

4.0

MOBILITY

THE LOWLINE IS A NEW **MOBILITY CORRIDOR** ALONG THE SPINE OF THE PENINSULA.

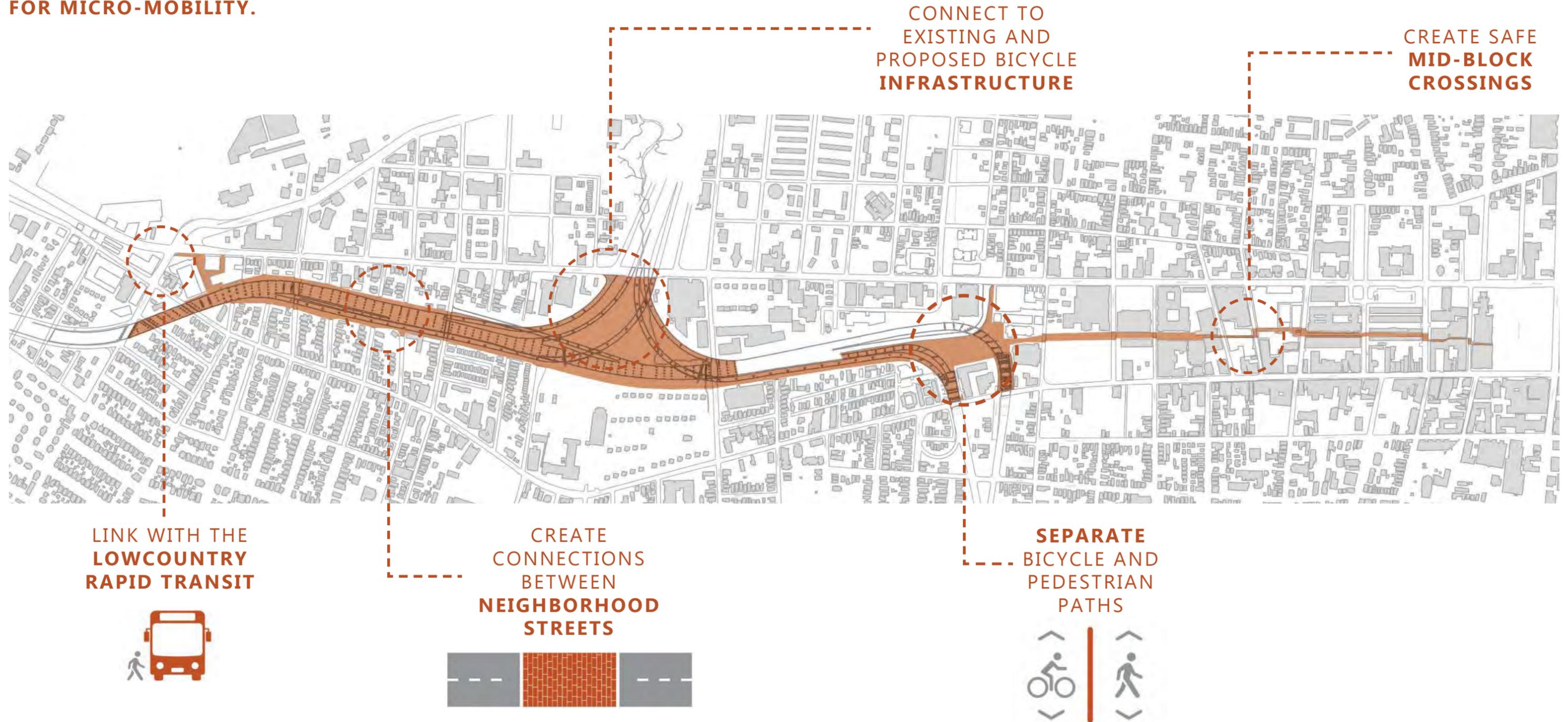
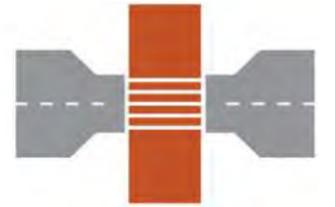
THE LOWLINE PROVIDES SAFE **BICYCLE AND PEDESTRIAN** CIRCULATION ALONG ITS ENTIRE LENGTH, BECOMING AN INTEGRAL PART OF THE CITY'S **PEOPLE PEDAL PLAN**.

