

Project ID: HWK1048G

**Final Design Services for the Owls Head
Connector Section of the Brooklyn Waterfront Greenway**

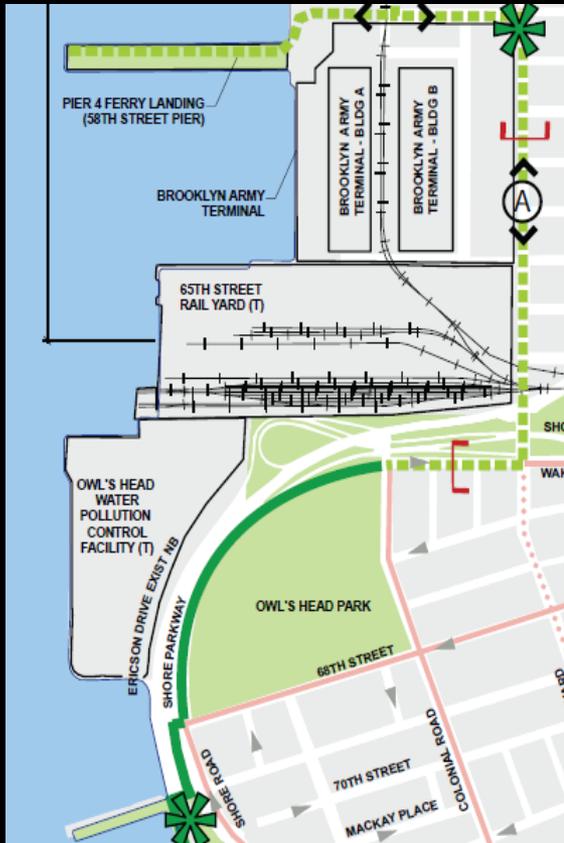
Borough of Brooklyn

**Community Board No. 10 Presentation
October 5th, 2015**

Pre-Scoping Services for The Owl's Head Connector Section of the Brooklyn Waterfront Greenway

- Project Objectives
- Background/Existing Conditions
- Proposed Roadway/Retaining
Wall Design

Project Objectives



Brooklyn Waterfront Greenway Implementation Plan
(June 2012)

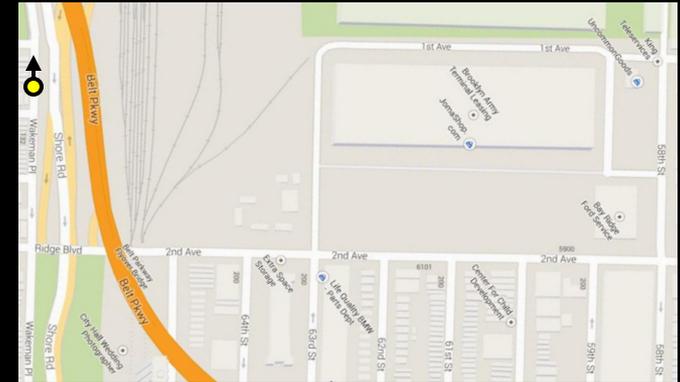
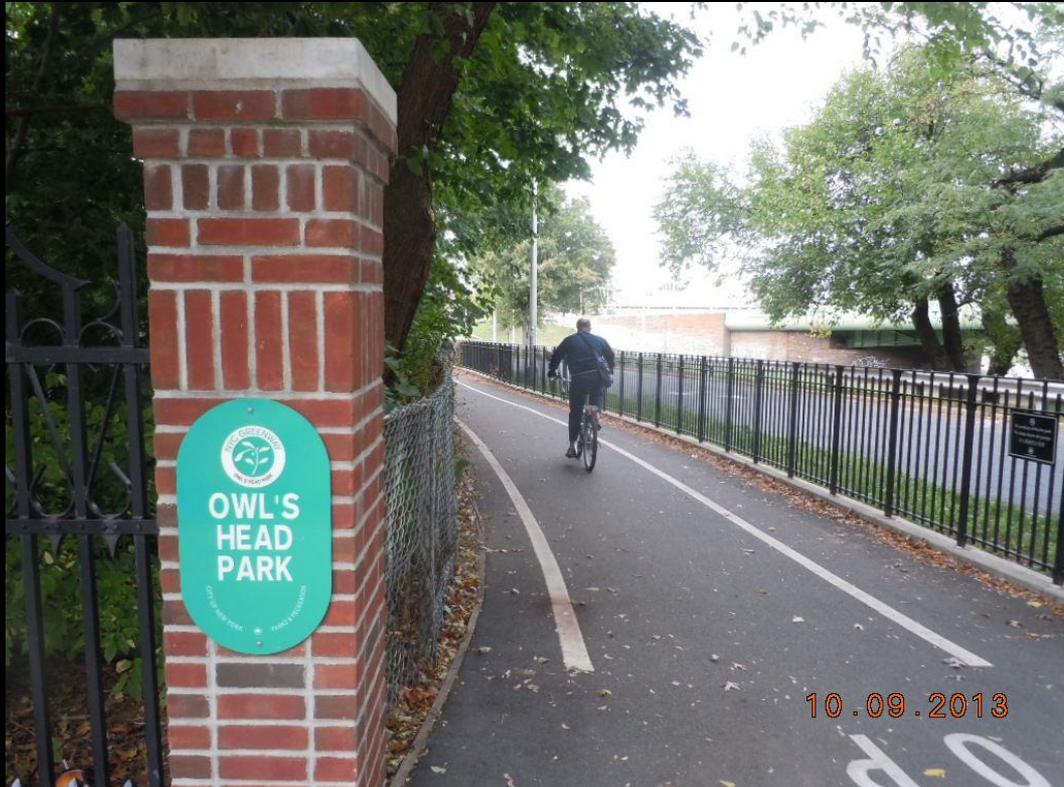
- Improve Pedestrians and Cyclists Safety and Accessibility including ADA Compliance
- Create an effective link between communities and waterfront
- Showcase Neighborhood Character
- Implement Sustainable Design Opportunities
- Repair Existing Retaining Wall along 2nd Avenue

