

Second Avenue Subway

Community Board 8 Second Avenue Subway Task Force Update

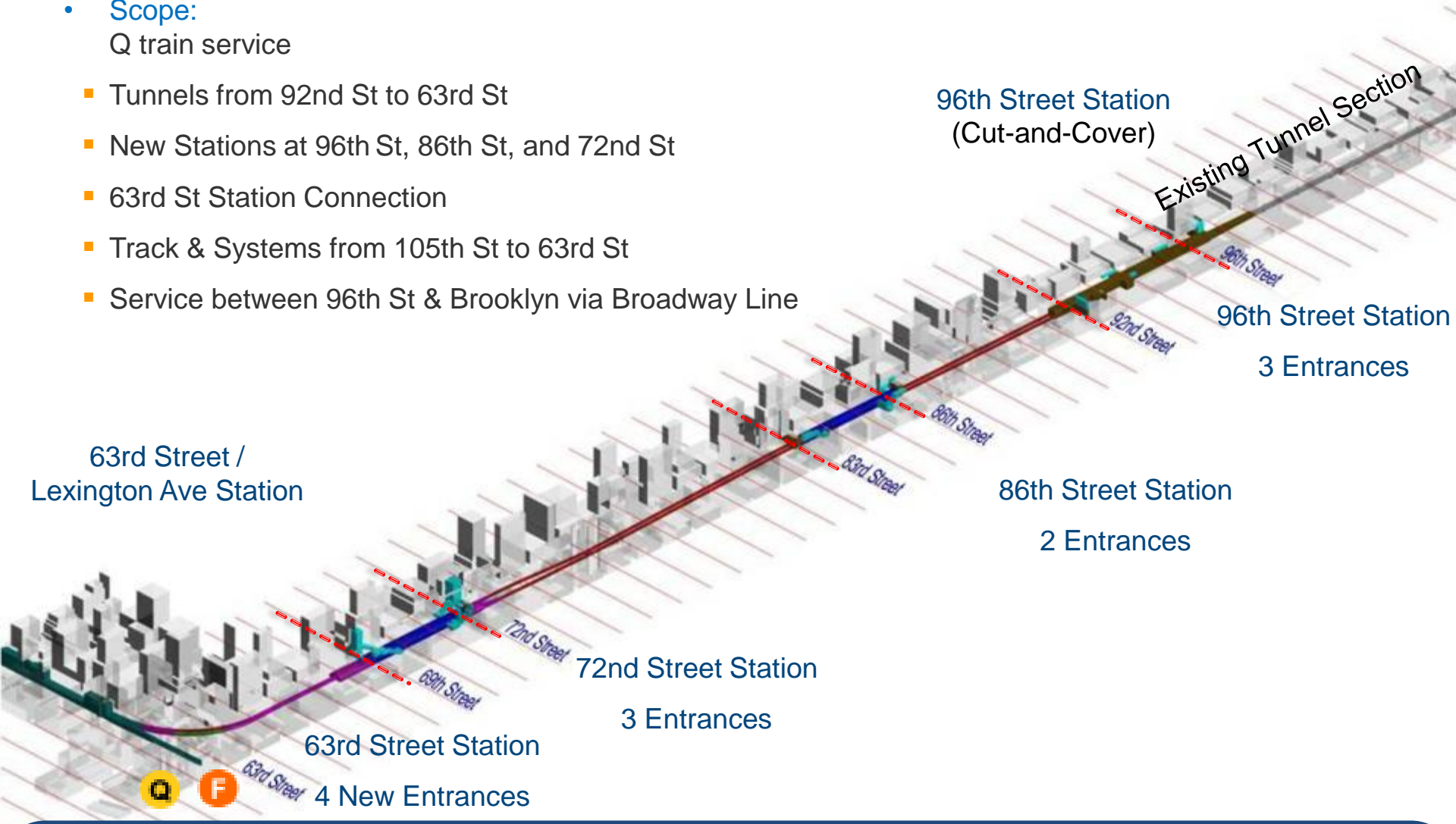
July 14, 2015

Tom Peyton
Second Avenue Subway
Project Director



Phase 1 Overview

- Scope:
 - Q train service
 - Tunnels from 92nd St to 63rd St
 - New Stations at 96th St, 86th St, and 72nd St
 - 63rd St Station Connection
 - Track & Systems from 105th St to 63rd St
 - Service between 96th St & Brooklyn via Broadway Line



Phase 1: Target Cost-\$4.451B--- Ridership 200,000 --- Target Completion Date-2016

Current Project Status

- The Second Avenue Subway project is on budget and on time for December 2016 revenue service.
- Overall Construction Progress is 84.30% Complete (as of July 1, 2015)
- All 10 SAS Contracts have been awarded for Phase 1
- 5 Construction Contracts Completed:
 - Tunnel Boring Machine Tunneling
 - 86th St Excavation, Utility Relocation, and Road Decking
 - 96th St Site Work and Heavy Civil
 - 72nd St Cavern Mining, Tunnels and Heavy Civil (1/14/14)
 - 86th St Cavern Mining & Heavy Civil (12/16/14)

