

## Chapter 3. Future Developments

### The Gateway Center at Bronx Terminal Market

The Gateway Center at Bronx Terminal Market is a planned retail complex and hotel that will be developed in the area bounded by East 149<sup>th</sup> Street, River Avenue, Exterior Street and the Metro-North railroad tracks. The main components of the project are: approximately 957,700 gross square feet (gsf) of multi-story retail establishments; 2,835 parking spaces in a multi-level parking garage and at grade parking, and a 250-room hotel.

According to the Gateway Center at Bronx Terminal Market Project Final Environmental Impact Statement (FEIS) dated December 7, 2005, the main changes that would be of concern to this project are:

- The current southern BTM building located between East 149<sup>th</sup> Street, Exterior Street, River Avenue and East 150<sup>th</sup> Street will be renovated and reused as one-story retail (Retail E.1.).
- Opposite this building across the current East 150<sup>th</sup> Street, a one-story retail building will be constructed (Retail Building E.2.). Surface parking with approximately 12 spaces is provided adjacent to Retail Building E.2. at the site of the current East 150<sup>th</sup> Street.
- Retail Building B/F will be a four-story structure located north of Retail Building E.2. It will have parking on the ground floor for approximately 256 vehicles.
- A six-story parking garage will be constructed north of Retail Building B/F, with a capacity of 2,342 spaces. This building will have retail on the ground level of Exterior Street (Retail Building C) and River Avenue (Retail Building D). One entrance will be located at River Avenue at East 151<sup>st</sup> Street.
- Retail Building A will be a three-story structure located north of the parking garage.
- A hotel, a banquet facility and approximately 225 parking spaces will be constructed at the northern end of the site, south of the Metro-North tracks.
- Pedestrian access to the retail center will be provided at East 151<sup>st</sup> Street and East 150<sup>th</sup> Street from both sides between River Avenue and Exterior Street, at East 149<sup>th</sup> Street and Exterior Street, at other points along River Avenue between East 151<sup>st</sup> Street and East 149<sup>th</sup> Street, and along Exterior Street between East 149<sup>th</sup> Street and its north end.
- East 150<sup>th</sup> Street will be closed between River Avenue and Exterior Street.
- Cromwell Avenue will be demapped between East 150<sup>th</sup> Street and its northern terminus.
- East 151<sup>st</sup> Street will be closed west of River Avenue.
- Exterior Street between East 149<sup>th</sup> Street and its northern terminus will be improved substantially. These enhancements will include “widening to two travel lanes per direction, a dedicated southbound left-turn lane into the parking garage on the east side of Exterior Street, pavement resurfacing, crosswalks at exits and entrances to parking areas, traffic signals at parking garage driveways, lane striping, signage, upgraded lighting” and streetscaping.
- River Avenue between East 149<sup>th</sup> Street and East 151<sup>st</sup> Street will be re-striped to provide

two travel lanes in each direction, shared turn/through lanes and crosswalks at East 150<sup>th</sup> Street and East 151<sup>st</sup> Street, and a crosswalk at the proposed garage exit. Streetscaping will also be improved.

- Major traffic mitigation measures will be implemented at the intersection of East 149<sup>th</sup> Street, Exterior Street, the northbound Major Deegan Expressway exit ramp, the 145<sup>th</sup> Street Bridge approach and River Avenue. They include widening the expressway's off-ramp, restriping and/or channelizing traffic, and signal phasing and timing modifications.
- A new waterfront public open space will be developed by the City at Pier 4 on a portion of the BTM area west of Exterior Street. It will be approximately 2 acres in size.
- The project will displace approximately 2,100 existing Yankee Stadium parking spaces (including on-street parking).

### Traffic Analysis

The Gateway Center at BTM FEIS analyzed traffic at 21 intersections in the project area and along sections of the Major Deegan Expressway. Existing, no build and build conditions were studied. The proximity of the project to Yankee Stadium was taken into account in the traffic analysis, differentiating game and non-game days, and pre-game and post-game peaks during game days. The traffic analysis assumes that the number of trips generated by the Gateway Center will be lower on game days' peak hours, because Gateway Center patrons will choose other times of the day to visit the facility.

The traffic analysis concluded that the following intersections will experience significant adverse traffic impacts (\*) as a result of the construction of the Gateway Center: Grand Concourse and East 149<sup>th</sup> Street, Grand Concourse and East 161<sup>st</sup> Street, River Avenue and East 150<sup>th</sup> Street, River Avenue and East 151<sup>st</sup> Street, River Avenue and East 153<sup>rd</sup> Street, River Avenue and East 161<sup>st</sup> Street, Jerome Avenue and East 161<sup>st</sup> Street, and Jerome Avenue and Ogden Avenue. Sections of the Major Deegan

Expressway that will also experience significant traffic impacts include the intersection of the northbound ramp and service road and East 157<sup>th</sup> Street, the approach to Exit 4 at East 149<sup>th</sup> Street, and the southbound approach to the exit ramp at East 161<sup>st</sup> Street. According to the Gateway Center at BTM FEIS:

“The detailed analyses of mitigation measures indicated that these significant adverse impacts on the local street network can be mitigated by standard traffic engineering improvements such as signal phasing and timing modifications, parking prohibitions, lane re-striping and intersection channelization improvements, and pavement markings”.

There is one major intersection where significant adverse traffic impacts can not be mitigated with the above mentioned measures: at the intersection of East 149<sup>th</sup> Street, Exterior Street, the northbound Major Deegan Expressway exit ramp, the 145<sup>th</sup> Street Bridge approach and River Avenue. As mentioned above, major traffic mitigation measures will be implemented at this multi-legged intersection.

The impact of increased traffic at these locations has been considered in the development of the Bronx Harlem River Bicycle and Pedestrian Study's recommendations.

Regarding pedestrians, the Gateway Center at BTM FEIS states that the project would result in a significant adverse impact only to the north crosswalk at East 149<sup>th</sup> Street and River Avenue, decreasing its pedestrian level of service (LOS) from A to D. The redesign of this intersection will mitigate this LOS decrease. The retail center will obviously increase pedestrian volumes in the area, but with the exception of the previous intersection, the sidewalks' level of service will not deteriorate.

*\*Note:* A significant traffic impact is defined in the City of New York CEQR Technical Manual as: for a No Build LOS A, B, or C conditions that deteriorate to unacceptable LOS D, E or F in the future Build condition. For future No Build LOS A, B, or C conditions that deteriorate to LOS D, mitigation to mid-LOS D is required.

