

World Trade Center Quarterly Report

3rd Quarter 2009

November 6, 2009

The Honorable David A. Paterson
Governor of the State of New York
State Capitol
Albany, New York 12224

Dear Governor Paterson:

I am pleased to provide you with the fourth of The Port Authority of New York and New Jersey's World Trade Center Quarterly Reports – an ongoing initiative to give the public a tangible way to track the agency's progress. These quarterly installments are published on our WTC website – www.wtcprogress.com – and contain a complete accounting of the interim milestones that the Port Authority established in October 2008 (and others we have since added), as well as an overview of the other work going on at the WTC site so the public has a full understanding of what we are doing to advance the rebuilding effort.

The 3rd Quarter of 2009 continued to see important progress on the 9/11 Memorial, One World Trade Center (1WTC), the WTC Transportation Hub and the other public infrastructure the Port Authority is responsible for building. Specifically, as of September 30th, we have completed over 80% of the steel erection for the 9/11 Memorial, which remains on track to open on 9/11/11. We also commenced installation of the jumbo steel perimeter columns of 1WTC, which are 60 feet high and weigh 70 tons each – the equivalent weight of a Honda Civic for every foot of steel. These columns are critical to have in place in order for 1WTC to reach the 20th floor-equivalent level during the first quarter of next year. Finally, we issued the Notice to Proceed for the critical Greenwich Street Corridor package, which will build out the permanent support structure of the MTA's #1 Subway line and the future Greenwich Street.

Overall, we hit 21 of 24 milestones. Of the three that were missed, we have developed complete mitigation strategies for the two that are within our control to avoid future delays. Listed below are the missed milestones with references to more detailed explanations, which appear in full later in the report.

- Four arches along the East/West Connector were not installed by the end of the 3rd Quarter (see page 9). This milestone called for all 8 remaining arches to be installed. To date, 51 of the 55 Calatrava arches have been installed.
- The WTC Transportation Hub's Structural Steel Package was replaced with a restructured procurement strategy (see pages 7-8), and as such has not yet been bid. While we believe this new procurement strategy will gain us greater schedule and cost certainty, along with needed flexibility given the uncertainty in the East Bathtub, the original milestone called for this procurement to commence by the end of the 3rd Quarter.

- The Lower Manhattan Development Corporation (LMDC) and Lower Manhattan Construction Command Center (LMCCC) announced new delays in their demolition of the 130 Liberty Street (the former Deutsche Bank Building). (See page 9-10.)

As the Port Authority looks ahead to next Quarter, we face several significant challenges.

- We continue to look at ways to mitigate the impact the delay in the deconstruction of 130 Liberty Street has on the construction of the Vehicle Security Center.
- We continue to manage aggressively the successful execution of our restructured procurement strategy for the WTC Transportation Hub's Structures to Grade work.
- In light of the continued uncertainty with respect to the schedule for the development of Towers 2, 3 and 4, the Port Authority has begun the formulation of a revised design for the WTC Hub that will permit the Port Authority to complete the construction of the public components of the WTC site independent of construction of Towers 2, 3 and 4. The development of this option will require, in addition to a revised design for the WTC Hub, a redesign of various aspects of One World Trade Center, the Vehicular Security Center and other infrastructure in order to minimize the impacts on the Roadmap dates included in the Port Authority's October 2008 WTC Report, while maintaining the ability of Silverstein Properties Inc. to commence construction of Towers 2, 3 and 4.
- We will also need to pay very close attention to the progress of the Memorial's Sector 1A Steel. This section of the Memorial Plaza is especially challenging to erect because it involves steel from two different projects – the Memorial and Transportation Hub – and several different contractors, who all need to be coordinated seamlessly in order for us to stay on the Memorial schedule's critical path.

I look forward to updating you next Quarter on our progress as well as our challenges, as we work every single day to rebuild the World Trade Center.

