond in the Cooper River Bridge Redevelopment Area. This can be used to fund some of the physical improvements identified for this phase and for Phase 2. Funds could go towards Lowline Park, the Lowline pathway and parking area improvements.



PHASE 1 B URBAN CORE AREA

Incentives & Improvements

ALLEY IMPROVEMENTS

Construction of the Lowline at these locations will: 1) adhere to the design guidelines in this document, 2) be on City-owned property, 3) use a mix of public and private investment, and 4) be timed according to construction of adjacent parcels (with the Lowline being used for construction area to be arranged with the City).

- 1 LIFESTYLE COMMUNITIES

 A plaza-like transition from the Alleys to Lowline Park.

 Delivered as part of planned adjacent development.
- 2 GREYSTAR/COURIER SQUARE
 Post-construction activation and pathway construction
 at the Guild (interim). Long-term improvements with
 remaining phases of Courier Square.
- **3** FORMER BI-LO Construct in coordination with adjacent development.
- SPRING STREET SEGMENT
 City-led effort (no adjacent development). Incentivize adjacent hotel and other buildings to retrofit frontages in order to improve/activate the Lowline.

OTHER IMPROVEMENTS

These aren't located along the core of the Lowline, but they are very important for its access and implementation.

- 5 CROSS STREETS
 Improve all cross streets from King Street to Meeting
 Street. Include street trees, high quality sidewalks and,
 where needed, on-street bicycle infrastructure.
- 6 MIDBLOCK PATHWAYS
 Where possible, encourage and improve midblock
 pathways on private property that connect the Lowline
 to King Street and Meeting Street. Where needed, add
 on-street bicycle infrastructure. Develop and install
 wayfinding to help users navigate using these pathways.
- 7 I-26 PARKING AREA B
 SCDOT MASTER LEASE AREA
 Improve for general public parking. Include a service area
 for adjacent private development to the south (in order to
 avoid using the Lowline for such activities).



PHASE | B URBAN CORE AREA

Mid-block Crossing & Stormwater Management Incentive Assignments

INCENTIVE TRADEOFFS

Usage of the Lowline for stormwater may be directly tied to the development of the Lowline and/or mid-block crossings as an incentive package. This should be further explored among all potential parties involved and may vary on a site-by-site basis. In other words, it may be mutually advantageous for the adjacent developer to use City-owned Lowline property for stormwater management in exchange for the developer constructing public infrastructure.

LIFESTYLE COMMUNITIES

Allow City-owned Lowline land to be used for stormwater storage and management for adjacent development sites.

LC (SOUTH OF LINE)

Allow City-owned Lowline land to be used for stormwater storage and management for adjacent development sites.

LINE STREET MIDBLOCK CROSSING

> Work with Lifestyle Communities to construct a midblock crossing in exchange for stormwater management allocation as described above.



COURIER SQUARE

Allow City-owned Lowline land to be used for stormwater storage and management for adjacent development sites.

COLUMBUS STREET MIDBLOCK CROSSING

SCDOT STREET

Work with Courier Square to construct a mid-block crossing in exchange for stormwater management allocation as described above.

FORMER BI-LO

Allow City-owned Lowline land to be used for

Allow City-owned Lowline land to be used for development sites.

SPRING STREET

Work with adjacent development to construct a midblock crossing in exchange for stormwater management allocation as described above.

Primary Stormwater Strategies FLOODABLE PARK **BIORETENTION AREAS BIOSWALES** UNDERGROUND **DETENTION** FLOOD MANAGEMENT AREA **GREEN INFRASTRUCTURE** PERMEABLE PAVERS REVITALIZED STORMWATER

stormwater storage and management for adjacent development sites.

SPRING STREET SEGMENT

stormwater storage and management for adjacent

MIDBLOCK CROSSING

PHASE 1 B URBAN CORE AREA

Critical Path Coordination Items

MID BLOCK CROSSING AGREEMENTS AND/OR ORDINANCE

This is the first and most urgent phase of the midblock crossings strategy outlined in section 7. The City and its partners should take the relevant streets from SCDOT and develop incentives to administer the construction of mid-block crossings in these locations. These should be timed with construction lay-down and possible underground stormwater detention.

2 URBAN BIKEWAY PLAN FOR COLUMBUS STREET

Develop an urban bikeway plan for Columbus Street from King Street to East Bay Street. This will allow cyclists to get on and off the Lowline and connect to the on-street bikeway system before traveling too far south, where space is limited and pedestrian congestion will be high.

3 EXISTING BUILDING RETROFITS

Work with existing buildings to encourage and possibly incentivize the retrofit of any ground floor condition of buildings fronting onto the Lowline to do so in a way that provides active, transparent and engaging conditions.



Major Public Improvements

NEWMARKET PARK

A major undertaking to convert the SCDOT overpass area into an intentionally-designed wetland open space and water management area. This will include paths, boardwalks, natural areas.

2 BOARDWALKS AND WATER SPACES

Use the area between Huger Street and Newmarket Park beneath I-26 for water management (daylighting of Newmarket Creek at the outfall of the King/Huger drainage improvement project). Use boardwalks and water edge pathways.

- HUGER STREET
- Develop a design plan for Huger Street from Meeting Street to King Street. Complete the urban bikeway planned for Huger Street east of Meeting Street. Work with adjacent properties and future development to organize and convert parking to on-street parallel. Construct a mid-block crossing for the Lowline and make pedestrian improvements under the I-26 overpass as part of these improvements.
- 4 LOWLINE PATH

Complete, long-term construction of the Lowline path and it associated lighting and landscape improvements from Huger Street to Grove Street.

MULTI-PURPOSE COURTS AND STORMWATER AREAS

Develop a series of stormwater areas, sports courts, plazas, play areas, etc. beneath I-26 between, among and alongside the rows of bridge support columns. Preserve the existing skatepark, but remove/prevent unsafe expansion and automobile usage on the existing multiuse path.

GROVE STREET NEIGHBORHOOD PLAZA

> Create a small pocket park/plaza at the end of Grove Street that connects the Lowline. Reduce excess pavement space, add landscaping and stormwater management for Grove Street.

7 CONNECT TO AND THROUGH AMERICAN COLLEGE OF BUILDING ARTS

Extend the pathway system through Newmarket Creek to the "Trolley Barn" parking area and the American College of Building Arts. This will allow the Lowline to connect Grove Street to Poinsette Street and Meeting Street (thus preventing a currently unsafe crossing of pedestrians on the Romney Street off-ramp).

8 COOL BLOW TO LAUREL ISLAND

Redesign Cool Blow Street from Meeting Street to Hanover Street. This will connect the Lowline from ACBA (#7 above) to Laurel Island via the planned Cool Blow Bridge (which will include a very wide pedestrian and bicycle multi-use pathway).

9 PRIVATE CONNECTION POINTS

Allow and encourage private properties to connect to the Lowline. Strongly encourage semi-public connections that go from the Lowline to King Street.

PARKING
Parking area off Meeting Street (see page 55).



Stormwater Management Approach

I KING/HUGER DRAINAGE PROJECT FUNDED & UNDERWAY

Complete the King/Huger drainage improvement using a mix of conventional and open/wetland approaches. Use the project to anticipate and make specific recommendations for New Market Park.

- 2 NEWMARKET PARK
 Create a massive water management open space with a mix of wetland and pipe/pump systems (green and grey infrastructure). This is recommended in Dutch Dialogues Charleston and would benefit the entire area.
- 2 NEWMARKET CREK
 Restore the functionality of Newmarket Creek, removing barriers to its natural flow and taking advantage of ecosystem service for flood management. This is also recommended in Dutch Dialogues Charleston and would benefit the entire area.



Primary Stormwater Strategies									
FLOODABLE PARK									
BIORETENTION AREAS									
BIOSWALES									
UNDERGROUND DETENTION									
FLOOD MANAGEMENT AREA									
GREEN INFRASTRUCTURE									
PERMEABLE PAVERS									
REVITALIZED STORMWATER WETLAND									
I-26 STORMWATER									

COLLECTION & MANAGEMENT

EXISTING INFRASTRUCTURE

IMPROVEMENTS

Critical Path Coordination Items

SCDOT COORDINATION
CITY OF CHARLESTON & SCDOT

Clarify stormwater management obligations and potential sources of funding. Detailed design to allow hydrological, grading and other landscape alterations for stormwater open space.

2 MAKE HUGER STREET A NEW PROJECT BEYOND CURRENT CAPITAL PROJECT CITY OF CHARLESTON & LCRT

Prioritize the upgrade of Huger Street to accommodate an east-west bicycle lane, on-street parking and a midblock crossing for the Lowline. Work with proposed LCRT project for potential federal transit funding and pursue other sources of capital. Conduct preliminary design immediately.

3 LOWLINE PATH ALIGNMENT
Phase-in pathway alignment relative to existing multiuse pathway. Also coordinate with King/Huger stormwater project to determine any interim improvements that can be

made to the Lowline.

FOR PARKING

Engage private property to explore opportunity for shared driveway access to a surface parking lot below

I-26 for user of Newmarket Park and the Lowline.

SECURE ACCESS EASEMENT

5 PRESERVE AND ENHANCE THE INFORMAL SKATEPARK

FRIENDS OF LOWLINE, CITY OF CHARLESTON, SKATE PARK USERS & SCDOT

Create a plan for the skatepark, known as the "Bridge Spot," that will lead to compliance with the SCDOT lease agreement. Explore issues of design, maintenance, stormwater, parking, lighting, and others for short- and long-term improvement.

6 ACCESS EASEMENT AND DESIGN COORDINATION FOR PUBLIC CONNECTION

CITY OF CHARLESTON & ACBA

Design, plan and make agreements for the connection of the Lowline across Newmarket Park to and through the American College of the Building Arts (ACBA) campus.

TO CONVERT PARKING TO OUTDOOR DINING SPACE

Engage adjacent venues and stakeholders to develop a phased improvement plan to convert this area (or a portion of it) into an active, outdoor seating and events area. Allow adjacent and mobile food and beverage vendors to serve onto this space.

8 INCENTIVIZE PRIVATE CONNECTIONS

Work with owners and developers of adjacent properties to create connections onto the Lowline. These should be permitted, encouraged and incentivized to enhance safety, access, activity and economic development.



Improvements Delivered by Private Development on Private Land

411 MEETING STREET UNDER REVIEW

This development project will design and construct the Lowline at this location according to the Design Guidelines provided in this document.

