U. S. Department
of Transportation

**Federal Aviation
Administration**

New York Airports District Office
159-30 Rockaway Blvd, Suite 111
Jamaica, New York 11434

August 29, 2016

Mr. Ed Knoesel
Port Authority of New York and New Jersey
Aviation Department
Four World Trade Center
150 Greenwich Street, 18th Floor
New York, NY 10006

Re: John F. Kennedy International Airport (JFK)
TWA Flight Center Hotel Project
Environmental Determination

Dear Mr. Knoesel:

The Federal Aviation Administration (FAA) has recently approved the Environmental Assessment (EA) and made a Finding of No Significant Impact/Record of Decision (FONSI/ROD) for the TWA Flight Center Hotel Project at John F. Kennedy International Airport. A copy of the signed FONSI/ROD and the EA signature page are enclosed.

This Federal environmental approval is a determination by the Approving Official that the requirements imposed by applicable environmental statutes and regulations have been satisfied by a FONSI/ROD.

In compliance with Council on Environmental Quality (CEQ) regulations 1501.4(e)(1) and 1506.6, we require that your office make the final EA with Signature Page and FONSI/ROD available to the affected public, and announce such availability through appropriate media in the area. The announcement shall indicate the availability of the document for examination and note the appropriate location of general public access where the document may be found (i.e., your office, local libraries, public buildings, etc.). We request that a copy of such announcement be sent to the NYADO when it is issued. Given your desire to implement this project in the very near future, this announcement should happen as soon as possible.

Finally, your attention is directed to the mitigating measures that were made a condition of approval of the FONSI/ROD. These measures must be taken by the airport sponsor in order to meet the terms of the FONSI/ROD. Please note that this correspondence represents the formal Federal Environmental Finding; additional coordination with the FAA may be necessary for this project with regard to an Airport Layout Plan Approval, Airspace Review, and any potential funding eligibility.

The process of making these environmental determinations is that of a partnership between yourself, as airport sponsor, and the other contributing parties, both public and private. We thank you for your effort and cooperation.

Please contact our office if you have any questions.

Sincerely,



Marie C. Jenet
Environmental Specialist
New York Airports District Office

Enclosures (2)

cc: D. Free, PANYNJ
N. Kimball, PANYNJ
J. Steven, PANYNJ
C. Vaughn, ACHP
R. Pierpont, SHPO
B. Cumming, SHPO

bcc: A. Brooks, AEA-610
G. Butler, AEA-7

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
FINDING OF NO SIGNIFICANT IMPACT
RECORD OF DECISION

Location
John F. Kennedy International Airport (JFK)
Queens, New York

1. Introduction

This Finding of No Significant Impact/Record of Decision (FONSI/ROD) sets out the Federal Aviation Administration's (FAA) consideration of environmental and other factors for Airport Layout Plan (ALP) approval for the Trans World Airlines (TWA) Flight Center Hotel Project at John F. Kennedy International Airport (JFK). This FONSI/ROD is based on the Final Environmental Assessment (EA) for the TWA Flight Center Hotel Project, John F. Kennedy International Airport, dated July 2016. The Final EA and its appendices are incorporated herein and are made part of this finding. The Final EA is included as Attachment 1 to this FONSI/ROD.

2. Background (Refer to Chapter 1 of the Final EA)

In 2004, an EA, FONSI/ROD, and Section 4(f) evaluation were completed for the Redevelopment of Terminal 5/6 at JFK. Implementation of this project involved the Construction of Terminal 5 (The Jetblue Terminal) and demolition of Terminal 6 as well as the demolition of Flight Wings one and two of the historic TWA Flight Center. The historic TWA Flight Center, designed by Finnish architect Eero Saarinen in 1962, is considered a masterwork of exceptional importance and is also considered to have begun the modern architectural movement.

To address the impact on historic resources resulting from the Terminal 5/6 project, the FAA, the Advisory Council on Historic Preservation (ACHP), the New York State Historic Preservation Office (SHPO), and the Port Authority of New York and New Jersey (PANYNJ) entered into a Memorandum of Agreement (MOA) for the Rehabilitation, Restoration, and Adaptive Reuse of the TWA Flight Center. The MOA set forth a number of measures that would be undertaken to avoid, minimize and mitigate the Adverse Effect of the Terminal 5/6 Redevelopment Project, including how consultation would proceed regarding the future treatment and reuse of the TWA Flight Center.

As a result of the 2004 MOA, the TWA Flight Center was formally listed on the National Register of Historic Places in October 2005. Since then, the PANYNJ has performed approximately $19 million in restoration and maintenance work on the historic structure. The 2004 MOA stipulated that an adaptive reuse developer should be retained to develop the TWA Flight Center in accordance with the Secretary of the Interior Standards for the Treatment of Historic Properties. The Proposed Action is intended to address the adaptive reuse of the TWA Flight Center into a hotel facility.

3. Proposed Action Description (Refer to Chapters 1 and 3 of the Final EA)

The Proposed Action is the development of the TWA Flight Center Hotel as an adaptive reuse of the historic TWA Flight Center. Specifically, the Proposed Action includes:

- Demolition of non-historic portions of the TWA Flight Center building.

- Construction of two new guest room hotel buildings located on either side of the TWA Flight Center building, including below grade (basement) areas. There would be a total of approximately 505 guest rooms, split roughly evenly between the two new buildings.

- Restoration and reuse of the historic TWA Flight Center:

  - Repurposing of the main building as the hotel lobby area and amenities, including retail space, a food hall, counters for hotel and event check-in, three restaurants and lounge areas, construction of new ramps to connect the lower and main lobby levels following the historic path of circulation, ballroom area, and exhibit area for historic interpretive displays to feature the history of the TWA Flight Center, building architect Eero Sarinen, JFK Airport, and aviation in New York City;

  - Utilization of the east and west connector tubes to provide pedestrian walkways to the airport Terminal 5 and the hotel buildings; new passageways would be cantilevered from the guest room buildings to connect to the east and west tubes;

  - The lobby area would include a minimum of two electronic ticketing kiosks for use by airline passengers with carry-on luggage only.

  - Below grade levels would be excavated and expanded to include 50,000 square feet of conference space, including flexible meeting rooms, kitchens, mechanical rooms, laundry, fitness center, and space for historic interpretive displays.

- Placement of a repurposed Lockheed "Super G" Constellation Airplane between the two connector tubes and accessed via walkways from the guest room buildings for use as a cocktail lounge.

- Redesign of the existing roadway network to include guest drop-off and valet parking to accommodate approximately 44 vehicle parking spaces. Hotel guest and conference/banquet attendees would also be able to self-park in the existing Yellow Garage. A walkway would be constructed to connect the TWA Flight Center Hotel lobby to the nearby Terminal 5 AirTrain station.

- Construction of a new on site cogeneration facility to power the Flight Center Hotel, including the lobby and two guest room buildings.

4. Necessary Federal Actions

The FAA's actions, relative to the Proposed Action, include making a determination of compliance with CEQ regulations (40 C.F.R. Parts 1500-1508), and other applicable federal

statutes, rules, regulations and approvals. The FAA findings within which these determinations are made are found in Section 10, "Federal Agency Findings" of this FONSI/ROD. The FAA must also take the following federal actions:

a. Unconditional Approval of a revised ALP to depict the Proposed Action pursuant to §47107(a)(16);

b. Determine, and approve of, the effects of this Proposed Action upon the safe and efficient utilization of navigable airspace pursuant to 49 U.S.C. §40103(b) and, 49 U.S.C. §44718, and 14 CFR Parts 77 and 157 ;

c. Determination under 49 U.S.C. §40101(d)(1) and §47105(b)(3) as to whether the Proposed Action meets applicable design and engineering standards set forth in FAA Advisory Circulars;

d. Maintain continued close coordination with the PANYNJ and appropriate FAA program offices, as required, for safety during construction;

e. Determination under 49 U.S.C. §44502(b) that the Proposed Action is reasonably necessary for use in air commerce or in the interests of national defense; and

f. Approval of appropriate amendments to the JFK Airport Certification Manual (ACM), as required, pursuant to 49 U.S.C. §44706.

5. Purpose and Need (Refer to Chapter 2 of the Final EA)

The purpose and need for the Proposed Action is to restore, rehabilitate and reuse the historic TWA Flight Center to add a high quality full service hotel, conference center and amenities, within the central terminal area of JFK and with AirTrain and inter-terminal connections, to enhance customer convenience, and to generate economic activity.

6. Alternatives (Refer to Chapter 3 of the Final EA)

In addition to the Proposed Action, several other alternatives, including the No Action alternative, were evaluated but eliminated from further consideration. Under the No Action alternative, the TWA Fight Center Hotel would not be built and the historic TWA Flight Center would not have an adaptive reuse, rehabilitation or restoration as set forth in the 2004 MOA and would not meet the project's identified purpose and need. Hotel sites at other locations within JFK Airport property and another location off JFK Airport property were considered, however, they do not meet the project purpose and need of establishing an adaptive reuse of the historic TWA Flight Center. Smaller hotel proposals were also considered and not carried forward by the Port Authority in response to earlier developer Requests for Proposals (RFPs). In review and negotiation of these smaller hotel proposals, it was determined that the hotel proposals were not financially viable and could not support the development of the hotel or the rehabilitation, restoration, and maintenance of the TWA Flight Center pursuant to the 2004 MOA.

7. Environmental Consequences (Refer to Chapter 5 of the Final EA)

This section of the FONSI/ROD summarizes the environmental consequences of the No Action and Action alternatives. Where an alternative would result in an environmental impact, FAA

determined whether that impact would be significant based upon FAA impact thresholds established in FAA Order 1050.1F, FAA Order 5050.4B and guidance contained in the 1050.1F Desk Reference. The following impact analysis provides highlights of the more thorough analysis presented in the Final EA. It is FAA's finding that the Proposed Action will not have any significant environmental impacts.

7.1 Historic Preservation and Department of Transportation (DOT) Section 4(f) (Refer to Chapter 5-2 of the Final EA)

The Proposed Action involves development on land protected by Section 4(f) of the DOT Act of 1966 (49 U.S.C. §303(c)). The Act provides that the Secretary of Transportation shall not approve any program or project that requires the use of any publicly owned land from a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance or land from an historic site of national, State, or local significance as determined by the officials having jurisdiction thereof, unless there is no feasible and prudent alternative to the use of such land and such program, and the project includes all possible planning to minimize harm to the 4(f) property resulting from the use. Publicly and privately owned historic sites of national, state and local significance are protected under this statute and are subject to Section 4(f) evaluation if they are listed or eligible for listing on the National Register of Historic Places.

In 2004, an EA and Section 4(f) Evaluation were prepared for the Terminal 5/6 Redevelopment Project at JFK International Airport. To address the Adverse Effect on historic resources from this project, the FAA, the ACHP, the SHPO, and the PANYNJ entered into a MOA for the Rehabilitation, Restoration, and Adaptive Reuse of the TWA Flight Center, pursuant to the National Historic Preservation Act (NHPA) (54 U.S.C. 300101 et seq.). The MOA set forth a number of measures that would be undertaken to avoid, minimize and mitigate the Adverse Effect of Terminal 5/6 Redevelopment Project, including how consultation would proceed regarding the future treatment and reuse of the TWA Flight Center.

More than ten years have elapsed since the execution of the 2004 MOA during which time many of the conditions provided therein have been accomplished or are no longer required. The 2004 MOA established the initial framework that led to the request for proposals ultimately leading to the PANYNJ's selection of the Developer and the proposed TWA Flight Center Hotel development plan. The TWA Flight Center Hotel is a direct outcome of, and serves to implement certain stipulations of the 2004 MOA with respect to the restoration, rehabilitation, and adaptive reuse of the TWA Flight Center.

As a result of the 2004 MOA, the TWA Flight Center was formally listed on the National Register of Historic Places in October 2005. The TWA Flight Center, consisting of the Main Terminal Building, East and West Tubes, and Flight Wing 2, was designated a New York City Landmark in 1994. Because the TWA Flight Center is listed on the National Register of Historic Places, the site is considered 'Section 4(f) land.'

In the absence of a prudent and feasible alternative that avoids all use of Section 4(f) land, there must be a demonstration that the project incorporated all possible planning to minimize harm to the resource. For the Proposed Action, many meetings and communications occurred, including more than 30 meetings of the Redevelopment Advisory Committee (RAC) which was established

pursuant to the 2004 MOA and has been providing input regarding the proposed TWA Flight Center Hotel design and adaptive reuse of the TWA Flight Center.

The NHPA requires federal agencies to consider the impacts and effects of their undertakings on historic sites. Pursuant to 36 Code of Federal Regulations Part 800 (36 C.F.R. 800), implementing Section 106 of the NHPA, the FAA, in conjunction with the PANYNJ, SHPO and ACHP, has discussed and coordinated the Proposed Action with the following consulting parties:

- The National Trust for Historic Preservation
- The Municipal Art Society of New York
- The New York City Partnership
- DOCOMOMO[1] US/New York Tri-State
- The Finnish Consulate General
- The New York Landmarks Conservancy
- The New York Building Congress

The views of the consulting parties and the public at large were an essential component that assisted the FAA in reaching an informed federal decision. Based on the Section 106 consultation regarding the design of the proposed TWA Flight Center Hotel and the adaptive reuse of the TWA Flight Center, a First Amendment to the 2004 MOA has been prepared.

The parties to the Section 106 process consulted, commented, and provided input on the terms, conditions, and stipulations of the First Amendment to the 2004 MOA. The First Amendment to the 2004 MOA documents compliance with the terms of the 2004 MOA, provides for mitigation of the adverse effects on the historic resource, and reflects the role of the Developer in the adaptive reuse of the TWA Main Terminal and includes Flight Center Hotel, LLC, a joint venture between MCR Development LLC and JetBlue Airways Corporation. In addition to the consulting parties listed above, the Developer has also been invited to concur on the First Amendment to the 2004 MOA. The First Amendment to the 2004 MOA calls for the continued coordination with the RAC regarding the design plans for the hotel development; the RAC will continue to meet until all stipulations under the MOA have been concluded.

The First Amendment to the 2004 MOA and was entered into on July 12, 2016 by FAA, SHPO, ACHP, and PANYNJ with the concurrence of the New York City Partnership and the New York Building Congress, both consulting parties to the 2004 MOA, and Flight Center Hotel, LLC.[2]

A separate Section 4(f) evaluation was prepared and submitted to the US Department of the Interior (DOI) for review. On May 31, 2016, DOI concurred that there is no prudent and feasible alternative to the proposed use of the Section 4(f) lands. The detailed discussion of the Section 106 process, Section 4(f) analysis, the 2004 MOA and the signed First Amendment to the 2004 MOA can be found in the Final EA and its appendices.

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[1] Documentation and Conservation of Buildings, Sites, and Neighborhoods of the Modern Movement.

[2] Though not all Consulting Parties concurred in the First Amendment to the MOA nor did all members of the RAC support the proposed design of the TWA Flight Center Hotel (as noted in "Whereas" clauses to the First Amendment to the 2004 MOA), all parties were engaged in active development of the First Amendment to the 2004 MOA and are interested in continuing to be involved in the design review process.

7.2 Air Quality (Refer to Chapter 5-5 of the Final EA)

In accordance with FAA Orders 1050.1F and 5050.4B, as well as guidance contained in the Desk Reference for Airports Actions, an air quality analysis, as required by the Clean Air Act (CAA) of 1970, as amended, was performed to estimate emissions attributable to the project. The CAA established National Ambient Air Quality Standards (NAAQS) for six criteria pollutants. Areas in compliance with these standards are considered in attainment. Areas where the outdoor levels of these pollutants exceed the standards are designated as non-attainment.

JFK is located in Queens County, New York, which has been designated as in attainment for CO, $PM_{2.5}$, PM_{10}, and Lead, and is currently in attainment of the annual average NO_2 standard. EPA has designated New York–Northern New Jersey–Long Island, NY-NJ-CT as a marginal non-attainment area for the 2008 ozone NAAQS. EPA has designated the entire state of New York as "unclassifiable/attainment" of the 1-hour NO_2 standard effective February 29, 2012.

Therefore, the Proposed Action is subject to the federal General Conformity requirements. General Conformity, as established in §176(c) of the CAA, requires federal agencies to show that the federal actions under review conform to the State Implementation Plans (SIP) developed to bring non-attainment areas back into attainment with the NAAQS. As such, federal actions in non-attainment areas must not cause or contribute to NAAQS violations, increase the frequency or severity of any exiting NAAQS violations, or delay the timely attainment of the NAAQS in accordance with the SIP.

According to the General Conformity rule (40 CFR Part 93, §93.153), if the total direct and indirect emissions from the Proposed Action are below the applicable *de minimis* thresholds, then a conformity determination is not required. The regulation assumes that an action whose criteria pollutant emissions have already been included in the local SIP's attainment or maintenance demonstrations conforms to the SIP.

Since the Proposed Action includes a natural-gas fired cogeneration facility, a stationary source analysis was conducted using the AERMOD dispersion model to evaluate the NO_2, SO_2, CO, PM_{10} and $PM_{2.5}$ concentrations. The maximum predicted concentrations, when added to the ambient background levels, would be below the NAAQS. In addition, an emissions inventory for the potential operational emissions from the cogeneration facility was prepared that also demonstrated emissions below the *de minimis* thresholds.

The air quality assessment demonstrates that construction and implementation of the Proposed Action would not cause an increase in air emissions above the applicable *de minimis* thresholds established by the General Conformity Rule in 40 CFR Part 93, §93.153. Therefore, in accordance with FAA Orders 1050.1F, 5050.4B and guidance contained in FAA's Desk Reference for Airports Actions, no further analysis with respect to General Conformity is needed and the Proposed Action conforms to the New York SIP and the Clean Air Act (CAA) and would not: cause or contribute to any new violation of any standard in any area; increase the frequency or severity of any existing violation of any standard in any area; nor delay timely attainment of any standard or any required interim emission reductions or other milestones in any area.

7.3 Visual Effects (Refer to Chapter 5-14 of the Final EA)

The Proposed Action has been designed to avoid visual effects on the TWA Flight Center. The crescent-shaped footprints of the new guest room buildings have been designed to follow the curvature of the façade of the TWA Flight Center prior to the 1970 additions, with glazing of the primary façades designed to complement and not compete with the masonry of the TWA Flight Center. Substantial clearance is also provided between the TWA Flight Center and the new guest room buildings with many of the views preserved. Further, in response to public comments, a shadow study was performed to show the extent and duration of shadows as well as explain the building's historical issue of solar control. Additional information can be found in Appendix G. While there will be visual effects from the Proposed Action, none would adversely impact the historic character nor the public's enjoyment of the TWA Flight Center.

7.4 Climate (Refer to Chapter 5-6 of the Final EA)

FAA Order 1050.1F (July 2015) established Climate as a new Environmental Impact Category. However, no significance thresholds have been determined for Climate in the Order. In its consideration of Climate, the Final EA presents analyses that predict the estimated annual CO_2 and CO_{2e} emissions from the operation of the proposed cogeneration facility and from construction operations. Following the Port Authority's submittal of the Final EA to the FAA and during the development of this FONSI/ROD, the Council on Environmental Quality (CEQ) issued "Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews" on August 1, 2016. In development of this FONSI/ROD, the FAA has considered this guidance and finds that the analysis conducted in the EA, in accordance with existing FAA policy, is also meets the requirements of the new guidance provided by the CEQ. Based on the analyses the Proposed Action is not expected to contribute any significant adverse impact to climate change.

7.5 Floodplains (Refer to Chapter 5-10-5-2 of the Final EA)

A section of the Proposed Action would encroach in the special flood hazard area subject to inundation by the 500-year floodplain as designated by the Federal Emergency Management Agency (FEMA) in the Preliminary Flood insurance Rate Maps (FIRMS) released January 30, 2015. However, the Proposed Action is not considered a 'critical action' as defined in the Water Resources Council Floodplain Management Guidelines. Therefore, there will be no floodplain impacts associated with the Proposed Action.

7.6 Coastal Zone Management (Refer to Chapter 5-11of the Final EA)

JFK is located within the designated New York State Coastal Zone Management Area (CZMA). Accordingly, any work undertaken within the CZMA is subject to consistency with the programs of the New York State Department of State (NYSDOS) Coastal Zone Management Program. A coastal zone consistency determination was prepared and submitted by the airport sponsor to the NYSDOS to determine whether the proposed project is consistent with the approved coastal zone management plan. In its November 12, 2015 letter to the airport sponsor, the NYSDOS concurred that there would be no significant adverse impacts to the CZMA as a result of the proposed action. Accordingly, there would be no significant adverse impact to the NYSDOS CZMA as a result of the Proposed Action.

7.7 Construction Impacts (Refer to Chapter 5-16 of the Final EA)

Construction of the Proposed Action is not expected to cause significant long-term environmental impacts. However, short-term impacts resulting from construction operations may occur. Air quality, water quality, noise, and climate are resources that are likely to experience temporary effects during construction from the operation of equipment, excavation of soils (fugitive dust), and sedimentation. These impacts will be controlled and limited by compliance with the mitigation measures set forth in the Final EA and in this FONSI/ROD, as well as the FAA's Advisory Circular 150/5370-10F "Standards for Specifying Construction of Airports," Item P-156, Temporary Air and Water Pollution, Soil Erosion, and Siltation Control; and Advisory Circular 150/5320-5D, "Airport Drainage Design" (see Conditions/Mitigation Measures, below).

7.8 Cumulative Effects (Refer to Chapter 5-17 of the Final EA)

Past, other present and reasonable foreseeable future actions were evaluated for the potential for cumulative impacts on affected resources. Emissions from on-site construction equipment and on-road construction-related vehicles, as well as dust generating construction activities have the potential to affect air quality. Noise impacts can also occur from the use of concrete trucks and delivery trucks as well as non-road equipment such as excavators, backhoes, loaders, and cranes during construction. However, use of such equipment would be temporary and short-term and would not be needed once the construction is complete. A thorough analysis of the cumulative effects of the Proposed Action in combination with past, on-going, or reasonably foreseeable future projects or actions at JFK to all resources categories is presented in the Final EA and concludes that no cumulative impacts are anticipated.

8. Conditions/Mitigation Measures (Refer to Chapter 6 of the Final EA)

1. Construction contract specifications developed for the project shall contain the provisions of FAA Advisory Circular 150/5370-10F, "Standards for Specifying Construction of Airports," Item P-156, Temporary Air and Water Pollution, Soil Erosion, and Siltation Control; and Advisory Circular 150/5320-5D, "Airport Drainage Design."

2. All required regulatory permits and approvals shall be obtained prior to construction of the Proposed Action. Required notifications pursuant to necessary permits and approvals shall also be completed prior to construction.

3. A First Amendment to the 2004 MOA was entered into by the FAA, PANYNJ, SHPO and ACHP. The First Amendment to the 2004 MOA contains new and modified stipulations for actions to be undertaken during the planning and design phase, as well as for ongoing maintenance and preservation. All stipulations of the First Amendment to the 2004 MOA, shall be implemented; all other stipulations remain as originally written in 2004 MOA.

Consistent with applicable orders, policies and guidance, including Council on Environmental Quality (CEQ) Guidance, dated January 14, 2011, "Appropriate Use of Mitigation and Monitoring and Clarifying the Appropriate Use of Mitigated Findings of No Significant Impact" under NEPA, the FAA understands that the PANYNJ will undertake the necessary actions to

ensure that the above conditions and/or mitigation measures are undertaken and that it will monitor the implementation and effectiveness of such measures. In some instances, the above conditions are required as a result of coordination and agreement; they do not necessarily reflect impacts that require mitigation to meet FAA standards, pursuant to FAA Orders or Guidance.

9. Public Involvement (Refer to Chapter 7 of the Final EA)

A Notice of Public Availability of the Draft EA was published in *New York Newsday, Daily News (Queens edition), Queens Chronicle, Queens Courier, Queens Times Ledger, Queens Ledger, Long Island Herald, and South East Queens Press* newspapers on April 7, 2016. The document was also made available to the public via the internet at *http://www.panynj.gov/about/studies-reports.html*. The review and comment period was from April 7, 2016 to May 7, 2016. Additionally, several other coordination meetings, detailed in Appendix C, were held throughout project development.

Comments were received from various interested parties and are included in the Final EA. Appendix G contains these comment letters and responses to those comments. Of 12 total comments received, 11 comments were in support of the proposed project. One comment, which was signed by preservation organizations, noted several concerns related to design issues, including the wings and north and south connector tubes, visual effects, soil borings, and the cogeneration facility that would supply power to the hotel. Also, concerns were raised about pedestrian access, hazardous materials, and air quality. As part of the responses to the comments, additional information is provided in the Final EA, including shadow study renderings, and soil pre-characterization testing results. The comments did not result in significant changes to the Proposed Action.

10. Federal Agency Findings

In accordance with all applicable laws, and based on supporting information and documentation, including analyses contained in the Final EA, the FAA makes the following findings for the Proposed Action:

A. **The Proposed Action is reasonably consistent with existing plans of public agencies for development of areas surrounding the airport. (49 U.S.C. §47106(a)(1) .** The FAA is satisfied that the Proposed Action is consistent with plans (existing at the time the Proposed Action is approved) of public agencies for development of areas surrounding the airport based on coordination efforts with public agencies, including, but not limited to, the RAC, NYSHPO, DOI, and NYSDOS. Documentation of this coordination is contained in Appendices C, E, and F of the Final EA.

B. **The interest of the communities in or near where the Proposed Action may be located were given fair consideration. (49 U.S.C. §47106(b)(2).** The FAA is satisfied that the interests of the communities near where the Proposed Action will be located were given fair consideration as demonstrated by the Final EA, including Appendix C, containing the documentation of coordination with the RAC, Appendix H, containing the

Notice of Public Availability, and Appendix G containing comment summary, and responses to comments.

C. **The FAA has given this Proposed Action the independent and objective evaluation required by the Council on Environmental Quality (40 C.F.R. Section 1506.5).** The FAA's review and ultimate decision process included the FAA's rigorous exploration and objective evaluation of reasonable alternatives and probable environmental consequences, regulatory agency and Native American consultations, as required, and public involvement. FAA furnished guidance and participated in the preparation of the Final EA by providing input, advice and expertise throughout the planning and technical analyses, along with administrative direction. FAA has independently evaluated the Final EA and takes responsibility for its scope and content.

D. **The Proposed Action includes a direct use of resources protected under 49 U.S.C. §303(c) (Section 4(f) of the DOT Act); Implementation of the Proposed Action will comply will all requirements of Section 4(f) of the DOT Act as well as the National Historic Preservation Act (NHPA) of 1966, as amended.** The Proposed Action will cause a direct use of Section 4(f) resources. The National Register listed TWA Flight Center will be restored, reused, and maintained in accordance with the Secretary of the Interior Standards. There is no feasible and prudent alternative to the proposed use of 4(f) lands. Accordingly, coordination occurred with the NYSHPO, the ACHP and other consulting parties. Pursuant to Section 106 of the NHPA and 36 C.F.R. Part 800, the First Amendment to the 2004 MOA, has been entered into by the FAA, PANYNJ, SHPO and ACHP. All stipulations of the MOA shall be implemented to mitigate the impact to the National Register Listed TWA Flight Center.

E. **The Proposed Action will conform to the State Implementation Plan (SIP) in accordance with Section 176 of the Clean Air Act (CAA) Amendments (42 U.S.C. §7506(c)).** JFK is located in Queens County, New York, which has been designated as in attainment for CO, $PM_{2.5}$, PM_{10}, and Lead, and is currently in attainment of the annual average NO_2 standard. EPA has designated New York–Northern New Jersey–Long Island, NY-NJ-CT as a marginal non-attainment area for the 2008 ozone NAAQS. EPA has designated the entire state of New York as "unclassifiable/attainment" of the 1-hour NO_2 standard effective February 29, 2012 (see Final EA, Section 5-5, Page 5-16). Therefore, the Proposed Action is subject to federal General Conformity requirements. Since the Proposed Action includes a natural gas fired cogeneration facility, a stationary source analysis was conducted using the AERMOD dispersion model to determine compliance with NAAQS. Based on specific emissions calculations, the Proposed Action's maximum predicted concentrations, when added to ambient background levels, would be below the NAAQS; the total construction and implementation emissions are below the *de minimis* thresholds established by the General Conformity Rule in 40 C.F.R. Part 93, §93.153.

According to FAA Orders 1050.1F and 5050.4B and guidance contained in FAA's Desk Reference for Airports Actions, agency consultation is not necessary, no mitigation is necessary, and further analysis is not required to comply with the CAA or NEPA.

Therefore, no further analysis with respect to General Conformity is needed and the Proposed Action conforms to the New York State Implementation Plans (SIP) and the Clean Air Act (CAA). The requirements of the General Conformity Rule have been met as discussed in the Final EA. As such, the Proposed Action conforms to the New York State Implementation Plan and complies with the Clean Air Act Section 176(c)(1) and would not: cause or contribute to any new violation of any standard in any area; increase the frequency or severity of any existing violation of any standard in any area; delay timely attainment of any standard or any required interim emission reductions or other milestones in any area.

F. **There are no disproportionately high and adverse environmental effects resulting from the Proposed Action on minority and/or low-income populations. (Executive Order 12989 and DOT Order 5610.2(a)).** In accordance with FAA guidance provided in FAA Order 5050.4B and FAA Order 1050.1F, as well as guidance contained in the "Environmental Desk Reference for Airport Actions," and DOT Order 5610.2(a) "Department of Transportation Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," implementation of the Proposed Action would not result in effects to any low income or minority population because the proposed action does not include any impacts that would go beyond the airport property and into adjoining neighborhoods. Therefore, there would be no minority or low-income group that would bear a disproportionate burden of the effects of the Proposed Action.

G. **The FAA finds that Executive Order 11988, which directs federal agencies to reduce the risk of flood loss, minimize the impacts of floods on human safety, health and welfare, and restore and preserve the natural and beneficial values served by floodplains, has been followed and as required, complied with appropriately.** A section of the Proposed Action would encroach in the special flood hazard area subject to inundation by the 500-year floodplain as designated by the Federal Emergency Management Agency (FEMA) in the Preliminary Flood insurance Rate Maps (FIRMS) released January 30, 2015. However, the Proposed Action is not considered a 'critical action' as defined in the Water Resources Council Floodplain Management Guidelines. Therefore, there will be no floodplain impacts associated with the Proposed Action.

H. **The Proposed Action is consistent with the New York State Department of State (NYSDOS) Coastal Zone Management Program in accordance with the CZMA, as amended (16 U.S.C. §1451-1464).** JFK is located within the designated New York State Coastal Zone Management Area (CZMA). As indicated in Appendix F of the Final EA, the NYSDOS, on November 12, 2015, concurred that the Proposed Action is consistent with the approved coastal zone management plan. There would be no significant adverse impact to the NYSDOS CZMA as a result of the Proposed Action.

Decision and Order

The FAA recognizes its responsibilities under the National Environmental Policy Act of 1969 (NEPA) and its implementing Council on Environmental Quality (CEQ) regulations, and its own directives. Recognizing these responsibilities, I have carefully considered the FAA's goals and objectives in relation to the various aeronautical aspects of the TWA Flight Center Hotel as

discussed in the Final EA, and I have used the environmental process to make a more informed decision. This review included the purposes and needs to be served by this project, alternative means of achieving them, the environmental impacts of these alternatives, and the mitigation and conditions necessary to preserve and enhance the human environment.

This decision is based on a comparative examination of environmental impacts, operational factors, and economic factors for each of the alternatives. The Final EA provides a fair and full discussion of the impacts of the Proposed Action. The NEPA process included appropriate planning and design for avoidance and minimization of impacts, as required by NEPA, the CEQ regulations, other special purpose environmental laws, and appropriate FAA environmental directives and guidance.

The FAA has determined that environmental and other relevant concerns presented by interested agencies and the general public have been addressed in the Final EA. The FAA believes that with respect to the Proposed Action, there are no outstanding environmental issues within FAA jurisdiction to be studied or NEPA requirements that have not been met. In making this determination, the FAA must decide whether to approve the federal actions necessary for implementation of the Proposed Action. FAA approval signifies that applicable federal requirements relating to airport development planning have been met and permits the Airport Sponsor to proceed with development. Not approving these actions would prevent the Sponsor from proceeding with the airport development.

After careful and thorough consideration of the facts contained herein and subsequent to my review of the Final EA and all of its related materials, the undersigned finds that the Proposed Federal Action is consistent with existing national environmental policies and objectives as set forth in Section 101 of NEPA and other applicable environmental requirements and will not significantly affect the quality of the human environment or otherwise include any condition requiring consultation pursuant to section 102(2)(C) of NEPA.

Accordingly, pursuant to the authority delegated to me by the Administrator of the FAA, I find that the actions summarized in this FONSI/ROD are reasonably supported and approved. I hereby direct that action be taken together with the necessary related and collateral actions, to carry out the agency actions noted above. Specifically:

a. Unconditional Approval of a revised ALP to depict the Proposed Action pursuant to §47107(a)(16);

b. Determine, and approve of, the effects of this Proposed Action upon the safe and efficient utilization of navigable airspace pursuant to 49 U.S.C. §40103(b) and, 49 U.S.C. §44718, and 14 CFR Parts 77 and 157 ;

c. Determination under 49 U.S.C. §40101(d)(1) and §47105(b)(3) as to whether the Proposed Action meets applicable design and engineering standards set forth in FAA Advisory Circulars;

d. Maintain continued close coordination with the PANYNJ and appropriate FAA program offices, as required, for safety during construction;

e. Determination under 49 U.S.C. §44502(b) that the Proposed Action is reasonably necessary for the use in air commerce or in the interests of national defense; and

f. Approval of appropriate amendments to the JFK Airport Certification Manual (ACM), as required, pursuant to 49 U.S.C. §44706.

Approved: _____ 8/29/2016

Carmine Gallo Date
Regional Administrator
Federal Aviation Administration
Eastern Region

Right of Appeal

This FONSI/ROD presents the Federal Aviation Administration's findings and final decision and approvals for the actions identified, including those taken under the provisions of Title 49 of the United States Code, Subtitle VII, Parts A and B.

Any party having a substantial interest may appeal this order to the United States Court of Appeals for the District of Columbia Circuit or in the court of appeals of the United States for the circuit in which the person resides or has its principal place of business, upon petition filed within 60 days after entry of this order in accordance with 49 U.S.C. §46110.

Any party seeking to stay the implementation of this ROD must file an application with the FAA prior to seeking judicial relief, as provided in rule 18(a) of the Federal Rules of Appellate Procedure.

Environmental Assessment

& USDOT Section 4(f) Evaluation

TWA Flight Center Hotel Project
John F. Kennedy International Airport
Queens, New York

Prepared For:
U.S. Department of Transportation Federal Aviation Administration

Sponsored By:
The Port Authority of NY & NJ

Prepared by:
AKRF, Inc.

July 2016

This environmental assessment becomes a Federal document when evaluated, signed, and dated by the Responsible FAA Official.

_____ August 23, 2016
Responsible FAA Official Date

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Acronyms and Abbreviations

AC	Advisory Circular
ACCRI	Aviation Climate Change Research Initiative
ACFM	actual cubic feet per minute
ACHP	Advisory Council on Historic Preservation
ALP	JFK Airport Layout Plan
AMS	American Meteorological Society
AOA	Air Operations Area
APE	Area of Potential Effects
ATCT	Airport Traffic Control Tower
BMP	Best Management Practices
BPIP	Building Profile Input Program
BPIPRM	Building Profile Input Program for the PRIME model
CAA	Clean Air Act
CAF	Coastal Assessment Form
CBIS	Checked Baggage Inspection System
CEQ	Council on Environmental Quality
CEQR	City Environmental Quality Review

CFR	Code of Federal Regulations
CO	Carbon Monoxide
CO2	Carbon Dioxide
$CO2_e$	Carbon Dioxide Equivalence
CSO	combined sewer overflows
CTA	JFK Central Terminal Area
CZM	Coastal Zone Management
DCP	Department of City Planning
DOE	Department of Energy
DOB	New York City Department of Buildings
DOS	New York State Department of State
DOT	Department of Transportation
EA	Environmental Assessment
EMP	Environmental Management Plan
EO	Executive Order
EPA	United States Environmental Protection Agency
ESA	Endangered Species Act
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FF&E	Fit out Furniture, Fixtures, and Equipment
FFRMS	Federal Flood Risk Management Standard
FIRMS	Flood Insurance Rate Maps
FONSI	Findings of No Significant Impact
GHG	greenhouse gases
gpd	gallons per day
HABS/HAER	Historical Architectural Building Survey/Historic American Engineering Record
HRSG	heat recovery steam generators
HVAC	heating, ventilating, and air conditioning
ICAO	International Civil Aviation Organization
ILS	Instrument Landing System
IRROPs	Irregular Operations
ITE	Institute of Transportation Engineers
JFK	John F. Kennedy International Airport
JFKE	John F. Kennedy Expressway
KIAC	Kennedy International Airport Cogeneration
KW	kilowatts
LEED	Leadership in Energy & Environmental Design
$\mu g/m^3$	micrograms per cubic meter
MEP	Mechanical, Electrical, and Plumbing
MMBTU	one million British Thermal Unit
MOA	Memorandum of Agreement
MW	megawatts
MTA	Metropolitan Transit Authority

MTBE	methyl tertiary butyl ether
NA	not applicable
NAA	non-attainment areas
NAAQS	National Ambient Air Quality Standards
NASA	National Aeronautics and Space Administration
NEPA	National Environmental Policy Act of 1969, as amended
NHPA	National Historic Preservation Act of 1966
NO_x	nitrogen oxides
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent
NRHP	National Register of Historic Places
NYCT	New York City Transit
NYSDEC	New York State Department of Environmental Conservation
NYSNHP	New York State Natural Heritage Program
PANYNJ	Port Authority of New York and New Jersey
PAPI	Precision Approach Path Indicators
PM_{10}	inhalable particulate matter less than 10 microns in diameter
PP+40	EPA Priority Pollutants plus 40
ppm	parts per million
PVMRM	Plume Volume Molar Ratio Method
RAC	Redevelopment Advisory Committee
RevPAR	revenue per available room
RFP	Request for Proposals
ROD	Record of Decision
RSA	Runway Safety Area
RVSR	Restricted Vehicle Service Road
SCFWH	Significant Coastal Fish and Wildlife Habitat
sf	square feet
SHPO	New York State Historic Preservation Officer
SIP	State Implementation Plan
SO2	sulfur dioxide
SO_x	sulfur oxides
SPCC	Spill Prevention, Control, and Countermeasure
SPDES	State Pollution Discharge Elimination System
STR	Standard Industry Sources
SWPPP	Stormwater Pollution Prevention Permit
TAA	Tenant Alteration Application
TBA	tertiary butyl alcohol
TERPS	Terminal Instrument Procedures
TPHC	total petroleum hydrocarbons
TSA	Transportation Security Administration
TWA	Trans World Airlines
ULSD	ultra-low-sulfur diesel
USC	United States Code

USDOT	United States Department of Transportation
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VOC	volatile organic compound
VWE	Van Wyck Expressway
WPCP	water pollution control plant
WRCRA	Waterfront Revitalization and Coastal Resources Act
WRP	Waterfront Revitalization Plan

Chapter 1: Introduction and Background

1-1 DOCUMENT PURPOSE AND ORGANIZATION

This Environmental Assessment (EA) was prepared pursuant to the National Environmental Policy Act of 1969 (NEPA), as amended, and analyzes the potential environmental effects of the Proposed Project involving development of the Trans World Airlines (TWA) Flight Center Hotel as an adaptive reuse of the historic TWA Flight Center at John F. Kennedy International Airport (JFK). The EA is prepared in accordance with Title 40 of the Code of Federal Regulations (CFR) Parts 1500-1508[1], which are the Council on Environmental Quality's (CEQ) regulations for implementing the procedural provisions of NEPA.

Flight Center Hotel, LLC (Developer) is the selected developer working with the Port Authority of New York and New Jersey (Port Authority) as project sponsor for the Proposed Project. **Figure 1-1** provides a general location of the airport within New York City and **Figure 1-2** provides a location map of the TWA Flight Center within the JFK Central Terminal Area (CTA). The change to the Airport Layout Plan (ALP) for JFK is a federal action subject to NEPA and approval from the Federal Aviation Administration (FAA).

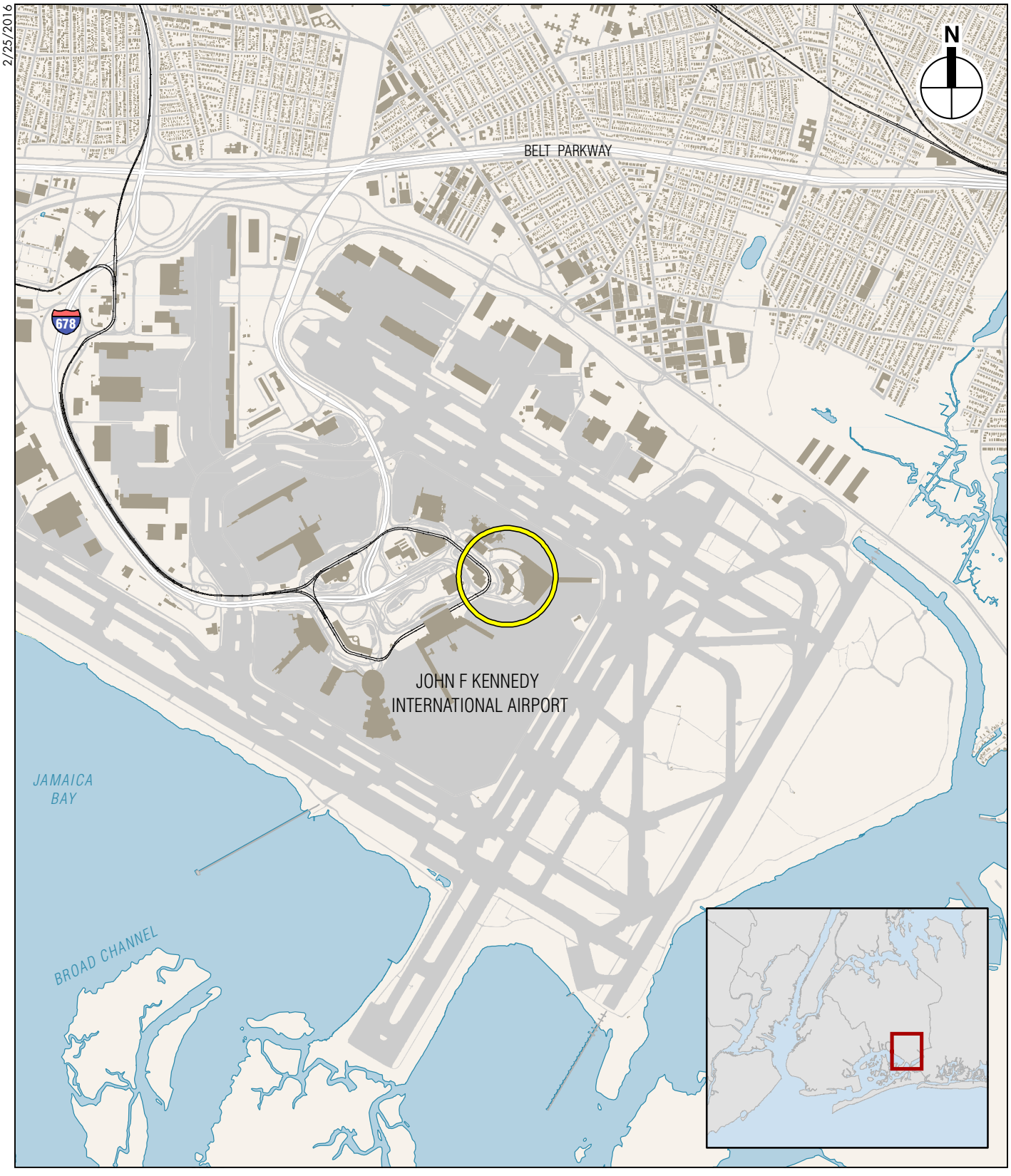
The EA is organized pursuant to FAA guidelines: FAA Order 10501.F *Environmental Impacts: Policies and Procedures, the 1050.1F Desk Reference, and FAA Order 5050.4B NEPA Implementing Instructions for Airport Actions.*[2,3] This document presents an overview and description of the Proposed Project, its purpose and need, a description of alternatives considered, and an assessment of the potential environmental impacts of the proposed TWA Flight Center Hotel.

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[1] P.L. 91-190, 42 U.S.C. 4321, et. seq., National Environmental Policy Act, 1969, Section 102(2)(c).

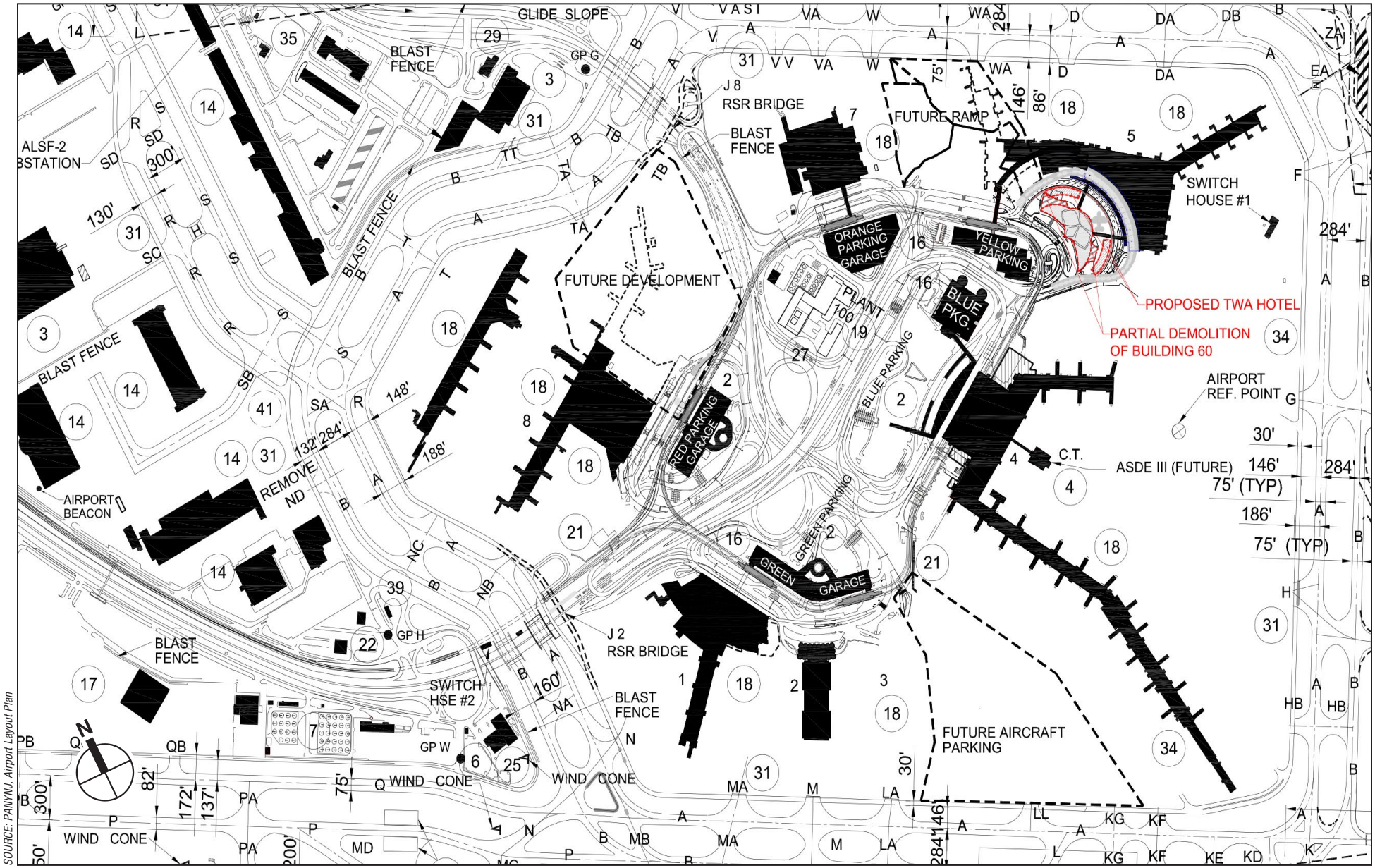
[2] FAA. "Final Order 1050.1F: Environmental Impact: Policies and Procedures";Office of Environment and Energy. Effective Date July 16, 2015. http://www.faa.gov/documentlibrary/media/order/faa_order_1050_1f.pdf

[3] FAA. "Order 5050.4B: NEPA Implementing Instructions for Airport Actions"; APP-400, Office of Airport Planning & Programming, Planning and Environmental Division. Effective Date April 28, 2006. http://www.faa.gov/airports/resources/publications/orders/environmental_5050_4/media/5050-4b_complete.pdf



TWA Flight Center Hotel

Project Location
Figure 1-1



SOURCE: PANYNJ, Airport Layout Plan

Proposed Site Plan

Figure 1-2

1-2 DESCRIPTION OF PROPOSED PROJECT

1-2-1 BACKGROUND

The centerpiece of the Proposed Project is the rehabilitation, restoration, and re-purposing of the historic TWA Flight Center. The TWA Flight Center was designed by Eero Saarinen and opened in 1962. Additions were completed in the 1960s and 1970s, along with further alterations undertaken in later years including the construction of Terminal 5/6 (jetBlue Terminal) to the north. The TWA Flight Center is a vaulted reinforced concrete structure designed with a sunken waiting area with a glazed façade that originally faced the runway, and with balcony levels where bar, restaurant and first-class waiting areas were located. The TWA Flight Center, with its sweeping and aerodynamic architectural forms, is recognized as a significant example of Post-War Modern architecture in the United States.

The TWA Flight Center was constructed during the development of JFK's "Terminal City" in the early 1960s, in which individual airlines each developed their own terminal infrastructure at the airport. The independently operated Terminal City concept continues to this day, with JFK's six terminals each controlled by airlines or private consortiums. At the time that the TWA Flight Center opened, American Airlines, United Airlines, and Pan American World Airways had each opened their own facilities, and Northwest and National Airlines would each subsequently open additional facilities. The TWA Flight Center and the I.M Pei designed National Airlines Sundrome would become JFK Terminals 5 and 6.

The TWA Flight Center was originally designed with one raised and enclosed walkway or “tube”—the East Tube—which connected to a flight wing (Flight Wing 2), which contained boarding gates where passengers boarded and deplaned. In 1967, a second and larger flight wing was added (Flight Wing 1) and was connected to the Main Terminal Building by another raised tube, the West Tube, which was longer and different in design to the East Tube. Between 1967 and 1970, additions were constructed to the runway, or airside, of the building on either side of the waiting area glazed façade, to house additional baggage handling, ticketing and office functions. These additions, or wings, were also constructed of concrete, altered the original footprint of the 1962 building, and have not gained enough significance to warrant retention.

TWA occupied Terminal 5 until American Airlines acquired its assets in 2001 and subsequently vacated the building in 2002 when TWA’s lease expired. JetBlue Airways commenced operations in 2000 out of JFK Terminal 6 (the Sundrome), and subsequently acquired the lease to Terminal 5 at the expiration of TWA's lease. Terminals 5 and 6 did not have adequate facilities to handle the growth of jetBlue's operations, and were ill-equipped to handle post-2001 security requirements.

In 2004, jetBlue and the Port Authority initiated comprehensive redevelopment of Terminals 5 and 6, which ultimately resulted in the construction of existing JFK Terminal 5 and the demolition of JFK Terminal 6. In 2004, an *EA and Section 4(f) Evaluation for the Terminal 5/6 Redevelopment Project: JFK International Airport* (referred to herein as the 2004 EA) was prepared. To address the impact on historic resources during the redevelopment of the terminals, the FAA, the Advisory Council on Historic Preservation

(ACHP), the New York State Historic Preservation Office (SHPO), and the Port Authority entered into a Memorandum of Agreement (MOA) for the Rehabilitation, Restoration, and Adaptive Reuse of the TWA Flight Center (referred to herein as the 2004 MOA). Alterations to the TWA Flight Center included the removal of both flight wings and the reconstruction of the West Tube. The East and West Tubes now connect to the jetBlue Terminal, with the West Tube having been reconstructed as part of the Terminal 5/6 Redevelopment Project.