Sincerely,

Chris Ward
Executive Director
Port Authority of New York & New Jersey

Cc: Governor Jon Corzine
Anthony R. Coscia, Chairman, Port Authority of NY & NJ
Henry R. Silverman, Vice-Chairman, Port Authority of NY & NJ
Port Authority Board of Commissioners
Mayor Michael Bloomberg

Assembly Speaker Sheldon Silver
Senate Majority Leader Pedro Espada Jr.
Senate President Malcolm Smith
Assembly Minority Leader Brian Kolb
Senate Minority Leader Dean Skelos
State Senator Daniel Squadron
Council Speaker Christine Quinn
Council Member Alan Gerson
Manhattan Borough President Scott Stringer
Senator Charles Schumer
Senator Kirsten Gillibrand
Congressman Jerrold Nadler

MILESTONES



June 2009



October 2009

A full description of the 3rd Quarter 2009 milestones is provided below, along with a six-month look ahead at the key milestones for the 4th Quarter 2009 and 1st Quarter 2010.

3rd Quarter 2009

National September 11 Memorial & Museum

- Complete Erection of Sector 3 Steel - Complete

Sector 3 steel was completed and consists of over 500 pieces of steel weighing in excess of 1,100 tons. This completed the steel erection to grade along the western edge of the southern fountain. Family members walked on this portion of the Memorial during the recent 9/11 Memorial service.

- Complete Erection of Sector 5 Steel - Complete

This sector consisted of over 270 pieces of steel weighing almost 800 tons. Sector 5 enclosed the area of the Museum containing part of the exposed slurry wall of the original World Trade Center, which will remain as part of the Memorial Museum's exhibits. It was through this section of steel that the "Last Column" was placed in its final position on August 24th.

- Award Pavilion Structural Steel - Complete

The contract award for the Pavilion Structural Steel was made to W&W / AFCO Steel LLC. This steel represents all of the above grade structural steel within the Memorial's Pavilion building, otherwise known as the Visitor's Center. This procurement will allow for the commencement of structural steel erection to begin in early 2010.

- Award Pavilion Curtain Wall - Complete

The award of the contract for the fabrication and installation of the Pavilion's curtain wall systems was made to W&W Glass LLC. This curtain wall will encase the Memorial Pavilion structure framed by the steel recently awarded in the Pavilion Structural Steel contract just discussed.

- Complete Counterfort Wall behind Exposed Slurry Wall - Complete

The counterfort wall behind the exposed section of the original WTC slurry wall was completed. This was to take the load off of the original slurry wall and provide the required structural section of the west bathtub slurry wall. The exposed slurry wall has now been enclosed by the completion of Sector 5 steel and will remain exposed inside the Memorial Museum as a permanent exhibit. This slurry wall provides the backdrop for the "Last Column" that was placed in the Museum on August 24th.

- Award Drywall / Carpentry Package - Complete

This contract was awarded to Component Assemblies Systems Inc. and consists of all carpentry and drywall work for the WTC Memorial and Memorial Museum.

- Complete Sector 2 Concrete - Complete

Over 5,000 CY of concrete was placed to complete decks and walls in this section of the Memorial. Concurrently, over 25,000 linear feet (LF) of conduit is in place within Section 2 of the Memorial. This concrete makes up $\frac{3}{4}$ of the concrete within the northern fountain area and its completion has enabled mechanical, electrical, and plumbing work to begin.

WTC Transportation Hub

- Begin Platform Column Foundations – Complete

Currently 10 of the 17 permanent column foundations are under construction. These foundations represent those required to support the PATH Hall roof above the PATH platforms and tracks, and are located on all station platforms, including the future Platform D. The sequence of work involves excavation and concrete placement in the Platform A area (easternmost platform), which has been deactivated from service. Stair fabrication and erection are underway for platforms B and C. After temporary stairs are in place, portions of platforms B and C will be taken out of service for excavation and concrete work. The permanent foundations that support the main roof steel are to be completed by the end of the year in order to support the placement of the Transportation Hub's structural steel that will arrive in the first quarter of 2010. There are also 22 temporary foundations that will now be constructed after the start of the

permanent column foundations. These temporary foundations will support the construction of the East Box Girder.

- Fulton Street Slab Available for Access - Complete

The completion of the Fulton Street slab, which provides construction access, is critical because it supports construction activity on the south side of One World Trade Center – for One World Trade Center and East-West Connector of the WTC Transportation Hub. Currently, retaining walls are being formed along the perimeter of the slab for the placement of backfill material. Waterproofing along the eastern side of the slab is also ongoing.