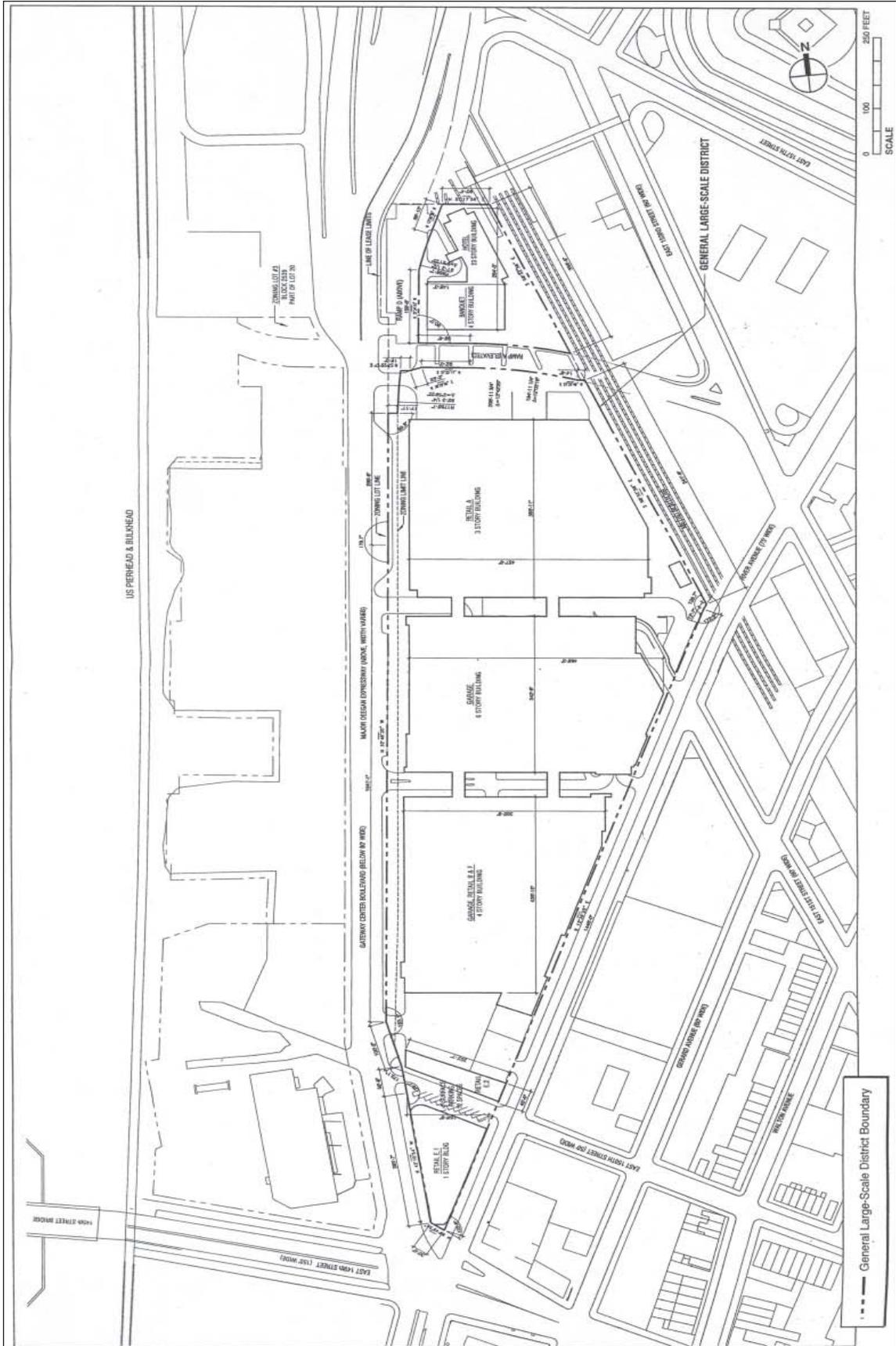


Figure 20. The Gateway Center at Bronx Terminal Market Plan, Gateway Center at Bronx Terminal Market Final Environmental Impact statement; AKRF, Inc. with Wachtel & Masyr, LLP, Eng-Wong Taub & Associates, Langan Engineering and Environmental Services, Sive, Paget & Riesel, P.C. December 2005.

## The Yankee Stadium Project

The Yankee Stadium project proposes the construction of a new Yankee Stadium one block north of its current location at East 161<sup>st</sup> Street and River Avenue. The new stadium will include four new parking garages and new and replacement recreational park facilities near the proposed stadium. The proposed new stadium will have a capacity of 54,000 spectators, reducing by 2,928 the capacity of the current stadium. Its construction is planned to be completed in 2009.

According to the Yankee Stadium Project Final Environmental Impact Statement (FEIS) dated February 10, 2006, the main changes that would be of concern to this project are:

- The four new parking garages will provide approximately 4,735 spaces; approximately 1,030 parking spaces in existing lots will be displaced by the project, but 376 spaces would be added in existing and expanded surface parking lots. As a result, a total of 10,310 parking spaces will be available for Yankee patrons in the proposed project, with a net increase of 3,315 off-street spaces. Currently, there are 6,995 dedicated parking spaces for Yankee Stadium patrons, but the construction of the Gateway Center will reduce this number to 6,229 spaces.
- Secure bicycle parking would be provided at one of the four proposed parking garages. The new parking garages in our study area are:
  - Parking Garage A, located between East 157<sup>th</sup> Street, East 161<sup>st</sup> Street, the Macombs Dam Bridge Approach and the site of the current stadium. Garage A will have a capacity of approximately 1,700 spaces, and vehicles will be able enter/exit at two locations along East 157<sup>th</sup> Street and one on the Macombs Dam Bridge Approach. This garage will be partially below-grade and it will have new recreational facilities above the structure;
  - Parking Garage C, bounded by East 161<sup>st</sup> Street, Jerome Avenue, the Major Deegan Expressway and the Macombs Dam Bridge Approach. Garage C will have a capacity of approximately 1,120 spaces, and two-way access will be provided at one location at East 161<sup>st</sup> Street and two locations along the Macombs Dam Bridge Approach. The garage will have new recreational facilities on its rooftop.
  - Parking Garage D, located on East 151<sup>st</sup> Street between River and Gerard avenues, with approximately 949 spaces, and two-way access points both at River and Gerard avenues.
- The proposed new structures would eliminate existing parkland areas, but new and replacement parks and recreational facilities are planned to be constructed, resulting in a net increase of approximately 4.63 acres of accessible recreational facilities in the area. These facilities include:
  - The recreational facilities established on top of the parking garages mentioned above.
  - New parkland at the site of the current stadium, at two existing surface parking lots on River Avenue and East 157<sup>th</sup> Street, and west of Exterior Street at Piers 1, 2 and 3 adjacent to the waterfront (at the site of the BTM).
  - An esplanade connecting this new waterfront park to the ferry landing and to Exterior Street.
- Ruppert Place will be demapped and permanently closed to vehicular traffic. It will be a pedestrian only street/plaza named Ruppert Plaza, and will provide a link between the proposed new stadium and the adjacent parking garages and recreational facilities.
- East 157<sup>th</sup> Street between River Avenue and Ruppert Place will be re-opened to vehicular traffic. This will create a new intersection consisting of East 157<sup>th</sup> Street, East 153<sup>rd</sup> Street and a Parking Garage A driveway. The second driveway to Parking Garage A along East 157<sup>th</sup> Street is proposed just east of this intersection.
- A new, 60-foot-wide, at-grade, permanent crosswalk will be established at the intersection of the future Ruppert Plaza and East 161<sup>st</sup> Street. This crosswalk location will be reconfigured



Figure 21. The Yankee Stadium Project plan, Yankee Stadium Project Final Environmental Impact Statement; AKRF, Inc. with Eng-Wong Taub & Associates, Sive, Paget & Riesel, P.C., Vollmer Associates, LLP. ; February 2006.

to provide a safe street crossing distance for pedestrians, and a new traffic signal will be introduced.

- An improved crossing will be provided at the Macombs Dam Bridge Approach intersections with the East 161<sup>st</sup> Street service roads. A new signal at the eastbound service road intersection, a new south crosswalk (20 feet wide), a widened north crosswalk (20 feet wide) and a widened continuous east crosswalk (10 feet wide) will be incorporated into the crossing. Also, there will be a physical widening of the east side of the bridge structure of approximately 5 feet.
- Along East 161<sup>st</sup> Street, a prominent plaza connecting the two main stadium entrances will be provided. This plaza will be separated from the East 161<sup>st</sup> St westbound service road by a 12 to 17-foot-wide sidewalk. The above-mentioned pedestrian crossing along the new Ruppert Plaza would connect at the midpoint of the sidewalk.
- The existing pedestrian bridge over the Metro-North tracks between Ruppert Place and the BTM will be completely reconstructed and would be open year-round. It would accommodate both pedestrians and bicyclists and it would be made Americans with Disabilities Act (ADA) compliant. The new bridge would be 25 feet wide; on the eastern end, a new, main 25 foot wide ramp would span over East 157<sup>th</sup> Street to Ruppert Plaza, while a 15 foot wide corridor would connect with the second level of Garage 8 (located between East 153<sup>rd</sup> Street, East 157<sup>th</sup> Street and River Avenue). Pedestrian improvements – unique paving, signage, lighting – will be added to the western side of the bridge.
- Pedestrian improvements along River Avenue down to Parking Garage D at East 151<sup>st</sup> Street will be implemented, such as replacement of sidewalks in poor condition, addition of new trees and improvement of street lighting.