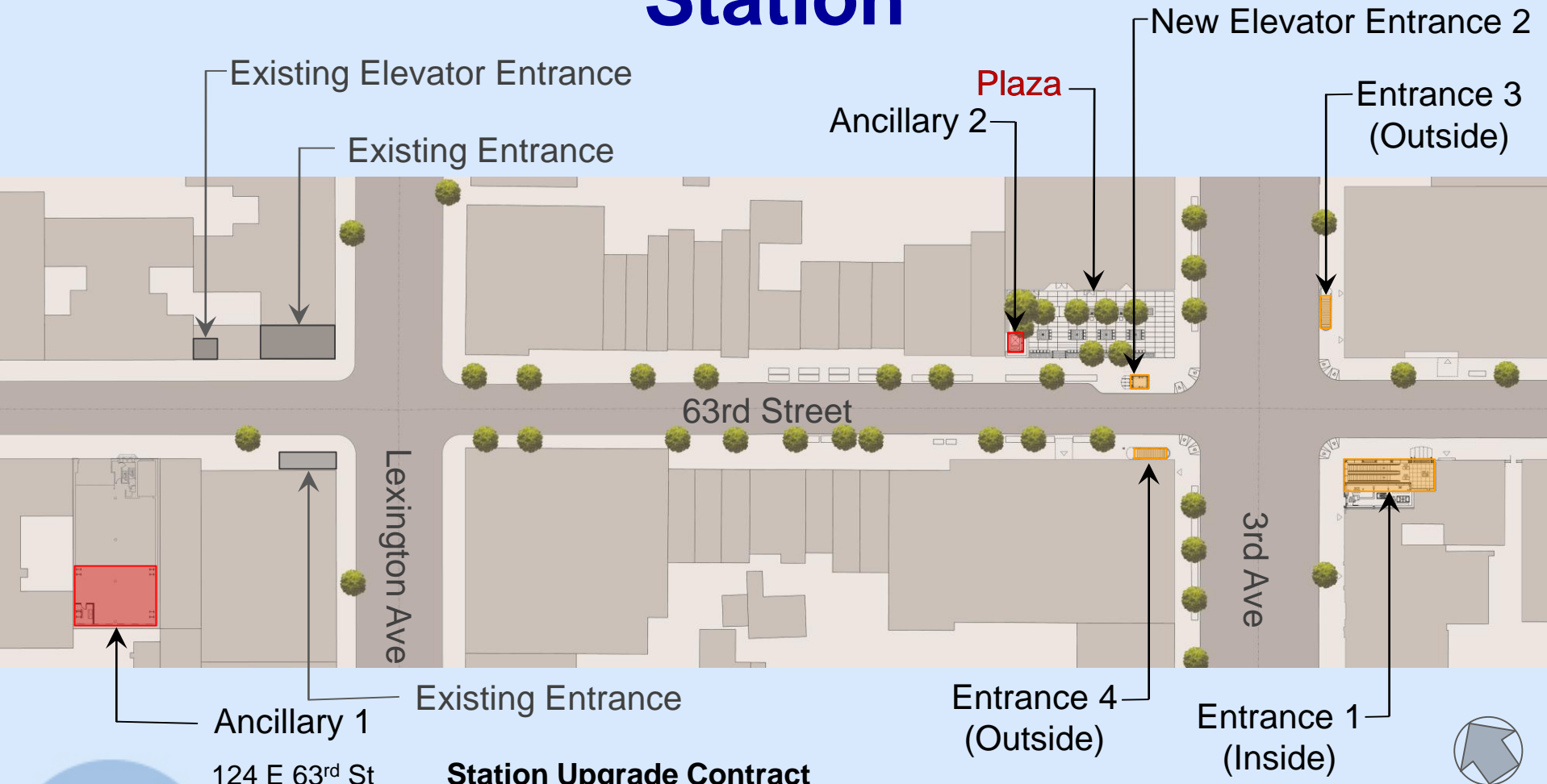


5 Active Contracts

96thSt.	Station Finishes, Systems, Ancillary Buildings and Entrances	71%
86thSt.	Station Finishes, Systems, Ancillary Buildings and Entrances	47.2%
72nd St.	Station Finishes, Systems, Ancillary Buildings and Entrances	63.3%
63rd St.	Station Upgrade	90.4%
All Stations	Track, Power, Signals & Communications Systems	60.2%



Rehabilitation of Existing 63rd Street Station



Ancillary 1
124 E 63rd St
Top of
Hahn Garage

Existing Entrance

Station Upgrade Contract

Percent Complete: 91 %

Contract Value incl. AWOs: \$190.8 M

Award Date: January 13, 2011

Forecast Completion: December 2015



Milestones

- Work in Plaza (northwest corner of 63rd Street and 3rd Avenue) commenced late June.
- Escalator installation at new Entrance 1 (southeast corner of 63rd Street and 3rd Avenue) is underway.
- Construction for Entrance 3 (northeast corner of 63rd Street and Third Avenue) and Entrance 4 (southwest corner of 63rd and 3rd Avenue) continuing below sidewalk level.