- Early Action Packages Awarded - Complete

Early Action packages for the WTC Transportation Hub were advertised in late 2nd Quarter and awarded in the 3rd Quarter. Awarded work orders include: stair fabrication, station demolition, construction to bring the Fulton Street slab to grade, foundation work for the Hub steel, and provision of temporary construction power. These packages are referred to as “early action” because they must be completed before the Hub steel arrives in early 2010. Otherwise, the site will not be able to accommodate the steel erection.

- Complete Level C Tiebacks (H&M Station) - Complete

The level C tiebacks are complete and have allowed for the continued demolition of the H&M station structure. They needed to be in place prior to demolition of the structure to the 266 level of the old structure. Along with the corner struts, these tiebacks provide necessary structural support of the slurry wall along the eastern portion of the site in the vicinity of the future Hub Transit Hall and Oculus structure. A total of 17 tiebacks were used at this level, some of which will be in excess of 85 feet in length.

- Notice to Proceed (NTP) - Construction Management Contract - Complete

A contract was awarded to the Joint Venture of Tishman Construction and Turner Construction to provide construction management services in support of the WTC Transportation Hub project. A notice to proceed was given to Tishman / Turner in early August to support its rapid integration into the program. The team is fully mobilized at this time.

- Structures-to-Grade Package Out to Bid - Incomplete

While the original Structures to Grade Package was in fact put out in time to meet this milestone (July), it has since been pulled back and replaced with a restructured procurement strategy for the Hub to ensure greater price and schedule certainty, as well as greater flexibility to address the continued uncertainty with

respect to the schedule for the development of Towers 2, 3 and 4. Thus, the milestone is rendered incomplete, though we believe this new strategy as described below will achieve greater schedule and cost certainty than the original approach.

While the original Structures-to-Grade Package included every major element of the build-out of the WTC Transportation Hub's above-grade structure (with the exception of the Oculus, which will be bid later), the new Structures-to-Grade Package will actually be a series of packages composed of one large package for the Hub work in the West Bathtub, which is critical to hitting our Memorial dates, and multiple packages in the East Bathtub.

This strategy accomplishes several goals:

First, by keeping one large package together for the West Bathtub, we can bid that quickly in order to make sure that that work gets done in time to meet our Memorial milestones and is coordinated by a single general contractor in what is the intersection of several different projects with multiple contractors already on site (that package has since been bid out). Also, by separating this body of work from anything going on in the East Bathtub, which is where the uncertainty is due to the lack of private office development, this West Bathtub package will move forward uninterrupted by potential changes in the East Bathtub, which may be necessary to address the continued uncertainty with respect to the schedule for the development of Towers 2, 3 and 4.

Second, by breaking up the rest of the original package in the East Bathtub into multiple smaller packages where more contractors can compete for the work (similar to the way the Port Authority has bid 1WTC), it will allow us to take advantage of the current construction market that continues to be highly competitive (as the successful Greenwich Street bidding process proved out), and it will give us the needed flexibility which may be necessary to address the continued uncertainty with respect to the schedule for the development of Towers 2, 3 and 4.

The West Bathtub Structures-to-Grade package must be awarded by early first quarter 2010 to stay on track. The East Bathtub packages will be rolled out over the course of the first half of 2010.

- Award and Issue a Notice to Proceed on the Top-Down Contract - Complete

The Greenwich Street Top-Down construction contract was awarded in August to Tutor Perini. Subsequently, a notice to proceed was given and the contractor mobilized prior to the end of the 3rd Quarter. This work includes the construction of permanent concrete walls, slabs and excavation of soil under the #1 Subway line, including the PATH Underpass, as well as the mass rock excavation in the Oculus site. It incorporates the existing temporary mini-piles into a concrete

shear wall and slab system that is being constructed from the “top down”. The construction along the 1,000 foot section of the #1 Subway Line forms the backbone of the Hub construction effort, and is critical to ensuring public access to the Memorial on 9/11/11.