## Traffic Analysis

According to the Yankee Stadium Project FEIS, there would be significant vehicular traffic impact on several streets in the study area by 2009, the projected build date. Specifically, traffic volumes would increase during peak hours before and after Yankee games at the northbound Major Deegan exit at East 157<sup>th</sup> Street, along the northbound Major Deegan Service road between East 157<sup>th</sup> and Jerome Avenue, and along Jerome Avenue between the service road and East 161<sup>st</sup> Street. In addition, traffic volumes would increase during Yankee game-day peak hours at the Deegan on-ramp/exit at East 153<sup>rd</sup> Street between Ruppert Place and River Avenue, and at East 161<sup>st</sup> Street near Jerome Avenue. The impact of increased traffic at these locations has been considered in the development of the Bronx Harlem River Bicycle and Pedestrian Study's recommendations.

In terms of the Yankee project's impact on bicyclists, according to the FEIS:

“secure bicycle parking would be provided at one of the new proposed garages. The proposed project would not preclude the provision of bicycle routes or lanes that are in existence or the City may consider in the future, and the infrastructure and operational measures that would be incorporated as part of the proposed project...would not alter the general roadway characteristics in the area.”

Significant impacts on pedestrian Levels of Service (LOS) during pre- and post-game peak hours for the projected 2009 build date are identified for 4 intersection crossings in the FEIS, all at River Avenue and East 161<sup>st</sup> Street. The FEIS introduces mitigation for the impact on pedestrian LOS, including crosswalk widening and continuing utilization of an existing Yankee game-day traffic management plan. However, because of its current and projected high traffic volumes, this intersection is not included in the recommendations of the Bronx Harlem River Waterfront Bicycle and Pedestrian Study.

The Yankee FEIS also recommends signaling the

intersection crossing at East 153<sup>rd</sup> and East 157<sup>th</sup> Streets to accommodate pedestrians crossing the entrance to the Yankee Stadium parking garage A, which is planned to go here. This signalized intersection would enhance this study's recommended bicycle/pedestrian facility along East 157<sup>th</sup>/East 153<sup>rd</sup> streets (see Recommendations chapter).



## Chapter 4. Recommendations

### Overview

The study area currently lacks any formal waterfront access, and its only bicycle facilities are two striped lanes on either side of St. Anns Avenue between East 135<sup>th</sup> Street and East 149<sup>th</sup> Street and bicycle/pedestrian paths on its bridges. Recently approved developments, including the new Yankee Stadium and Gateway Center projects, as well as approved and planned zoning changes create both the opportunity and need for enhanced bicycle and pedestrian access throughout the study area.

This chapter introduces recommendations for new bicycle and pedestrian facilities and identifies areas of opportunity, where access can be attained through the improvement of planned or existing facilities. The recommendations are divided into five sections, according to the study area sections outlined in the Existing Conditions chapter.

Section 1, stretching from the Macombs Dam Bridge to the 145<sup>th</sup> Street Bridge, runs along an area that is planned to undergo large-scale changes in the near future. In this section, both the new Yankee Stadium and Gateway Center projects have been approved by the New York City Council. Because of the planned changes, the preferred waterfront route, which runs adjacent to the Major Deegan Expressway and along Exterior Street, is recommended for the long term, after construction is slated to occur. There is a corresponding upland preferred route, which can be implemented sooner and can be maintained after construction has been completed as a complementary route to the long term waterfront route. The upland route would preferably run as a pair of one-way striped lanes along Gerard and Walton avenues, connected to the waterfront area by recommended facilities along East 157<sup>th</sup> Street or East 153<sup>rd</sup> Street.

In Section 2, from the 145<sup>th</sup> Street Bridge to the Madison Avenue Bridge, the preferred route would continue along Gerard and Walton avenues. A route closer to the waterfront is not currently feasible here. However, a long term route along Exterior Street is a possibility if proposed zoning changes occur in this section, and if the street bed and sidewalks are consequently improved in terms of calmer traffic and more biking and walking-conducive geometry.

Section 3, from the Madison Avenue Bridge to the 3<sup>rd</sup> Avenue Bridge, currently has a waterfront that is cut off from upland connections by the Major Deegan Expressway. Because of community interest in a potential street-end open space along the waterfront at Park Avenue (where the Oak Point Link comes onto land), an upland bicycle and pedestrian connection to this section is particularly important. The recommendations to this end include a bicycle and pedestrian overpass, spanning over the Major Deegan Expressway at Park Avenue; the re-opening of a bicycle and pedestrian underpass at Rider Avenue; and a bi-directional shared-use path along East 135<sup>th</sup> Street between East 138<sup>th</sup> Street and Park Avenue. Complementary upland connections north of the Major Deegan Expressway along Park Avenue, Rider Avenue, 3<sup>rd</sup> Avenue, East 135<sup>th</sup> Street and East 138<sup>th</sup> Street are also included in the recommendations for this section.

Section 4, from the 3<sup>rd</sup> Avenue Bridge to the Willis Avenue Bridge, includes recommendations for a bicycle path along the Bruckner Boulevard Antique and Art District, as well as for a street-end open space at Lincoln Avenue and for the re-opening of privately used or underutilized segments of East 132<sup>nd</sup> Street and the establishment of public bicycle and

pedestrian facilities there.

Section 5, from the Willis Avenue Bridge to the Triborough Bridge, is a particularly heavily trafficked area, with intense industrial and manufacturing land use south of the Major Deegan, and a lack of viable bicycle and pedestrian options along or close to the waterfront. Because of the existing conditions in Section 5, the preferred route would include the use of a service road along the privately leased Harlem River Railyard as a wide, shared-use greenway between Willis Avenue and Cypress Avenue. The use of this road would have to be negotiated with the New York State Department of Transportation, who owns the site, and the current leaseholders. In addition to the service road, recommendations in this section include facilities along Bruckner Boulevard, Willis Avenue, St. Anns Avenue, East 133<sup>rd</sup> Street and East 134<sup>th</sup> Street.

