

ATLANTIC YARDS CONSTRUCTION UPDATE
Weeks of January 2nd and January 9th

In an effort to keep the Atlantic Yards Community aware of upcoming construction activities, ESD and Forest City Ratner provide the following outline of anticipated upcoming construction activities. We hope it keeps you informed and helps you plan for any possible inconveniences. Please let us know if there's any way we can improve these updates.

If you have any questions please feel free to contact ESD's Project Director at 212-803-3766 or AtlanticYards@empire.state.ny.us

Please note: the scope and nature of activities are subject to change based upon field conditions. In addition, during the utility work water shut-offs may be required; these shutdowns are done under the oversight of DEP and property owners will be given advance notice. All work has been approved by appropriate City and State agencies where required.

Construction at the Arena Site Progresses as Scheduled

Deliveries & Site Access

- Hunt has demobilized the access ramp at Dean Street and Flatbush Avenue. The main gate and delivery ramp is now and will remain for the future at Pacific Street and 6th Avenue. The access route to the Pacific gate remains posted at the site and is the same as it has been throughout the project. Access is also available via the Atlantic Avenue gates at the Fort Greene intersection, midway between the Ft. Greene and 6th Avenue intersection and limited access for concrete trucks on Flatbush Avenue across from 5th Avenue and at the Dean Street intersection.
- Steel deliveries and steel erection will continue throughout this reporting period.
- Both of the two larger steel erection cranes inside the arena have been demobilized and replaced by a hydraulic crane in the Bowl.

Rodent Control Measures Taken

- Hunt and FCRC continue to review and implement actions to supplement the site and adjacent neighborhood's rodent protection activities. Hunt has more than 225 rodent bait stations within the arena work site and Block 1129 that are being monitored and maintained on a weekly basis.

Excavation

Excavation for the footings within the footprint of the arena in Area “C” were completed during the previous reporting period along with slab on grade. These footing excavations include the truck elevator.

Steel Erection and Stadia Installation

- A second shift was implemented on December 6th to demobilize the steel erection cranes. The need for a second shift crew will be re-evaluated throughout this period. Some weekday overtime (3:30 PM to 11:00 PM) may be needed and work on Saturdays will continue.
- The maintenance of the site to accommodate steel erection and stadia installation will continue during this period. Steel and stadia will continue to be brought into the site through the gate at Pacific Street and 6th Avenue throughout this reporting period.
- Primary roof steel erection will continue during this reporting period.
- Intumescent (fireproof) painting of the structural steel where required as an alternative to spray on fireproofing will continue on a second shift operation as needed and as weather allows during this reporting period.
- Roof decking installation will continue during this reporting period.

Façade Installation

- The façade erector will continue the installation of erection clips and panels on the Flatbush Avenue and along the west elevations during this reporting period. The installation of curtain wall and curtain wall/lattice panels will continue on the Flatbush Avenue elevation during this reporting period. In the interest of public safety, and as approved by the New York City Building Department, pedestrians using the east side sidewalk of Flatbush Avenue next to the arena may be temporarily diverted to across the street by Hunt flagmen during high level work. The façade erector will continue with installation of erection clips along the 6th Avenue elevation this reporting period. Installation of the erection clips will continue on the Dean Street elevation during this reporting period.
- The façade subcontractor resumed a second shift on December 19th and will continue the second shift as needed throughout this reporting period. Work may be performed on the Flatbush Avenue and 6th Avenue elevation on this shift.
- The installation of façade panels at the street level and at the Upper Concourse levels on Atlantic Avenue has been substantially completed. Contractor will return to install the façade panels at the uppermost elevation and in the area of the material hoist at a later date.

Waterproofing & Fireproofing

- The application of waterproofing to the interior foundation walls from 6th Avenue at Pacific Street starting north will continue during this reporting period, as weather allows. Backfilling at these locations will follow the waterproofing and will continue during this reporting period.
- The waterproofing of the interior walls of the east stormwater retention tank should resume this reporting period. This work may be performed on a second shift.
- The spray fireproofing will continue throughout this reporting period as weather allows. The contractor performing this work will continue to use temporary electric to power their equipment. The spray fire proofer will work a second shift as needed during this reporting period. The second shift will be continued on an as needed basis beyond this reporting period.
- The installation of temporary weather walls (visqueen & tarps) as well as temporary rubber roofing, to provide protection through the winter months, will continue this reporting period.