Current Work Zones (SE corner of 63rd Street & Third Avenue)



Entrance 1 – looking east

Current Work Zones

(NW corner of 63rd Street & Third Avenue)



Current Progress



New track wall tiles at lower level platform
(On 63rd St and Lexington Av)

Three-Month Look Ahead

STATION

- Installation of service carrier, ductwork and electrical conduit at the upper platform level
- Installation of platform finishes, including ceilings, track wall tile framing, column covers, platform paving, and lighting fixtures
- Masonry wall, ceiling panel, and door installation throughout station
- Mechanical, electrical and plumbing systems installation in new station area



Three-Month Look Ahead

ENTRANCE 1

(200 East 63rd Street)

- Escalator installation

ANCILLARY 2/ ENTRANCE 2

(Northwest corner of 63rd Street and Third Avenue)

- Construction of elevator shaft within plaza work zone area
- Receive materials via sidewalk access hatch



Three-Month Look Ahead

OTHER SURFACE WORK

- Reopen existing sidewalk grates along 140 East 63rd Street

THIRD AVENUE STORAGE/WORK ZONE

(Third Avenue between 63rd and 64th Streets)

- Work zone will remain until Summer 2016 for materials storage and small office trailer for systems contractor

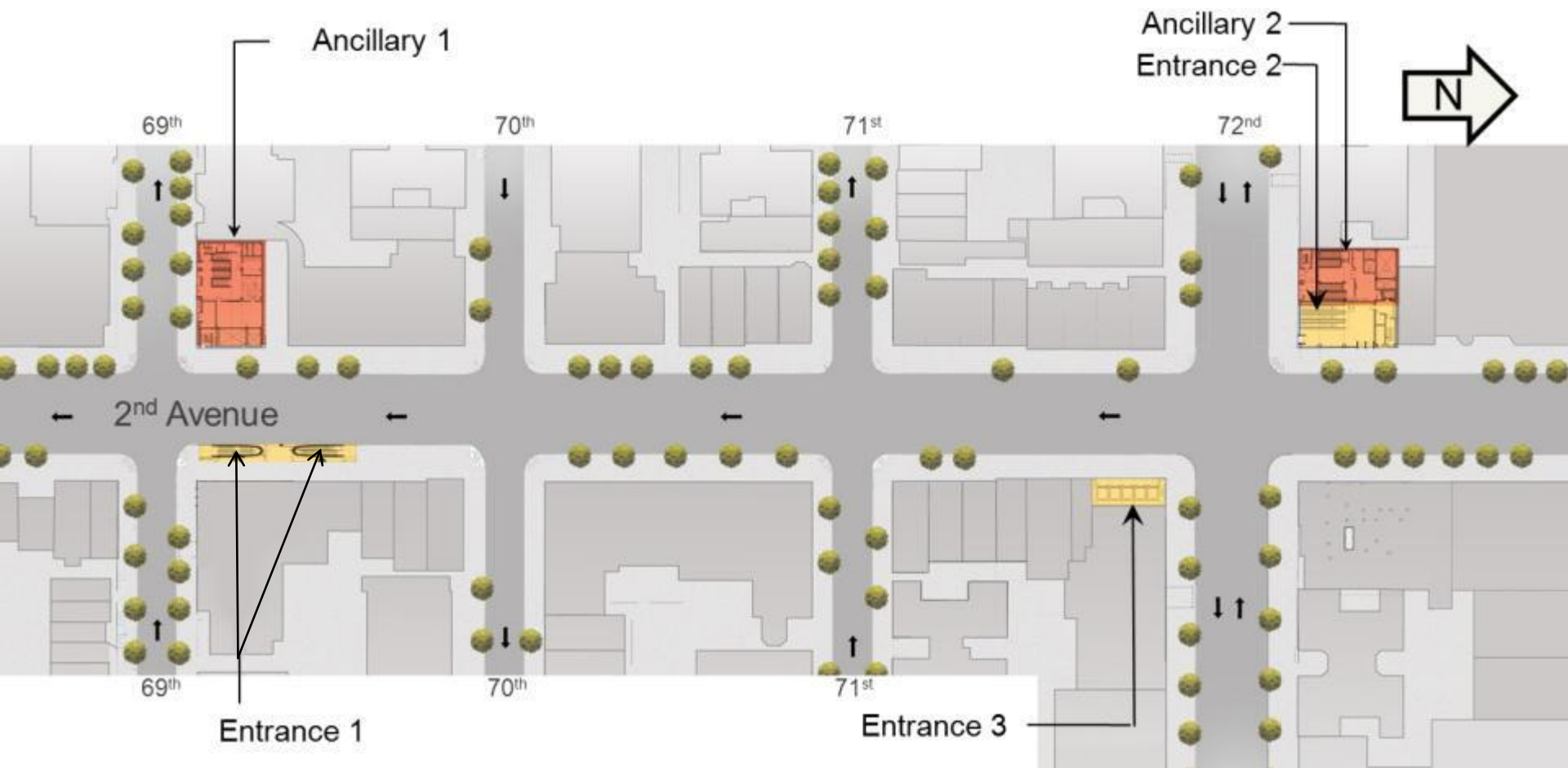




Proposed Rendering of 63rd Street Plaza (design not finalized)

SW corner of 63rd Street and Third Avenue

72nd Street Station



Finishes, MEP Systems, Ancillary Buildings and Entrances Contract

Percent Complete : **63.28%**

Contract Value incl. AWOs: **\$283.7 M**

Award Date: **February 14, 2013**

Forecast Completion: **October 2016**



Milestones

- Rail installation commenced in October 2014. Track work in tunnels to 63rd street completed. Third rail installation in progress.
- Entrance 1 exterior excavation 100% complete; interior excavation is in its final stages.
- Equipment rooms have been completed and turned over to the systems contractor for delivery and installation of communications and signaling equipment.
- Systems conduit installation is substantially complete and turned over to the systems contractor for installation of communications and systems cabling.



