CHAPTER 4:

CONCEPTUAL DESIGN FOR PROPOSED CAPITAL PROJECTS

ALTERNATE ROUTES

HUDSON RIVER VALLEY GREENWAY LINK

5 PALISADE AVENUE & RIVERDALE PARK PATHWAY


HENERY HUDSON PKWY
HUDSON TERRACE
INDEPENDENCE AVENUE
254TH STREET
INDEPENDENCE AVENUE
WAVE HILL
SPAULDING LANE
WEST 247TH STREET
232ND STREET
R.C.D.S.
DOUGLAS AVENUE
SETON PARK
PALISADE AVENUE
RIVERDALE PARK
DEP
MNR/AMTRAK
RIVERDALE YACHT CLUB
CONTROL POINT 11
MNR RIVERDALE STATION
DODGE PT.
SUB-STATION

View looking north on Palisade Avenue Between Spaulding Lane & 232nd Street

Palisade Avenue R.O.W. Between Spaulding Lane & 254th Street

Existing Conditions

Street Width: 20' Roadway, 2-15' Side Path

Travel Direction: South - North

Traffic Volumes: Low

Palisade Avenue is a narrow, two-way residential street with direct views of the Hudson River waterfront at certain cross streets and New Jersey Palisades. From 232nd Street to Spaulding Lane, a 7-15' dirt path runs along the west side of the roadway. Official maps from the Bronx Borough President's Office show additional unused right-of-way under NYCDOT ownership that could possibly be used for a more robust greenway facility. Traffic volumes range between approximately 50 and 150 vehicles per hour (vph) per direction during the AM and PM peak hours. North of 231st Street, no parking is allowed on either side of the roadway. Land use is predominately single family residential to the east. Riverdale Park is to the west from 232nd Street to 254th Street.

Riverdale Park has been designated "Forever Wild" by NYCDPR. This designation has strong community support and presents a challenge to any new development that may be proposed on park property. However, the dirt path along the edge of the park is generally free of trees, and therefor improvements to the path would have minimal impact on Riverdale Park's natural environment. Impacts to trees are being studied. Because of its steep slope Spawling Lane is not recommended for a bycycle route. The intersection of Palisade Avenue and Spaulding Lane requires careful planning to guide motorists, pedestrians and cyclists around this right-angle turn in the road. Spaulding Lane has rough paving and climbs steeply away from Palisade Avenue, creating a need for significant traffic calming to address these conditions as well as visibility between modes.

Design Solution

Palisade Ave from 232nd Street to Spaulding Lane

Option A: The roadway consists of one 10' travel lane in each direction with minimal shoulder, no curbs and no parking. Pedestrians currently use a 7-15' dirt path on the west side of the roadway. This path should be upgraded to ensure pedestrian safety and comply with ADA guidelines. Shared-lane markings are proposed on this portion of the roadway for cyclists.

Option B: Title and grade maps from the Bronx Borough President's Office indicate an 80'-120' right-of-way exists on this portion of Palisade Avenue. A physically separated shared multi-use path, with a two-way bicycle path and walkway is proposed to upgrade the existing path on the west side of Palisade Avenue. One travel lane is maintained in each direction at the existing lane widths.

Spaulding Lane to 254th Street

Palisade Avenue right-of-way continues north of Spaulding Lane as a dirt path.It is proposed that this path could be improved to allow cycling, as a continuation of the side path proposed south of Spaulding Lane.

Existing Conditions: Palisade Avenue R.O.W. - Spaulding Lane to 254th Street

Case Study Example: Tallman Mountain State Park - Rockland City, NY

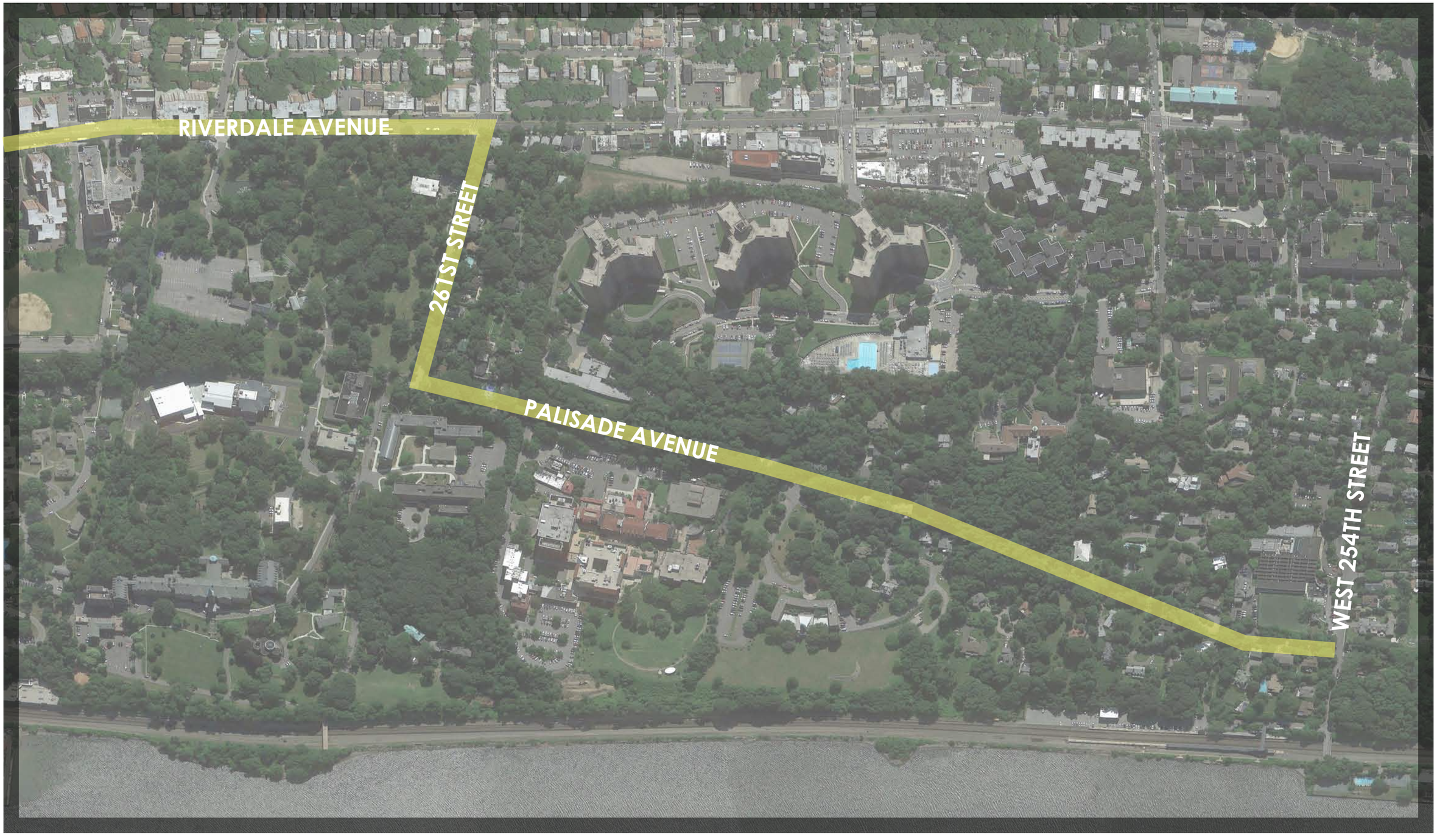
Case Study Example: The OCA Trail in Yonkers

Existing Photo Palisades Avenue - BEFORE

Rendering of potential multi-use path along Palisades Avenue - AFTER

Existing Conditions: Palisades Avenue Between Spaulding Lane & 247th Street

7 PALISADE AVE, 261ST STREET & RIVERDALE AVE CONNECTOR


RIVERDALE AVENUE
261ST STREET
PALISADE AVENUE
WEST 254TH STREET

Palisade Avenue north of 254th Street

Palisade Avenue north of New York Orphan Amy Road

Existing Conditions

Street Width: Palisade Avenue & 261st Street - 20', Riverdale Avenue - 64'

Travel Direction: Palisade Avenue (North - South), 261St Street (East - West), Riverdale Avenue (North - South)

Traffic Volumes: Palisade Avenue & 261st Street (Low), Riverdale Avenue (Moderate)

Palisade Avenue north of 254th Street, and 261st Street have steep grades and narrow lanes, no parking, and limited visibity at times. There is no shoulder, and shrubs or grass abut against the roads, so there is no sidewalk as a result.

Riverdale Avenue from 261st street to Valantine Lane is a busy retail corridor with limited on-street parking on both sides of the street.

Design Solution

It is proposed that Palisade Avenue and 261st Street be reconstructed as 'slow-speed' complete streets, including new sidewalks where missing, Class 3 bicycle route signs and pavement markings should be implemented, as well as other pedestrian safety and traffic calming improvements.

Because a bicycle lane solution would impact on-street parking on Riverdale Avenue, a 4-lane to 3-lane conversion is proposed. This would allow for the implementation of Class 2 bicycle lanes and streetscape improvements extending to Yonkers.