Stipulation 7 of the 2004 MOA required that the "TWA Terminal" (the name used for the TWA Flight Center in the Section 106 documentation, referred to as the TWA Flight Center throughout this document), including the Main Terminal Building, Flight Wings, and East and West Tubes be nominated to the National Register prior to the demolition of the Flight Wings. As a result of this stipulation, the TWA Flight Center was formally listed on the National Register in October 2005. Since the 2004 EA, the Port Authority has performed approximately $19 million in extensive restoration work on the TWA Flight Center, plus annual maintenance while searching for an appropriate adaptive reuse developer for the building. The 2004 MOA stipulated that an adaptive reuse developer should be retained to develop the TWA Flight Center in accordance with the Secretary of Interior Standards for the Treatment of Historic Properties. This EA addresses the adaptive reuse of the TWA Flight Center into a hotel facility.

1-2-2 REQUEST FOR PROPOSALS

The proposed long-term lease for financing, planning and design, rehabilitation / restoration / construction, management, operation and marketing of the TWA Flight Center Hotel is based on a Request for Proposals (RFP) selection process undertaken by the Port Authority. To date, there have been a total of three RFP's for the Adaptive Re-Use and Historic Preservation of the former TWA Flight Center (see attached in **Appendix A**). The initial tender in 2006 for an unspecified type of development opportunity garnered only a single respondent, who indicated that for a price, any program developed by the Port Authority would be considered. The proposal was determined to be "non-responsive" and was ended. Subsequent discussions internally at the Port Authority and with the Redevelopment Advisory Committee (RAC)[4] led to the Port Authority taking on limited restoration of the TWA Flight Center and a decision on what next steps should be taken towards adaptive reuse. Ultimately, consensus was reached that the most sustainable business adaptive re-use and development would likely be a hotel. JFK airport has a need for a full service hotel within the CTA (see Chapter 2 for a full discussion).

In 2011, the Port Authority issued a request for quotation (RFQ) to solicit interest in a subsequent RFP for a hotel. From that process, two potential developer teams entered in to preliminary discussions with the Port Authority, leading up to the more than a year of negotiations with the highest rated proposer. Changes in that developer's corporate business model late in 2013 resulted in the Port Authority and developer terminating

[4] The RAC membership of 12 agencies and parties includes the "signatories" to the 2004 MOA and its First Amendment, who are bound to the agreement, and other consulting parties from the Section 106 process that have expressed an interest in participating in the RAC.

negotiations. An outreach to the second highest rated proposer confirmed that they would not resume discussions regarding the Flight Center hotel development. The third RFP was tendered in 2014, returned only two serious respondents and resulted in the negotiation with and selection of the MCR-JetBlue Team (neither of the development team had previously proposed to the earlier RFP's). The RFPs are summarized below.

Request for Proposals #11002

A request for proposals was issued by the Port Authority on December 8, 2006 for the development and implementation of adaptive reuse of the TWA Flight Center and associated site at JFK International Airport. The Port Authority received a single proposal from a developer who did not meet the criteria of the RFP.

Request for Proposals # 24842

Prior to the release of a second RFP for the TWA Flight Center, the Port Authority engaged a consulting firm Real Estate Solutions Group (RESG) to perform a highest and best use analysis for the building. Following a recommendation from RESG, discussions with the RAC for the project and a $19M capital investment by the Port Authority to repair and enhance public areas of the building, it was determined that a hotel was the best option.

A request for proposal was issued on May 16, 2011 for the development, leasing, management and operation of a hotel, incorporating the TWA Flight Center at John F. Kennedy International Airport. A number of proposals were received from hotel development/management firms. Andre Balazs of The Standard Hotels was selected to engage in more detailed negotiations. After nearly two years, negotiations were cancelled. The Port Authority then approached the second highest ranked Proposer but was unable to agree on lease terms.

Request for Proposal # 38826

A third request for proposals for the development, leasing, management and operation of a hotel incorporating the TWA Flight Center at JFK International Airport was issued on August 8, 2014. Three proposals were received from hotel development and management firms. The team of MCR and jetBlue was selected by the Port Authority, and lease negotiations were finalized with MCR and jetBlue. The Port Authority Board of Commissioners unanimously approved the project during the September 2015 Board Meeting.

1-2-3 MEMORANDUM OF AGREEMENT

The RFP process fulfilled the obligations of the Port Authority as established in the 2004 EA environmental review process and pursuant to the 2004 MOA. The 2004 MOA established the guidelines for the rehabilitation, restoration, adaptive reuse, operation, and maintenance of the Flight Center as part of the master plan for redevelopment of Terminal 5/6. In addition, a First Amendment to the 2004 MOA with the same signatories was prepared in 2015, and is specific to the proposed TWA Flight Center Hotel (see **Appendix B**).

The Developer has prepared a Proposed Project development plan consistent with the 2004 MOA for adaptive reuse that incorporates restoration and rehabilitation in

accordance with the *Standards for the Treatment of Historic Properties—Rehabilitation* with the period of restoration defined as 1967. The Secretary of the Interior is responsible for establishing these standards to help protect cultural resources listed in or eligible for listing in the National Register of Historic Places (NRHP).[5]

The 2004 MOA also established a process to review and approve a reuse project through creation of the RAC. The RAC membership of 12 agencies and parties includes "signatories" to the 2004 MOA and its First Amendment, who are bound to the agreement, and other "consulting parties" from the Section 106 process that have expressed an interest in participating in the RAC and concurred with the agreement. The RAC continues to provide the agency coordination and guidance in the review of this Proposed Project in accordance with Section 106 of the National Historic Preservation Act. The MOA also stipulates the continued involvement of the RAC to provide input regarding the design and adaptive reuse of the TWA Flight Center. The proposed TWA Flight Center Hotel, LLC project has been presented to the RAC at four meetings—May 11, 2015, June 17, 2015, December 1, 2015, and February 26, 2016. The responsibilities of the RAC will conclude upon fulfillment of the 2004 MOA and its First Amendment. The RAC will continue to meet until all stipulations under the MOA have been concluded. Meeting minutes and correspondence related to the RAC's review of the Proposed Project are included in **Appendix C**.

1-2-4 PROJECT SITE

JFK is located in the southeastern section of Queens County, New York City, on Jamaica Bay (**Figure 1-1**). It is 15 miles by highway from midtown Manhattan. The Airport consists of 4,930 acres, including 880 acres in CTA. The Port Authority has operated JFK under the terms of a lease with the City of New York since June 1, 1947. JFK serves the largest domestic market in the United States, as well as a premier international gateway, with non-stop service to more foreign cities than any other airport in the United States. The Airport handles more than 50 million domestic and international passengers annually and accommodates more than 420,000 flights per year. There are six airline passenger terminals at JFK, with each terminal serving one or more airlines. **Figure 1-2** includes the existing terminal layout at JFK.

Over the last 20 years, a significant emphasis has been placed on modernizing and redeveloping the passenger terminals to respond to the current needs of airlines and passengers. Terminal 1 was completed in 1998, Terminal 2 was completed in 1994, Terminal 4 was constructed in 2002, Terminal 5 was redeveloped in 2009, Terminal 7 was constructed in 2003, and in 2007 the second phase of the new Terminal 8 (which combined Terminal 8 and 9) was completed. Terminal 6 was demolished in 2012. Terminal 4 is completing an expansion to accommodate additional gate capacity for Delta Airlines, while Terminal 3 has been demolished and the area is used for more efficient operations at Terminals 2 and 4.

[5] National Park Service and U.S. Department of the Interior. National Register of Historic Places, authorized by the National Historic Preservation Act of 1966. Accessed on www.nps.gov/nr/ on February 8, 2016.

The project site is an approximately 6.0 acre parcel located in the eastern portion of the CTA (see **Figure 1-2**). The site includes the historic TWA Flight Center and adjacent paved land areas of former tarmac and roadways. It is located between the jetBlue Terminal 5 to the east, the Terminal 5 AirTrain Station and Yellow Garage to the west, the International Terminal 4 to the south and the British Airways Terminal 7 to the north. The site is bounded by airport service roads including those serving the jetBlue Terminal 5 and the TWA Flight Center.

1-2-5 PROPOSED DEVELOPMENT PLAN

1-2-5-1 DEMOLITION OF NON-HISTORIC ADDITIONS

The initial step in the development of the site is the demolition of the non-historic portions of the TWA Flight Center building (see **Figure 1-3**). Two additions were added around 1970 and altered the original footprint of the 1962 building. The demolition of these additions would allow the area needed for new construction.

1-2-5-2 NEW HOTEL GUEST ROOM BUILDINGS

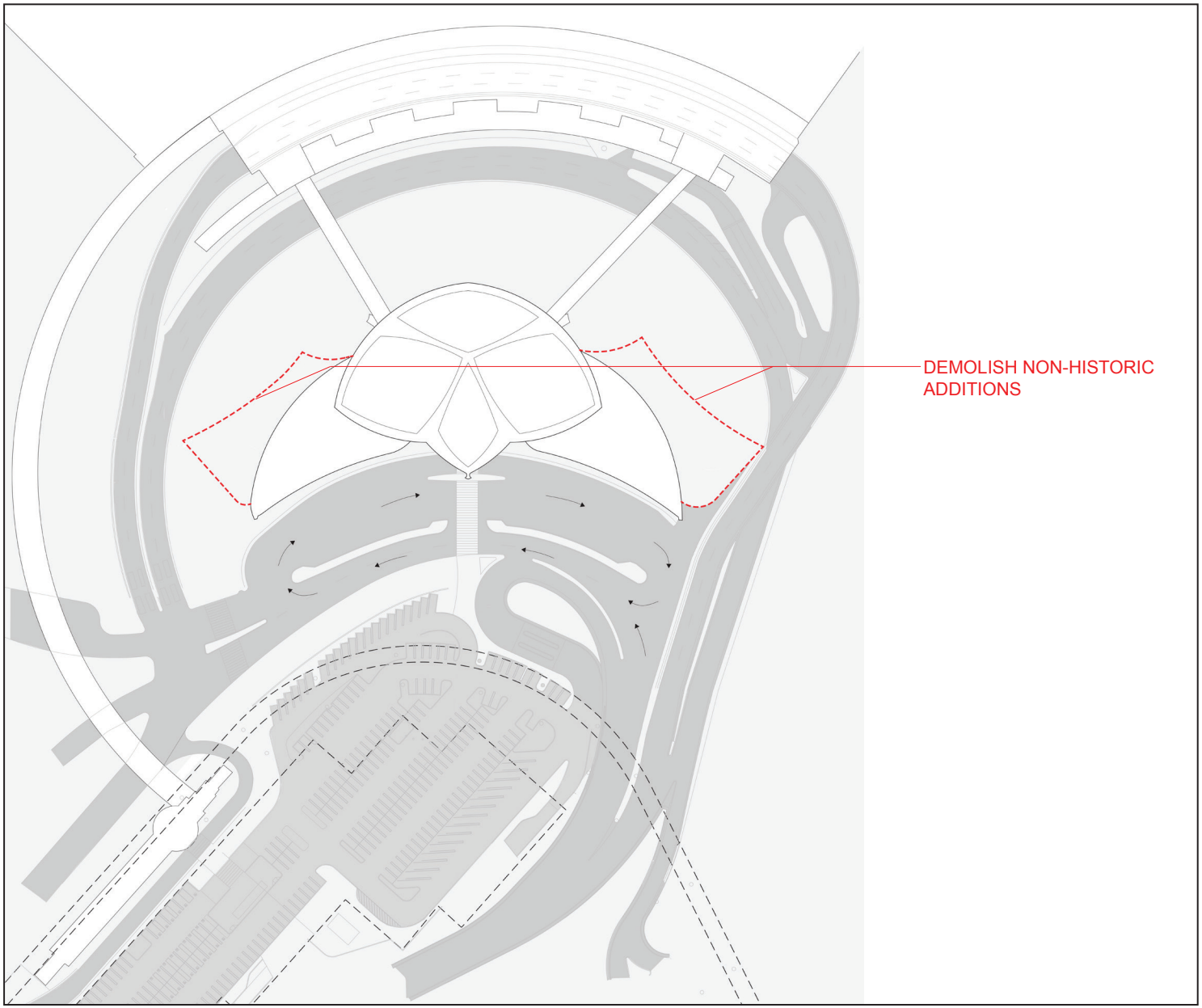
The Proposed Project includes the construction of two new guest room buildings on either side of the TWA Flight Center (see **Figure 1-4**). A total of approximately 505 guest rooms would be split between the two guest room buildings, including approximately 20 suites.

The floor area of all new above-grade construction will total about 222,000 square feet, while the combined footprint of the newly constructed guest room buildings will total 31,400 square feet. The total Proposed Project including the restored TWA Flight Center building and the new conference facilities would total about 440,000 square feet (including about 140,000 square feet of space retained in the existing terminal building and 50,000 square feet of newly constructed below grade conference space, and 30,000 square feet of newly constructed below grade service space). There would also be a cogeneration facility on the rooftop of the west hotel room building of about 7,500 square feet. Each hotel room building would be about 110,000 square feet and would be about one quarter of the overall volume of space.

The height of the new buildings will be up to 84 feet (including parapet wall but exclusive of mechanical areas such as elevator shafts) which is contextually within the building heights of surrounding buildings (such as the jetBlue Terminal 5 Skyway) and slightly taller than the TWA Flight Center itself. **Figures 1-5a to 1-5d** show surrounding building heights of the TWA Flight Center (66.25 feet), as well the AirTrain Station and Yellow Garage (76 feet), Terminal 5 ticketing roof (73 feet), Terminal 5 AirTrain Skywalk (77 to 88 feet), and other buildings in the vicinity of the TWA Flight Center. The curtain walls of the new guest room buildings will be clad with glass on the north and south sides. Additionally, a 5,000-square-feet roof-top observation deck with a cocktail lounge and a shallow splash-pool would be located on the east guest room building with views of the nearby runways.

1-2-5-3 TWA FLIGHT CENTER RESTORATION

Since the EA for the Terminal 5/6 Redevelopment Project was completed in 2004, the Port Authority has performed restoration work on the TWA Flight Center. The Proposed Project would complete the restoration of additional areas requiring extensive work. The



SOURCE: Lubrano Ciavarra Architects, December 2015

Existing Conditions
Figure 1-3



SOURCE: Lubrano Ciavarra Architects, February 2016

Rendering of Proposed Action

Figure 1-4



SOURCE: Lubrano Ciavarra Architects, June 2015

Contextual Building Heights
Figure 1-5a



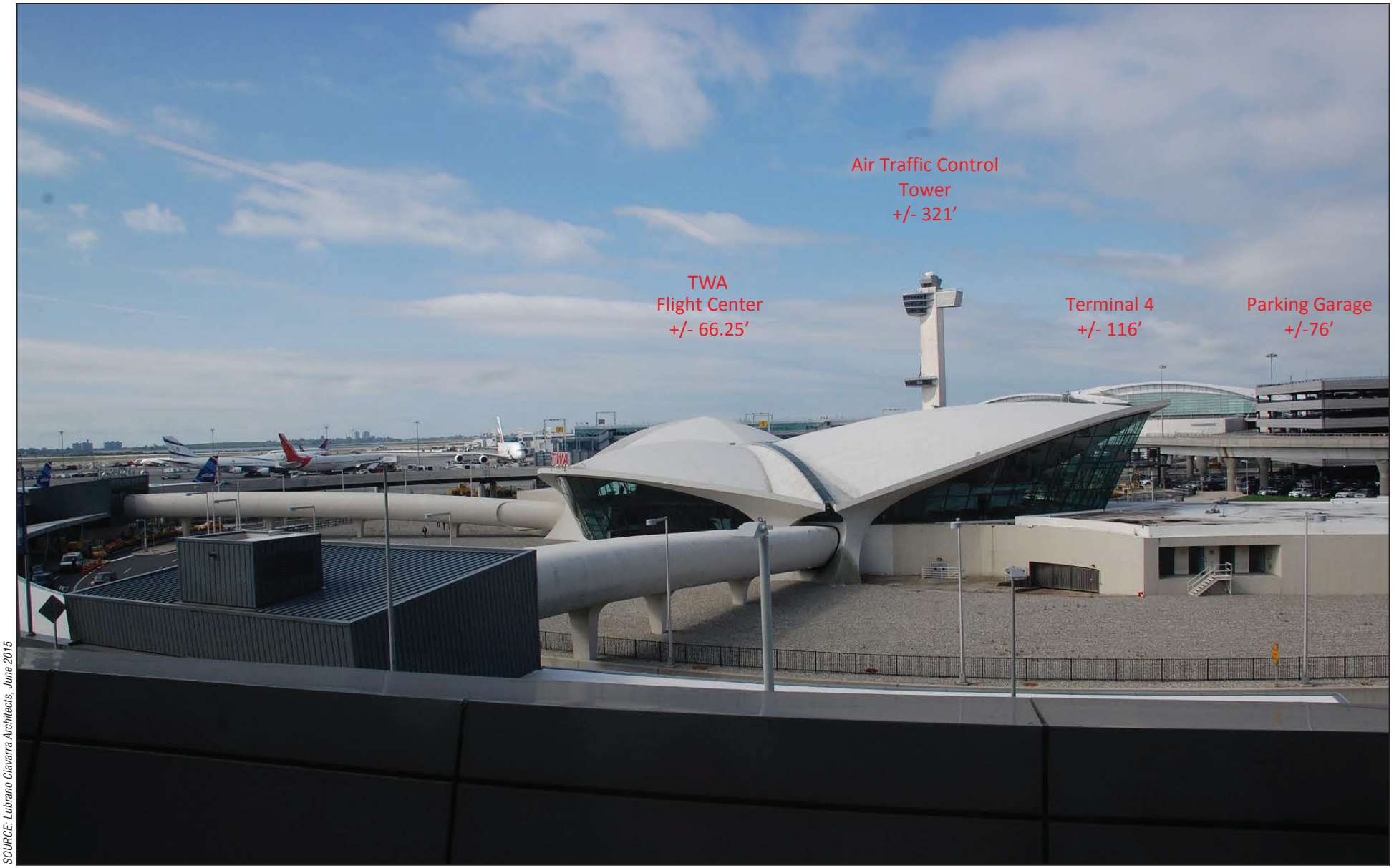
SOURCE: Lubrano Ciavarra Architects, June 2015

Contextual Building Heights
Figure 1-5b



SOURCE: Lubrano Ciavarra Architects, June 2015

Contextual Building Heights
Figure 1-5c



SOURCE: Lubrano Ciavarra Architects, June 2015

Contextual Building Heights
Figure 1-5d

original historic main TWA Flight Center Terminal building would be repurposed as the Lobby area and amenities for the hotel. Iconic public spaces would be restored to recapture their original grandeur, designs, and concepts. The East and West connector tubes provide pedestrian walkways from the Lobby level of the TWA Flight Center to the jetBlue Terminal 5, as well as the north and south guest room buildings, respectively (see **Figure 1-6**). New passageways would be cantilevered from the guest room buildings to connect to the East and West Tubes. While the East Tube has been restored, the West tube was reconstructed as part of the Terminal 5/6 Redevelopment Project.

Lower Lobby Level

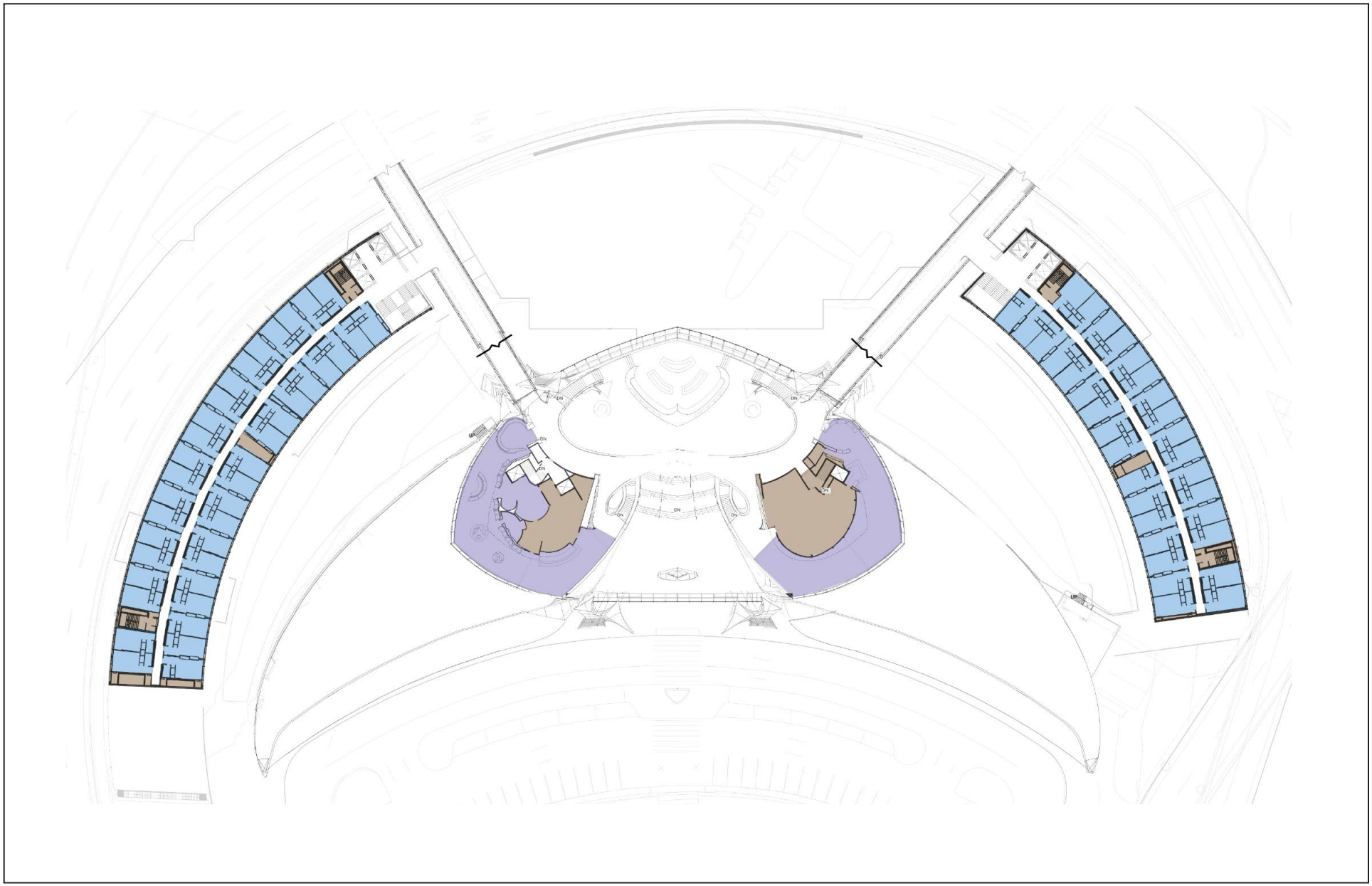
The interior of the TWA Flight Center is divided into three levels. The TWA Flight Center Hotel Lower Lobby is located at street level. Both ticketing areas at the Lower Lobby would be physically restored and repurposed. The South ticketing area would serve as a combination of Retail space and food hall. The North ticketing area would feature a new row of counters based on original design from 1962 to accommodate hotel and event check-in, including hotel baggage check-in which would be offered to all hotel visitors at street level to minimize the impact of wheeled luggage on the restored entrance staircases. No baggage check-in for flights would be accommodated. New ramps would be constructed to connect the Lower Lobby to the Lobby Level, following the historic path of circulation. Below grade walkways for staff would connect the Below Grade Level of the TWA Flight Center to the Below Grade Level of the guest room buildings.

Lobby Level

The main focus of the Lobby Level is the TWA Flight Center's iconic sunken lounge, as well as entrances to the East and West Tubes. This level would also include a Concierge, Duty-Free Shop, Ballroom, and Retail space (see **Figure 1-7**). Exhibit areas for historic interpretive displays would be developed throughout the hotel Lobby in partnership with the New-York Historical Society and the New York City Landmarks Preservation Commission. The historic interpretive displays would feature the history of the TWA Flight Center, Eero Saarinen, JFK Airport, TWA, and aviation in New York City.

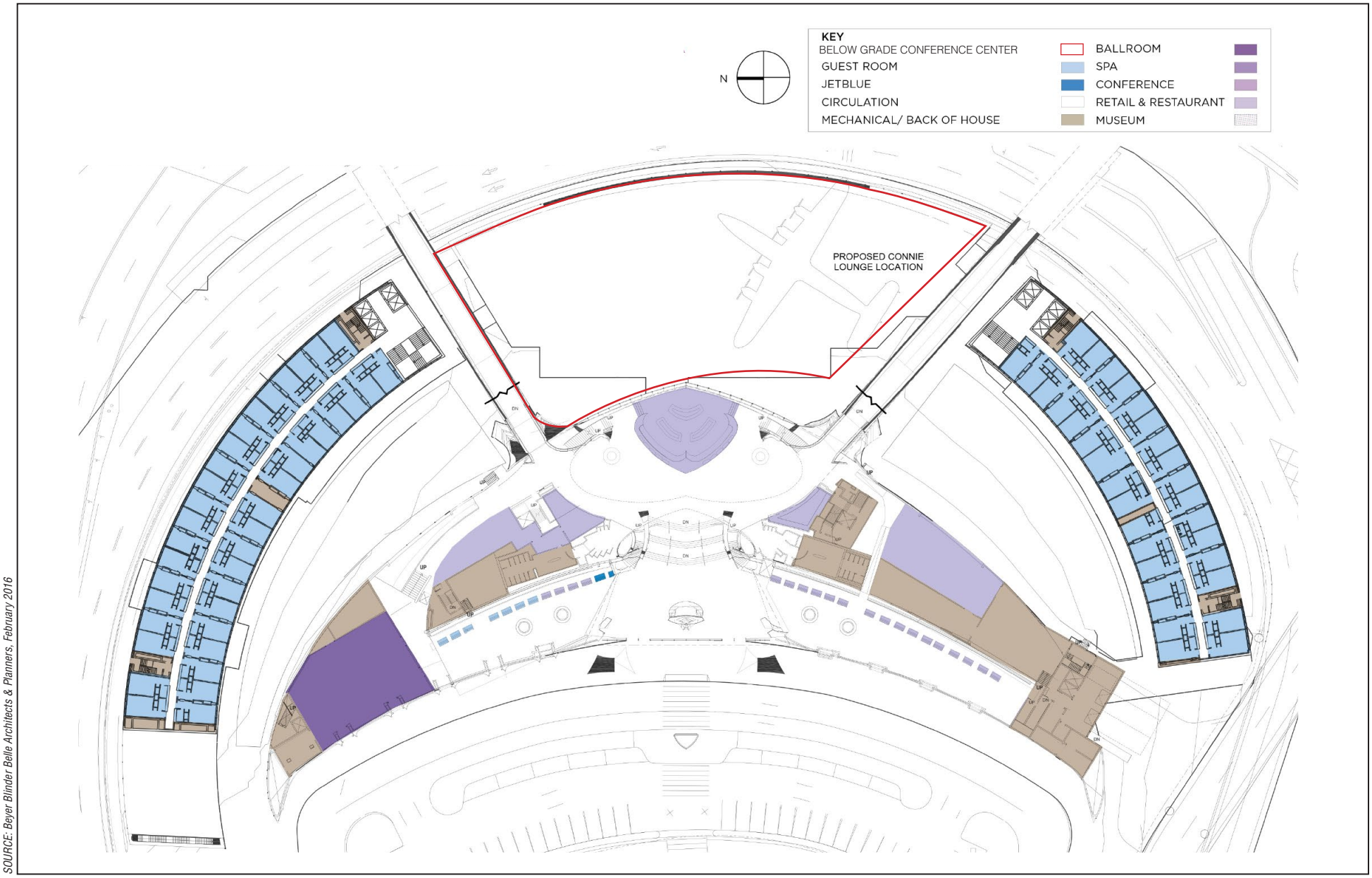
Accommodations for airline travelers would be provided by the hotel. The Lobby would include a minimum of two electronic ticketing kiosks for use by jetBlue airline passengers (as set forth in the 2004 MOA), as well as check-in counters for select customers. The Solari Board with flight information would be rebuilt from its original 1958 plans and remain as a unique, historic feature of the Lobby. The mechanical board would retain its distinct, audible clicking as flight information is updated.

One of the cocktail lounges, "The Connie Bar", would be located inside a re-purposed Lockheed "Super G" Constellation Airplane (the "Connie"). The airplane would be located between the two connector tubes and accessed via walkways from the guest room buildings.



Proposed Project Mezzanine Level and
Connection to Guest Room Buildings

Figure 1-6



SOURCE: Beyer Blinder Belle Architects & Planners, February 2016

Proposed Project Lobby Floor Plan

Figure 1-7

Mezzanine Level

The Mezzanine Level would include three restaurant and lounge areas original to the TWA Flight Center: The First Class Lounge, Lisbon Lounge, and Paris Café. Efforts would be made to replace the existing undersized elevator systems while preserving historic integrity.

Below Grade Levels

The hotel would offer a total of 50,000 square feet of conference space, located mainly on the newly expanded Below Grade Levels with flexible meeting rooms of varying capacities. The Below Grade Levels would also include the kitchens, mechanical rooms, laundry, fitness center, and additional space for the historic interpretive displays.

Below Grade Disturbance and Excavation

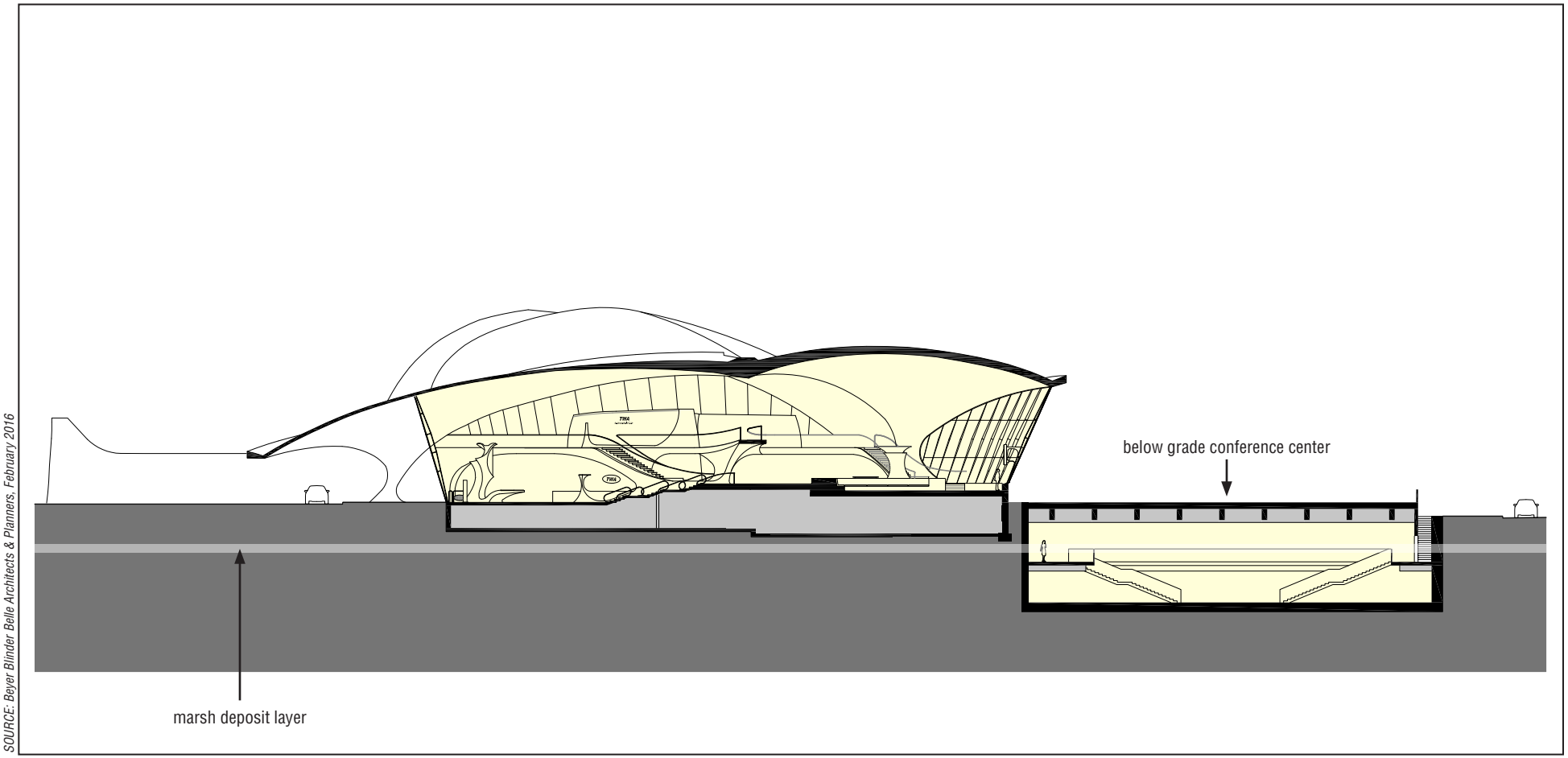
The Below Grade Levels of the TWA Flight Center as well as the lowest levels of the connecting walkways and the new hotel room buildings are located below the Lower Lobby existing street grade (at NAVD88 elevation 13 feet 10 inches). For the existing TWA Flight Center, this includes areas that are already up to about 9 feet 8 inches below the Lower Lobby and includes machine rooms and other spaces. The existing below grade areas account for about 66,000 square feet of the total below grade floor area of 146,000 square feet with new hotel construction.

The area of deepest excavation would be for the conference center (an area of approximately 50,000 square feet), as shown on **Figure 1-8**. The lowest possible excavation for the conference facilities would be approximately 27.2 feet below grade (at elevation -13 feet 5 inches). The lowest ground level for the guest room buildings would be about 5 feet below grade (at elevation 8 feet 10 inches).

As is discussed in Chapters 4 and 5, the levels of excavation are important based on the existing subsurface conditions on the project site and on the larger airport property where an approximately one to three foot layer of marsh deposits (organic silt, clay and peat) creates a natural barrier between the surface soils and developed areas and groundwater (see **Figure 1-8**). Deeper excavations would be conducted in a manner to limit the amount of seepage into the excavation by driving a sheet pile wall or cells to isolate the excavation from the surrounding aquifer. No pile driving would take place during nighttime hours. A Construction Noise and Vibration Mitigation Plan would be developed to protect the TWA Flight Center from potential vibrational impacts during construction and would also be reviewed by FAA Air Traffic Control Tower staff.

Summary

The total area of the proposed full service hotel, including existing areas to remain, and all Ground Floor areas will be 440,000 square feet. The height of the existing TWA Flight Center was taken into consideration in the design and siting of the Proposed Project. As such, the proposed hotel guest rooms and amenities would be partially submerged to create a habitable basement level. This approach also offers a direct relationship between the guest accommodations and the hotel back of house.



SOURCE: Beyer Blinder Belle Architects & Planners, February 2016

Proposed Project Cross-Section
Below Grade Conference Center
Figure 1-8

1-2-5-4 CIRCULATION AND PARKING

The existing roadway network would be redesigned to accommodate hotel functions, including guest drop-off and valet parking to accommodate approximately 44 spaces (see **Figure 1-9**). Hotel guests and conference/banquet attendees would also be welcomed to self-park in the Yellow Garage, located just across from the main entrance. A walkway would be constructed to connect the TWA Flight Center Hotel Lobby to the nearby Terminal 5 AirTrain station (see **Figure 1-9**).

It is anticipated that nearly all hotel and air passenger movements between the hotel and the surrounding terminals would be by the pedestrian tubes connecting to jetBlue Terminal 5 or by AirTrain. Hotel guests arriving or departing off the airport would be expected to be primarily linked to existing trips to and from the airport using the same modes of transportation that presently provide access to and from JFK (i.e, AirTrain, taxis, busses and vans, limos and car services, and private automobiles (See Chapters 4 and 5, below). No additional ground transportation would be provided by the hotel.

1-2-5-5 ELECTRICAL POWER INFRASTRUCTURE

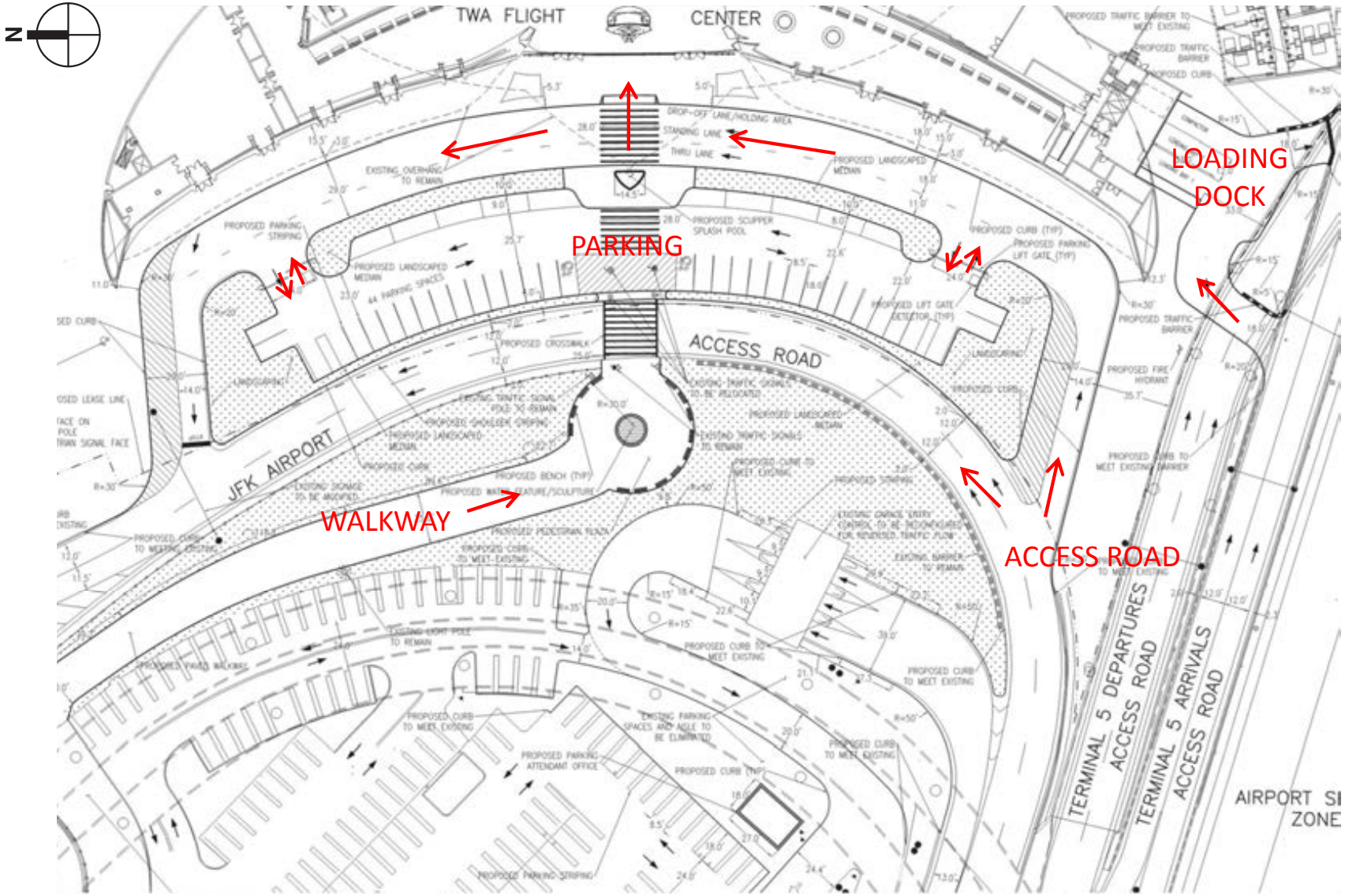
The Flight Center Hotel, including the Lobby and two guest room buildings, would be powered entirely by a new cogeneration facility. This facility would be on the rooftop of the west guest room building. Based on the calculated electrical load of 500 kilowatts (kW), a 1 megawatt (MW) facility would be required, consisting of twelve 100 kW Tecogen Inverde Ultra 100 units (including two redundant standby units). Additional information on the cogeneration facility is provided in Section 5-5. While the site is currently connected to the airport's on-site power plant, Kennedy International Airport Cogeneration (KIAC), there is not intent to use KIAC power at the proposed hotel.

1-2-5-6 CONSTRUCTION PHASING

Overall, construction of the Proposed Project is anticipated to begin in June 2016 and is expected to be complete and operational by 2018. Construction activities at the TWA Flight Center would begin with asbestos abatement, demolition (non-historic portions of the existing structure), and utility work, followed by the Lobby and amenities build out activities. Construction of the guest room buildings would begin with relocation of site utilities, excavation of soils, any required remediation, and construction of the foundations. When the below-grade construction is completed, construction of the superstructure of the new buildings would begin. Next, the exterior of the buildings would be constructed. Finally, interior fit-out activities would include the construction of nonstructural building elements, such as interior partitions and interior finishes.

1-3 FEDERAL ACTION

The Federal action required to implement the Proposed Project is a change to the ALP and its required approval by the FAA. This federal action triggers NEPA. The FAA would additionally approve its Form 7460, Notice of Proposed Construction or Alternation, for the Proposed Project and continue to review any airspace implications of the TWA Flight Center Hotel. These approvals must be obtained before the Port Authority and Flight Center Hotel, LLC can proceed with the development.



SOURCE: Philip Habib & Associates, February 2016

Proposed Project Site Access and Parking

Figure 1-9

Chapter 2: Purpose and Need

2-1 STATEMENT OF PURPOSE AND NEED

The purpose and need of the Proposed Project is to fulfill several important goals that will benefit all airport users (passengers, tenant airlines and their employees, Port Authority, and other customers), as well as the general public. These include:

- Restoration, rehabilitation, and adaptive reuse of the historic TWA Flight Center;
- Addition of a high-quality and full service hotel, conference center, and related facilities within the CTA and with AirTrain and inter-terminal connections;
- Enhance customer convenience and on-airport experiences; and,
- Economic benefits in terms of new private investment, public revenues to the Port Authority and other jurisdictions, and new employment opportunities and economic activity generated at the airport.

2-1-1 NEED FOR TWA FLIGHT CENTER REUSE

As documented in the 2004 EA, the historic TWA Flight Center was found inadequate to be operated as an active airline terminal. The final approved development plan for Terminal 5, which now surrounds the TWA Flight Center, was based on a commitment to incorporate an adaptive reuse strategy pursuant to the MOA entered into by the FAA, Port Authority, SHPO, ACHP, jetBlue, and other consulting parties to the Section 106 review undertaken as part of the Terminal 5 approval process.

As detailed in Chapter 5, *Environmental Consequences*, the MOA resulted in a process to ensure ongoing maintenance, initial restoration and rehabilitation work, and to solicit, review, and approve adaptive reuse proposals. To date, the Port Authority has invested about $19 million on extensive restoration work including replacing soundproofing materials on the ceiling of the main hall, restoration of the Lower and Upper Lobby areas, replacement of skylights, restoration of the East Flight Tube and removal and restoration of exterior areas.

Discussions internally at the Port Authority and with the RAC led to a decision on what next steps should be taken towards adaptive reuse. Ultimately consensus was reached that the most sustainable business adaptive re-use and development would likely be a hotel.

The proposed TWA Flight Center Hotel is a direct response by the developer to RFP #38826 issued by Port Authority. Development plans have been reviewed by the RAC. The proposal will provide an adaptive reuse that will provide for rehabilitation and restoration pursuant to the guidelines established in the MOA and consistent with

Secretary of the Interior's *Standards for the Treatment of Historic Properties - Rehabilitation*.

2-1-2 NEED FOR FULL SERVICE HOTEL

JFK is one of the most important airports in global aviation serving as a domestic and international gateway to the New York City region. Like other major airports, JFK is a major center of economic activity with about 37,000 employees and serves over 50 million passengers per year. As a full service hotel with conference facilities, the proposed TWA Flight Center Hotel will provide a major new asset to all airport users and further enhance the market competitiveness of the airport.

As airports continue to evolve with more diverse economic activities, airport hotels are increasingly seen as important market segments with meeting and conference elements and growing room night demand. Top ranked international and North American airport hotels overwhelmingly have direct terminal access and have broad user amenities and conference facilities. The consistently top ranked North American Hotel is the Vancouver Airport Fairmount Hotel which, like the proposed TWA Flight Center Hotel, provides both of these critical elements.[6] In addition, the proposed TWA Flight Center Hotel has the unique attribute of using the internationally recognized and iconic TWA Flight Center serving as the centerpiece of the proposed hotel.

As analyzed by the Port Authority and summarized in the 2014 developer RFP**,** the proposed TWA Flight Center Hotel would be introduced within a robust lodging market with consistently strong economic performance in occupancy, room rates, and revenue per available room (RevPAR).[7] The local market for airport hotels at JFK, with about 10 full service or larger hotels of 100 rooms or more have shown continuous growth in RevPAR between 2009 and 2013. The proposed TWA Flight Center Hotel would expand the market choices available to the overnight lodging marketplace.

As part of their response to the RFP, the Developer analyzed hotel economic data obtained from standard industry sources (STR Research) from three on-airport hotels—Marriott Newark Airport, Marriott Philadelphia Airport, Marriott Tampa Airport—as well as six of the adjacent JFK Airport hotels to evaluate the performance of the proposed TWA Flight Center Hotel.

2-1-3 ENHANCED CUSTOMER CONVENIENCE AND EXPERIENCE

As set forth in the developer's RFP and business model, the proposed TWA Flight Center Hotel would primarily serve existing and future demand presently at JFK. Among the 30 large hub airports in the United States, JFK has the fourth fastest projected annual compound growth rate at 2.43% between 2013 and 2040. FAA data indicates that JFK had 27.737 million enplanements (the sum of originating and connecting

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[6] Skytrax, World's Best Airport Hotels 2015 (http://www.worldairportawards.com/Awards/worlds_best_airport_hotels.html)

[7] Port Authority of NY&NJ. "Request for Proposals for the Development, Leasing, Management and Operation of a Hotel Incorporating the TWA Flight Center at John F. Kennedy International Airport (RFP#38826). August 8, 2014.

passengers but not arriving passengers) in 2013 and has a projected 47.337 million enplanements by 2040. [8]

The Developer estimates that its market segmentation would be based on: 17 percent of the hotel room demand generated by airlines in lodging for crew layovers or crew and passengers for irregular operations (IRROPs); 31 percent by the demand for airport-based meetings, conferences, and other events; and 52 percent would be by arriving or departing passenger demand for hotel room nights[9].

Room utilization and traveler bookings are based on capturing existing and future demand from airport operations and offer substantial market value through its direct connection to the CTA via the AirTrain. This also has a secondary benefit to the region by limiting vehicular traffic (vans, buses, taxis, and private cars) to and from airport to accommodate this demand. Airport-based conferences and meetings would include new opportunities based on a lack of existing facilities and a more efficient way to capture existing meeting and conference demand that already exists based on short-term travel demand to and from the New York region.

2-1-4 ADDITIONAL ECONOMIC BENEFITS

As estimated by the Developer, the proposed TWA Flight Center Hotel would provide an expansion of economic activity at JFK, from construction activities and through permanent operation of the new hotel. However, the Proposed Project would not increase the number of flights at JFK or alter any airside operations.

The development will invest some $265 million in equity and debt during the construction period. This expenditure will result in additional spending in the local economy and will generate new taxes and other revenues at a local, state and federal level.

Once opened, the Proposed Project is anticipated to generate approximately 500 to 600 permanent full and part time jobs. Operation of the hotel will generate revenue to the Port Authority in terms of base rent and percentage rent and a profit share. Taxes will accrue based on payroll and income taxes on employee wages as well as on sales taxes for goods and services as well as specific hotel occupancy taxes.

2-2 IMPLEMENTATION PHASING

Construction of the Proposed Project is planned to occur over a 30 to 31 month schedule. The proposed preliminary construction schedule is described below for the existing TWA Flight Center and proposed new guest room buildings**.**

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[8] FAA Terminal Area Forecast Summary Fiscal Years 2014-2040 (https://www.faa.gov/data_research/aviation/). In terms of total passengers, the Port Authority statistics indicate 50.424 million passengers in 2013 and 53.254 million passengers in 2014.

[9] Based on market analysis of other airport hotels and interviews with American Airlines and jetBlue (MCR Responses to Port Authority RFP Questions, November 2014). jetBlue and MCR Development. “Flight Center Hotel LLC, RFP Question Responses.” November 6, 2014.

TWA Flight Center

- Month 1: Site preparation
- Month 2 to Month 8: Demolition of non-historic portions of TWA Flight Center, including asbestos and lead abatement
- Month 6 to Month 18: Mechanical, electrical, and plumbing (MEP) select removal
- Month 8 to Month 24: Upgrade MEP infrastructure
- Month 12 to Month 27: Build out kitchen and function rooms
- Month 15 to Month 29: Build out restaurant and café
- Month 18 to Month 30: Main lobby and reception build-out
- Month 26 to Month 30: Fit out furniture, fixtures, and equipment (FF&E)
- Month 24 to Month 31: Port Authority Inspections
- Month 31: Project Completion

Guest Room Buildings

- Month 1 to Month 8: Site preparation and logistics, site utility relocation, piles and foundation.
- Month 5 to Month 13: Complete structure of new buildings
- Month 11 to Month 20: Complete exterior envelope
- Month 8 to Month 23: Install MEP infrastructure
- Month 13 to Month 26: Build out hotel rooms
- Month 23 to Month 27: Fit out interior FF&E
- Month 22 to Month 31 Port Authority Inspections
- Month 31: Project Completion

2-2-2 ENVIRONMENTAL / REGULATORY AUTHORIZATIONS

Federal

- FAA approval of a change to the ALP is a required federal action for the Proposed Project.
- FAA will render an environmental determination pursuant to its NEPA obligations.

State

- Coastal Zone Management Consistency Determination to demonstrate that the Proposed Project is in compliance with New York's Coastal Zone Management

Plan and New York City's Waterfront Revitalization Plan. The Proposed Project received the Coastal Zone Consistency Determination on November 12, 2015. The determination is available in Appendix F.

- A Stormwater Pollution Prevention Plan (SWPPP) would be prepared in accordance with the JFK Best Management Practices (BMP's) Plan and the Tenant Alteration Application (TAA). Following SWPPP approval by the Port Authority, a Notice of Intent (NOI) would be submitted to the New York State Department of Environmental Conservation (NYSDEC).
- A Long Island Well Permit would be required for dewatering authorization.
- Authorization for dewatering would be required under JFK's existing State Pollution Discharge Elimination System (SPDES) Permit

Port Authority of New York and New Jersey

- TAA would be submitted to the Port Authority and approved prior to the start of construction.

Any permits or approvals noted in the previous sections must be obtained and copies provided to the Port Authority prior to commencement of work.

Chapter 3: Alternatives

CEQ regulations implementing NEPA requires that the following tasks be performed when preparing an EA:

- Evaluate all reasonable alternatives, including alternatives not within the jurisdiction of the Federal agency, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated; and
- Devote substantial treatment to each alternative considered in detail, including the No-Build/No-Action Alternative and the Proposed Project, so that reviewers may evaluate their comparative merits.[10]

This section describes the Proposed Project and alternatives to the Proposed Project, including the No-Build/No-Action Alternative, and evaluates the ability of each to meet the Purpose and Need described in Chapter 2, *Purpose and Need*.

