REPLACEMENT OF THE WILLIS AVENUE BRIDGE OVER THE HARLEM RIVER

WILLIS AVENUE BRIDGE

Boroughs of Manhattan and The Bronx
September 2007 – December 2012

New York City
Michael R. Bloomberg
Mayor

New York City
Department of Transportation
Janette Sadik-Khan, Commissioner
BRIDGE HISTORY AND PROJECT OVERVIEW

New York City Department of Transportation (NYCDOT) is replacing the Willis Avenue Bridge over the Harlem River, including the Franklin Delano Roosevelt (FDR) Drive approach ramp and the ramp onto Bruckner Boulevard. NYCDOT will also reconstruct Willis Avenue over the Major Deegan Expressway for the New York State Department of Transportation (NYSDOT).

Constructed in 1901, the bridge is used by over 70,000 vehicles daily. The bridge is a swing-type, movable bridge that opens when marine vessels need to pass. The original Willis Avenue Bridge exhibits the effects of age, weather and the continual, daily usage by motor vehicles.

NYCDOT has planned the new bridge to be constructed adjacent to and just south of the existing bridge. Thus, traffic, including the BX-15 bus, can continue to use the current bridge until the new bridge opens, resulting in limited impact to motorists and nearby communities. Throughout the project, little impact to marine traffic will be experienced. The new swing span is being fabricated and assembled off site, and will be floated into place once the foundations, center pier and rest piers are ready to receive it. Project completion is scheduled for the end of 2012.
BRIDGE SAFETY

During construction, while the existing bridge is in use, NYCDOT will continue to inspect it every six months. In addition, necessary repairs to the existing bridge will continue to be made until the new bridge is in use.

NEW BRIDGE BENEFITS

- The new bridge will be built to current design standards; non-standard, tight curves will be eliminated, including the difficult “S” turn onto the bridge in Manhattan. The improved roadway approach to the bridge in Manhattan will result in better traffic flow.
- A direct connection to the northbound Major Deegan Expressway in the Bronx will be constructed.
- There will be wider travel lanes with shoulders, and a broader, combined pedestrian/bicycle pathway along the north side of the bridge.
- New, tested and inspected materials will be used including placement of a solid riding surface on the swing span instead of the open grating deck currently in use. In addition, modern electrical, mechanical and communications systems will be installed.
- A symbolic portion of the historic original Willis Avenue Bridge will be retained in place as a monument to the bridge in Harlem River Park.
## Replacement of the Willis Avenue Bridge

**CONSTRUCTION WILL PROCEED IN FIVE STAGES**

[The extent of construction is detailed and complex; therefore, periodic communications will be provided to the public in advance of each stage of work.]

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
<th>Timeline</th>
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<tbody>
<tr>
<td><strong>STAGE 1</strong></td>
<td>Preconstruction and mobilization</td>
<td>9 mos.</td>
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<tr>
<td><strong>STAGE 2A</strong></td>
<td>Preconstruction</td>
<td>8 mos.</td>
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<tr>
<td><strong>STAGE 2B</strong></td>
<td>Mobilization</td>
<td>1 weekend</td>
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<tr>
<td><strong>STAGE 3</strong></td>
<td>Temporary pedestrian ramp</td>
<td>8 mos.</td>
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<tr>
<td><strong>STAGE 4</strong></td>
<td>Temporary pedestrian ramp</td>
<td>2 mos.</td>
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<tr>
<td><strong>STAGE 5A</strong></td>
<td>Final restoration</td>
<td>4 mos.</td>
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<tr>
<td><strong>STAGE 5B</strong></td>
<td>Contract completion</td>
<td>12 mos.</td>
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**During this phase,** the contractor will
- **STAGE 1**
  - Mobilize on site
  - Complete necessary supplies and equipment
  - Provide shop drawings and make roadway repairs
  - Temporary pedestrian ramp will be floated away

- **STAGE 2A**
  - Temporary pedestrian ramp will be demolished
  - Northern half of the abutment will be constructed
  - Existing swing span will be floated away

- **STAGE 2B**
  - Temporary pedestrian ramp will be floated away
  - Southern half of the Bronx viaduct to Willis Avenue will be constructed

- **STAGE 3**
  - Temporary pedestrian ramp will be demolished
  - Southern half of the bridge will be constructed
  - Existing swing span will be floated away