Construction Cost Estimate

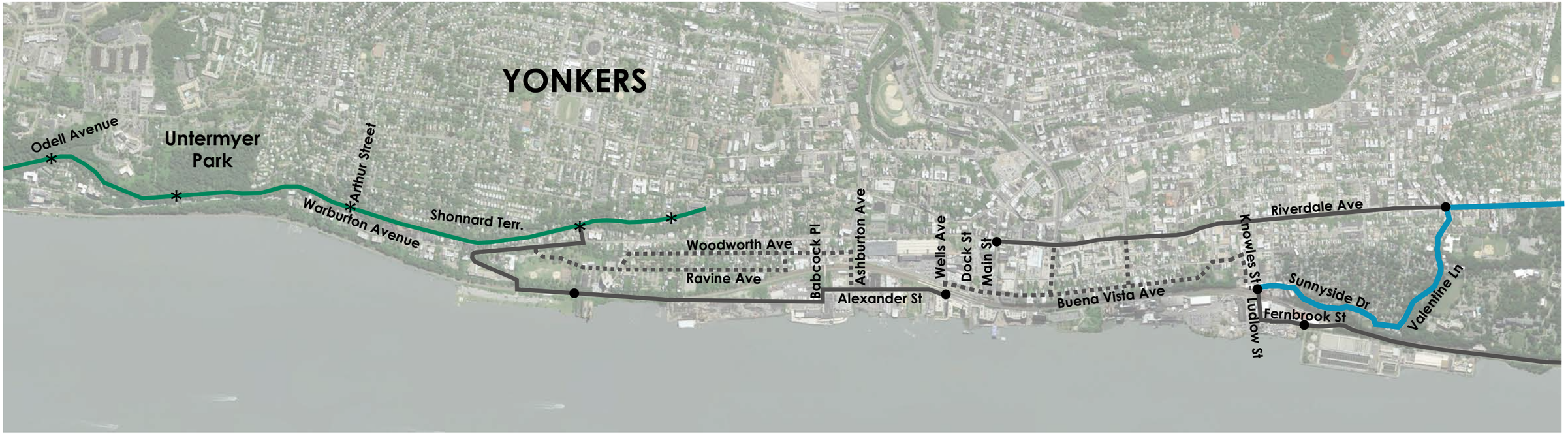
$5M - Palisade Avenue & 261st Street

$45,000 - Riverdale Avenue

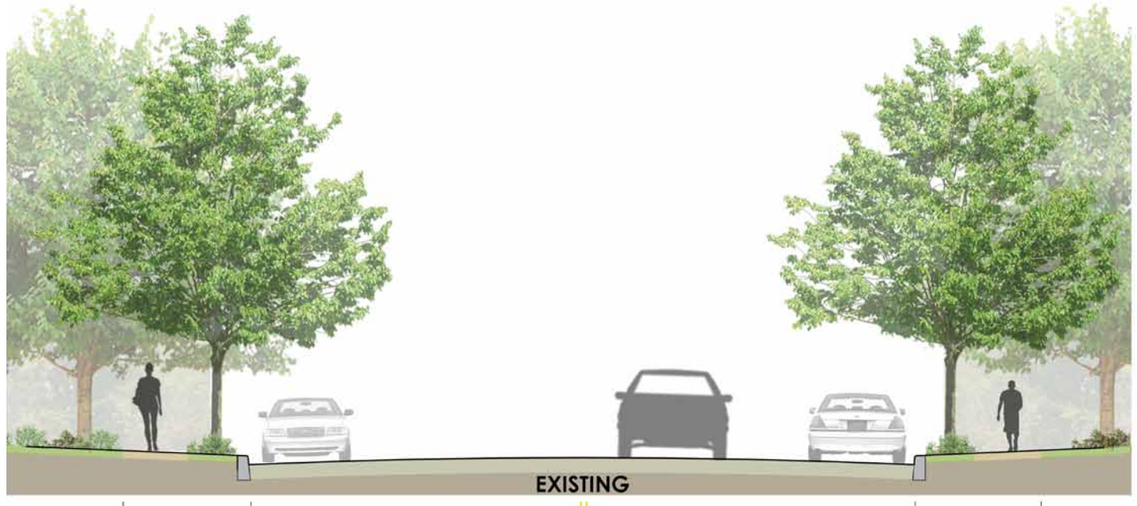
261st Street south of Riverdale Avenue

Riverdale Avenue north of 261st Street

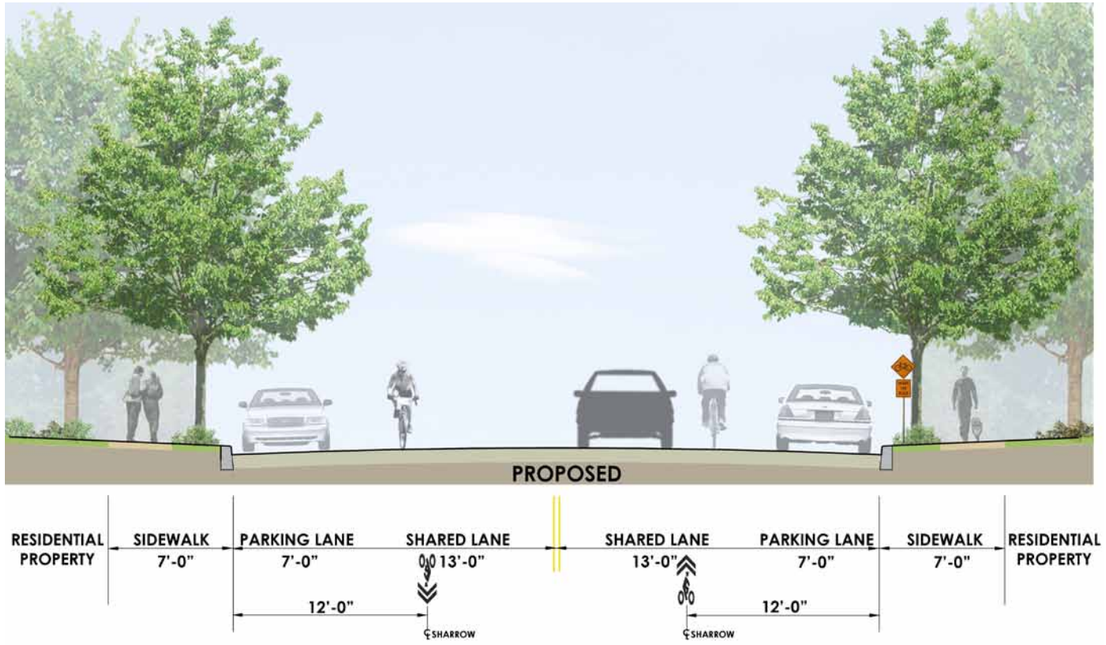
8 VALENTINE LANE, SUNNYSIDE DRIVE

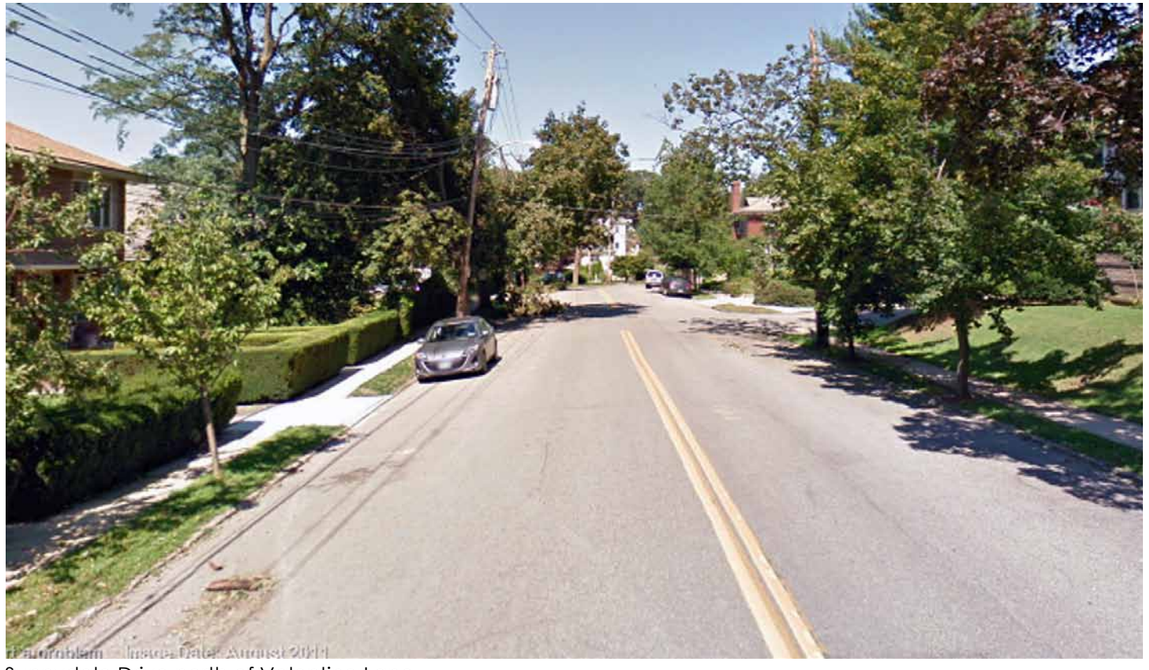



RIVERDALE AVENUE
PIER STREET
FAIRFIELD ROAD
FRANKLIN AVENUE
BELVEDERE DRIVE
HAWTHORNE AVENUE
VALENTINE LANE
SUNNYSIDE DRIVE



Sunnyside Drive Between Valentine Lane & Peir Street





Sunnydale Drive north of Valentine Lane

Existing Conditions

Street Width: 40'

Travel Direction: East - West

Traffic Volumes: Low

Parking Regulations: Parking on both sides of the street, except west of Hawthorne Avenue on Valentine Lane

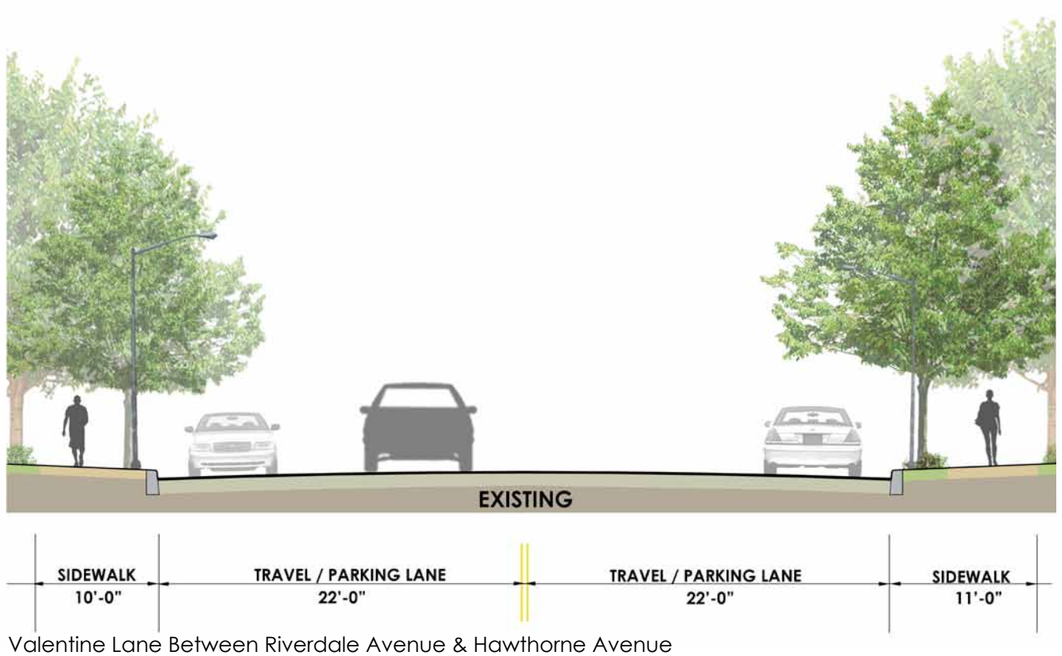
Valentine Lane and Sunnyside Drive are quiet residential streets with on-street parking and low traffic speeds.

Design Solution

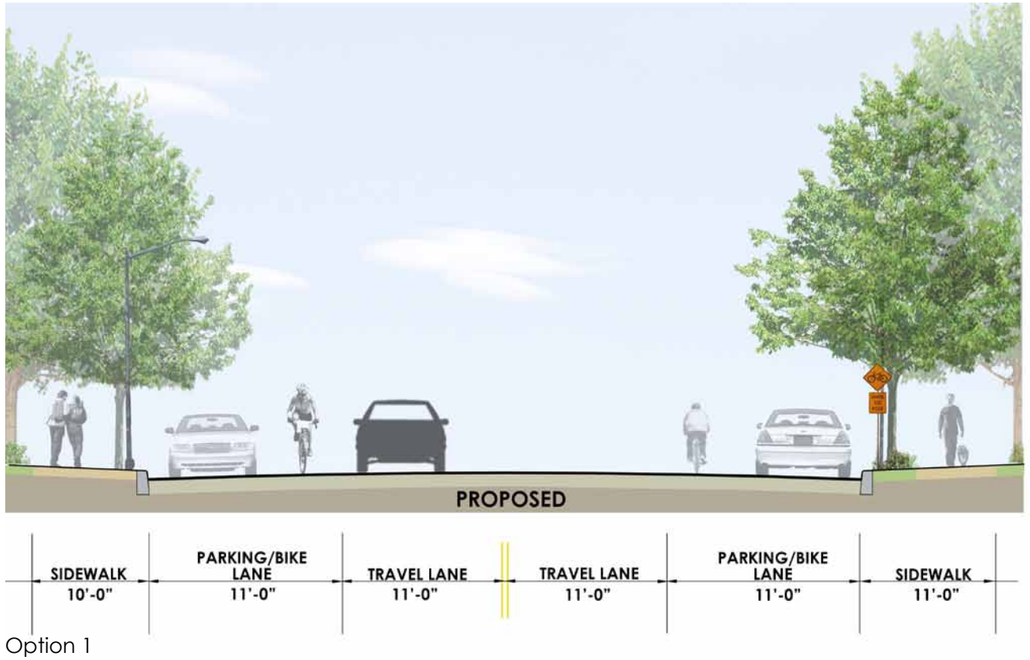
It is recommended that Class 3 shared lanes be installed along Sunnyside Drive and Valentine Lane north of Hawthorne Avenue, to form a comfortable connection thought the southern part of Yonkers. Between Riverdale Avenue and Hawthorne Avenue, the roadway widens, providing sufficient space for a Class 2 bicycle lane. Prior to implementation, community outreach should be conducted.