Current Progress



Main Cavern – Installation of acoustic ceiling panels



Current Progress

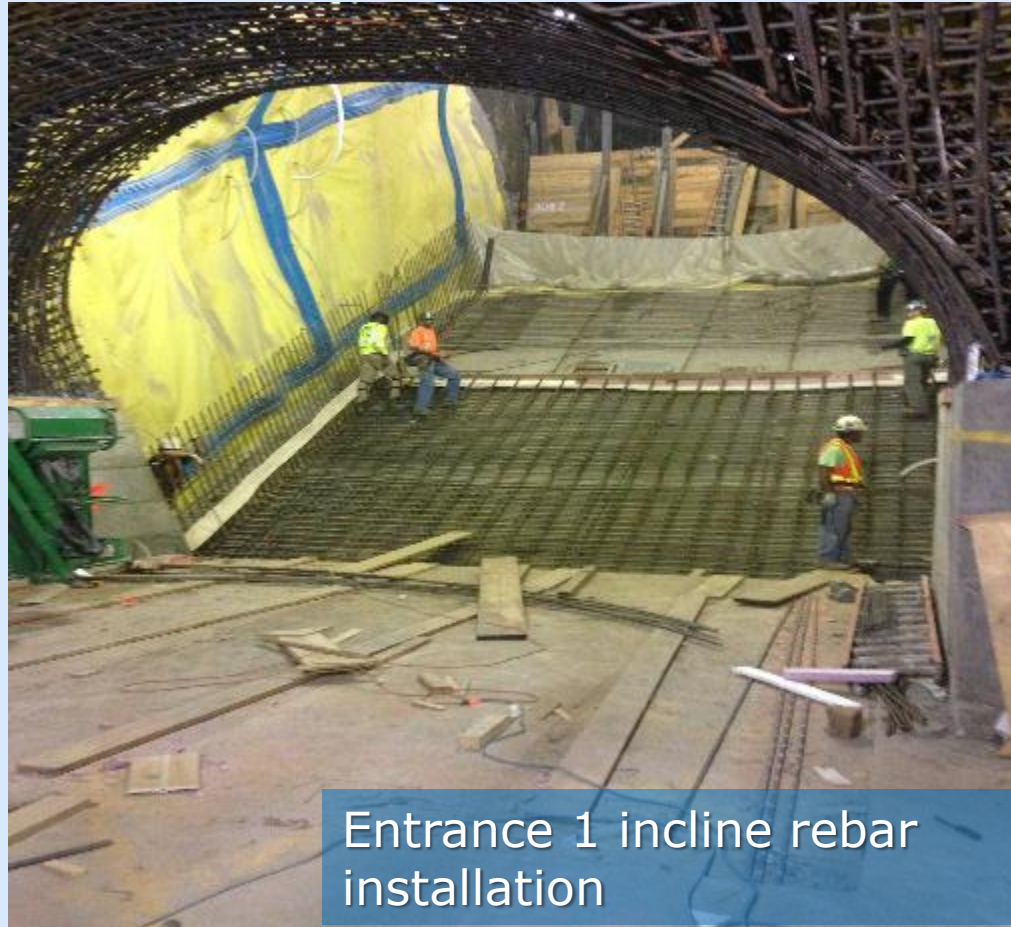


Current Progress

Ancillary#2 NW corner 72nd Street



Current Progress



Three-Month Look Ahead

Main Station Cavern:

- Installation of track wall tiles, ceiling panels, conduits and duct work at the platform level.
- Mechanical, electrical and plumbing systems installation at mezzanine level.
- Construction of new operations and maintenance rooms within mezzanine areas and Ancillary 2 building (northwest corner of 72nd Street and Second Avenue).
- Installation of escalators from mezzanine to platform level.
- Cable pulling for signals and communications through finished station conduits.
- Resumption of track work in station area by end of August.



Three-Month Look Ahead

Entrance 1:

- Excavation work for Entrance 1 within garage at 301 E. 69th Street to be completed in July.
- Installation of the underground portion of the entrance incline lining is in progress.
- Underpinning of the west wall of 301 E. 69th Street is complete.
- Concrete pours to commence.
- Street work hours: 7 a.m. – 10 p.m.

Ancillary 1, Ancillary 2, Entrance 3

- Installation of waterproofing and construction of Ancillary 1, Ancillary 2 and Entrance 3 structures.
- Concrete pumping at Ancillary 1, Ancillary 2 and Entrance 3.
- Equipment installation at Ancillary 1 and Ancillary 2.



Three-Month Look Ahead

Miscellaneous

- Concrete truck staging as needed between 74th and 75th Streets.
- Use of access hatch at Ancillary 1 and Ancillary 2 to deliver materials to the station.
- Upcoming Con Edison work on 72nd Street from 1st to 3rd Avenues.