THE LOWLINE CONNECTS TO AND SUPPORTS THE FORTHCOMING **LOWCOUNTRY RAPID TRANSIT**.

THE LOWLINE HELPS **TRANSFORM** THE WAY PEOPLE MOVE AROUND THE LOWCOUNTRY.

MOBILITY STRATEGIES

THESE STRATEGIES WILL BE IMPLEMENTED ALONG THE ENTIRE LENGTH OF THE LOWLINE TO ENSURE A SAFE, EFFECTIVE NEW CORRIDOR FOR MICRO-MOBILITY.



LOWCOUNTRY RAPID TRANSIT



The forthcoming Lowcountry bus rapid transit system (LCRT) will enter downtown Charleston at Mount Pleasant Street. The preferred alignment shown at right was selected for further study by the Berkeley-Charleston-Dorchester Council of Governments (BCDCOG) in June 2020¹⁴.

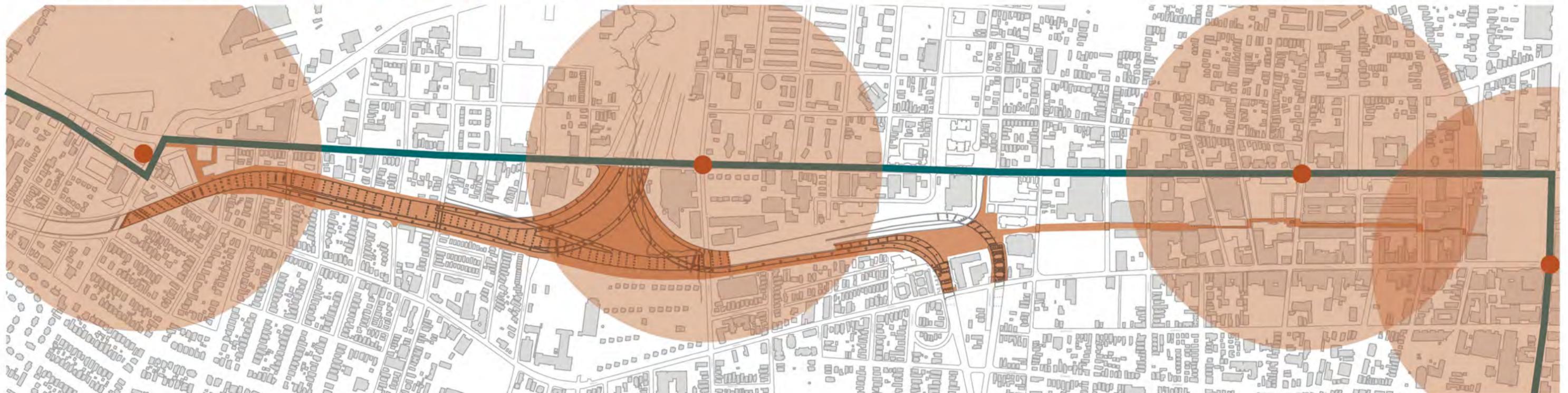
The transit hub at Mount Pleasant Street provides an opportunity for redevelopment of the city-owned parcel where the Parks Department is currently housed. Connecting the Lowline to the transit hub provides an engaging setting for people to disembark from the bus rapid transit system and continue their journey down the Peninsula by bike or foot via the Lowline.



TRANSIT HUB + GATEWAY



PROPOSED LCRT STOPS ALONG THE LOWLINE WITH 1/4 MILE RADIUS



PEOPLE PEDAL PLAN



The City of Charleston's People Pedal Plan is a new vision for a robust urban bikeway system on the Charleston Peninsula. Such a system will benefit all modes of travel, including automobiles. The urban bikeway network will be composed of segments and intersections of various types. This is the first comprehensive bicycle infrastructure study for the Peninsula and is a vital first step in creating a multi-modal transportation system.

The Lowline will become the key central spine of this peninsula-wide plan, enhancing connections for multi-modal transportation by providing safe and comfortable paths for cyclists and pedestrians alike.



Example of a painted bike lane with a bike box at the intersection.