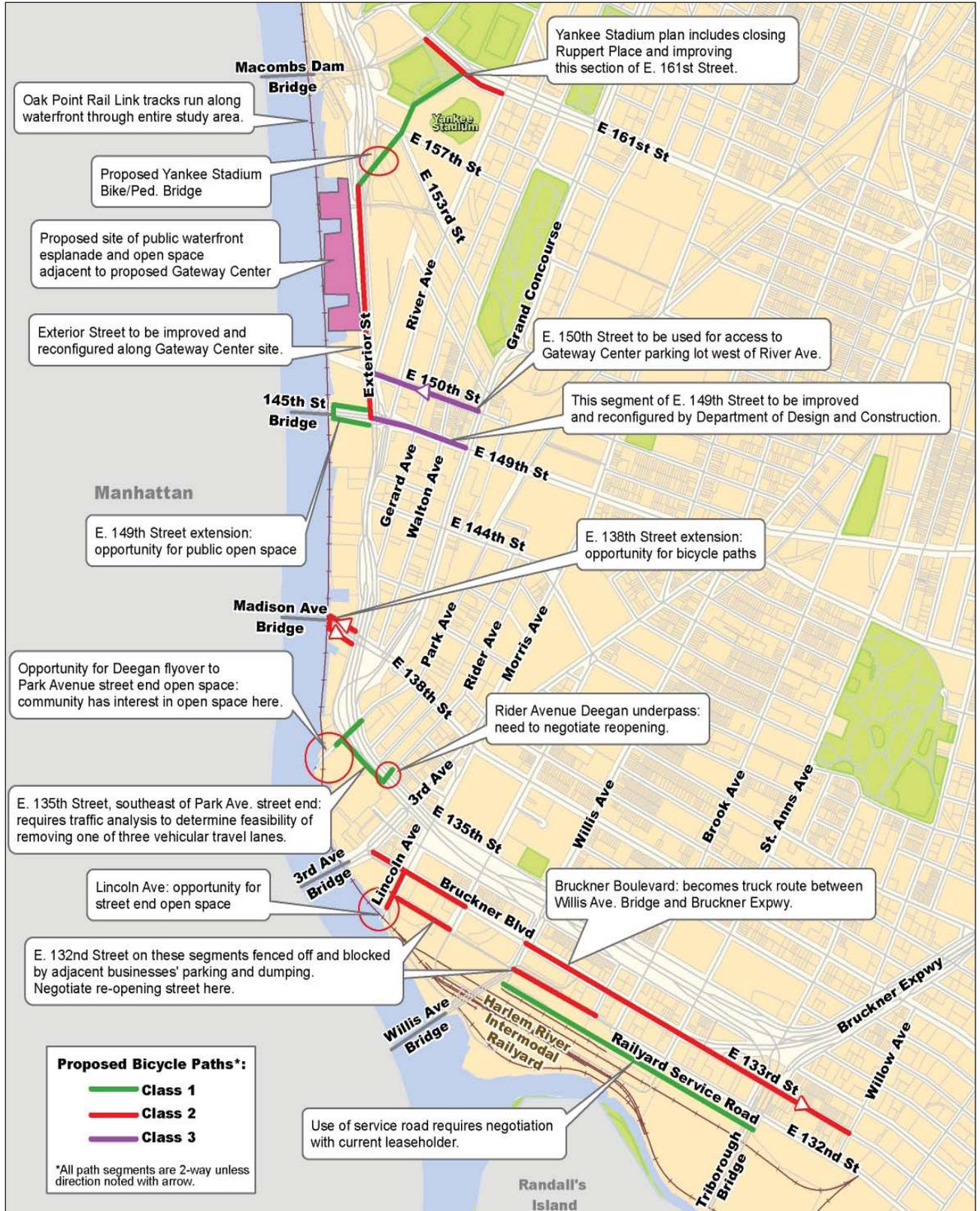


Figure 22. Map of opportunities and constraints along preferred and alternate routes