Construction Cost Estimate

$25,000 for signs and markings

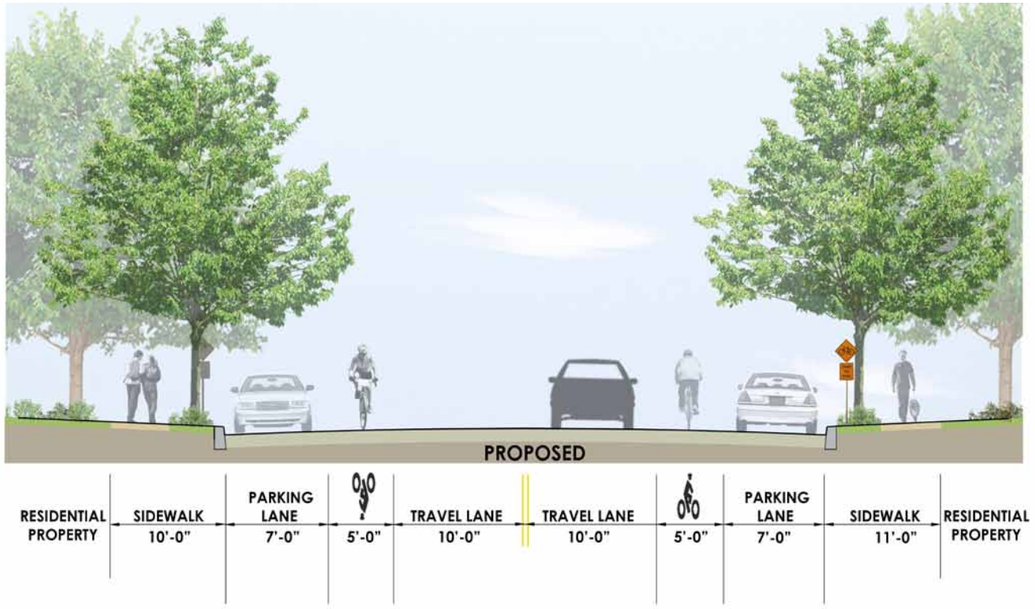


Valentine Lane Between Riverdale Avenue & Hawthorne Avenue

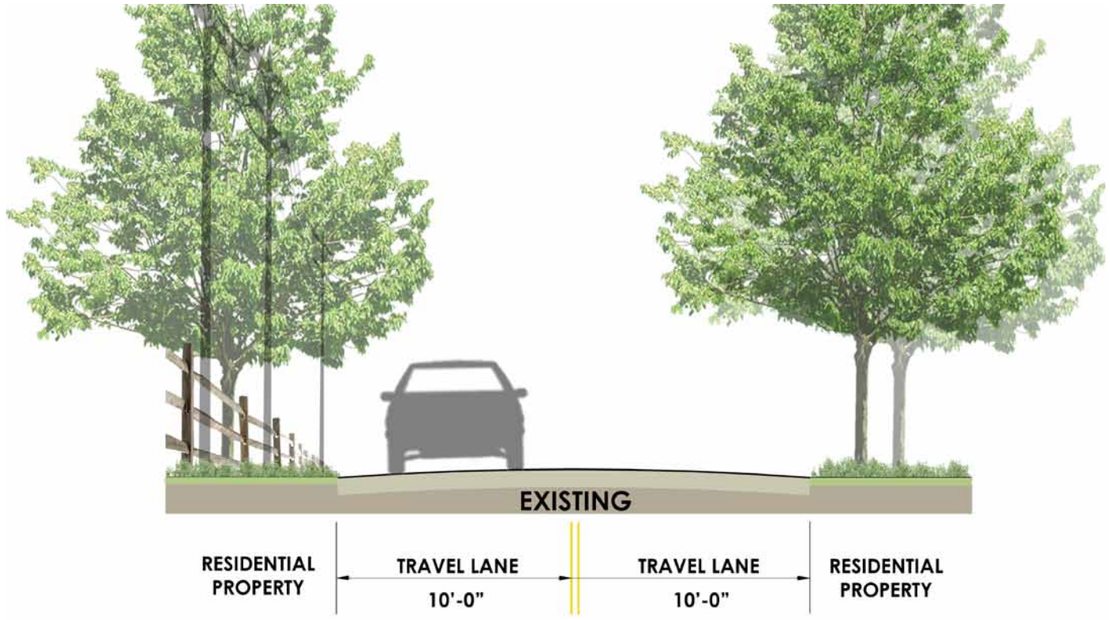


Option 1

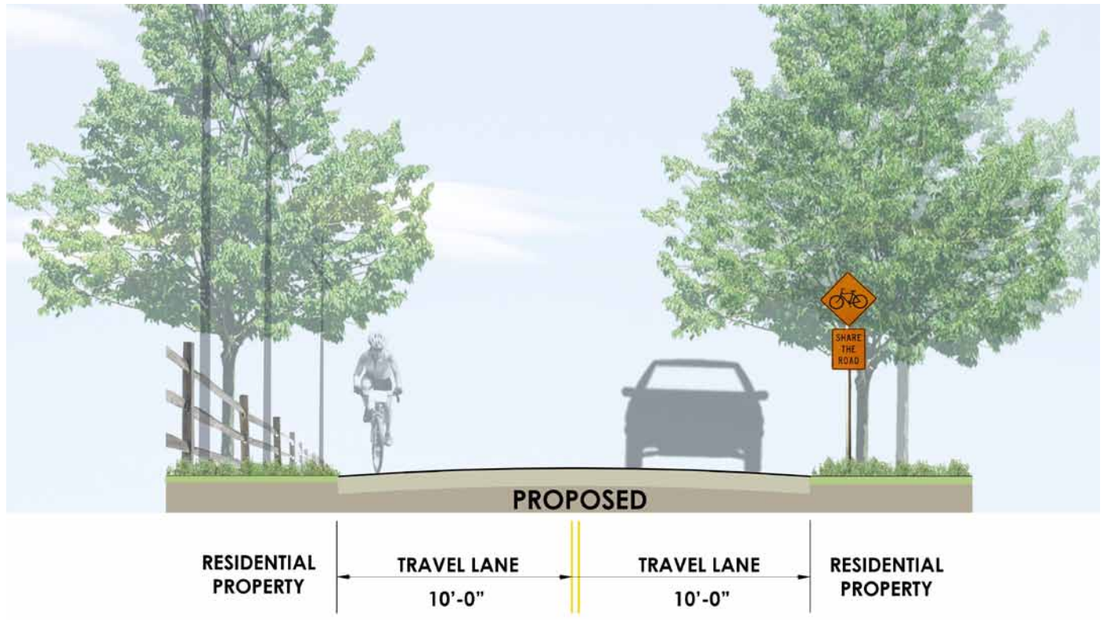
Valentine Lane west of Riverdale Avenue



Option 2

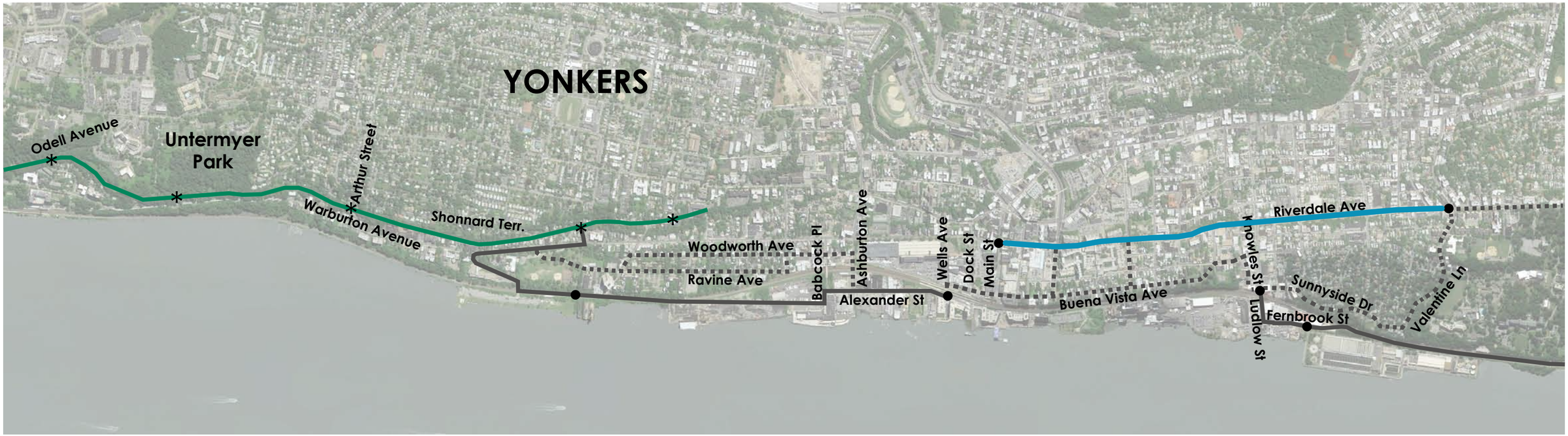


Valentine Lane Between Hawthorne Avenue & Sunnydale Drive



Valentine Lane west of Howthorne Street

⑩ RIVERDALE AVENUE URBAN BOULEVARD



Existing Conditions

Street Width: 74' - 90'

Travel Direction: North - South

Median Type: Varies

Parking: Commercial parking on both sides of the street

The current configuration and condition of Riverdale Avenue is not conducive to cycling, and provides an inconsistent pedestrian experience. Parking and moving lane widths are wider than necessary, which contributes to high speed traffic. The width of the street varies substantially from one end to the other, although two moving lanes and parking are maintainted in each direction, with left turn lanes at many intersections.

The first two blocks north of Valentine Avenue have a painted meidan, which is built out to the north of Radford Street. Some of the medians have trees planted, but they do not extend thorugh crosswalks to provide a refuge for pedestrians crossing the street. Street trees on sidewalks are sporatic.

Design Solution

Riverdale Avenue is an important inland route, connecting downtown Yonkers to the retail center in the northern part of Riverdale in Bronx. The long-term vision is to create an urban boulevard with substantial pedestrian and bicycle amenitites, which would require reconstruction of the street to reapportion space from the medians elsewhere in certain locations. The short-term concept would provide shared lanes for cyclists with a few exceptions where on-street bicycle lanes are possible without changing the existing street geometry. Street trees are proposed along the sidewalks to fill in the gaps that exist.

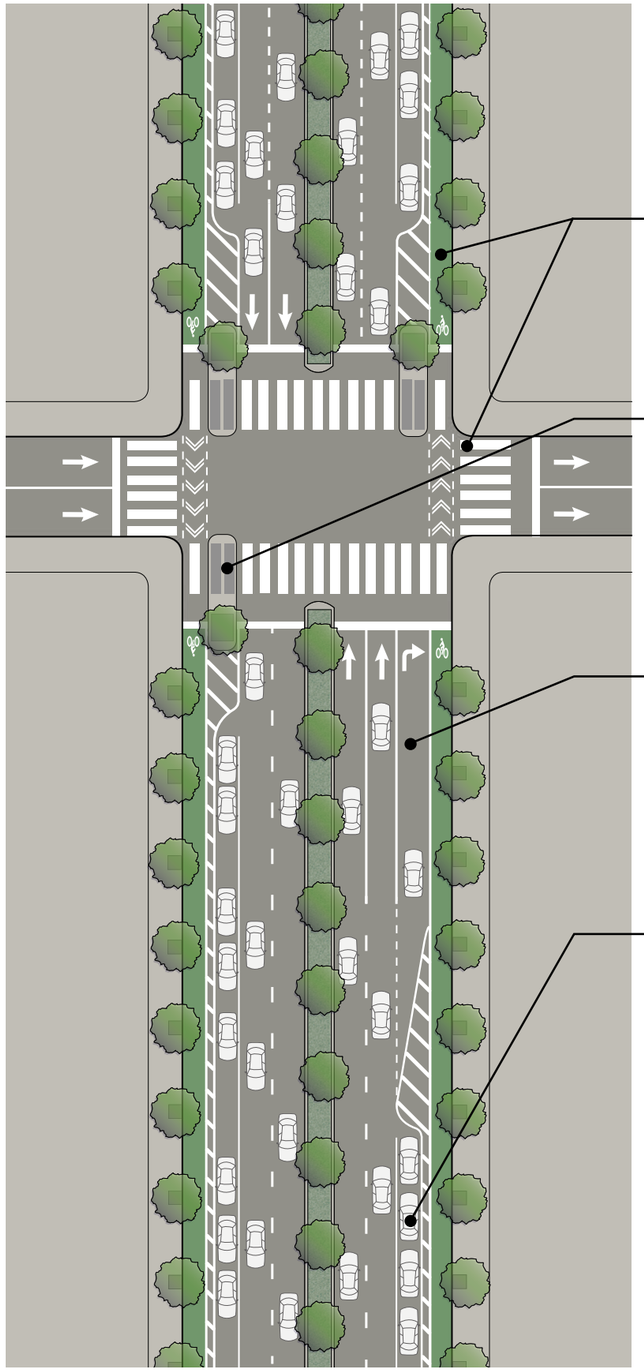
Riverdale Avenue is a bus route. Therefore, for the proposed cross-sections shown, a 12' wide lane is maintained adjacent to parking for bus operations.

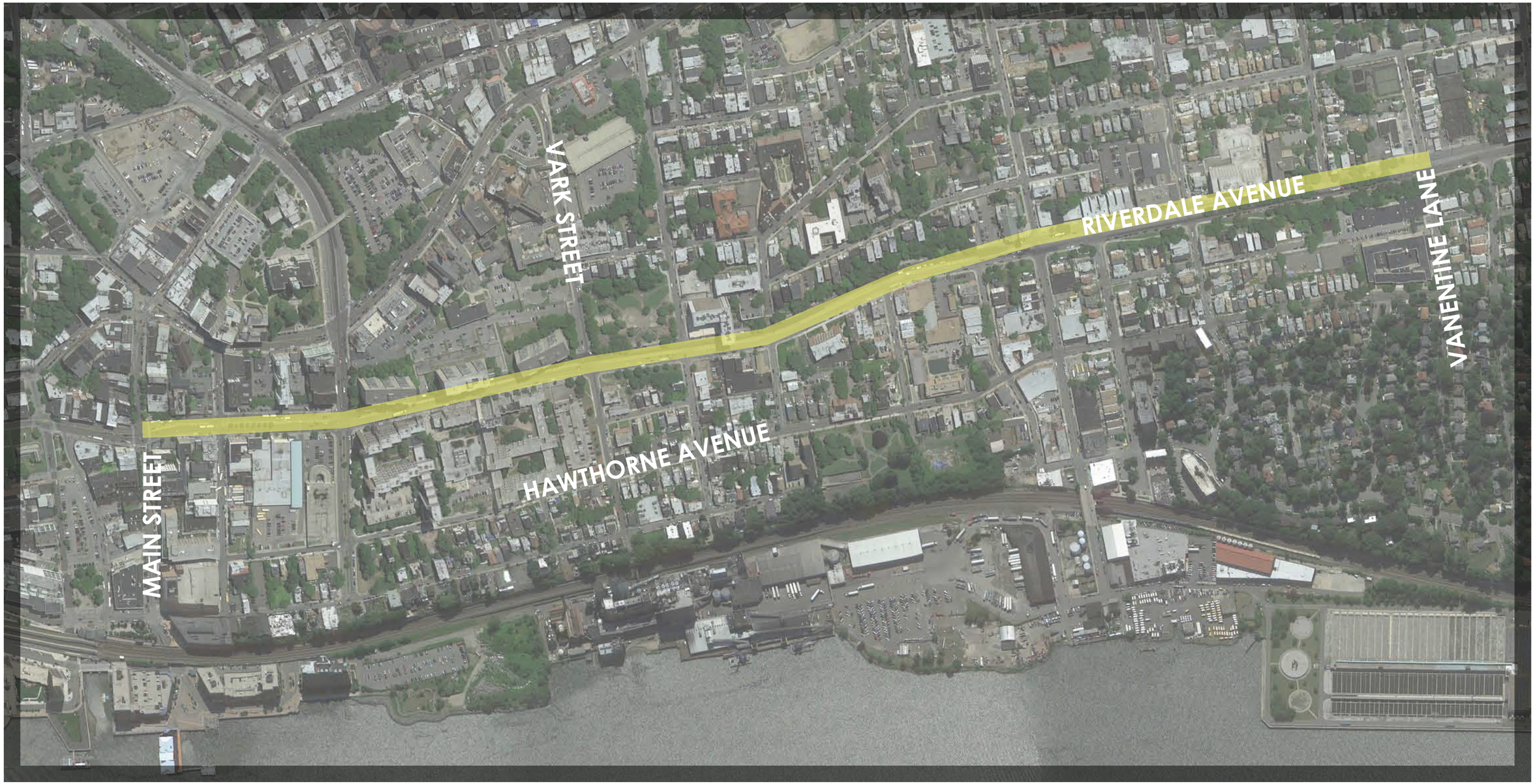
Short-term

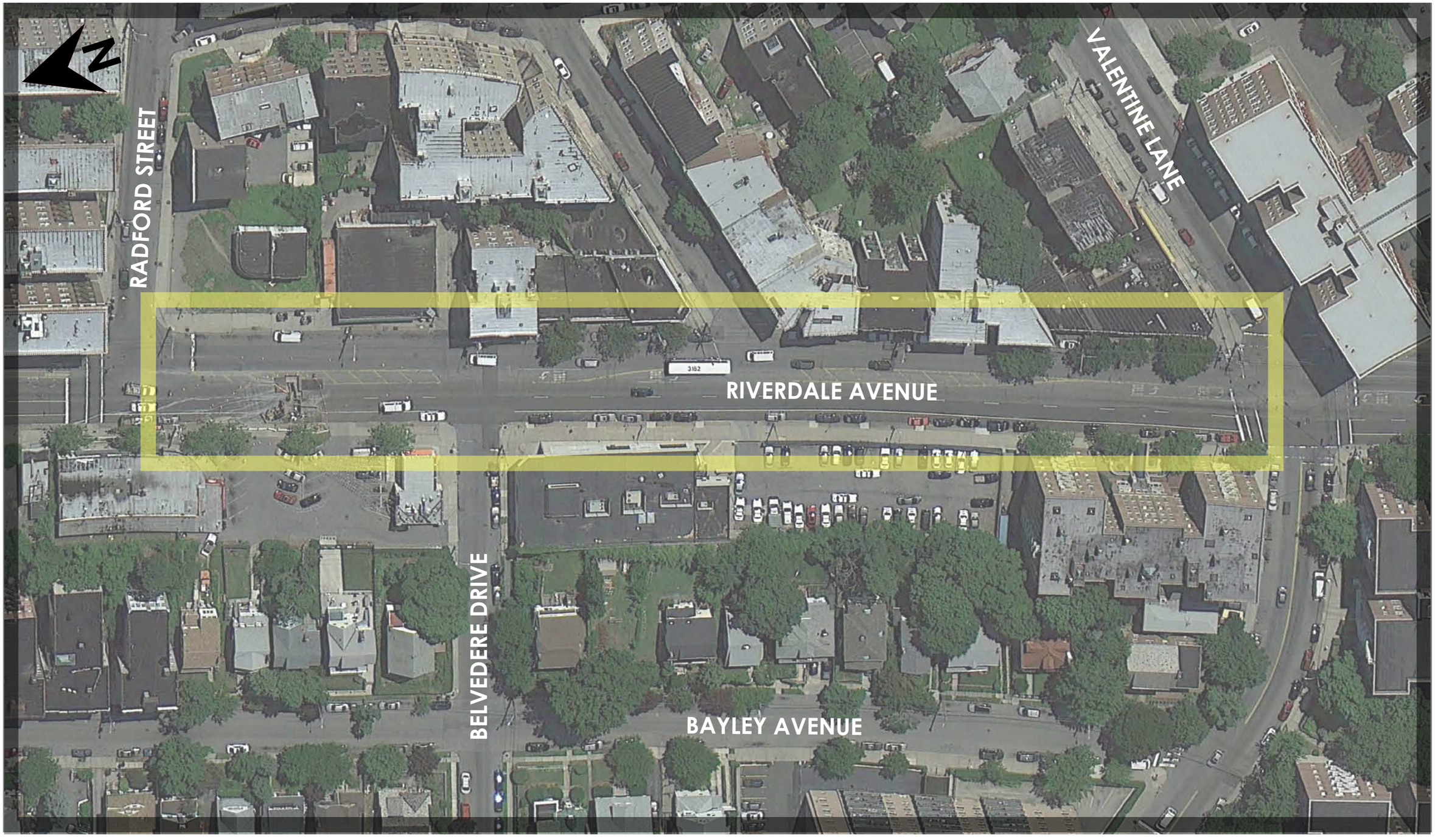
In many cases, the existing lane configuration can be tightened to calm trafffic. Where there is not space for striped bicycle lanes, any additional width would be given to the parking lane. This would provide additional clearance between parking and moving lanes for cyclists.