- Complete Installation of the 8 Additional Arches along the East-West Connector – Incomplete

All 8 remaining arches (out of the 55 total – 47 of which have already been installed) have been fabricated and delivered to the contractor’s storage yard, but only 4 of the 8 have been erected and bolted into place. The erection of three of the remaining four arches is anticipated to be complete in early November and must be completed by then in order to provide construction vehicles access to Fulton Street prior to the end of the year. The remaining arch, located in the western portion of the East/West Connector is awaiting final placement along the interface of the East/West Connector at the 9A underpass area. This arch will be placed along this interface in the first quarter of 2010 and is not on the critical path for the erection of vehicular access to the Fulton Street section south of 1WTC.

- Demo 286 & 266 slabs (H&M Station) – Complete

Demolition of the H&M Station slabs are complete through the 266 level. Work is ongoing to complete the remainder of the demolition to top of rock in the 4th Quarter of 2009. This will be the last remains of the original Temporary PATH Station that was built in the aftermath of 9/11 to restore PATH service to Lower Manhattan.

WTC Vehicular Security Center and Tour Bus Parking Facility

- 130 Liberty St. Deconstruction Complete by LMDC/LMCCC – Incomplete

The owner of 130 Liberty Street (the former Deutsche Bank Building) and the agency responsible for its abatement and demolition – the Lower Manhattan Development Corporation and the Lower Manhattan Construction Command Center – have announced that they will not meet their 3rd Quarter milestone for the complete abatement and deconstruction of the building. While abatement has been completed, demolition has yet to begin. The agencies report that demolition should begin in November and should be complete toward the end of 2010, though no detailed schedule has been published.

The challenge with these delays is that the Vehicle Security Center, which the Port Authority is responsible for building, is supposed to be built where 130 Liberty Street currently stands. While past delays have already delayed the VSC, until we have the chance to understand in detail LMDC/LMCCC’s new deconstruction schedule, it is difficult to determine the further impact it will have

on the Vehicle Security Center. We will report back once we have a better understanding.

- Finish Slurry Panels Along West St. - Complete

All 10 of the slurry panels along West Street are complete as well as an additional 8 panels along the southern edge of the project site. This west section of the slurry panels delineates the construction site boundary between the Vehicular Security Center and the NYSDOT construction work along Route 9A.

- Complete Work Around Design for 130 Liberty - Complete

With the delay in the demolition of the former Deutsche Bank building, a work around design was developed to mitigate the impact to the overall Vehicular Security Center schedule, though this mitigation plan may not be enough to mitigate the new delays that were recently announced by LMDC/LMCCC. The concept of this design is to split the Vehicular Security Center site – the “South Bathtub” into two sections (east and west) utilizing a demising wall. This will allow excavation and foundation work to be completed on the western half of the VSC site, which is the part of the site we currently have access to because the former Deutsche Bank building occupies the eastern half of the site. Once the former Deutsche Bank building is demolished, we can continue moving the excavation and foundation for the VSC work east of the demising wall.

One World Trade Center

- Concrete Slabs to Grade Substantially Complete - Complete

These are the slabs that bring the One World Trade Center (1WTC) construction to grade around the perimeter of the project. Completion of this work has enabled the placement of crawler cranes on both the east and west plazas. These cranes are supporting the placement of the building’s perimeter super columns.

- Place Concrete at Shear Walls – 1st Lift Above Ground - Complete

This is the 1st lift above ground for the Tower’s North Core Shear Walls. This has enabled the contractor to complete the North Core to the same level as the South Core shear wall, complete erection steel, and jump the tower crane above the concrete core to be supported by the erection steel.

- Complete Demo of Vesey Street - Complete

The Vesey Street cutback is complete along the entire length of the street, north of the One World Trade Center site. This demolition has enabled the installation of the remainder of the building’s exterior columns and completion of basement deck construction along the northern edge of the building.

- Tower Steel Erection Begins - Complete

An 800 ton crane was placed on the western edge of the building site and is currently placing columns along the western perimeter of the building. All 24 of the 70 ton, 60 foot high columns are scheduled to be in place prior to the end of the 4th quarter.