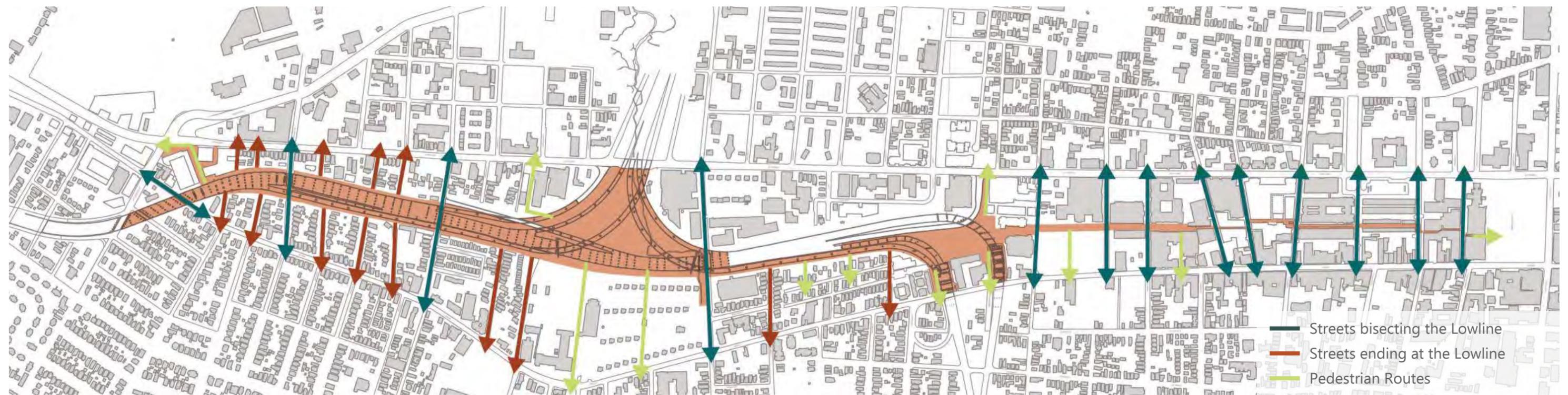


Example of a separated two-way cycle track.

NEIGHBORHOOD CONNECTIONS



I-26 and the Norfolk Southern rail corridor separated the neighborhoods to the east and west. The Lowline aims to reinforce neighborhood connections by filling the gaps between dead-end streets, encouraging pedestrian and bicycle access along and across the Lowline. The Lowline will function as the central spine of the Peninsula.



BIKEWAY AND PEDESTRIAN PATH

WHERE IS THE PATH?



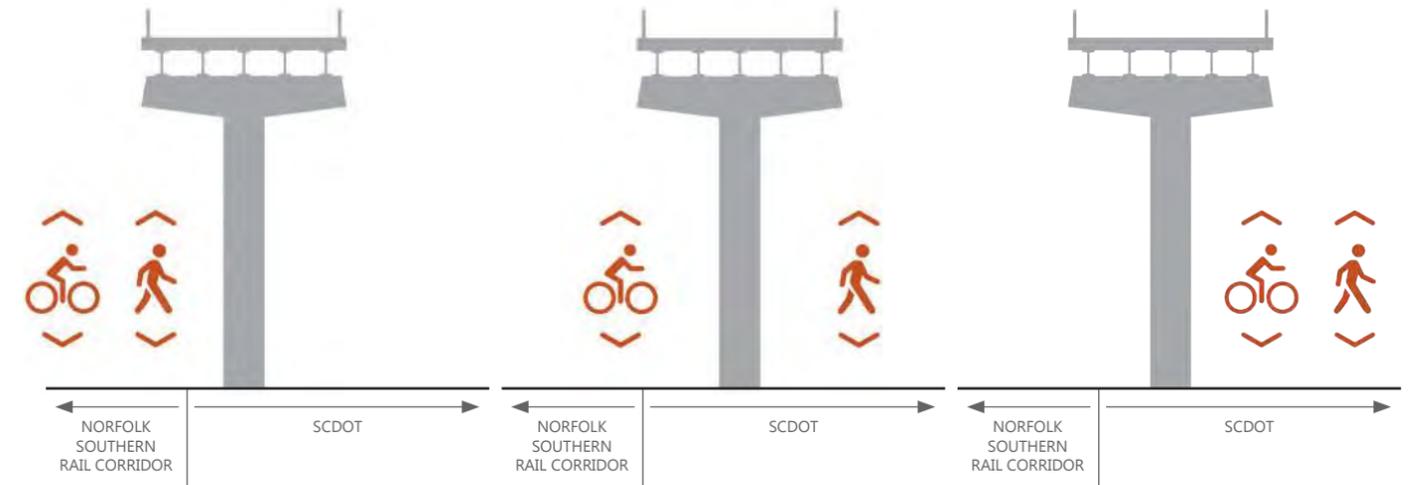
The following minimum design criteria have been established for the design of the Lowline pathways:

- 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.
- The paths will be separated by a 6' minimum planted median to minimize pedestrian-bicycle conflict
- There will be designated 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.

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 additional leases from SCDOT, the Lowline can extend under the overpass. This has allowed greater flexibility in the design of the Lowline north of Huger Street. Three possible scenarios are illustrated below.



SECTIONS

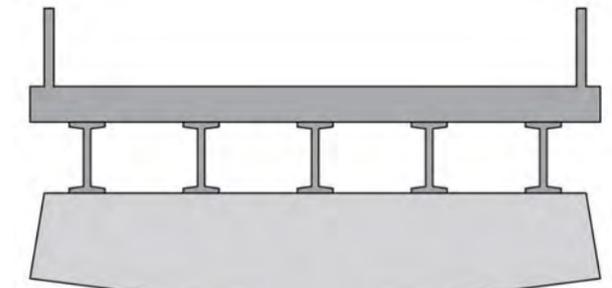
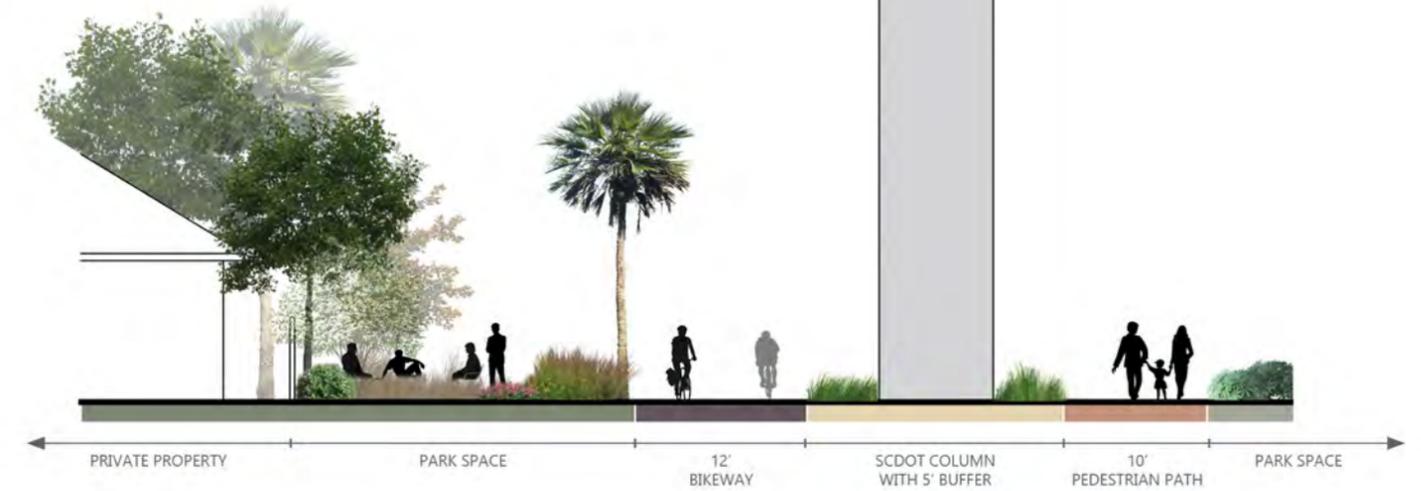
The following sections illustrate what is envisioned for the Lowline in different districts.