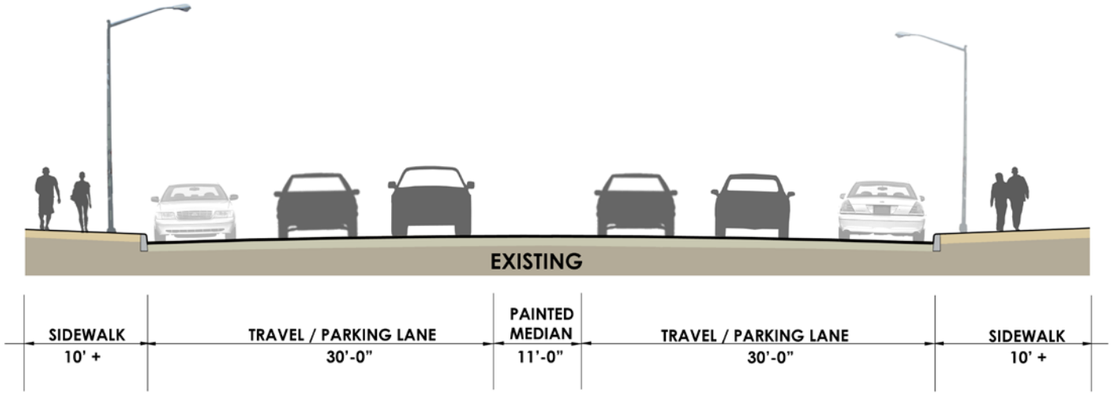
Long-term

The long-term intent is to create a tree-lined urban boulevard. Street trees should be filled into sidewalks and medians where missing. When roadway width make it possible, it is the recommended that the design shown to the right be implemented in order to provide a safe and comfortable cycling experience.

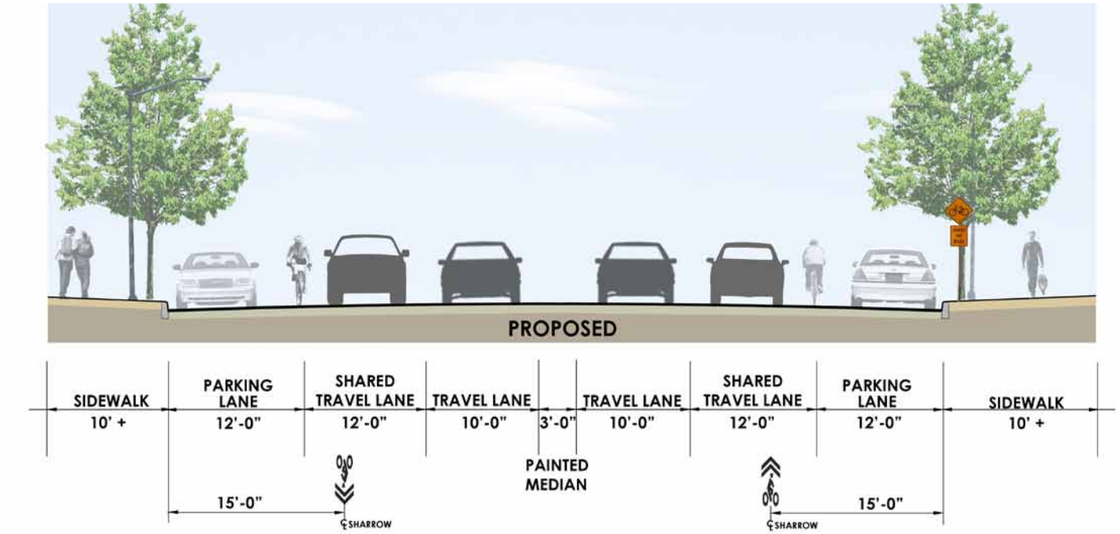


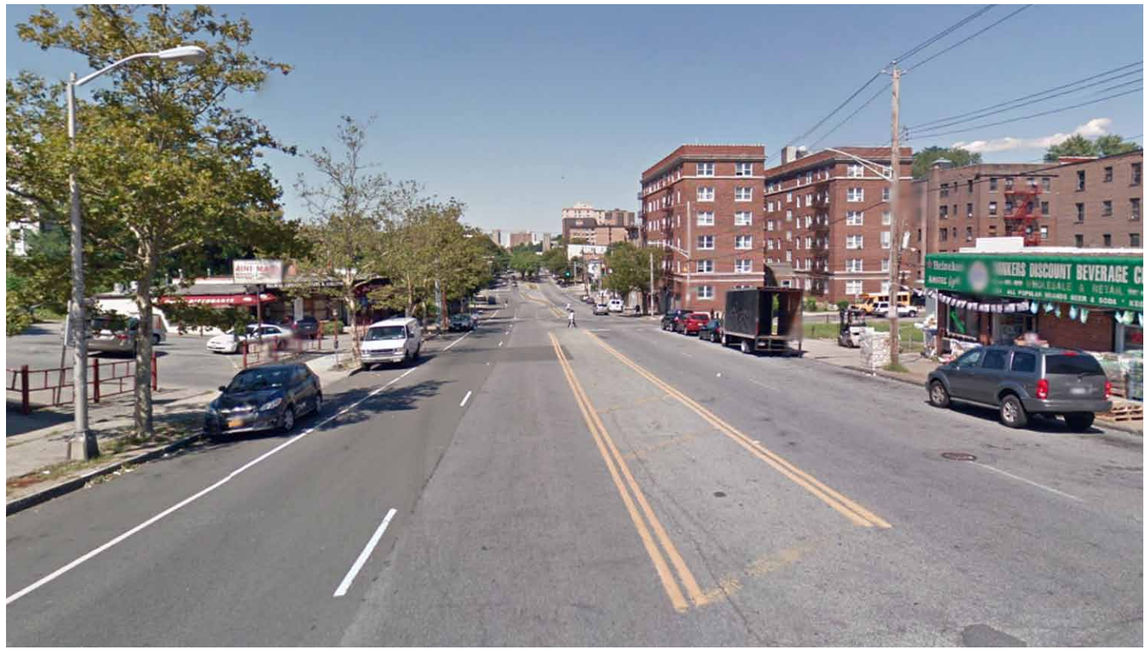

VARK STREET
RIVERDALE AVENUE
VANENTINE LANE
MAIN STREET
HAWTHORNE AVENUE


N
RADFORD STREET
VALENTINE LANE
RIVERDALE AVENUE
BELVEDERE DRIVE
BAYLEY AVENUE

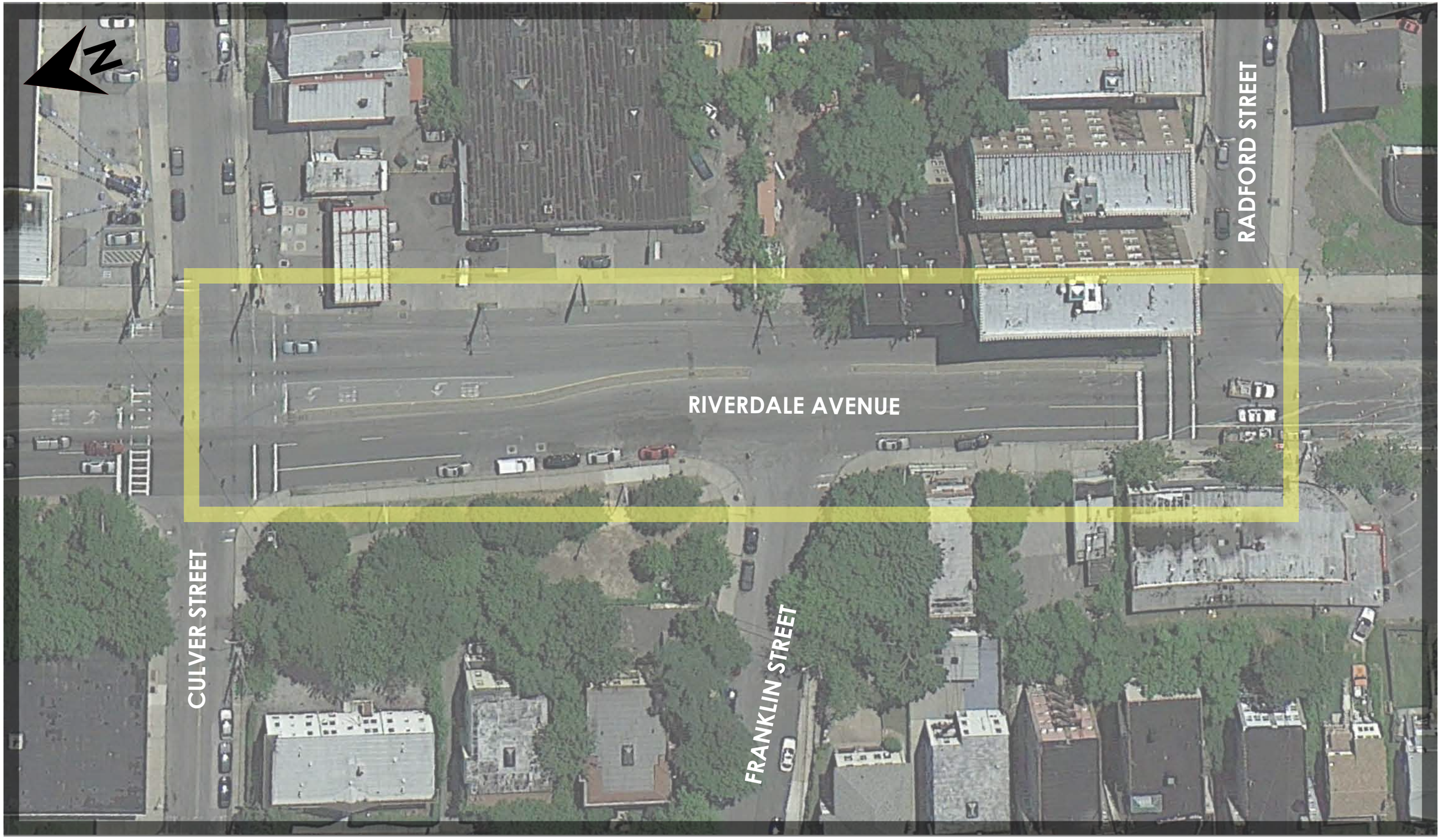


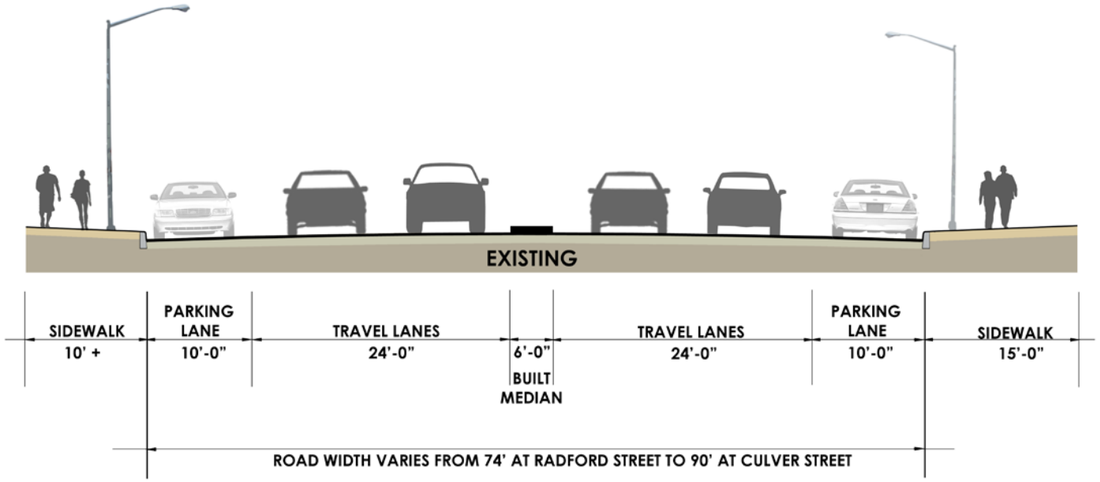
Riverdale Avenue Between Valentine Lane & Radford Street