2 82 MARY STREET

This development project will design and construct the Lowline at this location according to the Design Guidelines provided in this document.

3 MORRIS SOKOL SITE

This development project will design and construct the Lowline at this location according to the Design Guidelines provided in this document. This site may be required to install interim improvements if a temporary surface parking lot is planned between Wolfe Street and Reid Street.

4 WOLFE-REID SITES

This development project will design and construct the Lowline at this location according to the Design Guidelines provided in this document. This site may be required to install interim improvements if a temporary surface parking lot is planned between Wolfe Street and Reid Street.

5 25/31 WOLFE STREET CONCEPTS CURRENTLY BEING DEVELOPED

This development project will design and construct the Lowline at this location according to the Design Guidelines provided in this document.

6 SKYGARDEN

Remove the fence and other private amenities (or convert them to public amenities). The area should be opened-up to the public as the Lowline and modified to accommodate movement as specified in the Design Guidelines.



Primary Stormwater Strategies FLOODABLE PARK **BIORETENTION AREAS BIOSWALES UNDERGROUND DETENTION** FLOOD MANAGEMENT AREA GREEN INFRASTRUCTURE PERMEABLE PAVERS REVITALIZED STORMWATER WETLAND **I-26 STORMWATER COLLECTION & MANAGEMENT**

EXISTING INFRASTRUCTURE

IMPROVEMENTS

Mid-block Crossings



This mid-block crossing should be assigned to the developments site listed (3 and 4) above. This should be required as part of the TRC process but may be negotiated in a different way.

SCDOT STREET This mid-block crossing

REID STREET

This mid-block crossing should be assigned to the developments site listed (1 and 2) above. This should be required as part of the TRC process but may be negotiated in a different way.

Critical Path Coordination Items

REOPEN & UPGRADE DESIGN CITY & PROPERTY OWNER

Any fences or vertical obstructions (bike racks, furniture, etc.) should be removed from the allocated Lowline at this location. The design should be upgraded as recommended in the Design Guidelines. Examine ways for adjacent buildings better engage the Lowline.

3 TAKE STREETS FROM SCDOT

Remove Wolfe Street and Reid Street from the State Highway System to turn them over to the City of Charleston. Investigate alternative options for maintenance costs.

2 DESIGN, ACCESS AND ALLOCATION OF PRIVATE PROPERTY

(SEE DETAIL ON THIS PAGE)

Ensure good design and sufficient space is allocated on private property to achieve a high-quality Lowline connection through all of these blocks. Such a connection benefits everyone adjacent and the general public, resulting in higher values and optimal public space amenities.





10 Feet Min.

10 Feet Min.

DESIGN, ACCESS AND ALLOCATION OF PRIVATE PROPERTY

The City, Friends of the Lowline and adjacent developers will work together to allocate, design and construct the Lowline along a portion of privately owned land of at least 10 feet in width. When two neighboring parcels meet to form the Lowline, the combination of their 10-foot allocation will result in a 20-foot-wide space for the Lowline. No portion of a building should be placed in this area, as to maintain a clear 20 foot wide path. The design of this space can be directed through the Board of Architectural Review in coordination with the Design Review Committee and/or be reviewed through the Design Review Committee on voluntary basis. Development agreements, access easements, and maintenance agreements can be used to facilitate and standardize the consistent allocation of this space in this area.

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PHASE 4 THE COLUMNS

Incentives & Improvements

1 LOWLINE PATHS

Construct the complete Lowline path from Grove Street to Cypress/Brigade Street (with an interim pathway from Brigade/Cypress to Mount Pleasant Street). This should include a separated bicycle and pedestrian path, connection to adjacent streets, and any lighting and landscaping along, near and between these paths.

2 OPEN AIR MARKET

An open air, neighborhood-focused market should be established at this location immediately (as in interim strategy along with earlier phases). This phase should then involve the formal design and development of market in a permanent way.

3 "GREEN" SERVICE STREET

Work with adjacent developers to design and construct a "service street" along the east edge of I-26. This will allow for a mix of public and dedicated business parking to access the various spaces in the Columns. It will connect streets from Meeting Street that currently end at the Lowline and encourage the backs of buildings to face the street and the Lowline.

4 MULTIPURPOSE COURTS AND STORMWATER AREAS

Develop a series of stormwater areas, sports courts, plazas, play areas, etc. beneath I-26 between, among and alongside the rows of bridge support columns.

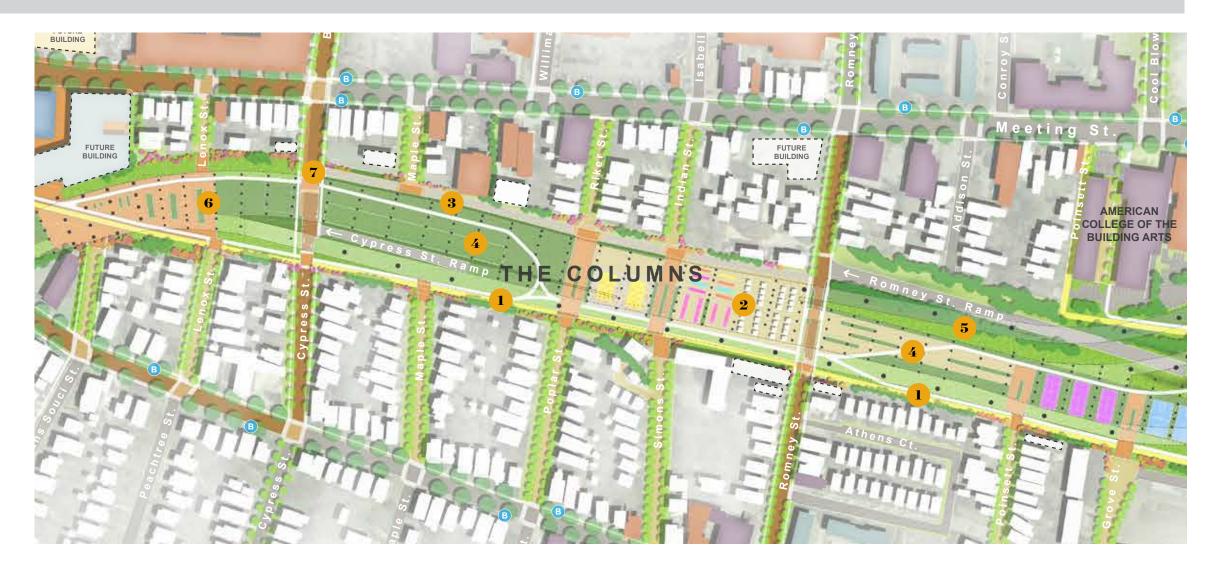
5 EDGE CONDITION ALONG ROMNEY STREET OFF RAMP

Work with SCDOT to design and implement a barrier along the Romney Street I-26 off-ramp to prevent pedestrian access and provide a well-landscaped edge along the east side of the Lowline.

6 INTERIM IMPROVEMENTS

Make interim improvements to this area, with complete improvements delivered as part of the next phase.

7 BRIGADE STREET BIKEWAY
Planned bicycle improvements on Brigade Street that
connect to, and align with, the Lowline.





Intersections

POCKET PARKS AT **NEIGHBORHOOD STREET ENDS**

> Design and develop individual pocket parks for each neighborhood street ending at the Lowline. This will involve community engagement and stewardship, vertical transitions (stairs, ramps, etc.) and stormwater management facilities.

MID-BLOCK CROSSING AT **ROMNEY STREET**

> Construct a mid-block crossing for the Lowline and make pedestrian improvements under the I-26 overpass as part of these improvements.

MID-BLOCK CROSSING AT CYPRESS/BRIGADE STREET

Construct a mid-block crossing for the Lowline and make pedestrian improvements under the I-26 overpass as part of these improvements.

Primary Stormwater Strategies

FLOODABLE PARK

BIORETENTION AREAS

BIOSWALES

UNDERGROUND **DETENTION**

FLOOD MANAGEMENT AREA

GREEN INFRASTRUCTURE

PERMEABLE PAVERS

REVITALIZED STORMWATER WETLAND

I-26 STORMWATER COLLECTION & MANAGEMENT

EXISTING INFRASTRUCTURE IMPROVEMENTS

Critical Path Coordination Items

OPEN AIR
NEIGHBORHOOD MARKET
FRIENDS OF THE LOWLINE,
ADJACENT NEIGHBORHOODS, CITY OF
CHARLESTON & SCDOT

Create an informal neighborhood market as an interim step in an earlier phase (as soon as possible). Use lighting and temporary, low cost treatments. This phase will formalize the market with more permanent amenities like storage, service access, vendor booths, play areas, and, or course, landscaping.

2 SERVICE STREET NETWORK
CITY OF CHARLESTON, PRIVATE
PROPERTY OWNERS & SCDOT

Facilitate agreements necessary to allow private developer to deliver public infrastructure. Examine existing and draft lease agreements to ensure local control needed to deliver these types of improvements.

3 LOWLINE PATH ALIGNMENT CITY OF CHARLESTON & FRIENDS OF THE LOWLINE

Determine optimal pathway alignments relative to mode separation, sun/shade locations, and space for neighborhood connections. Some portion of SCDOT right-of-way will be needed to achieve a widened pathway as called for in the Lowline Opportunities Plan.

ADJACENT DEVELOPMENT COORDINATION
CITY OF CHARLESTON & PRIVATE

PROPERTY OWNER

Work with property owner to conduct a capacity and urban form study. Ensure zoning and incentives are in place to facilitate a development that enhances the

Lowline. Be sure that active uses are located on the ground floor, the building fronts the Lowline abruptly, and that as many doors and windows as possible are located along the ground floor of the building. Surface parking and driveways along the Lowline should be avoided.



MID-BLOCK CROSSINGS
CITY OF CHARLESTON & SCDOT

Determine if street takeover is needed to achieve the desired mid-block crossing condition shown on page 35. The City may not have the desire or capacity to assume ownership and maintenance over these streets. Ideally the design would be approved by SCDOT.

6 ROMNEY OFF-RAMP
CITY OF CHARLESTON & SCDOT

Work with SCDOT to develop a design to prevent pedestrian crossing of the Romney Street off-ramp. Funding might be available through SCDOT or FHWA. Ensure landscaping is included as part of the project.