Mechanical, Electrical, & Plumbing

- The boiler is being piped and electrical service to the boiler is being installed during this reporting period.
- The primary switchgear installation for the Network Protector Room and the ConEd vault wiring installation will continue this reporting period.
- The piping for the storm/sanitary/water services from the street mains to the arena at 6th and Pacific has been cancelled for this reporting period, due to site constraints ((access at the main gate). This work will take place in March 2012. A second and/or third shift as well as weekend work is being considered to execute this work prior to March 2012.
- The construction fence at the ConEd vault was revised in the last reporting period to allow ConEd and the Arena contractors to begin installation of primary power conduit, cable and drainage piping to the arena at this point of entry. This will require work in the street by ConEd personnel – installers and Arena contractors. Metal plates will cover the cable work in Dean Street while it is underway.
- Mechanical, electrical, plumbing and fire protection rough-in work will continue through this reporting period at the Event, Main, Concourse, Lower Suite, Upper Suite and Upper Concourse levels.
- Elevator installation will continue this reporting period.

Interior Build-out

- The masonry contractor will continue working at all levels during this reporting period. The masonry contractor will also be working the elevator shafts.
- Precast concrete stadia erection of the upper seating bowl was completed during the last reporting period at Blocks 10-12 (Dean Street elevation). Precast erection will resume within the lower bowl seating area following completion of roof erection. The placement of concrete column wraps will continue during this reporting period.

- The gypsum wallboard (GWB) aka drywall framing & construction subcontractor will continue layout of walls during this reporting period and will begin placement of the top wall track and partition walls at all levels. Steel stud placement for partition walls will continue during this reporting period. The wallboard installation will continue on the Event Level, on Main Concourse, and on Lower Suite Level this reporting period.
- The placement of slab on grade (SOG) concrete will continue within the arena site at the event level, Area “C” during this reporting period.

New Subway Entrance Moves Forward

Vibration Monitoring

- BMT vibration monitors are no longer required by the NYCT and were removed. IRT monitors will also be removed in areas where they are no longer required.

Demolition

- Interior demolition of the new southbound local IRT stair has been completed and construction of the new stair will continue for the next several weeks below grade. The concrete has now been placed and the masonry work is nearing completion. Finish work and lighting will then follow.

Rodent Control Plan

- Civetta has had a rodent control plan in place since September 2010 which includes above and below ground baiting and maintenance on a weekly basis.

Work outside the Fence

- Permits have been secured for the portions of the street immediately adjacent to the “Tip” of the project area. The southern eastbound lane of Atlantic Avenue continues to be taken behind an expanded MPT in order to facilitate the removal of the planking/decking to be removed and the installation of temporary roadway restoration. A pathway for the new water main has been coordinated with the utility team and is now complete. A substantial amount of the roadway plank has now been removed. This will now permit the next phase of the water main installation to take place which is scheduled for the beginning of the year. This expanded MPT, noted above, has been approved by DOT.
- Work on the northern and southern vent shafts along Flatbush Avenue is now substantially complete.

Concrete

- The new roof over the new fare array area has been poured. Construction of the reinforced concrete staircase structure is substantially complete with steel treads and tiled risers to follow. Concrete foundation walls are substantially complete and construction of the station roof near the tip, at Flatbush and Atlantic Avenues, is now substantially complete. The two new escalator trusses from the fare array area to the new plaza have been set and final assembly continues. The new elevator enclosure has also been erected and elevator rail installation continues.

Steel Erection

- Steel erection of the above ground entrance canopy is now complete and the deck installation is substantially completed. The concrete structural roof slab has now been placed.

Waterproofing

- Waterproofing behind the foundation walls is now complete. Waterproofing of the new roof at the tip of the site is also now substantially complete and the balance of the roof waterproofing is now underway and is anticipated to be complete by the end of the year.