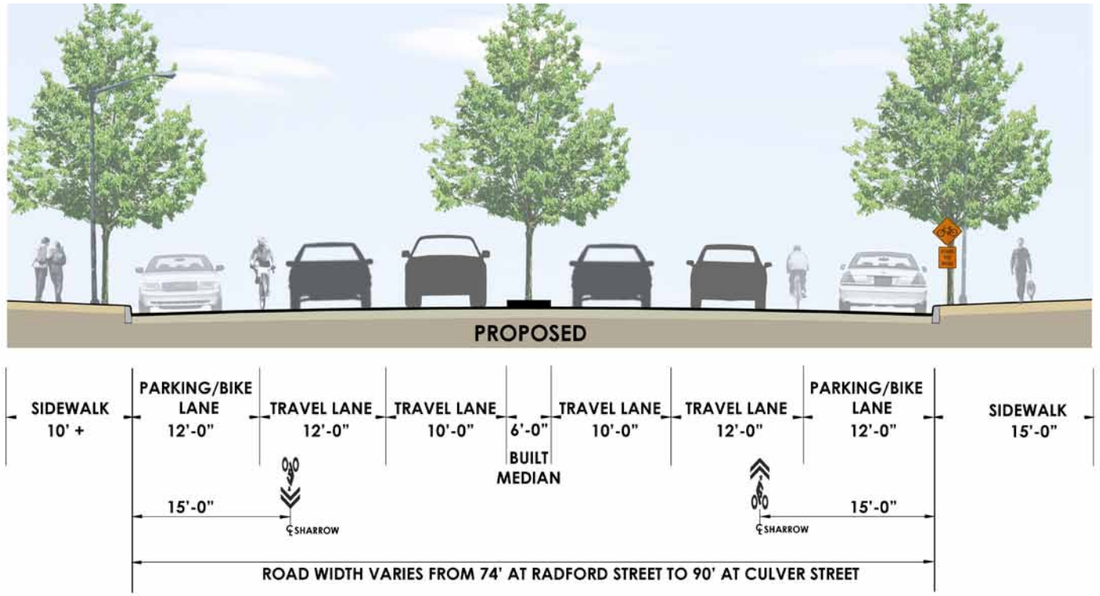


Riverdale Avenue at Valentine Lane Facing North

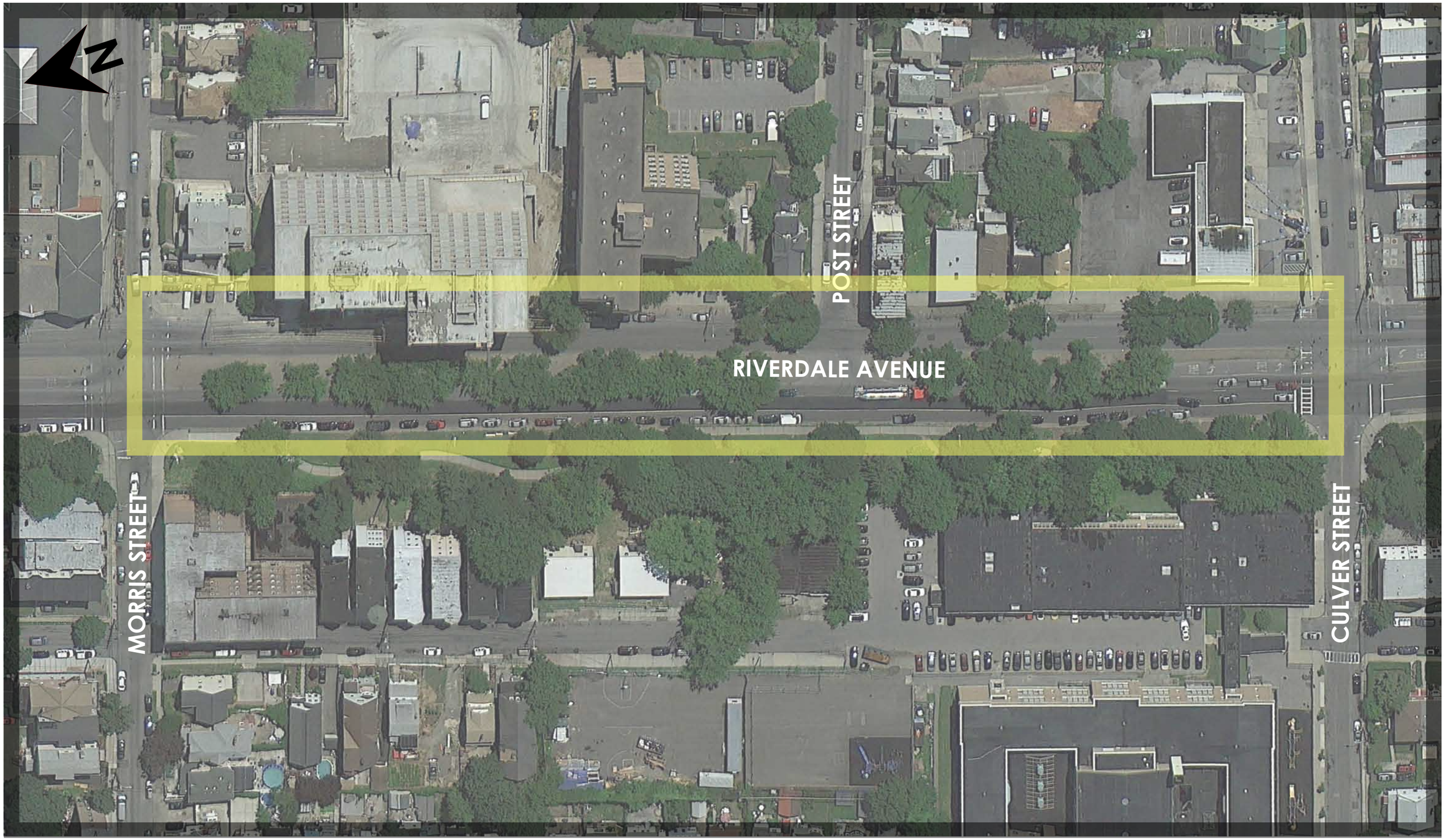

N
RADFORD STREET
RIVERDALE AVENUE
CULVER STREET
FRANKLIN STREET

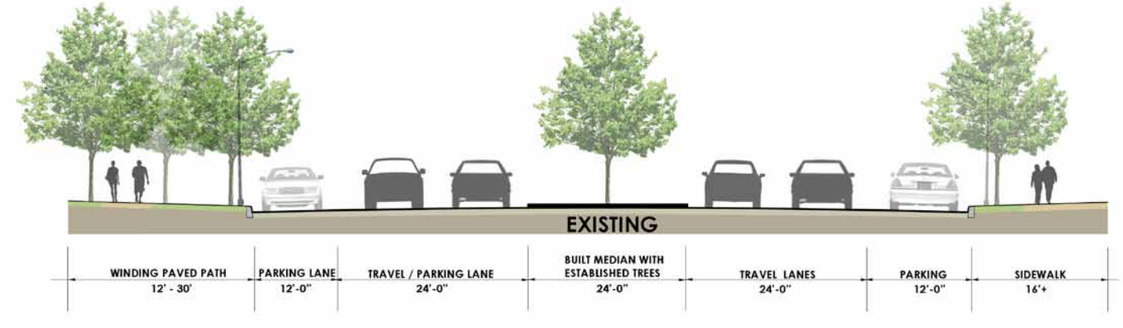


Riverdale Avenue Between Radford Street & Culver Street

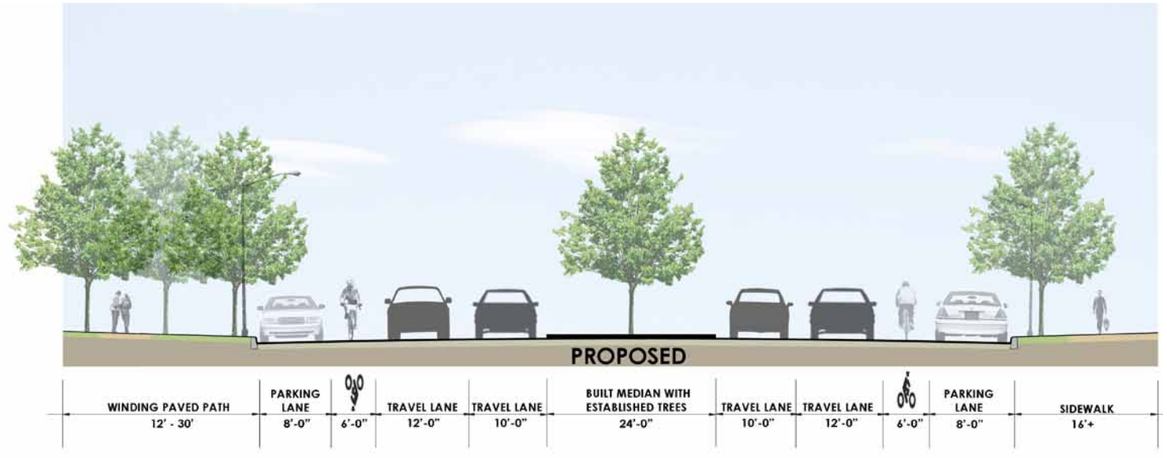


Riverdale Avenue North of Radford Street Facing North


POST STREET
RIVERDALE AVENUE
MORRIS STREET
CULVER STREET



Riverdale Avenue Between Culver Street & Morris Street

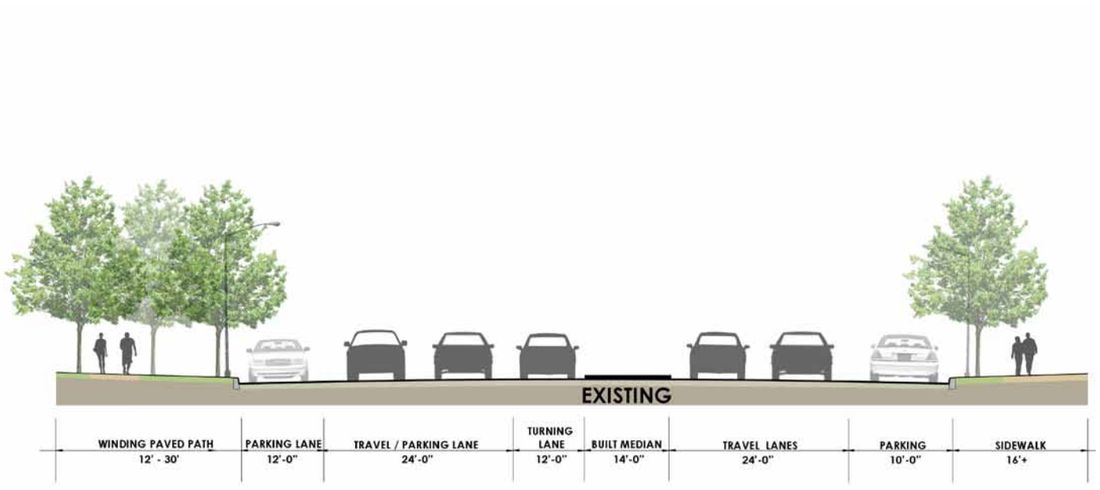


Short Term Solution

Riverdale Avenue North of Culver Street Facing North

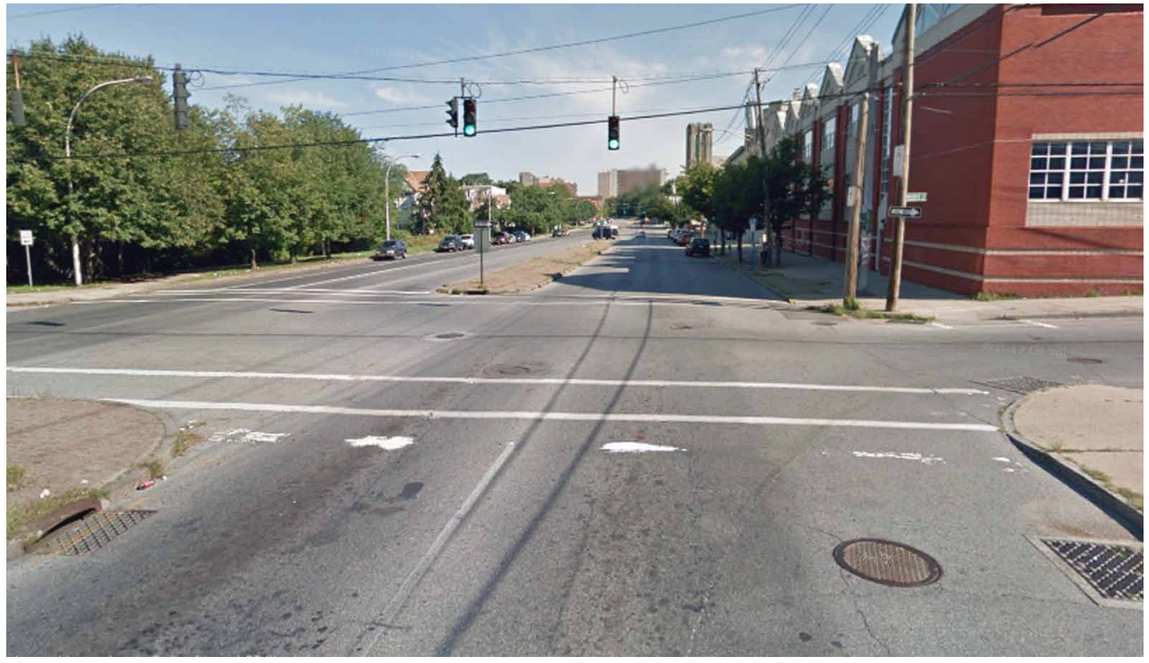
Long Term Solution


RIVERDALE AVENUE
PIER STREET
MORRIS STREET

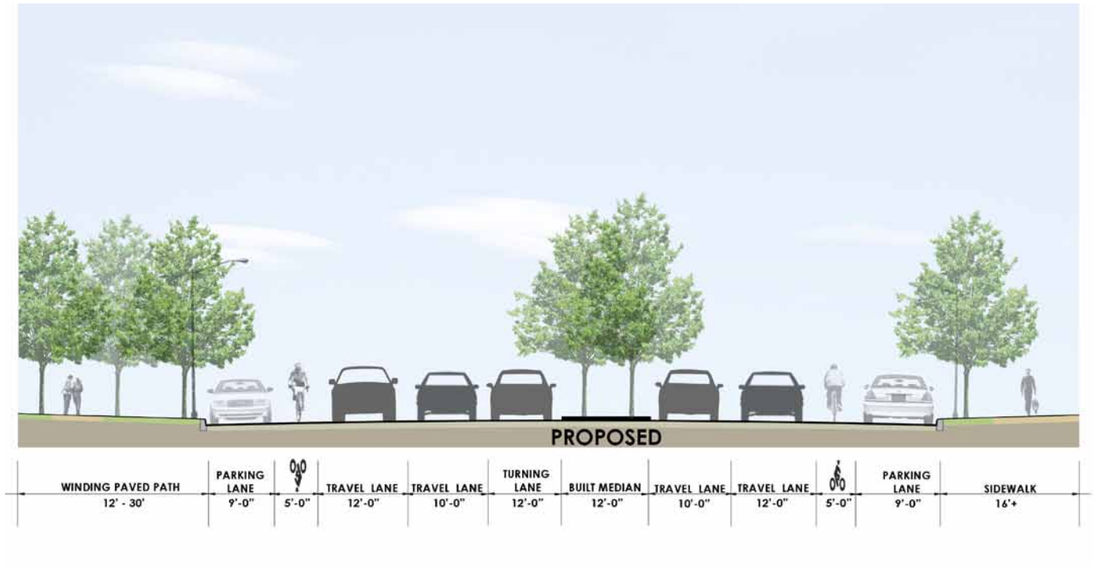


Riverdale Avenue Between Morris Street & Peir Street

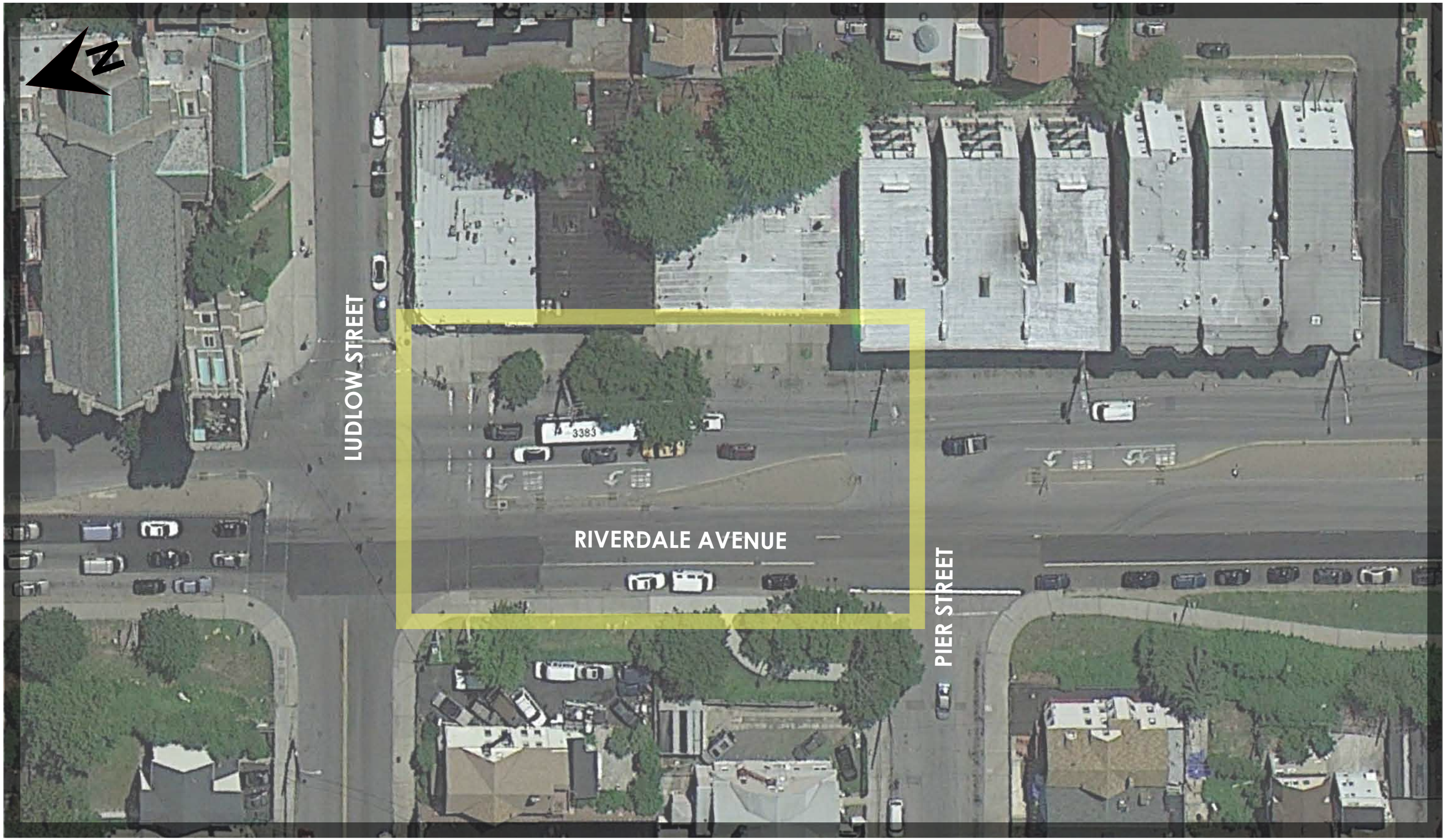
Short Term Solution



Riverdale Avenue at Morris Street Facing North



Long Term Solution


N
LUDLOW STREET
RIVERDALE AVENUE
PIER STREET

Riverdale Avenue at Ludlow Street Facing North

Existing Conditions

Street Width: 86'