- **STAGE 4**
  - Southern half of the Bronx viaduct to Willis Avenue will be constructed
  - Existing swing span will be floated away

- **STAGE 5A**
  - Northern half of the abutment will be constructed
  - Existing swing span will be floated away

- **STAGE 5B**
  - Southern half of the Bronx viaduct to Willis Avenue will be constructed
  - Existing swing span will be floated away

**During this phase,** the contractor will

- Inspect equipment and provide remaining contract closeout activities.
- Complete the remaining portions of the access ramps in Manhattan and the Bronx.
- Perform electrical work and complete the southern half of the Bronx viaduct to Willis Avenue and the Bruckner Boulevard ramp.
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- Provide shop drawings and make roadway repairs
- Temporary pedestrian ramp will be floated away

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Replacement of the Willis Avenue Bridge

The Willis Avenue Bridge Project map below shows the configuration for using the current bridge while the new bridge is under construction. The new bridge will be built to the south.
TRAVEL DURING CONSTRUCTION

Pedestrians and Bicyclists – will follow a protected, detoured route across the existing Willis Avenue Bridge until the new bridge is completed and new pavement is placed.

Bus and Subway Passengers – will not have their customary travel patterns interrupted. The BX 15 bus, which transports passengers eastbound along 125th Street in Manhattan, and terminates at Fordham Plaza in the Bronx, will continue to use the Willis Avenue Bridge and will not be rerouted during construction. The 4, 5 and 6 subways will operate as usual. The closest station stops are 125th Street in Manhattan, and Third Avenue/138th Street or 138th Street/Grand Concourse in the Bronx. For information, go to www.mta.info or phone (718) 330-1234 between 6AM and 10PM.

Motorists – have choices. Because major construction projects typically cause traffic delays, motorists in Manhattan proceeding to the Bronx may wish to use alternate bridge crossings. Here are alternate travel suggestions:

- Motorists on FDR Drive northbound and traveling north on local streets (from south of 125th Street) should continue to use the Willis Avenue Bridge route or the Triborough Bridge (toll) to the Bronx
- Motorists between 125th and 145th Streets may prefer to use the Madison Avenue Bridge or the newly constructed 145th Street Bridge route to local streets in the Bronx
- Motorists above 145th Street may use the reconstructed Macombs Dam Bridge route

NYC Marathon – will not be impacted. As part of its route, runners will continue to use the current bridge each year until the new bridge is completed.
MITIGATION MEASURES

The NYCDOT has taken measures to reduce disturbance and inconvenience to the nearby community in the Bronx and Manhattan.

- Traffic Enforcement Agents are utilized to direct traffic and assist pedestrians
- Variable Message boards and construction detour signs are utilized to alert motorists to construction detours and alternative routes
- NYCDOT Engineer’s Field Office at the bridge continuously monitors the project
- A Community Liaison is available to provide information regarding the project, and to answer questions
- Public Information will regularly provide updates to the public regarding construction activities
- The contractor must minimize noise by using best available technology
- Traffic will be maintained by off-line bridge replacement

HOURS OF WORK

Construction activities are normally conducted on Monday through Friday from 7:00 AM to 3:30 PM. The schedule requirements and the nature of certain construction activities that need to run continuously necessitate a substantial amount of work outside normal working hours. Night work, lane restrictions on the FDR Drive, the HRD and the Major Deegan Expressway will be required for safety reasons. Community notification will be provided in advance.

EXPEDITING THE WORK

To expedite completion of the project and minimize the impact to the community and to the traveling public, there are significant liquidated damages in the construction contract that specify particular milestones for completion.
FOR MORE INFORMATION

Please call 311 for additional information, to report a problem or to register a comment. The 311 system is available 24 hours a day, seven days a week. For updates, check NYC DOT’s website at www.nyc.gov/dot. NYC DOT also has a community liaison, Martha M. Holstein of Strategic Urban Solutions, Inc., who will work with you. Contact her at (718) 219-1606 or by email at mholstein@urbansol.com

PROJECT TEAM

Owner, Willis Avenue Bridge - NYCDOT Division of Bridges
Owner, Willis Avenue Bridge over Major Deegan Expressway – NYS DOT Region 11
Designer for NYCDOT – Hardesty & Hanover LLP
Designer for NYS DOT – STV, Inc
Prime Contractor – Kiewit Constructors Inc/Weeks Marine Inc. Joint Venture
Resident Engineering Consultant – Willis Avenue Bridge Company