Pre-Scoping Services for The Owl's Head Connector Section of the Brooklyn Waterfront Greenway



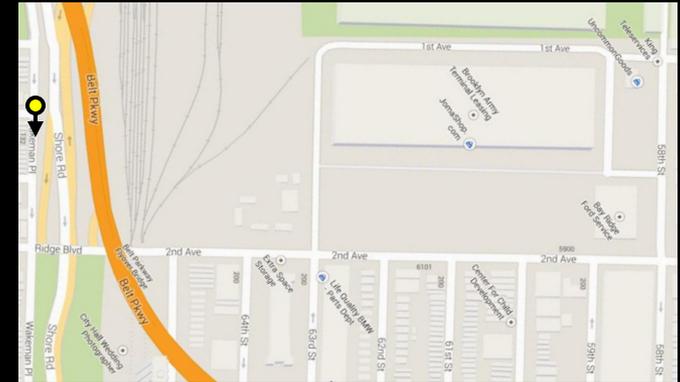
- Wakeman Place Between Colonial Road and 2nd Avenue (Bay Ridge Neighborhood) – **CB10**
- 2nd Avenue Between Wakeman Place and 58th Street (Sunset Park Neighborhood) – **CB7**

Existing Conditions



Wakeman Place/Colonial Road Owl's Head Park Entrance

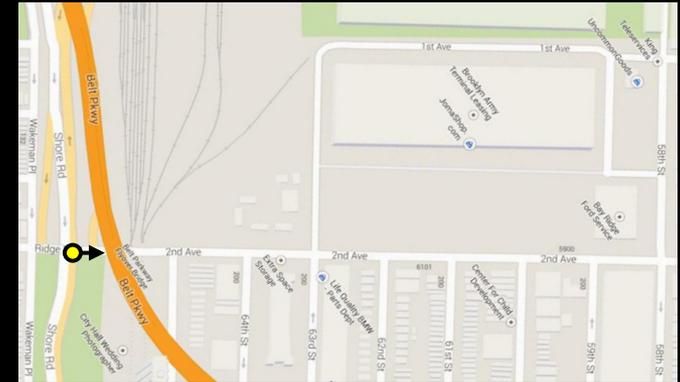
Existing Conditions



Wakeman Place Looking East

- On-Street Bicycle Path to be relocated to North Sidewalk

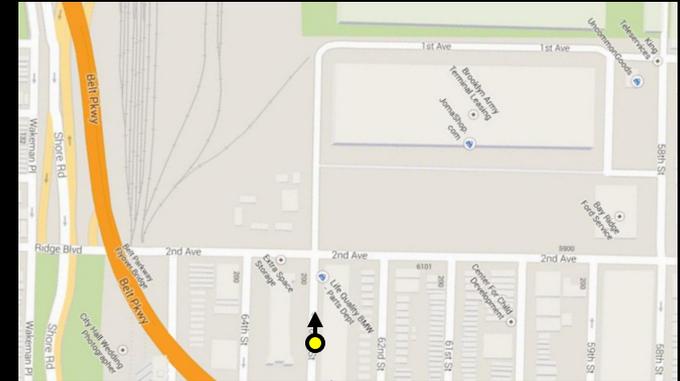
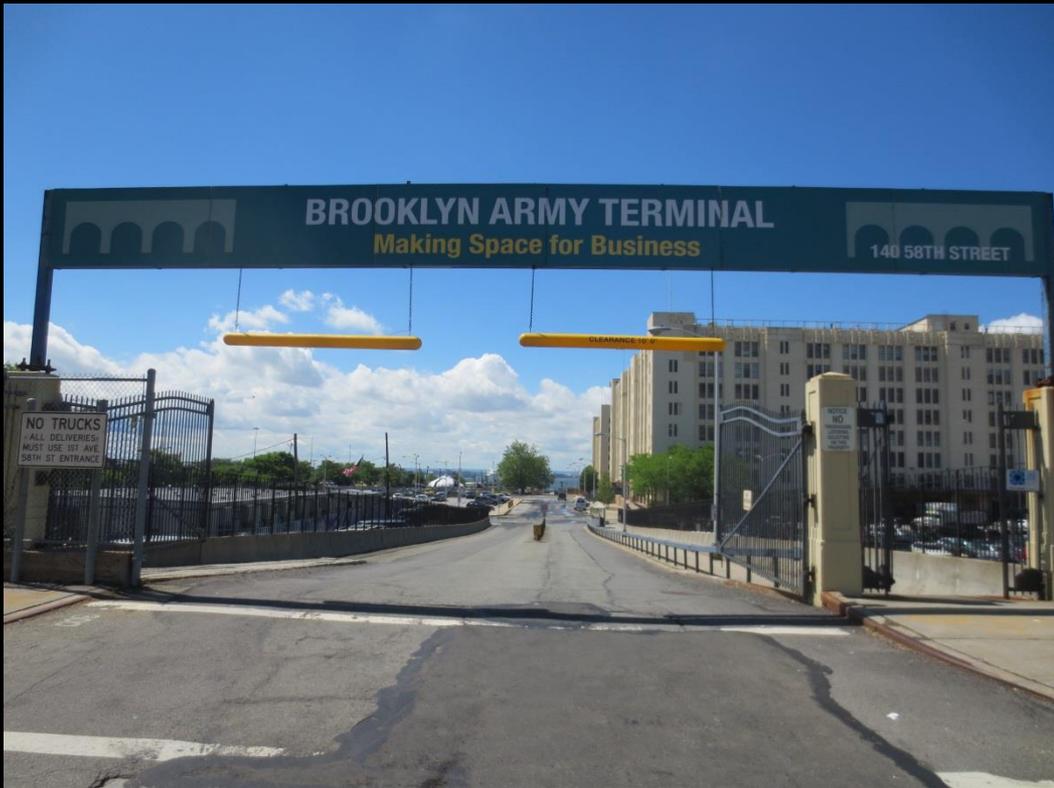
Existing Conditions