72ND ST STATION – ENTRANCE 2 / ANCILLARY 2



72ND ST STATION – ENTRANCE 3

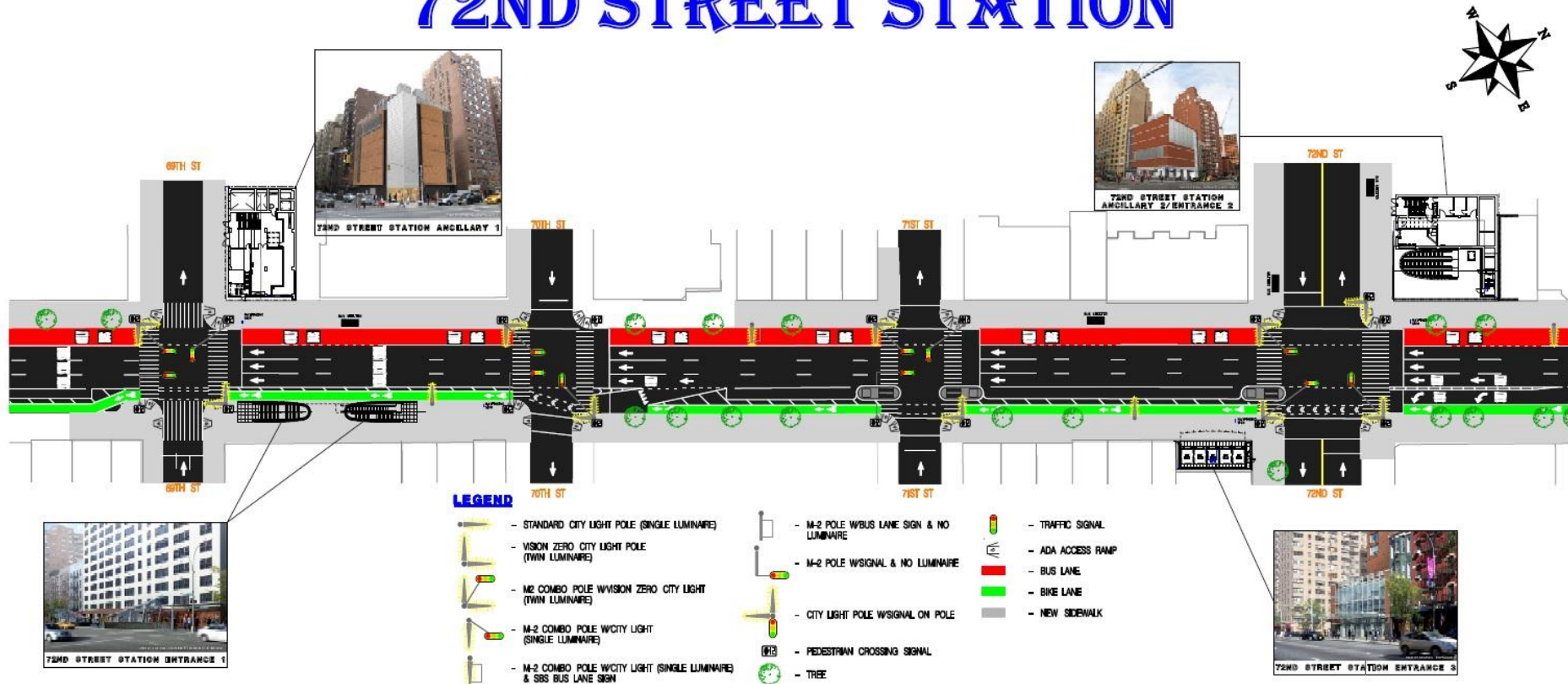


72ND ST STATION – ANCILLARY 1



Final Streetscape Layout

72ND STREET STATION



Note: Location of street furniture (benches and bike racks) will be updated by DOT as the project nears completion.

A full project-wide layout will be uploaded to the SAS website in the near future.

86th Street Station



Finishes, Entrances, Ancillaries, and MEP Systems Contract

Percent Complete : **41.77%**

Contract Value: **\$223,000,000**

Award Date: **June 12, 2013**

Forecast Completion: **October 2016**



86th Street Station Milestones

- Water treatment plant between E. 83rd and E. 82nd Streets has been dismantled.
- All the rail for the 86th Street Station has been delivered.
- Three of the four escalators at Entrance 2 (E. 86th Street) have been installed.





Track installation at 86th Street



East side tunnel looking south under Second Avenue

Three Month Look Ahead

86th Street Station Area

E. 78th to E. 79th Streets (center of Second Avenue)

- Maintain current traffic pattern on Second Avenue with one lane east of the center work zone and two lanes west of the center work zone between 78th and 79th Streets for concrete placement work in the underground tunnels.

E. 83rd to E. 85th Streets – South Cavern

- The contractor will be moving work zones and storage areas to the west side of Second Avenue for utility work. This will be done in stages beginning in August.
- At Ancillary 1 (NW corner of 83th St.), placement of exterior walls is approximately 20 feet from the street level. A portion of the roof structure in this area has also been completed.

E. 86th to E. 87th Streets - North Cavern

- At Ancillary 2 (NW corner of 86th St.), the contractor continues to install waterproofing, reinforcing steel, structural concrete slabs, and walls, above the mezzanine level. Work is approximately 40 feet from reaching the street level.



Three Month Look Ahead

86th Street Station Area

Underground Construction

- Mechanical equipment for permanent station power is being fabricated, delivered, and installed throughout the station.
- Installation and painting of concrete walls at all levels in the station continues.
- Installation of HVAC duct work and electrical conduit continues at all levels of the station.