Travel Direction: North - South

Traffic Volumes:

Parking Regulations:

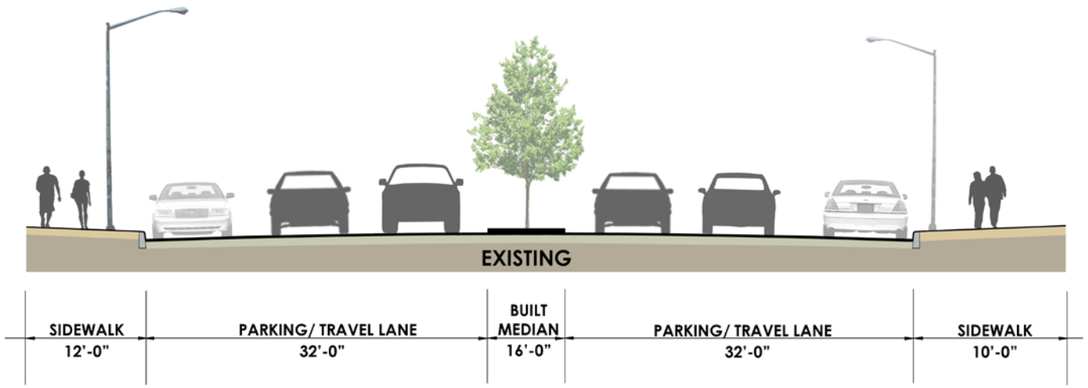
Median Type: Built, 20' Wide

Design Solution

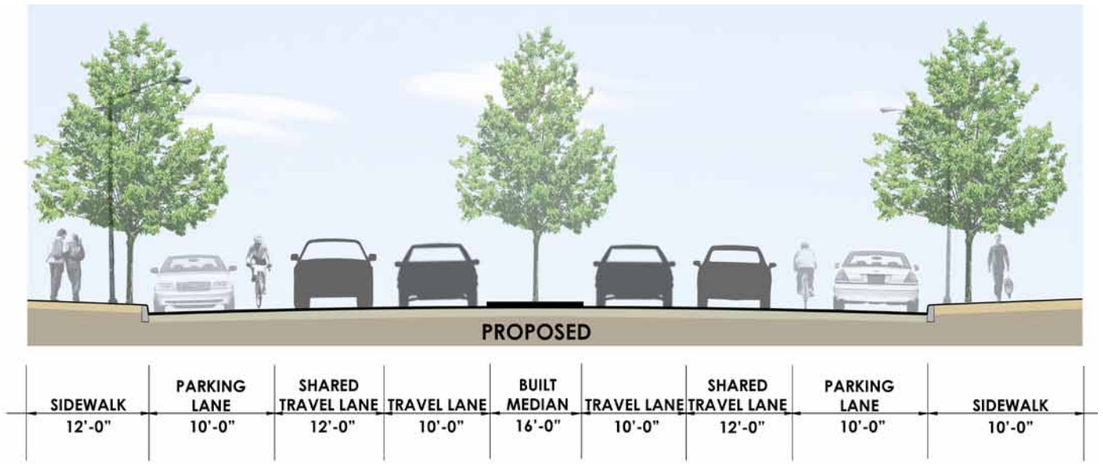
This Short segment of Riverdale Avenue would require a treatment to transition between the chosen design to the north and south.

Construction Cost Estimate

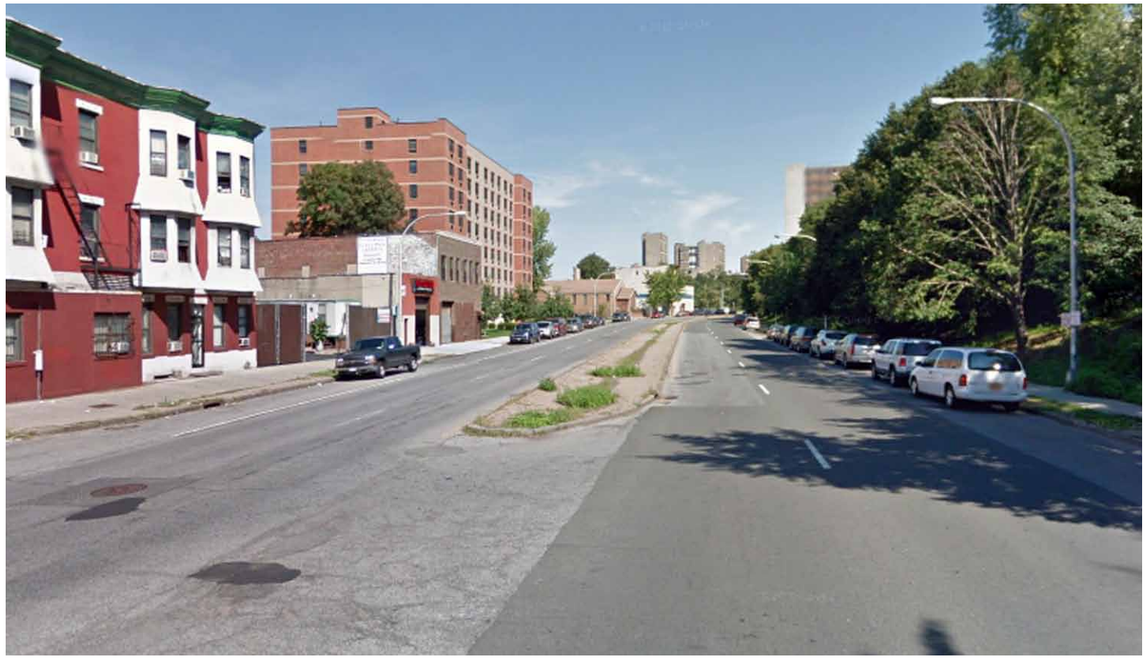

N
VARK STREET
HERRIOT STREET
HIGHLAND AVENUE
STANLEY AVENUE
LUDLOW STREET
RIVERDALE AVENUE
DOWNING STREET



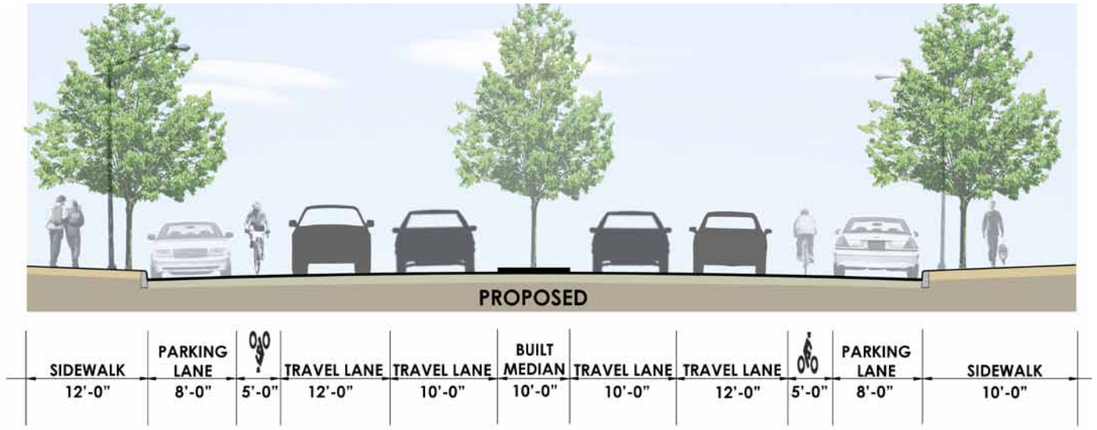
Riverdale Avenue Between Ludlow Street & Vark Street