2nd Avenue/Wakeman Place Looking North

- Currently no Bicycle Facility

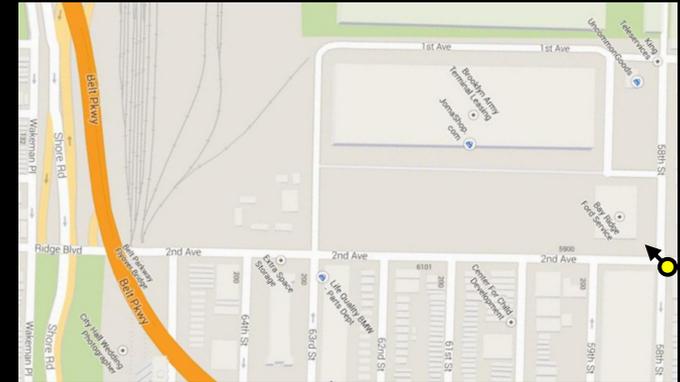
Existing Conditions



2nd Avenue/63rd Street Brooklyn Army Terminal Looking West

- Signalized Entrance/Exit Ramp

Existing Conditions



2nd Avenue/58th Street Looking South

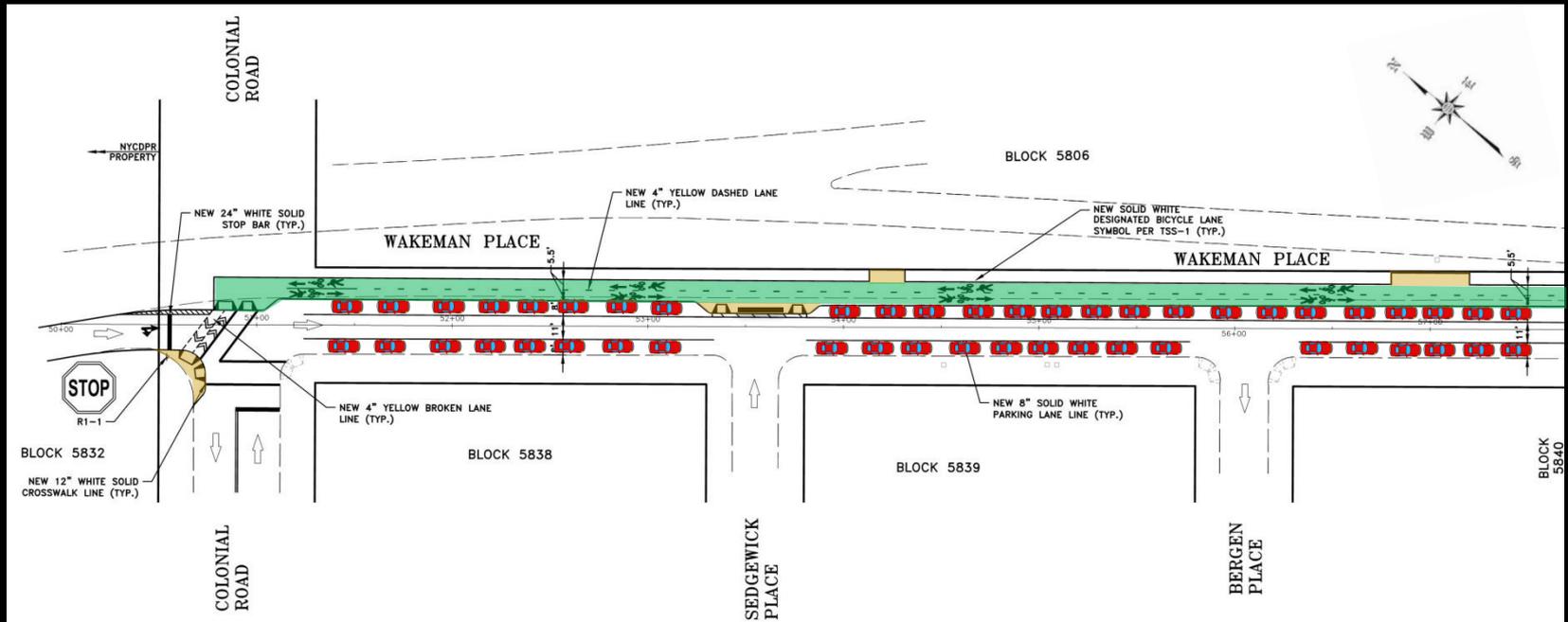
- Currently no Bicycle Facility or Turning Lanes

Roadway Design

- Design Criteria
 - Pedestrian/Bicyclist Travel Lanes
 - Tree Impact
 - Maintaining Existing Parking
 - Providing Seating/Resting Areas