POCKET PARKS AT NEIGHBORHOOD STREET ENDS FRIENDS OF THE LOWLINE &

ADJACENT NEIGHBORHOODS

Work with residents to design individual pocket parks and Lowline connections at the end of each street (as shown on page 36). Each street ending should reflect the needs and desires of each street and be based on input by the residents of those streets.

PHASE 5 TRANSIT HUB (MT. PLEASANT STREET TOD AREA)

Major Public Improvements

LOWLINE ALIGNMENT

Route the Lowline away from the former Norfolk-Southern railway to go between the Coca-Cola building and new infill development, so that it connects to Meeting Street and the nearby major intersection of Morrison Drive and Mount Pleasant Street. The Lowline crossing at this intersection should be located alongside the crosswalk.

PUBLIC PLAZAS

Create series of civic open spaces at the entrance to the Lowline and other locations around the major intersection.

PARK OR PARKING AREA

Create a well-landscaped surface parking area in accordance with the City's master lease agreement with SCDOT. This can be allocated to affordable housing as part of the Parks Department redevelopment discussed on the next page.) This could also be more open space.

INTERSECTION REALIGNMENT

A major undertaking, but with transit and the Lowline being introduced to this currently substandard intersection, it will need to be drastically improved in the near future. We recommend a slightly curved approach on Morrison Drive using some adjacent private property (to be acquired as right-of-way and a slight widening (and concrete median) on Mount Pleasant Street.

KING STREET STREETSCAPE

Improve King Street as an urban main street with a dedicated on-street bikeway. Include more sidewalks, curb and gutter, crosswalks, curb extensions, street trees and other landscaping. Encourage future development to front directly onto the new main street.

6 PARK IMPROVEMENTS

Make improvements to Vivian Anderson Moultrie Playground as an extension of the Lowline. (It is unclear if this will include a multi-use pathway.)

7 FUTURE LOWLINE EXTENSION
Possible route of the Lowline alongside existing or
former rail lines. This may use Meeting and King

Intersections

LOWLINE CROSSING

SCDOT STREET

Create a dedicated, co-located bicycle and pedestrian crosswalk across Mount Pleasant Street, connecting the Lowline to the planned LCRT transit hub. This should be as safe as possible, giving Lowline user travel modes as much priority in intersection as possible.

2 KING STREET SCDOT STREET

Possible location for a mid-block crossing connecting the open spaces below I-26.

MOUNT PLEASANT STREET AT 1-26

SCDOT STREET

Add intersections and crosswalks.

4 KING STREET SCDOT STREET

Add a complete crosswalk on King Street at Montford and/or Courtland Avenues. This will help to create a pedestrian-oriented main street environment and connect adjacent neighborhoods to planned transit.



Streets.

Transit-oriented Infill Development

COCA-COLA BUILDING (ADAPTIVE REUSE)

The existing Coca-Cola building should be adaptively reused as a focal point to any future development. As described on the previous page, it should be surrounded by active plaza space, landscaping and courtyards.

LINED PARKING DECK

If additional parcels can be secured, consider a parking deck at this location. The parking deck should be lined with habitable space so as to avoid exposure of parking to views from surroundings and provide active uses along the public realm (especially the Lowline). This parcel is zoned for a 12-story building, which can be placed atop the lined parking garages.

3 INFILL BUILDING

Also part of the Parks Department redevelopment concept. Parking for this building can be located in the parking garage (#3). Appropriate massing transitions to surrounding urban fabric are critical here.

KING STREET LINER BUILDING

Develop a 2-3 story shopfront liner building between the proposed lined parking garage and King Street. This should strengthen the main street character of King Street and provide driveway access to the parking garage.

5 TRANSIT HUB MIXED-USE

Development should occur on the LCRT transit hub block. The ground floor can be composed of uses that relate to transit. Parking may be completely omitted or located far off site due to abrupt transit access.

6 JOSEPH FLOYD MANOR

Improve the existing housing tower at this location. Develop additional structures that line the street and provide more mixed-use density adjacent to transit. Consider a lined parking garage to the north of the tower. Development here should reinforce an active urban main street along King Street.

Primary Stormwater Strategies

| FLOODABLE PARK |
| BIORETENTION AREAS |
| BIOSWALES |
| UNDERGROUND |
| DETENTION |
| FLOOD MANAGEMENT AREA |
| GREEN INFRASTRUCTURE |
| PERMEABLE PAVERS |
| REVITALIZED STORMWATER |
| WETLAND |

I-26 STORMWATER
COLLECTION & MANAGEMENT

EXISTING INFRASTRUCTURE IMPROVEMENTS



Critical Path Coordination Items

PARKS DEPARTMENT REDEVELOPMENT

CITY OF CHARLESTON & DEVELOPMENT PARTNER

The City of Charleston Parks & Recreation Departments currently occupy and operate from City-owned land that could be put to a higher and better use, especially since its located next to a proposed regional transit hub for the Lowcountry Rapid Transit System and zone UP-Upper Peninsula. The City should investigate and likely pursue a public-private partnership (PPP) to: 1) relocate the Parks Department to better serve the City, 2) assemble relevant adjacent parcels as necessary, 3) and attract a private developer who will deliver the Lowline and other public space, add appropriate mixed-use development with structured parking, and (ideally) reimburse the City for the relocation of the Parks Department.

2 TRANSIT ORIENTED DEVELOPMENT AND IMPROVEMENTS

CITY OF CHARLESTON & BCD-COG

Work with the Berkely Charleston Dorchester Council of Governments (BCD-COG) on the Lowcountry Rapid Transit (LCRT) system to ensure appropriate transit-oriented development (TOD) configurations for public and private space, including the coordination, funding and implementation of public improvements that benefit the Lowline (especially those that connect it to transit and bikeways to the north).

3 KING STREET SITE CITY OF CHARLESTON

Work with property owner to be part of PPP described in #1 above. This parcel is needed to construct the buildings as shown and provide vehicular access to the development site.

LOWLINE NORTH CITY OF CHARLESTON & SCDOT

Create a plan to extend the Lowline north along Meeting Street and King Street (likely as on-street urban bikeways.)



59

Major Public Improvements

1 BUS MALL RETROFIT

Close the "bus mall" to through traffic to create a full Lowline segment. Consider the existing street trees, railroad tracks, and other materials. Explore options for stormwater management when pavement is removed. Consider extending design elements from Camden Depot.

PARKING GARAGE RETROFIT

Retrofit the ground floor of the parking garage along the "bus mall" to include street-facing retail and other active uses. The street space and the retail should be designed and constructed together.

3 TRANSIT HUB

Convert the surface parking lot adjacent to the visitors center bus shed to accommodate CARTA bus transit and smaller tour buses. Consider moving bus service away from Mary Street to create a consolidated transit hub location to serve residents and tourists.

Primary Stormwater Strategies FLOODABLE PARK **BIORETENTION AREAS BIOSWALES UNDERGROUND DETENTION** FLOOD MANAGEMENT AREA **GREEN INFRASTRUCTURE** PERMEABLE PAVERS REVITALIZED STORMWATER WETLAND **I-26 STORMWATER COLLECTION & MANAGEMENT**

EXISTING INFRASTRUCTURE IMPROVEMENTS



BUS MALL & PARKING GARAGE RETROFIT

Close the "bus mall" to through traffic to create a full Lowline segment.

Retrofit the ground floor of the adjacent parking garage.

A CLOSE AND REPAIR THE STREET



C PARKING ABOVE



Mid-block Crossings*

MARY STREET
SCDOT STREET

Construct a mid-block crossing following the retrofit of the "bus mall." The preserved small Charleston single house will be aligned at the center of the crossing and should be planned with its surrounding plaza space.

2 ANN STREET

Remove existing mid-block crossings, which are not aligned with the existing street or planned Lowline. Create a new mid-block crossing to align with the retrofitted "bus mall" and the existing Camden Depot pedestrian walkway.

3 JOHN STREET

Connect Camden Depot with a mid-block crossing in front of the Charleston Music Hall to go to Hutson Alley. There is a significant jog from one Lowline segment to the other, so a mid-block crossing may be extra wide to accommodate this movement.

Critical Path Coordination Items

WORK WITH CARTA

Coordinate with CARTA on rerouting of buses away from the "bus mall" to allow for retrofit. The bus mall is a City-owned parcel of land (not a public right-of-way).

2 PUBLIC-PRIVATE PARTNERSHIP

Develop a public-private partnership to incentivize the private sector to construct ground level retail spaces within the City-owned parking garage along the Lowline. Develop the right deal to deliver retail spaces and Lowline improvements.

3 TRANSIT HUB CONSOLIDATION

Explore the removal of bus activity on Mary Street at the City-owned parking garage as part of a larger effort to create a transit hub at the Charleston Visitors Center for the planned Lowcountry Rapid Transit line (LCRT). Retrofit the streetscape on Mary Street.



Major Public Improvements

INTERIM WAYFINDING
Ensure people can find their way from Marion Square to Hutson Alley, which will serve as the beginning of the Lowline until improvement #2 can be implemented. This may include signage and other Lowline elements on Hutson Street and King Street (both of which are controlled by the City of Charleston).

2 SERVICE ALLEY RETROFIT
Enhance the existing pedestrian connect alongside the
Bennett Hotel service alley to effectively extend Hutson
Alley to Marion Square. This will make Marion Square
the beginning (or end) of the Lowline.

Assigned Mid-block Crossings

HUTSON STREET

Construct a mid-block crossing on Hutson Street,
connecting the Lowline across to Marion Square. This
will help to attract pedestrians from King Street to retail
and other locations on Hutson Alley.

Critical Path Coordination Items

Determine the design and delivery of Hutson Street.

Work with adjacent developer to improve and implement their concept for the street, which can unify and beautify their several properties along the corridor.

2 SERVICE ALLEY RETROFIT
Identify public or grant funding to do this project. Work
with Bennett Hotel to ensure service functions are not
interrupted. An access easement and maintenance
agreement may be needed here.

Primary Stormwater Strategies FLOODABLE PARK **BIORETENTION AREAS BIOSWALES UNDERGROUND DETENTION** FLOOD MANAGEMENT AREA **GREEN INFRASTRUCTURE** PERMEABLE PAVERS REVITALIZED STORMWATER WETLAND I-26 STORMWATER **COLLECTION & MANAGEMENT**

EXISTING INFRASTRUCTURE



5

MIDBLOCK CROSSING STRATEGY

The Lowline will extend across a dozen or so city streets. Safe, high-quality mid-block street crossings prioritizing the flow of pedestrians and bicyclists will be essential to connect users of the Lowline from one block segment to another. While the design guidelines describe the characteristics of the crossings, this section identifies the possible overall strategies for their implementation.