Erection of Interior Walls

- Interior masonry walls in the fare array area and in the new utility rooms under the main staircase are now substantially complete. Masonry infill walls at the BMT mezzanine will continue in January.

Mechanical, Electrical & Plumbing

- Mechanical, electrical and plumbing work within the subway station below ground is underway to accommodate the new station configuration. Work continues in the new utility rooms under the main staircase.

Track Outages (General Orders)

- IRT and BMT Tunnel inspections have taken place and the tunnel repair work is now substantially complete in both the IRT and BMT tunnels. Minor repair and cleanup work will occur on selective evenings under scheduled NYCT flagging protection.

What's Happening in the Rail Yard

Deliveries

- Posillico/Tully will continue to receive deliveries of material for lagging, tieback and mini-pile pipe for the car shop, yard and bridge during this reporting period.

Rodent Control Measures Taken

- McKissack has implemented an ongoing rodent control plan which is being monitored weekly. There are over 166 bait stations laid in this area and on Block 1129.

Excavation & Soil Characterization

- General excavation and soil removal work will continue during the reporting period and for the next month.

Drilling – Support of Excavation, & Tiebacks,

Some remaining drilling of tiebacks in the east and middle yard will continue. This tieback drilling and placement of the attendant wood lagging will continue for the next month, as they go together the remaining with excavation.

Drainage System

- Posillico/Tully is working from west to east to install deep drainage piping in the yard. They will also continue excavation for the associated stormwater manholes. This work will be ongoing for the next 3 months. Through this period, Retention Basins “A” and “B” have been completed and back-filled. Work will now move further east to Basins “C” and “D”.

Electrical Ducts and Manholes

- Conduit formwork continues to be placed throughout the yard for underground electrical duct banks (for both train traction power and signal). Precast manholes continue to be placed at multiple locations. This work will continue for several months.

Carlton Ave. Bridge

- MPT has been in place at Carlton Ave. and Pacific Street for work on the new south abutment. Excavation to the subgrade for the South Abutment foundation has been completed and the reinforced concrete footing poured. During this reporting period the contractor will continue to form and install rebar for the stem wall of the new South Abutment.
- Formwork for the footing of Pier #2 has been placed in a prepared excavation in the mid-yard. Rebar will be placed during this reporting period prior to pouring the Pier #2 footing in January..
- Posillico/Tully will continue the installation of the 30 mini-piles required to be installed to support the new North Abutment during the next two weeks.

Car Shop

- The forming and pouring of the foundations and retaining walls for the Car Shop will continue the next few months. Work on the new Lead Track retaining wall is scheduled to begin within the next month. Work will continue in approximately 200 foot sections until the foundation and walls are completed. All of this work is located within Block 1121 adjacent to the Car Shop.

East End (former Gasoline Station)

- Posillico/Tully will continue working on the lagging and tieback work at this location and continue to lower the grade there. SOE Pile-drilling in this area below grade is complete although caisson piles will be drilled in early February after the yard has been lowered. The excavation and associated support work will be on-going for the next couple of months.

Schedule Maintenance

- Due to the need to expedite all of this work for overall schedule maintenance, it will be progressed on double shifts during the weekdays along with Saturdays and selected Sundays & holidays.

Yards Lights

- During the week, to facilitate early start and late finish of work, Yard Flood Lights will be turned on at 6am and from dusk to 11:00 pm, during double shifts through the completion of the Carlton Avenue Bridge replacement, as needed.

Replacement of Adjacent Water Mains and other Utility Work

- On behalf of the DEP, FCRC is managing the installation of new water trunk main and associated distribution mains on Flatbush and Atlantic Avenues. The work is divided into three stages.
 - Stage One is the work on the west side of Flatbush, north of the Atlantic intersection, continuing across Flatbush to the edge of the transit improvements on the arena block. This is called Stage One because the design of this section was critical to the remaining two stages. The actual installation will follow Stage Two.
 - Stage Two is the work along the south side of Atlantic Ave from a location just west of the former 5th Avenue bed, running eastward to a location west of the 6th Avenue intersection.
 - Stage Three is the area between Stages One and Two, across Flatbush Avenue and the top of the future new transit station improvements.