Roadway Design

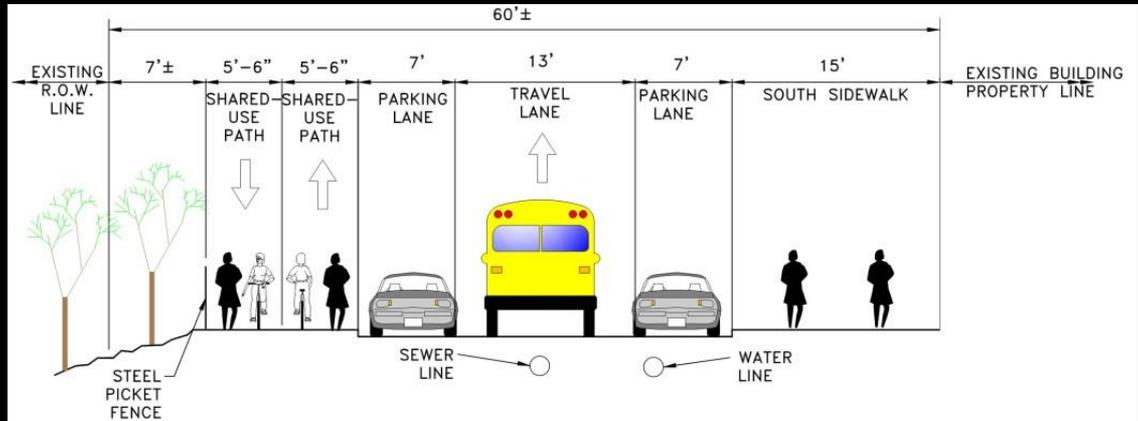
Wakeman Place Plan View



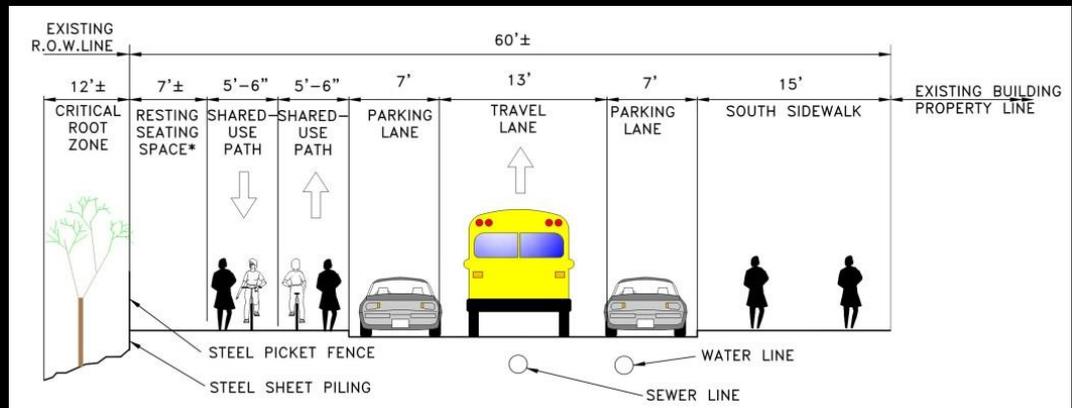
- Shared Bicycle Lane/Pedestrian Path
- Three (3) total parking spots eliminated to accommodate curb extension on north curb at Sedgewick Place intersection
- One (1) Tree Impacted