It is anticipated that SCDOT design standards and their constraints will not be sufficient to meet City of Charleston and stakeholder objectives, design quality or prioritization of nonmotorized modes of travel (chiefly the users of the Lowline over vehicles on intersecting streets). For this reason, it is also anticipated that the City of Charleston will have to assume ownership and maintenance from SCDOT (removing them from the State Highway System). The City must think carefully about this tradeoff as to avoid an undue maintenance burden. For this and other reasons, a clear strategy for implementation is needed.

MID BLOCK CROSSING STRATEGY

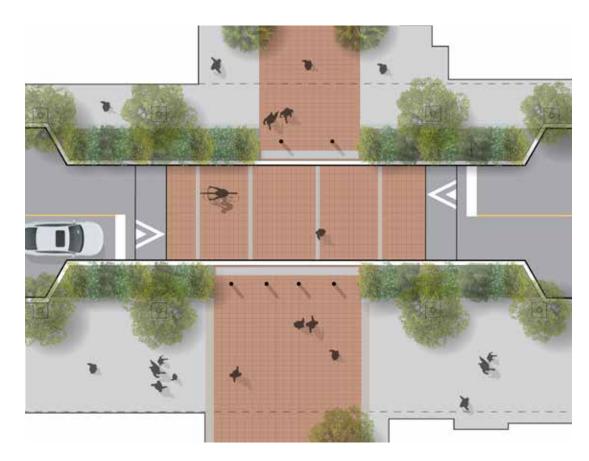
MID-BLOCK CROSSINGS

Mid-block crossings are an essential element of the Lowline, as they will enable each segment of the Lowline to be connected for safe bicycle and pedestrian travel. They will enable people to safely cross intersecting streets. It is to the advantage of the general public and adjacent development stakeholders that all mid-block crossings are implemented on the Lowline.

City ordinances may be updated to require mid-block crossings of the adjacent developer as part of the development review process administered by the City's Technical Review Committee (TRC). They may also be jointly funded and designed through public-private partnership or funded through some other mechanism when/if not required by TRC.

In all phases, where many streets are owned and maintained by the South Carolina Department of Transportation (SCDOT), delivery of mid-block crossings will likely require the City to assume maintenance liability by removing the SCDOT streets from the State Highway System (taking them over from SCDOT). This is because SCDOT will likely not approve of the of the mid-block crossings.

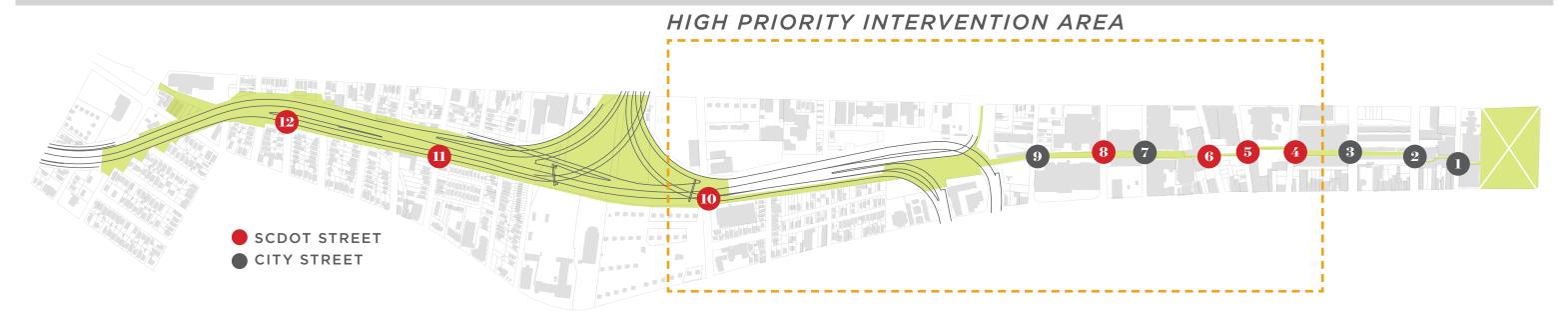




Potential Midblock Crossing Strategies

- 1 AVOID ALLOWING PARKING, LOADING OR USES OF THE SPACES NEEDED FOR THE MID-BLCOK CROSSINGS
- 2 COORDINATE WITH SCDOT ON DESIGN TO DETERMINE POTENTIAL ACCEPTANCE
- 3 CREATE AN INCENTIVE STRUCTURE FOR IMPLEMENTATION
- 4 DEVELOP A PLAN TO TAKE OVER STREETS FROM SCDOT
- 5 PURSUE PUBLIC FUNDING

MID BLOCK CROSSING STRATEGY



Site-specific Midblock Crossing Strategies

HUTSON STREET

Try to get this as part of Hutson Street improvements at later date. Pursue incentives, work with adjacent developer.

- 2 JOHN STREET
 City/County capital project.
- **3** ANN STREET
 City/County capital project. Pursue as part of bus mall retrofit
- MARY STREET

 TAKE OVER FROM SCDOT

City/County capital project. Pursue as part of bus mall retrofit. Consider taking over street from SCDOT early to assist adjacent development, deliver high quality cross street improvements, and explore a temporary mid-block crossing.

5 REID STREET
TAKE OVER FROM SCDOT

Work with adjacent developers using incentives, deliver along with development of Lowline on private sites. City funding likely needed. Take over street in near future to assist adjacent development, deliver high quality cross street improvements, and secure complete design control of midblock crossing.

6 WOLFE STREET
TAKE OVER FROM SCDOT

Work with adjacent developers using incentives, deliver along with development of Lowline on private sites. City funding likely needed. Take over street in near future to to assist adjacent development, deliver high quality cross street improvements, and secure complete design control of midblock crossing.

SPRING STREET

Work with adjacent developers using incentives, deliver along with development of Lowline on private sites. City funding likely needed. Take over street in near future to assist adjacent development, deliver high quality cross street improvements, and secure complete design control of midblock crossing.

8 COLUMBUS STREET TAKE OVER FROM SCDOT

Explore a design exemption with SCDOT (not likely, or likely result in inferior design). Take over immediately if only segment from King to Meeting (half has been resurfaced and remaining half will likely be done with development prior to SCDOT). Take over street in near future to assist adjacent development, deliver high quality cross street improvements, and secure complete design control of mid-block crossing.

1 LINE STREET

Work with adjacent developers using incentives, deliver along with development of Lowline on City property. Request County to prioritize street resurfacing.

HUGER STREET

TAKE OVER FROM SCDOT

Create a new capital project for Huger Street, extending the planned bikeway and street improvements from Meeting Street to King Street. Take street over from SCDOT (likely for current project from Meeting to Morrison, may also have to include newly resurfaced portion from King to President).

ROMNEY STREET

Pursue a design exemption to allow street to remain in SCDOT control.

CYPRESS/BRIGADE STREET

Pursue a design exemption to allow street to remain in SCDOT control.

When designing mid-block crossings on SCDOT rights-of-way, every effort must be made to avoid the City having to take over the street from SCDOT. In other words, the City and/or the design team will work with SCDOT to meet these guidelines while keeping street in SCDOT ownership and maintenance. Takeover of If a design quality that does not meet these guidelines cannot be resolved, then the City should consider taking over ownership and maintenance of the right-of-way to achieve these standards.

More information on mid-block crossing design for SCDOT streets can be found in the SCDOT Traffic Engineering Guidelines TG-38 - Crosswalks (available on thier website).

MID BLOCK CROSSING STRATEGY Inventory, Evaluation and Readiness

	Street Name	Current Ownership	Take over From SCDOT	Lowline Plan Phase	Public \$	Possible Private \$ / Incentive (Voluntary Potential Adjacent Developer Participation)	Possible Requirement as Part of TRC (w/ New Ordinance/ Requirement)	Condition	Potential Near Future Resurfacing	Greater Extent in case Possibly Regiured to Takeover More than Needed	Local Design Control Incentive for Pending Adjacent Development for General Street Improvements (Also Likely to Resurface Street)
1	Hutson Street	City	n/a	7	TBD	Yes	Possible - Bennett Hospitality on Hutson Street	Fair with New Portion	No	n/a	TBD
2	John Street*	City	n/a	7	Yes	n/a	n/a	Fair	No	n/a	No
3	Ann Street	City	n/a	6	Yes	n/a	n/a	Poor	Maybe	n/a	No
4	Mary Street	SCDOT	Yes	6	Yes	n/a	n/a	Fair	No	Yes (King to Coming; Meeting to America)	82 Mary; 413 Meeting Street; Morris- Sokol Sites
5	Reid Street	SCDOT	Yes	3	TBD	Yes - 82 Mary & 413 Meeting Street	Yes - 82 Mary & 413 Meeting Street	Poor with New Portion	Yes "but may get pushed back" (SCDOT 2022 and Beyond)	Yes (King to East Bay)	82 Mary; 413 Meeting Street; Morris- Sokol Sites; 25/31 Wolfe Street
6	Wolfe Street	SCDOT	Yes	3	TBD	Yes - Wolfe/Sokol	Yes - Wolfe/Sokol	New?	No	Yes (King to Drake)	25/31 Wolfe Street; Sokol Sites
7	Spring Street	City	n/a	1	TBD	Yes - Bi-Lo/U-Haul	Yes - Bi-Lo/U-Haul	New?	No	n/a	n/a
8	Columbus Street	SCDOT	Yes	1	TBD	Yes - Courier Square / Bi-Lo & U-Haul	Yes - Courier Square / Bi-Lo & U-Haul	Fair with New Portion	Yes (SCDOT 2022 and Beyond)	Yes (King to East Bay)	Courier Square & U-Haul (Half of segment already complete by the Guild)
9	Line Street	City	n/a	1	TBD	Yes - Lifestyle Communities / Parcel 5	Yes - Lifestyle Communities / Parcel 5	Bad / Terrible	County Unknown (SCDOT No)	n/a	Lifestyle Communities; Courier Square
10	Huger Street	SCDOT	Yes	2	Yes	n/a	n/a	Poor / Bad	County Unknown (SCDOT No)	Yes (President to Morrison Drive)	n/a
11	Romney Street	SCDOT	If not able to get design exemption.	4	Yes	TBD	Evaluate Impact of regulation on small scale development here.	Poor	Possible (Bicycle lanes Planned for 2021) (SCDOT No)	Yes (King to Nassau)	n/a
12	Cypress/ Brigade Street	SCDOT	If not able to get design exemption.	4	Yes	n/a	n/a	Poor	Planned (Fall 2020)	Yes (Meeting to Huguenin)	n/a

SCDOT STREETS

EARLY PHASE IMPLEMENTATION

ADJACENT DEVELOPER COORDINATION NEEDED

*A midblock crossing could be used at John Street to connect completed segments of the Lowine today.