Federal and state guidelines concerning the environmental review process require that all prudent, feasible, reasonable, and practicable alternatives that might accomplish the objectives of a project be identified and evaluated. As noted in FAA Order 5050.4B, an alternatives assessment is based on the Purpose and Need Statement, and Federal agencies may consider the applicant's purposes and needs and common sense realities of a given situation in the development of alternatives.[11]

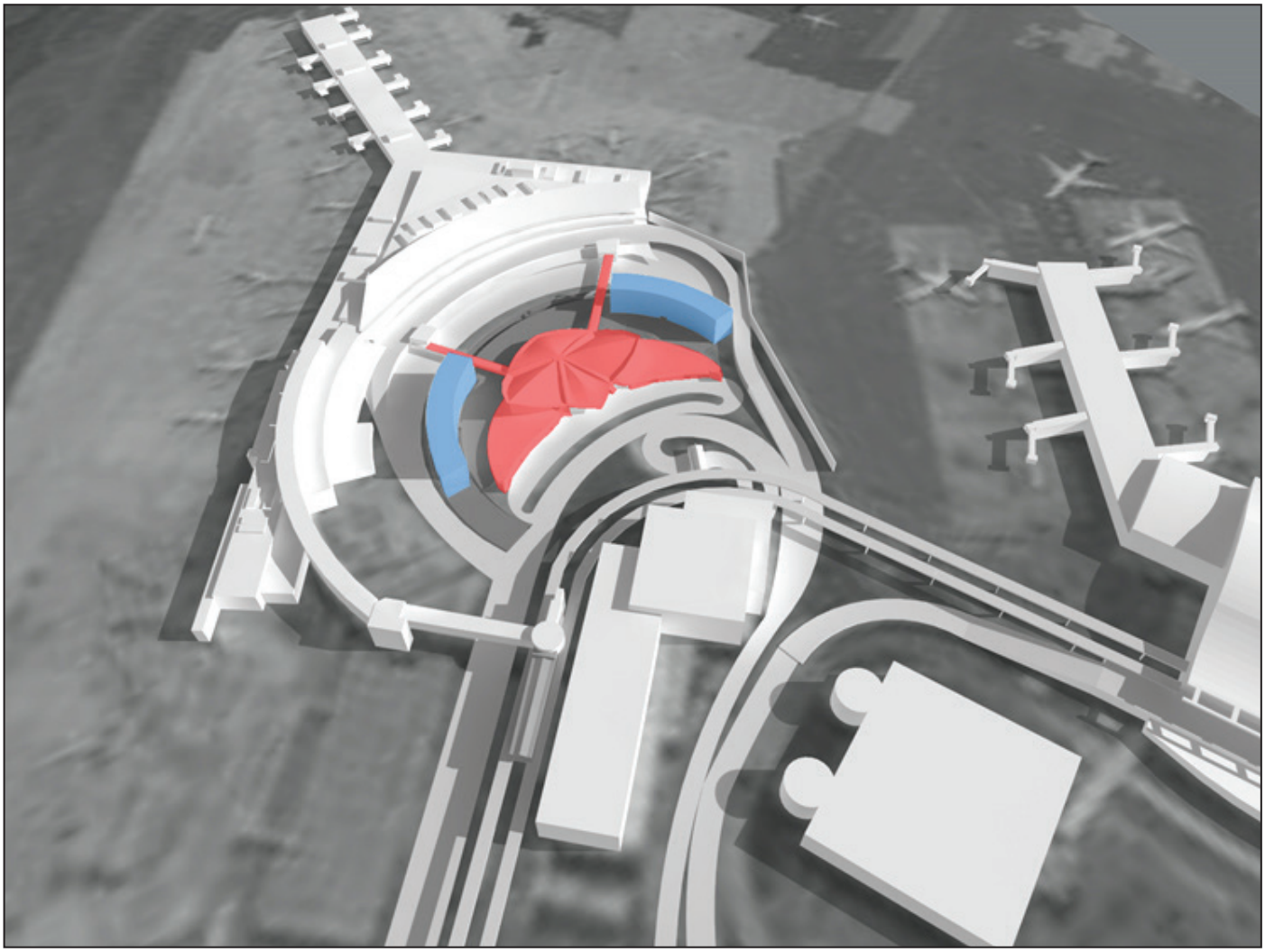
This EA was prepared to identify and evaluate all potential adverse impacts on the natural and human environments that are expected to result from implementation of the Proposed Project and the No-Build/No-Action Alternative. Other alternatives were considered during the planning phases of the Proposed Project, but were eliminated from further detailed environmental review as stated in Section 3-3.

3-1 PROPOSED PROJECT ALTERNATIVE

The Proposed Project Alternative is the TWA Flight Center Hotel, and this chapter describes the overall project and how the Proposed Project addresses the stated purpose and needs described in Chapter 2 “Purpose and Need.” The site plan for the proposed hotel is shown in **Figure 3-1** and more detailed information on project elements can be found in Chapter 1 “Project Description.”

[10] Guidance Regarding NEPA Regulations, CEQ, 48 *Federal Register* 34263 (July 28, 1983).

[11] Ibid.



SOURCE: Lubrano Ciavarra Architects, December 2015

Proposed Project Alternative
Figure 3-1

3-1-1 ADAPTIVE RE-USE OF THE TWA FLIGHT CENTER

The centerpiece of the Proposed Project is the rehabilitation, restoration, and re-purposing of the historic TWA Flight Center. The iconic TWA Flight Center was designed by Eero Saarinen and opened in 1962. While the adjacent jetBlue Terminal T5 construction was completed in 2009, the TWA Flight Center has not been in use as a functioning terminal building since 2001. The 2004 MOA prepared as part of the 2004 EA specifically identified the need and process for seeking adaptive re-use alternatives for the TWA Flight Center and the Proposed Project is a direct outcome of that process. The Proposed Project has the following elements specific to the development and re-use of the former terminal building.

3-1-1-1 DEMOLITION OF NON-HISTORIC ADDITIONS

Site development plan includes the demolition of the non-historic portions of the building that were added around 1970 and altered the original footprint of the 1962 building.

3-1-1-2 BUILDING RESTORATION

The main TWA Flight Center building would become the lobby and public amenities for the proposed hotel. Iconic public spaces would be restored to recapture their original design and concepts. Key features of the restoration include:

- The East and West connector tubes would provide pedestrian walkways to and from the jetBlue Terminal 5, as well as the guest room buildings and conference center. New passageways would be cantilevered from the guest room buildings to connect to the historic East and West tubes. As part of the 2004 Terminal 5/6 Redevelopment Project, the East tube was restored and the West tube was reconstructed as per the 2004 MOA.
- The Lower Lobby level is located at street level and includes the former ticket counters. The South ticketing area would serve as a combination of retail space and a food hall. The North ticketing area would accommodate hotel and event check-in. A minimum of two airline ticketing kiosks would be provided in the Lower Lobby for check-ins with carry-on baggage only. Connections to the proposed new hotel room buildings (see below) would be from walkways at the Upper Lobby level.
- The Lobby level includes the TWA Flight Center's iconic sunken lounge and would be the location for many of the hotel's proposed amenities, including a f concierge, ballroom, and other uses. In addition the Lobby level would include the historic interpretive display established in partnership with the New-York Historical Society.
- The Mezzanine level includes three restaurant and lounge areas original to the TWA Flight Center.
- The Below Grade Levels would include 50,000 square feet of conference space with flexible meeting rooms of varying capacity. This area would also include kitchens, mechanical rooms, laundry, fitness center, and additional space for the historic interpretive display.

- The existing airport circulation road would continue to provide curbside access to the TWA Flight Center, the layout of the terminal access way would be redesigned to accommodate hotel functions including valet parking.

3-1-1-3 CONNIE BAR

One of the hotel's lounges would be located within a re-purposed Lockheed "Super G" Constellation airplane that would be placed on the former tarmac area between the two connector tubes and would be accessed via walkway from the hotel.

3-1-1-4 HOTEL GUEST ROOM BUILDINGS

The Proposed Project includes the construction of two new guest room buildings that would be built on either side of the original TWA Flight Center with each building having a footprint of approximately 1,600 square feet and would be six stories (plus a habitable basement level). A 5,000 square foot roof-top observation deck would be located on the east guest room building.

3-1-2 PROPOSED PROJECT SUMMARY

The total area of the proposed new guest room buildings and hotel amenities, plus the existing TWA Flight Center to be re-purposed would be 440,000 square feet. The entire project would be powered by a new cogeneration facility that would be located on the rooftop of the west guest room building. The Proposed Project is anticipated to take about two years to complete beginning in 2016 with completion by 2018.

The Proposed Project has been established directly in response to identified needs set forth Chapter 2, *Purpose and Need*, and in comparison with the No Action Alternative or other Alternatives considered, the Proposed Project specifically allows for:

- The adaptive reuse of the historic TWA Flight Center building;
- Development of an on-airport hotel facility at JFK with direct connection to the AirTrain;
- Enhanced Customer Convenience and Experiences; and
- New economic activity and employment opportunities at the airport.

3-2 NO BUILD / NO ACTION ALTERNATIVE

In the No Build, or No Action, Alternative the proposed TWA Flight Center Hotel would not be built, and the historic TWA Flight Center would not have an adaptive reuse program and would not undergo the complete rehabilitation and restoration as set forth in the 2004 MOA (e.g. remaining asbestos abatement, replacement of all windows, upgrade and replace antiquated heating, ventilation, and air conditioning, etc.). With the No Action Alternative, there would be no use of the building and basic services would not be provided (e.g. hotel services and other related amenities, restaurants, etc.). There would be no public access to the building. There would be no new on-airport hotel and no enhancement for customer experience at the airport, and the TWA Flight Center would not result in new employment and economic activity at the airport.

In terms of the adaptive re-use of the TWA Flight Center, and as set forth in Stipulation 20 of the 2004 MOA, if the Port Authority has not reached agreement with an adaptive

reuse developer, the signatories to the MOA shall reconsider the terms of the agreement. As the Port Authority has indicated, no other funding resources are available and absent a private development partner, there is no anticipated ability to continue with the restoration and rehabilitation of the TWA Flight Center. The complete restoration project is estimated to require a total of $87 million, of which only a portion (approximately $19 million) has been funded by the Port Authority.

The absence of a high quality on-airport hotel is an increasingly notable omission compared with other international gateway airports. At JFK all adjacent hotels are off airport grounds and are not connected by transit or walkways to terminals. The Newark International Airport has an on-airport Marriott although it is not directly connected to any one terminal or a stop on its AirTrain. Market trends, nationally and locally as researched by the Developer and by the Port Authority, indicate that there is substantial value to on-airport hotel operations (increased occupancy, higher rates) and terminal connected hotels add to the economic value of the airport itself.[12]

The Developer estimates that its market segmentation would likely be based on: 17 percent of the hotel room demand generated by airlines in lodging for crews or other functions; 31 percent by the demand for airport-based meetings, conferences, and other events; and, 52 percent would be by arriving or departing passenger demand for hotel room nights. Airline room utilization and traveler bookings are based on capturing existing and future demand from airport operations and offer substantial market value through its direction connection to the CTA via the AirTrain. This also has a secondary benefit to the region by limiting vehicular traffic (vans, buses, taxis, and private cars) to and from airport to accommodate this demand. Airport-based conferences and meetings would include new opportunities based on a lack of existing facilities and a more efficient way to capture existing meeting and conference demand that already exists based on short-term travel demand to and from the New York region.

The No Action Alternative would not add additional on-airport employment opportunities or expand market opportunities as available from the on-airport hotel and conference facilities and would therefore not contribute to JFK's prominence as an important regional economic center of activity.

In summary, the alternative does not meet any of the identified needs established in Chapter 2, *Purpose and Need*.

3-3 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM FURTHER CONSIDERATION

3-3-1 HOTEL AT ANOTHER LOCATION ON THE JFK AIRPORT

Other hotel sites within JFK were considered but eliminated as viable alternatives to the Proposed Project.

[12] Based on market analysis of other airport hotels and interviews with American Airlines and jetBlue (MCR Responses to Port Authority RFP Questions, November 2014). jetBlue and MCR Development. "Flight Center Hotel LLC, RFP Question Responses." November 6, 2014.

3-3-1-1 WITHIN CENTRAL TERMINAL AREA

The first choice would be to find an alternative hotel site that would be as conveniently located within the CTA as with the Proposed Project. As shown in **Figure 3-2**, the TWA Flight Center site is the only viable location in the CTA that could accommodate new hotel facilities without requiring extensive relocation or incursion into or above parking garages, circulation roadways, or terminal structures. Therefore, based on the configuration of the CTA, no other locations would be available to build a hotel and connect directly to a terminal or the AirTrain system. Another location within the CTA would not meet the stated purpose and need of creating an adaptive reuse for the historic TWA Flight Center.

3-3-1-2 FORMER RAMADA PLAZA HOTEL

The former Ramada Plaza Hotel (JFK Building 144) hotel is located in the far northern section of the airport adjacent to the Belt Parkway and the Van Wyck Expressway. The hotel was originally opened in1958 as a Travelodge and was closed in 2009 after many years of interim uses and deteriorating conditions. It is not connected to the AirTrain and does have any proposed redevelopment interest as a hotel facility. Redeveloping the Ramada Plaza site would allow for an on-airport hotel facility but it would for all practical purposes operate in the same manner as the existing airport adjacent hotels since it would not be directly connected to the terminal or to transit. This alternative would also not meet the goal of creating an adaptive reuse for the historic TWA Flight Center. At a later date, a solicitation will be issued for a Developer to restore the former Ramada Hotel. However, as mentioned above, the Port Authority envisions it as a full or limited service hotel outside of the CTA, and would not meet the purpose and need of this project.

3-3-1-3 SUMMARY

Alternative locations on the airport grounds would not be practical in terms of providing a reasonable development site within the CTA and would not meet the purpose and need of the Proposed Project as an adaptive reuse of the historic TWA Flight Center resulting in the rehabilitation and restoration of the facility.

3-3-2 HOTEL AT ANOTHER LOCATION OFF THE JFK AIRPORT

There are numerous airport-oriented hotels located just off the airport property, primarily along the service roads of the Belt Parkway and the Nassau Expressway/Rockaway Boulevard. New hotels as allowed by local zoning and land use controls and in response to market demand are already a component of the lodging market.

This alternative would not meet the purposed and need of providing for an adaptive reuse of the TWA Flight Center or of providing an on-airport full service hotel.

3-3-3 SMALLER HOTEL AT THE TWA FLIGHT CENTER

Smaller hotel proposals were considered in earlier proposals considered and not carried forward by the Port Authority in response to earlier developer RFPs. In review and negotiation of the these smaller hotel proposals, in each case it was determined that the hotel proposal was not financially viable and could not support the development



2014 Aerial of Central Terminal Area

Figure 3-2

of the hotel or the rehabilitation, restoration, and maintenance of the TWA Flight Center pursuant to the MOA and the 2004 Terminal 5 EA.

In responding the Port Authority's 2014 RFP for adaptive reuse of the TWA Flight Center, the Developer presented a detailed financial model based on the comprehensive restoration of the TWA Flight Center and the development of the hotel itself including the TWA Flight Center, the new hotel room buildings, and related improvements to entire site. In a letter dated July 16, 2015, the ACHP questioned the siting, scale, and proposed programs for the Proposed Project. As noted in Port Authority's response to ACHP comments in **Appendix C**, the Proposed Project is reliant upon a balance between the hotel guest rooms and associated programs that support them. Alternative design schemes were considered and rejected due to site constraints and efforts to give visual clarity to the Flight Center. It is an important feature of the proposed design to distinguish between the historic structure and new spaces.

The size of the Proposed Project is in good part based on the restoration of the Flight Center which adds a considerable premium to the overall cost of development. As presented by the Developer to the RAC, this additional cost is estimated at approximately $87 million, of which an initial $19 million was funded by the Port Authority and the remaining $68 million will be funded by the Developer and integrated into the overall projection of costs that need to be offset by future revenues.

As with any hotel operations, guest rooms drive revenue and the proposed approximately 505 guest rooms are critical to the financial viability of the overall Proposed Project and, as modeled by the designated Developer, represent about 70 percent of total revenues. Analysis by the designated Developer highlights the sensitivity of building a smaller hotel in that there is a high level of fixed costs that remain regardless of the number of hotel rooms. In terms of construction, this results in a higher construction cost per room. On an operating basis, a smaller hotel does not offer the benefit of substantial cost savings relative to the loss of revenue. For example, the size difference would likely reduce the employment number by only 20 employees with an approximately 100 room reduction. This could reduce labor costs by an estimated $1.0 million while it would also result in a drop in revenue by approximately $10 million; thus revenue losses are almost 10 times the cost reduction. This is illustrated in **Table 3-1,** which provides a comparison of approximately 400 and 505 room hotels.

Table 3-1
Comparison of 400 Room Hotel to Proposed 505 Rooms

	Reduced Approximately 400 Rooms	Proposed Approximately 505 Rooms	Change
Total Approximate Construction Costs	$260,944,000	$277,671,357	-$16,656,000
Approximate Cost of Construction Per Room	$652,360	$549,844	$102,516 per room
Estimated Number of Employees	480	500	-20
Estimated Payroll ($50,000 per employee)	$24,000,000	$25,000,000	-$1,000,000
Estimated Hotel Room Revenue ($1 million per room per year)	$40,000,000	$50,000,000	-$10,000,000
Sources: MCR/Flight Center LLC			

The implications of a reduced hotel room count would be insufficient revenue to ensure a viable financial basis. This could affect terms of lease and revenue payments to the Port Authority or affect other aspects of the overall business plan including the upfront and ongoing costs for the restoration and rehabilitation of the TWA Flight Center.

Therefore, based on the evaluation of proposals and financial analyses, it has been confirmed that a smaller hotel would not be financially viable and does not meet the purpose and need for the Proposed Project.

3-3-4 OTHER USES CONSIDERED FOR THE TWA FLIGHT CENTER

Other uses considered for the TWA Flight Center consisted of an Airline Terminal, Conference Center, and a Museum. Consideration of reopening the TWA Flight Center as an airline terminal was eliminated as a possibility in the 2004 EA. Consideration of repurposing the TWA Flight Center as a Conference Center or a Museum were not practical nor feasible since neither one would generate enough revenue to rehabilitate, restore and support the on-going maintenance of this historic facility. The TWA Flight Center has open public spaces that were meant to accommodate large numbers of people leaving or returning from their flights. A museum would not have created the same practical amenities for the travelling public befitting a facility in JFK's Central Terminal Area. A hotel and conference facility will provide amenities for the travelling public and the region as a whole, while providing the revenue necessary to rehabilitate, restore, and support the ongoing maintenance of the facility.

Chapter 4: Affected Environment

FAA Order 5050.4B states that the affected environment should succinctly describe only those environmental resources the Proposed Project and its reasonable alternatives, are likely to affect. The amount of information on a potentially affected resource should be based on the extent of the expected impact and be commensurate with the impact's importance.

The following describes the area around the proposed TWA Flight Center Hotel and identifies the resources that may potentially be impacted, which include land use, historic resources, and air quality. In accordance with FAA Orders 1050.1F and 5050.4B, the other resource categories are not discussed in this chapter due to lack of presence of the resource in the Proposed Project area or no change in the number of operations, flight paths, or runway use. In addition, the Proposed Project would occur entirely on Airport property and have no impact to the surrounding communities. Chapter 5, *Environmental Consequences*, includes a discussion about all of the resource categories, whether there are impacts to the category or not.

4-1 ENVIRONMENTAL SETTING

As shown in Figures 1-1 and 1-2 in Chapter 1, *Introduction and Background*, JFK is located in southern Queens area of New York City. The airport includes approximately 4,960 acres and includes the following principal facilities: two pairs of parallel runways; a CTA with six passenger terminals, five of which contain Federal Inspection Services facilities for processing international passengers; 123 aircraft contact gates; and AirTrain, a light-rail transit system linking terminals with each other and with each other and with public transit lines. The Proposed Project occupies approximately a 6.0-acre site in the eastern portion of the CTA and basically in the center of the larger airport. The project site is currently occupied by the historic TWA Flight Center and surrounding paved surface areas and is located an area to the west of the jetBlue Terminal 5, to the east of the Yellow parking garage, to the north of Terminal 4 (International) and to the south of Terminal 7 (British Airways).

4-1-1 LAND USE

The Proposed Project is wholly contained within the CTA and is largely surrounded by other structures and buildings. There is no contextual relationship of the project site with areas outside this immediate area on or off the airport. Within a quarter mile of the project site current land uses include airline terminals (Terminals 4, 5, and 7), airside activities adjacent to the terminals, and landside support areas including parking and service roadways. As established by the Zoning Code of New York City, the entire airport is mapped with as an M1-1 Manufacturing Zoning District. M1 districts typically include light industrial uses, where offices, hotels and most retail uses are also permitted.

JFK is predominantly surrounded by residential areas, national, and local parks, and small areas of commercial and light manufacturing land uses. The residential land uses range from low density single-family dwellings to medium density townhouses and small buildings. There are no large apartment buildings, greater than 14 stories, in the vicinity of JFK. The Gateway National Recreation Area, which contains the Jamaica Bay Wildlife Refuge, borders the southern side of the Airport and is part of the National Park System. The commercial and light manufacturing land uses range from shopping centers and automotive sales to bridge construction component manufacturing and auto repair. These uses are generally located adjacent to low density residential areas

4-2 RESOURCES POTENTIALLY AFFECTED

4-2-1 HISTORICAL, ARCHITECTURAL, ARCHAEOLOGICAL, AND CULTURAL RESOURCES

4-2-1-1 AREA OF POTENTIAL EFFECT

A required step in the Section 106 process is determining the Area of Potential Effect (APE), which is defined as "the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if such properties exist" (36 CFR § 800.16[d]). The APE is influenced by the scale and nature of an undertaking.

In general, adverse effects on historic properties may include both direct physical effects—demolition, alteration, or damage from construction—and indirect effects, such as the introduction of visual, audible, or atmospheric elements that may alter the characteristics of the historic property that qualify it for inclusion in the National Register in a manner that would diminish the integrity of the property's significant historic features.

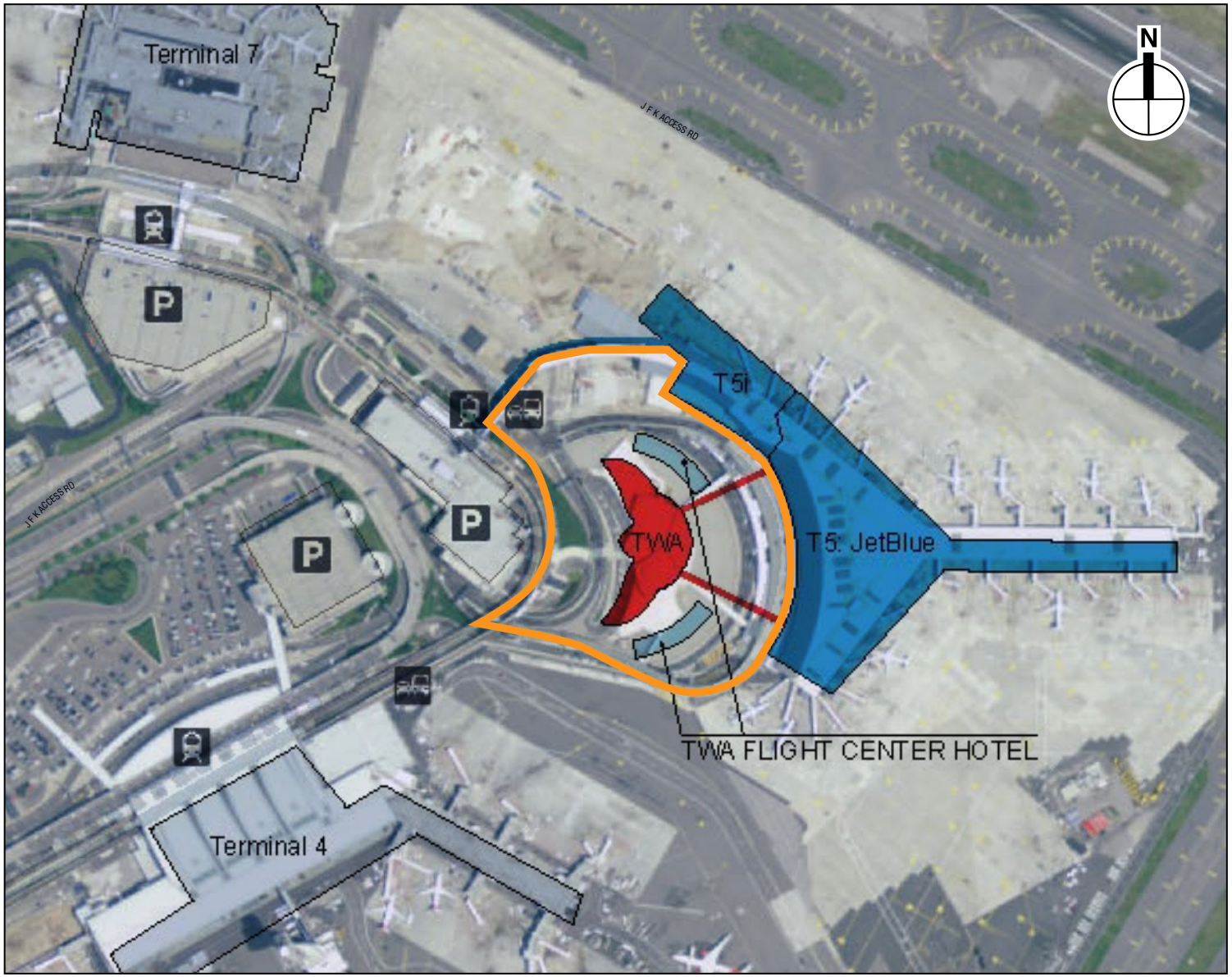
The APE includes the area where the proposed project could cause potential direct effects and the area in which the proposed project could cause indirect effects. The area where potential direct effects could occur is the project site, including the historic TWA Flight Center and adjacent paved land areas of former tarmac and roadways. The APE for indirect effects is limited to the areas immediately adjacent to the project site, since the Terminal 5 building to the east, Terminal 5 AirTrain Skywalk to the north, elevated airport service roadway to the south, and Yellow Parking Garage to the west, serve as physical and visual buffers to areas beyond them where potential effects to historic properties would not be expected to occur (see **Figure 4-1**).

4-2-1-2 TWA FLIGHT CENTER

The APE contains the TWA Flight Center, a vaulted reinforced concrete structure designed with a sunken waiting area with a glazed façade that originally faced the runway, and with balcony levels where bar, restaurant and first-class waiting areas were located. The TWA Flight Center, with its sweeping and aerodynamic architectural forms, is recognized as a significant example of Post-War Modern architecture in the United States.

Stipulation 7 of the 2004 MOA required that the TWA Flight Center, including the Main Terminal Building, Flight Wings, and East and West Tubes be nominated to the

2.25.16



Area of Potential Effect for Indirect Effects

TRAIN

PARKING

GROUND TRANSPORTATION

TWA Flight Center Hotel

Area of Potential Effect

Figure 4-1

National Register prior to the demolition of the Flight Wings. As a result of this stipulation, the TWA Flight Center was formally listed on the National Register in October 2005 (see **Appendix B**). As defined in the National Register nomination, the boundary consists of a polygon that encompassed all the existing components of the terminal complex, including the Main Terminal Building, East and West Tubes, both Flight Wings, and certain land beyond the boundary of these structures. The period of significance established in the National Register nomination spans between 1962 and 1970, which corresponds to the initial construction of the TWA Flight Center through completion of the baggage wings.[13]

The building was originally designed with one raised and enclosed walkway or "tube"- the East Tube – which connected to a flight wing (Flight Wing 2), which contained boarding gates where passengers boarded and deplaned. In 1967, a second and larger flight wing was added (Flight Wing 1) and was connected to the Main Terminal Building by another raised tube, the West Tube, which was longer and different in design to the East Tube. Between 1967 and 1970, additions were constructed to the runway, or airside, of the building on either side of the waiting area glazed façade, to house additional baggage handling, ticketing and office functions. These additions, or wings, were also constructed of concrete, altered the original footprint of the 1962 building, and are not included in the listing on the National Register.

Construction of Terminal 5/6 resulted in further alterations to the TWA Flight Center. These include the removal of both light wings and the reconstruction of the West Tube in conformance with the 2004 MOA. The East and West Tubes now connect to the jetBlue Terminal, with the West Tube having been reconstructed as part of the Terminal 5/6 Redevelopment Project. The TWA Flight Center site is defined by the airport access roads that surround it, including those built as part of the Terminal 5/6 Redevelopment Project. The areas of the Proposed Project site that are not occupied by the existing building's footprint include a loading dock area at the east end of the building, and stone gravel throughout the remainder of the site.

Since the EA for the Terminal 5/6 Redevelopment Project was completed in 2004, the Port Authority has performed approximately $19 million in extensive restoration work on the TWA Flight Center, plus annual maintenance. In summary, the work consisted of replacing soundproofing material on the ceiling of the main hall, restoration of the tiles in Lower and Upper Lobby areas of the main hall, replacement of skylights, restoration of the East connector tube, and restoration of portions of the exterior.

The TWA Flight Center is vacant; American Airlines acquired TWA's assets in 2001 and subsequently vacated the building in 2002 when TWA's lease expired.

[13] The National Register of Historic Places National Registration Form for the TWA Terminal states that Flight Wing 1 was constructed in 1967, with an underground passenger access tunnel connecting the TWA Main Terminal Building to Flight Wing 1 added at the basement level in 1970 (National Register of Historic Places Registration Form, Trans World Airlines Flight Center, John F. Kennedy International Airport, Jamaica, NY, June 22, 2005).

4-2-2 SURFACE TRANSPORTATION

4-2-2-1 TRAFFIC AND PARKING

Two divided highways provide access to JFK: the Van Wyck Expressway (VWE) and the John F. Kennedy Expressway (JFKE). The VWE (Interstate 678) is a six-lane highway extending in a north-south direction. The VWE serves as the primary access route for travelers destined to the Airport with connections to the east-west expressway network extending to Manhattan on the west and into Long Island in the east and leads to the Whitestone Bridge. The JFKE is a four to six-lane divided highway extending in a north-south direction located approximately 0.5 miles east of the VWE. The JFKE serves as a secondary access to the Airport with connections to the Nassau Expressway and the Belt Parkway.

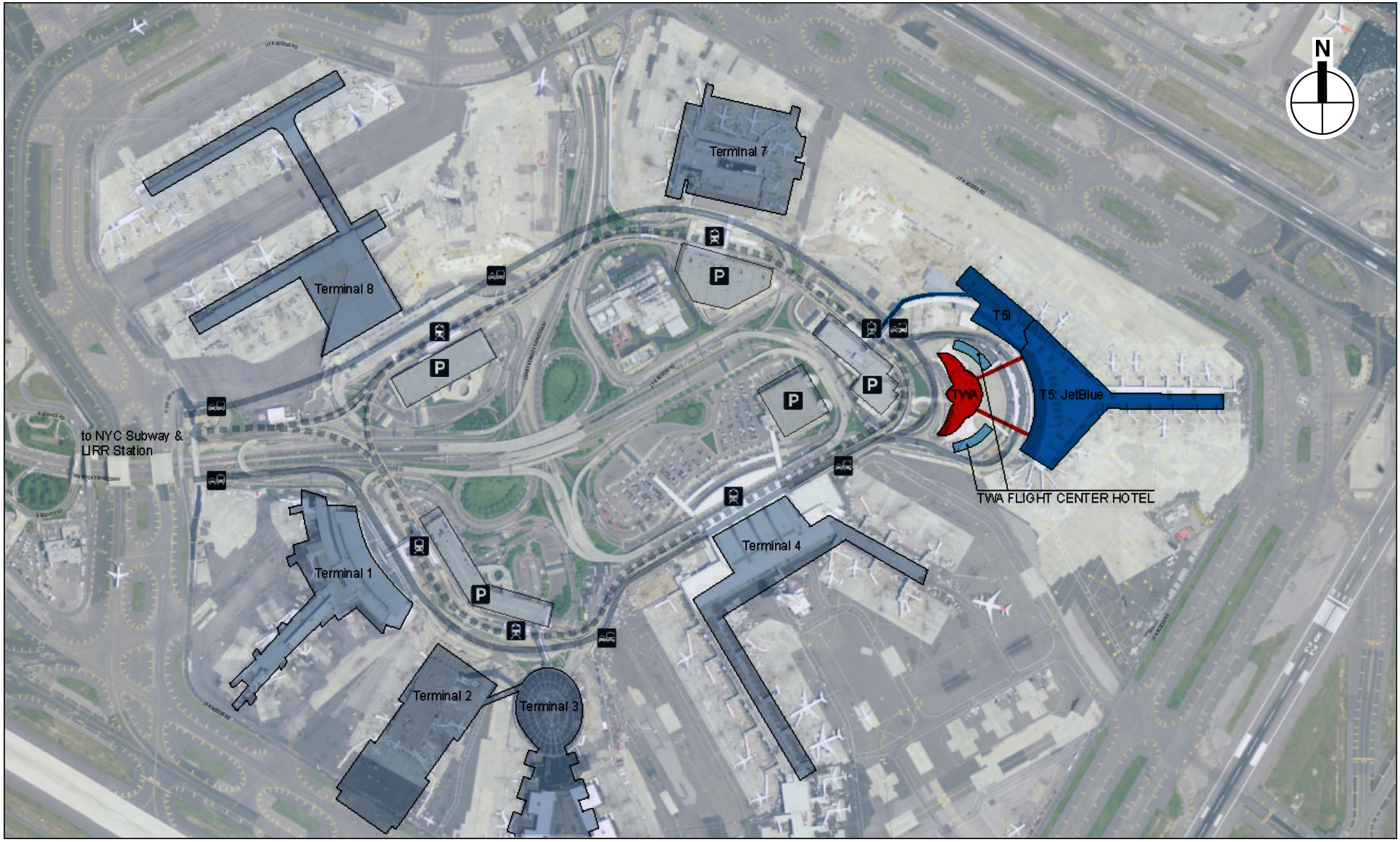
The existing roadways allow vehicles to circulate through the CTA, access each terminal's arrivals, departures and parking areas, and connect to the highway system. Paid parking facilities are provided within the center of the CTA in a number of structures and parking lots. The existing configuration of the JFK road network is shown in **Figure 4-2**.

Automatic traffic recorder (ATR) counts of the vehicles entering the JFK Yellow Quadrant (capacity of 1507 parking spaces), which serves Terminal 5 and the proposed TWA Flight Center Hotel, were conducted between August 21st and September 8, 2009 by the Port Authority. These counts show that the average peak volumes into the Yellow Quadrant were 1,430, 850, 913, and 1,198 during the weekday AM, midday, and PM, and Saturday peak hours, respectively. In order to approximate current existing traffic levels in the Yellow Quadrant, the 2009 Port Authority Yellow Quadrant vehicle counts were proportioned to reflect the growth in overall JFK air travel between 2009 and 2014. According to data from the Port Authority[14], the number of total revenue airplane passengers at JFK was 4,734,696 during the month of August, 2009, when the Yellow Quadrant counts were undertaken. Total revenue airplane passengers during August, 2014 (the latest year for which data are available) were 5,477,187. This amounts to an increase of revenue passengers of approximately 16 percent. In order to approximate existing Yellow Quadrant vehicular traffic, this same proportional increase in volume was applied to the above 2009Yellow Quadrant counts, and the derived 2014 existing traffic volumes entering the roadways in the Yellow Quadrant, which would serve the Proposed Hotel, would be approximately 1,659, 986, 1,059, and 1,390 during the weekday AM, midday, and PM, and Saturday peak hours, respectively.

4-2-2-2 TRANSIT

JFK is served by several modes of public transportation, including bus, rail, and subway. One of the primary modes of transit to and from the Airport is the AirTrain JFK Light Rail System, which was opened in 2003. The AirTrain has stops at each of the terminals at JFK and provides connections to the rapid transit network at Jamaica

[14] The Port Authority of NY & NJ August 2014 Traffic Report http://www.panynj.gov/airports/pdf-traffic/AUG2014_JFK.pdf



TWA Flight Center Hotel

JFK Transportation Network

Figure 4-2

Station and the New York City Transit (NYCT) Howard Beach Station. Travelers destined to JFK can also use numerous other combinations of subway or rail combined with bus access as well as various private taxi services, express shuttles, and buses, which also provide transportation to and from JFK.

According to Port Authority data, the number of passengers using the AirTrain to access JFK from in the year from December 2013 to December 2014 was 6,371,783. Assuming an even number of riders for each day of the week, this would translate to approximately 17,457 AirTrain riders per day.

4-2-3 AIR QUALITY

4-2-3-1 NATIONAL AMBIENT AIR QUALITY STANDARDS

As required by the Clean Air Act (CAA), primary and secondary National Ambient Air Quality Standards (NAAQS) have been established for six major air pollutants: carbon monoxide (CO), nitrogen dioxide (NO_2), ozone, respirable particulate matter (both particles with an aerodynamic diameter of less than or equal to 2.5 micrometers [$PM_{2.5}$], and particles with an aerodynamic diameter of less than or equal to 10 micrometers [PM_{10}]), sulfur dioxide (SO_2), and lead. The primary standards represent levels that are required to protect the public health, allowing an adequate margin of safety. The secondary standards are intended to protect the nation's welfare, and account for air pollutant effects on soil, water, visibility, materials, vegetation, and other aspects of the environment. The primary standards are generally either the same as the secondary standards or more restrictive. The NAAQS are presented in **Table 4-1**. The NAAQS for CO, annual NO_2, and 3-hour SO_2 have also been adopted as the ambient air quality standards for New York State but are defined on a running 12-month basis rather than for calendar years only. New York State also has standards for total suspended particulate matter, settleable particles, non-methane hydrocarbons, 24-hour and annual SO_2, and ozone which correspond to federal standards that have since been revoked or replaced and for the noncriteria pollutants beryllium, fluoride, and hydrogen sulfide.

The CAA, as amended in 1990, defines non-attainment areas (NAA) as geographic regions that have been designated as not meeting one or more of the NAAQS. When an area is designated as non-attainment by the United States Environmental Protection Agency (EPA), the state is required to develop and implement a State Implementation Plan (SIP), which delineates how a state plans to achieve air quality that meets the NAAQS under the deadlines established by the CAA, followed by a plan for maintaining attainment status once the area is in attainment.

The conformity requirements of the CAA and regulations promulgated thereunder limit the ability of federal agencies to assist, fund, permit, and approve projects that do not conform to the applicable SIP. When subject to this regulation, the federal agency is responsible for demonstrating conformity for its Proposed Project. Conformity determinations for federal actions other than those related to transportation plans, programs, and projects which are developed, funded, or approved under title 23 U.S.C. or the Federal Transit Act (49 U.S.C. 1601 et seq.) must be made according to the requirements of 40 CFR Part 93 (federal general conformity regulations).

Table 4-1
National Ambient Air Quality Standards (NAAQS)

Pollutant	Primary		Secondary	
	ppm	$\mu g/m^3$	ppm	$\mu g/m^3$
Carbon Monoxide (CO)				
8-Hour Average [1]	9	10,000	None	
1-Hour Average [1]	35	40,000		
Lead				
Rolling 3-Month Average [2]	NA	0.15	NA	0.15
Nitrogen Dioxide (NO_2)				
1-Hour Average [3]	0.100	188	None	
Annual Average	0.053	100	0.053	100
Ozone (O_3)				
8-Hour Average [4,5]	0.070	140	0.070	140
Respirable Particulate Matter (PM_{10})				
24-Hour Average [1]	NA	150	NA	150
Fine Respirable Particulate Matter ($PM_{2.5}$)				
Annual Mean [6]	NA	12	NA	15
24-Hour Average [7]	NA	35	NA	35
Sulfur Dioxide (SO_2) [8]				
1-Hour Average [9]	0.075	196	NA	NA
Maximum 3-Hour Average [1]	NA	NA	0.50	1,300

Notes:
ppm – parts per million (unit of measure for gases only)
$\mu g/m^3$ – micrograms per cubic meter (unit of measure for gases and particles, including lead)
NA – not applicable
All annual periods refer to calendar year.
Standards are defined in ppm. Approximately equivalent concentrations in $\mu g/m^3$ are presented.
(1) Not to be exceeded more than once a year.
(2) EPA has lowered the NAAQS down from 1.5 $\mu g/m^3$, effective January 12, 2009.
(3) 3-year average of the annual 98th percentile daily maximum 1-hr average concentration. Effective April 12, 2010.
(4) 3-year average of the annual fourth highest daily maximum 8-hr average concentration.
(5) EPA has lowered the NAAQS down from 0.075 ppm, effective December 2015.
(6) 3-year average of annual mean. EPA has lowered the primary standard from 15 $\mu g/m^3$, effective March 2013.
(7) Not to be exceeded by the annual 98th percentile when averaged over 3 years.
(8) EPA revoked the 24-hour and annual primary standards, replacing them with a 1-hour average standard. Effective August 23, 2010.
(9) 3-year average of the annual 99th percentile daily maximum 1-hr average concentration.
Source: 40 CFR Part 50: National Primary and Secondary Ambient Air Quality Standards.

JFK Airport is located in Queens County, New York which has been designated as in attainment for CO, $PM_{2.5}$, PM_{10} and Lead and is currently in attainment of the annual-average NO_2 standard. New York City was previously designated as non-attainment for $PM_{2.5}$ and CO, so the area is covered under maintenance plans to ensure that future background levels remain below standards. EPA has designated New York–Northern New Jersey–Long Island, NY-NJ-CT NAA as a marginal NAA for the 2008 ozone

NAAQS. EPA has designated the entire state of New York as "unclassifiable/attainment" of the 1-hour NO_2 standard effective February 29, 2012; since additional monitoring is required for the 1-hour standard, areas will be reclassified once three years of monitoring data are available (likely 2017). The EPA has established a 1-hour SO_2 standard, and based on the available monitoring data, all New York State counties currently meet the 1-hour standard; draft attainment designations were published by the EPA in February 2013, indicating that the EPA is deferring action to designate areas in New York State and expects to proceed with designations once additional data are gathered.

4-2-4 WATER RESOURCES

JFK is bordered on three sides by surface water, including Jamaica Bay, Bergen Basin, Head of Bay, and the Thurston Basin. Jamaica Bay, bordering JFK to the south, receives input from Bergen Basin and Thurston Basin, which border JFK on the west and east, respectively. The waters of Jamaica Bay and Head of Bay are considered suitable for primary and secondary contact recreation and are classified SB by NYSDEC. Waters within the adjacent tributaries are considered suitable for secondary contact recreation (classified I by NYSDEC). Shell fishing for market purposes is not permitted in these areas. A large part of Jamaica Bay and its adjoining waterways and shoreline are now a component of the Gateway National Recreation Area, which includes a National Wildlife Refuge. Tidal wetlands, shallow and deep-water habitats adjacent to the Airport are habitat for a diverse plant and avian population.

4-2-4-1 WATER QUALITY AND WASTEWATER

Water Quality

JFK is located along the periphery of the Brooklyn/Queens aquifer system, which is part of the larger Long Island aquifer complex. The area is primarily underlain by sandy fill materials dredged from Jamaica Bay during Airport construction. Beneath the fill material are layers of organic material from marsh deposits (organic silt, clay and peat) and glacial outwash deposits (sands, gravels with quantities of silts and clays). The marsh deposits are thought to act as a semi-confining unit that inhibits downward migration of shallow groundwater. The marsh deposit layer known to underlay the site is generally encountered at depths of 11 to 13 feet. Previous reports indicate groundwater in the Proposed Project area is approximately seven feet below grade.

The overall direction of groundwater flow at the site is to the south/southwest toward Jamaica Bay and away from water supply wells in central Queens that rely on the Long Island aquifer. Groundwater quality has been affected by past development at JFK and surrounding communities. Recharge of groundwater at JFK is primarily accomplished through migration from Brooklyn and Nassau Counties and from precipitation. The increase in impervious surfaces from past development and the installation of a separate storm sewer system has resulted in significant reductions in groundwater recharge. The Proposed Project area is primarily impervious; therefore, stormwater discharge from the area does not directly contribute to groundwater recharge. Groundwater is not used as potable water source in New York City.

Stormwater Runoff

JFK is serviced by an independent storm sewer system that collects stormwater runoff from the Airport and discharges to Jamaica Bay at 26 separate permitted outfall locations (NYSDEC Permit #2-6308-00019/00016). Runoff from parking areas, rooftops, runways, tarmacs and landscaped areas is collected and transported in a closed system and discharged to the Bay.

In New York State, storm water discharges are regulated by NYSDEC under the SPDES program. The Port Authority has been issued a discharge permit for the entire Airport that includes monthly monitoring requirements for specified water quality constituents. The constituents and their discharge limitations have been chosen in consultation with the NYSDEC to specifically address issues relating to Airport operations, including aircraft fueling and deicing. All discharges occurring via the stormwater conveyance system are in accordance with the requirements set forth in the Port Authority permit.

Sanitary Wastewater

Four water pollution control plants (WPCPs) discharge treated wastewater effluent into Jamaica Bay and its tributaries: Jamaica WPCP (including JFK wastewater), Rockaway WPCP, Coney Island WPCP, and 26th Ward WPCP. During significant rainfall events, sanitary and stormwater collected in combined sewers overflow to Jamaica Bay in combined sewer overflows (CSOs). There are over 25 potential CSO locations around Jamaica Bay. All sanitary wastewater generated at JFK, including the Proposed Project area, is conveyed to the Jamaica WPCP by the Airport sanitary sewer system.

The effects of these discharges on water quality vary across the Bay and its tributaries. The City of New York annually monitors New York Harbor, including Jamaica Bay. Coliform levels, dissolved oxygen, algae growth and floating materials, suspended solids, and heavy metals are a few of the quality indicators used. The City of New York has implemented various pollution control programs and is continually upgrading sewer systems and treatment facilities to support water quality enhancement.

4-2-5 COASTAL RESOURCES

The federal Coastal Zone Management (CZM) Act of 1972 was established to support and protect the distinctive character of the waterfront, and to assist coastal states in establishing policies for managing their coastal zone areas. In 1982, New York State adopted a state Coastal Management Program, designed to balance economic development and preservation in the coastal zone by promoting waterfront revitalization and water dependent uses while protecting fish and wildlife, open space and scenic areas, public access to the shoreline and farmland, and minimizing adverse changes to ecological systems and erosion and flood hazards. The State program is consistent with the federal CZM Act and contains 44 coastal policies. It also provides for local implementation when a municipality adopts a local waterfront revitalization program that is consistent with the federal CZM Act.

In accordance with the State program, New York City adopted a local waterfront revitalization program, the New York City Waterfront Revitalization Program (WRP), in 1982. The WRP, as amended, incorporates the State's 44 coastal policies, and

contains an additional 10 policies. The program is administered by the New York City Department of City Planning (DCP). It establishes the City's policies for development and use of the waterfront and provides a framework for evaluating activities proposed in the Coastal Zone. The site is located within the coastal zone designated by New York City. Therefore, the Proposed Project is subject to New York City's Coastal Zone management policies, contained within the WRP.

The coastal zone management program consistency review process is described in federal regulation at 15 CFR 930: Federal Consistency with Approved Coastal Management Programs, as amended, as well as in the WRP. Consistency review is required for any project that:

- Is in, or is expected to affect the resources or land or water uses of, the New York coastal zone, and
- Requires a state-listed federal license or permit, is federally or state funded, or is a direct activity of a federal agency.

The area affected by the Proposed Project is within the coastal zone. The nearby Jamaica Bay is a Significant Coastal Fish and Wildlife Habitat (SCFWH) and abuts JFK Airport. However, the project site is not in or adjacent to SCFWH. A copy of the letter seeking NYSDOS concurrence and the NYSDOS concurrence letter is attached as Appendix F.

On January 30, 2015, the President of the United States issued Executive Order (EO) 13690 that amends EO 11988, and established the Federal Flood Risk Management Standard ("FFRMS") and a process for public input prior to implementation of the FFRMS. However, *Guidelines for Implementing Executive Order 11988, Floodplain Management, and Executive Order 13690, Establishing a Federal Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input*, ("Guidelines") were issued on October 8, 2015. In the Guidelines, federal agencies were directed not to apply the new requirements until after the agencies adopt new or revised regulations governing the proper implementation of EO 13690 and the FFRMS. The Guidelines state that agencies will continue to comply with the requirements of the 1977 version of EO 11988 until they update their regulations and procedures to incorporate the amendments from EO 13690. These regulations and procedures will describe an agency's schedule for applying any new requirements as well as how it will apply the new requirements. The new requirements of EO 11988 will not be applied retroactively. The DOT has not issued implementing orders to date.

4-2-6 NATURAL RESOURCES AND ENERGY SUPPLY

The energy for JFK, including the existing TWA Flight Center, is supplied by the KIAC Facility. The facility is located at Building Number 49 in the middle of the CTA. The KIAC Facility consists of two General Electric combustion turbines equipped with supplementary fired duct burners and heat recovery steam generators (HRSGs), powered by natural gas with a backup of No. 2 fuel oil source. The KIAC Facility provides electrical power and heating and cooling services to the Airport facilities.

The existing TWA Flight Center is not currently in use; therefore, a minimal amount of natural resources and energy supply are utilized.

4-2-7 HAZARDOUS MATERIALS, SOLID WASTE, AND POLLUTION PREVENTION

4-2-7-1 TERMINAL 5 REMEDIAL INVESTIGATIONS

Various subsurface investigations in the vicinity of the project site have identified soil and groundwater impacted by jet fuel, gasoline, diesel, and other petrochemical products. Between 1999 and 2005, five separate investigations were performed during which numerous monitoring wells were installed and soil and groundwater samples were collected.

In May 2002, the Port Authority began product recovery from three identified product plumes near Terminal 5. Vacuum truck extraction was used in conjunction with the 80 extraction wells installed in the product plume areas. The vacuum truck extraction activities continued intermittently until October 2005 when construction activities related to the terminal redevelopment were initiated. A total volume of 16,200 gallons of product and approximately 800,000 gallons of groundwater were recovered during the vacuum extraction activities. During the construction of the new jetBlue Terminal 5, the old fuel hydrant system was removed in November 2006. At the time of construction, approximately 160,500 cubic yards of soil was removed from the Site. Approximately 28.59 million gallons of fluids were processed by the dewatering system during construction.[15]

Additional sampling was conducted following the completion of the Terminal 5 expansion. Between February and April 2011 the Port Authority completed soil and groundwater investigation activities. The results of the investigation indicated there were three areas where the groundwater is impacted by jet fuel related petroleum hydrocarbons at levels above the CTA Criteria, which were established in concert with NYSDEC. A Remedial Action Workplan was developed to propose remedial technologies to address the residual jet fuel groundwater impacts. Enhanced biodegradation via sulfate injection was chosen as a remedial alternative to reduce petroleum constituent concentrations.[16]

4-2-7-2 TWA FLIGHT CENTER INVESTIGATION

The TWA Flight Center was constructed in 1962 when building materials now known to be hazardous were commonly used. Hazardous materials present in the TWA Flight Center building include asbestos and lead-based paint.

LiRo Engineers Inc. (LiRo) prepared the *Terminal 5 Interim Initial Post Construction Baseline Report,* dated November 2009 which included results from sampling conducted immediately to the east and north of the Building 60 Site. LiRo's Terminal 5 investigation reported petroleum contamination in well T5-PMW-121 located in the current Terminal 5 roadway.

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[15] Port Authority of NY&NJ, Engineering/Architecture Design Division. "John F. Kennedy International Airport Terminal 5. NYSDEC Spill No.: 9010043, Remedial Action Workplan." June 2011.

[16] Ibid.