Roadway Design

Wakeman Place



Wakeman Place between Colonial Road and 2nd Avenue - Without Seating



Wakeman Place between Colonial Road and 2nd Avenue - With Seating

Roadway Design

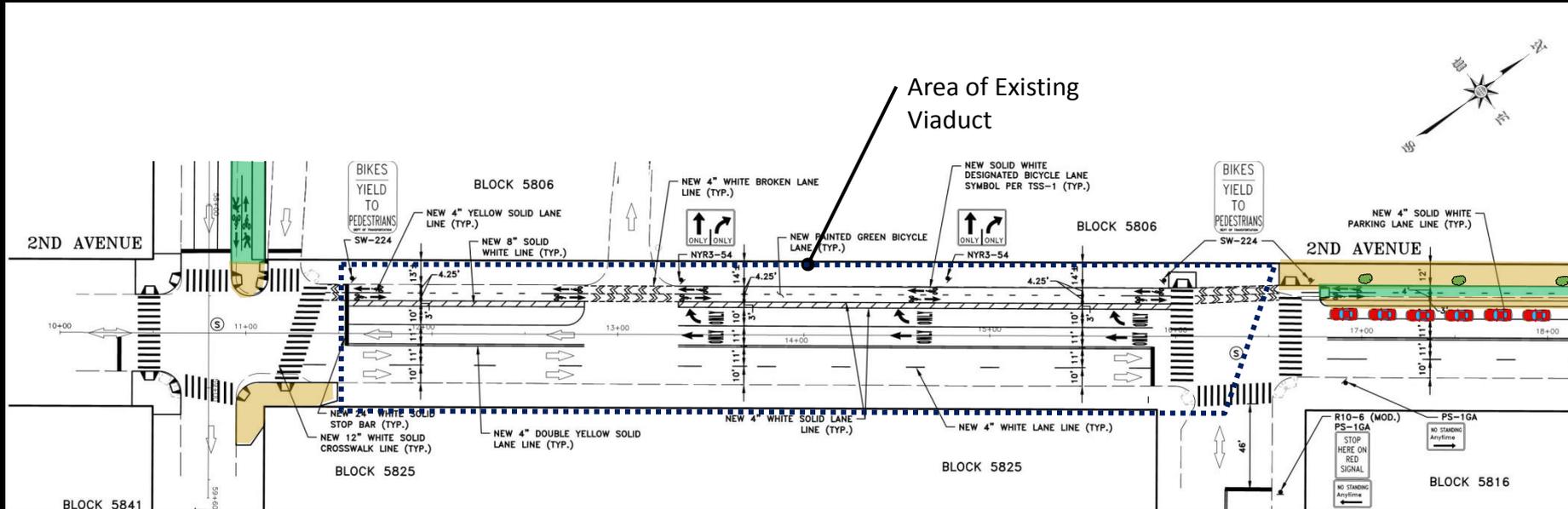
Wakeman Place



Wakeman Place/Colonial Road Looking East

Roadway Design

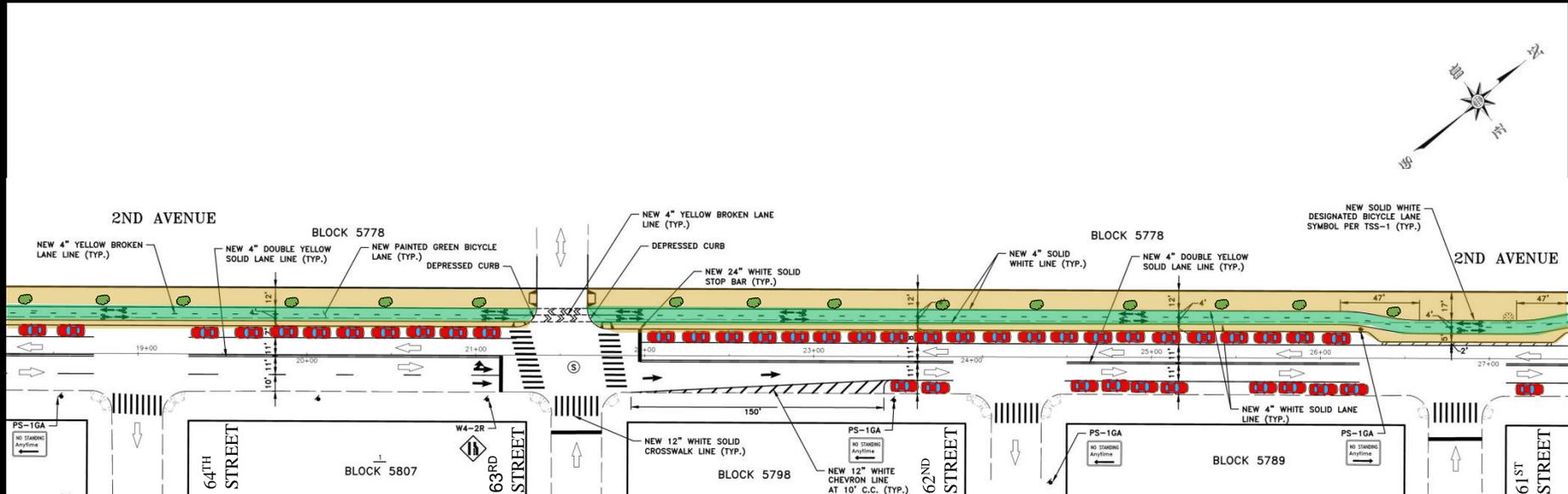
2nd Avenue Plan View



- Bicycle Path located on Street
- Pedestrian Path located on Sidewalk South of 65th Street
- Forty-Six (46) total parking spots eliminated on 2nd Avenue
 - Fifteen (15) parking spots between Wakeman Place and 65th Street to accommodate traffic operations and on street bike lane
- Forty-one (41) trees removed and thirty-seven (37) trees transplanted