6

SCDOT LEASE AGREEMENT AREA

This section provides guidance as to how the City of Charleston's lease agreement with SCDOT affects the design and programming of the portions of the Lowline located on right-of-way controlled by SCDOT. The lease agreement allows usage of SCDOT land area along the Lowline for parking and recreation, with each use having particular constraints.

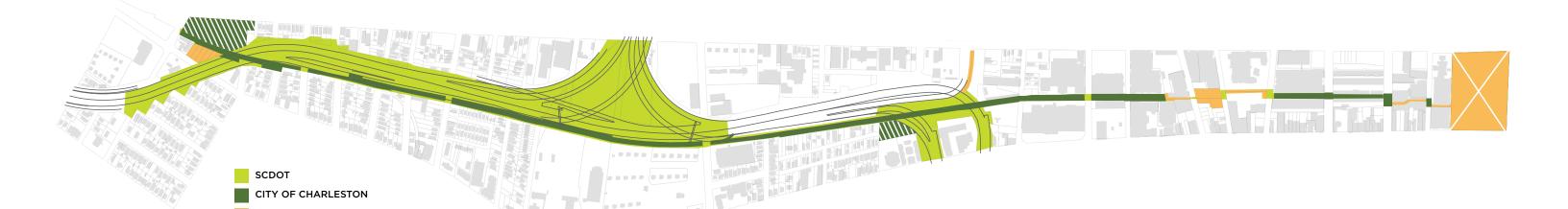
While this section provide graphic and design-based guidance on the lease agreement area, it is not a substitute for the lease agreement itself. Individual usage and site design concepts must be evaluated by the SCDOT District Six Engineering Administrator and the Director of Maintenance Office or their designee(s).

SCDOT LEASE AGREEMENT

SCDOT

OTHERS

CITY OF CHARLESTON

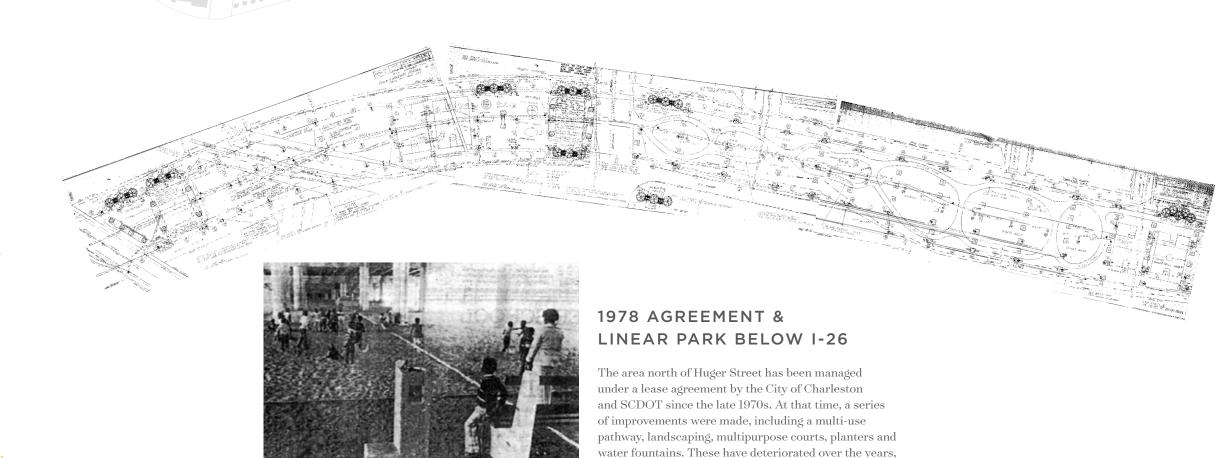


OWNERSHIP AND AGREEMENTS

The Lowcountry Lowline is a mix of City property, South Carolina Department of Transportation (SCDOT) right-ofway and private property. The portion of former Norfolk-Southern rail line, some intersecting streets and some adjacent properties are owned and controlled by the City of Charleston. To achieve maximum benefit from the Lowline, all areas have to be seamlessly incorporated into the overall design.

The City has had a long-standing agreement with SCDOT for the area beneath the I-26 underpass between Mount Pleasant Street and Huger Street for the purposes of a linear park. In early 2021, the City and SCDOT entered into a new lease agreement governing the design, usage and processes related to areas alongside the Lowline in the SCDOT right-of-way. Many of the areas are below the elevated highway (I-26).

The 2021 lease agreement should be used when designing areas in SCDOT right-of-way and can be obtained by contacting the Director of Traffic & Transportation at the City of Charleston. This section summarizes basic design-related aspects of the lease agreement.



but the Lowline Conceptual Master Plan calls for them

to be revitalized and expanded as part of the project.

SCDOT LEASE AGREEMENT Critical Lease Agreement Elements

CRITICAL LEASE AGREEMENT ELEMENTS

This section specifies desired uses and design configurations in and around elevated highways and SCDOT right-of-way along the Lowline. As shown in the Lowline Conceptual Master Plan, such SCDOT spaces are viewed as a seamless extension of the linear park space, having amenities such as multipurpose courts, stormwater management landscapes, varied non-motorized pathways, and places for programmed events.

A continuous, activated park system will serve to increase safety and security in these areas through lighting, maintenance, and natural surveillance by park users. The SCDOT right-of-way is also needed for surface parking lots to serve the general public: those using the Lowline, visitors and workers accessing surrounding areas of the city and residents of City of Charleston affordable housing developments.

The following are critical key points covered in the SCDOT lease agreement to implement the goals of the Lowcountry Lowline.

The City will work closely with the Friends of the Lowline, other partners and local stakeholders through the local design review process with the SCDOT District Six office to ensure individual plans meet the often-complex transportation, open space, stormwater managment and other site-specific public realm objectives of the Lowline and its surroundings. While the lease agreement ensures broad functions and priorities, the detailed design of smaller areas will be worked out on a case by case basis in compliance with the lease agreement. Any outstanding issues that cannot be resolved at the local level may be elevated to the Deputy Secretary of Engineering in Columbia for final determination.

Primary Uses

There are three primary uses permitted for all SCDOT areas leased by the City of Charleston, including those beneath and alongside elevated highways:



PARKING

Prelimary locations and designs of surface parking areas have been indentified by City staff, but these are not specified by the lease agreement. Parking design will be reviewed by the SCDOT district office. Parking uses are limited by the lease agreement to two types: affordable housing and the general public.



PARK / RECREATION

As stated, the City and its partners will seek to convert as much of the area along and below I-26 into a linear park and bike-ped transportation corridor. We will also seek to use this area for stormwater management purposes, but in a manner that primarily constitutes and enables recreational activities.



MULTIMODAL ACCESS

Bicycle, pedestrian and vehcular access for recreational and maintenance purposes. This includes parking and functions associated with access and maneuvering of parking areas.

Key Design Coordinaton Items



USE ADJACENT TO BRIDGE COLUMNS

The lease states that "no use shall be made within five feet (5') of any bridge or pier column." It will be highly desirable to make some use of this area, even if it is only grass for recreation, landscaping, concrete for sports courts or surface material for a playground. This issue will need to be resolved through site specific design in coordination with SCDOT Distirct Six.

This is essential to providing a continuous and cohesive ground plane of park space program and materials and avoiding any remnant buffer spaces void of such materials around the bridge piers. Spaces void of functional landscape materials, which are likely to be composed only of dirt, are disruptive to the quality of the open space experience and serve no functional or structural security purpose.



VEHICULAR ACCESS

Vehicular access is limited to those 15' in height and the use of bollards, fences and other means will likley be required to enforce this. Access by fire trucks, emergency vehicles and SCDOT maintenance vehicles is allowed when necessary.



GRADING & STORMWATER

Unless permitted by SCDOT District Six, the following are not allowed: a) change in site grades or fill elevation, b) trenching or drain structures, c) additional stormwater drainage discharged into bridge ponds, and d) additional off-site storm water drainage from private parcels.

Since the City and its partners seek to maximize the Lowline for open space and stormwater management purposes, close coordination will be be needed with District Six on each phase of the Lowline to impelement this vision.

"The following improvements generally constitute the Lesse's planned improvements to be installed and constructed at the Lessee's own expense, which have generally been approved by SCDOT: Lessee will improve the Premises for function and attractiveness that wil be use to create passenger vehicle parking, including paving, fencing, landscaping and installing pylon protectors, and lighthing. Lessee will improve some or all of the Premisis to function as park and recreation areas. to include grassing, fencing, landscaping, lighting, installation of benches, shade structures, athletic courts and play equipment. Lessee will improve some or all of the Premisis for pedestrian, bicycle, and vehicular access, ingress, and egress, including walking, joggind and biking paths and/or trails to other property of the Lessee and/ or to parking, park, and recreational uses on the Premisis, inclduing paving, fencing, landscaping and installing pylon protectors. and lighting."

SCDOT LEASE AGREEMENT Desired Parking and Recreation Uses Below Elevated Highways

FLEXIBILITY FOR DESIRED USES

The City and Friends of the Lowline envision a wide variety of landscape types and design features to activate and optimize the areas beneath and alongside the I-26 elevated highways. These illustrations use a generic but typical column spacing to show the array of uses to be sought for allowance

and implementation under the SCDOT master lease agreement through site-specific design review with the SCDOT local office. Desired uses and design configurations are not limited to those shown here; flexibility and creativity is needed to deliver a complete, safe and well-designed open space system.



STORMWATER STORAGE





PARKING



LOWLINE PATHWAYS



OUTDOOR MARKETPLACE



SPORTS COURT

SCDOT LEASE AGREEMENT Critical Design Elements

PARKING, LANDSCAPING AND SURFACE MATERIALS ADJACENT TO BRIDGE COLUMNS

As stated previously, the City of Charleston and its partners will likely seek to make some use of areas immediately adjacent to the elevated highway bridge columns. While the specific design, use, materials, etc. will be determined by individual site planning needs of the subject spaces, these illustrations convey the type of basic intent, purpose and spacing for areas within 5' of the bridge columns. As structured in the lease agreement, these elements will be evaluated by SCDOT on a case-by-case basis.