Greenwich Street

- Notice to Proceed (NTP) for Top-Down Construction - Complete

This milestone, in addition to being critical for the Transportation Hub, is essential for Greenwich Street because it will include the ultimate foundation for the future Greenwich Street, which, along with a new Fulton Street, will reestablish the street grid at the World Trade Center site (as opposed to the super-block that overtook the original street grid when the original World Trade Center was built).

Looking Ahead – 4th Quarter 2009

National September 11 Memorial & Museum

- Complete 1A Steel Decking at 307 Level

This represents the structural steel for the southeast portion of the Memorial's southern fountain. The placement of this steel will be accomplished by use of a crane-way along the Greenwich Street corridor. This crane-way will support both Memorial and Transportation Hub steel erection.

- Sector 5 Concrete Operations Substantially Complete

Creates the Museum viewing area and is the balance of the concrete for the southwest corner of the North Fountain.

- Installation of Phase 1 of Sector 2 Interior Masonry

This masonry work will enable the fit-out for the Museum's northern area to begin.

- Complete Sector 3A Steel Erection

Complete steel erection in SW corner along interface with Vehicular Security Center and over PATH Right-of-Way

- Complete Central Chiller Plant Concrete

Substantially completes slabs, hardened walls, and shear walls for the core and shell of the Central Chiller Plant.

- Complete Sector 3 Masonry Walls

This will complete the masonry work in the Sector 3 area and facilitate completion of the fit-out in that area.

WTC Transportation Hub

- Begin Construction of Underpass Super Columns

These massive columns serve to support the #1 Subway Line at the PATH Underpass as well as the PATH Hall Roof and Transit Hall grade slab. Timing will depend on the Port Authority's restructured procurement process and this milestone may be re-sequenced, though we do not anticipate it affecting the overall critical path of the project.

- Complete Steel Erection at South Mezzanine & Pavilion Transfer Structure

This represents the steel that supports the Memorial Pavilion as well as the southeast corner of the Memorial Plaza.

- Begin Fabrication of PATH Hall Roof Steel

Following shop drawing submissions and approvals, the contractor will begin to fabricate the PATH Hall roof steel to be logically sequenced in time for delivery to the site. The first structural members expected onsite are the columns and plate girders supporting the arched roof structure. The fabrication of the PATH Hall roof steel must begin in the 4th Quarter of 2009 to allow the start of steel erection for the PATH Hall roof to begin in the 1st Quarter of 2010.

- Complete Fulton Street Access Roadway

This work consists of retaining walls, concrete wall and slab infill, permanent backfill, and a temporary paving course for the western portion of Fulton Street. Once complete, this roadway will provide access for Station Roof construction and Tower One steel staging.

- Complete PATH Hall Roof Demolition over Platform A (Tracks 1&2)

This activity includes utility relocations and demolition of the existing temporary station roof over Platform A and Tracks 1 and 2. This work will allow for the subsequent construction of the West Super Columns and #1 Subway line truss as well as the East Box Girder.

WTC Vehicular Security Center and Tour Bus Parking Facility

- Complete Buttress Wall Panels along Cedar Street

Completion of these walls will provide the support to the slurry wall along Cedar Street in an area that tie backs could not be placed.

- Start Construction of Liberty Street Pedestrian Bridge

The completion of this bridge will allow for the excavation of the VSC site while providing uninterrupted safe passage of commuters around the WTC site. Construction needs to start in the 4th Quarter so that it can be complete by early 1st Quarter 2010.

One World Trade Center

- Start Erection of Tower Steel

Placement of this steel began at the end of the 3rd Quarter.

- Erect Tier 2 – Floors 2M & 3 – Perimeter

After all the perimeter steel is erected at Tier 1, 2nd Floor; then the Tier 2 steel erection will take place that covers the 2nd Floor Mezzanine and the 3rd Floor.

- Jump Crane onto Steel at North Core

Once the North Core Shear Walls are completed to ground level and erection steel is assembled, the North Crane will be “jumped” to the next level. This will enable the contractor to continue with the erection of the structural steel.