Roadway Design

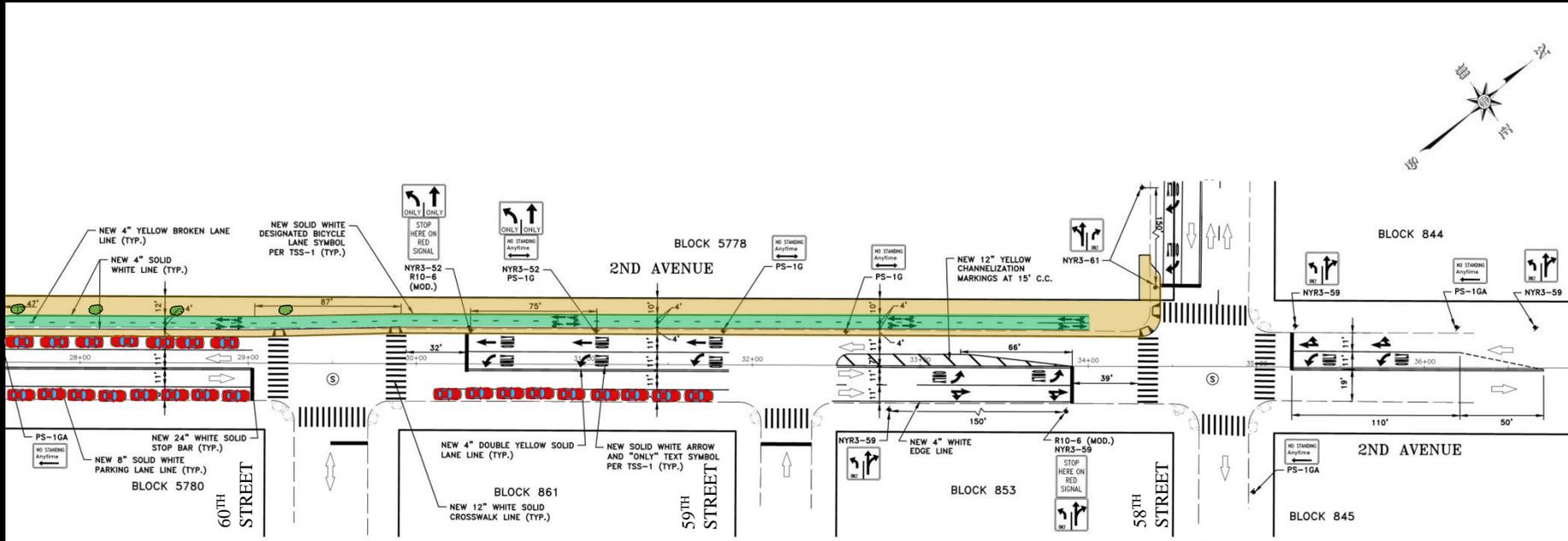
2nd Avenue Plan View



- Shared Pedestrian/Bicycle Path Located on Sidewalk Between 65th Street and 58th Street
- Forty-Six (46) total parking spots eliminated on 2nd Avenue
 - Eight (8) parking spots between at 61st Street intersection to accommodate curb extension
- Forty-one (41) trees removed and thirty-seven (37) trees transplanted

Roadway Design

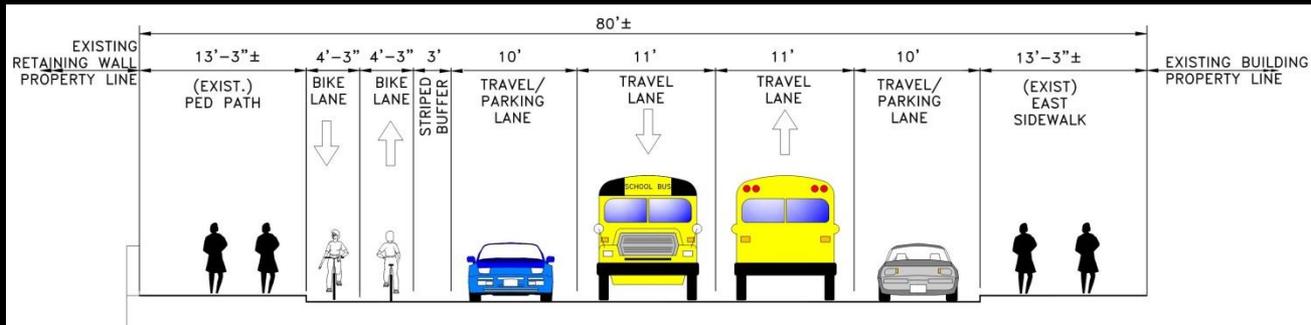
2nd Avenue Plan View



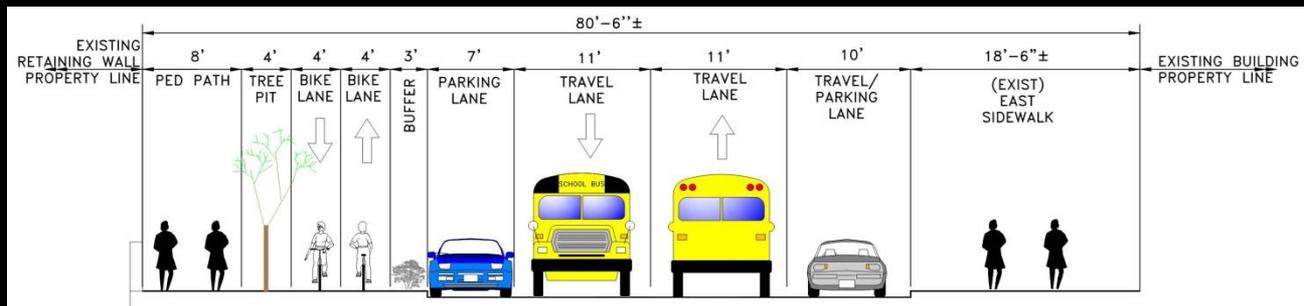
- Shared Pedestrian/Bicycle Path Located on Sidewalk Between 65th Street and 58th Street
- Forty-Six (46) total parking spots eliminated on 2nd Avenue
 - Nineteen (19) parking spots between 60th Street and 58th Street to accommodate traffic operations
- Forty-one (41) trees removed and thirty-seven (37) trees transplanted

Roadway Design

2nd Avenue



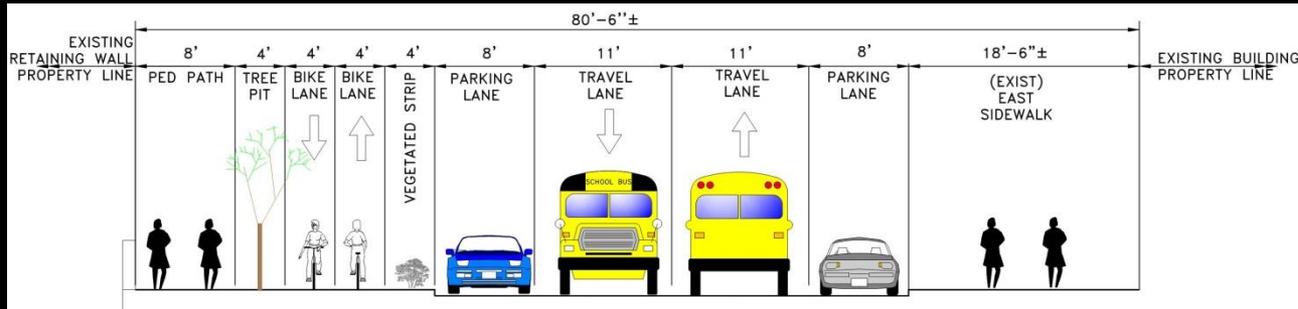
2nd Avenue Between Wakeman Place and 65th Street