LiRo prepared a *Site Specific Sampling Plan*, dated June 2015 for the project site, based on their review of the *Building 60 Environmental Subsurface Baseline Investigation Report*, dated March 2010. A total of six soil borings were drilled at TWA Flight Center (aka Building 60) and all of the borings were completed as permanent monitoring wells. The newly installed wells at Building 60 plus five wells located on the Terminal 5 leasehold were gauged in order to determine the direction of groundwater flow at the site. Soil and groundwater samples were analyzed for parameters on the EPA Priority Pollutants plus 40 (PP+40) List including total xylenes, methyl tertiary butyl ether (MTBE), tertiary butyl alcohol (TBA), total petroleum hydrocarbons (TPHC), ethylene glycol and propylene glycol. Field observations and laboratory analysis indicated minimal contamination at the site.

In August 2015, LiRo completed 12 additional borings to identify soil characteristics on the eastern portion of the project site at the location of the proposed conference center and guest room buildings. The marsh deposit layer was encountered at all boring locations at depths ranging from 11.7 to 13 feet below grade with a thickness ranging from 1.6 to 3.5 feet. Groundwater at two existing monitoring wells was measured ranging from 7.3 to 7.9 feet below grade. Results of soil sampling by LiRo on December 10, 2015 were compared to NYSDEC Part 375-6.8(b) Restricted Use Protection of Public Health (Commercial) soil cleanup objectives (SCOs), NYSDEC Part 375-6.8(b) Restricted Use Protection of Groundwater SCOs, 6 NYCRR Part 371 hazardous waste limits and RCRA Subtitle C characteristic thresholds. The analytical results did not detect any compounds at levels above these regulatory thresholds.

Chapter 5: Environmental Consequences

5-1 INTRODUCTION

As discussed previously, the FAA issued a Finding of No Significant Impact (FONSI) / Record of Decision (ROD) for the EA and Section 4(f) Evaluation for the Terminal 5/6 Redevelopment Project. Therefore, this chapter specifically focuses on the proposed new hotel and adaptive reuse of the TWA Flight Center in order to assess the potential for environmental impacts not previously identified in the 2004 EA. This chapter presents the assessment of environmental impacts addressed in considering reasonably foreseeable environmental consequences of the Proposed Project.

5-1-1 ENVIRONMENTAL CATEGORIES

As required by FAA Orders 5050.4B and 1050.1F, the environmental categories listed below are addressed in this EA. Consistent with the findings from the 2004 EA, those technical areas with the highest potential for environmental impacts—historic, Section 4(f), Surface Transportation, and Air Quality—are the first areas to be evaluated in this chapter.

- Air quality
- Biological resources (including fish, wildlife, and plants)
- Climate
- Coastal resources
- Department of Transportation Act, Section 4(f)
- Farmlands
- Hazardous materials, solid waste, and pollution prevention
- Historical, architectural, archeological, and cultural resources
- Land use
- Natural resources and energy supply
- Noise and compatible land use
- Socioeconomics, environmental justice, and children's environmental health and safety risks
- Visual effects (including light emissions)
- Water resources (including wetlands, floodplains, surface waters, groundwater, and wild and scenic rivers

5-1-1-1 SECONDARY (INDUCED) IMPACTS

No adverse secondary (induced) impacts would occur from the Proposed Project. The Proposed Project would induce temporary positive secondary impacts as a result of the construction, by increasing employment opportunities and expenditures on local services.

Construction Impacts

The Proposed Project is not anticipated to cause any significant adverse construction-related impacts. This is due to the temporary nature of construction and mitigation procedures set forth in FAA Advisory Circular (AC) 150/5370 10E, Standards for Specifying Construction of Airports, as well as Port Authority's JFK BMPs. However, the cumulative impact of related construction projects, in addition to the Proposed Project, might have potential temporary impacts related to air quality, surface traffic congestion, and noise. The assessment of potential construction related impacts to each of the applicable categories listed above in Section 5-1-1 has been included in this chapter.

Cumulative Impacts

Even when impacts are determined to be individually insignificant, the impacts can be collectively significant when taking place over a period of time. Therefore, the cumulative effects of environmental impacts were considered only for those categories determined to have impacts due to the Proposed Project. The construction schedule of the Proposed Project would overlap with the construction of other projects at JFK, including demolition of Hangars 3, 4, and 5, the redevelopment of Building 144, rehabilitation of Runway 4R/22L, , North Cargo Area redevelopment, Bulk Fuel Farm Modification, Taxiway Q/QZ and RVSR rehabilitation and possibly Phase III of Terminal 3 and 4 expansion. The assessment of potential cumulative impacts to each of the applicable categories listed above in Section 5-1-1 has been included in this chapter.

5-2 HISTORICAL, ARCHITECTURAL, ARCHAEOLOGICAL, AND CULTURAL RESOURCES

The Proposed Project requires ALP approval, among other potential federal actions, and it is subject to NEPA and other laws, including Section 106 of the National Historic Preservation Act of 1966 (NHPA) as implemented by federal regulations appearing in 36 CFR Part 800. Section 106 of the NHPA mandates that federal agencies consider the effect of their actions on any properties listed in or determined eligible for listing on the NRHP (“historic properties”) and afford the ACHP a reasonable opportunity to comment on such undertakings.

The FAA, in cooperation with SHPO, Port Authority, and ACHP, determined that the proposed federal undertaking would have an adverse effect on the historic TWA Flight Center. The adverse effect was determined to include the removal of the structure’s aviation function and potential for it to become a secondary structure. Section 106 requires consultation with the SHPO, federally recognized Indian tribes that might attach religious and cultural significance to historic properties affected by the Proposed Project, and additional Consulting Parties with a demonstrated interest in the Proposed Project based on a legal or economic relation to affected properties, or an interest in the

Proposed Project's effects on historic properties. In addition, the ACHP has participated in consultation for the resolution of adverse effects.

Revised Section 106 regulations became effective in January 2001, with amendments effective in August 2004.

In 2004, an EA and Section 4(f) Evaluation for the Terminal 5/6 Redevelopment Project: JFK International Airport (referred to herein as the 2004 EA) was prepared. To address the impact on historic resources during the redevelopment of the terminals, the FAA, the ACHP, the SHPO, and the Port Authority entered into a MOA for the Rehabilitation, Restoration, and Adaptive Reuse of the TWA Flight Center. Consultation pursuant to Section 106 for the TWA Flight Center Hotel is proceeding pursuant to the 2004.

As part of the planning and environmental review conducted for the Terminal 5/6 Redevelopment Project, consultation was undertaken pursuant to Section 106 to assess the project's potential effects on historic properties. At the time of this consultation, the TWA Flight Center, including the Main Terminal Building, Flight Wing 2, and East and West Tubes, had been determined eligible for listing on the State/National Register of Historic Places. The TWA Flight Center, consisting of the Main Terminal Building, East and West Tubes, and Flight Wing 2, had also been designated a New York City Landmark (including portions of the interior of the Main Terminal Building, the East and West Tubes, and Flight Wing 2) in 1994.

Consultation pursuant to Section 106 identified that the Terminal 5/6 Redevelopment Project would result in an Adverse Effect on the TWA Flight Center, due to the planned removal of the original Flight Wing 2 and anticipated modifications to the West Tube. This Adverse Effect and measures that were developed to mitigate the Adverse Effect were memorialized in the 2004 MOA. The MOA set forth a number of measures that would be undertaken to avoid, minimize and mitigate the Adverse Effect of Terminal 5/6 Redevelopment Project, including how consultation would proceed regarding the future treatment and reuse of the TWA Flight Center.

The TWA Flight Center Hotel is a direct outcome of, and serves to implement certain stipulations of the 2004 MOA with respect to the restoration, rehabilitation, and adaptive reuse of the TWA Flight Center. Consultation for the TWA Flight Center Hotel is consistent with and within the Section 106 framework established by the MOA. The MOA and RFP issued by the Port Authority to solicit adaptive reuse proposals for hotel use require the selected developer to comply with the stipulations of the MOA. These stipulations and the status of compliance are described below in Section 5-2-2.[17]

5-2-1 FIRST AMENDMENT TO THE 2004 MOA

Based on the Section 106 consultation with the RAC regarding the design of the proposed TWA Flight Center Hotel and the adaptive reuse of the TWA Flight Center, a First Amendment to the 2004 MOA has been prepared. As described above, the

[17] Stipulations 1 through 18 contain commitments related to design, rehabilitation, restoration and maintenance and are described below. Stipulations 19 through 21 relate to the administration of the MOA and therefore are not evaluated for their compliance status.

Proposed Project would result in the removal of the additions completed in 1970 to the TWA Main Terminal Building. This proposed modification has been reviewed by the RAC. As these additions have not attained significance on their own or as part of the overall understanding of the TWA Flight Center, their removal would be consistent with the Secretary of the Interior's Standards for Rehabilitation. Removal of these additions would return the TWA Flight Center to its 1967 configuration, the year in which the West Tube was completed, and allow for a greater separation between the TWA Main Terminal Building and the proposed hotel.

The proposed hotel has been designed with two separate guest room buildings to be constructed north and south of the TWA Main Terminal Building. The proposed crescent-shaped footprints of the hotel buildings follow a similar curvature as the façade of the original TWA Main Terminal Building (prior to the 1970s) additions. Pedestrian access to the proposed guest room buildings would be via new passageways connected to the East and West tubes, thereby not interfering with the sculptural quality of the TWA Main Terminal Building. The passageways would be cantilevered from the new guest room buildings to minimize changes to the East and West tubes. The proposed glass and metal primary facades have been designed to complement and not compete with the masonry TWA Flight Center.

5-2-2 MOA COMPLIANCE

The 2004 MOA established the initial framework that led to the developer request for proposals ultimately leading to the Port Authority's selection of the Developer and the proposed TWA Flight Center Hotel development plan. This section summarizes compliance with the stipulations of the agreement, as well as stipulations detailed in the First Amendment. The stipulations are shortened and summarized in the EA and the entire 2004 MOA and its First Amendment are found in **Appendix B**.

5-2-2-1 MOA PLANNING STIPULATIONS

1. *Issuance of RFP and execution of an agreement with an adaptive reuse developer for the adaptive reuse and restoration of the TWA Terminal (TWA Flight Center).*

Compliance Status: The Port Authority has issued three RFPs and the Proposed Project is specifically in response to RFP #38826. SHPO, RAC and the Port Authority concurrence on conceptual plans is a pre-requisite for the lease agreement for adaptive reuse. SHPO approvals are required on more specific plans for construction as details are developed in accordance with the Secretary of the Interior's *Standards for Treatment of Historic Properties - Rehabilitation*.

Amendment 1A. The adaptive reuse developer will adhere to the terms and conditions of the amended 2004 MOA, as contained in the long-term lease for the site.

Compliance Status: Flight Center Hotel LLC and the Port Authority have entered a long-term lease, which provides for the adaptive reuse of the site in accordance with the stipulations in the 2004 MOA and its First Amendment.

2. Installation of two electronic ticketing kiosks in the TWA Terminal (TWA Flight Center).

Compliance Status: Two kiosks including power and communication lines have been installed on the main Lower Lobby level of the TWA Main Terminal Building east of the main roadway entrance. The Port Authority will keep SHPO and the RAC advised regarding their activation.

3. Formation of an RAC, consisting of Section 106 consulting parties that choose to participate, along with the SHPO and the Port Authority, to provide input regarding the Terminal 5/6 Redevelopment Project and reuse/restoration of the TWA Terminal (TWA Flight Center).

Compliance Status: The RAC has been formed and has been providing input regarding the proposed TWA Flight Center Hotel design and adaptive reuse of the TWA Flight Center. The RAC will continue to meet until all stipulations under the MOA have been concluded.

4/5. Provision of design guidance regarding design of the new Terminal in relation to the historic TWA Terminal (TWA Flight Center), including the requirement that designs be forwarded to SHPO and the Port Authority as well as to the RAC for review and comment.

Compliance Status: Terminal 5 (Jet Blue) has been constructed and design consultation with the RAC is ongoing with respect to the adaptive reuse of the TWA Flight Center. A portion of the restoration of historic areas of the terminal has been substantially completed, including Upper and Lower Lobby areas, façade, frontage and the interim outdoor plaza. The complete restoration project is estimated to require a total of $84 million, of which only a portion (approximately $19 million) has been completed by the Port Authority. Restoration of the remaining historic areas would be performed by the Developer.

Amendment 5A. Provision of preliminary and pre-final design guidance regarding the TWA Flight Center Hotel and adaptive reuse of the historic TWA Terminal (TWA Flight Center) and the Connecting Flight Tubes, including the requirement that designs be forwarded to all consulting parties, as well as to the RAC, for review and comment via a web-based FTP site.

Compliance Status: Design plans for the restoration, rehabilitation, and adaptive reuse of the TWA Flight Center by Flight Center Hotel, LLC, were developed in coordination with SHPO, the Port Authority, and the RAC.

Amendment 5B. The design plans for the TWA Flight Center Hotel will include two new structures, a historical interpretive display, the restored Solari Flight information Display, updated roadways, pedestrian access, and landscaping.

Compliance Status: The Developer is committed to providing the abovementioned integral components for the TWA Flight Center Hotel.

Amendment 5C. If final design plans for the TWA Flight Center Hotel "differ substantially" from those approved by the Port Authority and SHPO, then the

consulting parties and RAC shall reconvene to review and comment on the design changes.

Compliance Status: The following design changes would be avoided to the fullest extent possible: any changes impacting the footprint or height of the proposed new construction; any proposed changes to the historic exterior façade (i.e. concrete shell, window walls, skylights, or tubes); or any interior changes to the character-defining features. The consulting parties and RAC would have the opportunity to review any necessary design changes.

6. *Installation of an interpretive exhibit illustrating the history and significance of the TWA Terminal (TWA Flight Center).*

Compliance Status: The Developer, Flight Center Hotel, LLC is committed to providing an educational exhibit. This exhibit is planned at the Below Grade Level of the TWA Main Terminal Building, and consists of the two areas at the base of the circulation cores (escalators, stairs, elevator) that will provide access from the Lobby level to the proposed conference center at Below Grade Level.

7. *Preparation by a qualified professional of a National Register of Historic Places nomination for the TWA Main Terminal Building, Connector Tubes, and Flights wings prior to the demolition of the flight wings.*

Compliance Status: The nomination was prepared, and the TWA Flight Center was listed on the National Register of Historic Places in 2005.

8. *Recordation of the TWA Main Terminal Building to Level 1 Historical Architectural Building Survey/Historic American Engineering Record (HABS/HAER) standards.*

Compliance Status: The HABS/HAER documentation was recorded with the National Parks Service, New York State Archives, the Port Authority, and the SHPO. The work was conducted by a consultant chosen by the Port Authority who meets the professional qualifications established by the United States Department of the Interior as set forth in 36 CFR 61).

9. *Acknowledgement that the columns that support the East Tube may need to be altered to allow the proposed roadway to be built between the TWA Terminal (TWA Flight Center) and new Terminal 5 to pass beneath the tube.*

Compliance Status: Design and construction of the roadway was completed without the need to modify the East Tube's support columns.

10. *Provision that the Flight Wings may not be removed until the plan for the new Terminal 5 has been established and a lease agreement is in place between the Port Authority and the Terminal 5 tenant.*

Compliance Status: A lease agreement between the Port Authority and jetBlue was executed on November 22, 2005, and the Flight Wings have since been removed as part of the construction of the new Terminal.

5-2-2-2 MOA INTERIM MAINTENANCE STIPULATION

11. The MOA provides for the maintenance of the TWA Terminal (TWA Flight Center) by the Port Authority until such time as these responsibilities are transferred to the adaptive reuse developer.

Compliance Status: This maintenance has been ongoing, including inspections and repairs, as needed.

5-2-2-3 MOA RESTORATION AND REHABILITATION STIPULATIONS

12/13. Restoration and rehabilitation of the TWA Main Terminal Building and the East Tube shall be in accordance with the Secretary of the Interior's Standards, with the full visible exterior of the East Tube retained and modifications to the West Tube to be undertaken in consultation with the RAC.

Compliance Status: A number of the exterior and interior spaces have been restored and rehabilitated by the Port Authority, including the Lower Lobby and upper main Lobby spaces, the interior of the East Tube, the existing façade including most of the landside entrances and front window wall and skylights. The balcony areas will be restored by the Flight Center Hotel, LLC as per the Secretary of the Interiors Standards – Restoration, and in consultation with SHPO and the RAC. The full visible exterior length of the East Tube has been retained, and the West Tube has been modified and has a similar appearance to the East Tube. Both Tubes connect the TWA Main Terminal Building with Terminal 5 (jetBlue).

14. Investigation of the potential reuse of the Flight Wing 1 and 2 gate lounge "trumpets" or other significant architectural elements as part of the new Terminal design.

Compliance Status: Based on consultation with SHPO and the RAC, the "trumpets" were not incorporated into the design of the new Terminal.

15. Restoration of the TWA Main Terminal Building and Flight Tubes will include the removal of non-historic additions and restoration of certain original interior features of the TWA Main Terminal Building.

Compliance Status: This work is ongoing. Additions as specified in the MOA including entrance vestibules, security booths, the south baggage facility and the pedestrian canopy have been removed. The interior Lobby spaces have been restored with non-historic signage and furniture removed. The east and west balcony levels will be restored and rehabilitated by TWA Flight Center Hotel, for use as lounge, restaurant, café, and retail space in coordination with SHPO and the RAC. In addition, though not specified in the MOA, the Proposed Project would also remove the non-contributing 1970s additions placed on the airside of the Main Terminal Building to house office, ticketing, and baggage functions, consistent with the 1967 period of restoration and as described in greater detail below.

Amendment 15A. Should previously unidentified archaeological properties be discovered during rehabilitation of the TWA Terminal (TWA Flight Center), work activities should cease and the Port Authority would notify the FAA and SHPO in accordance with 36 CFR Section 800.13(b).

Compliance Status: The Developer and its contractors are committed to the protocols following the unanticipated discovery of archaeological resources. The FAA and SHPO would be notified within 24 hours to provide documentation.

Amendment 15B. Should unanticipated adverse effects occur during rehabilitation of the TWA Terminal (TWA Flight Center), the Port Authority would notify the FAA and SHPO in accordance with 36 CFR Section 800.13(b).

Compliance Status: The Developer and its contractors are committed to the protocols following the unanticipated adverse effects during construction. The FAA and SHPO would be notified within 24 hours to provide documentation.

Amendment 15C. The FAA and the Port Authority shall provide a status report 12 months following the execution of the First Amendment to the 2004 MOA. Annual reports shall also be provided by January 30th of each year until the MOA expires or is terminated. Following review of the annual reports, the consulting parties and the RAC may request a meeting, as needed.

Compliance Status: A status report and subsequent annual reports will be submitted, including a summary detailing work undertaken; any proposed scheduling changes; problems and resolutions; and any resolutions to disputes and objections.

16. Approval of the SHPO will be sought once the restoration and rehabilitation work at the TWA Main Terminal Building and the East Tube has been completed as set forth by Stipulation 12 of the MOA. In addition, the SHPO will notify the RAC once they have been notified of completion by the Port Authority, to give the RAC the opportunity to comment and also tour the restored and rehabilitated spaces.

Compliance Status: As discussed above, a portion of the restoration and rehabilitation work has been completed by the Port Authority, with additional restoration and rehabilitation to be undertaken by TWA Flight Center Hotel, LLC. Consultation with SHPO and the RAC is ongoing regarding the adaptive reuse design for the TWA Main Terminal Building and the design of the TWA Flight Center Hotel.

5-2-2-4 MOA ONGOING MAINTENANCE AND PRESERVATION STIPULATIONS

17/18. The MOA require that the Port Authority prepare maintenance and preservation guidelines for the TWA Main Terminal Building and East Tube upon completion of the rehabilitation and restoration work, for submission to SHPO for review and approval, and that the Port Authority perform an inspection of the TWA Main Terminal Building and East Tube every five years and that the report documenting the inspections and approved by SHPO be provided to the signatories of the MOA by the Port Authority.

Compliance Status: The adaptive reuse developer will prepare maintenance and preservation guidelines for the repair of historic materials and fixtures and for façade maintenance and cleaning, with the requirement of inspections included in the agreement between the Port Authority and the Developer.

Amendment 17A. The developer shall prepare maintenance and preservation guidelines for treatment of the TWA Main Terminal Building and East Tube. The

guidelines shall be submitted to the Port Authority, SHPO, and the RAC, following completion of the rehabilitation and restoration work.

Compliance Status: The Developer will submit maintenance and preservation guidelines for review and approval.

5-2-3 HISTORICAL, ARCHITECTURAL, ARCHEOLOGICAL, AND CULTURAL RESOURCES CONSTRUCTION IMPACTS

A detailed assessment of potential impacts on historic, architectural, archaeological, and cultural resources is described above in Section 5-2-1. The section below summarizes the potential for the Proposed Project to result in adverse construction-period impacts on these resources.

The TWA Flight Center was formally listed on the National Register in October 2005. As defined in the National Register nomination, the boundary consists of a polygon that encompassed all the existing components of the terminal complex, including the Main Terminal Building, East and West Tubes, both Flight Wings, and certain land beyond the boundary of these structures. Consultation has been proceeding with SHPO and the RAC regarding the design of the proposed TWA Flight Center Hotel and the adaptive reuse of the TWA Flight Center Terminal. Consultation regarding the proposed adaptive reuse project would follow the stipulations set forth in the MOA and its First Amendment, ensuring both the appropriate consultation with SHPO and the RAC for the Proposed Project and treatment of the historic TWA Flight Center Terminal. Construction means and methods to avoid inadvertent damage (i.e., vibration) to the historic resources would be implemented during construction.

5-2-4 HISTORICAL, ARCHITECTURAL, ARCHEOLOGICAL, AND CULTURAL RESOURCES CUMULATIVE IMPACTS

The Proposed Project of adaptive reuse of the TWA Flight Center Terminal and the removal of non-historic portions will impact this historic resource under Section 106 of the National Historic Preservation Act (See Section 5-2-2, above). The Proposed Project represents the implementation of the adaptive reuse pursuant to the 2004 MOA entered into as part of the 2004 EA and would not generate additional impacts on historic resources. It would not have an impact on any prehistoric, archeological, or paleontological resources because the Proposed Project would be limited to only previously disturbed portions of the airport. Any cumulative adverse impacts to historic, resources would be mitigated through the 2004 MOA and its First Amendment.

5-3 DEPARTMENT OF TRANSPORTATION ACT, SECTION 4(F) EVALUATION

This section describes the effects of the Proposed Project on land protected by Section 4(f) of the Department of Transportation (DOT) Act of 1966. The Act established a federal policy that special effort should be made to minimize adverse effects resulting from the use of public park and recreation lands, wildlife and waterfowl refuges, and significant historic sites (49 United States Code [USC] 303). As the site is listed on the National Register of Historic Places, it is protected under this Statute and is subject to Section 4(f) evaluation to assess the potential for adverse effects.

The Secretary of Transportation may approve a transportation project requiring the use of a Section 4(f) land only if:

- There is no prudent and feasible alternative to using the Section 4(f) land.
- The Proposed Project includes all possible planning to minimize harm to the Section 4(f) land resulting from its use.

As set forth in 23 CFR § 774.5, the Section 4(f) evaluation shall be provided for coordination and comment to the U.S. Department of the Interior (DOI) and to officials with jurisdiction over the Section 4(f) resource that would be used by the Project, to determine whether the project is consistent with Section 4(f) of the United States Department of Transportation Act of 1966.

As detailed in Section 5-2, an MOA was executed among the Port Authority, SHPO, the FAA, and ACHP in 2004, as a means to implement ways to avoid, minimize, and mitigate the adverse effects to historic resources. A revised MOA was developed in 2015, based on the continuation of Section 106 consultation with SHPO and the RAC regarding the design of the proposed TWA Flight Center Hotel and the adaptive reuse of the TWA Flight Center.

In the absence of a prudent and feasible alternative that avoids all use of Section 4(f) land, it was demonstrated that reuse of the TWA Flight Center incorporates all possible planning to minimize harm to the resource. The MOA and its First Amendment stipulate the mitigation measures for the adverse effects under the Section 106 process, and for the continued involvement of the RAC (see **Appendix B**). The stipulations were developed with comment and input from the signatories (the FAA, SHPO, the Port Authority, and the ACHP) and consulting parties. The stipulations of the MOA and its First Amendment proposed adaptive reuse of the TWA Fight Center Terminal, including the preparation of a HABS/HAER document, maintenance and preservation guidelines, public education efforts, and preparation of a rehabilitation and reuse plan. The development of jetBlue's Terminal 5 eliminated the potential reuse of the TWA Flight Center as an operable airport terminal. Therefore, the potential alternatives considered are limited to alternative hotel size and siting or other adaptive reuse alternatives as examined in Chapter 3: Alternatives. A complete Section 4(f) Evaluation is attached as **Appendix E**.

5-3-1 DEPARTMENT OF TRANSPORTATION ACT, SECTION 4(F) CONSTRUCTION IMPACTS

A detailed assessment of potential impacts on the Section 4(f) resource during construction is described above in Section 5-2-2.

5-3-2 DEPARTMENT OF TRANSPORTATION ACT, SECTION 4(F) CUMULATIVE IMPACTS

No Department of Transportation, Section 4(f) resources are located within the area of the other concurrent projects, and no impacts to other Section 4(f) resources would result from the Proposed Project. Therefore, there would be no cumulative adverse impacts to Section 4(f) resources.

5-4 SURFACE TRANSPORTATION

Surface Transportation is typically assessed in Section 5-8, *Socioeconomic Impacts, Environmental Justice, and Children's Environmental Health and Safety Risks,* but since the new hotel may have a specific effect on traffic, it is examined in its own section.

5-4-1 TRAVEL DEMAND ESTIMATES FOR THE PROPOSED PROJECT

Because the proposed approximately 505-room hotel and its ancillary uses would be developed within JFK, the volume of person and vehicle trips generated as a result of its development and its associated travel characteristics are expected to differ from a typical New York City hotel.

Trip and modal characteristics of the hotel were estimated by reviewing and applying typical industry standards such available from the Institute of Transportation Engineers (ITE), integration of trip rates consistent with hotel projects in New York City as available from the 2014 City Environmental Quality Review (*CEQR*) *Technical Manual*, modal split information of airport arrivals and departures as available from other recent projects at JFK (including the Delta Terminal 4 EA), hotel industry trends, as well as precedent FAA EAs prepared for other terminal-connected hotels.[18]

In general, terminal-connected hotels largely represent a capture and re-alignment of trips already bound to and from the airport itself with few if any changes to traffic patterns outside the airport's circulation road. Therefore, it was assumed that a majority, 90 percent, of the incremental trips associated with the Proposed Hotel would occur solely within JFK grounds, and would not result in new trip-making on off-site roadways in the regional network.

The 2014 *CEQR Technical Manual* identifies procedures for evaluating a proposed project's potential transportation-related impacts. Because these procedures have been developed to evaluate local New York City projects, the CEQR guidelines are typically more stringent than those applied under other jurisdictions, such as State and Federal. Although CEQR guidelines are not required by this Proposed Project, which is subject to environmental review under NEPA, the CEQR methodology and procedures for transportation analysis were applied as a conservative benchmark to guide this impact evaluation. The CEQR methodology begins with the preparation of a trip generation analysis to determine the volume of person and vehicle trips associated with a proposed project. The results are then compared with the *CEQR Technical Manual*-specified thresholds (Level 1 screening analysis) to determine whether additional screening and/or quantified analyses are warranted. If the Proposed Project would result in 50 or more peak hour vehicle trips, further analysis assignment of these trips would typically be undertaken to determine if specific locations would warrant further detailed analysis of potential impacts.

[18] *Baltimore/Washington International Thurgood Marshall Airport Hotel Environmental Review* (2013), *Environmental Assessment for the Proposed South Terminal Redevelopment Program at the Denver International Airport* (2010)

Using the travel demand factors from the *CEQR Technical Manual* (see **Table 5-1**), accounting for the capture of internal JFK trip-making, and applying modal splits derived from the *John F. Kennedy International Airport Delta Redevelopment Traffic Impact Study Report* (2010), the proposed approximately 505-room hotel and its ancillary uses, including the 50,000 square feet (sf) conference center, would generate approximately 34, 48, 36, and 29 off-airport incremental vehicle trips on the regional (non-JFK) roadway network during the weekday AM, weekday midday, weekday PM, and Saturday peak hours, respectively (see **Table 5-2**). Using the CEQR threshold of 50 vehicle trips necessary for a quantified traffic analysis, incremental trips generated by the Proposed Hotel on roadways external to JFK would not exceed the threshold, and the Proposed Project would therefore not be expected to result in the potential for any significant traffic impacts.

Table 5-1
Travel Demand Assumptions

Use	Hotel			
	Weekday		Saturday	
Daily Person Trip Generation Rate	(1) 9.4 Trips / Room		(1) 9.4	
		(3)		
	AM	MD	PM	SAT
Link Credit	90%	90%	90%	90%
Final Trip Rate	0.94	0.94	0.94	0.94
Person Trip	(1)	(1)	(1)	(1)
Temporal	AM	MD	PM	Sat
Distribution	8.0%	14.0%	13.0%	9.0%
Directional Distribution	(2)	(2)	(2)	(2)
In	41%	68%	59%	56%
Out	59%	32%	41%	44%
Total	100%	100%	100%	100%
Modal Split	(3)	(3)	(3)	(3)
Auto	31.0%	31.0%	31.0%	31.0%
Taxi	24.0%	24.0%	24.0%	24.0%
Black Car	17.0%	17.0%	17.0%	17.0%
Shuttle Bus	8.0%	8.0%	8.0%	8.0%
Transit (Subway, City Bus, AirTrain)	20.0%	20.0%	20.0%	20.0%
Total	100%	100%	100%	100%
Vehicle Occupancy	(3)			
Auto	1.53			
Taxi	1.42			
Black Car	1.79			
Shuttle Bus	4.22			
Daily Delivery Trip Generation Rate	(2) 0.10 Delivery Trips / Room			
Delivery Trip	(2)	(2)	(2)	(2)
Temporal	AM	MD	PM	Sat
Distribution	12.0%	8.7%	0.0%	0.0%
Directional Distribution	(2)	(2)	(2)	(2)
In	50%	50%	50%	50%
Out	50%	50%	50%	50%
Total	100%	100%	100%	100%

Sources:
(1) 2014 *CEQR Technical Manual*
(2) *Jamaica Plan FEIS* (2007).
(3) *John F. Kennedy International Airport Delta Redevelopment Traffic Impact Study* (2010)

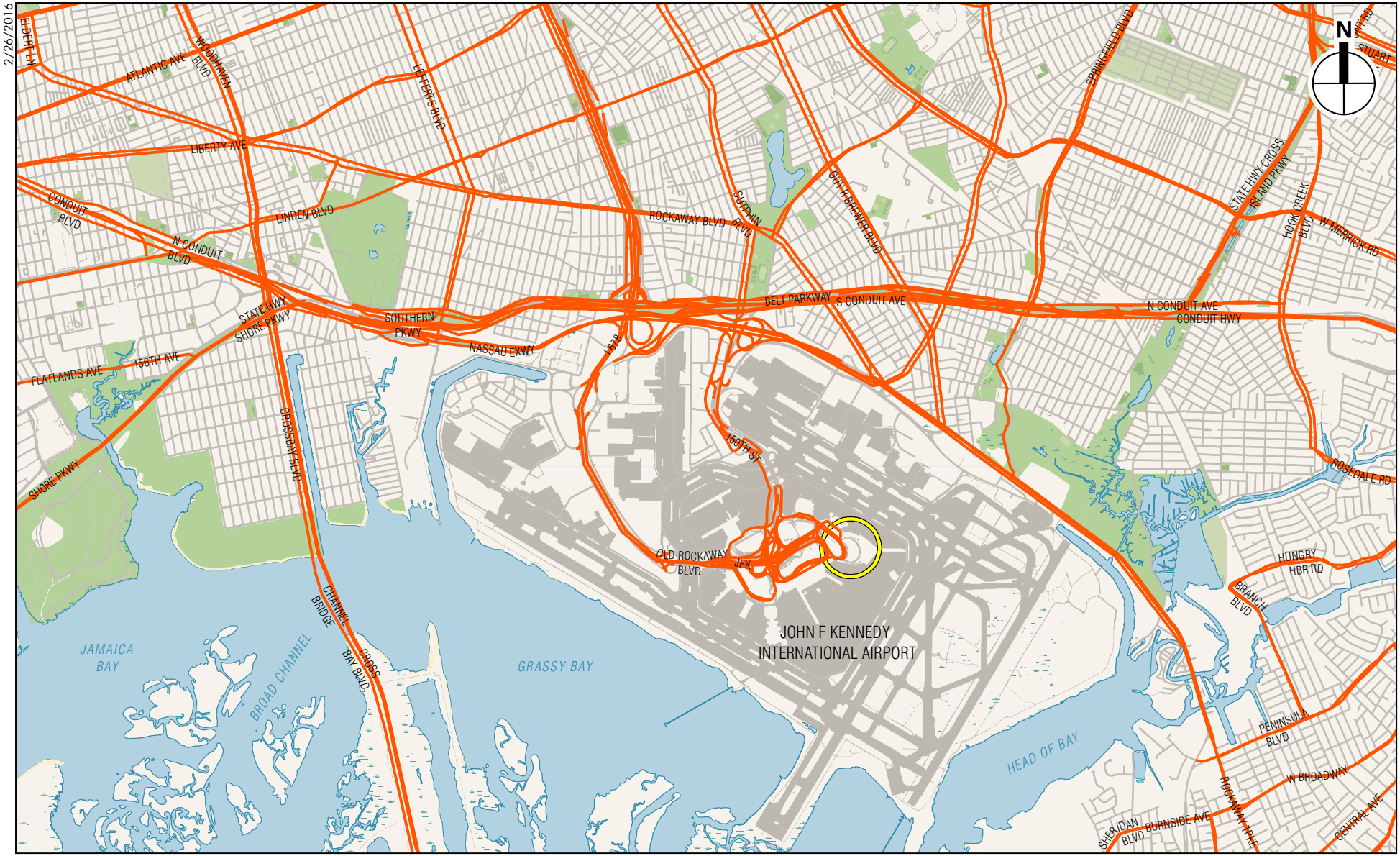
Table 5-2
Trip Generation Summary: Incremental Trips External to JFK

Person Trips								Vehicle Trips						
Peak Hour	In/Out	Black Shuttle Auto	Taxi	Car	Bus	Transit	Total	In/Out	Black Shuttle Auto	Taxi	Car	Bus	Delivery	Total
AM	In	5	4	3	1	3	16	In	3	5	4	1	3	16
	Out	7	5	4	2	4	22	Out	5	5	4	1	3	18
	Total	12	9	7	3	7	38	Total	8	10	8	2	6	34
MD	In	14	11	8	4	9	46	In	9	8	6	1	2	26
	Out	7	5	4	2	4	22	Out	5	8	6	1	2	22
	Total	21	16	12	6	13	68	Total	14	16	12	2	4	48
PM	In	11	9	6	3	7	36	In	7	6	5	1	0	19
	Out	8	6	4	2	5	25	Out	5	6	5	1	0	17
	Total	19	15	10	5	12	61	Total	12	12	10	2	0	36
Saturday	In	7	6	4	2	5	24	In	5	5	4	1	0	15
	Out	6	5	3	2	4	20	Out	4	5	4	1	0	14
	Total	13	11	7	4	9	44	Total	9	10	8	2	0	29

Furthermore, the 10 percent external incremental trips quantified above, mostly associated with the conference center, would arrive at the Proposed Hotel via the multiple access points to JFK and the numerous roadways serving the airport, including the Belt Parkway from the east and west, and the VWE from the north (see **Figure 5-1**). Considering the multiple access roadways to the airport, no intersection outside JFK would be expected to experience a significant increase in vehicles as a result of the Proposed Project during any peak hour. Therefore, the Proposed Project is not expected to result in the potential for any significant adverse traffic impacts outside the airport grounds.

In terms of the internal JFK transportation network, a majority of the internal trips associated with the Proposed Project would be made on the AirTrain light rail system, which stops at each JFK terminal, and has connections to the regional transit system outside the airport.

To understand the characteristics of events (i.e., weddings) at the proposed hotel that would be unique and not necessarily represented in the daily trip demand generated by airport passengers and business conferences, the Developer estimates that a typical event that could be handled at the hotel would be about 200 persons, with weekend event attendance expected to be higher than that of weekdays. Unlike typical travel to the airport, most attendees would arrive at the conference center via auto and taxi. However, even with this expectation, such events would yield a nominal number of vehicle trips to the external and internal road network. The incremental trips to and from the conference center are encapsulated in the overall Proposed Hotel trips for each peak hour, as detailed above. Because the incremental vehicle trips are relatively low as compared to the existing volumes in the Yellow Quadrant, the roadways and intersections serving the Proposed Hotel would not be expected to experience a significant increase in vehicles as a result of the Proposed Project. In addition, as noted above, the external auto trips would utilize the multiple access roadways to the airport, and no intersection outside JFK would be expected to experience a significant increase



Project Site

Major Roadway in Vicinity of JFK

TWA Flight Center Hotel

Roadway Access to the Project Site

Figure 5-1

in vehicles as a result of the Proposed Project's ancillary conference center during any peak hour. As described above in the Existing Conditions section, the JFK AirTrain carries approximately 17,457 passengers per day. The relatively insignificant increment to AirTrain ridership from the conference center would not affect AirTrain service. Therefore, the Proposed Project is not expected to result in the potential for any significant adverse transportation impacts to the various modes of transportation serving JFK's internal travel circulation network.

The former frontage roads of the TWA Flight Center would be repurposed to receive traffic bound or originating from the hotel and would incorporate a valet parking element. Because the existing building had served as an airport terminal with active pick-up/drop-off activities along its frontage, there is already substantial space available for what can be expected to be a lower-traffic use associated with the proposed Flight Center Hotel.

5-4-1-1 PARKING

With only 10 percent of the trip-making to the Proposed Project arriving from the roadway network outside of JFK, the incremental vehicle volumes generated by the Proposed Project would be adequately accommodated by the internal JFK road network designed to accommodate airport pick-up and drop-offs. With a capacity of 1,507 spaces, the Yellow Garage, which would serve the parking demand from the Proposed Project, would likewise adequately accommodate the small incremental vehicle demand generated by the Proposed Project. Additionally, approximately 44 spaces of valet parking would be located between the main entrance and the JFK Airport Access Road.

5-4-2 SURFACE TRANSPORTATION CONSTRUCTION IMPACTS

Construction of the Proposed Project would generate vehicle trips from workers traveling to and from the site, as well as from the movement of materials and equipment, and removal of construction waste. Given typical construction hours, the majority of worker trips would occur during off-peak travel times (in the early hours between 6:00 AM and 7:00 AM and the mid-afternoon between 3:00 PM and 4:00 PM). For construction trucks, deliveries would occur throughout the day when the construction site is active. Truck movements would generally occur between the hours of 6:00 AM and 3:00 PM, depending on the stage of construction. Traffic generated during construction would be temporary and of short duration. In addition, nearby roadways (i.e., Belt Parkway, Van Wyck Expressway) are already heavily trafficked and the construction-generated traffic would therefore not result in substantial increases along these roadways. For these reasons, it is concluded that the Proposed Project would not result in adverse impacts due to vehicles generated by construction activities.

5-4-3 SURFACE TRANSPORTATION CUMULATIVE IMPACTS

Due to the coordination of off-peak scheduled material transfer and specific route management measures, no significant impacts related to construction surface traffic are anticipated due to the Proposed Project. Related projects at JFK are subject to similar coordination measures, therefore no significant cumulative impacts are expected to occur due to the Proposed Project with respect to construction related surface traffic.

5-5 AIR QUALITY

The CAA, as amended in 1990, defines non-attainment areas (NAA) as geographic regions that have been designated as not meeting one or more of the NAAQS. When an area is designated as non-attainment by EPA, the state is required to develop and implement a State Implementation Plan (SIP), which delineates how a state plans to achieve air quality that meets the NAAQS under the deadlines established by the CAA, followed by a plan for maintaining attainment status once the area is in attainment.

JFK Airport is located in Queens County, New York, which has been designated as in attainment for CO, PM2.5, PM10 and Lead and is currently in attainment of the annual-average NO2 standard. New York City was previously designated as non-attainment for PM2.5 and CO, so the area is covered under maintenance plans to ensure that future background levels remain below standards.[19] EPA has designated New York–Northern New Jersey–Long Island, NY-NJ-CT NAA as a marginal NAA for the 2008 ozone NAAQS. EPA has designated the entire state of New York as "unclassifiable/attainment" of the 1-hour NO2 standard effective February 29, 2012; since additional monitoring is required for the 1-hour standard, areas will be reclassified once three years of monitoring data are available. The EPA has established a 1-hour SO2 standard, and based on the available monitoring data, all New York State counties currently meet the 1-hour standard; draft attainment designations were published by the EPA in February 2013, indicating that the EPA is deferring action to designate areas in New York State and expects to proceed with designations once additional data are gathered.

The existing background ambient air quality in the area of the Proposed Project is based on the air quality monitoring data collected by the NYSDEC in Region 2 at air quality monitoring stations nearest to the study area. The summary of the concentrations of all criteria pollutants in the vicinity of the Project Site are presented in **Table 5-3**. All data statistical forms and averaging periods are consistent with the definitions of the NAAQS. These existing concentrations are based on recent published measurements, averaged according to the NAAQS. As shown in the table, there were no monitored violations of the NAAQS for the pollutants at these sites.

[19] *The Green Brook Nonattainment Areas for Criteria Pollutants* (as of October 1, 2015) presents designations available online at https://www3.epa.gov/airquality/greenbook/.

Table 5-3
Representative Monitored Ambient Air Quality Data

Pollutant	Location	Units	Averaging Period	Concentration	NAAQS
CO	Queens College 2, Queens	ppm	8-hour	1.1	9
	Queens College 2, Queens		1-hour	1.9	35
SO_2	Queens College 2, Queens	$\mu g/m^3$	3-hour	42.1	1,300
			1-hour	37.4	196
PM_{10}	Queens College 2, Queens	$\mu g/m^3$	24-hour	26	150
$PM_{2.5}$	Queens College 2, Queens	$\mu g/m^3$	Annual	8.2	12
			24-hour	21.7	35
NO_2	Queens College 2, Queens	$\mu g/m^3$	Annual	32	100
			1-hour	109	189
Lead	IS 52, Bronx	$\mu g/m^3$	3-month	0.004	0.15
Ozone	Queens College 2, Queens	ppm	8-hour	0.072	0.075

Notes:

-Based on the NAAQS definitions, the CO and 3-hour SO2 concentrations for short-term averages are the second-highest from the year. NYSDEC does not currently report the 3-hour SO2 concentrations; the referenced value is based on 2012 data, which is the most recent available data.

-SO2 1-hour and NO2 1-hour concentrations are the average of the 99th percentile and 98th percentile, respectively, of the highest daily 1-hour maximum from 2012 to 2014.

-PM2.5 annual concentrations are the average of 2012–2014, and the 24-hour concentration is the average of the annual 98th percentiles in 2012- 2014.

-8-Hour average ozone concentrations are the average of the 4th highest-daily values from 2012 to 2014.

Source: NYSDEC, New York State Ambient Air Quality Data (2014).

5-5-1 GENERAL CONFORMITY REVIEW

Under the general conformity regulations, a determination for federal actions is required for each criteria pollutant or precursor in non-attainment or maintenance areas where the action's direct and indirect emissions have the potential to emit one or more of the six criteria pollutants at rates equal to or exceeding the prescribed *de minimis* rates for that pollutant.[20] In the case of the Proposed Project, the prescribed annual rates are 50 tons of volatile organic compounds (VOCs) and 100 tons of NO_x (ozone precursors, ozone non-attainment area in transport region), 100 tons of CO (CO maintenance area), and 100 tons of $PM_{2.5}$, SO_2, or NO_x ($PM_{2.5}$ and precursors in $PM_{2.5}$ maintenance areas).

[20] EPA. General Conformity Rule, 40 CFR Parts 93 and 153. *Federal Register* of Tuesday, November 30, 1993.

The general conformity requirements do not apply to federal actions that[21]:

- Do not exceed the prescribed emissions threshold levels;
- Occur in an attainment area;
- Are related to transportation plans, programs, and projects developed, funded, or approved under Title 23 U.S.C.. or the Federal Transit Act (49 U.S.C. 1601); or
- Qualify for exemptions or where the emissions are not reasonably foreseeable as defined in § 93.153.

The regulation assumes that a proposed federal action whose criteria pollutant emissions have already been included in the local SIP's attainment or maintenance demonstrations conforms to the SIP. According to the General Conformity rule, if the total direct and indirect emissions from the Proposed Project are below the applicable *de minimis* thresholds, provided above, then a conformity determination is not required.[22]

The emissions from stationary sources are subject to air conformity review. Therefore, a qualitative assessment was conducted to evaluate whether the Proposed Project would have the potential to result in adverse effects on air quality.

5-5-2 OPERATIONS PHASE (INDIRECT EMISSIONS)

The Proposed Project would include a natural-gas fired cogeneration facility. Therefore, a stationary source analysis was conducted to evaluate the potential for an impact on air quality from the proposed emission source.

5-5-2-1 OPERATIONAL EMISSIONS

The proposed cogeneration facility would have a total capacity of 1 MW consisting of twelve identical 100 KW natural gas-fired Tecogen Inverde Ultra 100 units. Two of the twelve units would be redundant (stand-by) units.

NO_x and CO emission rates were calculated based on vendor-guaranteed emission factors while PM_{10}/$PM_{2.5}$ and SO_2 emission rates were calculated from EPA emission factors.[23] Emission rates assumed maximum equipment capacity for the short-term averaging period and were prorated based on average load demand for the annual averaging periods. Stack exhaust parameters for the proposed plant were based on the information provided by the project design team.

The cogeneration facility would be located on the rooftop of the west hotel building, and the cogeneration units would be vented through a common exhaust stack. **Table 5-4** presents the stack parameters and emission rates used in the analysis.

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[21] EPA General Conformity Rule, 40 CFR 93.153 and FAA 1050.1F Desk Reference (Section 1.3.5).

[22] FAA 1050.1F Desk Reference, Section 1.3.5 General Conformity.

[23] EPA *Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume I: Stationary Point and Area Sources (August 2000)*

Table 5-4
Stack Parameters and Emission Rates from the Cogeneration System

Parameter	Value
Stack Height (ft)	79.3
Stack Diameter (ft)	1.67
Exhaust flow Rate (acfm)(1)	5.250
Exhaust Temperature (°F)	500
Emission Rates(2)	
NO_x (1-hour) (Lb/hr)	0.007
NO_x (Annual) (Lb/hr)	0.004
SO_2 (1-hour & 3-hour) (Lb/hr)	0.001
CO (1-hour & 8-hour) (Lb/hr)	0.020
PM_{10} (24-hour) (Lb/hr)	0.025
$PM_{2.5}$ (24-hour) (Lb/hr)	0.025
$PM_{2.5}$ (Annual) (Lb/hr)	0.012

Notes:
(1) ACFM = actual cubic feet per minute.
(2) Emission rates presented are per unit
Source: Arup and Tecogen Advanced Modular CHP systems (June 1, 2015)

Maximum annual emissions of regulated pollutants, as presented in Section 5-5-3-3, would be well below major source thresholds as defined in NYSDEC regulations at 6 NYCRR Part 201. Therefore, a federal Title V operating permit would not be required. In addition, based on their capacity the proposed units would be considered exempt from NYSDEC minor source air permitting regulations. Therefore, the proposed cogeneration facility would be exempt from federal and New York State air permitting.

5-5-2-2 DISPERSION MODELING

Potential impacts from the Proposed Project's cogeneration facility were evaluated using the EPA / American Meteorological Society (AMS) AERMOD dispersion model.[24] AERMOD is a state-of-the-art dispersion model, applicable to rural and urban areas, flat and complex terrain, surface and elevated releases, and multiple sources (including point, area, and volume sources). AERMOD is a steady-state plume model that incorporates current concepts about flow and dispersion in complex terrain and includes updated treatments of the boundary layer theory, understanding of turbulence and dispersion, and handling of terrain interactions.

The AERMOD model calculates pollutant concentrations from one or more points (e.g., exhaust stacks) based on hourly meteorological data, and has the capability of calculating pollutant concentrations at locations when the plume from the exhaust stack is affected by the aerodynamic wakes and eddies (downwash) produced by nearby structures. The analyses of potential impacts from exhaust stacks were made assuming stack tip downwash, urban dispersion and surface roughness length (with and without building downwash), and elimination of calms.

[24] Since the Proposed Project's emissions are due to stationary point sources and do not affect aviation-related sources of emissions, the EPA AERMOD model is appropriate to evaluate potential air quality impacts due to the Proposed Project.

The AERMOD Model also incorporates the algorithms from the PRIME model, which is designed to predict impacts in the "cavity region" (i.e., the area around a structure which, under certain conditions, may affect an exhaust plume, causing a portion of the plume to become entrained in a recirculation region). The Building Profile Input Program (BPIP) program for the PRIME model (BPIPRM) was used to determine the projected building dimensions modeling with the building downwash algorithm enabled. The modeling of downwash from sources accounts for all obstructions within a radius equal to five obstruction heights of the stack.

The analysis was performed both with and without downwash in order to assess the worst case at elevated receptors close to the height of the sources, which would occur without downwash, as well as the worst case at lower elevations and ground level, which would occur with downwash.

Methodology Utilized for Estimating NO_2 Concentrations

Annual NO_2 concentrations from heating, ventilating, and air conditioning (HVAC) sources were estimated using a NO_2 to NO_x ratio of 0.75, as described in EPA's *Guideline on Air Quality Models* at 40 CFR part 51 Appendix W, Section 5.2.4.[25]

EPA has developed guidance for assessing 1-hour average NO_2 concentrations for compliance with the NAAQS.[26] Background concentrations are currently monitored at several sites within New York City, which are used for reporting concentrations on a "community" scale. Because this data is compiled on a 1-hour average format, it can be used for comparison with the new 1-hour standards. Therefore, background 1-hour NO_2 concentrations currently measured at the community-scale monitors can be considered representative of background concentrations for purposes of assessing the impact of the Proposed Project's HVAC systems.

EPA's preferred regulatory stationary source model, AERMOD, is capable of producing detailed output data that can be analyzed at the hourly level required for the form of the 1-hour standards. EPA has also developed guidance to estimate the transformation ratio of NO_2 to NO_x, applicable to HVAC sources, as discussed further below. Therefore, an analysis was prepared.

1-Hour average NO_2 concentration increments from the Proposed Project's cogeneration facility were estimated using AERMOD model's Plume Volume Molar Ratio Method (PVMRM) module to analyze chemical transformation within the model. The PVMRM module incorporates hourly background ozone concentrations to estimate NO_x transformation within the source plume. Ozone concentrations were taken from the NYSDEC Queens College monitoring station that is the nearest ozone monitoring station and had complete five years of hourly data available. An initial NO_2 to NO_x ratio

[25] EPA Revision to the Guideline on Air Quality Models: Adoption of a Preferred General Purpose (Flat and Complex Terrain) Dispersion Model and Other Revisions; Final Rule http://www.epa.gov/scram001/guidance/guide/appw_05.pdf

[26] EPA Memorandum, "Additional Clarification Regarding Application of Appendix W, Modeling Guidance for the 1-Hour NO_2 National Ambient Air Quality Standard," March 1, 2011. https://www.epa.gov/sites/production/files/2015-07/documents/appwno2_2.pdf

of 20 percent at the source exhaust stack was assumed, which is considered representative for the reciprocating engines used in the cogeneration facility. The results represent the five-year average of the annual 98th percentile of the maximum daily 1-hour average, added to the background.