- Place Concrete on Deck at 2nd & 2M Floors

This will be the first concrete placement on an elevated deck to be built above Ground Level; the concrete will be visible from the street and covers the 2nd Floor and 2nd Floor Mezzanine elevations.

Greenwich Street

- Begin Construction of Underpass Super Columns

These very large columns serve to support the MTA’s #1 Subway Line at the PATH Underpass as well as the PATH Hall Roof and Transit Hall grade slab.

- Begin Construction of Elevation 274' Concrete Slabs

This represents the first level of concrete slabs that will be placed to support the mini-pile columns that currently support the MTA's #1 Subway Line.

Looking Ahead – 1st Quarter 2010

National September 11 Memorial & Museum

- Complete Erection of Sector 1A Steel

This critical section in the southeast corner of the Memorial requires the coordination of both the Memorial and Transportation Hub programs. It is comprised of over 380 tons of steel and outlines the southern foundation's eastern edge. Completing this sector will facilitate the construction of the south pump room and form the eastern perimeter of the south fountain.

- Complete Core and Shell of the South Fountain Pump Room

Completion of this area will establish the location for the mechanical equipment that will operate the south fountain of the Memorial. When complete, it will allow the start of the Mechanical, Electrical, and Plumbing placement within the pump room. The installations of these mechanical items are crucial to having functional fountains for the 10th anniversary of the 9-11 attacks.

- Complete Turnover of the Central Chiller Plant for Fit-Out

The Central Chiller Plant is a critical component of the HVAC systems for the Memorial. Completion of the core and shell work will allow the focus of the construction team to shift to equipment installation and MEP installation.

- Start Sector 3A Concrete

With steel already underway in this sector, the placement of 6,500 CY of concrete will follow. Sector 3A is located over the inbound and operational PATH tracks.

- Finish Spray on Fireproofing Sector 3 and Start Spray on Fireproofing Sector 4

The fireproofing material is sprayed to the underside of the metal decking and columns to slow the effects of heat on the materials to which it is applied. It is a necessary requirement of occupancy of the space.

WTC Transportation Hub

- First Roof Steel to Site

Delivery of this material will be the first structural steel to the site for the PATH Hall roof structure to enable the start of steel placement, which is critical to the

“Deckover” approach that was established during the 2008 Assessment process. This “Deckover” approach will help deliver the northeast corner of the Memorial Plaza by 9/11/11.

- Begin East Box Girder Shoring

The East box girder is a primary support member of the #1 Subway Line in the PATH Hall area. This 200 foot beam, weighing 1,500 tons when complete, will transfer the Hub Roof loads to the super columns.

- Begin Plate Girder erection (AS-1) and continue with Plate Girder (BS-1) erection

These plate girders provide support for the arches that tie into the East Box Girder and North / South Shear Wall.

- Complete Access Bridge for Memorial Pavilion Transfer Structure

This temporary bridge located in the southeast corner of the Memorial will allow for crane access to the area to provide construction material for the southern portion of the PATH Station and eastern portion of the Memorial Plaza.

- Complete Fulton Street Construction Access

Access to Fulton Street, a thoroughfare bisecting the site from East to West, will allow for the feeding of materials to both the WTC Transportation Hub and 1WTC without public interference.

- Complete PATH Hall roof footings in NE Quadrant

This work to complete 17 foundations is currently under construction and will serve as the base for the columns that support the PATH Hall roof.

WTC Vehicular Security Center and Tour Bus Parking Facility

- Complete Demising Wall

This will complete the cut off of the western portion of the south bathtub and allow for the excavation and tieback work to start. By completing the bifurcation of the site, we will be able to mitigate some of the VSC delays caused by the delay in the deconstruction of the former Deutsche Bank building.

- Begin Excavation in Western portion of site

This excavation of the western half of the site will enable the completion of foundations and the placement of VSC steel.

- Complete Liberty Street Bridge Relocation

Currently, the Liberty Street Bridge allows pedestrians to walk from the World Financial Center along the planned Liberty Street roadway through the WTC site to gain access to Greenwich Street. The modification to the Liberty Street Bridge will enable excavation to begin in the south bathtub by redirecting pedestrians to Albany Street. The Port Authority will be reaching out to community stakeholders as plans for the relocation take shape.