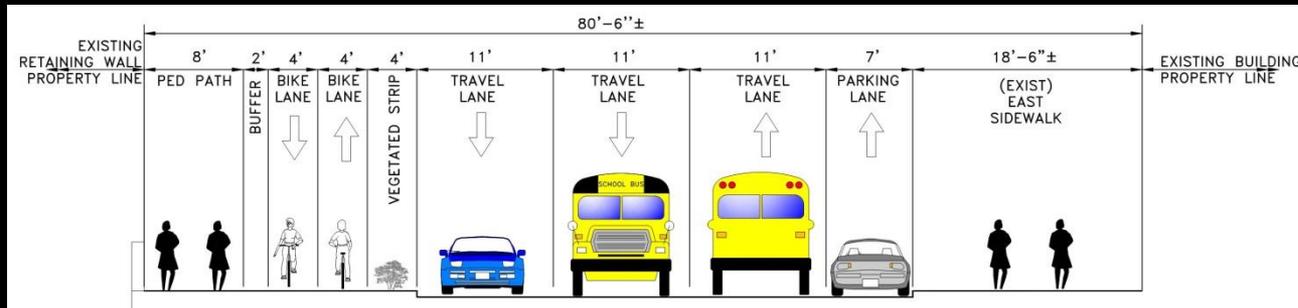
2nd Avenue Between 65th Street and 63rd Street

Roadway Design

2nd Avenue



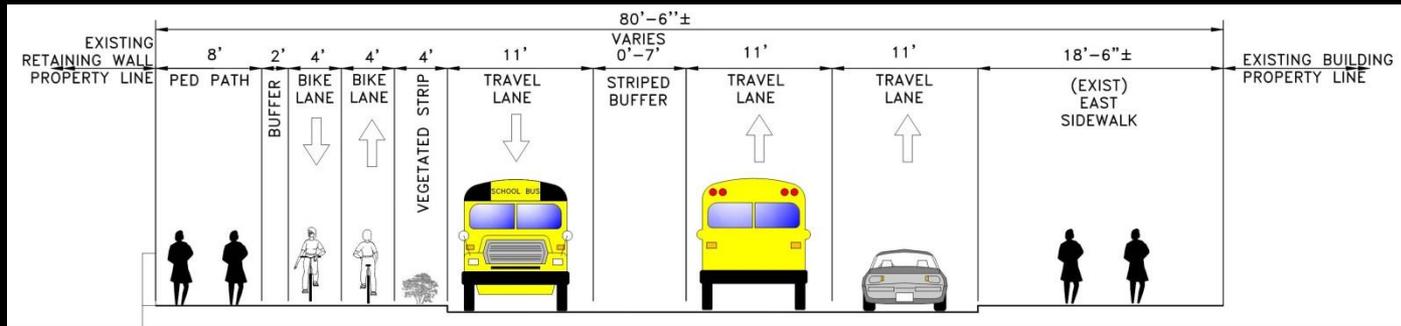
2nd Avenue Between 63rd Street and 60th Street