PARKING & LANDSCAPING

Dirt or landscaping around the column with a gravel parking area. A vertical bollard 3' from column, and a wheel stop 5' from column.

3' O' 5'

APPLICABLE MATERIALS

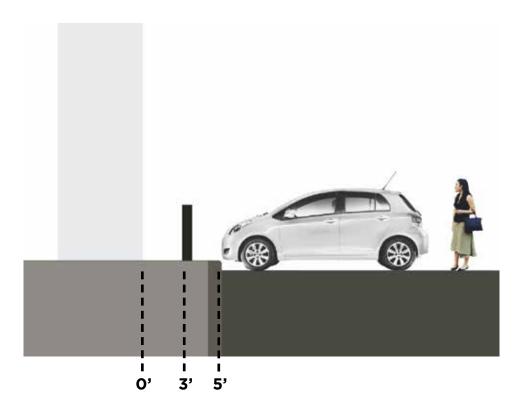






PARKING W/ CURB

Concrete curb area around the column with a paved parking area. A vertical bollard 3' from column, and the edge of the curb 5' from column.



APPLICABLE MATERIALS

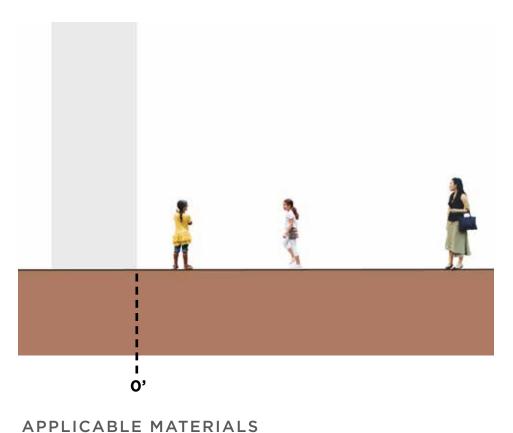






RECREATION

Recreational surface material directly adjacent to column.









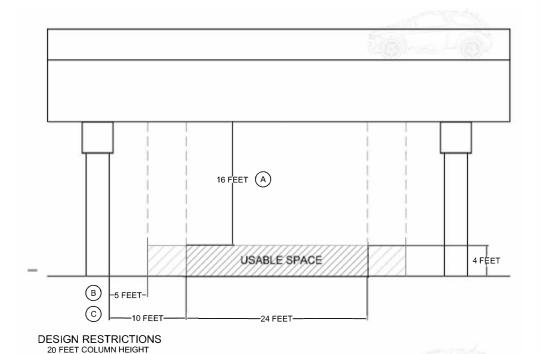
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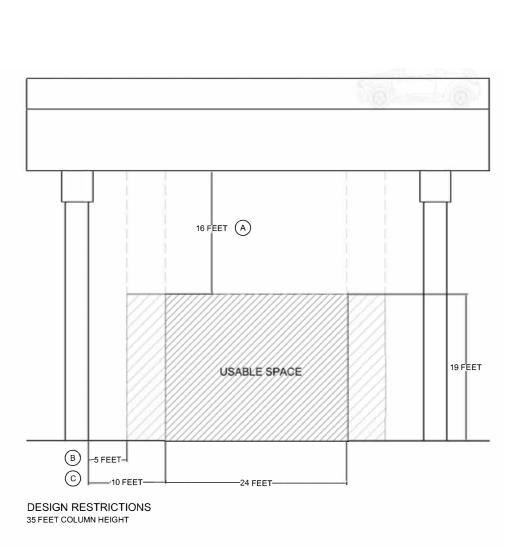
SCDOT LEASE AGREEMENT Critical Design Elements

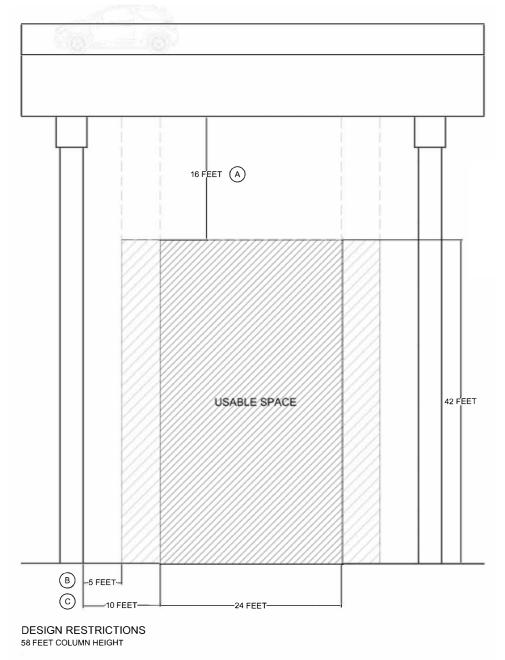
VERTICAL CLEARANCES

Design Division has interperted cleareance requirements from a previous draft of an SCDOT lease agreement. While these are not expressed in the current adopted lease agreement, they **may** still apply and warrant awareness and further investigation. These may affect the Huger Street parking area and possible others.

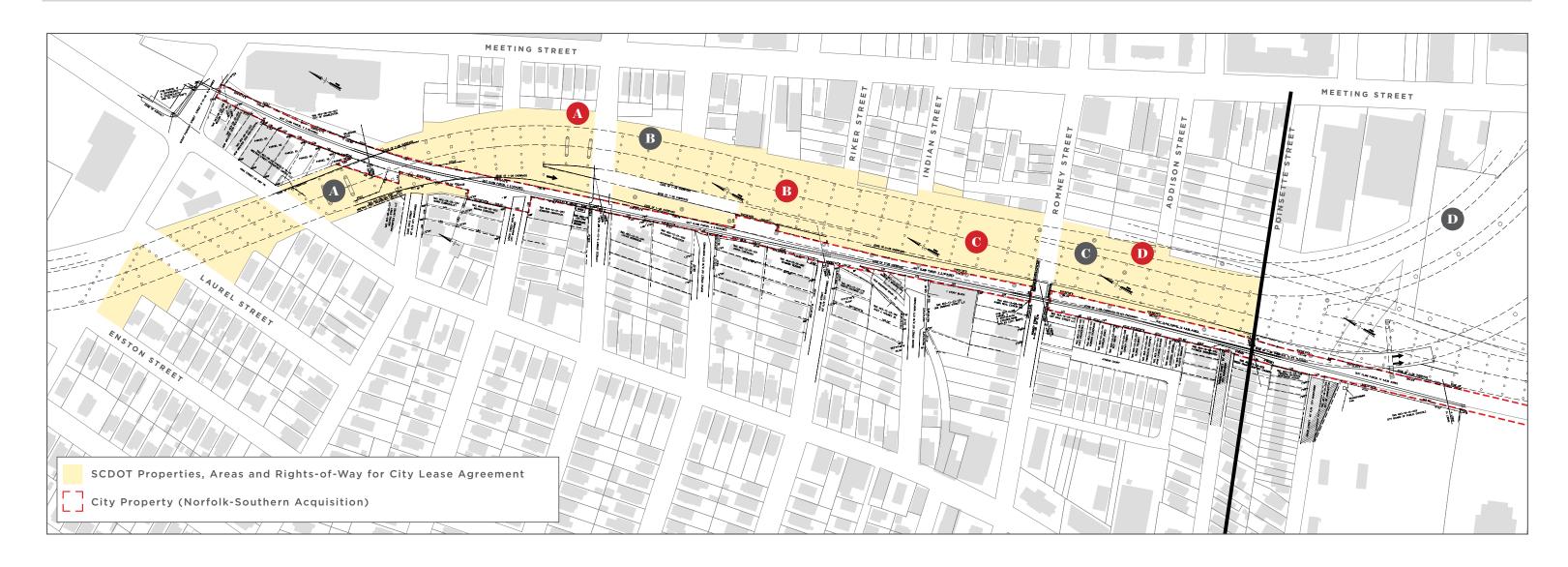
- A NO USE WITHIN 16 FEET VERTICALLY.
- B NO PERMANENT PAVEMENT WITHIN 5 FEET OF ANY BRIDGE, PIER OR COLUMN.
- C NO USE WITHIN 10 FEET HORIZONTALLY OF ANY STRUCTURE.
 LESSEE IS RESPONSIBLE TO PROTECT COLUMNS OR STRUCTURES
 AT NO EXPENSE TO SCDOT AND WITH PROTECTIVE DEVICES
 APPROVED BY SCDOT DISTRICT SIX ENGINEERING ADMINISTRATOR.







SCDOT LEASE AGREEMENT



PARKING AREAS

A PARKING AREA A

Area between King Street and the City of Charleston Park's Department site.

B PARKING AREA B

Service street concept for access and parking. Refer to the parking concept plan on the following pages for more information. This could be created north and/or south of Brigade Street. PARKING AREA C

Parking may be desired north or south of Romney Street beneath I-26. This has not yet been finalized and the City may wish to pursue this option.

PARKING AREA D

Trolley Barn parking area behind American College of Building Arts. (Under constrution as of early 2021.)

OTHER ELEMENTS

A SERVICE STREET

Allow a street grid extension and head-in parking facing the Lowline and I-26. Consider some area for stormwater.

R STREET ENDINGS

Allow streets to end with pathways that cross the Lowline.