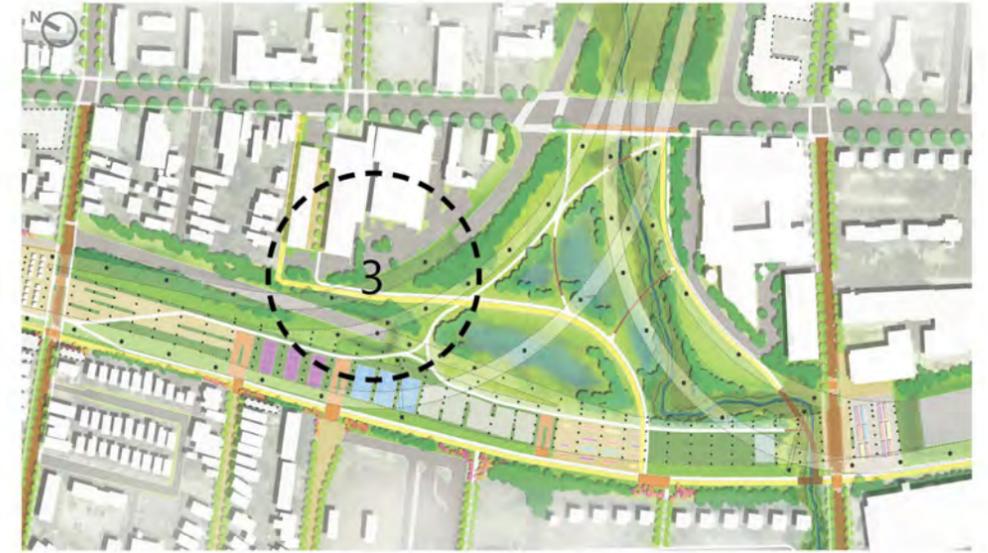
SECTION 1: PLAZA AT MT. PLEASANT STREET



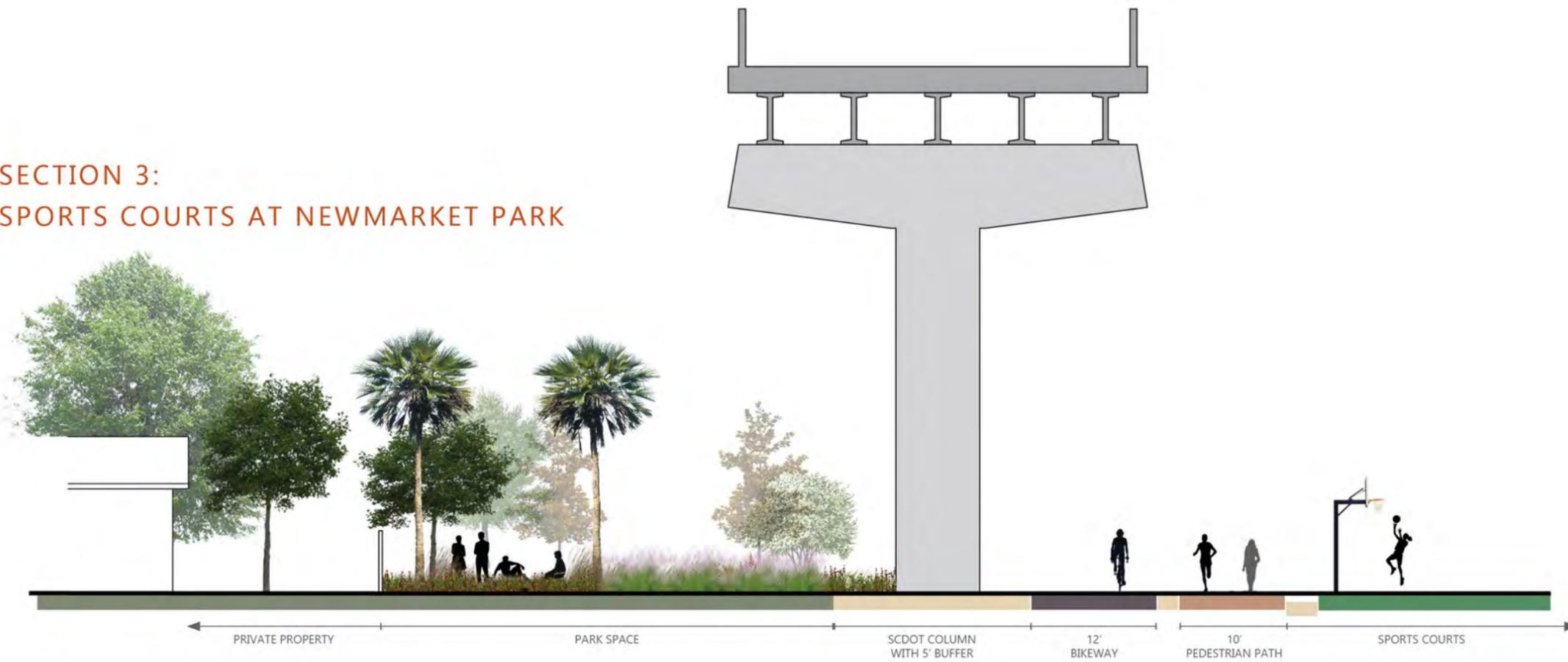
SECTION 2: THE COLUMNS



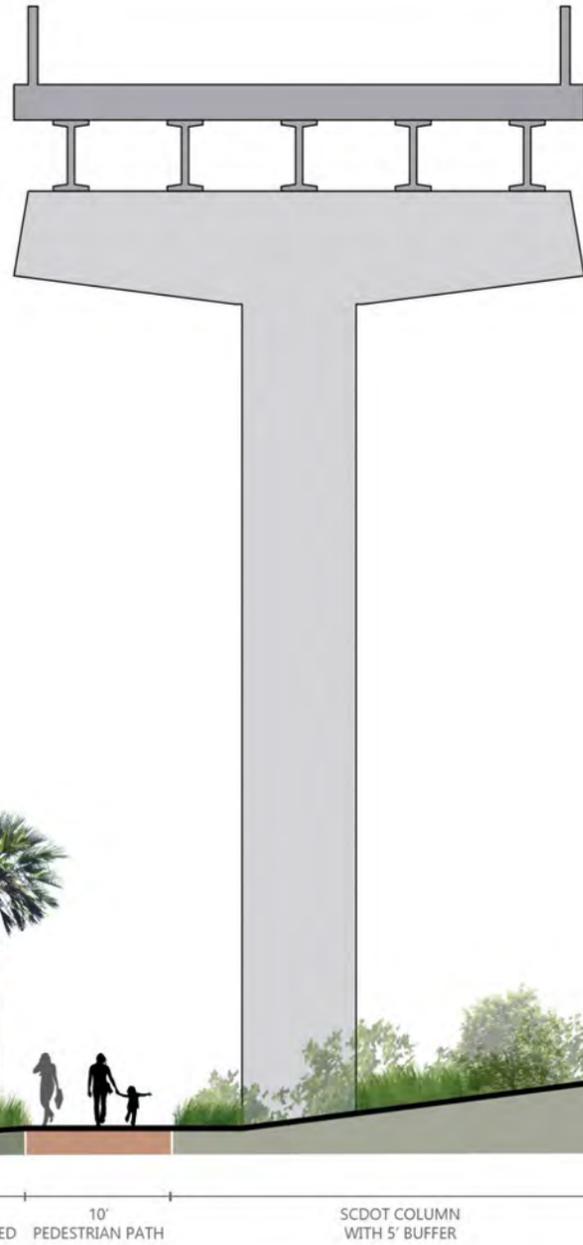
SECTIONS



SECTION 3:
SPORTS COURTS AT NEWMARKET PARK



SECTIONS



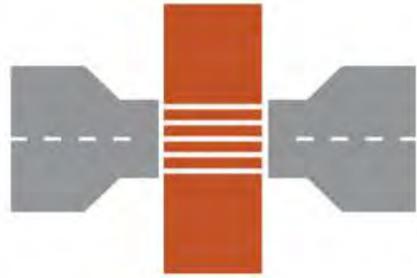
SECTION 4:
NORTH OF LOWLINE PARK