2nd Avenue Between 60th Street and 59th Street

Roadway Design

2nd Avenue



2nd Avenue Between 69th Street and 58th Street

Roadway Design

2nd Avenue



2nd Avenue/65th Street Looking North

Roadway Design

2nd Avenue

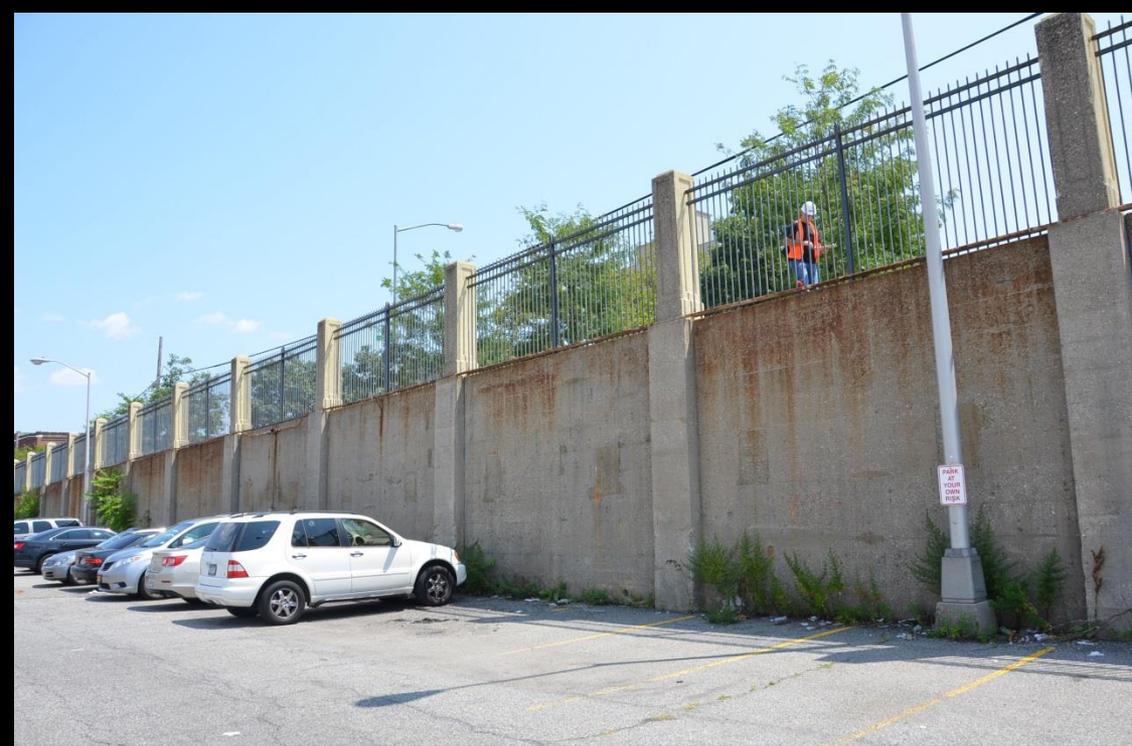


2nd Avenue/65th Street Looking South

Existing Retaining Wall

Project Objectives

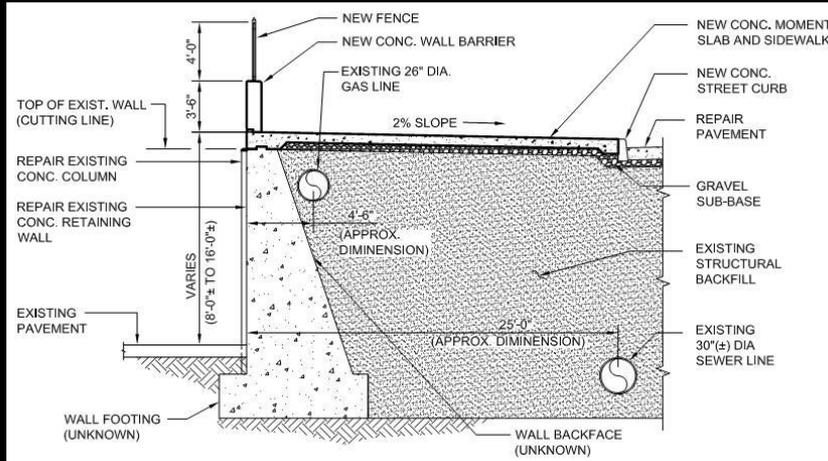
- Repair/Replace Existing Retaining Wall
- Existing Retaining Wall on west side of 2nd Avenue between 65th Street and 58th Street (1,800 LF)
- Height of retaining wall ranges from 8 feet to 16.5 feet
- Existing wall contains spalls, scaling, open joints and deterioration.



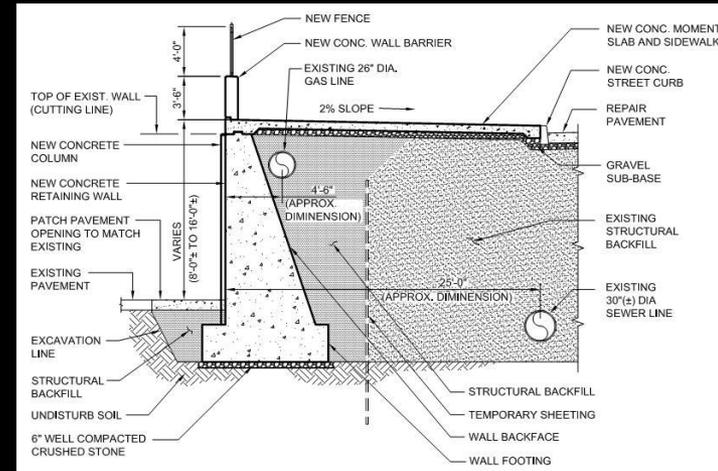
Retaining Wall Design

75% Repair & 25% Replacement

- Can be scheduled during sidewalk reconstruction
- Minimal parking and community disruption.



75% Repair Along Retaining Wall



25% Replacement along top of Retaining Wall only

Retaining Wall Design



PROPOSED PLANT MATERIALS FOR PLANTERS



Hawthorn 'Winter King'
Crataegus viridis 'Winter King'



Tilia x euchlora
Crimean Linden



Japanese Zelkova
Zelkova serrata



Fragrant Sumac
Rhus aromatica



Dwarf Pavement Rose
Rosa rugosa 'Dwarf Pavement'



New Jersey Tea
Ceanothus americanus



Inkberry
Ilex glabra



Savin Juniper
Juniperus sabina 'Scandia'



Lavender
Lavandula hybrida



Lily Turf
Liriope muscari



Swamp Milkweed
Asclepias incarnata



Blue Spruce Stonecrop
Sedum reflexum 'Blue Spruce'



White Coneflower
Echinacea purpurea 'Virgin'



Small Globe Thistle
Echinops ritro 'Veitch's Blue'



Russian Sage 'Lacey Blue'
Perovskia atriplicifolia 'Lacey Blue'

PROPOSED PLANT MATERIALS FOR PLANTERS



Blue Leadwood
Ceratostigma plumbaginoides



Pink Muhlygrass
Muhlenbergia capillaris



Prairie Dropseed
Sporobolus heterolepis



Dyer's Greenwood
Genista tinctoria

Roadway & Retaining Wall Design

Cost and Schedule

- Total Project Cost and Schedule for Roadway and Retaining Wall Design:
 - **\$17.6 Million**
 - **24 Months**

Questions/Comments