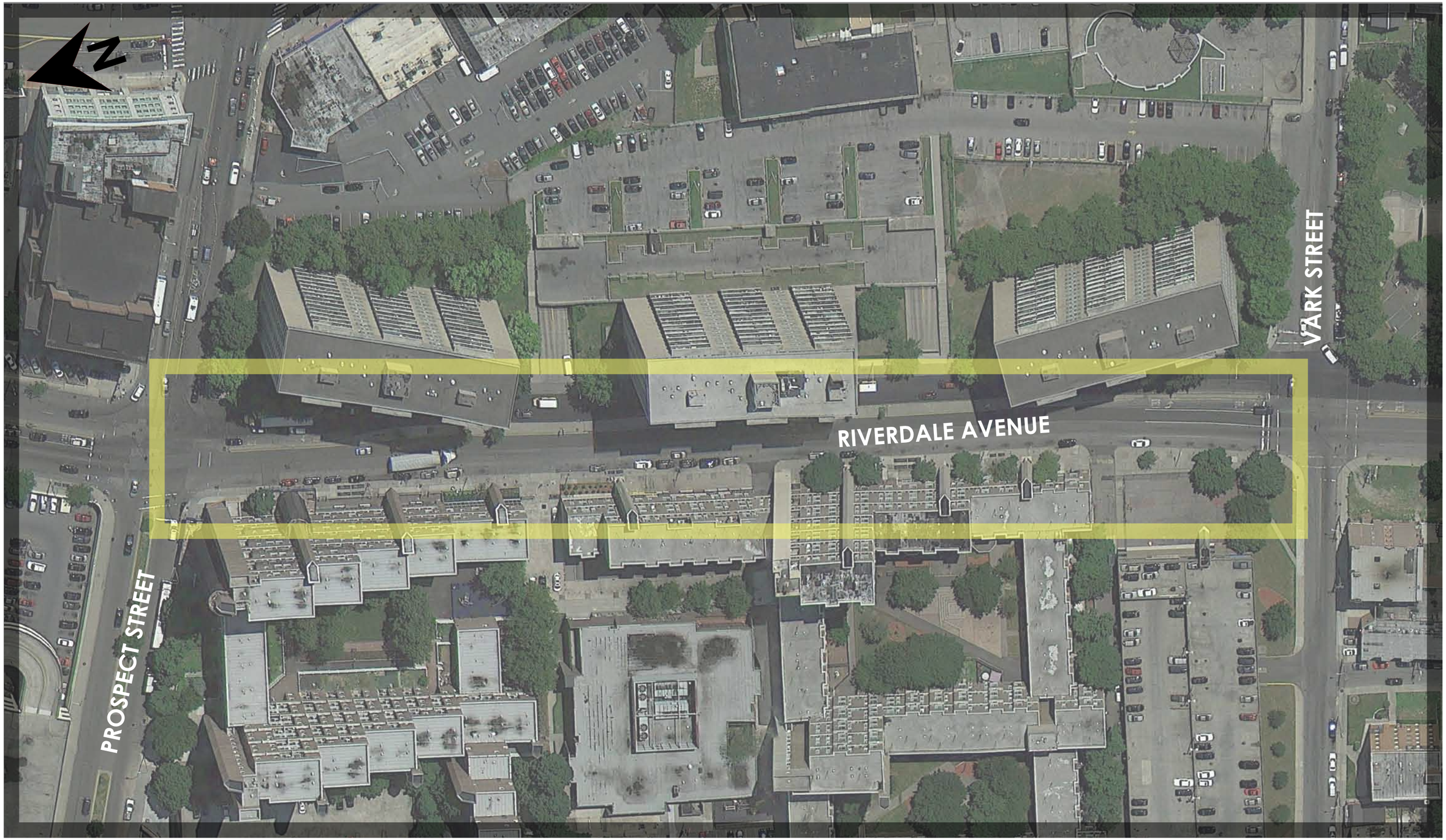
Short Term Solution

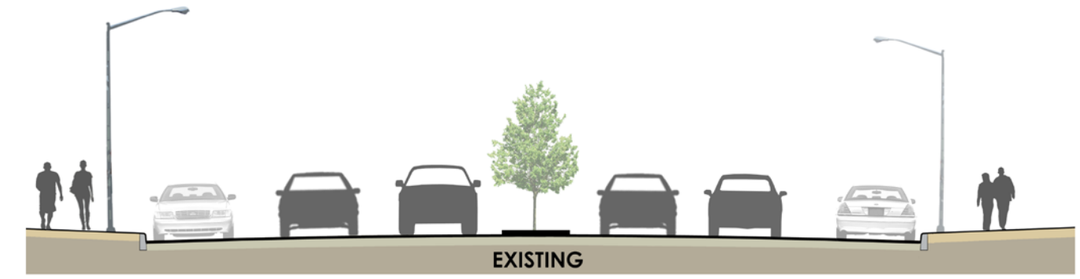


Riverdale Avenue at Downing Street Facing North

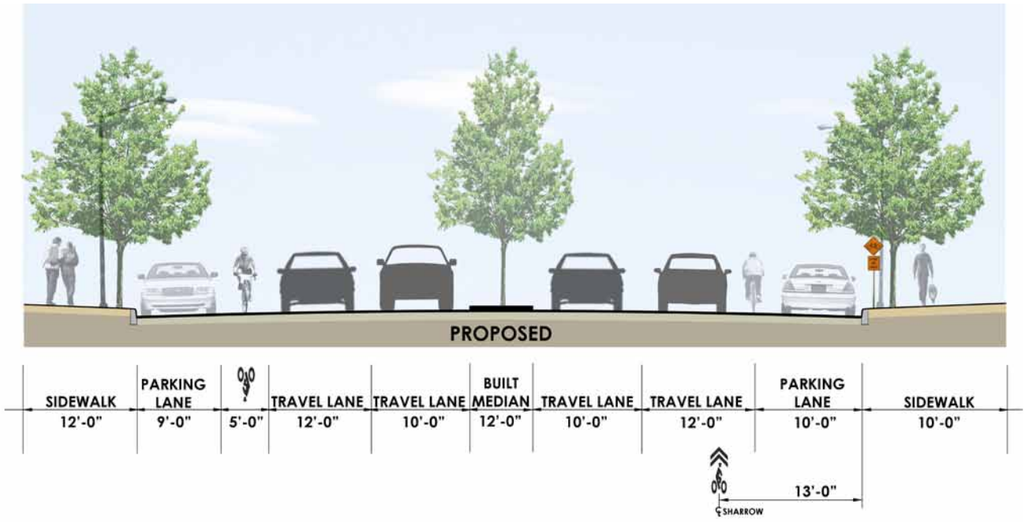


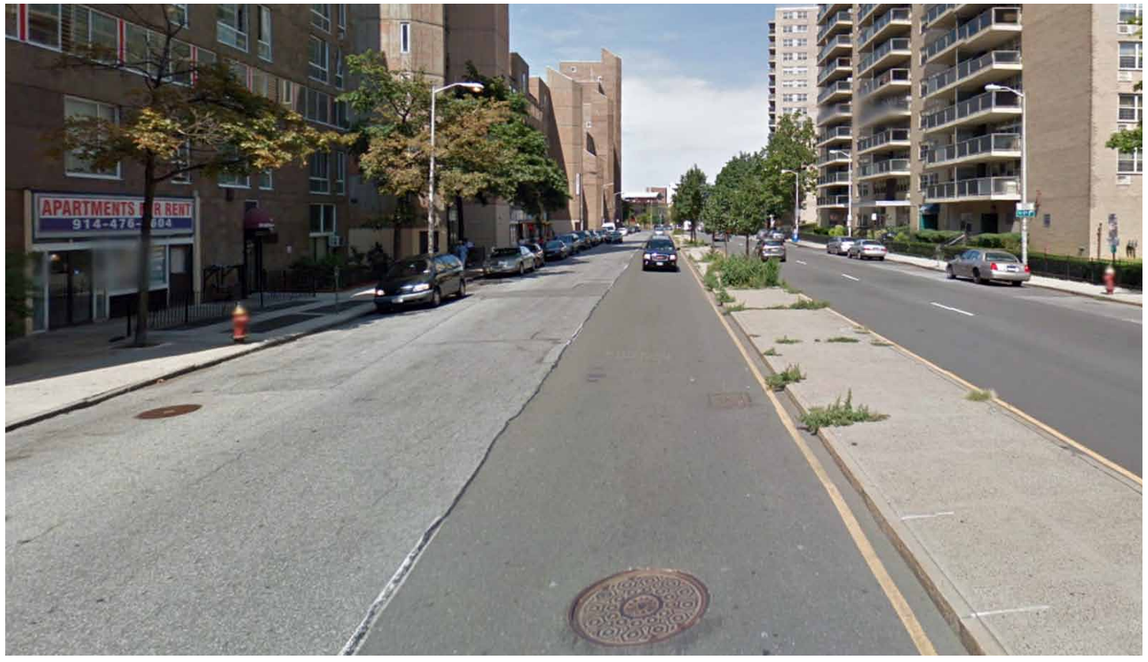
Long Term Solution


N
PARK STREET
RIVERDALE AVENUE
PROSPECT STREET

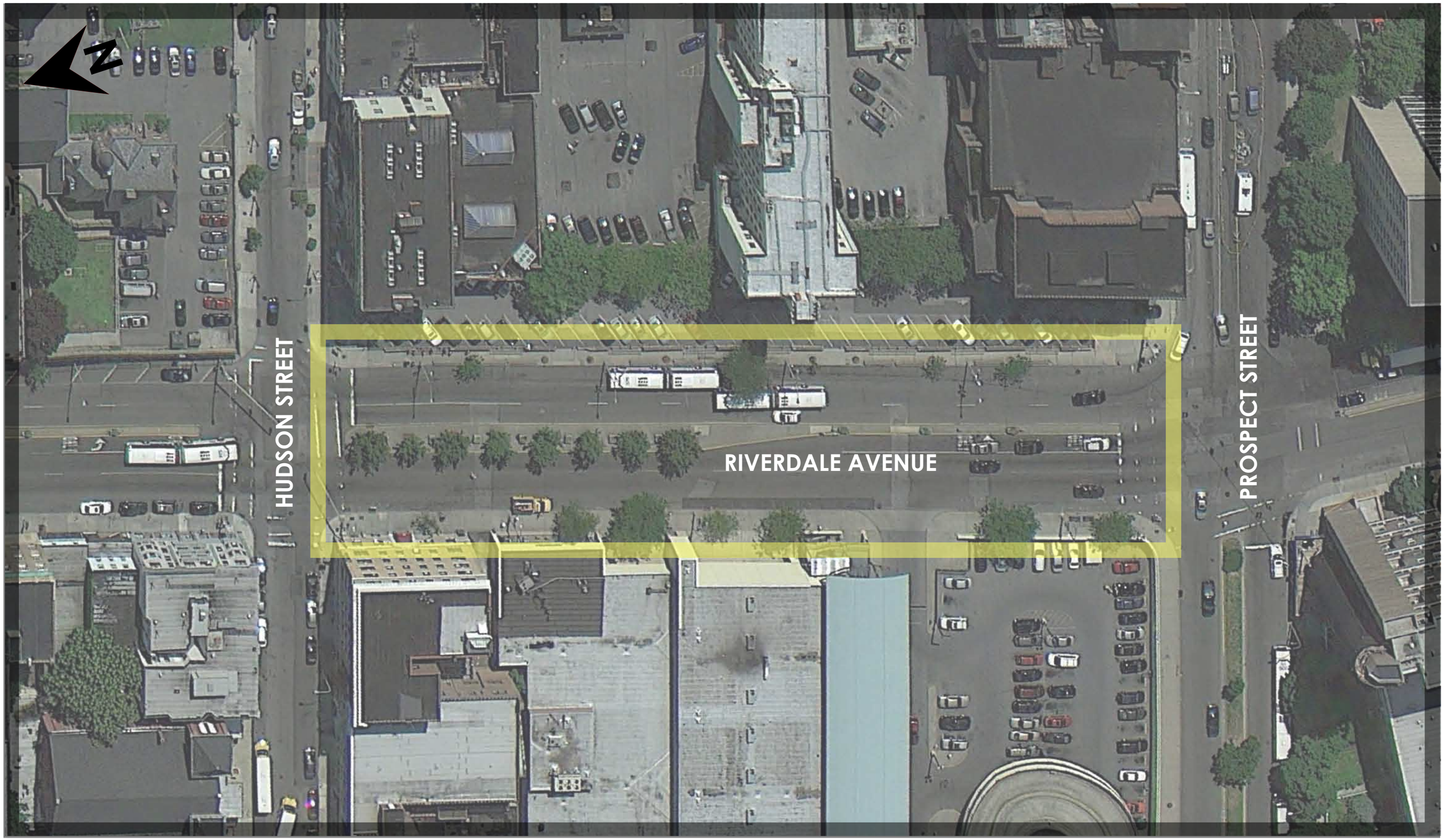


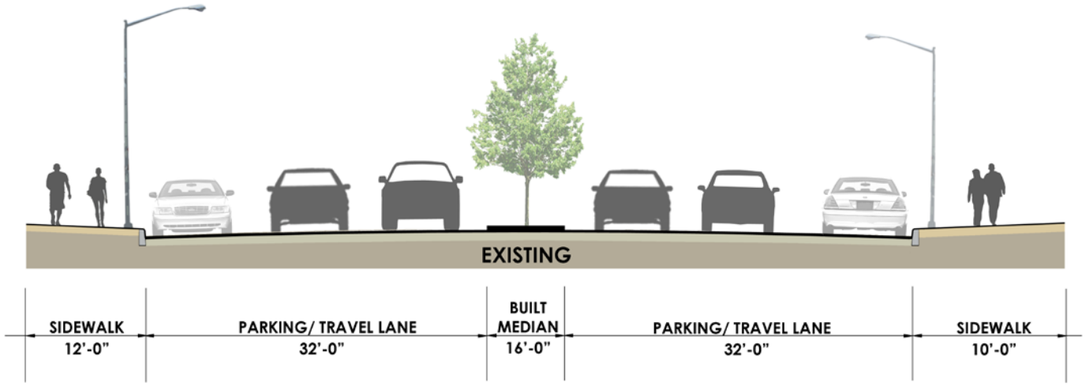
Riverdale Avenue Between Vark Street & Prospect Street