Elevator entrance at E. 86th Street



86th Street Entrance 1 Rendering

83rd Street and Second Avenue

86TH ST STATION – ENTRANCE 1 @ 83RD ST & 2ND

Final Streetscape Layout

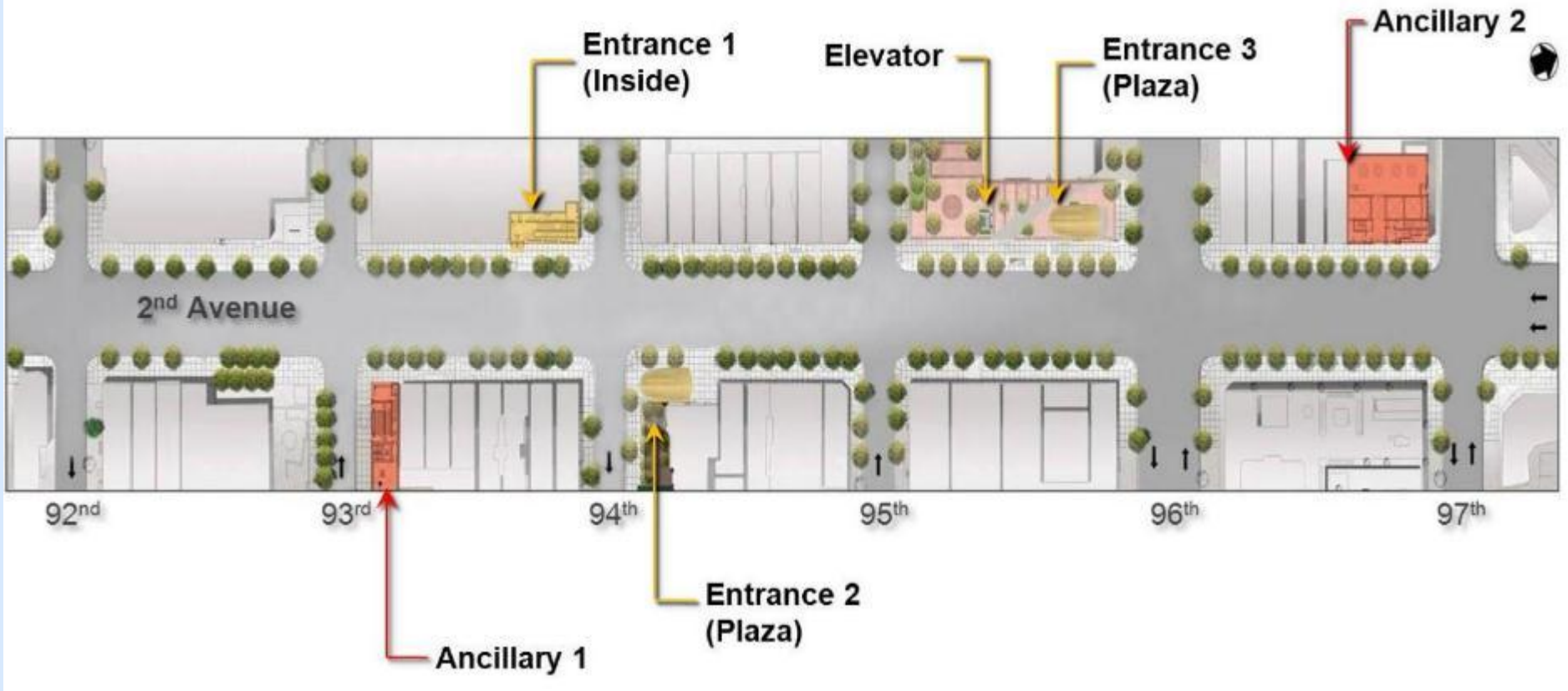
86TH STREET STATION



Note: Location of street furniture (benches and bike racks) will be updated by DOT as the project nears completion.

A full project-wide layout will be uploaded to the SAS website in the near future.

96th Street Station



Finishes, MEP Systems, Ancillary Buildings and Entrances Contract

Percent Complete: 71%

Contract Value: \$324,600,000

Award Date: [June 22, 2012](#)

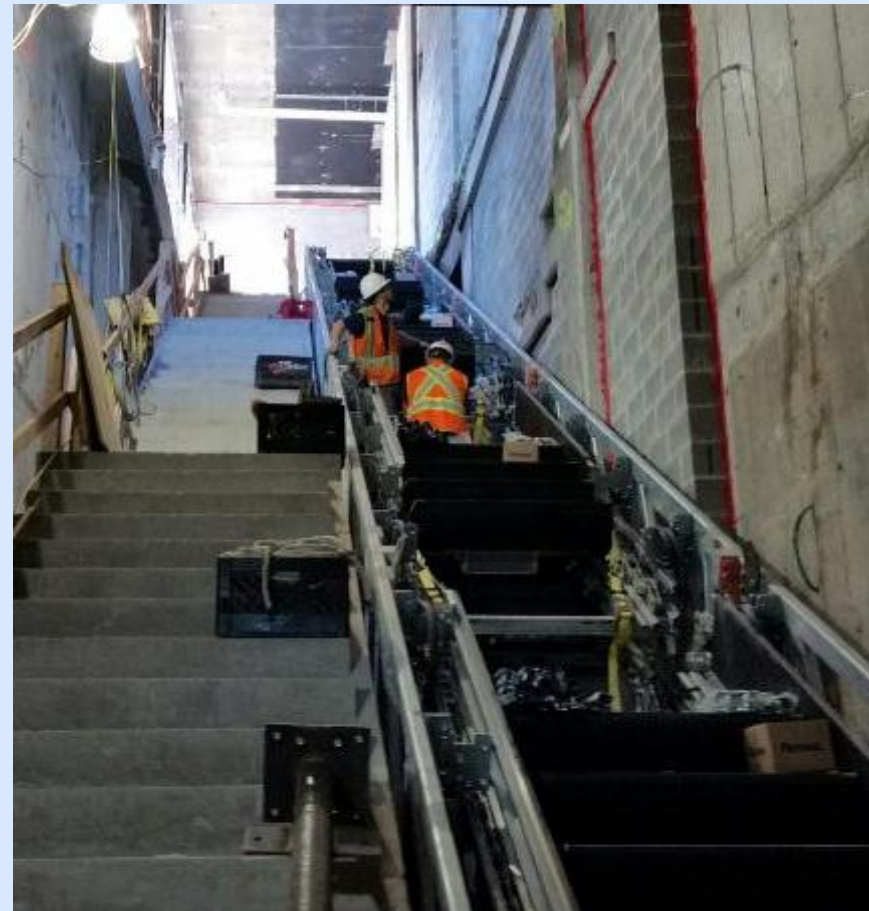
Forecast Completion: [October 2016](#)