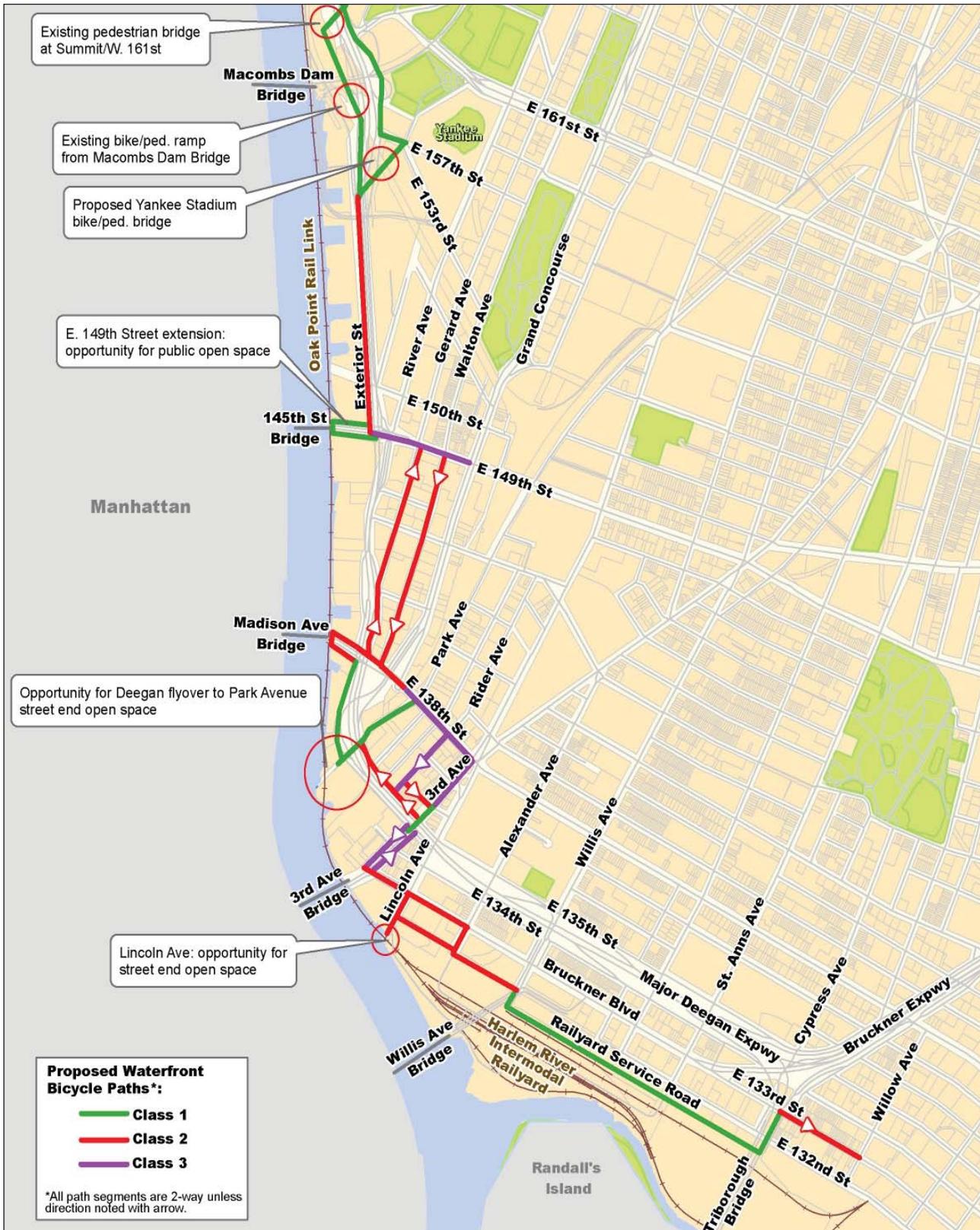


Figure 23. Map of preferred waterfront route

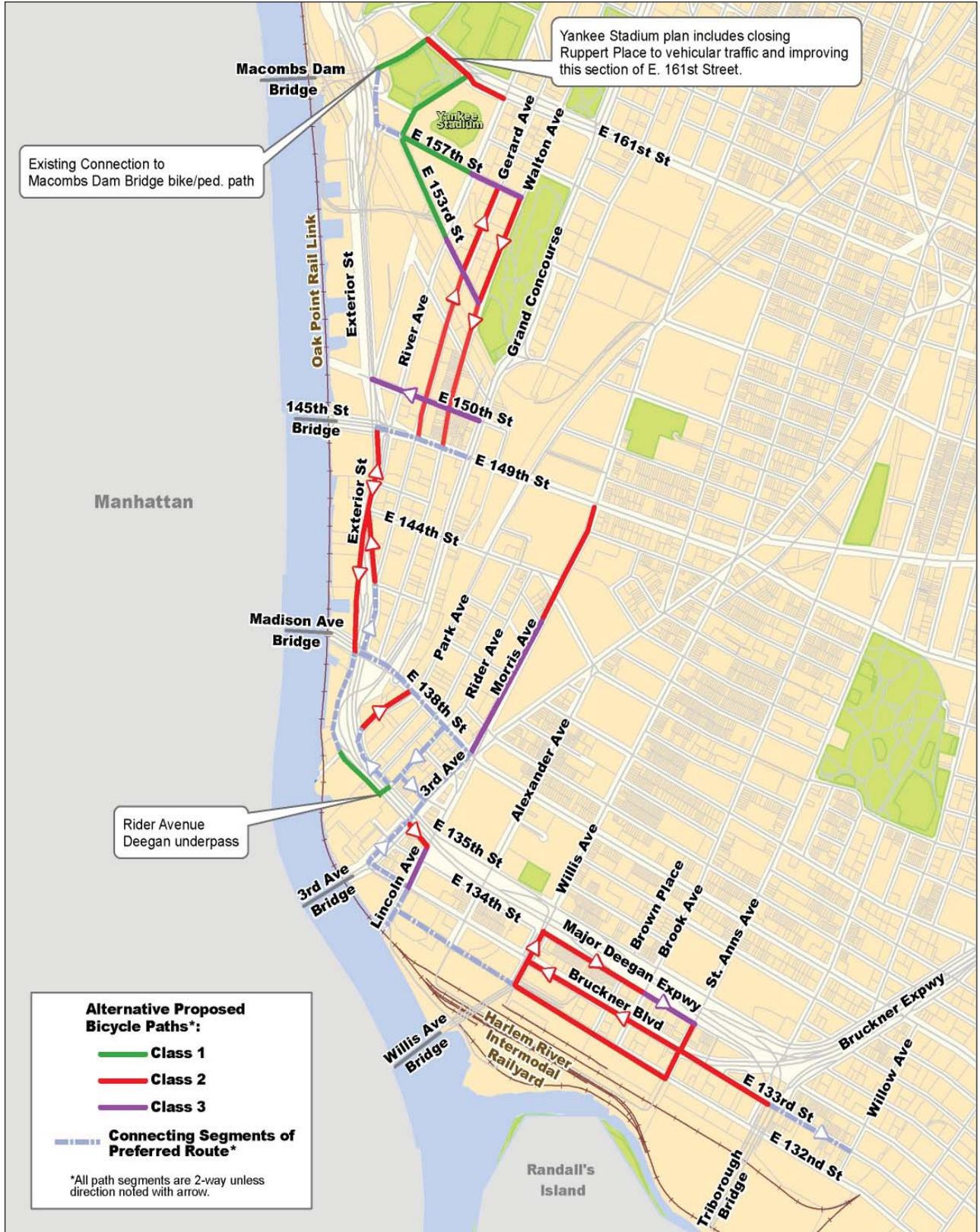


Figure 24. Map of upland routes, alternate routes and additional connections

## Section 1: Macombs Dam Bridge to 145th Street Bridge

Two major developments planned for this section, the Gateway Center at the site of the current Bronx Terminal Market (BTM), and the relocation of Yankee Stadium north of East 161st Street, will positively impact the waterfront. The New York City Council approved the Gateway Center project on February 1, 2006. The demolition of existing BTM buildings is scheduled to begin in June 2006, and the completion of the Gateway Center is targeted for Fall 2009.

The Yankee Stadium plan was approved by the City Council on April 5, 2006. Construction is to begin in 2006 and to be completed in 2010, according to the project's Final Environmental Impact Statement (FEIS). The proposed new stadium would open in

2009, and all the proposed parking garages would be operational at that time.

This plan identifies a short-term route that features upland connections while the projects are under construction, the other a long-term route that incorporates improved waterfront access and paths to be built by each of these developments. It also identifies alternate routes and treatments, including improved street-ends.

### Preferred Long-term Waterfront Route

In this long-term scenario, the Gateway Center shopping mall has been completed and Yankee Stadium has been relocated north of East 161<sup>st</sup> Street. There are new waterfront parks and a waterfront

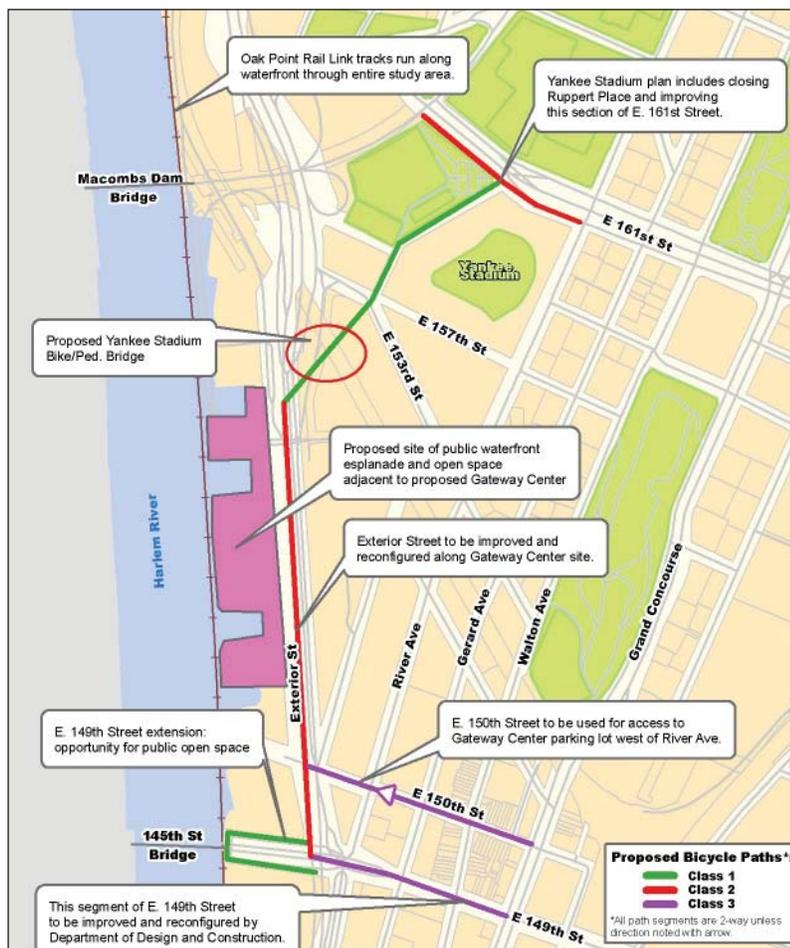


Figure 25. Map of opportunities and constraints along Section 1

esplanade, and there is a newly constructed pedestrian and bicycle bridge over the Metro North tracks that run north and east of the Gateway Center site.

*Jerome Avenue and Sedgwick Avenue Intersection*

The preferred route runs north and south as a bi-directional shared-use path beginning at the intersection of Jerome Avenue and the northbound Major Deegan Expressway service road. This path would continue the Regatta Park Greenway proposed by the New York City Department of Parks and Recreation (“Parks”) south along Sedgwick Avenue to its intersection with Jerome Avenue, where a triangular traffic median channels traffic north and east. Vehicular traffic at this intersection is fast and frequent, right turns are not controlled, and no crosswalks are marked. Given the potential conflict between path users and automobiles, a

bicyclist/pedestrian-activated traffic signal should be installed and a wide crosswalk should be marked at the intersection.

However, a traffic signal and crosswalk may not be feasible, considering that the intersection is designed to channel traffic with minimal delay. (A warrant analysis and/or traffic study would be required to assess any impacts of the proposal.) Minus a redesigned intersection, it is recommended that bicyclists and pedestrians cross Jerome Avenue at an existing crosswalk just east of Ogden Avenue to connect to and from a recommended path along the Major Deegan Service Road sidewalk (see description below) via the sidewalk that connects to the northern Macombs Dam Bridge bicycle and pedestrian path. A crosswalk should also be marked at the beginning of the on-ramp loop to the Macombs Dam Bridge in order to achieve the above connection.