One World Trade Center

- Steel Erection Complete – 20th Floor

By the 1st Quarter of 2010, steel erection should reach the 20th floor level. It is at this level – above the reinforced base of 1WTC – that the construction of the typical floor sections begin.

- West Street – Water, Sewer and Fire Services Complete

These represent the connection of major utility services to One World Trade Center, which will provide the building with domestic water, water for the sprinkler system, and connection to the City's sewer system.

- Concrete Core & Slabs Complete – 3rd Floor

The Concrete Contractor will complete this core work, having waited for the Steel Contractor to advance work enough to create an appropriate lag. The concrete core and slab placement for the 3rd floor will occur once the steel installation is sufficiently ahead in order to ensure uninterrupted work.

Greenwich Street

- Excavation under #1 Line Subway between Bents 90-150 to Elevation 240'

Excavation under this portion of the #1 Line subway box will provide access to install the permanent underpinning steel and permanent concrete down to elevation 240'. Work in this area consists of massive excavation of soil.

QUARTERLY UPDATE

The following sections detail the significant actions taken over the past quarter:

Highlights (as of October 1, 2009)

National September 11 Memorial & Museum

- Installed approximately 750 tons of steel – enough for six Statues of Liberty. Steel erection is now more than 80% complete.
- Began installation of the remainder of sector 3A steel over the existing PATH tracks that enter the site from the west side of the site.
- Approximately 10,000 out of a total of 50,000 CY of concrete were placed on the Memorial in the 3rd Quarter. There is over 15,000 CY of concrete and 6 millions pounds of rebar installed to date.
- Installed over 90,000 feet (over 17 miles) of electrical conduit.
- Commenced installation of HVAC ductwork and drainage piping.
- Lowered the “Last Column” into its final location within the Memorial Museum.

WTC Transportation Hub

- Awarded one of the most critical work packages – Greenwich Street Corridor/Underpinning of #1 Subway Line.
- Awarded to Brookfield Properties the completion of the remainder of the 9A underpass work.
- Removed an additional 20,000 tons of soil from under the 1/9 subway line.
- Installed four additional Calatrava arches in the East/West Connector bringing the overall total to 51.

One World Trade Center

- Placed over 7,300 CY of sub and superstructure concrete in the 3rd quarter. To date, over 55,000 CY has been placed at the site.
- Installed 1,500 tons of structural steel, including 12 of the 24 super columns that form the perimeter of the building. Over 3,700 tons of steel has been installed to date.
- An 800 ton crane was assembled on the western side of the site to continue the super column installation.

VSC

- Completed the installation of ten slurry panels totaling over 1,500 CY of concrete and 250 tons of rebar. A total of 18 slurry panels have been installed to date.
- Began Construction of the Demising Wall - a proactive strategy developed to mitigate some of the delays from the ongoing demolition of 130 Liberty Street.

WTC Office of Program Logistics

Throughout the third quarter, the Office of Program Logistics (The Office) continued its efforts to support the accelerated pace of building within the World Trade Center site while planning the coordinated movement of vehicles and pedestrians around the site perimeter. With the arrival of the largest crane yet on site; increased activity on top of the MTA # 1 Subway Line Box that bisects the site; the delivery and placement of One World Trade Center's jumbo perimeter columns; and continued progress on the Memorial and VSC projects, the Office ramped up its collaboration with contractors and various City and State agencies. The Office also continued to communicate actively and openly with community members, businesses, and elected officials of Lower Manhattan through presentations and expanded outreach efforts.

The Office advances this work through efforts in four areas:

- Planning and Analysis
- Stakeholder Coordination
- Communication
- Operations

Planning/Analysis: Expanding proactive efforts to develop and maintain the coordinated movement of vehicles and pedestrians around the site perimeter while providing site access for construction vehicles to ensure construction productivity; focusing on proactive planning to address circulation and access challenges as portions of the site are completed and become operational.