The installation of the new trunk water main in Stage Two on the south side of Atlantic Avenue east of the Fort Greene intersection is complete and has been cleaned, pressurized, inspected and chlorinated.

Stage One began in early August. The first work included the installation of a distribution water main along the sidewalk of Flatbush, north of Atlantic. The work is being done at night (10 pm to 6 am) and requires partial closure of the sidewalk and the curb lane of traffic during the work hours. The work will take two to three months in this location and then will move on southward and cross Flatbush. The bus stop at the west side of Flatbush, north of Pacific, has been removed by NYC DOT, per the approval of NYCTA. The trench for most of the work in the Flatbush sidewalk is completed and plated. The contractor will continue for the next month. Steel pipe was installed, welded and partially backfilled along the northern part of the zone.

- Verizon retained a contractor to install new conduits in Atlantic Avenue west of Flatbush. This work has been completed.
- Stage Two along Atlantic Avenue between the transit connection work area and 6th Avenue was completed in August.
- Stage Three, which is over a portion of the transit area, will begin in January.
- The sanitary sewer and water taps on Dean Street are complete, inspected, backfilled and paved.
- Stormwater discharge at Flatbush Avenue is complete but has not yet been inspected. Work on the discharge at 6th and Pacific Streets is paused until access to the arena ramp and perimeter is available. We expect the work to resume in 2012. The work will include a trench and associated sheeting or lagging approximately 17 to 20 feet deep to reach the bottom of the existing sewer main which the storm system will connect to. Because the main is almost in the center of the road and traffic will be limited until it is plated, and subject to DOT and OCMC approval, the trenching can be cut off at grade and plated over. This work will be coordinated with DOT, NYPD, FDNY as well as the arena contractor.
- During the course of utility installation work, the contractor may encounter unforeseen contaminants, underground storage tanks or other structures. In the event that this happens and where appropriate,

notification will be given to the DEC, VOC monitoring will be continuously performed, and remediation steps will be implemented.

Block 1129 (Carlton, Dean, Vanderbilt, Pacific) – Construction Staging

- FCRC and Hunt have activated a delivery dispatch center here to dispatch all delivery trailers and trucks to the arena site in order to further minimize impacts to the local traffic and pedestrian patterns. This dispatch center will remain in operation during this reporting period.
- Occupancy/Use of the lay down area due south of the 752 Pacific Street office building will continue during this period.
- The installation of gravel driving base within the Block 1129 material lay down lots may continue during this reporting period.
- The Utility contractor moved most of its operations from the southeast corner of Block 1129, lot 54 (the corner of Vanderbilt and Dean) to Block 1129, lot 21 (just east of the 752 Pacific Street building and adjacent to Pacific Street) to help mitigate noise impacts to residents. The contractor will continue to make every effort to move the remaining equipment and materials to the new location during daytime work hours.

Traffic Mitigation Site Work

The FEIS requires the construction of certain roadway, sidewalk and traffic signal improvements prior to arena opening to mitigate traffic projected in the area. Work has been divided into two seasons – summer/fall 2011 and spring/summer 2012. The details of the work have been reviewed with City agencies, Community Boards and the general public.

The first element of the 2011 work includes the installation of curb extensions at the Pacific/4th Avenue, Dean/Flatbush and Pacific/Flatbush intersections and the reversal of traffic from westbound to eastbound on Pacific between 4th and Flatbush Avenues. This work is substantially complete.

- Work related to the closure of the northbound lanes of 4th Avenue at Atlantic Avenue is substantially complete; however, based upon DOT's review of the operations of this intersection since the initial installation, there will be additional signage and striping modifications. The work remaining includes the installation of two special poles and permanent signs. Permits for the striping have been issued and work will be performed when the weather is favorable. Later next year, the MTA will replace bollards in the area and install other improvements. Our contractor will return to the site to replace the area once the MTA work is complete. Work will be performed at night if lanes have to be taken out of service for access to the site.
- The Pacific and Flatbush curb extension is complete.
- The curb extension on Dean Street, west of Flatbush is complete.
- The Pacific Street & 4th Avenue curb extension is complete.