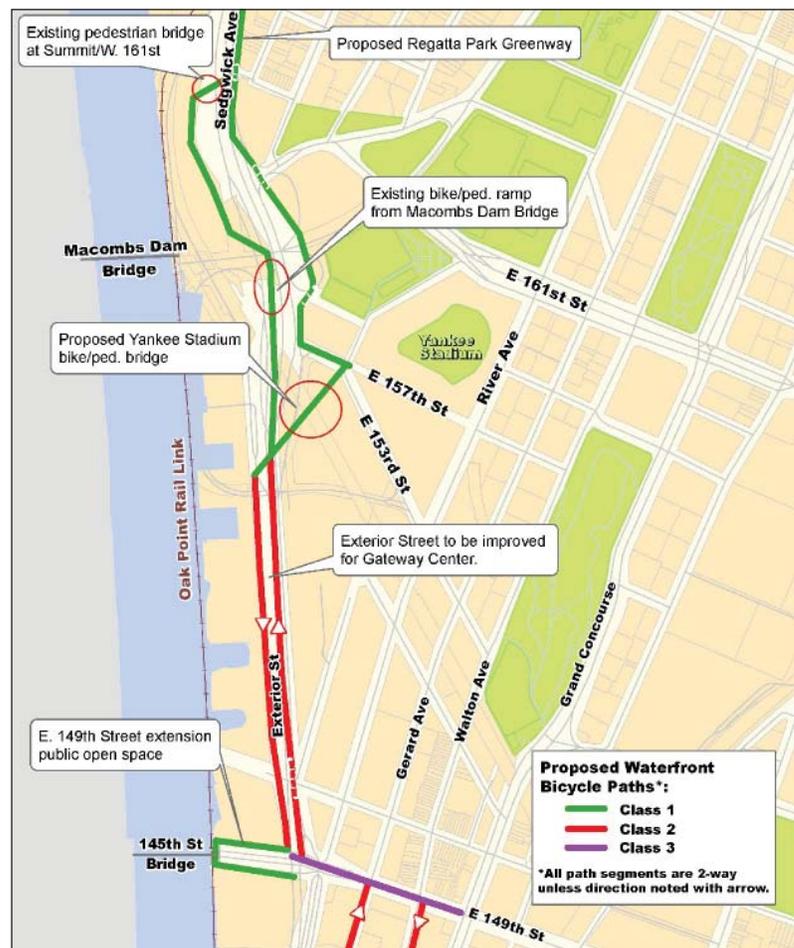


Figure 26. Section 1 map with preferred waterfront route

Traffic signs instructing vehicular traffic to yield to pedestrians should be installed on the concrete median facing the Deegan Service Road and Jerome Avenue approaches. According to the Manual on Uniform Traffic Control Devices 2000 (MUTCD), appropriate signs include: “Yield Here to Peds” (MUTCD Code: R1-5), “Yield Here to Pedestrians” (MUTCD Code: R1-5a), “In-Street Ped Crossing” (MUTCD Code: R1-6), and “Turning Traffic Must Yield To Pedestrians” (Code: R10-15).

#### Major Deegan Expressway Service Road Sidewalk

South of the intersection of Jerome and Sedgwick Avenues, the Sedgwick Avenue sidewalk continues along the east side of the Deegan service road to East 157<sup>th</sup> Street. The Deegan service road sidewalk (between Jerome Avenue and a Macombs Dam Bridge off-ramp just south of the bridge) is from seven to ten feet wide and has numerous obstacles on or immediately adjacent to the sidewalk; mainly trees, utility poles and the bridge support structure. A wrought-iron fence separates the sidewalk from an adjacent unused grassy open space owned by the New York City Department of Parks and Recreation (see Photo 6, page 17).

The American Association of State Highway and Transportation Officials (AASHTO) recommends a minimum width of 10 feet for a bi-directional shared use path (1999 *Guide for the Development of Bicycle Facilities*). The guide suggests that a three-foot wide graded (1:6 slope) area should be established adjacent to a shared-use path in order to provide separation from obstructions such as trees and poles. Due to the presence of obstacles and bridge structures, therefore, a bi-directional path along the Deegan service road cannot be established by redesigning the existing sidewalk.

A path of sufficient width could be established by removing (or relocating) the wrought-iron fence and designating the existing sidewalk as the northbound leg of the bi-directional shared-use path. The path would be six feet wide, in accordance with AASHTO standards for one-way shared use paths, with a three-foot wide graded (1:6 slope) buffer on its east side

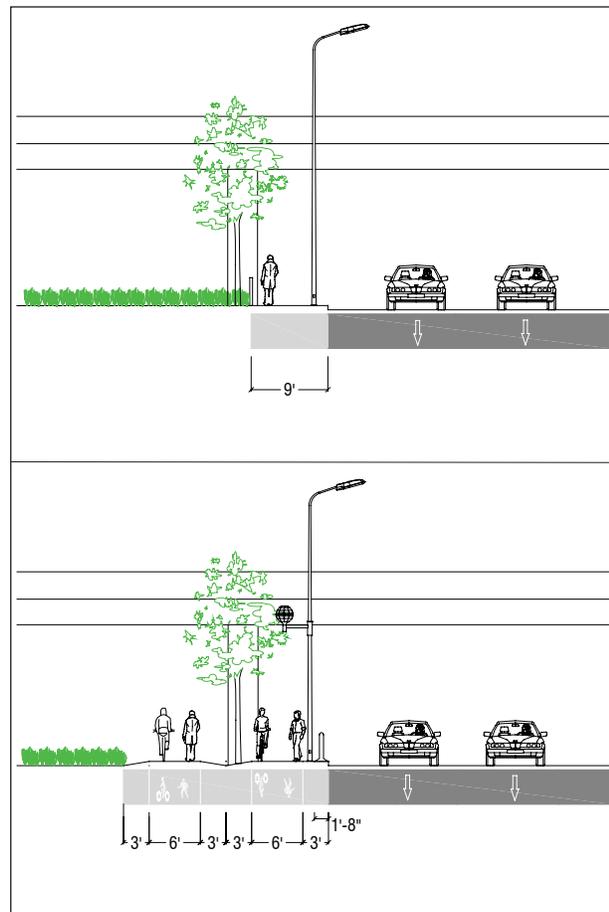


Figure 27. Major Deegan Expressway Service Road sidewalk, existing and recommended cross section (facing south)

and a raised barrier on its west side. The southbound segment would be established approximately 10 feet east of the Major Deegan service road sidewalk’s eastern edge to avoid bridge supports adjacent to the sidewalk (see Figure 27).

South of the Macombs Dam Bridge, the separate one-way segments would merge into a single path at a new bicycle/pedestrian-activated traffic signal and crosswalk, which is recommended to ensure safe passage across the Macombs Dam Bridge off-ramp, where cars are not currently controlled as they exit the bridge. A warrant analysis may be necessary to determine the feasibility of a signalized crosswalk at this location. If the addition of a signalized crosswalk is deemed infeasible, the crossing could simply be equipped with a sign instructing motorists on the bridge off-ramp to yield to bicyclists and

pedestrians (see *Jerome Avenue and Sedgwick Avenue Intersection*).

The Deegan Expressway service road sidewalk south of the bridge off-ramp is adjacent to the proposed Yankee Stadium Parking Garage A site. It widens to almost 10 feet, is not as obstructed as the sidewalk north of the off-ramp, nor is it fenced off from its adjacent open space, which, however, descends relatively steeply approximately five feet east of the sidewalk. For this segment, the existing sidewalk should be widened and designed as a bi-directional shared-use path, separated from traffic by a raised barrier. The path should include a three-foot wide graded (1:6 slope) buffer along its east side.

#### Alternate Route

##### *Ruppert Place and East 161<sup>st</sup> Street*

A possible alternative to the proposed path along the Major Deegan Expressway service road sidewalk would be a bi-directional shared use path on Ruppert Place from East 157<sup>th</sup> Street to East 161<sup>st</sup> Street. As per the Yankee Stadium project proposal, the current Ruppert Place will be demapped and transformed into Ruppert Plaza, a pedestrian-only plaza that will provide the main access route to the new stadium from the parking garages south of East 161<sup>st</sup> Street. A shared-used path should be implemented along this segment to take advantage of the absence of motor vehicles and the light pedestrian traffic at all times other than game time. Pedestrians and bicyclists would then connect to the East 161<sup>st</sup> Street local roads leading to the Macombs Dam Bridge approach via a crosswalk at East 161<sup>st</sup> Street and Ruppert Plaza to be installed as part of the Yankee Stadium Project.

##### *Connection to the Macombs Dam Bridge*

The north sidewalk on the Macombs Dam Bridge is currently designated as a bike route. Pedestrians and bicyclists would use the existing north and south bridge sidewalks, which loop along the bridge's vehicular on- and off-ramps to connect directly to

the Deegan service road sidewalk between Jerome Avenue and East 157<sup>th</sup> Street.