OUTDOOR EVENT AREA / MARKET PLACE

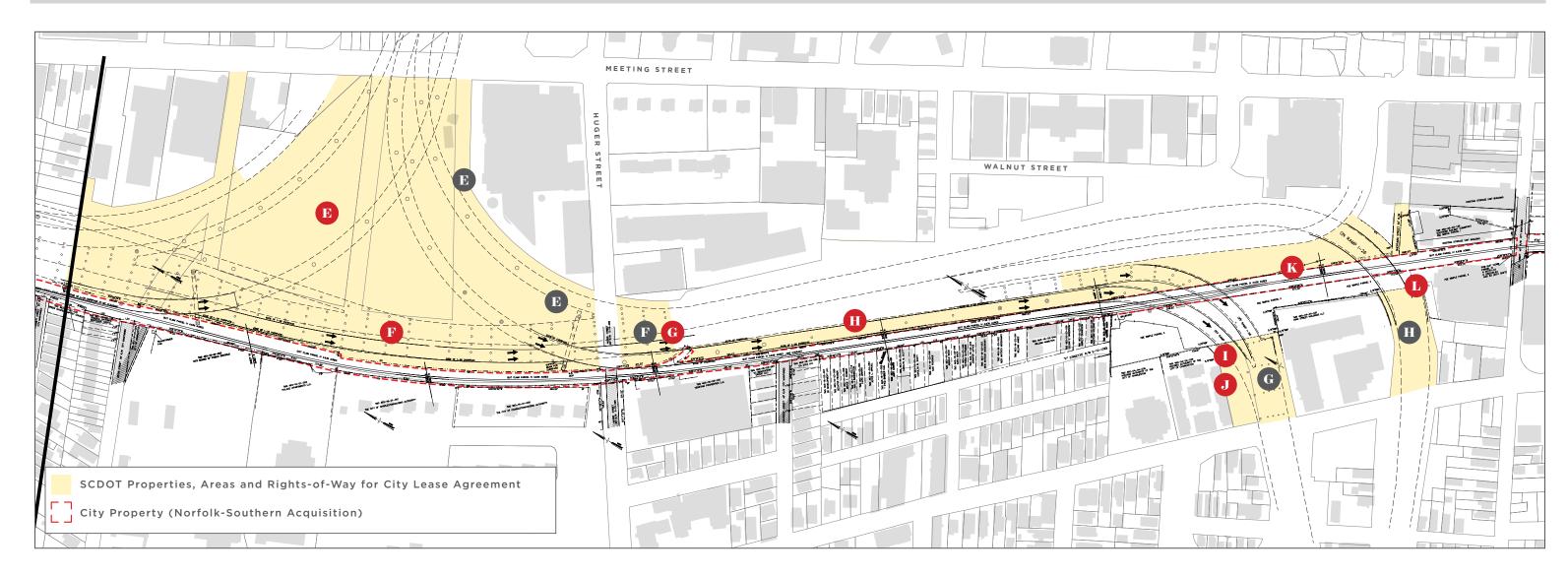
Allow an outdoor market place with lighting. Ensure vending fees can be collected by park programmers.

PROTECTIVE WALL

Install a wall along the west side of the Romney Street off ramp and allow the City to use all areas west of the wall.

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SCDOT LEASE AGREEMENT



PARKING AREAS

- PARKING AREA E

 North of Huger Street, adjacent to future natural area. Refer to
 Lowline Master plan illustration for more information.
- PARKING AREA F
 Huger Street parking area.
- G PARKING AREA G
 Under I-26. Public parking associated with affordable housing. See appendix for more information on the Lowline Affordable Housing.
- PARKING AREA H
 Under I-26. Public parking area with service access to adjacent development site.

OTHER ELEMENTS

- NEWMARKET CREEK PARK
 Allow stormwater maintenance and open wetland park. all the way to Meeting Street.
- MULTIPURPOSE COURTS

 Any remnant multipurpose court from the late 1970s improvement efforts are to be allowed to persist and be improved upon.
- G OUTDOOR EVENT AREA / MARKET PLACE

Allow an outdoor marketplace with lighting. Ensure vending fees can be collected by park programmers and adjacent businesses can serve food and drink out onto the space.

EXPAND CORRIDOR WIDTH

Allow for the Lowline to be expanded onto SCDOT property and the existing fence relocated closer to the roadway.

AFFORDABLE HOUSING
Ensure parking can be allocated to adjacent affordable housing (in this location and area-wide).

lease agreement for improvements.

PARCEL 4600404034

Not SCDOT right-of-way, but a fee simple parcel that is needed for surface parking area. This is covered in the SCDOT

OUTDOOR EVENT AREA / MARKET PLACE

Allow an outdoor marketplace with lighting. Ensure vending fees can be collected by park programmers and adjacent businesses can serve food and drink out onto the space.

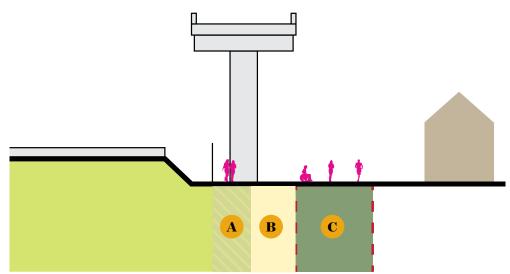
Allow parking to be designed and used so that drive driveways can be used for service access to adjacent development site.

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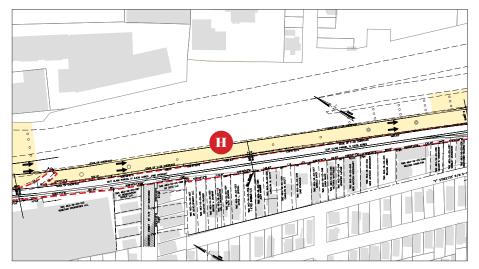


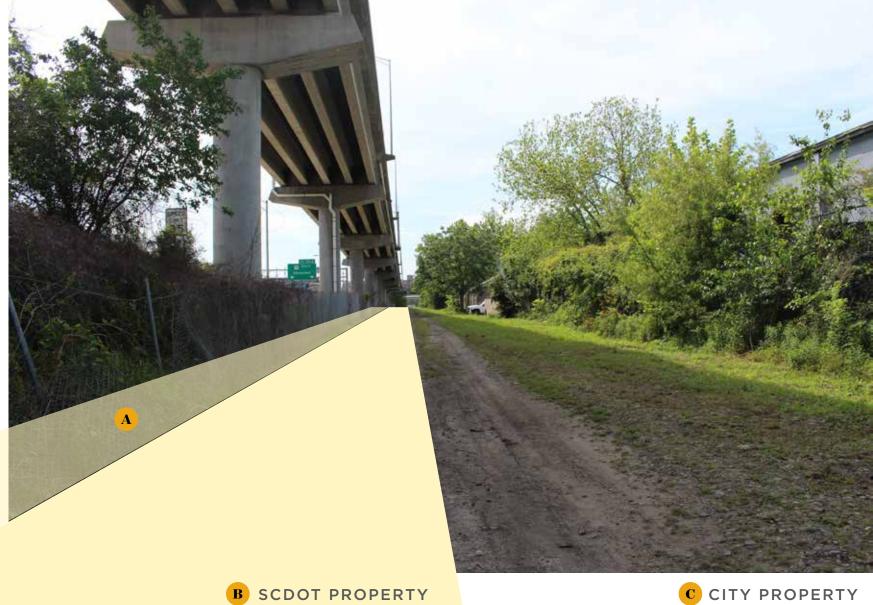
PROVIDE FULL ACCESS

The area alongside the Lowline property running south of Huger Street to the southern end of F Street. The City requests usage of an additional 10-15 feet of linear space beneath the westernmost elevated highway. There are two options: 1) Relocate chain-link fence towards at-grade highway to allow City usage of space beneath the westernmost elevated highway, and 2) Allow usage of space up to existing chain-link fence.



LEASE AREA REFERENCE MAP





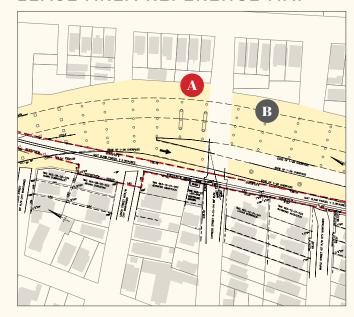
SURFACE PARKING AREA CONCEPT



SERVICE STREET CONCEPT

Allow an extension of the street grid and surface parking along the east side of I-26. This is viewed as part of the Lowline and will help to provide parking access the planned facilities below I-26. The parking may also be used for residents and visitors to access the surrounding urban environment.

LEASE AREA REFERENCE MAP



- B PARKING AREA B
 Service street concept for access and parking.
 Refer to the parking concept plan on the following pages for more information. This could be created north and/or south of Brigade Street.
- A SERVICE STREET
 Allow a street grid extension and head-in parking facing the Lowline and I-26. Consider some area for stormwater.



DESIGN CONCEPT SOUTH OF CYPRESS STREET

741 MEETING STREET

Urban Redevelopment Analysis

CHARLESTON, SOUTH CAROLINA
Middle Street Partners, LLC

Middle Street Partners, LLC
The Middleton Group, LLC
Sottile & Sottile, Civic Architecture

- LANDSCAPE ISLANDS AROUND BRIDGE COLUMNS
- 2 CONNECT EAST-WEST STREETS
- PATHWAYS ALONG STREETS AND ACROSS TO LOWLINE
- 4 PLANNED SPORTS COURTS BELOW I-26
- 5 PEDESTRIAN CROSSINGS



DESIGN CONCEPT NORTH OF CYPRESS STREET

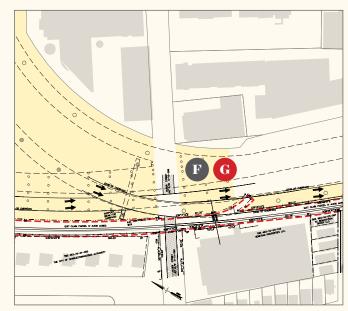
- HEAD-IN PARKING AND PARALLEL PARKING WITH 2-WAY DRIVE AISLE
- 2 LANDSCAPE ISLANDS AROUND BRIDGE COLUMNS
- CONNECT EAST-WEST STREETS TO CREATE A BLOCK SYSTEM
- SPORTS COURTS AND OTHER LOWLINE AMENTITES
- 5 LOWLINE MID-BLOCK CROSSING
- 6 10' SPACING FROM BRIDGE COLUMNS (COULD BE REDUCED TO 5')



HUGER STREET

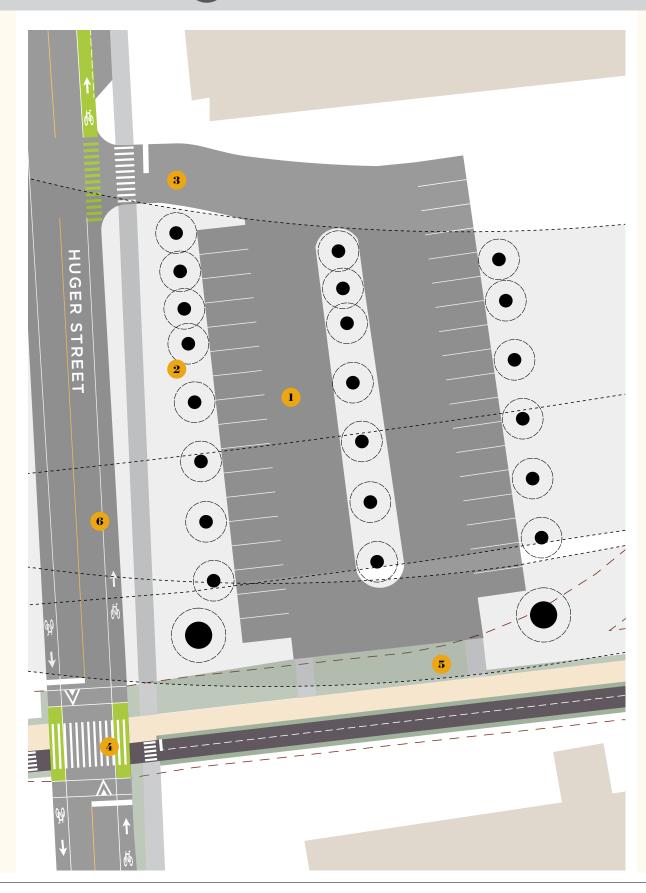
Construct surface parking below I-26 south of Huger Street. The parking can be used by the general public to access the Lowline and the surrounding urban area. Height restirctions may drive available parking layout.