- Atlantic Avenue Medians

Work will begin late 1st quarter or early 2nd quarter 2012 on the remaining traffic mitigation work, most of which is made up of raised medians along Atlantic Avenue from Flatbush Avenue to Vanderbilt Avenue. OCMC is reviewing the scope and location of the medians and will determine whether the work shall be performed during limited daytime, which will prolong the construction period, or at night between 10pm and 6 am. If the work is done at night, mobile light units will be used to illuminate the work area. The arena block, Carlton Avenue Bridge reconstruction and DDC utility work between Carlton and Vanderbilt Avenues also take lanes out of service. Therefore, the median work must be scheduled block by block to coordinate with the other work schedules and MPT configurations. Because the work is a few feet directly above the LIRR tunnel into Atlantic Terminal, the means and methods must be reviewed and approved by the LIRR.

Any required nighttime work will be concluded by 6 AM so that related temporary MPT can be removed for the morning rush hour. All long-term MPT will have DOT approval and permits and will be removed when work in the area is completed.

The traffic mitigation work to date required the use of jack hammers due to the requirement to install new conduits for new traffic signals being installed at the 4th, Flatbush and Atlantic intersections and the existence of thicker than normal road bed in many locations around Times Plaza. This second condition was due to the proximity and thickness of IRT and LIRR tunnel roofs, causing the inability to use larger more efficient equipment (i.e. excavators and hoe rams) which would have reduced the duration of the noise substantially. After the pavement was saw-cut down to approximately 18", jack hammers were required to be used to do remaining work removing pavement. The upcoming Atlantic Avenue Median work means and methods are being discussed with the LIRR with the goal of performing the pavement removal in a more efficient, rapid way to reduce noise intensity and duration while conforming to LIRR requirements for work in proximity to their facilities.

Arena Site Work

The revised Flatbush Avenue MPT is allowing work to continue on the installation of the Flatbush Avenue façade and the installation of bollards along this same stretch. Part of the overall site work for the arena block, bollard installation, commenced at the intersection of Dean and Flatbush in the area of the southern vents and is continuing north along Flatbush, eventually continuing around the entire block. The bollard work is anticipated to be complete by the middle of January. Other work that will be done as part of the site work includes sidewalks, installation of pavers, street furniture, street trees, light and signal poles, way finding signage, hydrants and the canopy to the new subway entrance. Additional detail on the work will be provided as the contractor progresses.

Installation of the underground drainage has commenced within the plaza area located at the tip of the site and is substantially complete. The balance of the drainage will be completed as the work at the tip of Atlantic and Flatbush is completed in the Spring and Summer. Preparation for the placement of temporary asphalt working surface throughout the plaza is now completed.

Environmental Remediation

- Soil that has been classified as clean, contaminated or hazardous will be removed from the site as part of the excavation activities and brought to appropriate disposal locations.
- Where excavation and soil removing activities occur in areas of known Volatile Organic Compounds (VOC's) (BL 1119, lot 1 & 64, BL 1118, lot 1 and BL 1127, lot 1) VOC monitoring will be performed as required in the Community Air Monitoring Plan ("CAMP") and VOC Best Monitoring Practices documents.
- CAMP monitoring is continuing on all areas of soil disturbance per the project plan, including excavation, grading and demolition.
- VOC monitoring as required by the CAMP continues.
- During the course of the excavation work, the contractor may encounter unforeseen contaminants, underground storage tanks or other structures. In the event that this happens and where appropriate, notification will be given to DEC, VOC monitoring will be continuously performed while excavating these materials and remediation steps will be implemented.