##### *East 157<sup>th</sup> Street to East 153<sup>rd</sup> Street*

The bi-directional route continues along East 157<sup>th</sup> Street to its intersection with East 153<sup>rd</sup> Street. The sidewalk along the north side of East 157<sup>th</sup> Street is 10' 6" wide, but is lined with trees, and therefore may not be suitable for conversion to a shared-use path (see Photo 42). In order to maintain a connection to the path along the Deegan service road sidewalk, it is recommended to add eight feet of recaptured and unnecessary roadbed to the existing sidewalk along this segment of East 157<sup>th</sup> Street, and to redesign it as a bi-directional multi-use path separated from traffic by a raised barrier extending to the intersection of East 157<sup>th</sup> Street and Ruppert Place.

The roadbed along this segment of East 157<sup>th</sup> Street is 42 feet wide, with one eastbound travel lane and two unmarked westbound lanes to accommodate traffic turning right onto the Deegan service road, and no permitted curbside parking. The reassignment of eight feet of roadbed would maintain three 11-foot vehicular travel lanes, and would not impact traffic, even heavy traffic generated by Yankee games.



Photo 42. East 157<sup>th</sup> Street between Major Deegan Expressway Service Road and East 153<sup>rd</sup> Street

*East 157<sup>th</sup> Street to Exterior Street via a New Pedestrian and Bicycle Bridge at Yankee Stadium*

As mentioned in the Future Developments chapter, the existing pedestrian bridge over the Metro-North railroad tracks at Ruppert Place would be reconstructed as part of the Yankee Stadium project. This bridge would provide the community with permanent access to Exterior Street, the ferry landing at the Harlem River and the planned waterfront parks and esplanade. The bridge would be open to the public year-round; would accommodate both pedestrians and bicyclists; and would comply with the access requirements of the Americans with Disabilities Act (ADA). The northeast side of the bridge would connect to Ruppert Plaza via a ramp; however, the Yankee Stadium FEIS does not specify whether a ramp or an elevator would be provided at the southwest end of the bridge.

*Macombs Dam Bridge Ramp to Exterior Street*

An existing bicycle/pedestrian inclined ramp leads from the Macombs Dam Bridge's southerly pedestrian path to the BTM and its major north-south road, Exterior Street. This segment provides an additional link between the Macombs Dam Bridge and Exterior Street and the future Gateway Center (see Photo 5, page 17).

*Waterfront Esplanade*

The bicycle and pedestrian bridge would connect to a new shared-use route along the planned waterfront esplanade. The path would run adjacent to the waterfront bordering the public open space as proposed in the Yankee Stadium project. This recommended greenway would continue along the waterfront public open space that the City of New

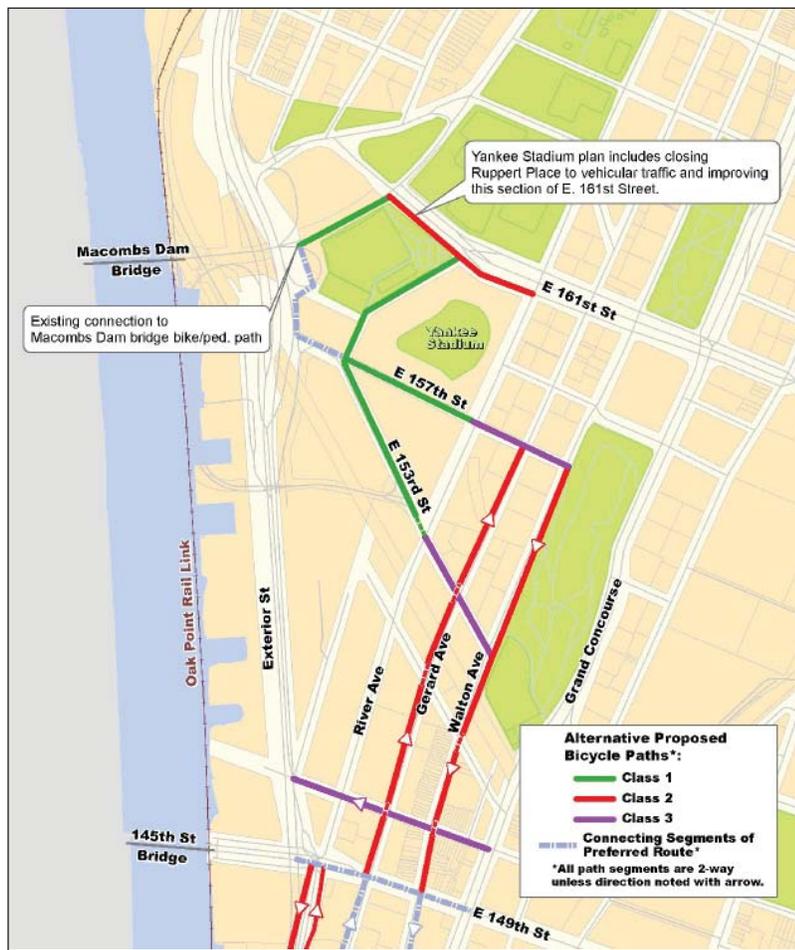


Figure 28. Section 1 map with preferred upland and alternate routes

York is going to develop at Pier 4, as specified in the Gateway Center FEIS (see Future Developments chapter), then connect to the recommended path along Exterior Street.

*Exterior Street*

As previously described, Exterior Street will be improved substantially as part of the Gateway Center project. The proposed widening and reconfiguration of the street should include the striping of Class 2 on-street bike lanes from its northern end to East 149<sup>th</sup> Street. This route would be parallel to the previously described waterfront esplanade route, but would be better suited for commuting riders. At the southern end these lanes would connect to the East 149<sup>th</sup> Street bike route and the 145<sup>th</sup> Street Bridge pedestrian and bicycle paths via the improved intersection of Exterior Street, East 149<sup>th</sup> Street and River Avenue.

*East 149<sup>th</sup> Street street-ends*

East 149<sup>th</sup> Street runs along both sides of the 145<sup>th</sup> Street Bridge, where the street ends connect under the bridge as they dead-end at the river (see Photo 11, page 18). The area around the bridge is currently used as a staging site for the 145<sup>th</sup> Street Bridge

rehabilitation and a chain link fence blocks access to the waterfront.

In the future, these service roads should be redesigned to promote public access to the waterfront and to create a street-end park/open space. The drawings for the planned Gateway Center include the extension of Exterior Street’s western curblines to the 145<sup>th</sup> Street Bridge sidewalks’ curblines, and describe these new curblines as “mountable curbs.” It is recommended to prohibit motor vehicle traffic along the East 149<sup>th</sup> Street extensions, except for emergency and maintenance vehicles. The street ends could be repaved at the curb line level to eliminate the roadbed and the different grade levels. Adequate infrastructure and street lighting would be introduced, as well as trees, vegetation and benches. This linear open space could also include recreational facilities such as domino and chess tables, bocce courts, skate parks and open play areas (see Figure 29). If the street width can accommodate them, the site could also include a playground, dog run, or similar recreational facilities.