96th Street Station Progress

Contract C2B is 71% complete as of July 1st, 2015.

- Deck beam removal and utility work on the west side of Second Avenue. All work zones between 91st and 99th Streets have been moved to the west side.
- The escalator for Entrance 1 (southwest corner of 94th Street and Second Avenue) was delivered and is being installed.
- Structural concrete pours are completed at Ancillary 1 and 2 (northeast corner of 93rd Street and Second Avenue and southwest corner of 97th Street and Second Avenue, respectively)
- Concrete pours are complete at Entrance 2 at (southwest corner of 94th Street and Second Avenue).



Entrance 1 Escalator Installation
94th Street and 2nd Avenue



Traffic Switch to East Side Completed
94th – 96th Streets and 2nd Avenue



Structural Concrete Completed at Ancillary 2
Southwest corner 97th Street

2015. 6.17 7:29



Structural Concrete Complete at Ancillary 1
Northeast corner 93rd Street

2015. 6.17 7:56



Scaffold Installation for Entrance 3 Street Slab

96th Street and 2nd Avenue

Three-Month Look Ahead

- Deck beam & roadway decking removal on the west side of Second Avenue between 92nd and 97th Streets.
- Utility work on the west side of Second Avenue between 93rd and 96th Streets.
- Installation of HVAC ducts, masonry walls, and electrical conduit throughout the station.
- Complete waterproofing of the roof for Entrance 1 on the southwest corner of 94th Street and Second Avenue.



Three-Month Look Ahead

- Equipment installation and testing for power station.
- Water main work in conjunction with DEP.
- Tunnel ventilation fan installation at Ancillary 1, northeast corner of Second Avenue and 93rd Street.
- Installation of escalator at Entrance 1 on the southwest corner of 94th Street and Second Avenue.

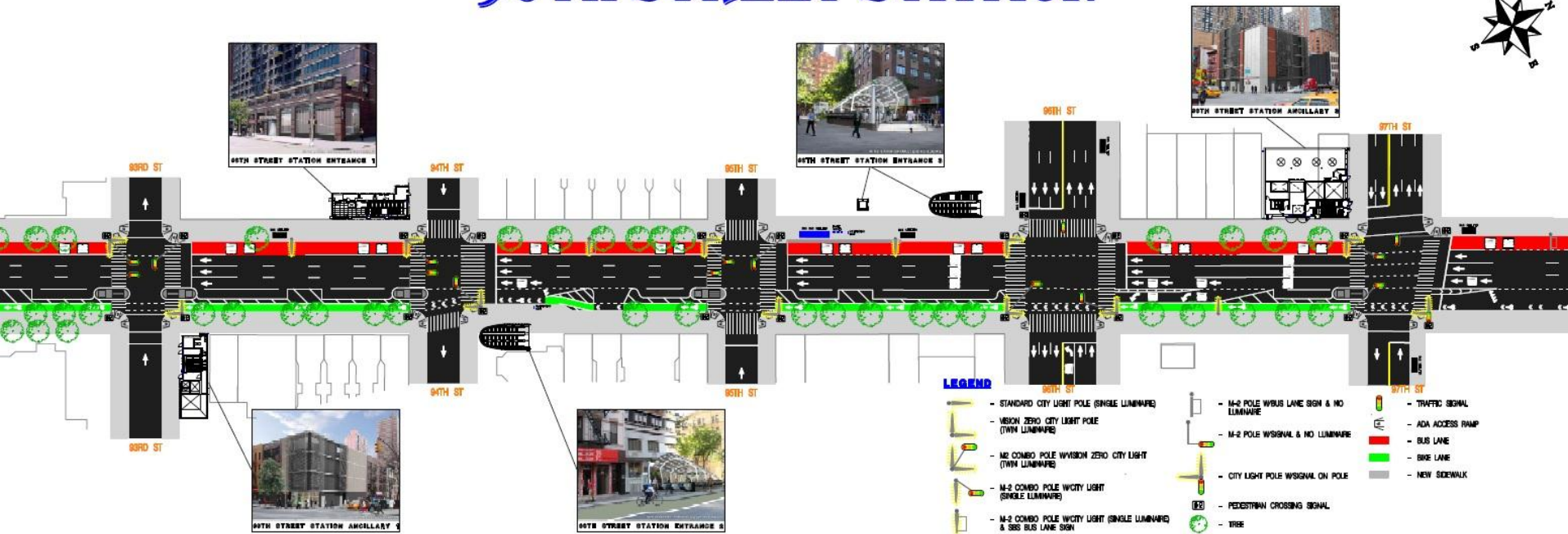




96th Street Entrance 3 rendering
SW corner 96th Street and Second Avenue

Final Streetscape Layout

96TH STREET STATION



Note: Location of street furniture (benches and bike racks) will be updated by DOT as the project nears completion.