Maintenance & Protection of Traffic (MPTs) For Your Safety

- MPT continues to be in place along the southern side of Atlantic Avenue between Flatbush & 6th Avenue. The current configuration of this MPT may be adjusted to accommodate the Stage Three work described in "Replacement of Adjacent Water Mains and other Utility Work". This adjustment will result in the expansion of the MPT into the southern eastbound lane of Atlantic Avenue. This expanded MPT is in accordance with previously approved MPT.
- MPT remains in place on the southern side of Atlantic between Carlton & Vanderbilt Avenues. Posillico/Tully has installed car shop roof support columns through openings that were core-drilled in the sidewalk and work continues underneath in the car shop while the roof is temporarily supported from a column-based roof bracing system. This work will take several months. All DOT permits remain in place.
- MPT continues to be in place for the Carlton Avenue Bridge south abutment construction staging from Pacific Street. The exact location is in the intersection of Carlton Avenue & Pacific Street. This is not having an impact on the traffic flow at this intersection.
- MPT currently installed along Flatbush Avenue between Atlantic Avenue and Dean Street is being reconfigured to allow the construction of site work on the Arena Block. MPT will be adjusted during the times outlined below resulting in the following travel lane configuration along Flatbush Avenue:
 - 6 AM TO 10 AM there will be three (3) northbound travel lanes and two (2) southbound lanes;
 - 10 PM to 6 AM there will be four (4) travel lanes, two (2) northbound and two (2) southbound;
 - All other times of the day, there will be three (3) southbound travel lanes and two (2) northbound.

During overnight work hours (10 PM to 6 AM) the 8' construction fence will be removed and temporary timber barrier will be shifted out into the curbside travel lane to permit site work. The barrier will be removed and the travel lane restored daily in time for morning rush hour. A pedestrian pathway will be maintained along the east side of Flatbush Avenue. However, during night time work hours, 10 PM to 6 AM, the portion of the pathway between 5th Avenue and Dean Streets will be closed and pedestrians will be directed by a flagger (provided by the contractor) to the west side of Flatbush.

Please Be Advised of Anticipated Nighttime & Weekend Work

During this reporting period the following work will be performed either at night or during the weekend as noted. All work will be done pursuant to approved permits:

- Long Island Rail Road/Vanderbilt Yard/ Carlton Avenue Bridge:
 - All weekdays all locations in the yard: 6:00AM to 11:00PM
 - Saturdays as required: 7:00 AM to 11:00 PM
 - Sundays and Holidays as required: 8:00AM to 11:00PM
 - The weekend work being performed could be in any area of the yard, and within MPT areas for which permits are on hand.
 - The work hours will remain in place for a minimum of the next three months.
- Arena Site:
 - Arena weekend work will be scheduled no later than close of business on the preceding Thursday, where make-up work due to weather or other delays makes it necessary. Saturday work is expected to continue for this reporting period.
 - Subject to receipt of permits, a second shift shall be continued throughout this reporting period, from 3 – 11 PM, Monday-Friday only. Also subject to receipt of permits, a third shift may be instituted during this reporting period, from 11 PM – 7 AM, Monday –Friday only.
 - Hunt has been granted a permit to allow for deliveries from 6 AM to 7 AM to the Arena site from the dispatch center. This work allows for an additional hour of deliveries to take place outside the neighborhood peak traffic patterns and reduce congestion and interference with the local traffic.
 - The second shift arena contractors are noted within the arena summary above.
- NYC Transit Improvements:
 - Temporary concrete road decking will now be removed as noted above. Such work will be performed at night per DOT regulations. Traffic will be restored every morning according to DOT stipulations.

Work related to the BMT structure and below grade concrete, steel and MEP work may be conducted on Saturdays January 7th and 14th during this reporting period.

- Arena Site Work:
 - Underground utility work may occur within the site at the main plaza. Work will be conducted during the hours of 8 A.M. to 4 P.M., subject to NYCDOB permits.

- Block 1129 – staging area:
 - Contractors conducting night work may have cause to enter and exit this area as it serves as a staging and material/equipment storage area.

During the course of work, conditions may be encountered at the site which may warrant the need for night and/or weekend work. Work will be done pursuant to approved permits.

How to Reach Our Community Liaison Office (CLO)

Persons seeking access should do so from Carlton Avenue. Both the CLO phone line (866-923-5315) and email (communityliaison@atlanticyards.com) are operational and community residents are encouraged to use both when making inquiries about the project.