SECTION 5:
WOOLFE STREET



MID-BLOCK CROSSINGS

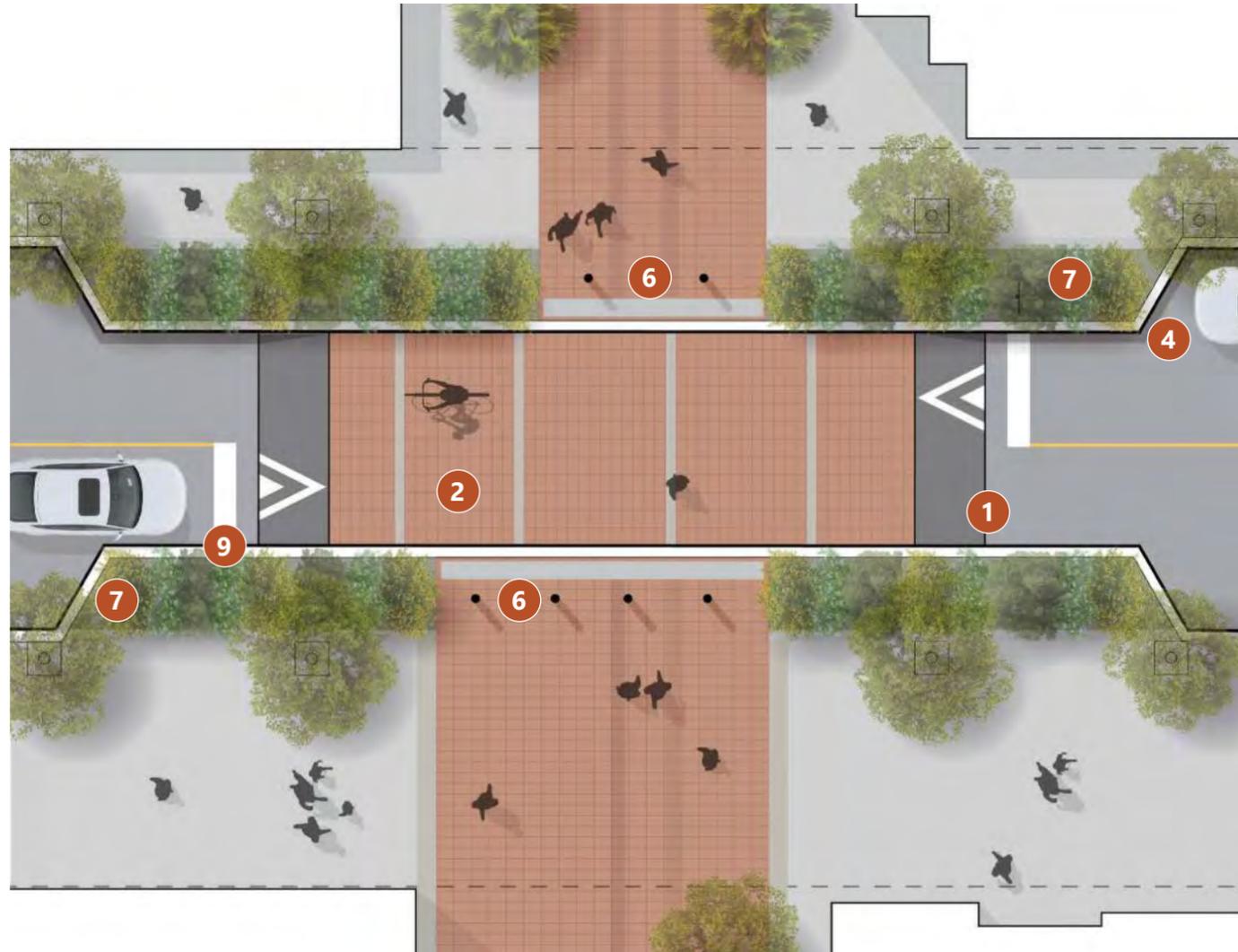


To provide the safest mid-block crossings, the City of Charleston should acquire from SCDOT the ownership of all streets that cross the Lowline. This allows streetscape improvements including street trees to be implemented on all streets bisecting the Lowline.

MID-BLOCK CROSSINGS COULD INCLUDE:

- 1. RAISED SPEED TABLES
- 2. SPECIALTY PAVING
- 3. PAINTED CROSSWALKS
- 4. NARROW VEHICLE LANES
- 5. SIGNAGE
- 6. BOLLARDS
- 7. PLANTED CURB EXTENSIONS
- 8. PEDESTRIAN ACTIVATED SIGNALS
- 9. PAINTED STOP LINES FOR CARS

MID-BLOCK CROSSING: URBAN CORE



MID-BLOCK CROSSING: NORTH CENTRAL CORRIDOR