A full project-wide layout will be uploaded to the SAS website in the near future.

Systems Installation

- Low Vibration Track (LVT) System Being Installed
 - Track to be installed: 22,000 ft.
 - Track installed to date: 11,180 ft.
 - Aluminum 3rd rail installed: 5,400 ft.
 - Track delivered to site: 20,000 ft.

Note: Track as reported here consists of 2 rails and includes Special Work Portions

- Traction Power work ongoing for three substations and four circuit breaker houses



LVT Track installed with Aluminum 3rd rail



Systems Installation

- Signal equipment being installed in relay rooms, central instrumentation room and along the wayside.
- Contractor completed approximately 70% of the copper cable and 90% of the fiber optic cable installations at 63rd street station.
- Installation of all CCTV cabinets at 63rd, 72nd and 96th street stations.
- Installation of inter-station communication cables completed between 86th Street and 105th Street.

Track, Power, Signals and Communications Systems Contract

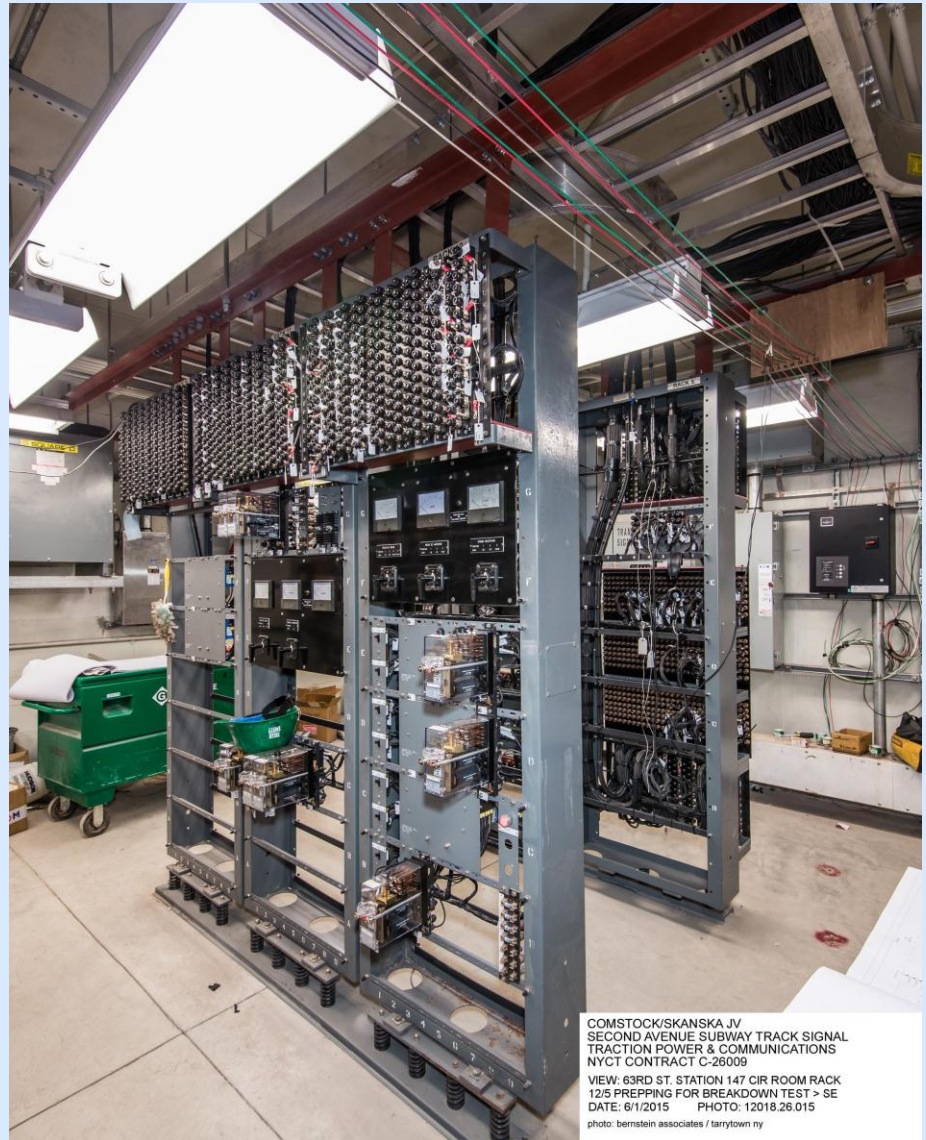
Percent Complete: **56.2%**

Contract Value incl. AWOs: **\$282.8 M**

Award Date: **January 18, 2012**

Forecast Completion: **October 2016**

Central instrumentation testing underway at 63rd Street.



Questions