Meteorological Data

The meteorological data set consisted of five consecutive years of meteorological data: surface data collected at JFK Airport (2010–2014), and concurrent upper air data collected at Brookhaven, New York. The meteorological data provide hour-by-hour wind speeds and directions, stability states, and temperature inversion elevation over the five-year period. These data were processed using the EPA AERMET program to develop data in a format which can be readily processed by the AERMOD model. The land uses around the site where meteorological surface data were available were classified using categories defined in digital United States Geological Survey (USGS) maps to determine surface parameters used by the AERMET program.

Receptor Placement

Discrete receptors were analyzed and included locations on the two proposed hotel buildings and the planned pedestrian sidewalk. The analysis assumed that windows on the proposed hotels would be operable; therefore, receptors were placed at regular intervals on the facades of the proposed buildings.

5-5-2-3 ANALYSIS RESULTS AND ENVIRONMENTAL CONSEQUENCES

An analysis was performed using the AERMOD model to evaluate the NO_2, SO_2, CO, PM_{10} and $PM_{2.5}$ concentrations with the operation of the proposed natural-gas fired cogeneration facility. The maximum predicted concentrations were added to the maximum ambient background concentrations and compared to the NAAQS. **Table 5-5** presents the maximum predicted concentrations from the modeled scenario for the Proposed Project's cogeneration facility. As shown in the table, the maximum concentrations, when added to the ambient background levels, would be below the NAAQS, and therefore no significant adverse air quality impacts are predicted from the Proposed Project's emission source.

In addition, an emissions inventory for the potential operational emissions from the Proposed Project's cogeneration facility was prepared. The Proposed Project would result in emissions which are well below the *de minimis as* presented in **Table 5-6,** and the Proposed Project would not result in adverse effects on air quality.

Table 5-5
Maximum Modeled Pollutant Concentrations from the Proposed Project (µg/m^3)

Pollutant	Average Period	Maximum Modeled Impact	Background	Total Concentration	NAAQS (µg/m^3)
NO_2	1-hour	1.6	108.9	110.5	188
	Annual	0.12	40.7	40.8	100
SO_2	1-hour	0.19	37.5	37.7	196
	3-hour	0.18	77.7	77.9	1,300
CO	1-hour	5.8	3,894	3,899.8	40,000
	8-hour	3.9	1,947	1,950.9	10,000
PM_{10}	24-hour	3.4	32	35.4	150
$PM_{2.5}$	24-hour	3.4	21.7	25.1	35
	Annual	0.57	8.2	8.8	12

Source: New York State Air Quality Report Ambient Air Monitoring System, NYSDEC, 2010-2014.

Table 5-6
Annual Emissions Inventory – Operations Phase

Emissions Sources	Annual Operations Emissions (tons per year)				
	VOC	NO_x	CO	$PM_{2.5}$	SO_x
2018 Proposed Project	0.22	0.15	0.44	0.54	0.02
De minimis level	50	100	100	100	100

5-5-3 CONSTRUCTION PHASE (DIRECT EMISSIONS)

Construction activities would be carried out in accordance with all applicable regulatory requirements. As required by the EPA regulations, ultra-low-sulfur diesel (ULSD) fuel would be used for all construction-related vehicles and non-road construction equipment. Since all diesel engines would use ULSD, sulfur dioxide (SO_2) emissions would be negligible. All necessary measures would be implemented to ensure adherence to the New York City Air Pollution Control Code regulating construction-related dust emissions. In addition, the provisions specified in FAA AC 150/5370-10G, Standards for Specifying Construction of Airports, regulating construction-related dust emissions would be followed during the construction of the Proposed Project.

Emissions from on-site construction equipment and on-road construction-related vehicles, as well as dust generating construction activities, have the potential to affect air quality. Construction of the Proposed Project would require the use of concrete trucks and delivery trucks as well as non-road equipment such as excavators, backhoes, loaders, and cranes. The estimated construction equipment emissions by equipment type are presented in **Table 5-7**. However the use of such equipment would be temporary and short-term and would not be needed once the construction task is complete. Further, the approach and procedures for the construction of the Proposed Project would be typical of the methods utilized in other building construction/renovation projects throughout New York City. Nevertheless, as the construction emissions are expected to be below the applicable *de minimis* levels, as presented in **Table 5-8**, the Proposed Project would not result in adverse effects on air quality.

Table 5-7
Emissions Inventory by Equipment Type – Construction Phase

Construction Equipment Type	Construction Year Emissions (tons per year)														
	2016					2017					2018[1]				
	VOC	NO_x	CO	$PM_{2.5}$	SO_2	VOC	NO_x	CO	$PM_{2.5}$	SO_2	VOC	NO_x	CO	$PM_{2.5}$	SO_2
Excavator	0.13	1.19	0.38	0.07	0.003	0.05	0.41	0.13	0.02	0.001	0.00	0.00	0.00	0.00	0.00
Forklift	0.01	0.07	0.04	0.01	0.0001	0.03	0.34	0.18	0.03	0.0004	0.01	0.13	0.07	0.01	0.0002
Compressor	0.08	1.12	0.25	0.05	0.002	0.08	1.07	0.24	0.04	0.002	0.00	0.00	0.00	0.00	0.00
Generator	0.05	0.44	0.24	0.04	0.0005	0.03	0.28	0.15	0.02	0.0003	0.00	0.00	0.00	0.00	0.00
Concrete Pump	0.14	2.23	0.95	0.13	0.003	0.08	1.19	0.51	0.07	0.002	0.00	0.00	0.00	0.00	0.00
Rubber Tire Loader	0.08	1.16	0.70	0.08	0.002	0.06	0.98	0.59	0.06	0.001	0.00	0.00	0.00	0.00	0.00
Crane	0.16	2.24	0.73	0.10	0.004	0.10	1.14	0.25	0.05	0.002	0.03	0.32	0.07	0.01	0.001
Paving Equipment	0.11	0.05	5.82	0.002	0.004	0.06	0.02	3.10	0.001	0.002	0.00	0.00	0.00	0.00	0.00
Trucks	0.37	6.02	1.65	0.37	0.007	0.37	6.02	1.65	0.37	0.007	0.18	3.01	0.82	0.18	0.003

Note: (1) The last year of proposed construction includes only a few months of activity.
Sources: EPA NONROAD2008a model; MOVES14

Table 5-8
Annual Emissions Inventory – Construction Phase

Emissions Sources	Construction Year Emissions (tons per year)				
	VOC	NO_x	CO	$PM_{2.5}$	SO_x
2016	1.1	14.5	10.8	0.8	0.03
2017	0.9	11.5	6.8	0.7	0.02
2018[1]	0.23	3.5	1.0	0.2	0.004
De minimis level	50	100	100	100	100

Notes:
(1) The last year of proposed construction includes only a few months of activity.
Sources: EPA NONROAD2008a model; MOVES14

5-5-4 AIR QUALITY CUMULATIVE IMPACTS

The Proposed Project would cause a temporary change in the net emissions due to the operation of construction equipment. In addition, the Proposed Project's cogeneration facility would result in a small overall increment of new emissions after the Proposed Project is complete (See Section 5-5, *Air Quality*). However, the emissions are *de minimis* under the Clean Air Act (as amended in 1990) General Conformity Rule. According to the General Conformity rule, if the total direct and indirect emissions from the Proposed Projects are below the applicable *de minimis* thresholds, provided above in Section 5-5-1, then a conformity determination is not required.[27] Further, the *de minimis* emissions are assumed to comply with the New York SIP and are not expected to cause an exceedance of any of the NAAQS, delay the attainment of any NAAQS, or worsen an existing violation any NAAQS. Hence, per FAA 1050.1F Desk Reference, a general conformity determination is not required.

No cumulative adverse air quality impacts are anticipated from the Proposed Project in combination with the other projects whose construction overlaps with the Proposed Project,

[27] EPA. General Conformity Rule, 40 CFR Parts 93 and 153. *Federal Register* of Tuesday, November 30, 1993.

which include the demolition of Hangars 3, 4, and 5, the redevelopment of Building 144, rehabilitation of Runway 4R/22L, possibly the demolition of Hangar 17 and Building 213, North Cargo Area redevelopment, Bulk Fuel Farm Modification, and possibly Phase III of Terminal 3 and 4 expansion. As previously discussed, the incorporation of procedures into the Proposed Project's construction specifications would reduce the fugitive emissions of dust (particulate matter) and prevent particulate matter from becoming airborne. Such measures are anticipated to reduce any potential construction impacts to air quality in the immediate project area. All related projects at JFK are subject to similar construction mitigation measures and are isolated from any neighboring community by the surrounding roadways; therefore no significant cumulative impacts are expected to occur due to the Proposed Project with regard to construction related activities.

5-6 CLIMATE

There is general consensus in the scientific community that the global climate is changing as a result of increased concentrations of greenhouse gases (GHGs) in the atmosphere. GHGs are those gaseous constituents of the atmosphere, from both natural and anthropogenic emission sources (i.e., resulting from the influence of human beings), that absorb infrared radiation (heat) emitted from the earth's surface, the atmosphere, and clouds. This property causes the general warming of the earth's atmosphere, or the "greenhouse effect," which in turn affects sea level and global and local climate, resulting in changes in many environmental and human systems.

On December 18, 2014, the CEQ issued revised Draft Guidance under NEPA describing how and when Federal agencies should address the subject of GHG emissions and climate change in documents prepared pursuant to NEPA. The Draft Guidance recommends that agencies consider 25,000 metric tons of carbon dioxide (CO_2) equivalent emissions on an annual basis as a reference point below which a quantitative analysis of greenhouse gas is not recommended. Based on the building size and potential mobile source emissions, the Proposed Project would not require quantitative analysis, as it would not exceed the annual threshold.

Aviation has been calculated to contribute approximately three percent of global CO_2 emissions; this contribution may grow to five percent by 2050. Actions are underway within the United States and by other nations to reduce aviation's contribution through such measures as new aircraft technologies to reduce emissions and improve fuel efficiency, renewable alternative fuels with lower carbon footprints, more efficient air traffic management, market-based measures and environmental regulations including an aircraft CO_2 standard. The United States has ambitious goals to achieve carbon-neutral growth for aviation by 2020 compared to a 2005 baseline, and to gain absolute reductions in GHG emissions by 2050. At present there are no calculations of the extent to which measures individually or cumulatively may affect aviation's CO_2 emissions.

The EPA issued an Advance Notice of Proposed Rulemaking on June 1, 2015, to provide an overview of and seek input on a variety of issues related to setting an international CO_2 standard for aircraft at the International Civil Aviation Organization (ICAO). The FAA, with support from the United States Global Change Research Program and its participating federal agencies (e. g., National Aeronautics and Space Administration [NASA], National Oceanic and Atmospheric Administration [NOAA],

EPA, and Department of Energy [DOE]), has developed the Aviation Climate Change Research Initiative (ACCRI) in an effort to advance scientific understanding of regional and global climate impacts of aircraft emissions, with quantified uncertainties for current and projected aviation scenarios under changing atmospheric conditions. JFK has a long history of proactively initiating projects that reduce GHG emissions from aircraft, buildings, and vehicles, including the implementation of a ground management program for aircraft, comprehensive energy efficiency retrofit programs in its buildings, use of biodiesel, and the construction of AirTrain JFK, providing passengers with additional mass transit options to and from the airport, among many other actions.

5-6-1 CLIMATE OPERATIONS IMPACTS

Annual CO_2 and CO_{2e} emissions from the operation of the proposed cogeneration facility were estimated. Overall greenhouse gas impacts are expressed in terms of CO2 equivalence, or CO2e, which adds the greenhouse gas effects of methane, nitrous oxide, and other pollutants that contribute to global warming, expressed in CO2 equivalence relative to their global warming potential. **Table 5-9** below presents annual operational GHG emissions from the Proposed Project. The predicted annual GHG emissions are well below the draft CEQ Guidance recommended 25,000 metric ton threshold limit.

Table 5-9
Annual GHG Emissions Inventory – Operations Phase

Emissions Sources	Annual Operations GHG Emissions (metric tons per year)	
	CO_2	CO_{2e} (CO_2 equivalence)
2018 Proposed Action	2,935	2,938
Source: 40 CFR Part 98 Subpart C- General Stationary Fuel Combustion Sources.		

5-6-2 CLIMATE CONSTRUCTION IMPACTS

The estimated GHG emissions from construction equipment are presented below in **Table 5-10**. Annual GHG emissions from the construction phase are presented in **Table 5-11**. The Proposed Project would not be expected to contribute any significant adverse impacts to climate during construction.

Table 5-10
GHG Emissions Inventory by Equipment Type – Construction Phase

Construction Equipment Type	Annual Operations GHG Emissions (metric tons per year)					
	2016		2017		2018[(1)]	
	CO_2	CO_{2e}	CO_2	CO_{2e}	CO_2	CO_{2e}
Excavator	425.2	426.6	145.8	146.3	0.0	0.0
Forklift	8.4	8.5	40.5	40.6	15.2	15.2
Compressor	194.2	194.8	192.7	193.4	0.0	0.0
Generator	46.2	46.4	29.2	29.3	0.0	0.0
Concrete Pump	323.9	325.0	172.8	173.4	0.0	0.0
Rubber Tire Loader	179.6	180.2	151.8	152.3	0.0	0.0
Crane	434.8	436.3	280.3	281.2	78.8	79.1
Paving Equipment	19.7	19.8	10.5	10.5	0.0	0.0
Trucks	970.3	970.9	970.3	970.9	485.2	485.5
Note: (1) The last year of proposed construction includes only a few months of activity. Sources: 40 CFR Part 98 Subpart C for construction equipment emission factors; MOVES2014 for trucks.						

Table 5-11
Annual GHG Emissions Inventory – Construction Phase

Emissions Sources	Annual Operations GHG Emissions (metric tons per year)	
	CO_2	CO_{2e}
2016	2,602	2,609
2017	1,994	1,998
2017[(1)]	579	580

Note: (1) The last year of proposed construction includes only a few months of activity.
Sources: 40 CFR Part 98 Subpart C for construction equipment emission factors; MOVES2014 for trucks.

5-6-3 CLIMATE CUMULATIVE IMPACTS

As discussed above in Section 5-6, the Proposed Project would not be expected to contribute any significant adverse cumulative impacts on the global climate, when added to other past, present, and reasonably foreseeable future actions.

5-7 NOISE AND COMPATIBLE LAND USE

5-7-1 NOISE

Similar to the conclusion of the 2004 EA for the larger site which included the redevelopment of jetBlue's Terminal 5, the addition of the hotel and associated activity related to the operation of the hotel does not meet regulatory significance thresholds as a potential noise impact. The operation of the hotel will not generate additional flight traffic nor significantly alter traffic flows to and from JFK. The hotel itself will not generate noise that would affect the surrounding community. Additionally, the hotel facility would be built to ensure adequate indoor noise levels, so that outside noise would not disturb guests of the hotel. A double façade was designed for the hotel buildings to control noise to 35 dBA, the maximum desired internal noise level.

5-7-1-1 NOISE CONSTRUCTION IMPACTS

Impacts on community noise levels during construction would include noise from the operation of construction equipment and noise from construction and delivery vehicles traveling to and from the site. Noise levels at a given location are dependent on the type and quantity of construction equipment being operated, the acoustical utilization factor of the equipment (i.e., the percentage of time a piece of equipment is operating), the distance from the construction site, and any shielding effects (from structures such as buildings, walls, or barriers). Noise levels caused by construction activities would vary widely, depending on the stage of construction and the location of the construction activities relative to noise-sensitive receptor locations.

Construction of the Proposed Project would follow the New York City Noise Control Code (also known as Chapter 24 of the Administrative Code of the City of New York, or Local Law 113) and EPA's noise emission standards. These local and federal requirements mandate that specific construction equipment and motor vehicles meet specified noise emission standards; that construction activities be limited to weekdays between the hours of 7:00 AM and 6:00 PM; and that construction materials be handled and transported in such a manner as not to create unnecessary noise. As part of the New York City Noise Control Code, a site-specific noise mitigation plan would be

developed and implemented that would include source controls (i.e., reducing noise levels at the source or during most sensitive time periods), and path controls (e.g., erection of a minimum 8-foot high construction fence around the perimeter of the site; placement of equipment to minimize noise and/or placement of barriers between equipment and sensitive receptors). Construction of the Proposed Project would be required to follow the requirements of the New York City Noise Control Code for construction noise control measures.

Construction noise includes noise generated by on-site construction equipment and activity and noise generated by construction-related traffic, including delivery trucks and worker vehicles, traveling to and from the development site. During these peak construction activities, as is typical with building construction in New York City, there would be some noise disruption to the nearby areas, but such effects would be temporary. In addition, the project site is not located near any sensitive receptors, with the closest residential area more than 4,000 feet way from the project site.

Therefore, based on the information presented above and considering construction of the Proposed Project would follow the requirements of the New York City Noise Control Code for construction noise control measures, no adverse noise impacts would be expected due to construction of the Proposed Project.

5-7-1-2 NOISE CUMULATIVE IMPACTS

The Proposed Project will not impact airport noise. The projects that would overlap with the Proposed Project projects occur completely on Airport property. The Runway 4R/22L rehabilitation will not alter runway length or thresholds, and therefore is not expected to create noise impacts. No other past projects or future projects planned within the five-year time period that would combine with the noise impacts of the Proposed Project that would result in significant cumulative impacts.

The only potential impacts of the Proposed Project due to construction noise are to operators of construction equipment and nearby construction workers; construction noise is not expected to impact nearby communities. Potential construction noise impacts are a localized and temporary occurrence. Other projects at the airport may have similar localized and temporary impacts, and may add to ambient noise levels. Because the project area is isolated from neighboring communities by the surrounding roadways, no significant cumulative impacts are expected to occur due to the Proposed Project with respect to construction noise.

5-7-2 COMPATIBLE LAND USE

The Proposed Project is located entirely within the limits of the JFK Airport property and would not affect residential or other land uses located near the Airport. Hotels are an allowable use in the airport's M1-1 Manufacturing zoning classification, as established by the Zoning Code of New York City. Land use impacts associated with the Proposed Project are not expected to occur.

5-7-2-1 COMPATIBLE LAND USE CONSTRUCTION IMPACTS

The Proposed Project would not be expected to contribute any significant adverse impacts on compatible land use during construction.

5-7-2-2 COMPATIBLE LAND USE CUMULATIVE IMPACTS

The projects that would overlap with the Proposed Projects occur completely on Airport property and are compatible with existing zoning, surrounding area land use plans, and the land uses on the Airport. Therefore, no cumulative adverse impacts on compatible land use would occur.

5-8 SOCIOECONOMIC IMPACTS, ENVIRONMENTAL JUSTICE, AND CHILDREN'S ENVIRONMENTAL HEALTH AND SAFETY RISKS

The types of socioeconomic impacts that may result from airport development projects include the following:

- Relocation of residences;
- Relocation of community businesses;
- Disruption of planned development;
- Disruption of local traffic patterns that affect the surrounding communities;
- Divide the physical arrangement of a community
- Substantial loss in the community tax base;
- Environmental justice issues; and
- Children's Environmental Health and Safety Risks.[28]

The Proposed Project would not be expected to contribute to any significant adverse socioeconomic impacts, as listed above. The Proposed Project would not cause any significant impacts to the surface transportation at the Airport, considering the multiple access points and the numerous roadways serving the airport.

5-8-1 SOCIOECONOMIC IMPACTS, ENVIRONMENTAL JUSTICE, AND CHILDREN'S ENVIRONMENTAL HEALTH AND SAFETY RISKS CONSTRUCTION IMPACTS

The Proposed Project would not be expected to contribute to any significant adverse socioeconomic impacts during construction.

5-8-2 SOCIOECONOMIC IMPACTS, ENVIRONMENTAL JUSTICE, AND CHILDREN'S ENVIRONMENTAL HEALTH AND SAFETY RISKS CUMULATIVE IMPACTS

The Proposed Project would not be expected to contribute to any significant adverse cumulative socioeconomic impacts when considered in conjunction with the other projects at JFK. This is because the other projects occur on Airport property. The Proposed Project and other projects in the planning or construction stages do not appear to include any activities that would result in impacts to surface transportation. Therefore, no cumulative adverse impacts are expected.

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[28] FAA. "Final Order 1050.1F: Environmental Impact: Policies and Procedures";Office of Environment and Energy. Effective Date July 16, 2015. http://www.faa.gov/documentlibrary/media/order/faa_order_1050_1f.pdf

5-9 BIOLOGICAL RESOURCES

The Endangered Species Act of 1973 (ESA), as amended, provides for the protection of certain plants and animals as well as the habitats in which they are found. In compliance with the ESA, agencies overseeing Federally-funded projects are required to obtain from the U.S. Fish and Wildlife Service (USFWS) information concerning any species listed, or proposed to be listed, which may be present in the area of the Proposed Project.

Information obtained from the USFWS and the New York State Natural Heritage Program (NYSNHP) indicated the potential for proposed, candidate, threatened, and endangered species in the project area (see **Appendix D**). However, habitat for these species is not located within the project site. Therefore, no impacts to fish, wildlife, and plants are expected as a result of the Proposed Project.

In addition the Proposed Project would not create a wildlife hazard as defined in FAA AC 150/5200-33 nor affect any existing wildlife hazard area. Minimal low-lying vegetation would be located by the splash-pool on the roof of the south guest room building. Any plantings at the project site would comply with the Port Authority's *Aviation Landscape and Sustainable Design Guidelines* to deter wildlife from the airport. The splash-pool, glass panels and other aspects of the design would not be expected to attract or increase the abundance of birds in the area relative to the existing condition. Overall, the Developer will consult with the American Bird Conservancy to optimize a safe building design.

5-9-1 BIOLOGICAL RESOURCES CONSTRUCTION IMPACTS

The Proposed Project is not expected to result in adverse effects to biological resources during construction.

5-9-2 BIOLOGICAL RESOURCES CUMULATIVE IMPACTS

The Proposed Project is not expected to result in adverse cumulative effects to biological resources.

5-10 WATER RESOURCES

5-10-1 WETLANDS

There are no identified wetlands or regulated water features in the proposed project area. Based on a review of wetland maps, the nearest wetlands are found along the Airport's perimeter along Jamaica Bay. Therefore, the Proposed Project would have no impact to wetlands or other regulated water features.

5-10-2 FLOODPLAINS

A section of the Proposed Project would encroach in the special flood hazard area subject to inundation by the 500-year floodplain as designated by Federal Emergency Management Agency (FEMA) in the Preliminary Flood Insurance Rate Maps (FIRMS)

released January 30, 2015[29] (See **Figure 5-2**). However, the Proposed Project is not considered a "critical action," as defined in the Water Resources Council Floodplain Management Guidelines. The Proposed Project was designed in compliance with the Port Authority Climate Resilience Design Guidelines, Appendix G of the New York City Building Code[30], and Executive Order 13690, which amends Executive Order 11988 – *Floodplain Management* guidelines[31]. Therefore, there would be no floodplain impacts associated with the Proposed Project. The table below sets forth the flood protection levels (building elevation levels) designated in the Code and the flood protection elevation levels that will be applied by the PANYNJ Design Guidelines. The PANYNJ Design Guidelines are more rigorous because they also adjust the building levels for the predicted Sea Level Rise ("Sea Level Rise Adjustment"), thus requiring that, taking into account the life of the asset, buildings within the floodplain that will be subject to that Sea Level Rise, be constructed at an elevation higher than the Code requirement.

Table 5-12
Port Authority of NY & NJ Climate Resilience Design Guidelines-Flood Protection Levels

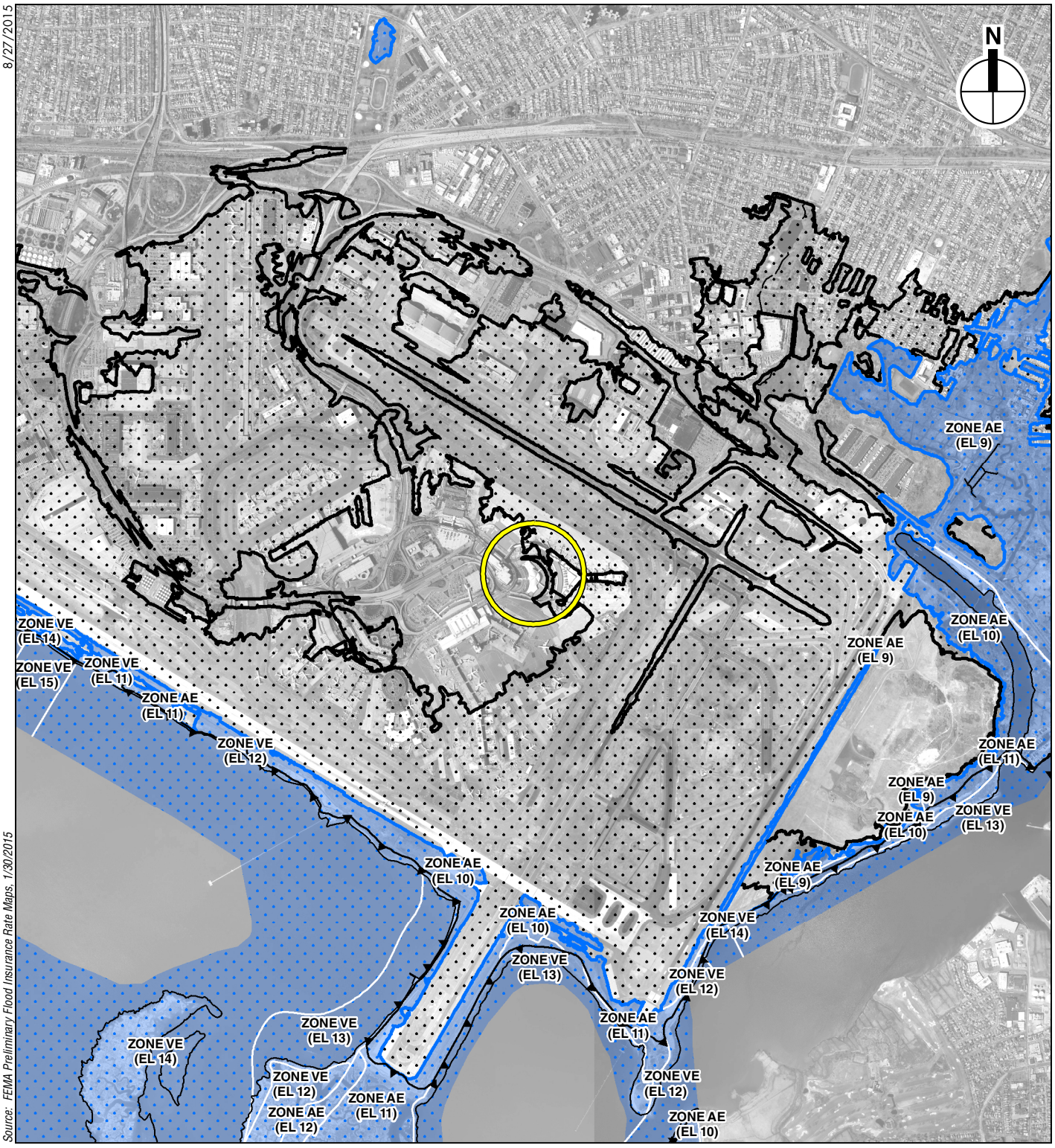
Flood Protection Levels						
	Non Critical Assets			Critical Assets		
Asset Design Life	Code Requirement	Sea Level Rise Adjustment	Final Flood Protection Elevation	Code Requirement	Sea Level Rise Adjustment	Final Flood Protection Elevation
Up to 2020	12"	6"	FEMA 1% Elevation + 18"	24"	6"	FEMA 1% Elevation + 30"
2021-2050	12"	16"	FEMA1% Elevation + 28"	24"	16"	FEMA1% Elevation + 40"
2051-2080	12"	28"	FEMA1% Elevation + 40"	24"	28"	FEMA1% Elevation + 52"
2080+	12"	36"	FEMA1% Elevation + 48"	24"	36"	FEMA1% Elevation +60"

Source: Port Authority of NY & NJ, 2015 https://www.panynj.gov/business-opportunities/pdf/discipline-guidelines/climate-resilience.pdf

[29] FEMA Region 2 Preliminary Flood Maps and Data. http://www.region2coastal.com/view-flood-maps-data/view-preliminary-flood-map-data/

[30] New York City Building Code, Appendix G: Flood Resistant Construction. Accessed February 2016 http://www.nyc.gov/html/gbee/downloads/pdf/buildingcode_appdx_g.pdf

[31] The White House, Office of the Press Secretary, Executive Order-Establishing a Federal Flood Risk Management Standard and Process for Soliciting and Considering Stakeholder Input. January 30, 2015. https://www.whitehouse.gov/the-press-office/2015/01/30/executive-order-establishing-federal-flood-risk-management-standard-and-



FEMA Preliminary Flood Hazard Areas

Figure 5-2

TWA Flight Center Hotel

5-10-3 WATER QUALITY AND WASTEWATER

The Proposed Project will not alter drainage structures on the airport or increase impervious surfaces. The Proposed Project would require the relocation of existing wastewater pipes; however, the relocation would not result in any environmental impacts nor affect project design. All construction activities would occur within the airport complex and away from water bodies. The Proposed Project is not expected to increase the quantity of stormwater runoff.

The sanitary wastewater generated by the Proposed Project would add a marginal increment over current wastewater generated by the Airport. The total anticipated water demand and sanitary wastewater generation is approximately 60,606 gallons per day (gpd), assuming 120 gpd per room based on guidance established for projects in New York City as part of the *CEQR Technical Manual*. Water demand estimates for the project are inclusive of HVAC and restaurant facilities. The proposed cogeneration facility does not generate wastewater, as it is not a steam-based system.

As the project site is located in Service Area Number 12, wastewater from the project site would be treated at the Jamaica WPCP). Capacity and flow information for the Jamaica WPCP was obtained directly from monthly flow reports as available through DEP.[32] The plant has a permitted operating capacity of 100 million gallons per day (mgd) and currently treats about 78 mgd. The proposed project has a projected demand of 60,606 gallons per day and therefore represents a negligible increase of 0.008 percent over existing flow to the plant. The Proposed Project does not represent a change of use or zoning that would potentially affect drainage plans for the area. While there is no increase in impervious coverage associated with the project, it is noted that stormwater runoff is handled separately through existing JFK SPDES permit and would have no effect on operation of the Jamaica WPCP. Due to the size of this development project, significant adverse impacts to the City's infrastructure and water quality are not expected.

5-10-4 WILD AND SCENIC RIVERS

The Proposed Project does not occur near any wild and scenic rivers, and would not result in adverse impacts to wild and scenic rivers.

5-10-5 WATER RESOURCES CONSTRUCTION IMPACTS

5-10-5-1 WETLANDS

There are no identified wetlands or regulated water features in the Proposed Project project areas. No adverse impacts on wetlands are expected during construction.

[32] DEP. Unpublished Correspondence from John G. Petito, P.E., DEP Acting Deputy Commissioner to Robert Elburn, P.E., Regional Water Engineer, NYSDEC. Letter containing "Monthly reports for December 2015: Operating Efficiency Citywide Bubble and Nitrogen" and dated Thursday January 28, 2016.

5-10-5-2 FLOODPLAINS

A section of the Proposed Project would encroach in the special flood hazard area subject to inundation by the 500-year floodplain as designated by FEMA in the Preliminary FIRMs released January 30, 2015. However, the Proposed Project is not considered a "critical action," as defined in the Water Resources Council Floodplain Management Guidelines[33]. Therefore, there would be no floodplain impacts associated with the Proposed Project during construction.

5-10-5-3 WATER QUALITY AND WASTEWATER

The Proposed Project will not alter drainage structures on the airport or increase impervious surfaces. The Proposed Project is not expected to increase the quantity of stormwater runoff. All construction activities would be conducted following BMP's and applicable local, state, and Federal regulations. A plan for soil erosion and sediment control would be required of all contractors. Dewatering activities would be required to remove groundwater and surface water from excavations during the construction work. A dewatering plan would include requirements for treating and testing dewatering effluent to ensure that any discharge complies with Port Authority and NYSDEC requirements. Such procedures are routinely implemented for all airport projects; therefore no significant water quality impacts would be expected during construction.

5-10-5-4 WILD AND SCENIC RIVERS

The Proposed Project does not occur near any wild and scenic rivers, and would not result in adverse construction impacts to wild and scenic rivers.

5-10-6 WATER RESOURCES CUMULATIVE IMPACTS

5-10-6-1 WETLANDS

There are no identified wetlands or regulated water features in the Proposed Project area. Based on the list of recent, ongoing, and future projects, no cumulative adverse impacts on wetlands are expected.

5-10-6-2 FLOODPLAINS

As the Proposed Project is not considered a "critical action," as defined in the Water Resources Council Floodplain Management Guidelines, no cumulative floodplain impacts associated with the Proposed Project are expected.

5-10-6-3 WATER QUALITY AND WASTEWATER

The Proposed Project is not expected to result in adverse effects to water quality and wastewater in combination with concurrent projects at the Airport.

[33]U.S. Water Resources Council Floodplain Management Guidelines for Implementing E.O. 11988. February 1978. http://portal.hud.gov/hudportal/documents/huddoc?id=DOC_14216.pdf

5-10-6-4 WILD AND SCENIC RIVERS

The Proposed Project does not occur near any wild and scenic rivers, and would not result in adverse cumulative impacts to wild and scenic rivers.

5-11 COASTAL RESOURCES

5-11-1 COASTAL BARRIERS

JFK Airport and the project site do not fall within the Coastal Barrier Resources System. Therefore, there would be no coastal barrier impacts associated with the Proposed Project.

5-11-2 COASTAL ZONE MANAGEMENT PROGRAM

The area affected by the Proposed Project is within the coastal zone, but would not adversely impact coastal zone resources and is consistent with the Waterfront Revitalization and Coastal Resources Act (WRCRA), as well as New York City's Waterfront Revitalization Program (WRP). The applicable 44 New York State Department of State (DOS) coastal zone policies were analyzed.

The completed Federal, State, and City Coastal Assessment Forms (CAFs) and consistency determination are available in **Appendix F**. Upon review of the New York City WRP CAF, WRP policies 1.1, 5.1, 6, 7.2, 7.3, and 10 apply to the Proposed Project. The CAFs and attachments in Appendix F review these policies and assess the consistency of the Proposed Project with them.

5-11-3 COASTAL RESOURCES CONSTRUCTION IMPACTS

5-11-3-1 COASTAL BARRIERS

There would be no coastal barrier impacts associated with the Proposed Project. As a result, there would be no construction impacts to Coastal Barriers.

5-11-3-2 COASTAL ZONE MANAGEMENT PROGRAM

Because the Proposed Project would not affect the coastal zone, adverse impacts are not expected to the coastal zone during construction.

5-11-4 COASTAL RESOURCES CUMULATIVE IMPACTS

5-11-4-1 COASTAL BARRIERS

There would be no coastal barrier impacts associated with the Proposed Project. As a result, no cumulative impacts to Coastal Barriers are expected.

5-11-4-2 COASTAL ZONE MANAGEMENT PROGRAM

The area affected by the Proposed Project is within the coastal zone, but would not adversely impact coastal zone resources and is consistent with the WRCRA and New York City on the Waterfront Revitalization Program. Because the Proposed Project would not affect the coastal zone, there are not expected to be cumulative adverse impacts to the coastal zone.

5-12 FARMLAND

The Proposed Project does not occur near farmland, and would not result in adverse impacts to farmland.

5-12-1 FARMLAND CONSTRUCTION IMPACTS

The Proposed Project does not occur near farmland, and would not result in adverse impacts to farmland during construction.

5-12-2 FARMLAND CUMULATIVE IMPACTS

The Proposed Project does not occur near farmland, and would not result in adverse cumulative impacts to farmland.

5-13 NATURAL RESOURCES AND ENERGY SUPPLY

The Proposed Project would increase the use of natural resources and energy consumption. The cogeneration facility would utilize approximately 55,000 MMBTU's[34] of natural gas per year. With the proposed construction of a stand-alone cogeneration facility, the Proposed Project would result in fewer impacts than the No-Build/No-Action in the use of energy.

5-13-1 NATURAL RESOURCES AND ENERGY SUPPLY CONSTRUCTION IMPACTS

The Proposed Project is not expected to result in adverse effects on natural resources and energy supply during construction.

5-13-2 NATURAL RESOURCES AND ENERGY SUPPLY CUMULATIVE IMPACTS

The combination of the concurrent projects will not result in the need for additional energy facilities. Based on the list of recent, ongoing, and future projects and the provisions for energy production facilities within the scope of the Proposed Project, no cumulative adverse impacts on natural resources or energy supply are expected.

5-14 VISUAL EFFECTS

Neither the tubes nor the concrete façade and roof of the TWA Flight Center are architectural resources that depend on direct sunlight for their enjoyment, and as noted, the extent and duration of shadows on these elements would be limited. Although the guest room building would cast some shadows on the southern window wall of the TWA Flight Center and approximately one-third of one of its skylights during a portion of the year, the existing roof overhangs the windows and casts shade on the southern window wall already. Moreover, the window walls and skylight are comprised of transparent glass and are not sunlight sensitive in the manner of, for example, stained glass windows.

[34] 1 MMBTU is equal to 1 million British Thermal Units (BTU's).

Additionally, the building's history has shown that solar control has always been a concern. There have been attempts to reduce sunlight in the building by using blinds, window glazing, and colored mylar. The green-tinted glass is original to the building and is important for transparency and contrast with the concrete. Eero Saarinen's team (the building architect) had installed vertical blinds on the southern windows as part of the original construction. A purple film was installed on the windows during the 1980's or 1990's, which was removed in the 2008 restoration campaign.

Therefore, the potential shadow cast on the TWA Flight Center would not adversely impact the historic character nor public's enjoyment of the building as a) shadows on the building and tubes are very limited in their extent and duration, and the enjoyment of these features does not depend on direct sunlight, b) the shadows only fall on the south window wall and small portion of one linear skylight in the winter analysis period, c) the large extent of glazing elsewhere in the building would not be affected by the Project during any portion of the year, d) design measures were integrated into the original design of the building (tinted glass, vertical blinds) as well as later (mylar film) to control sunlight into the building, and e) there would be 90 to 150 feet between the south window wall and the south hotel wing so as to maximize access to daylight at that window wall.

Based on the integrated design of the new guest room buildings to be contextually compatible with the historic TWA Flight Center and their placement within the development area of the existing Terminal 5, no significant visual impacts would result with the Proposed Project. Given the project's location within the extensively lit area of the CTA, there is no additional visual impact from light emissions.

5-14-1 VISUAL EFFECTS CONSTRUCTION IMPACTS

The Proposed Project is not expected to result in adverse visual effects during construction.

5-14-2 VISUAL EFFECTS CUMULATIVE IMPACTS

The Proposed Project is not expected to result in adverse visual effects in combination with concurrent projects at the Airport.

5-15 HAZARDOUS MATERIALS, SOLID WASTE, AND POLLUTION PREVENTION

As discussed below, asbestos and lead-based paint would be removed as part of the construction phase of the Proposed Project. In addition, solid waste would be generated during the construction and operation phase of the Proposed Project. Materials that cannot be recycled would be disposed of in accordance with all Federal, state, and local regulations. Sufficient disposal capacity exists in the greater metropolitan area to handle the waste load. Therefore, the Proposed Project would not result in impacts with respect to hazardous materials, pollution prevention, and solid waste.

5-15-1 HAZARDOUS MATERIALS, SOLID WASTE, AND POLLUTION PREVENTION CONSTRUCTION IMPACTS

The construction documents would include language and details on dust and sedimentation control, as well as preventive measures for construction activities associated with hazardous materials, including the following:

- Asbestos would be removed from the TWA Flight Center building, prior to any demolition or renovation work. Removal protocols, established by the Port Authority, the City and state (NYSDEC and New York State Department of Labor) regulators would be followed, thereby mitigating the potential hazards. These procedures would also address issues of noise and dust control, and thereby protect the public and workers from exposure to hazardous materials. The asbestos waste generated during the abatement procedures would be disposed of according to state (NYSDEC) regulatory requirements.
- Materials coated with lead-based paint would be removed during demolition, for disposal or recycling, as appropriate. Construction protocols would ensure that dust is minimized and contained. Workers would be provided with protection from lead in dust. Local and state permitting and notification could apply for the removal, transportation, disposal and recycling of lead containing materials.
- Construction protocols would be put in place to identify and manage the environmental issues that arise due to the discovery of soil and/or groundwater contamination on the construction site. In addition, design of storm drainage and building foundations would include provisions to limit the migration of suspended solids or other pollutants along these pathways.

An Environmental Management Plan (EMP) will be prepared for the Proposed Project and will include measures to be implemented to prevent and remediate petroleum contamination that may be discovered during site construction. In addition, the Port Authority currently has a Spill Prevention, Control, and Countermeasure (SPCC) Plan for JFK that contains appropriate spill prevention and clean up measures in the event that a spill occurs

5-15-2 HAZARDOUS MATERIALS, SOLID WASTE, AND POLLUTION PREVENTION CUMULATIVE IMPACTS

The Proposed Project would not increase the quantity of hazardous materials present in the environment or exacerbate existing contamination. Based on the list of recent, ongoing, and future projects, there does not appear to be other projects that, when combined with the Proposed Project, would result in significant adverse cumulative impacts from hazardous materials. Therefore the Proposed Project would not contribute to any cumulative impacts from future actions with respect to hazardous materials.

Solid waste would be generated from the Proposed Project in the form of building and construction debris and soil from the demolition of certain parts of existing structures and excavation activities. Materials and debris would be recycled to the greatest extent feasible. Materials that cannot be recycled would be disposed of in accordance with all Federal, state, and local regulations. There is sufficient disposal capacity (out-of-state landfills, recycling centers, and incinerators) in the greater metropolitan area to handle

the waste load. None of the other projects would result in significant amounts of solid waste. Therefore, the Proposed Project would not contribute to any cumulative impacts from future actions with respect to solid waste.

5-16 CONSTRUCTION IMPACTS ANALYSIS

Construction impacts, though temporary, can have a disruptive and noticeable effect on the adjacent community. Construction activities could affect transportation, noise, and air quality conditions. The Proposed Project was designed to be certified by the Leadership in Energy & Environmental Design (LEED) program, and it utilizes sustainable design in compliance with the Port Authority's *Sustainable Design Guidelines*.

The Proposed Project would include the construction of two new six-story hotel buildings (plus a habitable basement level) on either side of the TWA Flight Center and the repurposing of the TWA Flight Center as the Lobby area and amenities for the hotel. Overall, construction of the Proposed Project is anticipated to begin in June 2016 and is expected to be complete and operational by 2018. This section summarizes the construction program for the Proposed Project and assesses the potential for adverse impacts during construction.

5-16-1 CONSTRUCTION OF GUEST ROOM BUILDINGS

Construction activities for the guest room buildings are anticipated to begin in June 2016 and would last approximately 27 months. The sequence of construction phasing is illustrated in **Figures 5-3a through 5-3g**. Construction of the guest room buildings would begin with relocation of site utility, excavation of soils, any required remediation, and construction of the foundations. When the below-grade construction is completed, construction of the superstructure (the building's beams, columns, floor decks, and core) of the new buildings would begin. Next, the exterior of the buildings would be constructed; the curtain walls of the new guest room buildings would be clad with glass. Finally, interior fit-out activities would commence and would include the construction of nonstructural building elements such as interior partitions and interior finishes (i.e., flooring, painting, etc.) and hotel rooms build out.

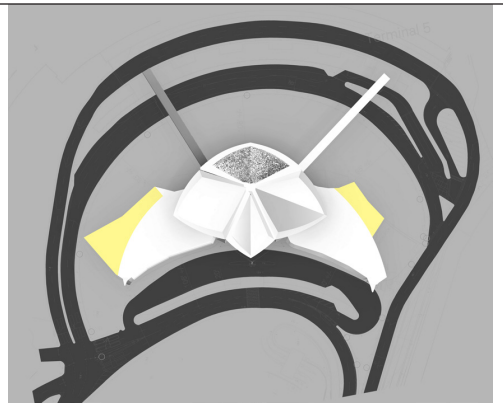
5-16-2 REDEVELOPMENT OF TWA FLIGHT CENTER

The repurposing of the existing TWA Flight Center is anticipated to begin in July 2016 and would last approximately 29 months. Construction activities at the TWA Flight Center would begin with abatement, demolition (non-historic portions of the existing structure), and utility work, followed by Lobby/amenities build out activities. The TWA Flight Center would also include new pedestrian walkways below grade to connect the TWA Flight Center to the new guest room buildings and a new walkway to connect the TWA Flight Center to the nearby Terminal 5 AirTrain station.