LEASE AREA REFERENCE MAP



- PARKING AREA F
 Huger Street parking area.
- OUTDOOR EVENT AREA /
 MARKET PLACE
 (FUTURE PHASE)

Allow an outdoor marketplace with lighting. Ensure vending fees can be collected by park programmers and adjacent businesses can serve food and drink out onto the space.



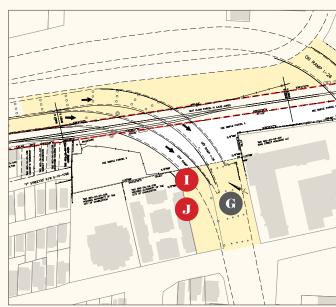
- 1 HEAD-IN PARKING WITH 2-WAY DRIVE
- 5' SPACING AWAY FROM BRIDGE COLUMNS
- 3 DRIVEWAY ON OPPOSITE SIDE OF PARKING LOT FROM LOWLINE
- LOWLINE AND LOWLINE MID-BLOCK CROSSING (PREVENT DRIVEWAY AT THIS LOCATION)
- 5 SIDWALKS AND LANDSCAPING BETWEEN PARKING AND LOWLINE
- PLANNED CONFIGURATION OF HUGER STREET WITH BICYCLE LANES



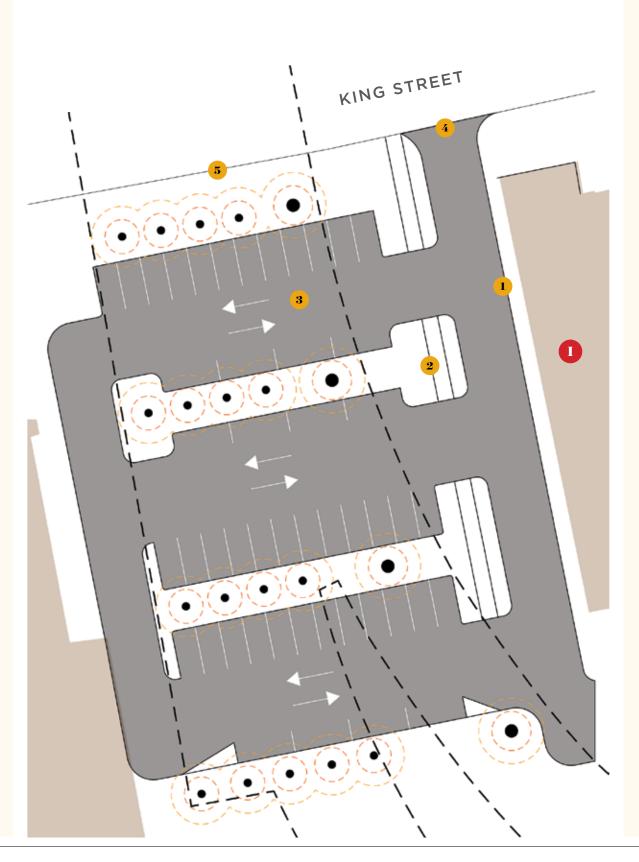
ENGEL STREET

Construct surface parking below I-26 east of King Street. The parking needs to be able to be allocated to affordable housing and also used by the general public to access the Lowline and the surrounding urban area.

LEASE AREA REFERENCE MAP



- G PARKING AREA G
 Under I-26. Parking for neighboring affordable housing developments and the general public.
- AFFORDABLE HOUSING
 Ensure parking can be allocated to adjacent affordable housing (in this location and area-wide).
- PARCEL 4600404034
 Not SCDOT right-of-way, but a fee simple parcel that is needed for surface parking area. This is covered in the SCDOT lease agreement for improvements.



- REPLACE HEAD-IN PARKING WITH VEGETATED BUFFER ALONG BUILDING
- 2 PATHWAY TO LOWLINE (MAY BE LOCATED ALONG BUILDING INSTEAD)
- MIX OF HEAD-IN AND PARALLEL PARKING
- RELOCATION OF DRIVEWAY CONNECTION TO KING STREET
- 5 IMPROVE AREA ALONG KING STREET

SURFACE PARKING AREA CONCEPT

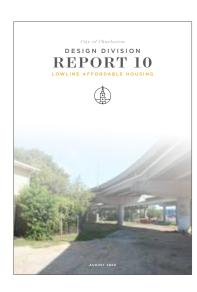


ENGEL STREET



CONCEPT DESIGN NOTES

- 1 LOWLINE AFFORDABLE HOUSING SITE
- 2 TREES PLANTED WHERE VERTICAL CLEARANCE ALLOWS
- PATHWAY TO LOWLINE MAY BE LOCATED ALONG BUILDING
- 4 DRIVEWAY CONNECTION TO AFFORDABLE HOUSING SITES
- RELOCATION OF DRIVEWAY CONNECTION TO KING STREET
- 6 IMPROVE AREA ALONG KING STREET



LOWLINE AFFORDABLE HOUSING REPORT

Please refer to the Design Division's report for the Lowline Affordable Housing project for more information. The selected development and design team for the project will work with the City to refine this design and implement the vision for the parking area.

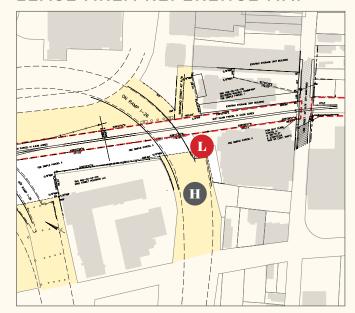
SURFACE PARKING AREA CONCEPT



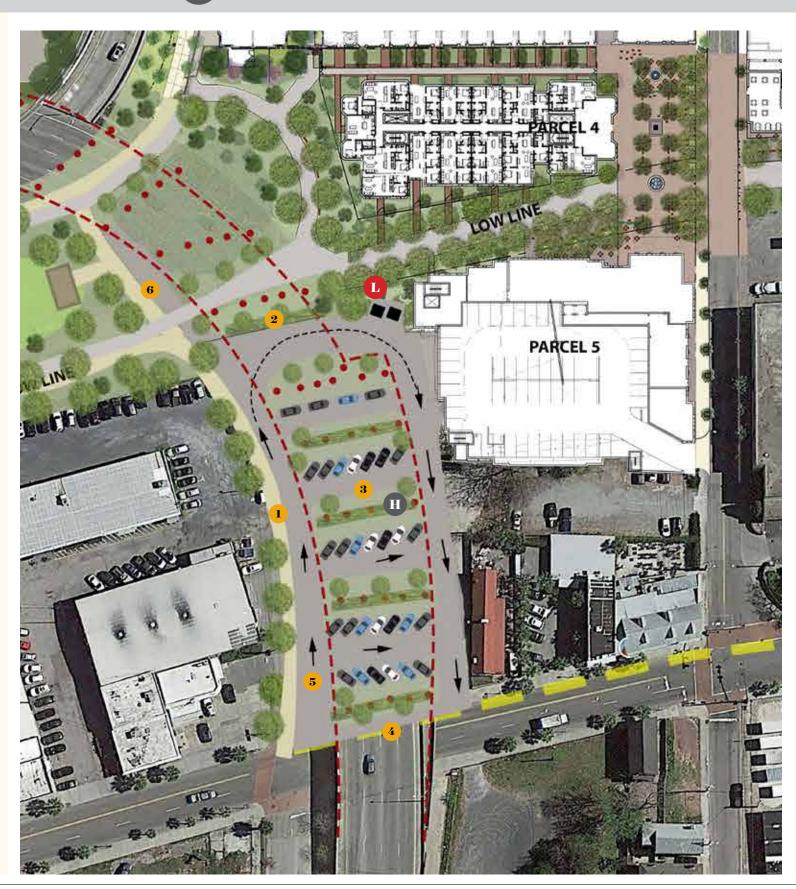
H SHEPPARD STREET

Construct surface parking below I-26 east of King Street. This is viewed as part of the Lowline and will help to provide access to future adjacent development. The parking can be used by the general public to access the Lowline and the surrounding urban area.

LEASE AREA REFERENCE MAP



- PARKING AREA H Under I-26. Public parking area with service access to adjacent development site.
- CROSS SITE SERVICE ACCESS Allow parking to be designed and used so that drive driveways can be used for service access to adjacent development site (see box on 80 for more details.)



- 1 PATHWAY FROM LOWLINE TO KING STREET NEEDS FURTHER STUDY
- BUFFER BETWEEN PARKING AREA AND LOWLINE NEEDS FURTHER STUDY
- CHECK DISTANCE REQUIREMENTS IN SCDOT LEASE AGREEMENT. MAY BE ABLE TO AVOID ANGLED PARKING. CREATE TWO ROWS IN MORE AREAS.
- INTERFACE WITH KING STREET NEEDS FURTHER STUDY. SHOULD BE WELL LIT AND COMFORTABLE FOR PEDESTRIANS ON KING STREET.
- ONE-WAY CIRCULATION TO BE DETERMINED WITH DETAILED DESIGN.
- PARKING AREA MAY ALSO BE NEEDED TO SERVICE PARK FACILITIES AND EVENTS.



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