

# 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

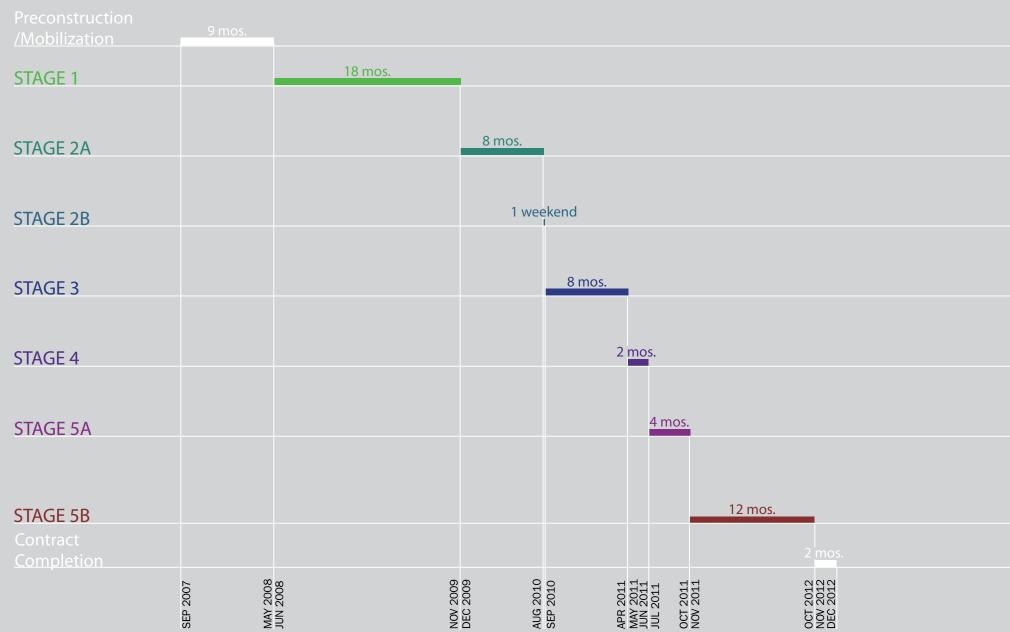
- The new bridge will be built to current design standards; non standard, tight curves will be eliminated, including the difficult "S" turn onto the bridge in Manhattan. The improved roadway approach to the bridge in Manhattan will result in better traffic flow
- A direct connection to the northbound 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



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## 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.]

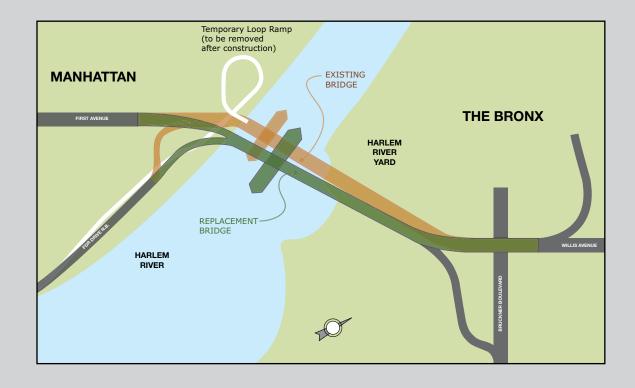


- During this phase, the contractor will mobilize on site, order necessary supplies and equipment, provide shop drawings and make roadway repairs. The FDR Drive's 125th Street exit ramp will be closed so the contractor may safely install sheeting and prepare for construction activities nearby.
- The contractor will build portions of the new off-ramp flowing to the Bronx, lay foundations for the new bridge on land and in the water, requiring off peak closures of FDR/Harlem River Drive (HRD) and work in the median.
- The contractor will construct a temporary loop ramp to access the existing bridge from the FDR Drive. Also the contractor will construct one-half of the viaduct in the Bronx for traffic exiting at Willis Avenue and build a portion of the ramp to Bruckner Boulevard.
- In the borough of Manhattan, the contractor will finish, pave and stripe the loop ramp onto the bridge. Access to the bridge from First Avenue will be closed during this weekend. Traffic will thereafter access the bridge via the loop ramp from the FDR Drive.
- The contractor will demolish the existing FDR Drive ramp and construct the southerly half of the First Avenue approach. Traffic will be shifted to the newly constructed Bruckner Boulevard ramp via a cross over. Most of the existing Bruckner Boulevard ramp will be demolished.
- The contractor will float in the new swing span, complete building the deck, install machinery and perform electrical work, and complete the southerly half of the Bronx viaduct to Willis Avenue and the Bruckner Boulevard ramp.
- Traffic will now flow across the new bridge. Pedestrian access will be maintained utilizing a temporary pedestrian crossover in Manhattan and the Bronx. The temporary loop ramp will be demolished; the northern half of the abutment will be constructed, and the existing swing span will be floated away.
- ▶ The remaining portions of the access ramps in Manhattan and the Bronx will be constructed and demolition activities for the remnants of the old bridge will be performed. Final restoration will be accomplished and new permanent signs installed.
- During this phase, the contractor and NYCDOT will finalize operations training, complete inspections of equipment and provide remaining contract closeout activities.

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# REPLACEMENT OF 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

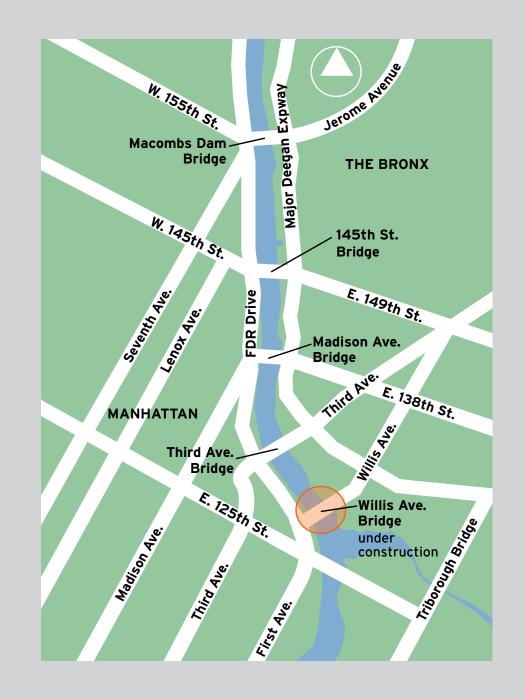
**Pedestrians and Bicyclists** – will follow a protected, detoured route across the existing Willis Avenue Bridge until the new bridge is completed and new pavement is placed.

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.



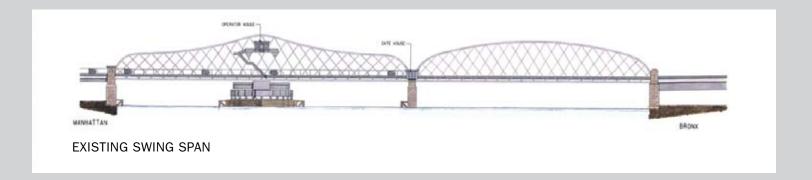
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#### HOURS OF WORK

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.



#### MITIGATION MEASURES

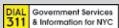
The NYCDOT has taken measures to reduce disturbance and inconvenience to the nearby community in the Bronx and Manhattan.

- 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



## 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 NYCDOT's website at www.nyc.gov/dot. NYCDOT 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 – NYSDOT Region 11

Designer for NYCDOT – Hardesty & Hanover LLP

Designer for NYSDOT – STV, Inc

Prime Contractor – Kiewit Constructors Inc/Weeks Marine Inc. Joint Venture

Resident Engineering Consultant – Willis Avenue Bridge Company