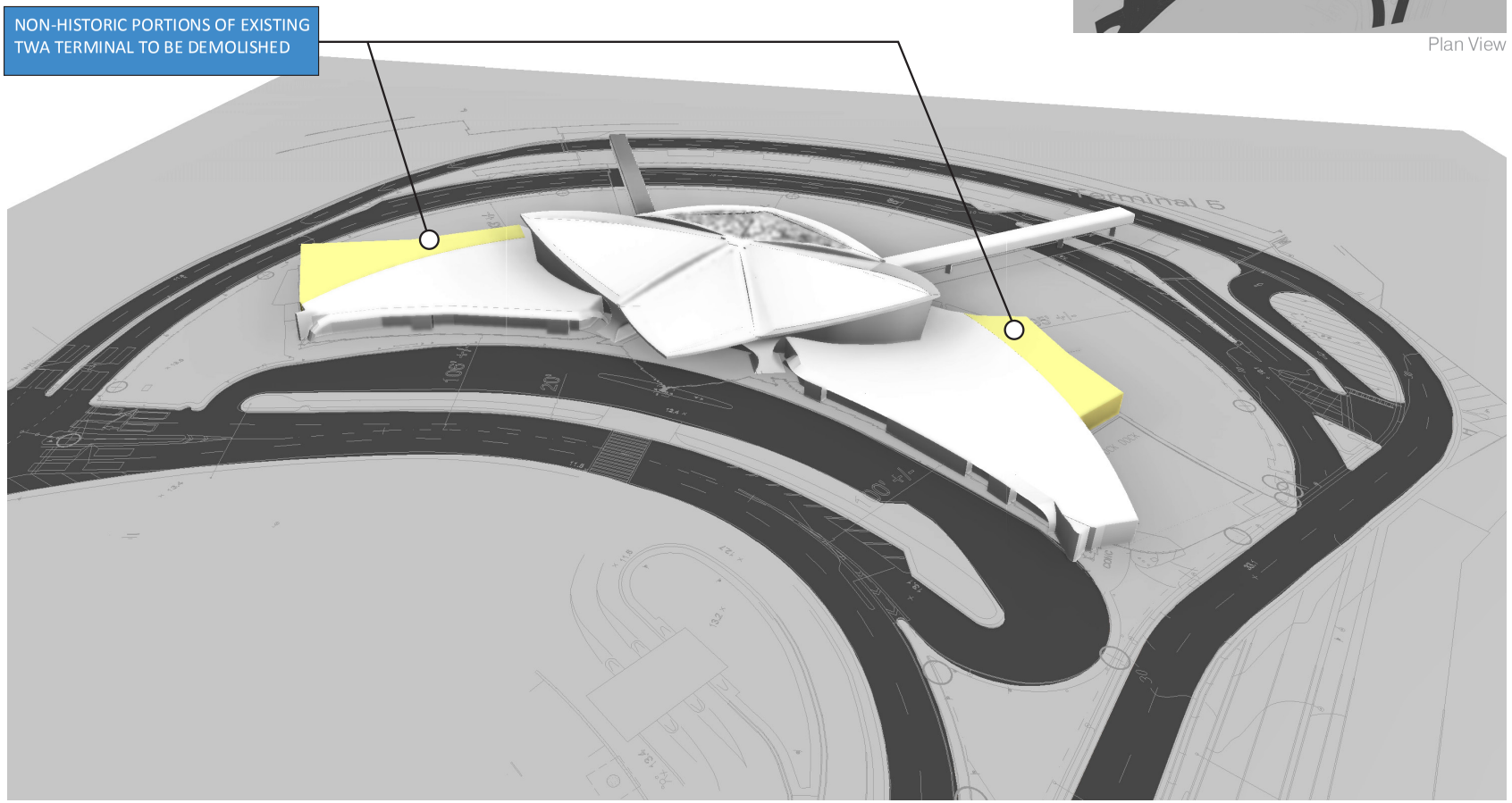
5-16-3 CONSTRUCTION GUIDELINES

Construction of the Proposed Project would be carried out in accordance with New York City laws and regulations, which allow construction activities between 7:00AM and 6:00PM on weekdays. Construction work would typically begin at 7:00AM and end at 3:30PM to 4:00PM. If night or weekend work is required, appropriate work permits from

Phase 1
Existing Conditions



Plan View

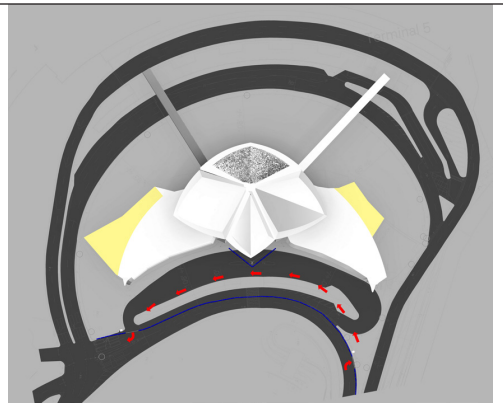


Perspective View

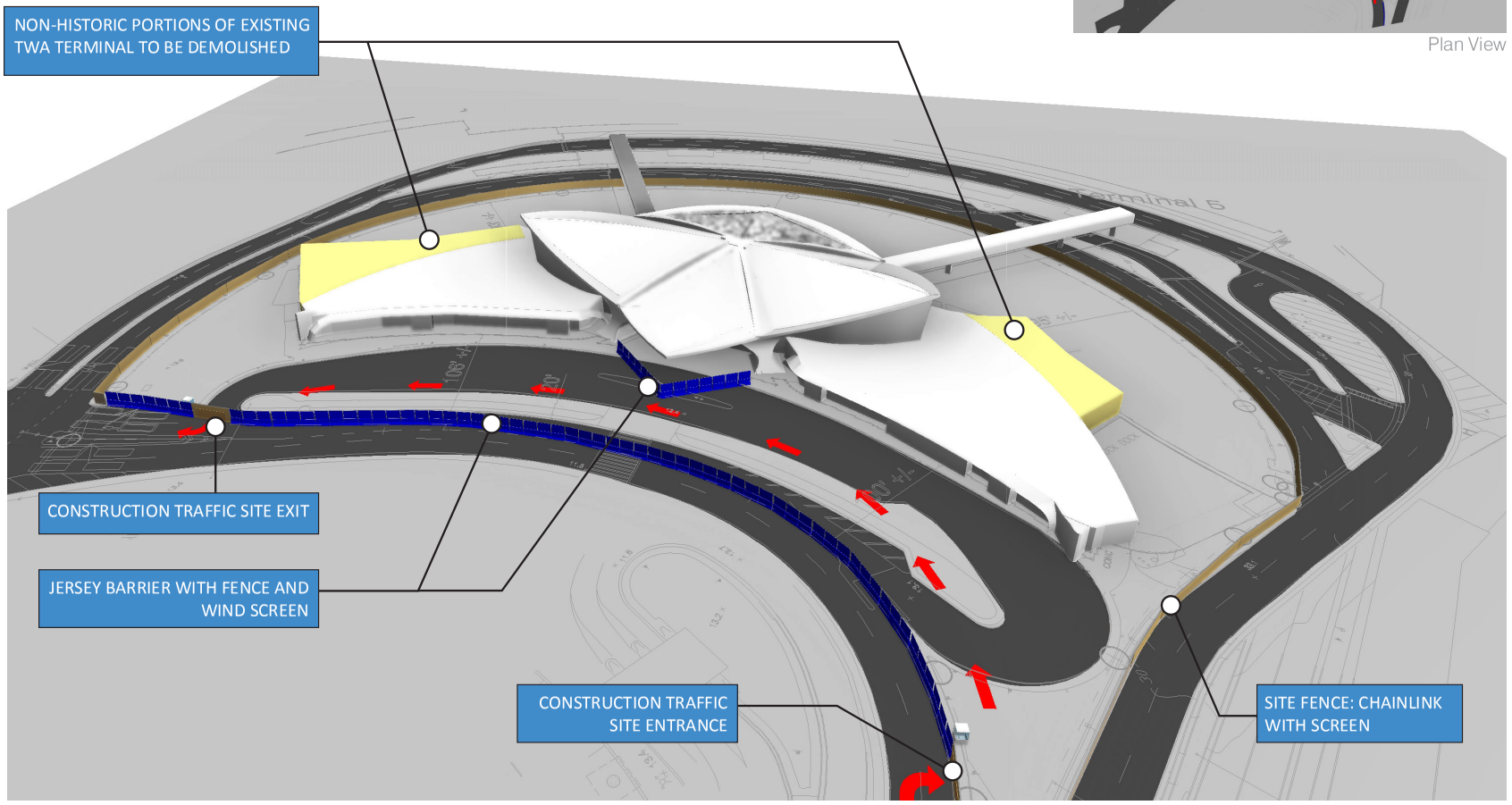
Source: Turner

Construction Phasing Sequence
Figure 5-3a

Phase 2
Demolition



Plan View

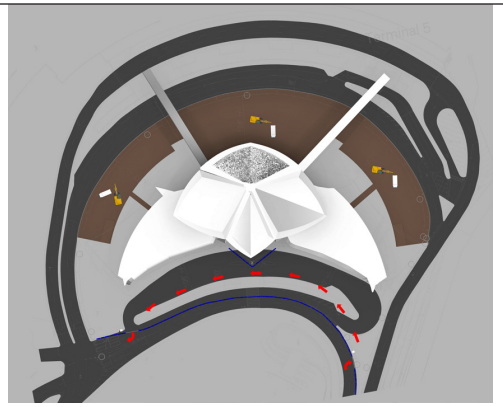


Perspective View

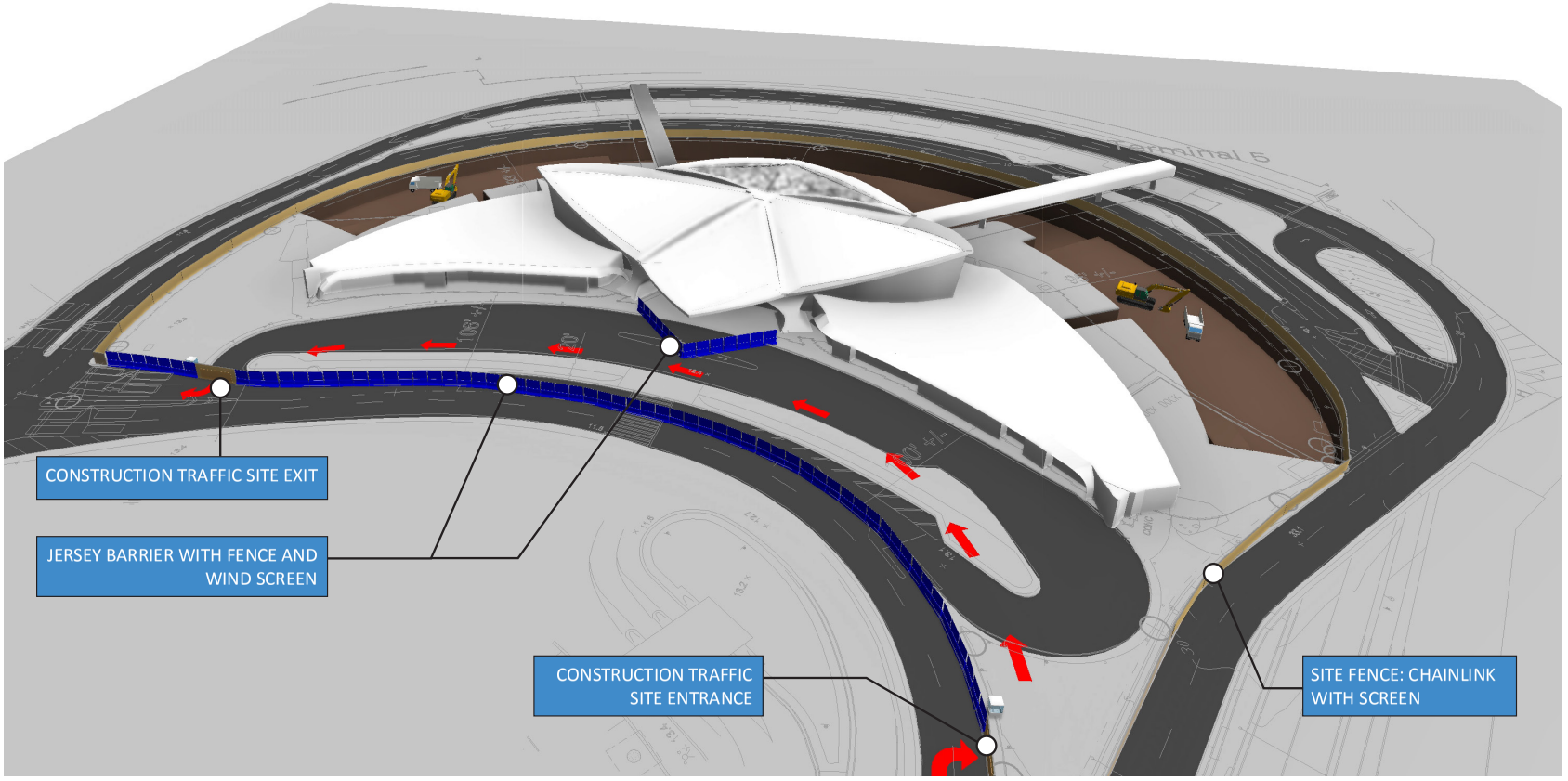
Source: Turner

Construction Phasing Sequence
Figure 5-3b

Phase 3
Excavation



Plan View

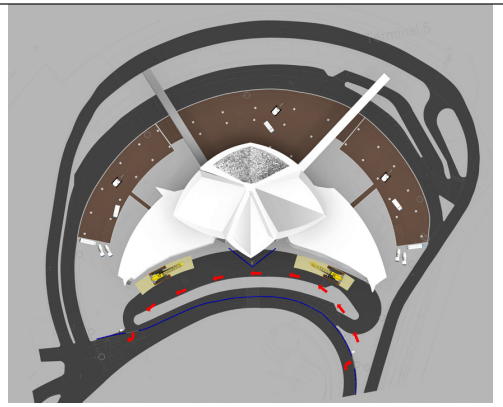


Perspective View

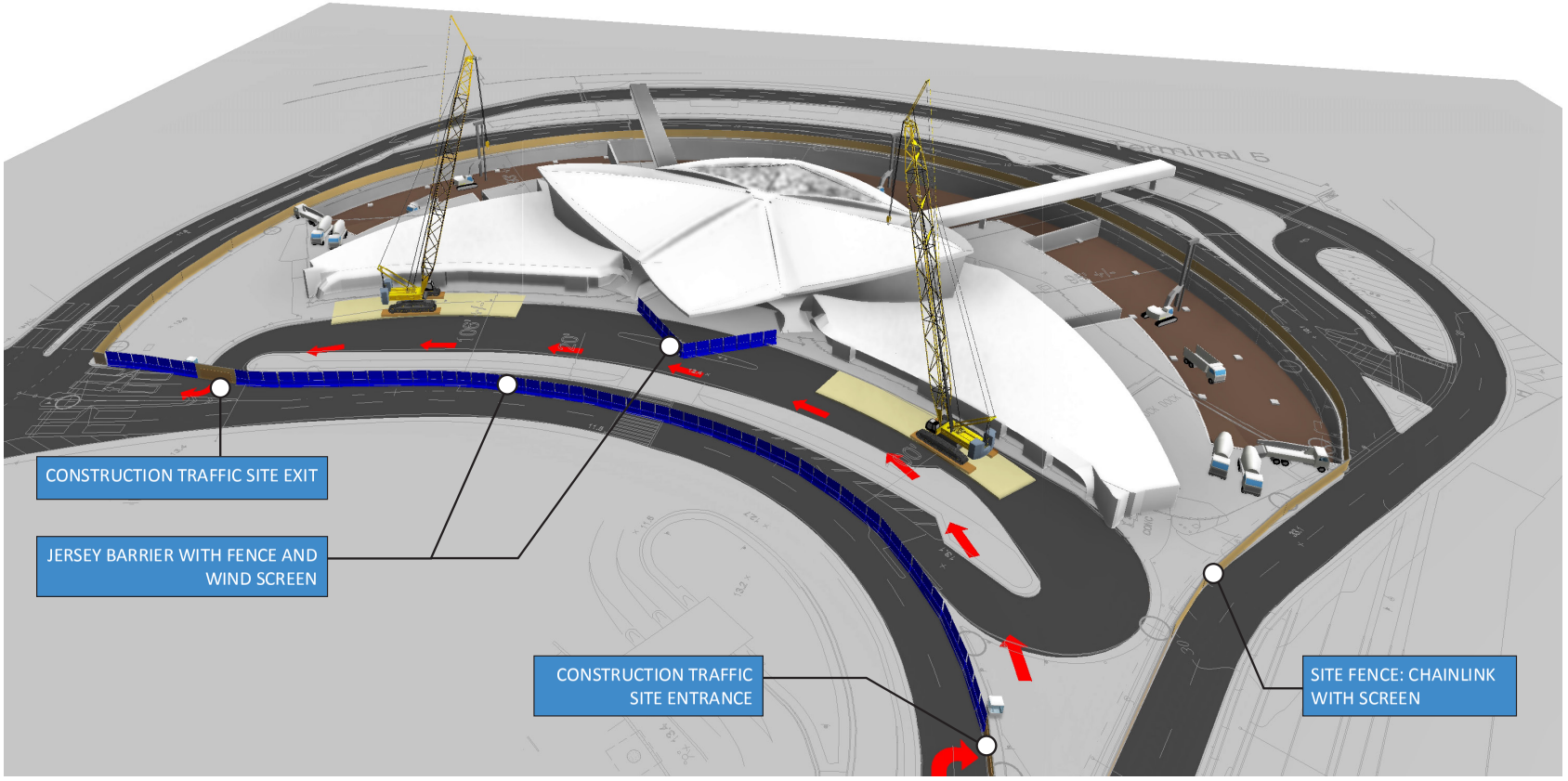
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Construction Phasing Sequence
Figure 5-3c

Phase 4
Foundation



Plan View

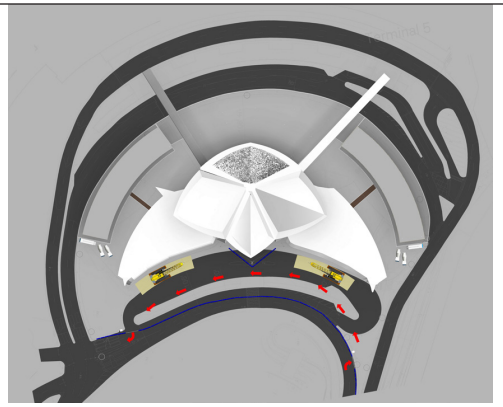


Perspective View

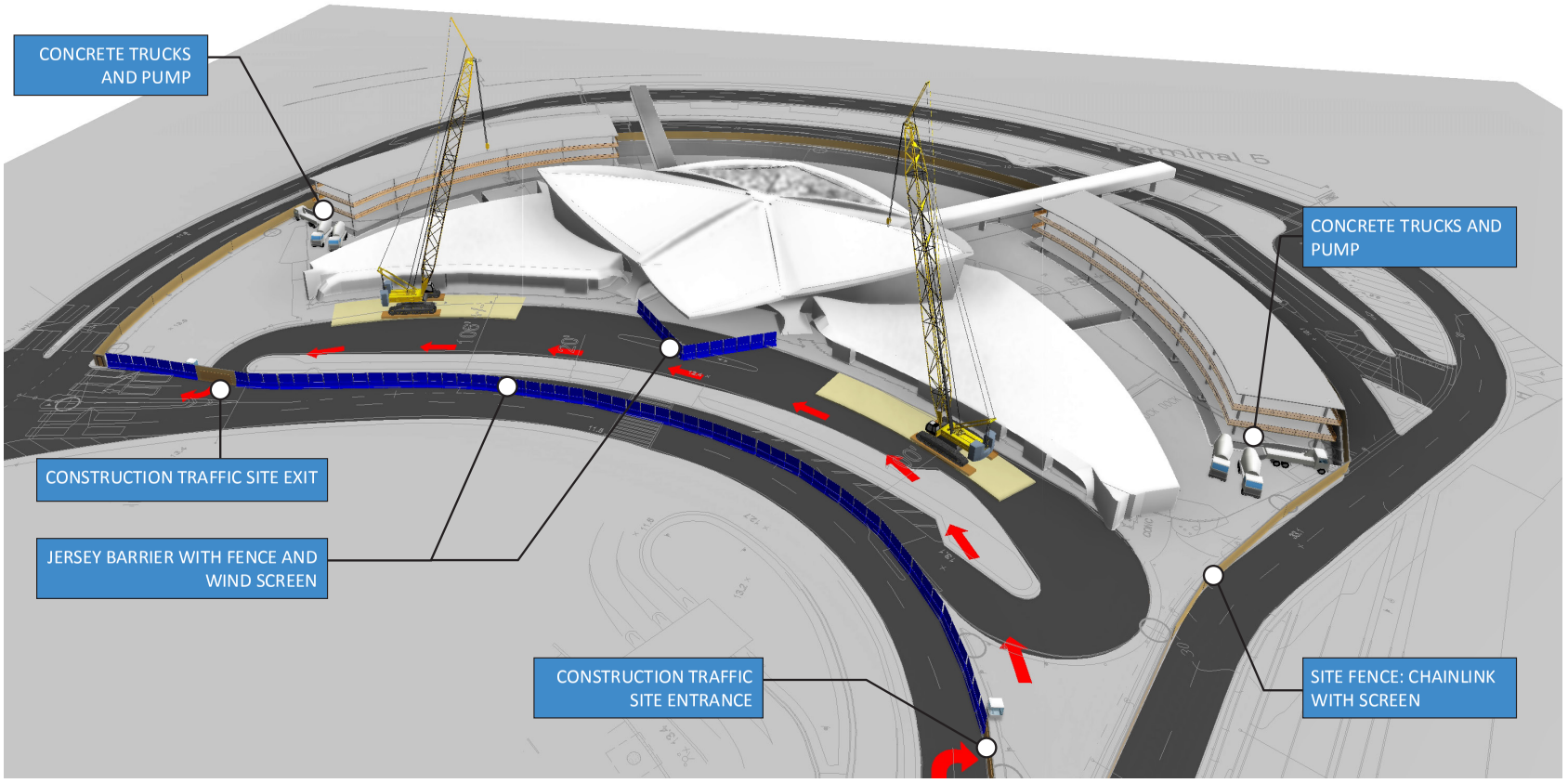
Source: Turner

Construction Phasing Sequence
Figure 5-3d

Phase 5
Superstructure



Plan View

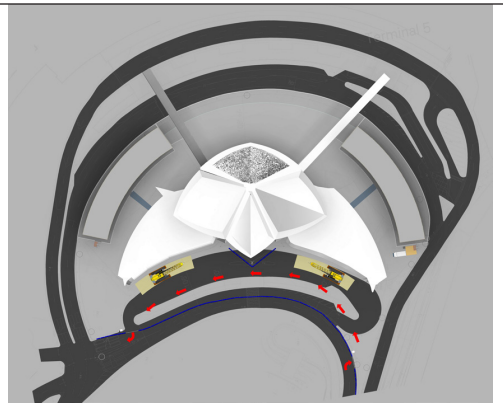


Perspective View

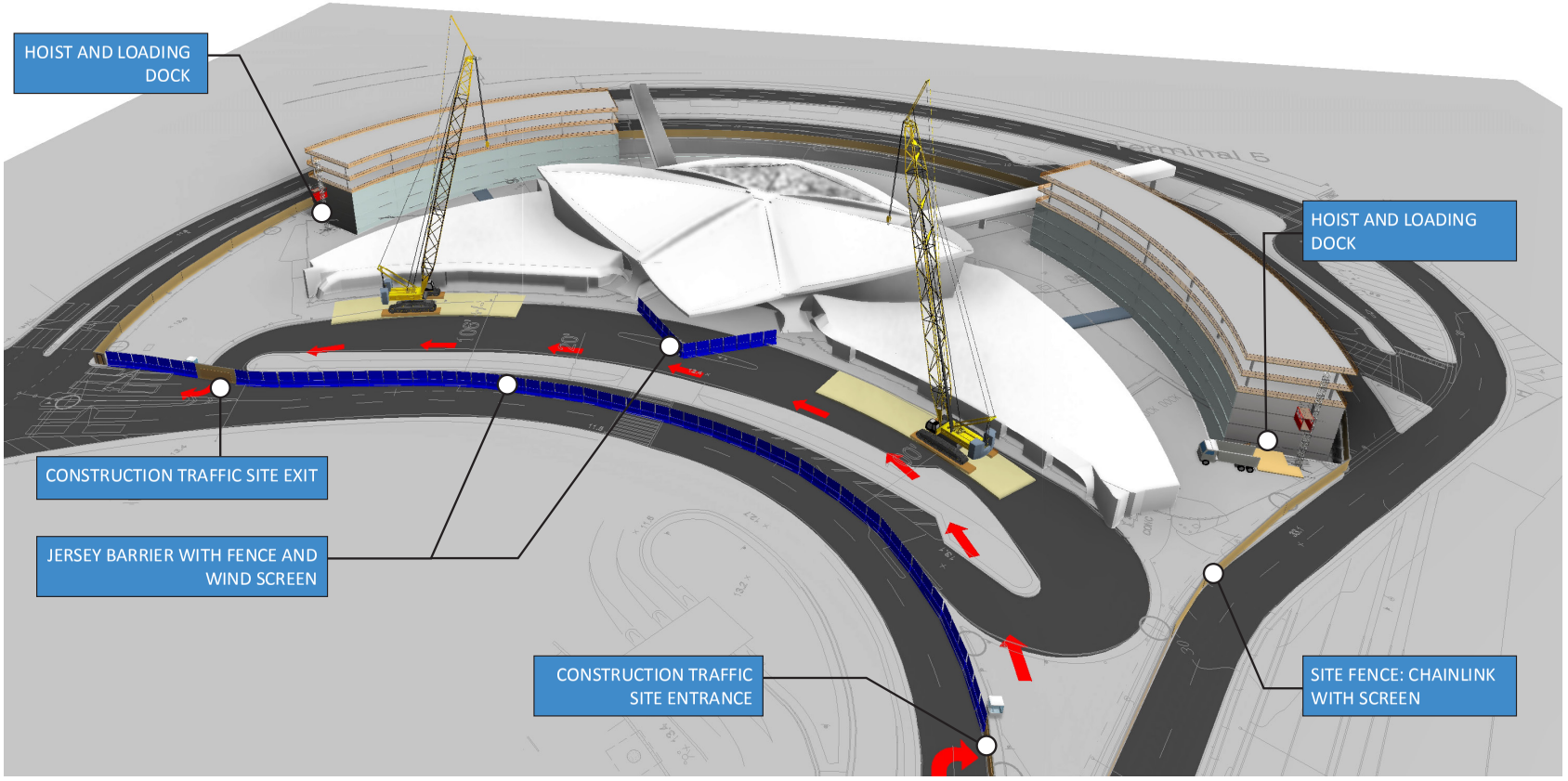
Source: Turner

Construction Phasing Sequence
Figure 5-3e

Phase 6
Curtainwall



Plan View



Perspective View

Source: Turner

Construction Phasing Sequence
Figure 5-3f

the New York City Department of Buildings (DOB) would be obtained. A Construction Noise and Vibration Mitigation Plan will be developed for review by FAA Air Traffic Control Tower (ATCT) staff. The ATCT has been identified as an extremely sensitive site due to the electronic equipment it houses.

Access to the construction site would be controlled. The work areas would be fenced off, and limited access points for workers and trucks would be provided. Construction equipment and materials would be staged within the project site. The Proposed Project would follow the construction guidelines specified in FAA AC 150/5370-10G, *Standards for Specifying Construction of Airport*, including the provisions pertaining to dust, water quality, and temporary erosion and sedimentation control measures, to minimize the effects of construction.

5-17 CUMULATIVE IMPACTS ANALYSIS

The CEQ NEPA regulations (40 CFR 1508.7) define a cumulative impact as "...the impact on the environment, which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency, Federal or non-Federal, or person undertakes such other actions. Cumulative impacts can result from individually minor, but collectively significant, actions taking place over a period of time." This cumulative impact analysis was conducted to comply with the intent of FAA Order 1050.1F, DOT Order 5610.1C, and the January 1997 CEQ guidance.

The construction schedule of the Proposed Project would overlap with the construction of other projects at JFK, including the demolition of Hangars 3, 4, and 5, the redevelopment of Building 144, rehabilitation of Runway 4R/22L, possibly the demolition of Hangar 17 and Building 213, North Cargo Area redevelopment, Bulk Fuel Farm Modification, and possibly Phase III of Terminal 3 and 4 expansion. With the exception of temporary construction related impacts, the cumulative adverse environmental impact of the Proposed Project is expected to be minimal. Extensive preventive procedures would be put into place to avoid and minimize any potential adverse impacts during construction. As described in the following sections, the Proposed Project is consistent with the overall planning mission of the Port Authority and would not result in unmitigated adverse cumulative impacts. The cumulative impacts resulting from implementation of the Proposed Project have been assessed for projects on Airport. The cumulative impacts analysis presented in this EA included a review of available environmental documents for other projects at JFK.

5-17-1 JFK REDEVELOPMENT PROGRAM

As is true for any large and complex airport facility, JFK serves a constantly changing industry and relies on adopting modern technology in a constantly evolving environment to serve its users efficiently and effectively. Therefore, this Airport along with many others throughout the country requires regular maintenance and modernization. The Port Authority has in the past and will continue to undertake an array of improvements at JFK, both airside and landside, to maintain and improve the efficient movement of aircraft and travelers. The projects listed below represent the Port Authority's most recent steps to maintain and to improve the Airport's functionality and also to enhance customer service. The various improvement projects have been analyzed within four

operational and physical development groups: airside, Runway Safety Area (RSA) improvements, landside-CTA, and landside-perimeter. Projects denoted as "landside-CTA" are within the CTA and provide landside support for aviation activity at JFK. These projects include passenger-processing functions, such as terminal development, as well as access roadway development. Projects denoted as "landside-perimeter" are located to the north and perimeter of JFK. The following is a summary of the ongoing or recently completed projects and projects anticipated in the foreseeable future.

5-17-1-1 AIRSIDE

These projects comprise improvements to the airfield, including modifications to the runways and supporting taxiways and taxilanes at JFK.

- Runway 4R Instrument Landing System (ILS) Pier Structure Rehabilitation - Work included repairing the damaged structural members of the existing ILS pier and fixing any suspect members exhibiting minor damage that could worsen in the future. A Categorical Exclusion was approved for this project in April 2005 and was completed in December 2007.
- Turf Stabilization in Runway Safety Area – Work included the installation of aviation grade artificial turf to mitigate localized erosion problems from jet blast and weather effects. Other benefits of this action were abatement of turf management, decrease in maintenance, wildlife control, and visual enhancement. A Categorical Exclusion was approved for this project in July 2006 and was completed in June 2007.
- Taxiway 'E' Rehabilitation – Work included milling and repaving Taxiway 'E' full length and widening of taxiway fillets to accommodate Group V aircraft per FAA standards in AC 150/5300-13, Airport Design. A Categorical Exclusion was approved for this project in March 2007 and was completed in November 2008.
- Taxiway 'Z' Rehabilitation – Work included milling and repaving Taxiway 'Z' between Runway 31L and Taxiway 'J'. A Categorical Exclusion was approved for this project in June 2007 and was completed in November 2007.
- Taxiway 'S', 'SB', 'SC' and 'SD' Rehabilitation – Work included full depth rehabilitation of the taxiways for the taxiways providing access to the cargo area in the northwest side of the airport. A Categorical Exclusion was approved for this project in February 2008 and was completed in April 2009.
- Partial Rehabilitation of Runway 4L/22R & Partial Rehabilitation of Taxiway 'K' – This project entailed the partial rehabilitation of Runway 4L/22R from the n end of Runway 4L extending approximately 1,350 feet north and the partial rehabilitation of Taxiway 'K' from Runway 4L extending approximately 500 feet west. Work included routine milling and repaving of the asphalt concrete pavement, the replacement of associated lighting systems and adjustments to the electrical manholes and other electrical devices. No new pavement was constructed. A Categorical Exclusion was approved for this project in March 2008 and was completed in September 2008.

- Taxiway 'FB' extension – Work included extending Taxiway 'FB' to the west of Taxiway 'E', parallel to Taxiway 'C', to a point across from Taxiway 'V'. Components of this project required the demolition of several buildings on the north side of the airfield. A Categorical Exclusion was approved for this project in March 2008 and was completed in December 2008.
- Taxiway 'YA' and 'FB' extensions and construction of Taxiway 'KB' – Work included extending Taxiway 'YA' west across Runway 4R/22L until it met Taxiway 'B' and extending Taxiway 'FB' from Taxiway 'ZA' to Taxiway 'E'. Taxiway 'KB' would be constructed between Taxiway 'K' and Runway 4L/22R. A Categorical Exclusion was approved for this project in March 2008. Work was completed in the third quarter of 2010.
- Delay Reduction Program – New Taxiways, Improvements to Existing Taxiways and Runway 13R Threshold Relocation – This project upgraded JFK's airside infrastructure, and widened and replaced approximately three miles of Runway 13R/31L. A central component of the program was widening Runway 13R/31L from 150 to 200 feet to make way for new delay-reduction taxiways. This project received a FONSI/Record of Decision (ROD) in August 2008 and began construction in March 2010. Major elements of the project were completed in November 2010; however, a few punch list items remained outstanding and the project was completely finished at the end of 2013.
- Taxiway 'Y' Rehabilitation – Work entailed the routine milling and overlaying of the asphalt concrete pavement, the replacement of associated lighting systems, and adjustments to the electrical manholes and other electrical devices. A Categorical Exclusion was approved for this project in November 2008. Work was completed in March 2010.
- Construction Airside Pavement SWAP (Hangar 12 Demolition) – Work entailed the hangar demolition and ramp expansion at the Hangar 12 site. A Categorical Exclusion was approved for this project in January 2009. Work was completed in the fourth quarter of 2011.
- Wildlife Hazard Assessment – JFK underwent a new Wildlife Hazard Assessment Study for one year beginning in 2010. The findings of this study were used to create an updated Wildlife Hazard Management Plan. The Plan was approved by the FAA and incorporated into the Airport Certification Manual. A Categorical Exclusion was approved for this project in August 2009.
- Runway 13R PAPI Installation – Work entailed the installation of Precision Approach Path Indicators (PAPI) for Runway 13R. This project received a Categorical Exclusion in October 2009 and work was completed in June 2010.
- Taxiway 'F' Rehabilitation – Work entailed the full-width milling and overlaying with asphalt concrete pavement of approximately 2,700 feet of Taxiway 'F', between Runway 4L/22R and Runway 4R/22L, shoulder and erosion pavement, grading, seeding, pavement marking and adjusting taxiway lighting and utility castings to meet the new finished surface. This project received a Categorical Exclusion in May 2010. Work was completed in December 2010.

- Taxiway 'P' Rehabilitation – This project entailed the full-width milling and overlaying with asphalt concrete pavement of approximately 5,500 feet of Taxiway 'P', between Taxiway 'PC' and 'B', shoulder and erosion pavement, taxiway fillet improvements, grading, drainage adjustments, soil erosion/sediment control, pavement markings, and adjusting taxiway lighting and utility castings to meet the new finished surface. Electrical work included new electrical infrastructure and installation of LED lights. This project received a Categorical Exclusion in October 2011 and work was completed in October 2012.
- New Taxiways 'HA', 'KF', and 'KG' – The proposed project entailed the construction three new taxiways and decommissioning of two existing taxiways. The new taxiways include Taxiway 'HA', 'KF', and 'KG', each connecting Taxiways 'A' and 'B' at different locations. Taxiways 'KD', and 'KK' were decommissioned. The new proposed taxiways enhance efficiency and safety of airport operations associated with Terminal 3 and 4 envelope. This project received a Categorical Exclusion in September 2010 and work was completed in December 2012.
- Taxiway 'P' Widening - The proposed project entailed widening Taxiway 'P' from 75 feet to 82 feet. This project brought Taxiway 'P' into full compliance for Group VI aircraft and removed the "conditionally approved" Modification to Standards by the FAA. Work on this project began in November of 2011 and ended in October 2012.
- Airport System Capacity Planning Study – The Port Authority has recently undertaken a study that is aimed at reviewing the existing Port Authority airport system characteristics and constraints; identifying and evaluating potential alternatives to meet the Port Authority's goals and objectives in consideration of existing constraints and current facility characteristics; and assessing alternatives in terms of practicality, as well as operational and economic feasibility. Because this study is still in progress recommendations are not known at this time. Any recommendations from this study would require a separate NEPA assessment before implementation would occur.
- Runway Safety Area Improvements to Runway 13L/31R – This project would involve declaring distances to comply with FAA's Runway Safety Area regulations. Declared distances at airports are a mechanism by which specific lengths of runway pavement are identified for use in aircraft operations[35]. In this case, the entire length of the pavement on the runway surface cannot be used due to Runway Safety Area regulations governing overrun distances. Declared distances were finalized with FAA and implemented in 2015. This project received a Categorical Exclusion in July 2014.

[35] FAA Advisory Circular AC 150/5300-13A, Airport Design, Section 322. http://www.faa.gov/documentLibrary/media/Advisory_Circular/150-5300-13A-chg1-interactive.pdf

- Taxiway 'B' Rehabilitation – This project entails the milling and overlaying with asphalt concrete pavement of approximately 7,000 feet of Taxiway 'B', between Taxiway 'N' and 'U', shoulder and erosion pavement, shoulder widening, improvements to storm water drainage, and installation of taxiway centerline lights, clearance bar lights, guidance signs, and pavement markings. This project received a Categorical Exclusion in April 2013. Work began in the second quarter of 2013 and was completed in the first quarter of 2015.
- Runway 4L-22R Rehabilitation - This project was initiated to comply with FAA design standards for RSA on Runway 4L-22R. The work includes displacing the Runway 4L arrival threshold 460 feet to the north to provide 600 feet of required undershoot RSA to comply with FAA design standards, constructing 728 feet of new runway pavement on the north side of Runway 4L/22R to maintain adequate departure length on Runway 22R while providing the required 1,000 feet of overrun RSA to comply with FAA design standards. Additional improvements include the runway using concrete, replacing the existing asphalt and widening the runway from 150 to 200 feet. The project received a FONSI/ROD for an EA in March 2014, and work was substantially completed in September 2015.
- Runway 4R-22L Rehabilitation - This project includes the mill and overlay of the full 8,400 foot length of Runway 4R-22L to maintain a good state of repair. The work will also include the relocation or adjustment of Taxiways FA, FB, F, H, and J, including the potential addition of high speed runway exits. The Port Authority expects to initiate the NEPA process for this project in the second quarter of 2016, with construction expected to start in the second quarter of 2017.
- Taxiway Q, QZ, and Restricted Vehicle Service Road Rehabilitation - This project would restore Taxiway Q, Taxiway QG, and a section of the Restricted Vehicle Service Road to a state-of-good repair, and extend their useful life, as required under the Federal Aviation Regulations (FAR) Part 139 – Certification and Operations of Land Airports. These sections of pavement were last paved in 1992 and 1998, and need rehabilitation to maintain a state of good repair. Modifications to aircraft turning radii on five intersecting taxiways will be made. The Port Authority expects to initiate the NEPA process for this project in the second quarter of 2016, with construction expected to start in the second quarter of 2017.

5-17-1-2 LANDSIDE CENTRAL TERMINAL AREA (CTA)

These projects are within the CTA that provides landside support for aviation activity at JFK. Landside projects include passenger processing functions such as terminal development as well as curbside and access roadway development.

- Remainder of Terminal 5/6 Redevelopment Project – As noted in Chapter 1, *Introduction and Background*, the current Proposed Project is the outcome of the MOA addressing the adverse effects to the historic TWA Flight Center based on the implementation of the Terminal 5/6 Redevelopment Project. The Port Authority completed an EA for this project in October 2004 and received a

FONSI/ROD from the FAA in February 2005. Work was completed on the Terminal 5 portion of the project in 2009 with additional improvements (including a Federal Inspection Services [FIS] facility that was completed in November 2014). No additional modifications to Terminal 5 are planned.

- Terminals 3 and 4 Redevelopment Project – Delta Air Lines is currently redeveloping the Terminal 3 and 4 envelope. The Phase I of the project included expansion of Concourse B at Terminal 4, the demolition of Terminal 3, redeveloping the Terminal 3 area to accommodate aircraft parking, developing additional passenger processing facilities at Terminal 4, and reconfiguring taxilanes and connections to existing taxiways between Terminals 2, 3, and 4. The Port Authority completed an EA for Phase I of the project in June 2010 and subsequently received a FONSI determination from the FAA in July 2010. Work was completed in May 2013. Phase II includes an extension of Concourse B of Terminal 4 and loading bridges on Terminal 2. A Categorical Exclusion was received on Phase II in April 2013 and work began in May 2013 and was completed in December 2014. Future Phase III includes expansion of Concourse A in Terminal 4, with the anticipated construction of 16 additional gates. Phase III is still in the planning and design stage and will be subject to a future NEPA analysis and review.
- Bollard Protection Terminal Frontages - The proposed project entailed the installation of a frontage bollard system at Terminals 1, 2, 3, 4, 5, 7, and 8. This project enhances security of passengers by reducing the threat of a vehicle attempting to penetrate the terminal building frontages. A Categorical Exclusion was received on the project in October 2009. Work began in the second quarter of 2010 was completed in approximately one year.
- Rehabilitation of CTA Roadways – This project entailed the rehabilitation of the CTA Roadways. Work associated with the rehabilitation included milling and overlaying the existing asphalt concrete roadway; localized full-depth pavement replacement; localized grading; replacement of several utility castings; striping of the roadways; minor signage work, repairs to damaged curbs and sidewalks; and localized resetting/replacement of paved salt splash areas. A Categorical Exclusion was received on the project in January 2010. Work began in June 2010 and ended in February 2012.
- Cargo Area C & D Communication Vaults – The proposed project entailed the installation of Communication Vaults in cargo area C & D and associated cabling. All communications and electrical access to the vaults is underground. Both vault sites and the expanded electrical substation site utilized permeable surfaces where possible, and completely re graded and re-planted. Concrete curbing was placed adjacent to each communication vault. The concrete curbing retained the gravel mulch areas adjacent to Communications Vaults C and D, where maintenance and security vehicles may park when they are servicing the vaults so that they would not have to park in an active lane of traffic. The gravel mulch provides a permeable surface that does not erode or cause runoff and erosion. A Categorical Exclusion was received on the project in December 2010. This project commenced in March 2011 and ended in December 2011.

- Airport Plaza - Multi Fuel Station/Carwash/Food Court - The proposed project entails the renovation of an existing 17,500-square foot building (Building 125) on Airport property into a public multi fuel carwash facility with a convenience store, restaurant, and food court on a 3.4-acre plot. In addition, a cargo truck parking area will be installed on an adjacent 2.4 acre plot. The proposed facility includes a small repair bay for cars and SUVs right next to the car wash bays with capability of fixing minor problems such as flat tires, oil change, battery recharge, etc. A Categorical Exclusion was received on the project in October 2010. Work began in April 2012 and ended the first quarter of 2014.
- National Car Rental Site Modification – The proposed project entails a modification to an existing rental car facility (Building 308) for National Rent-A-Car at JFK International Airport. The purpose of planned modification is to improve traffic flow and customer service at the rental facility site. The key improvements planned for this project are to construct new canopies over parking spaces and pedestrian walkways. Existing Building 308, approximately 6,400 square feet, is also proposed to be modified under this project. A portion of existing building, measuring approximately 2,700 square feet will be demolished for additional parking space. Two small additions will be made to Building 304 totaling 900 square feet for vehicle servicing. A Categorical Exclusion was received on the project in December 2011. Work began in June of 2012 and was completed at the end of the second quarter of 2014.
- Terminal One Checked Baggage Inspection System (CBIS) Project – The proposed project involves the construction of an exterior canopy structures on the east and south end of the existing Terminal One building. In order to make room for a required Transportation Security Administration (TSA) CBIS in the terminal's (Terminal One) east bag room, the existing in-bound, recheck, interline and oversize baggage function within the east bag room will need to be relocated to the east and south end of the terminal in a newly constructed exterior canopy structures. The Larger Canopy (East) will cover an area of approximately 9,100 sf, a majority of it will be open with the exception of a screen wall on the east side. The South Canopy (West) will cover an area of approximately 1,032 sf, out of which approximately 300 sf is fully enclosed. The canopies will be constructed on existing impervious areas. A Categorical Exclusion was received on the project in June 2011. Work began in November 2011 and was completed in December 2013.
- Building 94 Demolition – The proposed project entailed the demolition of Building 94. This project was necessary to accommodate the Aircraft Ramp (Apron) Expansion. Building 94, consisting of an 1,100-square foot area with utilities and guard post, was demolished in accordance with all Federal and state regulations. A Categorical Exclusion was received on the project in November 2010. This project commenced in April 2011 and ended in the third quarter of 2011.
- Hangar 7 Demolition - The proposed project entailed the demolition of Hangar 7. Hangar 7 was located north of Runway 13L/13R and Taxiway C in the northern section of the airport. The hangar was demolished since it was in a state of

disrepair and the cleared site will be used for future development which is unknown at this time. A Categorical Exclusion was received on the project in July 2011. This project commenced in November 2011 and was completed in July 2013.

- Hangars 3, 4, and 5 Demolition – A Categorical Exclusion was completed for the demolition of Hangars 3, 4, and 5 at JFK in August 2003. Work began in October 2014, and the project is expected to be complete in the first quarter of 2016.
- Restricted Vehicle Service Road (RVSR) J2 & J8 Bridges Relocation- This project entailed the relocation and demolition of J2 & J8 Bridges that serve the RVSR at the airport. The RSVR at JFK allows vehicular traffic to serve airside operations and includes the J2 and J8 Bridges, which span the Van Wyck and JFK Expressways, respectively. The Bridges carry a two lane roadway used by airside vehicles to travel between terminals, hangars, and service buildings. The new bridges provide necessary load capacity to accommodate modern equipment, such as fuel trucks. The new Bridges also eliminate existing height restrictions that prohibited the passage of larger vehicles, including some emergency vehicles, beneath the Bridges. Moreover, each Bridge's new location is sufficiently far from Taxiway A to allow operations of Group VI aircraft without any restrictions. The project received a Categorical Exclusion in July 2012 and work was completed in May 2014.
- Building 144 Redevelopment - Building 144 is the old Ramada Hotel that is not currently in use. It is anticipated the footprint of the building could be expanded or decreased (demolishing part of building); however the height would not increase. Work on this project would not start until 2018; it is still in the planning phase.
- North Cargo Area Redevelopment - This project would entail demolish existing buildings 260/261 and construct a 300,000 square foot cargo facility, with a possible 150,000 square foot addition. The Port Authority expects to initiate the NEPA process in late 2016, with demolition starting in early 2017, depending upon lease negotiations. It is currently anticipated that construction would be substantially complete by first quarter 2019.
- Bulk Fuel Farm Modification - This project would increase the bulk fuel farm's storage capacity by adding two, 80,000 barrel fuel tanks to the 62-tank fuel farm. The capacity is needed to satisfy the daily jet fuel requirements at JFK, which have increased commensurate with the increase in daily operations. The Port Authority will initiate the NEPA process in mid-2016, with construction anticipated to start in late 2016 and completion anticipated in second quarter 2017.

5-17-1-3 LANDSIDE PERIMETER

The landside perimeter projects are located to the north and along the critical Air Operations Area (AOA) perimeter of JFK.

- 150th Avenue Rehabilitation – This project entailed the rehabilitation of 150th Avenue between Cargo Plaza Road and North Boundary Road. Work associated with the rehabilitation included milling and overlaying the roadway with asphalt concrete; removal of approximately 20 percent of the roadway and replacing with full-depth asphalt concrete; repairing of curbs and sidewalks and adjusting of castings; and striping the roadway to its current configuration at the completion of paving. The project received a Categorical Exclusion in February 2008. Work began in August of 2008 and was completed in 2009.
- Perimeter Strengthening – This project entailed the installation of perimeter vehicle crash protection barriers. It provided a hardened perimeter, for the critical AOA perimeter, which will minimize potential intrusion of vehicles. The project replaced the fence structure in place. The project received a Categorical Exclusion in June 2008 and work was completed in 2009.

5-17-1-4 OFF-AIRPORT

The following projects are located off-airport property to north of Runway 4L/22R.

- Springfield Gardens Bluebelt Project - The project aims to address frequent flooding in Springfield Gardens and improve water quality in the lake in Springfield Park. The project includes storm sewer installation and street reconstruction, three large constructed wetlands, 2,000 square feet of porous concrete in the Springfield Boulevard median, undergirded with structural soil to encourage the growth of new trees planted in the median. Construction on the new Springfield Gardens Bluebelt began in October 2012 and is ongoing.[36]
- Logan Bus Company – The Logan Bus Company is currently seeking permits with the City of New York and the State of New York to construct a school bus parking and maintenance facility on their property along the northern perimeter of the Airport.
- Existing Obstruction Maintenance - There are approximately 312 existing Terminal Instrument Procedures (TERPS) tree obstructions in Idlewild Park that require removal to comply with FAA Order 8260.3B. The Port Authority is currently seeking a permit to remove these trees and install solar power obstruction lights. Without the solar powered obstruction lights more than 312 trees would need to be removed. In addition, there are trees in Idlewild Park that currently do not comply with Title 14 Code of CFR Part 77. The Part 77 tree obstructions do not require removal but do typically require the installation of lights/light poles to identify the obstructions to pilots. In order to comply with Part 77 requirements the Port Authority installed seven light poles in Idlewild Park to identify the tree obstructions. This project was completed in early 2015.

[36] NYC DEP. "City Begins Dredging of Springfield Lake and Continues Construction of storm Sewers and Bluebelt Wetlands in Southeast Queens". July 2013. http://www.nyc.gov/html/dep/html/press_releases/13-082pr.shtml

5-17-2 SUMMARY OF CUMULATIVE IMPACTS

As no potentially significant impacts would result from the Proposed Project, it is unlikely that the incremental impact of the Proposed Project would cause or contribute to a significant impact on the environment when added to past, on-going, or reasonably foreseeable future projects or actions involving JFK. The Proposed Project is not expected to cause or contribute to a significant impact on the environment when considered with other past, present or future actions regardless of what agency or person undertakes such other actions.

Chapter 6: Mitigation

6-1 ADVERSE EFFECTS TO HISTORIC RESOURCES

An MOA was executed among the Port Authority, SHPO, the FAA, and ACHP in 2004 to establish measures to avoid and minimize adverse effects resulting from the Terminal 5/6 Redevelopment Project on the TWA Flight Center. Since execution of the MOA, plans have been developed to adaptively reuse the TWA Flight Center as part of the TWA Flight Center Hotel, which would involve the construction of two guest room buildings. A First Amendment to the 2004 MOA with the same signatories has been prepared specific to the proposed TWA Flight Center Hotel. The Developer would be required to comply with the stipulations of the MOA and its First Amendment. These stipulations and the status of compliance are detailed in Section 5-2, *Historic, Architectural, Archaeological, and Cultural Resources*. Construction means and methods to avoid inadvertent damage (i.e., vibration) to the historic resources would be implemented during construction.

6-2 CONSTRUCTION MITIGATION MEASURES

6-2-1 NOISE CONTROL MEASURES

Construction of the Proposed Project would follow the New York City Noise Control Code (also known as Chapter 24 of the Administrative Code of the City of New York, or Local Law 113) and EPA's noise emission standards. These local and federal requirements are detailed in Section 5-7-1, *Noise Construction Impacts*. Based on the information presented above and that construction of the Proposed Project would follow the requirements of the New York City Noise Control Code for construction noise control measures, no adverse noise impacts would be expected due to construction of the Proposed Project.

6-2-2 AIR QUALITY CONTROL MEASURES

Construction activities would be carried out in accordance with all applicable regulatory requirements. As required by the EPA regulations, ultra-low-sulfur diesel (ULSD) fuel would be used for all construction-related vehicles and non-road construction equipment. Since all diesel engines would use ULSD, sulfur dioxide (SO2) emissions would be negligible. All necessary measures would be implemented to ensure adherence to the New York City Air Pollution Control Code regulating construction-related dust emissions. In addition, the provisions specified in FAA AC 150/5370-10G, Standards for Specifying Construction of Airports, regulating construction-related dust emissions would be followed during the construction of the Proposed Project.

Emissions from on-site construction equipment and on-road construction-related vehicles, as well as dust generating construction activities, have the potential to affect air quality. Construction of the Proposed Project would require the use of concrete

trucks and delivery trucks as well as non-road equipment such as excavators, backhoes, loaders, and cranes. However the use of such equipment would be temporary and short-term and would not be needed once the construction task is complete. Further, the approach and procedures for the construction of the Proposed Project would be typical of the methods utilized in other building construction/renovation projects throughout New York City.

As shown in Section 5-5, *Air Quality*, the annual estimated construction emissions are below the applicable thresholds and the Proposed Project would not result in adverse effects on air quality.

Chapter 7: Public Outreach and Agency Coordination

7-1 NEPA

To satisfy requirements for public involvement, a Notice of Public Availability was published in the Queens Borough President newsletter, *New York Newsday, Daily News (Queens edition), Queens Chronicle, Queens Courier, Queens Times Ledger, Queens Ledger, Long Island Herald, and South East Queens Press* newspapers. Additionally, the Notice of Public Availability was distributed to the Coordinating Committee of the NY Airports Community Airports Roundtable (NYCAR). The EA was available at the Port Authority's Administration Building at JFK and Port Authority's central staff office in Manhattan (4 World Trade Center). A copy of the document was also available for review on the website, http://www.panynj.gov/about/studies-reports.html. A 30 day comment period extended from April 7, 2016 to May 7, 2016. The Department of Interior Section 4(f) consistency review extended from April 12, 2016 to May 27, 2016.

To ensure that interested parties are informed, another advertisement was placed in the local newspapers announcing the FAA's decision. Copies of the Final EA and the FAA's decision are available at the Port Authority's Administration Building at JFK, and Port Authority's central staff office in Manhattan.

7-1-1 RESPONSE TO COMMENTS ON THE ENVIRONMENTAL ASSESSMENT

A total of twelve comment letters were received during the 30-day public comment period. Eleven of the twelve comment letters supported the project for various reasons including the following: the preservation and restoration of the TWA Flight Center; the opportunity for construction and permanent jobs; the benefits to JFK as a modern transit hub; the addition of conference and meeting space in Queens; and the project's eco-friendly LEED certification.

One of the comment letters questioned the proposed project design and requested the consideration of alternate designs. Alternatives were previously evaluated in the EA, as well as attached in Appendix C of the EA. Further clarification of the visual effects analysis was provided to show that the proposed project has been designed to avoid adverse impacts on the TWA Flight Center. Similarly, a shadow analysis concluded that potential shadow cast on the TWA Flight Center would not adversely impact the historic character or the public's enjoyment of the building. In response to a comment regarding the connector tubes, the proposed design is expected to incorporate the appropriate connectivity and circulation space in accommodating anticipated pedestrian traffic between the TWA Flight Center, guest room buildings, and Terminal 5. As the project design progressed, the cogeneration facility was relocated to the rooftop of the west guest room building, and the EA was updated accordingly.

A commenter requested the analytical results from recent soil and groundwater sampling. The analytical results did not detect any compounds at levels above the applicable regulatory thresholds and were summarized in the EA. All of the comment letters and a detailed Response to Comments are attached as **Appendix G**.

7-2 SECTION 106 COORDINATION WITH AGENCIES AND CONSULTING PARTIES

The Port Authority and FAA have coordinated with public agencies, and engaged with consulting parties regarding the Proposed Project and issues addressed in this EA. A consultation under Section 106 of the NHPA has occurred as part of the environmental planning for the Proposed Project because the Proposed Project involves a resource listed in the National Register of Historic Places. Both NEPA and NHPA and their associated regulations, require public and agency involvement before FAA can render a decision on the Proposed Project. A public notice and comment period will be part of the NEPA process. The intent of public and agency involvement is to ensure that the public and resource agencies can review the adaptive reuse of the historic resource and provide input on the Proposed Project. In addition, the RAC continues to provide the agency coordination and guidance in the review of this Proposed Project in accordance with Section 106 of the National Historic Preservation Act. The proposed TWA Flight Center Hotel, LLC project has been presented to the RAC at four meetings—May 11, 2015, June 17, 2015, December 1, 2015, and February 26, 2016. A detailed discussion on the Section 106 process is included in Section 5-2, *Historical, Architectural, Archaeological, and Cultural Resources*.

7-3 NEW YORK CITY UNIFORM LAND USE REVIEW PROCEDURE

The public has had several opportunities to learn about and share comments on the proposed TWA Flight Center Hotel through public meetings and hearing associated with the New York City Uniform Land Use Review Procedure (ULURP), a process which establishes several opportunities for public review and comment. The ULURP process is in support of the proposed project sponsor's seeking a long term lease commitment directly with New York City which would only be required if the City's lease with the Port Authority is not renewed.

Specifically, the project has been presented at regularly scheduled public meetings including to the three local Community Boards (10, 12, and 13) that are located adjacent to the airport, the Queens Borough President's office, and the New York City Planning Commission. In each instance, the project sponsor provided an overview presentation of the project in terms of the proposed development program, the specific need for the lease commitment by the City, the restoration of the historic TWA Flight Center, and a visual depiction of the project in relationship to the surrounding buildings of this portion of the Central Terminal Area. Board members and the general public were allowed to ask questions and comment on the proposed project.

As part of their role and input to the ULURP process, each of the Community Boards and the Borough President's office have recommended approval of the proposed project (see **Appendix H**). The New York City Planning Commission approved the

ULURP application on March 9, 2016. The ULURP process concludes with a final hearing by the New York City Council. In chronological order, the location and dates of meetings held to date on the proposed TWA Flight Center Hotel are listed below:

Queens Community Board 13 Land Use Committee
Monday, December 14, 2015 at 7:00 pm
Community Board 13 Office
219-41 Jamaica Avenue
Queens Village, NY 11428

Queens Community Board 13 Full Board Meeting
Monday, December 21, 2015 at 7:30
Bellerose Assembly of God
240-15 Hillside Avenue,
Bellerose, NY 11426

Queens Community Board 12 Land Use Committee
Tuesday, January 5, 2016 at 7:00pm
Community Board 12 Office
90-28 161st Street
Jamaica, NY 11432

Queens Community Board 10 Land Use Committee
Wednesday, January 6, 2016 at 7pm
115-01 Lefferts Blvd.
South Ozone Park, NY 11420

Queens Community Board 10 Full Board Meeting
Thursday, January 7, 2016 at 7:45pm
Knights of Columbus Hall
135-45 Lefferts Boulevard
South Ozone Park, NY 11420

Queens Community Board 12 Full Board Meeting
Wednesday, January 20, 2016 at 7pm
Robert Ross Johnson Family Life Center
172-17 Linden Boulevard
Jamaica, NY 11434

Queens Borough President Hearing
Thursday, January 28, 2016 at 10:30am
Queens Borough Hall
120-55 Queens Boulevard
Jamaica, NY 11424

Queens Borough Board Meeting
Monday, February 8, 2016 at 5:30pm

Queens Borough Hall
120-55 Queens Boulevard
Jamaica, NY 11424

City Planning Commission Review Session
Monday, February 22, 2016 at 10am
Spector Hall
22 Reade Street
New York, NY 10007

City Planning Commission Public Hearing
Wednesday, February 24, 2016 at 10am
Spector Hall
22 Reade Street
New York, NY 10007

Chapter 8: Cited References

8-1 CITED REFERENCES

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FAA. "Final Order 1050.1F: Environmental Impact: Policies and Procedures"; Office of Environment and Energy. Effective Date July 16, 2015.

