Community Board Eight
Second Avenue Subway Task Force
June 17th, 2008
Proposed Revisions to Track Alignment

June 17th, 2008
Station Designs in Final Design Phase

- 86th Street - 2 track station cavern (one platform)
- 72nd Street - 3 track station cavern (two platforms)

Decision made to change alignment

- Lower station track levels
- Reduce number of tracks and platforms at 72nd Street
- Reduce construction cost and risk

New proposal for Station Designs (June 08)

- 86th Street - 2 track station cavern (one platform)
- 72nd Street - 2 track station cavern (one platform)
Three Track alignment plan

June 17th, 2008
Two Track alignment plan

June 17th, 2008
THREE TRACK TO TWO TRACK

2nd Ave

100ft

70ft

North

June 17th, 2008
## Benefits

- Reduction in construction cost
- Reduction in excavated material and truck trips
- Reduction in temporary deep subsurface easements in 72\textsuperscript{nd} Street area

## Impacts

- New deep subsurface easements required in 63\textsuperscript{rd} Street area
NEXT STEPS

- **Environmental review**

- **Review design opportunities created by narrower cavern at 72nd Street**

- **Commence Real Estate Acquisition process for modified subsurface easements**

June 17th, 2008
Maintenance and Protection of Traffic (MPT)

June 17th, 2008
Existing Tunnels

Lexington Ave / 96th Street

Central Park

Lexington Ave / 63rd Street

96th Street

Contract 2

Contract 1

Existing Tunnels

• Award: 4th Quarter 2008

June 17th, 2008
96TH STREET STATION

Street Grade

7’ to 8’ Utility Zone

(28’-4”)

(48’-0”)

(65’-0”)

June 17th, 2008
SCOPE OF WORK

- **Utility Relocation between 95th Street and 99th Street**
- **Slurry Walls & Decking between 95th street and 99th Street**
- **Excavation between 95th Street and 99th Street**
- **SOE Walls and Excavation for Entrances & Ancillaries**
- **Construction of 96th Street Station Base Slab from 92nd Street to 99th Street**
## Critical Issues During MPT Plan Development

- **Interface with Ongoing TBM Launch Box Contract 26002**
- **Construction staging is developed to maintain two block buffer**
- **Maintain Access to Metropolitan Hospital**
- **Temporary closure of Side Streets to Build Walls for Entrances and Ancillaries**
- **Maintenance of Left turn operation at 96<sup>th</sup> /97<sup>th</sup> Street**
- **Maintain 5 lanes of traffic on 96<sup>th</sup> St. when work is being done at 97<sup>th</sup> St.**
- **Maintain 3 lanes of traffic on 97<sup>th</sup> St. when work is being done at 96<sup>th</sup> St.**
- **Maintain 4 lanes of traffic on Second Avenue**
- **Maintain 7’ sidewalks**

June 17th, 2008
West Side Utility Relocation

Present Contract (91st Street to 95th Street)

C-26005 Work Zone (95th Street to 99th Street)
West Side Slurry Wall Installation, Decking & Excavation

Present Contract (91st Street to 95th Street)

C-26005 Work Zone (95th Street to 99th Street)
East Side Slurry Wall Installation, Decking & Excavation

Present Contract (91st Street to 95th Street)

C-26005 Work Zone (95th Street to 99th Street)
### MITIGATIONS

- **Additional Variable Message Signs**
- **Additional CCTVs**
- **Additional Traffic Agents**
- **Signal Timing Modifications at 2nd Avenue / 96th St., Third Avenue / 96th St., First Avenue / 97th St., 2nd Avenue / 97th St.**
- **Extend right turn restriction time period at First Avenue onto 96th St.**
  
  *EB to start at 1pm to 7pm from current 4pm to 7pm*
- **Improvements in traffic operations at 96th St. and 97th St near FDR Drive**
- **Monitoring of construction zones via NYCDOT TMC at Long Island City**
72nd Street Work Shaft

- 4 Traffic Lanes
- Existing 20’ sidewalk curb line
- Work Zone (Typical)
- Alternative Delivery Zone (Typical)

6/18/2008
69th & 72nd Street Construction Shafts

Shafts will be used by Contractors to excavate the station cavern & muck removal
### SIDEWALK ENCROACHMENTS

- Vaults, Cellar doors, Utility vaults, etc
- Sidewalk Cafes
- Canopies and Awnings
- Sidewalk retail areas
- Public telephones, Bike racks etc
- Steps, Ramps, Oil fill valves

June 17th, 2008
Second Avenue Subway Construction Progress Update (March to June)

Presented by S3 Tunnel Constructors
June 17, 2008
Topics Covered

- Progress update (March to June)
- Secant Pile Walls
- Slurry wall equipment and steps
“Gas Trench” + splice boxes

2nd Avenue Looking North

Future 2nd Avenue Subway
Excavation for Gas Trench

View of March 2008
Install Sheeting for Gas Trench

View of April 2008
Install Gas Pipe in Trench

View of May 2008
30” Gas Main Inside 42” Carrier Pipe
Place Splice Boxes For Deck Beams & Backfill
“Sewer Trench” + other utilities

2nd Avenue Looking North

Future 2nd Avenue Subway
Installed Mini Piles at 92nd to 93rd Str.
Pour Concrete for Drilled Shafts
Construct Sewer in Trench
Secant Wall at selected location

Future 2nd Avenue Subway

Splice Box

Gas

Sewer

Secant Wall Support

2nd Avenue Looking North

6/18/2008
Topics Covered

- Progress update (March to June)
- Secant Pile Walls
- Slurry wall equipment and steps
Location for Secant walls

SECANT WALL

Portions installed

6/18/2008
Secant Pile Wall Construction - 91st to 92nd St
Secant Pile Wall Construction - 91st to 92nd Str
Secant Pile Wall Construction- 91st to 92nd Str
Topics Covered

- Progress update (March to June)
- Secant Pile Walls
- Slurry wall equipment and steps
Location for Slurry walls
Slurry Wall Excavation in Steps

Stage 1
Primary Panel Excavation
Clamshell Bucket
Slurry Walls
Reinforcement
Steel
Installation

Stage 2
Reinforcement installation

Stage 2
Slurry Walls
Pour Concrete

Stage 3
Concreting
Setup Slurry Wall Plant - 96th Street Yard
Setup Slurry Wall Plant - 96th Street Yard
Slurry Wall - Guide Wall Installation
Slurry Wall Machine During Wall Excavation
Reinforcing Steel Cage Lifting
Crane Safety and Inspections

All the cranes used on this project would go through the following inspection and Safety steps:

- NY City Building Department Crane and Derricks (CD) Inspection and Certifications Prior to Arrival on Site.
- NY City DOT Permits.
- NY State Licensed Professional Engineer Conducts Stability, Rigging, and Load Analysis
- All Cranes will be Operated ONLY by NYC Licensed Operators with type A Crane Operator’s License.
- All Cranes will be Operated by Union Operators with 4 Years of Training Program.
- Daily Operators check of all crane systems and components.
- MTA Overall Oversight
Excavation Between Slurry Walls Under Deck Panels