- The Office undertook a comprehensive program to record vehicle and pedestrian volumes along the site perimeter to further its analyses of the transportation impacts of WTC construction activity. The wide-ranging vehicle and pedestrian count program began in September at several intersections, roadways, and sidewalks surrounding the site. Additionally, regular site noise mitigation studies were performed to ensure that PATH commuters and area residents are not unduly impacted by potential construction noise.
- In late September, a Manitowoc 18,000 crane was assembled just west of One World Trade Center. With an over 400 foot boom, it is the largest crane on the site to date. Assembly required a full week, during which time a gate at the northwestern corner of the site ordinarily used by Transportation Hub, Memorial, and VSC contractors was unavailable. The Office coordinated with the contractors on these projects to ensure construction activities would continue unimpeded during crane assembly. Furthermore, The Office secured permission from NYCDOT to use entry gates for construction vehicle egress as well so that access and construction productivity were not adversely impacted during the assembly operation.

- The Office worked closely with the City of New York, the Memorial Foundation, Port Authority staff, and other state and local officials to plan and carry out this year's September 11th commemorative event. Because of the construction progress on the Memorial, family members of 9/11 victims were able to walk out onto the Memorial Plaza for the first time.

Stakeholder Coordination: Continuing stakeholder outreach efforts to identify and proactively address issues related to the various construction projects on the WTC site.

- Access to the Liberty Street Bridge is a critical pedestrian corridor to and from Battery Park City South and the rest of Lower Manhattan. As a result, it is important that all construction activity in this area minimize the impacts on the traveling public. As such, The Office coordinated the realignment of the Liberty Street pedestrian walkway, moving it northward to allow for the construction of a demising wall that is critical to VSC construction progress. This effort involved coordination with five other agencies (NYSDOT, NYCDOT, LMCCC, FDNY and DOB) as well as community residents. The Office worked with the contractor to secure the permit to perform this work. The Office also reported the project information to the community via its two-week construction look-aheads, LMCCC meetings, CB1 notification, WTC alerts, and press advisories.
- As work on the # 1 Subway Line Box has progressed, The Office has been continually updating guidelines for site safety, Environmental Protection Commitments (EPCs) and structural procedures. Regular safety meetings are held to update protocols, and coordination with contractors at the site is in effect. Regular noise and dust monitoring is also being conducted. Coordination with MTA to ensure compliance with weight restrictions on the Box is ongoing.

Operations: Coordinating WTC site operation requirements that will ensure safety of labor and coordinated vehicle and pedestrian flow both in the current condition and as portions of the site become operational.

- Working closely with site operations and security personnel, The Office continued to advance the development of the Site Logistics Coordination Center (SLCC). The SLCC will support construction logistics, security, and law enforcement liaison functions during the construction effort.
- The Office continued its Pedestrian Management program, which places pedestrian management personnel at key intersections around the WTC site. The Office has been working closely with New York City Department of Transportation to ensure enhanced pedestrian experience at these intersections. At the request of the community and NYCDOT, The Office continues to add pedestrian management coverage at various times and locations as needed.

Communication: Providing a central information source for stakeholders, agencies, and the general public regarding WTC construction progress.

- The Office continued to communicate all temporary street closures, noise on site due to construction activity, site drills, and crane activity via the weekly construction schedule, which forecasts site work for two-week stretches and goes out to area stakeholders every Friday.
- Liberty Park walking tours were conducted in August and again in September. These tours offered community members a platform to ask questions and provide input on the design of what will become a major community asset.
- The Office made a number of WTC presentations to community stakeholders, including to Community Board 1, the NY American Planning Association and residents of 90 West Street.
- The Office continued to dispatch construction alerts and WTC updates, which notify stakeholders of changes in construction activity and additional site information. The monthly progress newsletter continues to inform stakeholders, site visitors, and various agencies of construction progress at the site. Newsletter circulation among agencies, stakeholders, and site workers has continued to increase since the publication's launch in May 2009. Newsletters are currently available at numerous locations around the site, with the 9/11 Memorial Preview Site at 20 Vesey Street as the latest addition. Furthermore, construction updates and photographs continue to be posted on the www.wtcprogress.com website, which hosts the "Ask The Port Authority" feature, allowing the agency to respond directly to questions from the public. The website also provides opportunities to subscribe to text and email updates on WTC construction progress.