FAA, "Order 5050.4B: NEPA Implementing Instructions for Airport Actions"; APP-400, Office of Airport Planning & Programming, Planning and Environmental Division. Effective Date April 28, 2006.

Guidance Regarding NEPA Regulations, CEQ, 48 *Federal Register* 34263 (July 28, 1983).

jetBlue and MCR Development. "Flight Center Hotel LLC, RFP Question Responses." November 6, 2014.

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P.L. 91-190, 42 U.S.C. 4321, et. seq., *National Environmental Policy Act*, 1969, Section 102(2)(c).

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Port Authority of NY&NJ. "Request for Proposals for the Development, Leasing, Management and Operation of a Hotel, Incorporating the TWA Flight Center at John F. Kennedy International Airport (RFP#24852). Issued May 16, 2011.

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Port Authority of NY&NJ, Engineering/Architecture Design Division. "John F. Kennedy International Airport Terminal 5. NYSDEC Spill No.: 9010043, Remedial Action Workplan." June 2011.

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WEBSITES

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http://www.nyc.gov/html/dep/html/press_releases/13-082pr.shtml

Chapter 9: List of Preparers

9-1 LIST OF PREPARERS

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Appendix G: Response to Comments

Appendix H: Public Involvement

Appendix A: 2006, 2011, and 2014 Request for Proposals

The Port Authority of New York & New Jersey

ATTENTION: RFP CUSTODIAN
PROCUREMENT DEPARTMENT
ONE MADISON AVENUE – 7TH FLOOR
NEW YORK, NY 10010

ISSUED: DECEMBER 8, 2006

REQUEST FOR PROPOSALS

RFP #11002

TITLE: REQUEST FOR PROPOSAL FOR THE DEVELOPMENT AND IMPLEMENTATION OF ADAPTIVE REUSE OF THE TWA FLIGHT CENTER (BUILDING #60) AND ASSOCIATED SITE AT JOHN F. KENNEDY INTERNATIONAL AIRPORT, JAMAICA, NEW YORK 11430

QUESTIONS SHOULD BE SUBMITTED NO LATER THAN:	**March 15, 2007**	**TIME:**	**2:00 P.M.**
PROPOSAL DUE DATE:	**April 4, 2007**	**TIME:**	**2:00 P.M.**
CONTRACT OFFICER:	**Laurie Spencer**	**PHONE:**	**(212) 435-3980**
		FAX:	**(212) 435-3992**
		EMAIL:	**lspencer@panynj.gov**

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PART I: INVITATION

The Port Authority of New York & New Jersey (hereinafter sometimes referred to as "the Authority" and sometimes the "Port Authority") hereby invites your proposal for the historic restoration/rehabilitation and adaptive reuse of Building #60 (the former Trans World Airlines (TWA) Flight Center at Terminal 5) and associated site (collectively referred to as the "Premises") located at John F. Kennedy International Airport (JFK).

Proposals shall:

- Provide a detailed program for performing the restoration and rehabilitation of Building #60;
- Provide in conjunction with the above, a proposed adaptive reuse development plan with details of design and construction, financing, management, and operation and maintenance of the Premises (as indicated in Attachment C1.1), under a 39-year lease agreement with the Authority in compliance, with the Memorandum of Agreement (MOA) (See Part II, Item E below, and Attachment A, included herewith and made a part hereof). (It should be noted that the attached copy of the MOA, Attachment A, has been redacted to exclude the signature pages.) The Authority is seeking substantial capital investment by private developers in the proposed Project. Proposed fee management arrangements are not acceptable, and shall not be considered hereunder. The selected Respondent will be responsible for design, construction, and all costs and risks associated with the Project.

The proposed restoration and adaptive reuse represents a unique and challenging development opportunity at one of the leading international gateways into the United States.

The Authority's goal for the Project is the preservation/restoration and rehabilitation of the Building #60 landmark structure and the establishment of an adaptive reuse of the Premises. The goal is to be achieved by satisfaction of the terms of the MOA and the capability of the selected Respondent. The proposed reuse shall be suitable for JFK airport, shall be to the benefit of the airport and public, and must demonstrate financial viability.

The Port Authority has retained the professional services of URS Corporation (as Program Manager), and the firms of William Nicholas Bodouva + Associates, and Beyer Blinder Belle, both for architectural services relative to this project. These firms are expressly ineligible to participate on any development team.

After review and consideration of this solicitation document, firms intending to submit a proposal are requested to notify Laurie Spencer, Contract Officer, by email at lspencer@panynj.gov.

PART II: BACKGROUND

The following information and guidelines are provided to assist Respondents in understanding the facility as needed to prepare their submissions. The Authority makes no representations or warranties regarding the accuracy and completeness of the information contained herein.

A. GENERAL INFORMATION

Building #60 was designed by renowned architect, Eero Saarinen for TWA. It is listed on the National and State Registers of Historical Places, the nation's official lists of properties worthy of preservation. Listing on the National Register recognizes the importance of this property to the history of our country and provides it with a measure of protection. The structure consists of a Main Terminal Building and the passenger connecting bridges ("flight tubes").

In preparing for this Project, the Authority wishes to consider all feasible approaches for the financing, construction, leasing and operation and maintenance of Building #60 and the associated site. The Authority may choose to not consider any proposal that includes elements inconsistent with the goals and guidelines stated herein.

This Project is part of the larger Terminal 5/6 proposed master plan development program, but independent of the phased construction of the master plan. Phase I of the master plan consists of the new Terminal 5 and Garage currently under construction in proximity to the Premises, including connection of the full-length existing "flight tubes" from Building #60, to the front of new Terminal 5. This new 26 gate Terminal has been sited behind Building #60 in order to minimize the visual impact on the landmark building, to retain the building's landside view and to keep it connected to an active aviation site. Construction of Phase I is being performed by JetBlue Airways Corporation pursuant to a 30(+) year, long-term lease for the Terminal 5 site. Construction of the garage and terminal are well underway with scheduled openings in early spring and late fall of 2008, respectively.

Phase II of the master plan covers the completion of the redevelopment of the remainder of the Terminal 5/6 Air Terminal site. However, it is not known when in the indefinite future redevelopment of the remainder of the site will occur and such redevelopment may not occur as currently envisioned. Currently it is anticipated that when the entire Terminal 5/6 Air Terminal Site is redeveloped, the area of the Premises will be increased as shown in Attachment C1.2 and, the frontage roadway for the Premise will be changed to a "conventional flow" configuration with the additional area as shown in Attachment C1.3.

Currently the Premises frontage roadway is being constructed to accommodate a "reverse-flow" configuration as shown on Attachment C1.1, and such reverse flow configuration will not be changed until the additional area shown on Attachment C1.2 is added to the Premises. The Premises roadway shall only be used for public drop-off and pick-up in either configuration, in accordance with JFK Airport regulations prohibiting public parking of any kind on frontage roadways.

B. JOHN F. KENNEDY INTERNATIONAL AIRPORT

JFK is one of the nation's premier international gateways. In 2005, it welcomed approximately 41 million passengers, including approximately 19 million international passengers. JFK is located in the southeastern section of Queens County, New York City, on Jamaica Bay. It is fifteen miles by highway from midtown Manhattan. Equivalent in size to

all of Manhattan Island from 42nd Street to the Battery, JFK consists of 4,930 acres, including 880 acres in the Central Terminal Area. The airport has more than 30 miles of roadways and provides employment for approximately 45,000 airline employees, 36,000 tenants and government employees. JFK also generates major economic benefits by providing over 59,000 jobs off-airport in businesses directly impacted by the aviation industry. JFK contributes $25.7 billion annually in economic activity to the NY/NJ region. That total includes $6.7 billion in wages and salaries.

C. JFK REDEVELOPMENT PROGRAM

The Authority and the airport's tenants recognized that in order to ensure continued air transportation services well into the 21st century, major efforts would be necessary to upgrade, change or expand many aspects of the airport. To this end, the JFK Redevelopment Program was established and includes the following elements: a new air traffic control tower; reconfiguration of the Central Terminal Area (CTA) roadways; modernization of airport utilities; a light rail transit system; five parking garages; and private investment projects including airline terminal improvements. The Program also includes a master plan for the redevelopment of the Terminal 5/6 Site as shown on the Revised Concept Master Plan, attached to the Memorandum of Agreement (MOA) (See Section E, below). Phase I of the Terminal 5/6 site redevelopment is a new Terminal 5 and a new 1500 space public parking garage, both under construction by JetBlue Airways on behalf of the Port Authority. Completed elements include the air traffic control tower, two 1400-space parking garages, a 750 space parking deck and a cogeneration facility that generates thermal and electrical power for the CTA. The reconfigured CTA roadways have improved vehicular circulation and the modernization of airport utilities has improved reliability. The light rail transit system was completed and placed into service at the end of 2003.

Private investments in airline terminals at JFK include construction of the new Terminal One, which opened in May 1998, Terminal Four, which opened in May 2001, expansion and renovations to British Airways Terminal Seven, and the construction of a new American Airlines Terminal Eight, which opened in August 2005 with continuing phased construction currently in progress. Other private investments include the cogeneration plant and expanded cargo facilities.

D. AIRTRAIN LIGHT RAIL SYSTEM

The Authority has completed construction of an 8.4-mile light rail system known as AirTrain at JFK. It consists of a 2-mile loop around the Central Terminal Area with stops at each terminal complex; a 3.4-mile extension to car rental facilities, employee and long-term parking lots and the Howard Beach Subway Station; and a 3-mile extension off-airport to the Jamaica transportation center (connecting to bus lines, Long Island Railroad Jamaica Station and subway stations). The system carried an average daily paid ridership of 9,330 in 2005, exceeding 3.4 million in total paid ridership for the year.

E. MEMORANDUM OF AGREEMENT

The federal environmental approval process for the redevelopment of the Terminal 5/6 site has been concluded pursuant to the National Environmental Policy Act of 1970 and the 106 Process required by the National Historic Preservation Act. The Authority, the Federal Aviation Administration, the New York State Historic Preservation Office (SHPO), and the Advisory Council on Historic Preservation have entered into a Memorandum of Agreement

(MOA) covering the rehabilitation, restoration, adaptive reuse, operation and maintenance of the Premises.

F. BACKGROUND AND HISTORY OF THE TWA FLIGHT CENTER (BUILDING #60)

TWA Flight Center (Building #60) is a significant example of 20th Century modern architecture and engineering, designed by one of the preeminent architects of mid-20th century modernism in America. The Flight Center was designed by Eero Saarinen for TWA in the late 1950's and opened in May of 1962.

Eero Saarinen's most significant projects include: the Gateway Arch in St. Louis, Missouri; Dulles Airport in Chantilly, Virginia; and CBS Headquarters in New York City. The TWA Flight Center was one of his last projects and one of his most revolutionary and influential designs. It was Saarinen's intention that the terminal be an expression of "the excitement of travel".

Building #60 is located between existing Terminals 4 and 6, at the apex of a curve in the airport's main roadway system. The building consists of four reinforced-concrete vaults separated by narrow skylights and supported on four reinforced concrete buttresses, forming a shell 50 feet high and 315 feet long. Green-tinted glazed curtain walls are set within the vaults. The main building is flanked by wing-shaped single-story extensions on either side, which follow the curve of the roadway. Two elevated connector bridges, constructed of steel framing with a stucco finish and oval in section, extend from the rear of the terminal.

The interior of the TWA Flight Center is divided into three levels, and contains many curvilinear sculptural elements, which echo the exterior design. The consistently sculptural forms of signs, information boards, railings and counters help to create a unified interior environment.

This facility was listed on the National and New York State Registers of Historic Places in 2005, and earlier in 1994, the New York City Landmarks Preservation Commission had designated the terminal building, two connecting bridges and Flight Wing 2 a historic landmark. Flight Wing 2, not being a part of this Project, has been demolished as part of the redevelopment of Terminals 5 and 6 (see MOA, Attachment A).

G. THE BUILDING #60 SITE

The site is approximately 6 acres in size. The current development of a new airline terminal complex on the Terminal 5 and garage sites involve heavy construction activities immediately adjacent to and on the Premises. Portions of the Premises may not be immediately available.

Graphic representations of the Premises and Building #60 can be found in Attachment C.

H. NEW YORK CITY LEASE

The Port Authority operates the airport under a lease agreement with the City of New York (the "City") entered into in 1947, and amended and restated in 2004 (the "City Lease"). The City Lease currently expires on December 31, 2050.

PART III: SCOPE OF WORK

The Scope of Work and project requirements for the restoration/rehabilitation and adaptive reuse of Building #60 and associated site include, but are not limited to the following:

A. Design, construction, operation and maintenance of the Premises including Building #60, the Flight Wing 2 connecting bridge (”East Flight Tube”), and the outdoor plaza area, for complete implementation of an adaptive reuse.

B. Compliance with the terms and conditions of the MOA, which is provided as Attachment A. Upon execution of the lease agreement covering the Premises and the Project, the lessee shall be bound by the same requirements as bind the Authority with respect to the development, operation and maintenance obligations of the MOA, including without limitation those matters covered in stipulation paragraphs 2, 5, 6, 12, 13, 15, 16, 17, and 18 of the MOA. These development, operation and maintenance obligations must be acknowledged in the Respondents proposal.

C. Restoration and rehabilitation work is described in more detail in Attachment B – TWA Flight Center Rehabilitation Guidelines Report. This Report outlines scope for restoration and rehabilitation treatments and construction requirements. Building #60 and the Flight Wing 2 connecting bridge (“East Flight Tube”) contain asbestos and an abatement plan will be required. No abatement plan/work for the Flight Wing 1 connecting bridge (“West Flight Tube”) will be required.

D. The proposed design shall incorporate the following requirements:

1. Accommodate the provision of, at minimum, two (2) electronic ticketing kiosks in an appropriate setting within Building #60 for use by airline passengers without the need to check baggage.

   The Authority will require that any airline responsible for the ticketing kiosks will install, operate, and maintain the kiosks and monitor their usage. The kiosks shall be accessible during the normal operating hours of the restored/rehabilitated and adaptive reuse, Building #60**.**

2. Make available a prominent location in Building #60 consisting of an area approximately 20’x40’x10’high as a setting for an exhibit to be placed by the Port Authority, which exhibit or display shall be accessible to the public during the normal operating hours of the restored/rehabilitated and adaptive reuse, Building #60.

3. Allow public access through both passenger Connecting Flight Tubes, between Building #60 and the redeveloped Terminal 5/6 site, during the normal operating hours of the restored/rehabilitated and adaptive reuse, Building #60.

4. The frontage “reverse flow configuration” roadway area as indicated on Attachment C1.1, included herewith and made a part herein, has been established for the initial leasehold line of the Premises.

5. Establish and develop an outdoor plaza adjacent to and/or to the rear of the building within the designated initial leasehold line of the Premises.

6. For historic restoration and rehabilitation consideration, it is desired to the extent and degree possible, that the completed adaptive reuse project be comprised of, reside, and remain within the landmark base structure or larger portion of the existing structure, so as to preserve Building #60 exclusively in its present setting.

PART IV. TERMS AND PROVISIONS

At a minimum, the following issues must be addressed in your proposal.

1. TERM OF LEASE AGREEMENT BETWEEN THE PORT AUTHORITY AND SELECTED RESPONDENT

   The lease term will commence upon the execution thereof and will expire no later than (39) years after the date of lease execution.

   The selected Respondent's interest in the lease cannot be transferred to any other person/entity without the prior written consent of the Port Authority.

2. RENTAL PROVISIONS

   The Authority is seeking financial performance of this project to operate on a self-sustaining basis.

   Fixed Rental

   a. Ground Rental

      An annual ground rental will become payable on the earlier of the Date of Beneficial Occupancy (DBO) or 36-months after the effective date of the agreement. This annual rate in 2006 dollars is $92,464 per acre will be escalated annually, beginning on the first anniversary of the effective date of the lease by one-half of the Consumer Price Index (CPI SMSA New York Metropolitan Area) or 4%, whichever is greater. Additionally, it is expected that payment of all or a portion of this annual ground rental shall commence on the date of Initial Beneficial Occupancy.

   b. Additional Fixed Rentals

      If a mortgage or other security interest is required, an additional annual rent will be due the Authority. The Authority reserves the right to limit the conditions under which a mortgage or security interest is guaranteed.

   Participatory Rentals

   Other additional facility rentals shall be proposed by the Respondent and may take the form of any or all of, but are not limited to, the following:

   a. Percentage of gross receipts generated by the Respondent including retail and consumer service rentals. Identify each source of income and associated percentages for each year.

   b. Minimum guaranteed payments with respect to percentage fees.

3. FINANCING PLAN

   a. All project costs are the responsibility of the Respondent without recourse to the Authority, including leasehold roadway and utility work, construction overruns and improvements that are required during the term of the lease.

   b. The Authority requires the Respondent to demonstrate a substantial financial commitment to the Project. The Respondent must precisely state the form and size of the commitment.

   c. The Authority views the contemplated lease agreement to be entered into for the Premises as an operating asset of the Respondent, whereby a Return On Investment (ROI) will be derived from the successful operation of the Premises as a result of the Project.

d. No funds to finance this project are included in the Port Authority's Capital Budget.

e. Respondents are encouraged and directed to informational sources about historic property and preservation federal and state tax benefits by writing to the Historic Preservation Field Services Bureau or calling (518) 237-8643, and visiting the "Save America's Treasures" Program worldwide website at http://www.saveamericastreasures.org/index.html.

4. DEVELOPMENT PLAN

The Respondent, at its sole cost and expense, will be obligated to design, construct, restore, rehabilitate, operate and maintain the Premises. The Respondent will be expected to achieve Initial Beneficial Occupancy, no later than the opening of the T/5 Phase I Terminal, currently expected to occur in the last quarter of 2008. This Initial Beneficial Occupancy is hereby defined as restoration and rehabilitation of Building #60, to the extent necessary to accommodate airline passengers (without the need to check baggage) at the location(s) of the electronic ticketing kiosks and, to allow public access during the normal business hours of Building #60 to and from the redeveloped Terminal 5/6 site through both connecting Flight Tubes. However, final beneficial occupancy for the complete restoration/rehabilitation and adaptive reuse of Building #60 shall occur no later than 36 months from execution of the lease agreement. Respondents must submit a comprehensive Development Plan for the Premises as part of the Proposal including but not limited to:

a. Planned and proposed approaches, methodologies, safeguards, conventional and special techniques from demolition and removals if any, to final finishes for the restoration/rehabilitation of the landmark and the related continued maintenance thereafter.

b. Functional and conceptual delineation between proposed public and non-public space(s), services and amenities for the support of the proposed adaptive reuse and the relationship of the adaptive reuse with allowing public access through both "Tubes" between Building #60 and the redeveloped Terminal 5 site, should be included in a cohesive plan.

c. The plan must include graphics and narrative to fully describe the function and conceptual design of the Project, the development of the site, and public exposure of the Project. Submission requirements for this Project are described in Part V.

d. The Project shall comply with all federal, state and local laws, ordinances and regulations, applicable Port Authority and Airport Rules and Regulations, the lease agreement and the MOA.

5. DESIGN AND CONSTRUCTION CRITERIA, GUIDELINES, REVIEWS AND APPROVALS

The lease agreement will require submission of complete plans and specifications for the Project to the Authority for its approval in the form of a Port Authority Tenant Alteration Application as further described below.

Design and construction of the Project shall be in accordance with all Port Authority requirements and all federal, state and local laws, ordinances, and regulations including, but not limited to all provisions of the New York City Building Code, the Americans With Disabilities Act, the requirements as described in the Port Authority's Tenant Alteration Application Standards and Procedures Guide, the provisions of the Port Authority's Tenant Construction Review Manual, the Airports Standards Manual, and the Secretary of the

Interior's Standards for the Treatment of Historic Properties as referenced herein and as provided under Appendix "D" attached hereto. The proposed use should be appropriate to JFK airport and reflect the needs of the airport's patrons and other users. The development plan will constitute the basis for design development and final design for implementation.

6. OPERATIONS, MAINTENANCE AND REPAIR

The Authority expects the successful Respondent to be responsible for the operation, maintenance and repair of the Premises for the term of the lease, in accordance with the obligations of the MOA as stipulated in paragraph 17 thereof. The Respondent will be responsible for all costs associated with the operation, maintenance and repair of the Premises.

The Respondent will be obligated to clean, maintain, and perform structural and non-structural repairs to the Premises. If the Port Authority deems that the Premises is not being kept in a good state of repair, maintenance, or cleanliness, the Port Authority may assume the performance of such cleaning, maintenance and repairs. All costs associated with such cleaning, maintenance, and repair by the Port Authority, will be reimbursed by the Respondent to the Port Authority. This provision includes the operation of the Premises in accordance with sound environmental practices. A third party agreeable to both the Port Authority and the Respondent will be hired by the Respondent to periodically review the state of repair and maintenance of the Premises on a five-year cycle. The Authority and the Respondent shall share equally in the cost of such periodic reviews. The Respondent will be responsible for and correct any deficiencies at its expense.

For areas that have been restored or rehabilitated, the Respondent must adhere to the maintenance and preservation guidelines, requirements and inspection reporting requirements referenced in stipulation paragraphs 17 and 18 of the MOA.

7. MARKETING

Marketing and other public advertisement means will be required if deemed necessary by the Authority to ensure public awareness of the reuse and to attract likely patrons/customers.

The Respondent is expected to manage the Premises to enhance financial return, sustainability and landmark upkeep. A description of existing or proposed programs, for marketing and management, and marketing arrangements with other entities if applicable, must be provided.

8. SERVICE STANDARDS

Provide customer services on the premises for the benefit of airport patrons, and the general public and cooperate with the Port Authority in establishing and maintaining standards.

The Port Authority has committed to an aggressive, on-going service improvement campaign at the Airport to ensure superior levels of service that consistently exceed customer expectations. With input from its airport partners, the Port Authority has adopted Airport Customer Service Standards that identify the aspects of airport services that impact customer satisfaction and provide a means by which the services provided can be measured and tracked. The selected Respondent shall be responsible for, and be required to take all necessary measures to ensure compliance by all staff working at the Premises with all applicable sections of the most recent edition of the Airport Customer Service Standards, as provided by the Port Authority.

9. INDEMNIFICATIONS AND INSURANCE

The successful Respondent shall be responsible for the following:

- rebuilding the Premises in the event of casualty, and provide full replacement value property insurance.
- indemnifying the Port Authority against all claims for personal injury and property damage.
- providing all statutory required insurance coverage.
- Providing insurance for design and construction activities, business interruption insurance, commercial general liability insurance, automobile liability and such other insurance customarily carried in accordance with good business practice.
- The Authority cannot specify the exact insurance that will be required by the lease agreement at this time. Said insurance will depend on the actual exposures involved in the adaptive reuse.

10. UTILITIES

A. See current Port Authority provided and available utilities serving the Premises, their ratings/values, etc., as identified in Attachment C3.1 through C3.7

B. The selected Respondent shall be responsible for or must comply with the following:

   a. As necessary, the upgrade, modification, extension, or installation of new utilities for the Premises, and establish connections to airport utility services. Prior Port Authority approval for all such proposed connections is required.

   b. The operation and maintenance of the utilities that serve the premises exclusively

   c. The cost of all utility work for the Premises as stated herein

   d. Must purchase from the Port Authority hot water and chilled water provided to the Port Authority by KIAC Partners, the operator of the Cogeneration Facility at the Airport, for all of its heating and air conditioning requirements.

   e. Payment of hot water and chilled water costs in accordance with rates established by KIAC Partners.

   f. Payment of all electrical costs for the Premises in accordance with local utility rates.

   g. Payment of all domestic water costs for the Premises.

   h. Payment of all other utilities used at the Premises.

11. IDENTIFY IMPACTS

Identify any anticipated impacts or encumbrances affecting the Premises or Building #60 related to Terminal 5 or Garage construction, other than currently shown or listed in Attachments C2.1 through C2.General, specific to the Project Baseline Schedule that require mitigation and or clearing from the site by others, based upon a lease execution and/ or start of the Project construction. Schedule requirements are described in Part V.F.4

PART V: FORM AND SUBMISSION OF PROPOSALS

Respondents must submit all requested information. Proposals should be based on the designated site, in accordance with the criteria and guidelines contained herein. Your proposal must include the base landmark structure (shown as the shaded area) and the site area within the designated initial leasehold line as indicated in Attachment C1.1.1, dated 07/20/06, The Authority will consider and possibly accept a proposal that may entail limited variations, for example, the restoration/rehabilitation and adaptive reuse of a larger portion of the existing structure, or the integration of new space as may be allowed by the Secretary of the Interior, consistent with the terms of the MOA, and within the initial leasehold lines as shown on Attachment C1.1.1.

A proposal that includes a modification (e.g. the integration of new space) will only be considered if the Respondent thoroughly explains within the submission the shortfalls of the existing footprint.

Assumptions used in any plans and supporting analysis, must be clearly noted. Respondents are encouraged to include any additional information that would assist the Authority in understanding and evaluating the Respondent's capabilities and proposal.

Respondent's proposals must include completed Sections A through I below. The proposals shall be submitted in 2 SEPARATE PARTS AS FOLLOWS:

PART 1. Submit a concise proposal in response to the following Paragraphs A through G:

This portion of your Proposal shall be single-sided using 12 point or greater font size. Each resume shall be 2-page maximum, single-sided using 12 point or greater front size. The Proposal pages shall be numbered and bound, or in a 3-ring binder(s), with "Your Firm Name", and **RFP Number 11002** clearly indicated on the cover. Each section of the proposal shall be separated with a tab divider that is labeled in accordance with the letter of the requirements specified below as "A" through "G".

PART 2. Submit a concise cost proposal in response to the following Paragraphs H and I:

The cost proposal shall be single-sided, 12-point (or greater) font sized text and packaged within a separate sealed binding with your legal firm name and **"RFP Number 11002 – FINANCIAL INFORMATION"** clearly stated on the cover. Each section of the proposal shall be separated with a tab divider that is labeled in accordance with the letter of the requirements specified below as "H" and "I".

A. EXECUTIVE SUMMARY OF YOUR RESPONSE

Provide an overview or "executive summary" of the key elements of your submission. Address each of the areas noted below. This section should not exceed three pages.

1. Describe clearly the nature of your planned project. Include the highlights of your development and operations plans.
2. Identify all of the firms that will be members of the development and management team, describing briefly the role each will play, or if an individual, describe how you would develop and implement the project.
3. Describe in narrative form your proposed business arrangement for operation of the Premises, and how you plan to raise the capital required for the project.
4. Indicate other terms and conditions that may be necessary for your project.

B. LETTER OF TRANSMITTAL

Submit a letter on Respondent's letterhead, signed by an authorized representative, summarizing its experience and qualifications in meeting the requirements of this Request for Proposal. This letter shall include a statement on whether the Respondent is submitting a proposal as a single entity or a joint venture. In all cases, information required for a single entity is required for each participant in a joint venture.

The Letter of Transmittal shall contain:

1. Name and address of the Respondent and an original signature on the Letter of Transmittal by an authorized representative on behalf of the Respondent.
2. Name(s), title(s) and telephone number(s) of the individual(s) who are authorized to negotiate and execute the lease.
3. Name, title and telephone number of a contact person to whom the Port Authority can address questions or issues related to this Request for Proposal.
4. If a corporation: (a) a statement of the names and residences of its officers, and (b) a copy of its Certificate of Incorporation, with a written declaration signed by the secretary of the corporation, with the corporate seal affixed thereto, that the copy furnished is a true copy of the Certificate of Incorporation as of the date of the opening of the Proposals.

   If a partnership: a statement of the names and residences of its partners, indicating which are general and which are special partners.

   If an individual: a statement of residence.

   If a joint venture: information on each of the members consistent with the information requested above.

   If a joint venture which has not been established as a distinct legal entity submits a Proposal, it and all participants in the joint venture shall be bound jointly and severally and each such participant in the joint venture shall execute the Proposal and do each act and thing required by this Request For Proposal (RFP). On the original Proposal and wherever else the Respondent's name would appear, the name of the joint venture Respondent should appear if the joint venture is a distinct legal entity. If the Respondent is a common law joint venture, the names of all participants should be listed followed by the words "acting jointly and severally". All joint venture Respondents must provide documentation of their legal status.
5. The Respondent by signing the Letter of Transmittal, makes the certifications entitled "Certification of No Indictment, Conviction, Suspension, Debarment or Termination" and "Non-Collusion and Code of Ethics Certification; Certification of No Solicitation Based on Commission, Percentage, Brokerage, Contingent Fee or Other Fee" contained in Part VI of the RFP. If the Respondent cannot make any such certifications, it shall enclose an explanation of that inability.

C. AGREEMENT ON TERMS OF DISCUSSION

Submit a copy of the "Agreement on Terms of Discussion," signed by an authorized representative of the Respondent. The Agreement form is included as Appendix A and shall be submitted by the Respondent without any alterations or deviations. Any Respondent who fails to sign the Port Authority's "Agreement on Terms of Discussion" will not have its

proposal reviewed. If the Respondent is a joint venture, an authorized representative of each party must sign the Agreement.

D. PROJECT MANAGEMENT PLAN

Include a detailed narrative description of the Project Management Plan (management approach) and methods and practices that will be used to formulate and manage the proposed development. This should include design, construction, facility operations, maintenance and repair, staffing and on site requirements such as vehicles, man lifts, etc., and a description of the contemplated marketing strategies. Indicate how and why such methods and practices would be appropriate and effective.

E. DEVELOPMENT AND MANAGEMENT TEAM

1. Team Members and Organizational Structure

   a. Indicate the form of organization of the entity that would be the party to an agreement with the Authority. If the entity is a subsidiary of, or otherwise affiliated with, another organization the Respondent shall indicate such relationships. Indicate the state under whose laws the entity is organized.

   b. Identify all participants in the team and their respective roles, including design, construction, marketing, management, operations, legal, and financial firms or individuals, as well as investors and lending institutions.

   c. Submit an organization chart showing all team members, the reporting relationships, the responsibility of each team member, during the design, construction, and operation of the Project.

   In the event of a proposed subsequent change in or addition to the initial composition of the development team as submitted in response to this RFP, a full disclosure of the change must be made in writing to the Port Authority, which reserves the right to accept or reject the new team.

2. Team Experience and Qualifications

   a. Provide information on all firms on the team, including company profiles, individual resumes of key personnel who would be assigned to this Project, and descriptions of relevant experience. Your submission should include the most recently filed Securities and Exchange Commission (SEC) documents, if applicable, and audited financial statements (balance sheet and income statement) for each firm on your team.

   b. Each firm on the Respondent's submission team must provide the names and addresses of their primary banking institutions. All principal members of the development team should include a list of commercial or institutional credit references from which the developer has previously obtained substantial project financing.

   c. Provide information that demonstrates the experience and successful track record of the Respondent's primary team members, whether in finance, development, design, construction, management, and operation and maintenance, supporting their respective role proposed for this Project. Provide if applicable, examples of previous, existing and especially similar projects successfully undertaken by the Respondent

and, include measures used to evaluate performance. Respondents should identify appropriate references.

d. Provide information that demonstrates the experience and successful track record of design professionals and other principle members with projects of significant scope related to the preservation and adaptive reuse of landmarked or historical buildings.

e. Provide details on projects undertaken by any member of the team, or their subsidiaries or affiliates, which were foreclosed and indicate if any member or any subsidiary or affiliation of a member have been the subject of bankruptcy proceedings under Chapter 7 or Chapter 11 of the United States Bankruptcy Code or state that none exist.

F. DEVELOPMENT PLAN

Submit a complete and comprehensive development plan for the Premises. The proposed plan must include substantial graphics and narrative as required to fully describe the design and construction intent of the restoration/rehabilitation and adaptive reuse treatments, accommodation of public and non-public users and the overall development of the Premises.

The Development Plan shall be provided in a separate volume in the submission package, shall address each of the items in Part IV above, and shall include, but not be limited to the following:

1. Graphics

- Site plan including interfaces with other existing and planned facilities – one-fiftieth scale
- Floor plans and Elevations – one-eighth scale
- Sections and Details – appropriate larger scale
- Renderings

2. Narrative

- The graphics should be accompanied by a narrative, which fully describes the function and the design concept. A listing of all program elements and amenities for the Premises should be provided. Building and site information such as gross square footage, and square footage per use, should be clearly presented. Building materials and finishes proposed must also be clearly described for adaptive reuse, public and non-public areas.

- Describe your planned approach to address all areas of the building containing asbestos, including the abatement plans. Following Port Authority review and approval of the plan, update the plan as required to incorporate Authority comments, or any changing conditions identified by the Authority.

- Identify anticipated utility demand for electrical power, heating and cooling, domestic water, and sanitary for the proposed restoration, rehabilitation and adaptive reuse of Building #60.

- Describe your planned approach to the restoration and rehabilitation of the Premises in accordance with the terms of the MOA. Describe how they will meet or exceed the minimum historical treatment requirements.

- Comments may be generated by the Redevelopment Advisory Committee (RAC) on the design progress and plans for the restoration, rehabilitation and adaptive reuse of the TWA Main Terminal and Connecting Flight Tubes as stipulated in the MOA. Such comments shall be incorporated as directed by the Authority.
- All parking requirements for the Project should be identified. The plan must identify the location, number of spaces and hours of use for facility staff parking, and service vehicle access and times for deliveries. Vehicle parking control measures for Adaptive reuse operator's vehicles if contemplated, must be described as to necessity, detailed, and operator supervised.

3. Cost Estimate

   Provide a cost estimate, which will include all construction (hard) and non-construction (soft) costs required to complete the Project in the format indicated in Appendix C. Estimated costs for restoration and rehabilitation should be identified separately from the adaptive reuse estimate. The construction cost estimate submitted must follow Construction Specifications Institute designations.

4. Schedule

   Include a proposed Design and Construction Project Baseline Schedule in sufficient detail and in duration format to demonstrate your approach to implementing the project. Based on the Building #60 site information as described in Part III, provide a Baseline Schedule considering: (A) an encumbered site as shown on Attachments C2.5 and C2.6 and (B) an unencumbered site. For (A), consider the Attachment C2.8 "General" listing of conditions and indicate the duration from authorization, to when removal, mitigation, and or clearing of the Building #60 site is required to begin to commence work on this Project. For (A), provide in the schedule, best estimate of the duration for encumbrance removal and, the overall Project duration, and for (B), provide a Baseline Schedule considering an unencumbered site**.**

G. MANAGEMENT PLAN FOR OPERATIONS, MAINTENANCE AND REPAIR

Operations, Maintenance and Repair Plan

Identify how you propose to manage, operate, and maintain the Premises. State the operating hours for the facility. Indicate the level of service and overall appearance that can be expected from their operation and maintenance of the Premises. At a minimum, the level of service shall conform to Port Authority Customer Service Standards, as described in Part IV, paragraph 8.

Upon acceptance of its proposal and execution of a lease with the Port Authority, provide and submit for the review and approval of SHPO, a planned approach to the maintenance and preservation of areas that have been restored and rehabilitated. Identify methodologies to be used intended for compliance with Stipulation 17 in the MOA.

1. Marketing Plan

   Provide a description of your marketing plan, and other plans to promote public awareness and use of this specific property.

2. Retail Plan (if applicable)

Provide your estimates of expected sales and average rental rates by category of use for any planned retail component of the project. The Respondent is required to detail the basis of any assumptions used in estimating sales activity and rental rates.

H. FINANCING PLAN

1. Identify the lead firm or firms of the your team proposed for development and implementation of the financial plan. Briefly describe the role each such firm or member would play.

2. Describe your proposed plan for financing the project. Include the following:

   a) Identify each type of funding source expected to be available for the project, and provide a description and the estimated amount for each source.

   b) Indicate the financial commitment the Respondent is prepared to make to the project, and the form of such commitment.

   c) Provide an overall "sources and uses of funds" table for the construction period of the project that includes the types of funding sources identified above, and show how such funds would be applied to the various project and financing-related costs.

   d) Provide a schedule indicating when the Respondent proposes to secure the different types of capital proposed to provide for the project. The schedule should cover the period from initial design through the completion of construction of the project, and should clearly demonstrate to the satisfaction of the Authority that sufficient funds will always be available to meet the ongoing construction and other financial requirements of the project.

   e) Include specific details on any special financial treatment that you will apply for, be eligible for, and/or secure for Respondent's participation in the project.

   f) Describe the "flow of funds" proposed for the application of revenues derived from the project to the various payment obligations related to the project. Please also provide a tabular summary of the flow of funds.

   g) Describe any legal arrangements or covenants deemed necessary to support the plan for financing the project.

I. BUSINESS ARRANGEMENT FOR OPERATION OF THE PREMISES (BUSINESS PLAN)

As described in Part IV, the Authority expects to receive the following types of payments from the selected Respondent: 1) ground rent, 2) additional fixed rentals, if any, 3) participatory rentals including retail and consumer services payments. With respect to such payments please provide a delineation and detailed explanation of any and all forms of rental and consumer services payments.

1. Indicate how frequently each of the types of payments described in the prior paragraph would be made to the Authority, and where the different types of payments described would come in the "flow of funds" priority described in your response to Item H.2.f. above. You may reference the table contained in your response to Item H.2.f. if you wish.

2. Submit detailed pro forma financial projections, beginning at the estimated Date of Beneficial Occupancy and continuing through the term of the lease. These projections

should reflect your proposed plan for financing the project and your proposed business arrangement with the Port Authority for operating the Premises. Your projections should include the following information, as applicable, for all years:

a) all operating revenues

b) all operating and maintenance expenses

c) Port Authority ground rent

d) any fixed rental payments

e) participatory rentals

f) retail and consumer services payments **(**if other than covered in a, above**)**.

g) debt service payments on any bonds issued to finance the project and/or any other financial obligation payments

h) reserve for replacements of fixed assets

i) any capital improvements

The pro formas should include all line items of the suggested format in Appendix B. You should identify all revenue and expense items specific to your proposed business activity. All pro formas should be provided in hard copy and on CD digital media in Microsoft Excel 2000 or compatible files.

In the event of a negative cash flow, describe how your team would propose to address that scenario and the additional financial resources, if any, you would make available to the project to assure that your various financial obligations are met.

J. REFERENCES AND OTHER OUTSIDE SOURCES

The Port Authority reserves the right to contact references and to obtain relevant information from other outside sources and to consider any such information received.

K. ADDITIONAL INFORMATION

1. *Pre-Proposal Site Visit*

A pre-proposal Site Visit is scheduled for Wednesday, January 17, 2007, at 10:00: A.M. to allow Respondents to walk and observe visible areas of the building, the site and existing conditions prior to the submission of proposals. No questions will be addressed during the site inspection. Attendance is strongly recommended. Knowledge gained during the inspection may be useful to Respondents in preparing their submissions. Respondents interested in attending shall so notify Ms. Laurie Spencer via fax at (212) 435-3992, or via email at lspencer@panynj.gov. Attendees must notify Ms. Spencer at least 48-hours in advance of the site visit. Travel directions will be provided upon request.

2. *Oral Presentations*

After review of all proposal submissions, an oral presentation to the selection committee as appropriate, may be requested. Notification of presentation scheduling is made via e-mail. Please provide the name and e-mail address of the person who should be contacted for presentation scheduling, if applicable, as well as an alternate in the event that person is unavailable.

3. *Port Authority Communication*

At any time and from time to time after the receipt by the Port Authority of response to this RFP, the Manager, Professional, Technical & Advisory Services, Procurement Department of The Port Authority of New York and New Jersey, or his designated representative, may give oral or written notice to your organization to furnish additional information relating to its qualifications and to meet with designated representatives of the Port Authority with respect to its qualifications. Neither the furnishing of this RFP to your organization, the submission of any materials, documents, or other information by your organization, nor the acceptance thereof by the Port Authority, nor any correspondence, discussions, negotiations, meetings or other communications between your organization and the Port Authority, nor anything stated by the Port Authority in or at any such correspondence, discussions, negotiations, meetings or other communications shall be construed or interpreted by you to mean that the Port Authority has made a determination that your organization is qualified to become lessee under the lease agreement for the Premises nor be deemed to impose any obligations whatsoever on the Port Authority to compensate or reimburse you for any costs or expenses incurred in connection with your response to this RFP.

4. *Proposal Acceptance*

   No rights shall accrue to any respondent except upon acceptance of a proposal. Acceptance of a proposal shall be only by the due execution of a lease agreement covering the subject matter of this RFP by an authorized representative of the Port Authority and of the Respondent and delivery by the Port Authority of that agreement, fully executed by all parties, to the selected Respondent. No other act of the Port Authority, its Commissioners, officers, agents, representatives, or employees shall constitute acceptance of a proposal.

5. *Instructions For Submission of Proposals*

   Proposals are due no later than 2:00 o'clock P.M., New York Time on Wednesday, April 4,_2007 (the "Proposal Due Date") One original containing original signatures and (15) copies of the completed proposal together with a copy on CD media must be delivered to:

   The Port Authority of New York and New Jersey
   ATTENTION: RFP CUSTODIAN
   One Madison Avenue, 7th Floor
   New York, NY 10003

   All questions and requests for information must be forwarded to Ms. Laurie Spencer via fax at (212)-435-3992, or via email at lspencer@panynj.gov no later than 2:00 P.M. on Thursday, March 15, 2007.

6. There shall be no compensation for proposal preparation or presentation.

7. The Authority reserves the unqualified right, in its sole and absolute discretion, to reject all Proposals, to waive defects in proposals, to undertake discussions and modifications with one or more consultants and to proceed with that Proposal or modified Proposal, if any, which in its judgment will, under all the circumstances, best serve the public interest. Refer to Parts VII and VIII for other conditions, terms and limitations.

PART VI: DEVELOPER SELECTION

EVALUATION CRITERIA

The Respondent's proposal, including all information required in Parts IV and V of this RFP, will, subject to the terms of Part VII hereof, be evaluated against the criteria noted below. The Authority will examine the extent to which the information provided in the proposals is within a range of reasonable projections.

The selection of a successful Respondent will be made solely at the discretion of the Port Authority. In evaluating the proposals, the Port Authority will consider the following criteria listed in relative order of importance.

A. Technical approach, including but not limited to the following:

- Satisfaction of the terms of the MOA for historic restoration and rehabilitation and the degree to which the completed Project will entail, and only be comprised of, the landmark base structure or larger portion of the existing structure, preserved exclusively in its present setting.
- Benefit to the general public and/or airport community (travelers, visitors and employees) of the proposed function, the appropriateness and suitability of use within the airport environment, and the level of service of proposed use (intrinsic value, convenience, efficiency, etc.).
- The quality of the Development Plan including the architectural and contextual appropriateness of the proposed concept, benefit and feasibility of proposed completion schedules.

B. Quality of the Financing and Business Plans.

C. Management Approach including quality of the Project Management Plan and the Operations and Maintenance Plan for the Premises.

D. Qualifications and Experience of the Respondent including but not limited to demonstrated experience in the development, implementation, and operation of projects of comparable scale.

E. Staff Qualifications and Experience including consideration of the composition, experience and qualifications of the Development and Management Team.

PART VII: CONDITIONS, TERMS AND LIMITATIONS

The following terms and conditions apply with respect to this RFP, any application or response made thereto and to the selected candidates:

1. The information contained herein has been provided as general information only. The Port Authority makes no representations, warranties or guarantees that the information contained herein is accurate, complete or timely or that such information accurately represents the conditions that would be encountered at JFK Airport, now or in the future. The furnishing of such information by the Port Authority shall not create or be deemed to create any obligation or liability upon it for any reasons whatsoever and each organization by submitting its proposal expressly agrees that it has not relied upon the foregoing information, and that it shall not hold the Port Authority liable or responsible therefore in any manner whatsoever.

2. The Port Authority reserves the unqualified right in evaluating a proposal to use the criteria indicated in Part IV of this RFP or to use any other criteria or manner of evaluation as the Port Authority may choose, including without limitation, proceeding with a proposal that does not provide the most favorable financial arrangements. Neither the release of this RFP nor the opening of any response thereto shall compel the Port Authority to accept any proposal. The Port Authority shall not be obligated in any manner whatsoever to any Respondent until a proposal is accepted by the Port Authority in the manner provided in the Section of this RFP entitled "Proposal Acceptance"

   The Port Authority reserves, the unqualified right, at any time and in its sole discretion, to change or modify this RFP, to reject any and all proposals on the basis of an evaluation of the factors listed in this RFP or for other reasons or for no reason, to waive defects or irregularities in proposals received, to seek clarification of proposals, to request additional information, to request any or all Respondents to make a presentation, to undertake discussions or modifications with one or more Respondents, or to negotiate an agreement with any Respondent or any third person or to proceed with the Project itself, to terminate further participation in the proposal process by a Respondent or to proceed with any proposal or modified proposal., The Port Authority also reserves any additional rights which are available to it at law or in equity with respect to this RFP. The Port Authority may, but shall not be obligated to, consider incomplete proposals or to request or accept additional material or information. The holding of any discussions with any Respondent shall not constitute acceptance of any proposal. A proposal may be accepted only in accordance with Part V, paragraph K.4, entitled Proposal Acceptance.

3. Neither the expression of your organization's interest, nor the submission of your organization's proposal and any documents or other information, nor the acceptance thereof by the Port Authority, nor any correspondence, discussions, meetings or other communications between your organization and the Port Authority, nor a determination by the Port Authority that your organization is qualified hereunder shall impose any obligation on the Port Authority to include your organization in any such further procedures which the Port Authority may utilize prior to the selection of a lessee for the Project, shall be deemed to impose any obligation whatsoever on the Port Authority to accept your organization, to discuss any proposal which your organization may submit, to enter into negotiations with your organization, or shall entitle you to any compensation or reimbursement for any costs or expenses incurred by you in connection with the expression of your organization's

interest and the submission of your organization's qualifications, proposal or development and management plan hereunder.

4. Unless and until an agreement covering the leasing, design, financing, construction, and operation of the Premises is finally executed by the Port Authority and your organization and approved by the Port Authority's Board of Commissioners, either the Port Authority or your organization at any time, and for any reason whatsoever, or for no reason, may withdraw from any discussions or negotiations which may be pending between them, and from any commitments made by either party in any manner, and no party shall be liable to the other for any damages or costs of any kind in such event.

5. The Port Authority may consult references familiar with your organization regarding your prior operations and development or management projects or financial plan. Submission of a proposal in response to this RFP shall constitute permission for the Port Authority to make such inquiries and authorization to third parties to respond thereto.

6. Neither the Commissioners of the Port Authority nor any of them, nor any officer, agent or employee thereof shall be charged personally by your organization with any liability or held liable to it under any term or provision of this RFP or any statements made herein.

7. The Port Authority shall have no obligation to any Respondent with respect to the MOA and the Port Authority has the unrestricted right consistent with the MOA to amend, modify, supplement and replace the existing MOA.

8. **Certification of No Indictment, Conviction, Suspension, Debarment or Termination**

   By responding to this RFP, the Respondent and each person signing on behalf of the Respondent certifies, and in the case of a joint venture each party thereto certifies as to its own organization that the Respondent and each parent and/or affiliate of the Respondent has not (a) been indicted or convicted in any jurisdiction; (b) been suspended, debarred, found not responsible or otherwise disqualified from entering into contracts with any governmental agency or been denied a government contract or agreement for failure to meet pre-qualification standards; (c) had a contract or agreement terminated by any governmental agency for breach of contract or for any cause related directly or indirectly to an indictment or conviction; (d) changed its name and/or Employer Identification Number (taxpayer identification number) following its having been indicted, convicted, suspended, debarred or otherwise disqualified, or has a contract or agreement terminated as more fully provided in (a), (b) and (c) above; (e) ever used a name, trade name or abbreviated name, or an Employer Identification Number different from those inserted in the proposal; (f) been denied a contract or agreement by any governmental agency for failure to provide the required security, including bid, payment or performance bonds or any alternative security deemed acceptable by the agency letting the contract or agreement; (g) failed to file any required tax returns or failed to pay any applicable federal, state or local taxes; (h) had a lien imposed upon its property based on taxes owed and fines and penalties assessed by any agency of the federal, state or local government; (i) been, and is not currently, the subject of a criminal investigation by any federal, state or local prosecuting or investigative agency and/or a civil anti-trust investigation by any federal, state or local prosecuting or investigative agency; (j) had any sanctions imposed as a result of a judicial or administrative proceeding with respect to any professional license held or with respect to any violation of a federal, state or local environmental law, rule or regulation; and (k) shared space, staff or equipment with any business entity.

The foregoing certification as to "(a)" through "(k)" shall be deemed to have been made by the Respondent as follows: if the Respondent is a corporation, such certification shall be deemed to have been made not only with respect to the Respondent itself, but also with respect to each director and officer, as well as, to the best of the certifier's knowledge and belief, each stockholder with an ownership interest in excess of 10%; if the Respondent is a partnership, such certification shall be deemed to have been made not only with respect to the Respondent itself, but also with respect to each partner. Moreover, the foregoing certification, if made by a corporate Respondent, shall be deemed to have been authorized by the Board of Directors of the Respondent and such authorization shall be deemed to include the signing and submission of its proposal and the inclusion therein of such certification as the act and deed of the corporation.

In any case where the Respondent cannot make the foregoing certification, the Respondent shall so state and shall furnish with its proposal a signed statement, which sets forth in detail the reason therefore.

If the Respondent is uncertain as to whether it can make the foregoing certification, it shall so indicate in a signed statement furnished with its proposal setting forth an explanation for its uncertainty.

Notwithstanding that the certification may be an accurate representation of the Respondent's status with respect to the enumerated circumstances provided for in this clause as requiring disclosure at the time that the proposal is submitted, the Respondent agrees to immediately notify the Authority in writing of any change in circumstances.

The foregoing certification or signed statement shall be deemed to have been made by the Respondent with full knowledge that it would become a part of the records of the Authority and that the Authority will rely on its truth and accuracy. In the event that the Authority determines at any time prior or subsequent to the submission of the proposal, that the Respondent has falsely certified as to any material item in the foregoing certification; willfully or fraudulently submitted any signed statement pursuant to this clause which is false in any material respect; or has not completely and accurately represented its status with respect to the circumstances provided for in this clause as requiring disclosure, the Authority may determine that the Respondent is not responsible with respect to its proposal or with respect to future bids or proposals. In addition, the Respondent is advised that knowingly providing false certification or statement pursuant hereto may be the basis for prosecution for offering a false instrument for filing (see e.g., New York Penal Law, Section 175.30 et seq.). Respondents are also advised that the inability to make such certification will not in and of itself disqualify a Respondent, and that it each instance, the Authority will evaluate the reasons therefore provided by the Respondent.

As used in this clause, the following terms shall mean:

Affiliate: An entity in which the parent of the Respondent owns more than fifty percent of the voting stock, or an entity in which a group of principal owners which owns more than fifty percent of the Respondent owns more than fifty percent of the voting stock.

Agency or Governmental Agency: Any Federal, State, City or other local agency including departments, offices, quasi-public agencies, public authorities and corporations, Boards of Education and higher education, public development corporations, local development corporations, and others.

Employer Identification Number: The tax identification number assigned to firms by the Federal government for tax purposes.