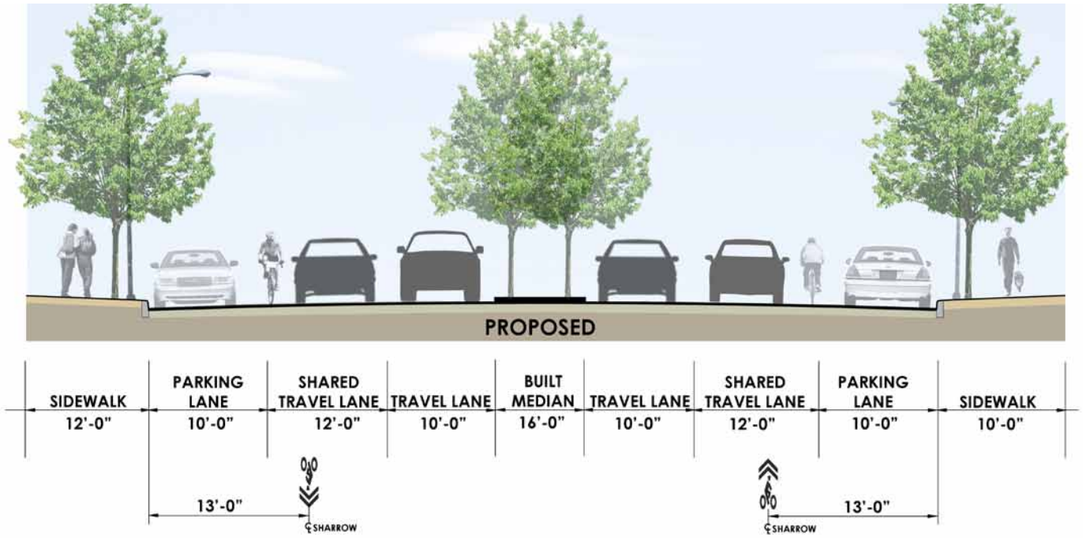


Riverdale Avenue North of Vark Street Facing North

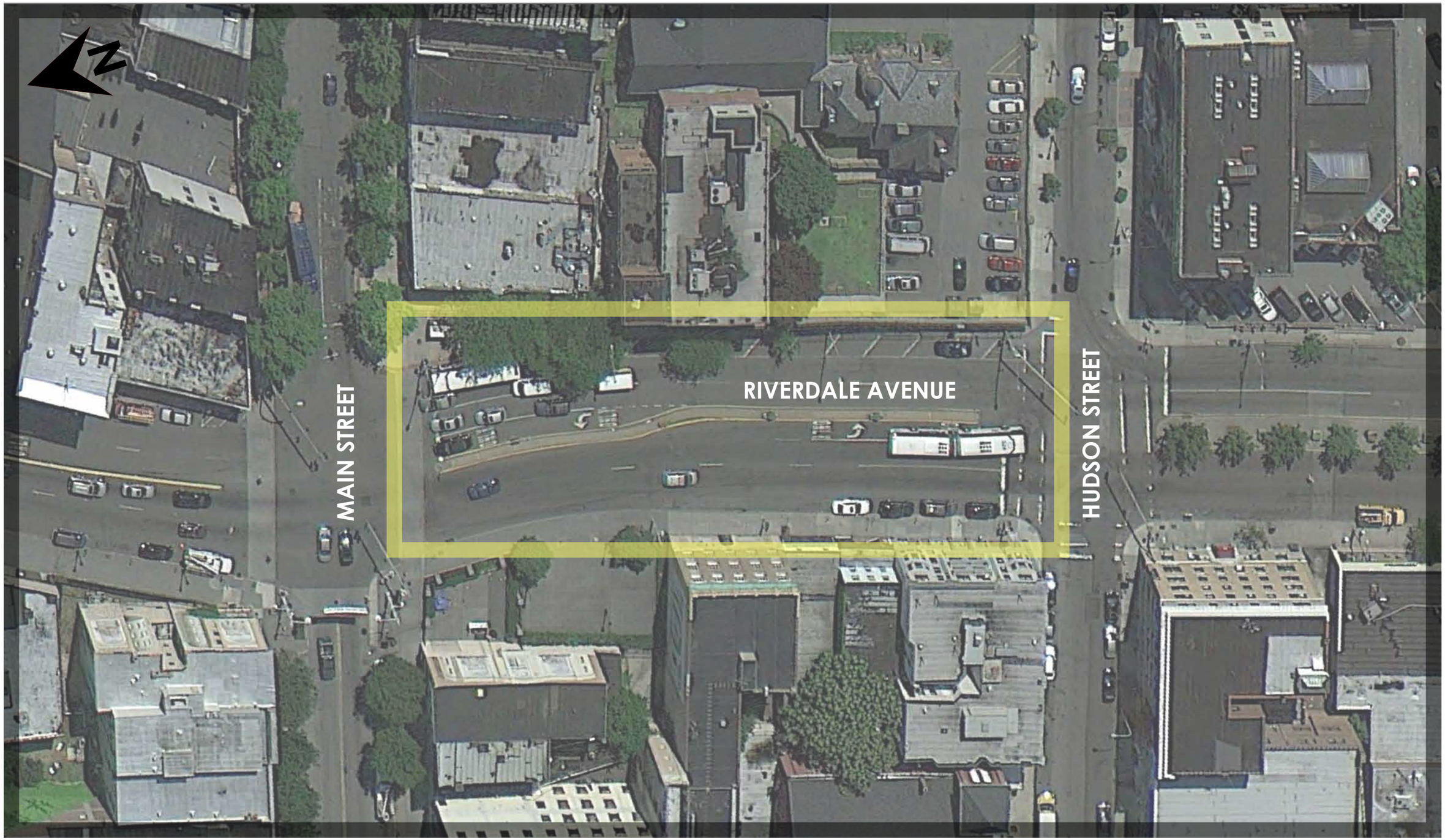

N
HUDSON STREET
RIVERDALE AVENUE
PROSPECT STREET

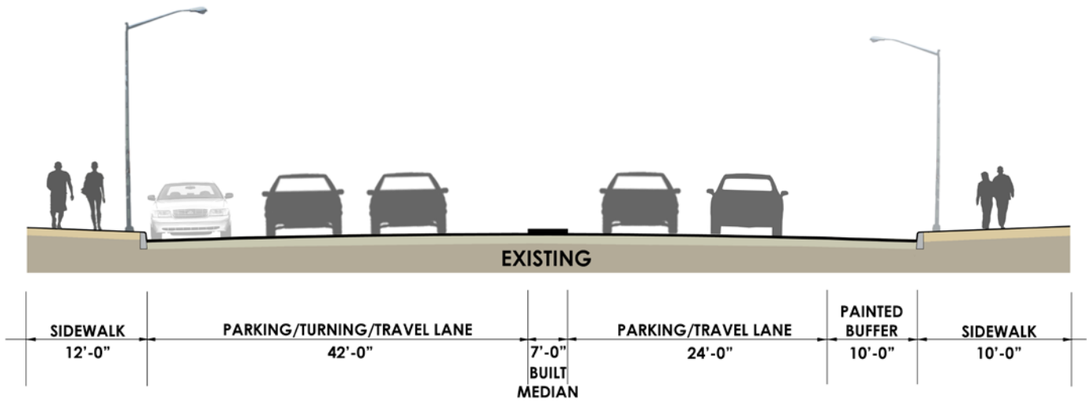


Riverdale Avenue Between Prospect Street & Hudson Street

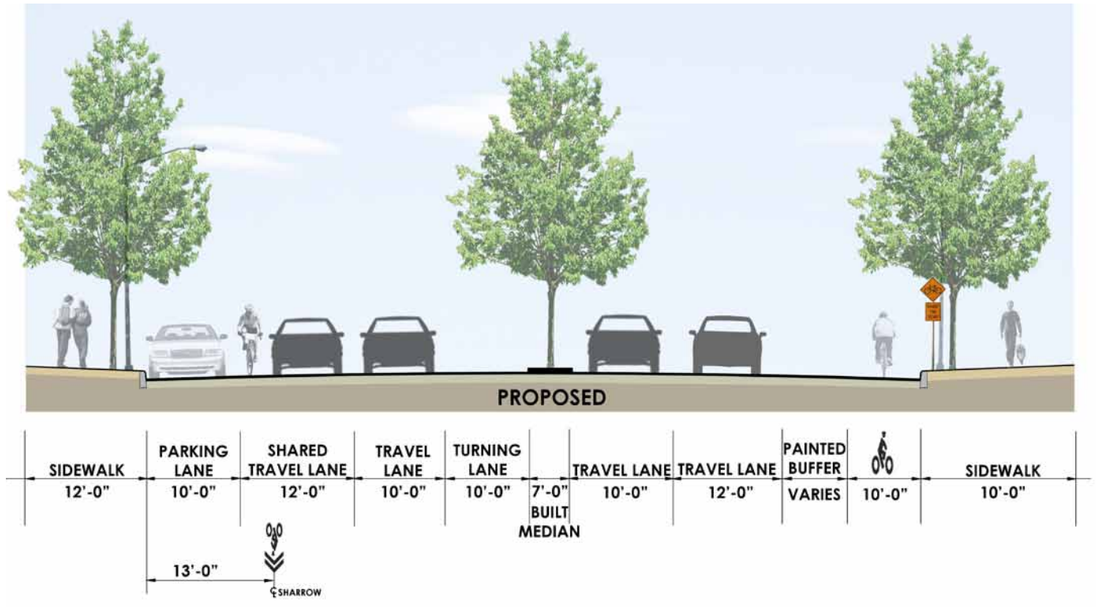


Riverdale Avenue North of Prospect Street Facing North


RIVERDALE AVENUE
MAIN STREET
HUDSON STREET

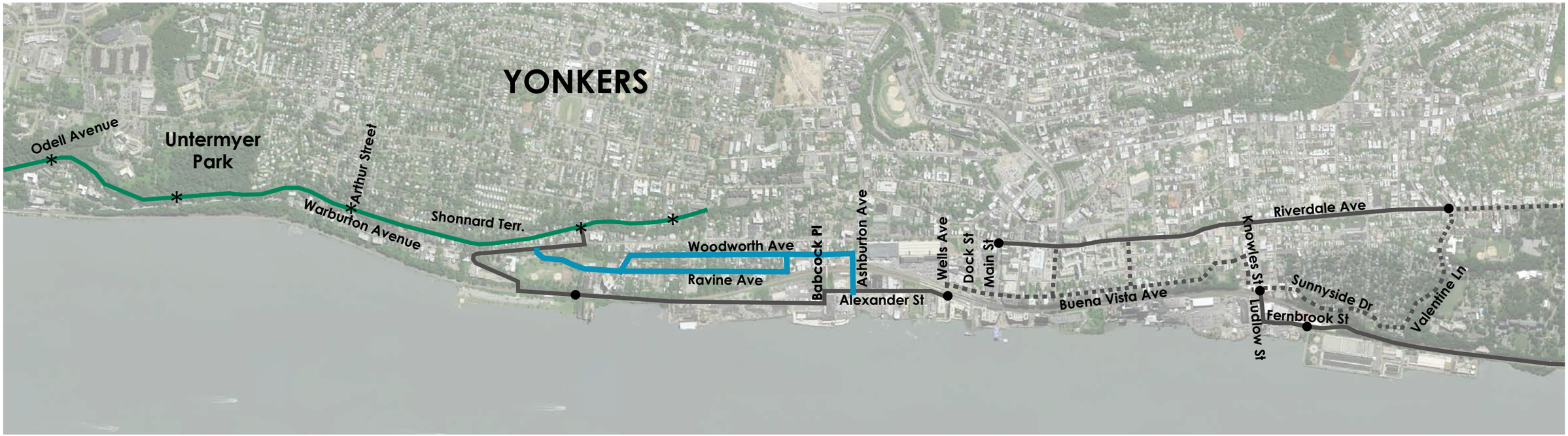


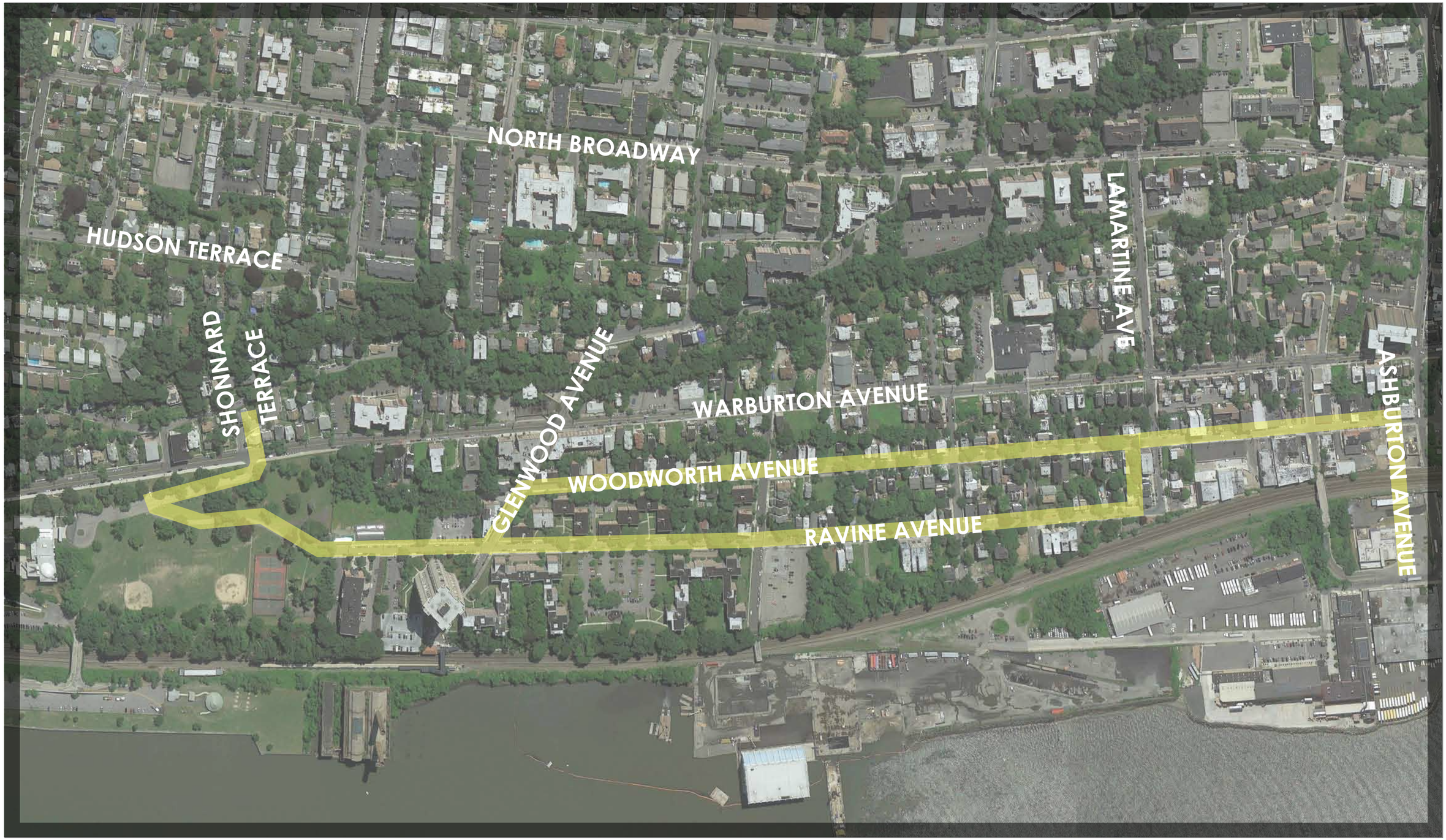
Riverdale Avenue Between Hudson Street & Main Street

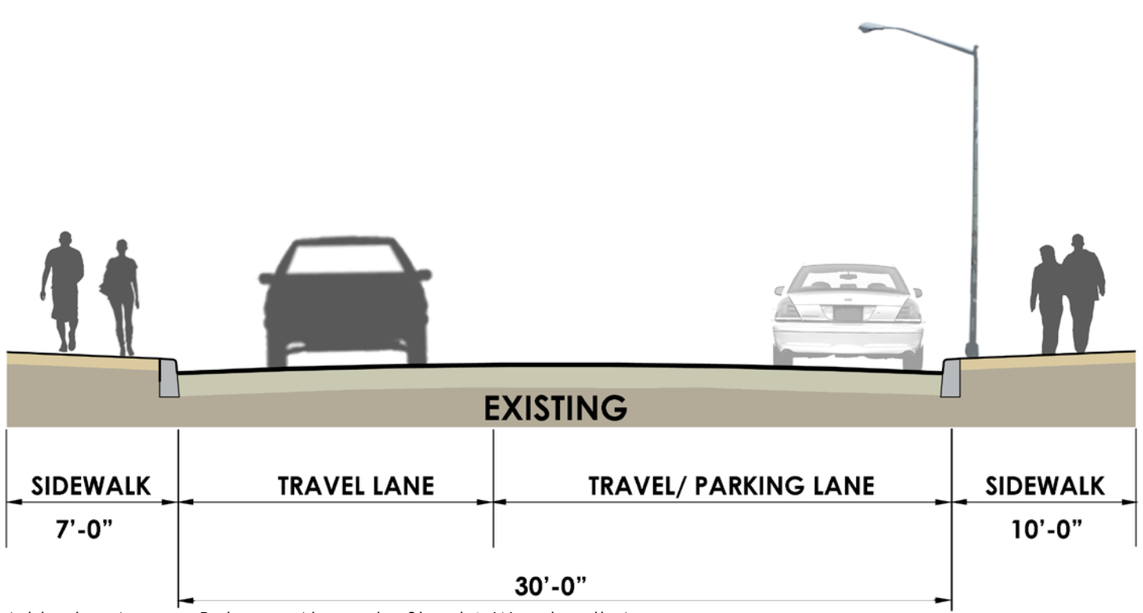


Riverdale Avenue North of Hudson Street Facing North

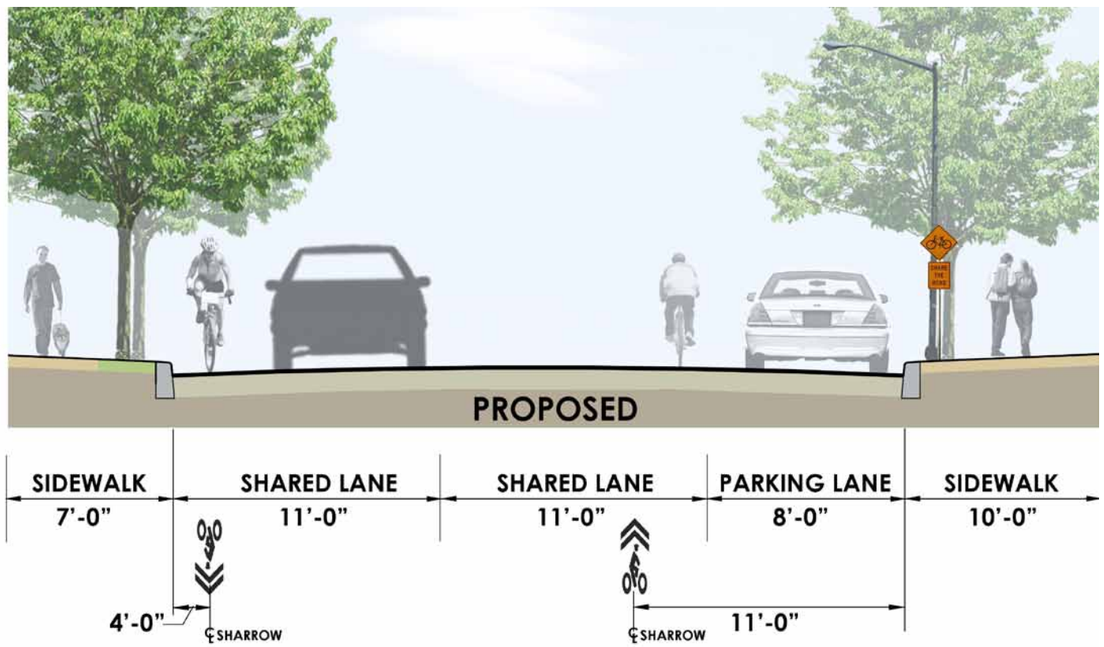
⑫ ASHBURTON AVE, WOODWORTH AVE - RAVINE AVE PAIR & TREVOR PARK CONNECTION




NORTH BROADWAY
HUDSON TERRACE
SHONNARD TERRACE
GLENWOOD AVENUE
LAMARTINE AVE
WARBURTON AVENUE
WOODWORTH AVENUE
RAVINE AVENUE
ASHBURTON AVENUE



Ashburton Avenue Between Alexander Street & Woodworth Avenue



Ashburton Avenue Between Alexander Street & Woodworth Avenue

Existing Conditions

Street Width: 30'

Travel Direction: East - West (Ashburton), North - South (Ravine and Woodworth)

Traffic Volumes: Low

Parking Regulations: Parking on both sides of the street on Ravine Avenue and Woodworth Avenue

Ashburton Avenue crosses under the railroad overpass towards the tree lined residential streets of Yonkers. While street trees are prevelant, sidewalks are inconsistent and often less than 5' wide.

Design Solution

It is recommended that a slow-speed complete street be implemented along these streets.

Construction Cost Estimate

$25,000 for signs and markings

Ravine Avenue Between Lamartine Avenue & Trever Park

Rendering of Potential 'full use' Shared Travel Lanes