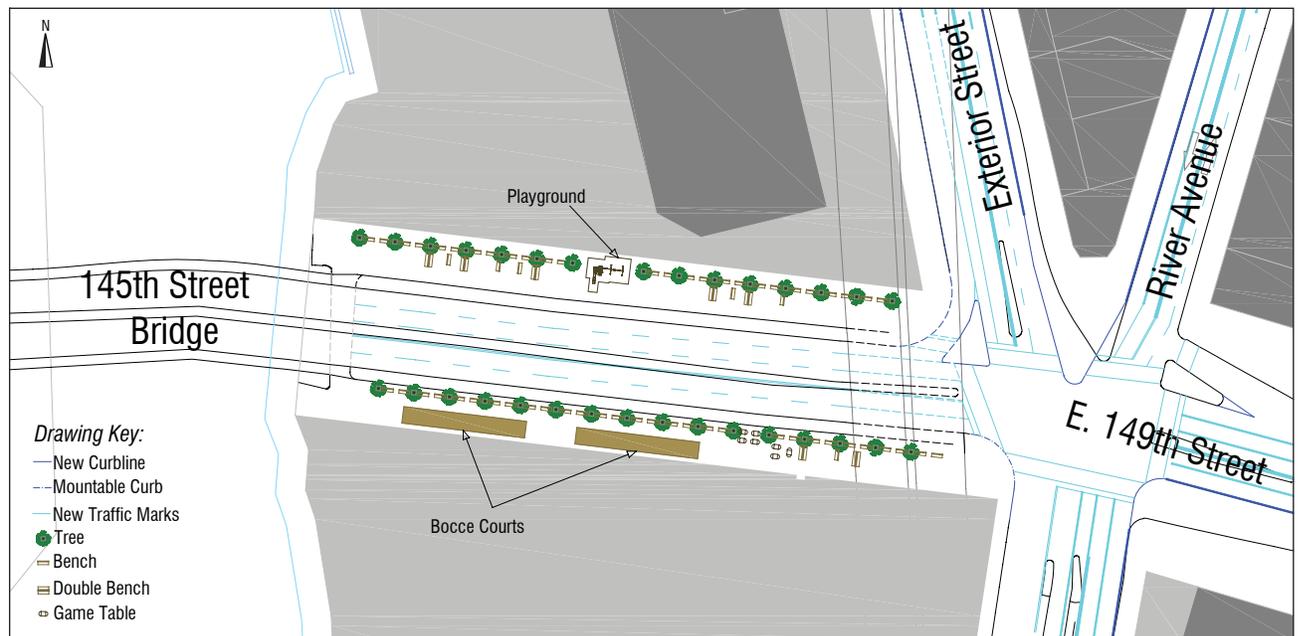


Figure 29. East 149<sup>th</sup> Street street-ends footprint

## Additional Connections

### *West 161<sup>st</sup> Street Pedestrian Overpass*

A bi-directional shared-use path could be created to connect the planned Regatta Park Greenway to the Macombs Dam Bridge. Starting at Summit Playground [part of Macombs Dam Park, which is elevated above Sedgwick Avenue at West 161<sup>st</sup> Street] the path would cross over the Major Deegan Expressway via an existing under-utilized pedestrian bridge (see Photo 43), to the remnants of an existing paved path on Parks owned property on the west side of the Deegan, then connect to an unused, paved ramp that leads to the Macombs Dam Bridge bicycle and pedestrian path.

The re-use and extension of the existing trash-strewn pedestrian bridge over the Deegan Expressway was recommended in the Department of City Planning's *Plan for the Bronx Waterfront* (1993) to provide access from the Highbridge community to the waterfront. The narrow pedestrian bridge would require rehabilitation. A paved path traverses the Parks-owned land, which was used as a staging area for the rehabilitation of the Macombs Dam Bridge, completed in 2004. An easement permitting use of the Parks property as a shared-use path may be required. In addition, a means of connecting the elevated path at West 161<sup>st</sup> Street and Summit Avenue to the Sedgwick path below Summit Playground would need to be determined.



Photo 43. West 161<sup>st</sup> Street pedestrian overpass

## Preferred Upland Route

### *East 157<sup>th</sup> Street to Gerard Avenue and Walton Avenue*

The preferred upland route would connect to the previously described Major Deegan Expressway service road sidewalk and East 157<sup>th</sup> Street segment, and continue on East 157<sup>th</sup> Street between Ruppert Place and Gerard and Walton avenues.

East 157<sup>th</sup> Street between Ruppert Place and River Avenue is currently a pedestrian-only plaza that provides access to Yankee Stadium and connects it with the adjacent parking garage on the south side of this block. The Yankee Stadium project would re-open East 157<sup>th</sup> Street between Ruppert Plaza and River Avenue to vehicular traffic. Therefore, it is recommended that the redesigned street be wide enough to accommodate the striping of six-foot wide Class 2 bike lanes. To the west the bike lanes would connect to the recommended Class 1 path along East 153<sup>rd</sup> Street between the Deegan service road and Ruppert Plaza; to the east, they would connect to the Class 3 route on East 157<sup>th</sup> Street leading to the proposed bicycle lanes on Gerard and Walton avenues (see below). As part of the Yankee Stadium project, the two existing surface parking lots at the northeast and southeast corners of East 157<sup>th</sup> Street and River Avenue would be converted into parkland.

East 157<sup>th</sup> Street between River Avenue and Walton Avenue is insufficiently wide to stripe bike lanes, therefore, the street should be signed as a two-way Class 3 bike route. Six-foot high "shared lane" bicycle route pavement markings, which have been successfully used by the New York City Department of Transportation (NYCDOT) to designate bicycle facilities in other parts of New York City, should be marked in addition to Class 3 route signs as highly visible reminders to motorists to share the road with bicyclists.

### Alternate Route

#### *East 153<sup>rd</sup> Street to Gerard Avenue and Walton Avenue*

As an alternative to East 157<sup>th</sup> Street, the route could continue along two-way East 153<sup>rd</sup> Street

as Class 1 lanes. New crosswalk striping and signage at the intersection of East 153<sup>rd</sup> Street and East 157<sup>th</sup> Street would direct cyclists to protected six-foot bicycle lanes adjacent to the sidewalk and separated from traffic by a raised barrier.

A Class 1 path is required due to the heavy vehicular traffic before and after Yankee games along this segment of East 153<sup>rd</sup> Street. East 153<sup>rd</sup> Street is very wide between Ruppert Place and River Avenue, with a single travel lane in each direction; parking is not allowed on either side of the street. Eight feet of roadbed in each direction could be reassigned for bicycle use, leaving 13-foot wide travel lanes that would not adversely impact vehicular traffic.

A southbound Deegan viaduct on- and off-ramp is located on the south side of East 153<sup>rd</sup> Street between Ruppert Place and River Avenue. Entering and exiting traffic is light except before and after Yankee games (see Photo 44). While an existing walk signal controls the crossing at the on-/off-ramp, the intersection is not marked by a crosswalk. A crosswalk and peg-a-tracking (dashed lines marking the bike lane through the intersection) should be striped here to facilitate safe bicycle and pedestrian movement.

East 153<sup>rd</sup> Street narrows between River and Walton Avenues and the 34-foot wide roadbed



Photo 44. East 153<sup>rd</sup> Street between East 157<sup>th</sup> Street and River Avenue

is not wide enough to establish two bicycle lanes and maintain an adequate roadbed width for vehicular traffic and parking. Therefore, East 153<sup>rd</sup> Street between River Avenue and Walton Avenue should be signed as a two-way Class 3 signed route. Six-foot high “shared lane” bicycle route pavement markings described above for the previous segment should be marked in addition to Class 3 route signs to enhance bicyclist safety.

This route is the preferred alternative under construction conditions in the short term scenario.

#### *Gerard Avenue and Walton Avenue*

The proposed alternate routes on East 157<sup>th</sup> Street and East 153<sup>rd</sup> Street would both continue to northbound Gerard Avenue and southbound Walton Avenue, where Class 2 bike lanes would be striped as far south as East 138<sup>th</sup> Street, as recommended in the NYC Bicycle Master Plan. (East 157<sup>th</sup> Street and East 153<sup>rd</sup> Street both connect to Franz Siegel Park, but the park disrupts access to the Grand Concourse.) Each bike lane would be six feet wide and striped between the parking and travel lanes according to AASHTO standards.

Between East 157<sup>th</sup> Street and East 149<sup>th</sup> Street, northbound Gerard Avenue and southbound Walton Avenue are both 34 feet wide, each with one travel lane and two parking lanes (see Photos 9 and 10, page 18). A six-foot wide bike lane should be striped on each street (on the side of the street from which passengers, rather than drivers, exit parked vehicles, to reduce the instance of “dooring”), which would leave two eight-foot parking lanes and a 12-foot vehicular travel lane (see Figures 30 and 31). Stricter enforcement of parking regulations is recommended on Gerard Avenue between East 150<sup>th</sup> and East 151<sup>st</sup> streets, where an automobile repair shop parks cars being repaired on the east sidewalk and double-parks them on the street along with its tow trucks.