Investigation: Any inquiries made by any federal, state or local criminal prosecuting agency and any inquiries concerning civil anti-trust investigations made by any federal, sate or local governmental agency. Except for inquiries concerning civil anti-trust investigations, the term does not include inquiries made by any civil government agency concerning compliance with any regulation, the nature of which does not carry criminal penalties, nor does it include any background investigations for employment, or federal, state and local inquiries into tax returns.

Officer: Any individual who serves as chief executive officer, chief financial officer, or chief operating officer of the Respondent by whatever titles known.

Parent: An individual, partnership, joint venture or corporation, which owns more than 50% of the voting stock of the Respondent.

Space Sharing: Space shall be considered to be shared when any part of the floor space utilized by the submitting business at any of its sites is also utilized on a regular or intermittent basis for any purpose by any other business or not-for-profit organization, and where there is no lease or sublease in effect between the submitting business and any other business or not-for-profit organization that is sharing space with the submitting business.

Staff Sharing: Staff shall be considered to be shared when any individual provides the services of an employee, whether paid or unpaid, to the Respondent and also, on either a regular or irregular basis, provides the services of an employee, paid or unpaid, to one or more business(es) and/or not-for-profit organization(s), if such services are provided during any part of the same hours the individual is providing services to the Respondent or if such services are provided on an alternating and interchangeable basis between the Respondent and the other business(es) or not-for-profit organization(s). The services of an employee: should be understood to include services of any type or level, including managerial and supervisory. This type of sharing may include, but not be limited to, individuals who provide the following services: telephone answering, receptionist, delivery, custodial, and driving.

Equipment Sharing: Equipment shall be considered shared, whenever the Respondent shares the ownership and/or the use of any equipment with any other business or not-for-profit organization. Such equipment may include, but not be limited to, telephone or telephone systems, photocopiers, computers, motor vehicles and construction equipment. Equipment shall not be considered to be shared under the following two circumstances: when, although the equipment is owned by another business or not-for-profit organization, the Respondent has entered into a formal lease for the use of the equipment and exercises exclusive use of the equipment; or when the Respondent owns equipment that is formally leased to another business or not-for-profit organization, and for the duration of such lease the Respondent has relinquished all right to the use of such leased equipment.

9. **Non-Collusion and Code of Ethics Certification; Certification of No Solicitation Based on Commission, Percentage, Brokerage, Contingent Fee or Other Fee**

By submitting a proposal in response to this RFP, each Respondent and each person signing on behalf of any Respondent certifies, and in the case of a joint venture each party thereto certifies as to its own organization that: (a) the terms of its proposal have been arrived at

independently without collusion, consultation, communication or agreement, for the purpose of restricting competition, as to any matter relating to such terms with any other proposal or with any competitor; (b) the terms of its proposal have not been and will not be knowingly disclosed, directly or indirectly, by the Respondent prior to the official opening of such proposal to any other Respondent or to any competitor; (c) no attempt has been made and none will be made by the Respondent to induce any other person, partnership or corporation to submit or not to submit a proposal for the purpose of restricting competition; (d) this organization has not made any offers or agreements or taken any other action with respect to any Port Authority employee or former employee or immediate family member of either which could constitute a breach of ethical standards under the Code of Ethics effective April 11, 1996 (a copy of which is available upon request to the Authority) nor does this organization have any knowledge of any act on the part of an Authority employee or former Authority employee relating either directly or indirectly to this organization which constitutes a breach of ethical standards set forth in said Code; and (e) no person or selling agency, other than a bona fide employee or a bona fide established commercial or selling agency retained by the Respondent for the purpose of securing business, has been employed or retained by the Respondent to solicit or secure this proposal on the understanding that a commission, percentage, brokerage, contingent or other fee would be paid to such person or selling agency.

The foregoing certification as to "(a)", "(b)", "(c)", "(d)" and "(e)" shall be deemed to have been made by the Respondent as follows: if the Respondent is a corporation, such certification shall be deemed to have been made not only with respect to the Respondent itself, but also with respect to each parent, affiliate, director and officer of the Respondent, as well as, to the best of the certifier's knowledge and belief, each stockholder of the Respondent with an ownership interest in excess of 10%; if the Respondent is a partnership, such certification shall be deemed to have been made not only with respect to the Respondent itself, but also with respect to each partner. Moreover, the foregoing certification, if made by a corporate Respondent, shall be deemed to have been authorized by the Board of Directors of the Respondent, and such authorization shall be deemed to include the signing and submission of the proposal an act and deed of the corporation.

In any case where the Respondent cannot make the foregoing certification, the Respondent shall so state and shall furnish with the signed Proposal, a signed statement which sets forth in detail the reasons therefore. If the Respondent is uncertain as to whether it can make the foregoing certification, it shall so indicate in a signed statement furnished with its proposal, setting forth in such statement the reasons for its uncertainty.

Notwithstanding that the Respondent may be able to make the foregoing certification at the time the proposal is submitted, the Respondent shall immediately notify the Authority in writing of any change in circumstances which might under the clause make it unable to make the foregoing certification or required disclosure. The foregoing certification or signed statement shall be deemed to have been made by the Respondent with full knowledge that it would become part of the records of the Authority and that the Authority will rely on its truth and accuracy. In the event that the Authority should determine at any time prior or subsequent to the submission of this proposal that the Respondent has falsely certified as to any material item in the foregoing certification or has willfully or fraudulently furnished a signed statement which is false in any material respect, or has not fully and accurately represented any circumstance with respect to any item in the foregoing certification required

to be disclosed, the Authority may determine that the Respondent is not responsible with respect to its proposal or with respect to future bids or proposals on Authority agreements.

In addition, Respondents are advised that knowingly providing a false certification or statement pursuant hereto may be the basis for prosecution for offering a false instrument for filing (see e.g., New York Penal Law, Sections 175.30 et seq.). Respondents are also advised that the inability to make such certification will not in and of itself disqualify a Respondent, and that in each instance the Authority will evaluate the reasons therefore provided by the Respondent.

10. Eligibility for Award of Contracts - Determination by an Agency of the State of New York Concerning Eligibility to Receive Public Contracts

The Respondent is advised that the Authority has adopted a policy to the effect that in awarding its contracts it will honor any determination by an agency of the State of New York or New Jersey that a bidder or Respondent is not eligible to bid on or be awarded public contracts because the bidder or Respondent has been determined to have engaged in illegal or dishonest conduct or to have violated prevailing rate of wage legislation.

The policy permits a bidder or Respondent whose ineligibility has been so determined by an agency of the State of New York or New Jersey to submit a bid or proposal on a Port Authority contract and then to establish that it is eligible to be awarded the contract on which it has bid or submitted a proposal because (i) the state agency determination relied upon does not apply to the bidder or Respondent, or (ii) the state agency determination relied upon was made without affording the bidder or Respondent the notice and hearing to which the bidder or Respondent was entitled by the requirements of due process of law, or (iii) the state agency determination was clearly erroneous or (iv) the state agency determination relied upon was not based on a finding of conduct demonstrating a lack of integrity or a violation of a prevailing rate of wage law.

The full text of the resolution adopting the policy may be found in the Minutes of the Authority's Board of Commissioners meeting of September 9, 1993.

11. Minority and Women's Business Enterprises Program (MBE/WBE)

The Port Authority has a long-standing practice of making its design and construction contract opportunities available to as many firms as possible and has taken affirmative steps to encourage Minority Business Enterprises (MBEs) and Women's Business Enterprises (WBEs) to seek business opportunities with it.

"Minority-owned business" or "MBE" means a business entity which is at least 51 percent owned by one or more members of one or more minority groups, or, in the case of a publicly held corporation, at least 51 percent of the stock of which is owned by one or more members of one or more minority groups; and whose management and daily business operations are controlled by one or more such individuals who are citizens or permanent resident aliens.

"Women-owned business" or "WBE" means a business entity which is at least 51 percent owned by one or more women, or, in the case of a publicly held corporation, at least 51 percent of the stock of which is owned by one or more women; and whose management and daily business operations are controlled by one or more women who are citizens or permanent resident aliens

"Minority group" means any of the following racial or ethnic groups:

Black persons having origins in any of the black African racial groups not of Hispanic origins;

Hispanic persons of Puerto Rican, Mexican, Dominican, Cuban, Central, or South American culture or origin, regardless of race;

Asian and Pacific Islander persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent or the Pacific Islands;

American Indian or Alaskan native persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification.

To ensure meaningful participation of MBEs and WBEs on the construction aspect of this project, the Authority has set goals of 12 percent from firms owned and controlled by minorities, and 5 percent for firms owned and controlled by women. Participation percentages shall be monitored throughout the performance of the agreement. Good faith effort shall include at least the following:

(a) Dividing the work to be subcontracted into smaller portions where feasible.

(b) Actively and affirmatively soliciting bids for subcontracts from MBEs and WBEs, including circulation of solicitations to minority and female contractor associations. The successful Respondent shall maintain records detailing the efforts made to provide for meaningful MBE and WBE participation in the work, including the names and addresses of all MBEs and WBEs contacted and, if any such MBE or WBE is not selected as a joint venture or subcontractor, the reasons for such decision.

(c) Providing a sufficient supply of plans and specifications of prospective work available to MBEs/WBEs, and providing appropriate materials to each in sufficient time to review.

(d) Utilizing the Authority's directory of MBEs/WBEs or seeking MBEs/WBEs from other sources for the purpose of soliciting bids for subcontracts and materials in accordance with the provisions below.

(e) Encouraging the formation of joint ventures, partnerships or other similar arrangements among subcontractors, where appropriate, to insure that the successful Respondent will meet its obligations hereunder.

(f) Insuring that provision is made to provide progress payments to MBEs/WBEs on a timely basis.

(g) Not requiring bonds from and/or providing bonds and insurance for MBEs/WBEs, where appropriate.

(h) Following up on specific suggestions made by Authority staff responsible for stimulating MBE/WBE participation.

PART VIII: APPENDICES

AGREEMENT ON TERMS OF DISCUSSION

REQUEST FOR PROPOSALS FOR THE RESTORATION/REHABILITATION, DEVELOPMENT AND IMPLEMENTATION OF ADAPTIVE REUSE OF THE TWA FLIGHT CENTER (BUILDING #60) AND ASSOCIATED SITE AT JOHN F. KENNEDY INTERNATIONAL AIRPORT

The undersigned hereby acknowledges that it is fully familiar with all of the provisions contained in The Port Authority of New York and New Jersey RFP #11002, and in any addenda issued in connection therewith, and the undersigned hereby represents and warrants that it is submitting the proposal subject to and in accordance with all of the terms and provisions thereof.

The Port Authority's receipt or discussion of any information (including information contained in any proposal, vendor qualification, ideas, models, drawings, or other material communicated or exhibited by us or on our behalf whether orally or in writing and whether before, with or after the submission of this proposal of which this Agreement is a part) shall not impose any obligations whatsoever on the Port Authority or entitle us to any compensation therefore and is not given in confidence. Such information may be used, or disclosed to others, for any purpose at any time without obligation or compensation and without liability of any kind whatsoever. Any oral or written statement which is inconsistent with this agreement, whether made as part of or in connection with this Agreement shall be void and of no effect. This Agreement is not intended, however, to grant to the Port Authority rights to any matter, which is the subject of valid existing or potential letters patent. The foregoing applies to any information, whether or not given at the invitation of the Port Authority.

Notwithstanding the above, and without assuming any legal obligation, the Port Authority will employ reasonable efforts, subject to the provisions of the Port Authority's Freedom of Information Resolution adopted by its Committee on Operations on August13, 1992, a copy of which is annexed hereto, not to disclose to any competitor of the undersigned, information submitted which are trade secrets or is maintained for regulation or supervision of commercial enterprise which, if disclosed, would cause substantial injury to the competitive position of the enterprise, and which information is identified by the Respondent as proprietary, which may be disclosed by the undersigned to the Port Authority as part of or in connection with the submission of a Proposal. The undersigned agrees to adhere to the terms and conditions in the referenced Memorandum of Agreement.

The undersigned agrees that it will not use any document obtained from the Port Authority in connection with this RFP for any purpose other than its response thereto and further agrees that it will not disseminate any such document to any third party.

The undersigned hereby designates the following person as its representative for purposes of providing clarification and any additional information required in connection with this RFP, and address as its representative and office to which notices or other papers may be delivered or mailed:

Name of Representative:

Address:

Name of Organization

By

Title

Date

APPENDIX B – FORMAT FOR PROJECT CASH FLOW PRO FORMA

Project Cash Flow

(Dollars in Thousands)
Specify Line Items in Detail

	Year 1	Year 2	Year XX*
Gross Revenues…			
Revenues from Primary Use:			
Revenue 1			
Revenue 2			
•			
•			
Subtotal Revenues from Primary Use:			
Concessions			
Other Operating Revenues			
Other			
Total Revenues:			
Operating Expenses…			
Primary Use Expenses:			
Expense 1			
Expense 2			
•			
•			
Subtotal Primary Use Expenses			
Concessions			
Other Operating Expenses			
Total Operating Expenses:			
Gross Operating Income:			
Undistributed Operating Expenses			
Administrative & General			
Marketing			
Energy Costs			
Property Operations & Maintenance			
Other			
Total Undistributed Operating Expenses:			
Income from Operations, before Fixed Charges:			
Fixed Charges…			
Rental Payment to PA			
Insurance			
Other Fixed Charges			
Total Fixed Charges:			
Income from Operations:			
Cash Flow Available for Debt Service:			
Debt Service:			
Residual Cash Flow:			

*Minimum 10 years – Maximum 39 years

APPENDIX C – PROJECT CAPITAL INVESTMENT SCHEDULE

PROJECT DEVELOPMENT ESTIMATE

Construction *(Note: breakout restoration and rehabilitation costs)*

Building Costs	Restoration			Rehabilitation			Adaptive Reuse			**Total $**
	Qty	Unit of Measure	Total $	Qty	Unit of Measure	Total $	Qty	Unit of Measure	Total $	
Demolition & Removals										
Asbestos										
Foundations										
Superstructure										
Exterior Enclosure										
Roofing and Skylights										
Interior Construction										
Interior Finishes										
Mechanical Systems										
Electrical Systems										
Amenities										
Special Equipment										
Furnishings, Fixtures & Equipment										
Total Building										

Site Development Costs	Restoration			Rehabilitation			Adaptive Reuse			Total $
	Qty	Unit of Measure	Total $	Qty	Unit of Measure	Total $	Qty	Unit of Measure	Total $	
Underground Utilities										
Area Lighting										
Roadways										
Surface Parking										
Landscape										
Hardscape										
Total Site										

APPENDIX D – ADDITIONAL INFORMATION

Certain documents, listed below, will be available for viewing by Respondents. To review these documents, Respondents must schedule appointments in advance. To schedule an appointment, please email Ms. Laurie Spencer at lspencer@panynj.gov at least 48 hours in advance.

By its review, the Respondent agrees that it will not use such documents for any purpose other than in response to this proposal and further agrees that it will not disseminate the contents of any document to any third party.

These documents were not specifically prepared for use with this RFP but will be provided to potential Respondents solely to make available information in the Authority's possession. The Authority shall not be responsible for their accuracy or for any conclusions drawn by the Respondent from information contained therein.

DOCUMENTS:

- Freedom of Information – Port Authority Policy and Procedure (Operations dated 8/13/92)
- Final Environmental Assessment - Terminal 5 and 6 Redevelopment Project - October 2004
- Final Environmental Assessment – FAA's Finding of No Significant Impact /Record of Decision (FONSI/ROD)
- Airport Standards Manual -
  - Customer Service – Fourth Edition – May 2005
  - Planning and Design For Terminals and Facilities – First Edition – May 2005
  - Signing and Wayfinding – Third Edition – July 2005
- Tenant Liaison Documents:
  - Tenant Alteration Application Standards and Procedures Guide – September 2006
  - Tenant Construction Review Manual – March 2003
  - KIAC (Calpine) Design Manual (Hot & Chilled Water) dated March 2001, Rev. A
- Reference Drawings – various:
  Architectural, Structural, Mechanical/HVAC, Electrical, Plumbing, Additions and Modifications, and Restaurants/Clubs/Lounges

ATTACHMENTS:

Attachment A - Memorandum of Agreement, dated 8/20/2004
Attachment B - TWA Flight Center Terminal Rehabilitation Guidelines Report - dated October 2002
Attachment C - Premises with Building #60 Drawings, dated 07/20/06

C1 series:
Site, Area, and Coordinates

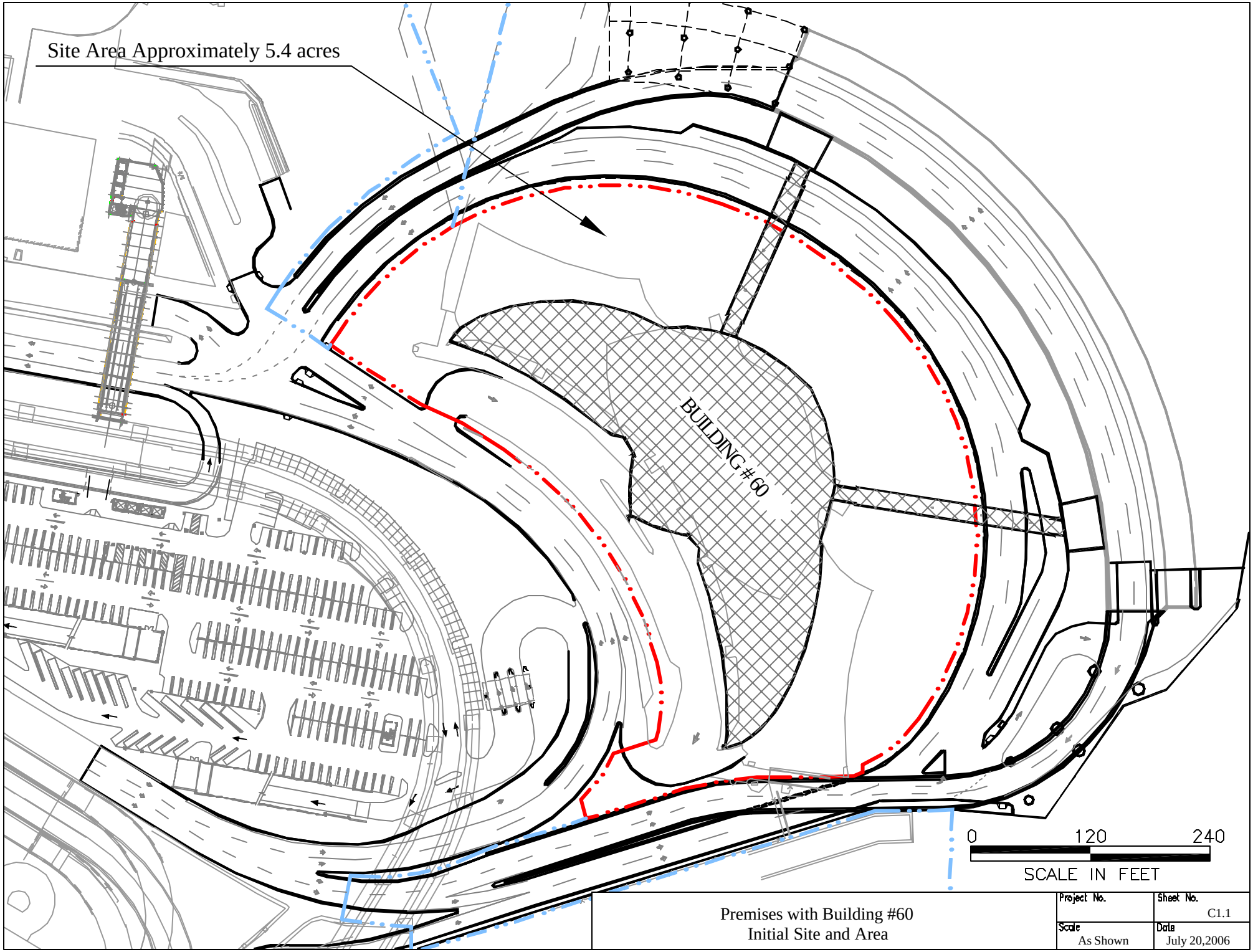
- Attachment C1.1 Initial Site and Area
- Attachment C1.1.1 Coordinates for Initial Site
- Attachment C1.2. Supplement to Initial Site and Area
- Attachment C1.2.1 Coordinates for Supplement to Initial Site
- Attachment C1.3 Future Proposed Final Site and area
- Attachment C1.3.1 Coordinates for Future Proposed Final Site

C2 series:
Site Restrictions and Encumbrances

- Attachment C2.5 Site Restrictions with T/5 Construction Activity – 1/01/08 to 10/1/08
- Attachment C2.6 Site Restrictions with T/5 Construction Activity – 10/1/08 - forward
- Attachment C2.7 Details and Sections
- Attachment C2.8 General

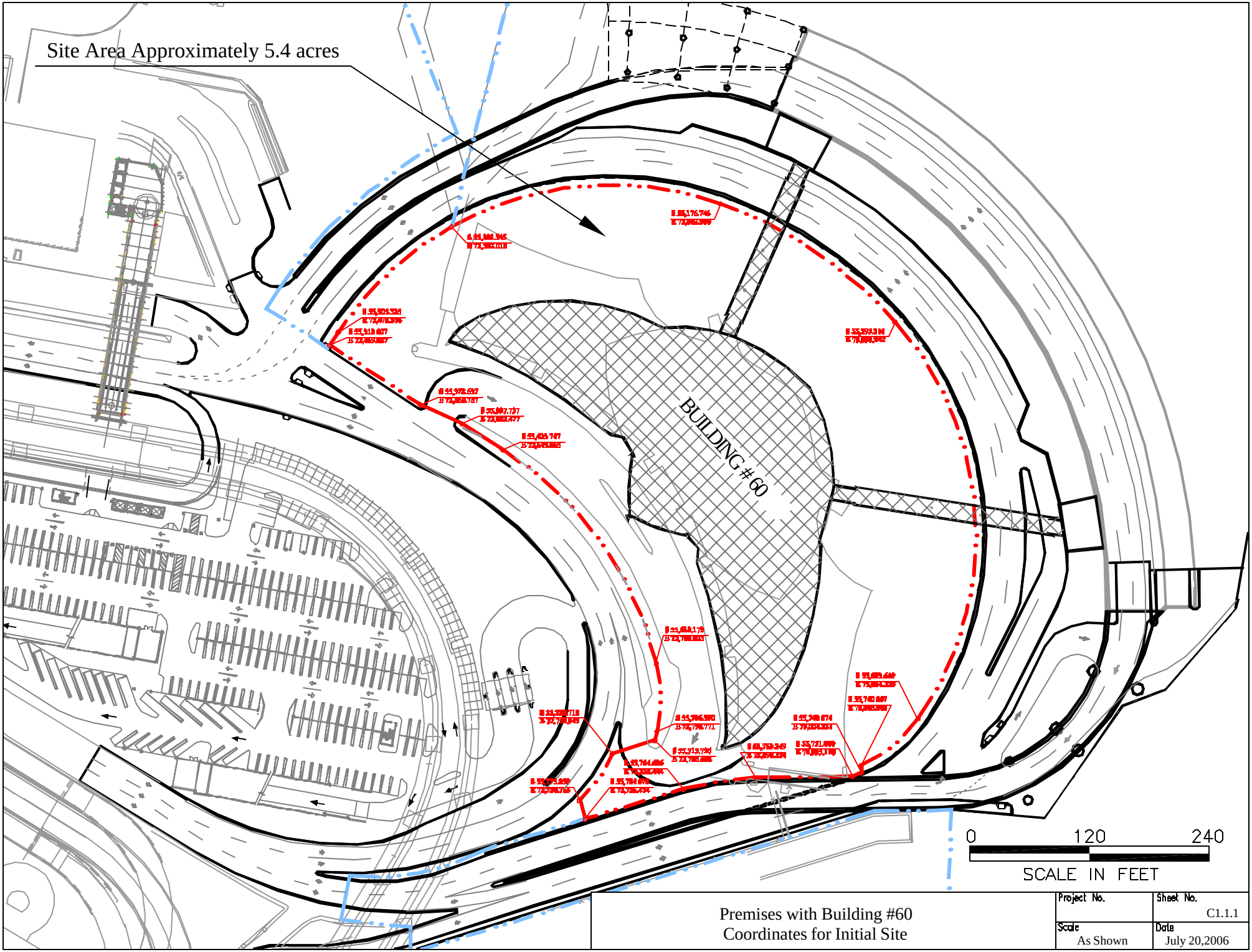
C3 series:
Utility Services - Existing (Current) Utility connected services (and capacities)

- Attachment C3.1 5kV – Power (Electrical)
- Attachment C3.2 MTHW & CHW – Thermal Distribution (Heating & Cooling)
- Attachment C3.3 Drainage (Storm)
- Attachment C3.4 Sanitary
- Attachment C3.5 LPW & HPW – Water (Domestic & Fire Protection)
- Attachment C3.6 Communication
- Attachment C3.7 Gas



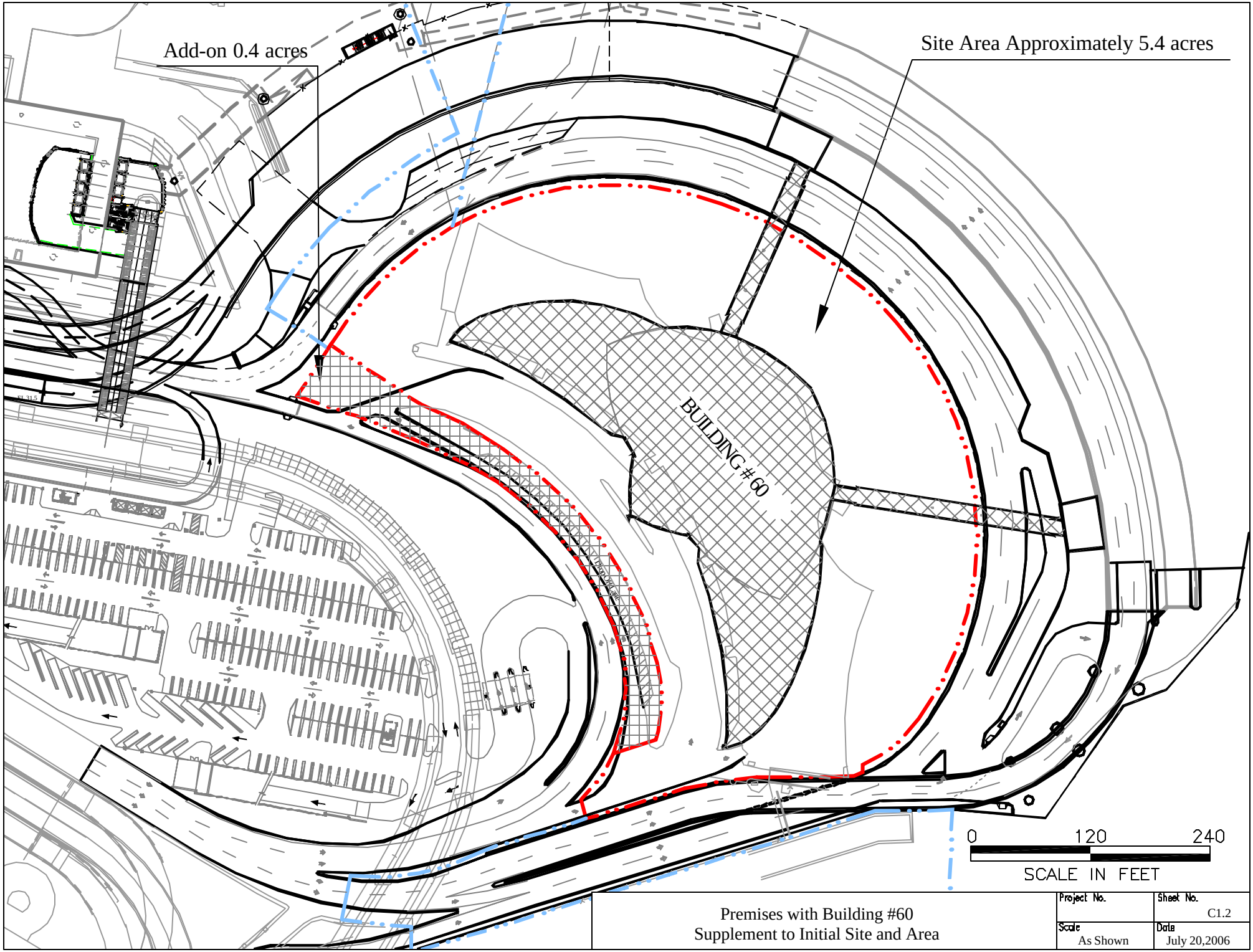
Premises with Building #60
Initial Site and Area

Project No.	Sheet No.
	C1.1
Scale: As Shown	Date: July 20,2006



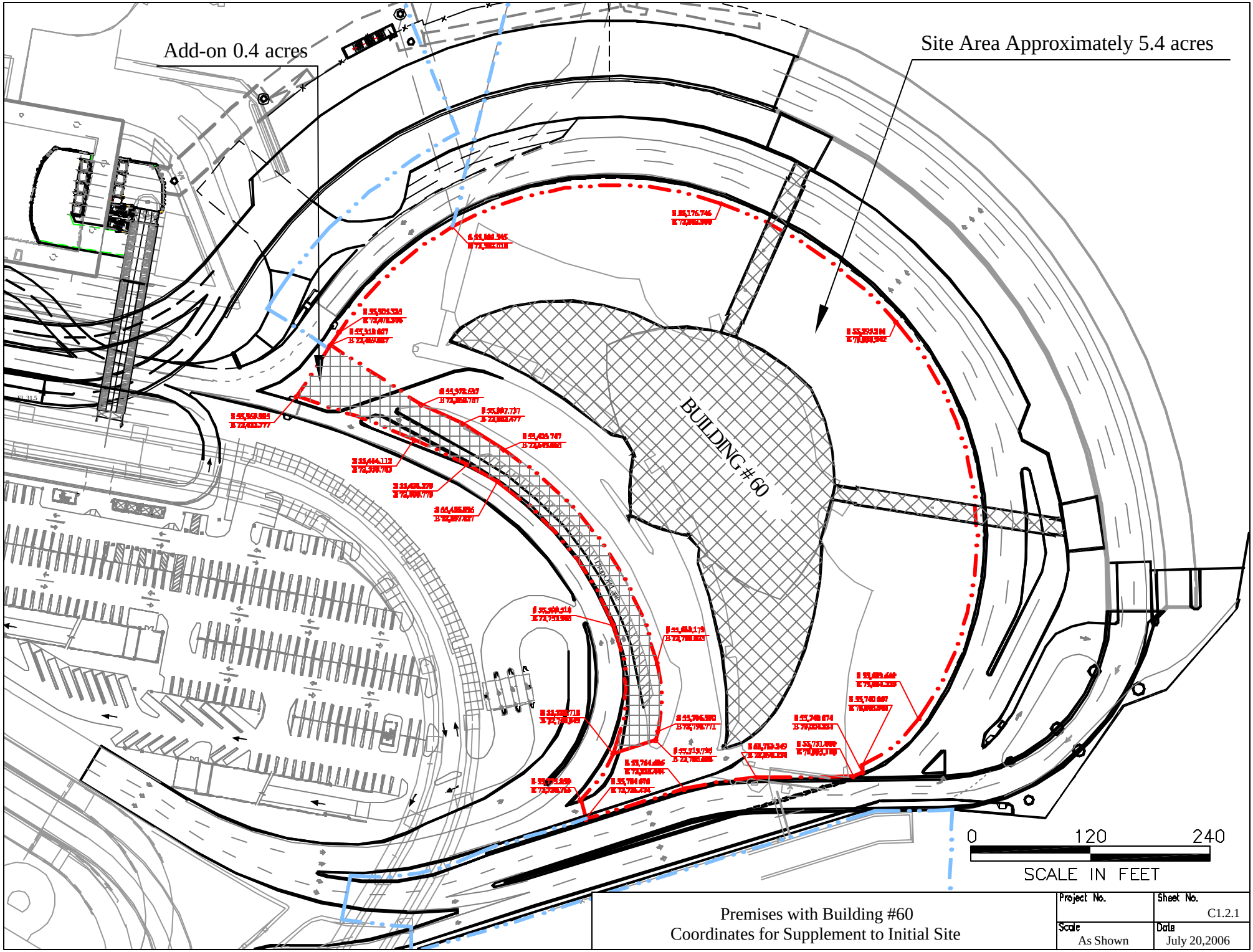
Premises with Building #60
Coordinates for Initial Site

Project No.	Sheet No.
	C1.1.1
Scale: As Shown	Date: July 20,2006



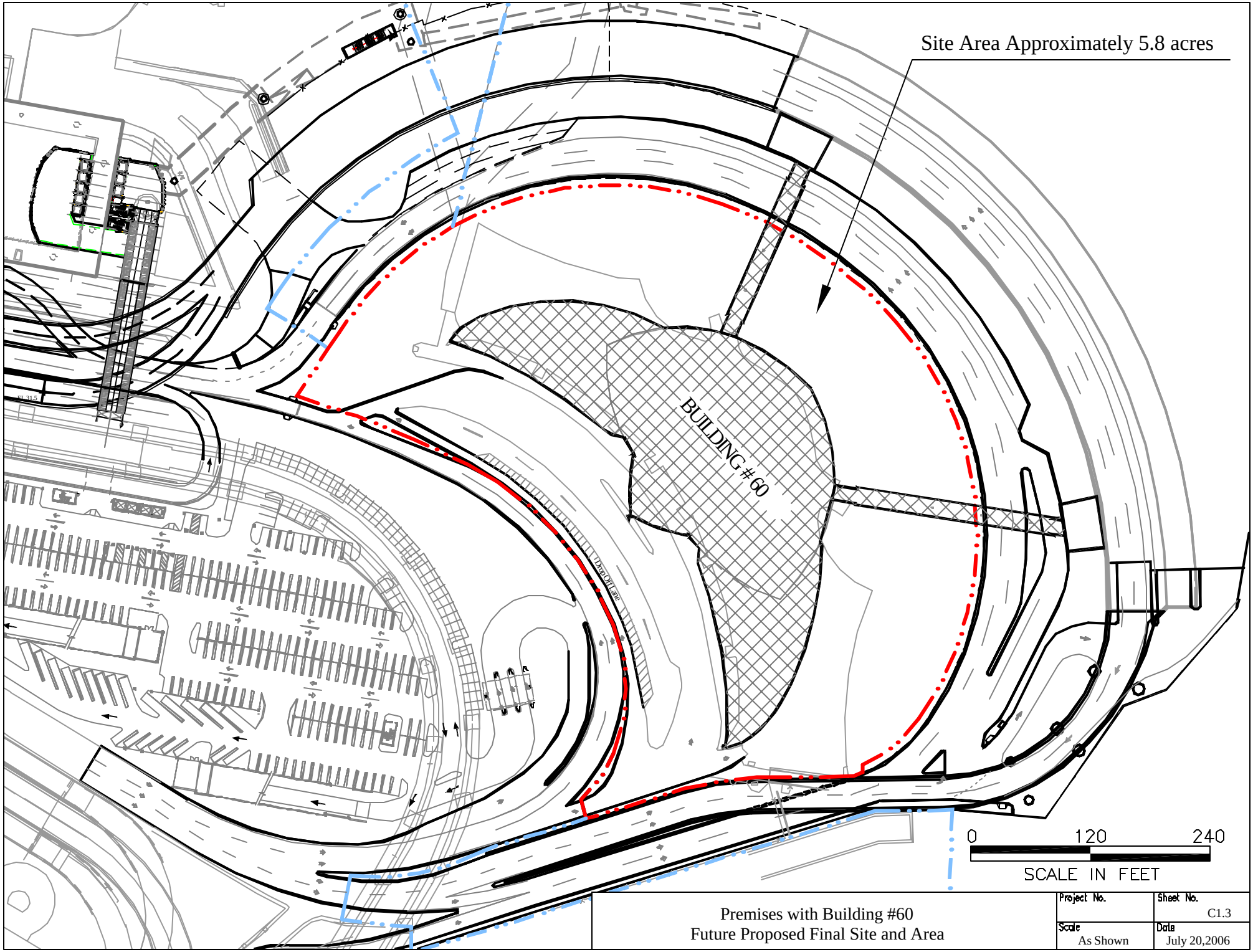
Premises with Building #60
Supplement to Initial Site and Area

Project No.	Sheet No.
	C1.2
Scale: As Shown	Date: July 20,2006



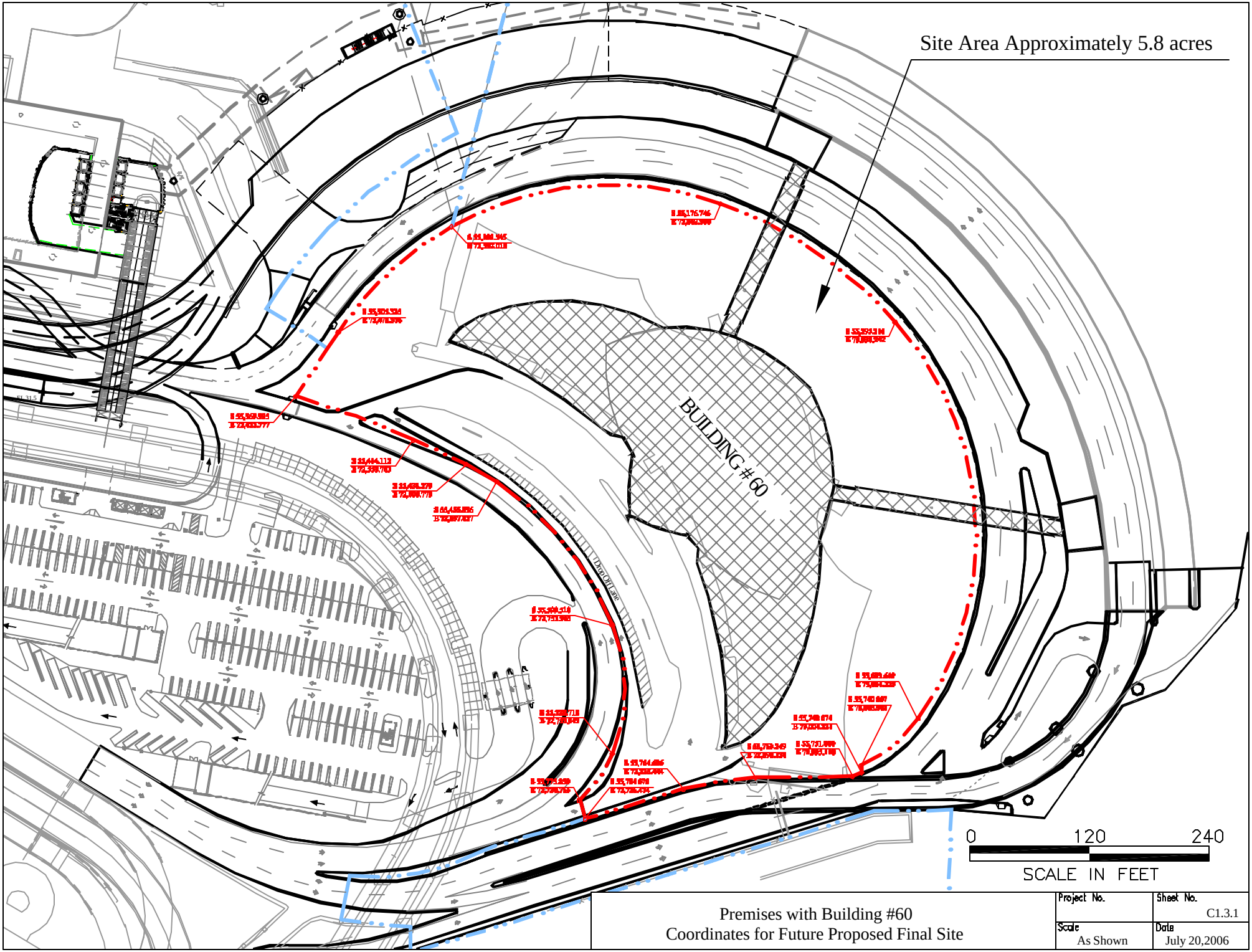
Premises with Building #60
Coordinates for Supplement to Initial Site

Project No.	Sheet No.
	C1.2.1
Scale: As Shown	Date: July 20,2006



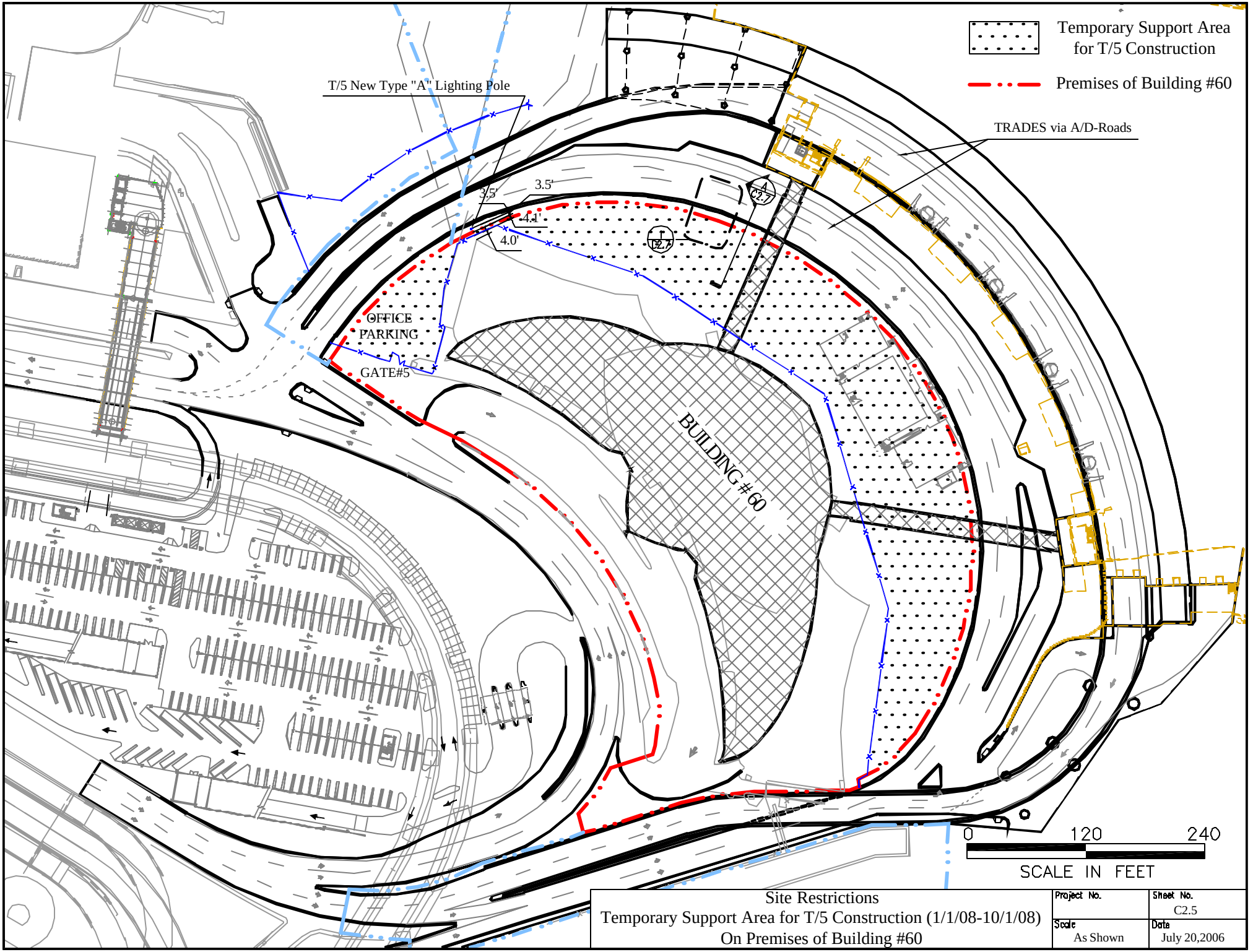
Premises with Building #60
Future Proposed Final Site and Area

Project No.	Sheet No.
	C1.3
Scale: As Shown	Date: July 20,2006



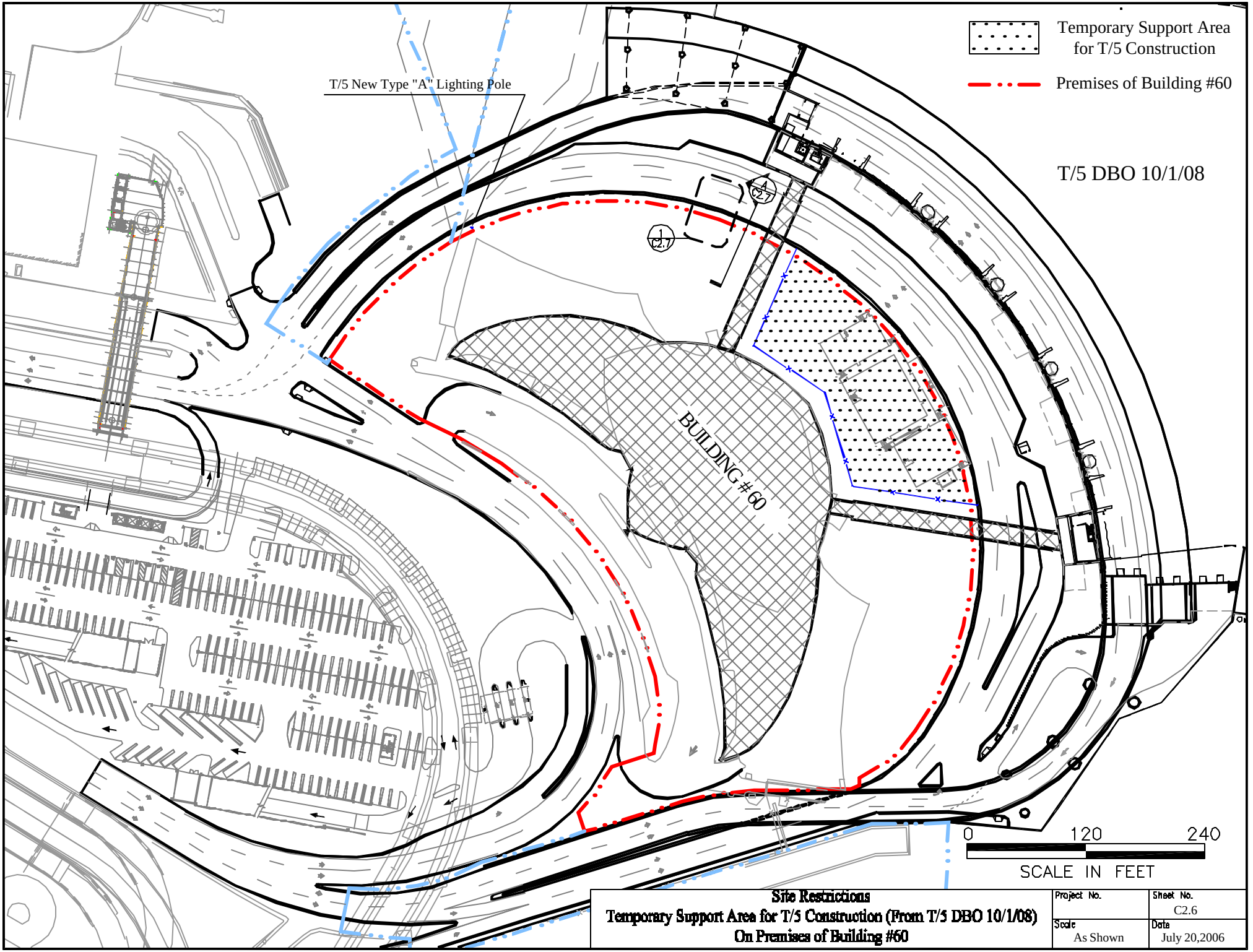
Premises with Building #60
Coordinates for Future Proposed Final Site

Project No.	Sheet No.
	C1.3.1
Scale: As Shown	Date: July 20,2006



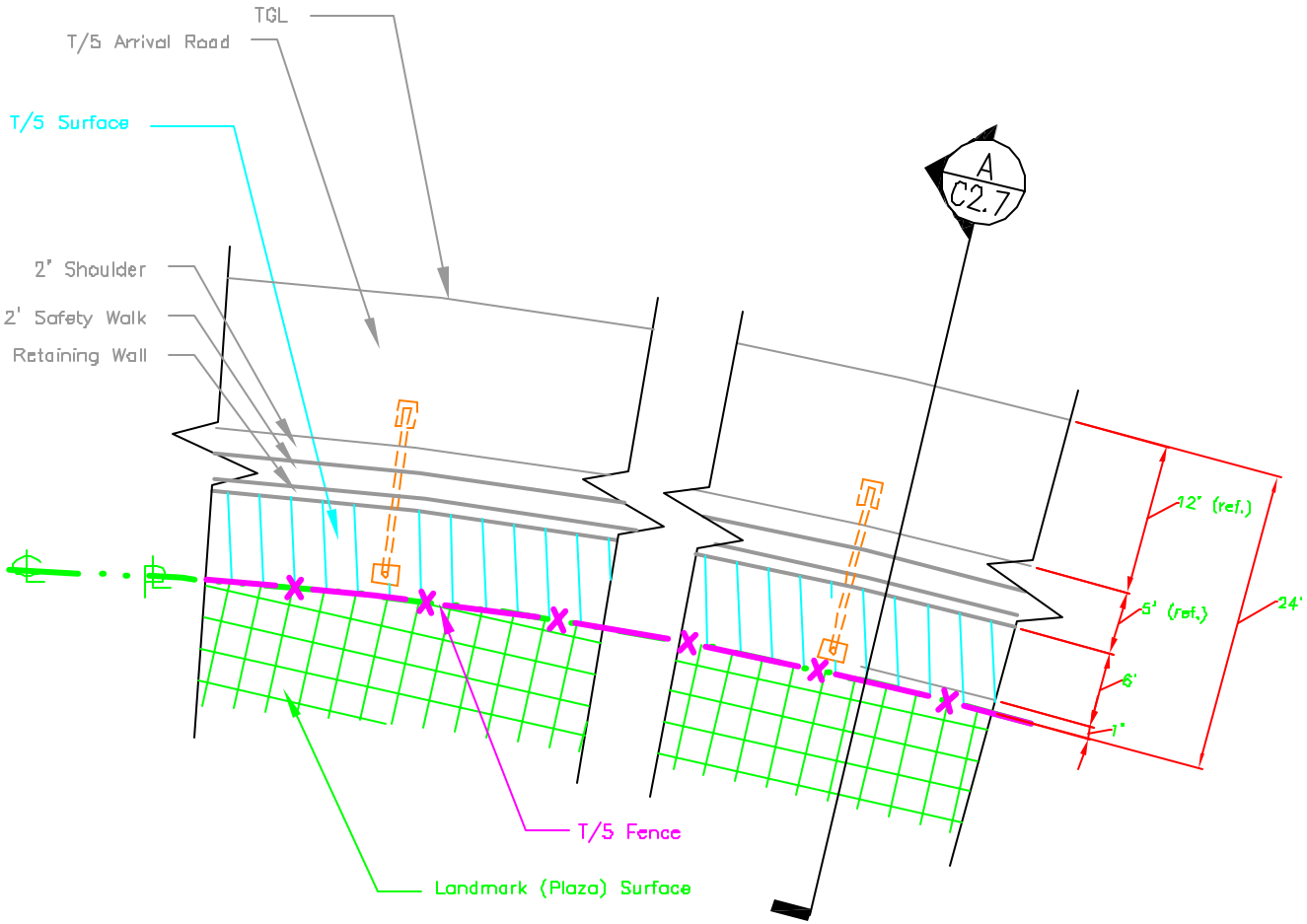
Site Restrictions
Temporary Support Area for T/5 Construction (1/1/08-10/1/08)
On Premises of Building #60

Project No.	Sheet No.
	C2.5
Scale: As Shown	Date: July 20,2006

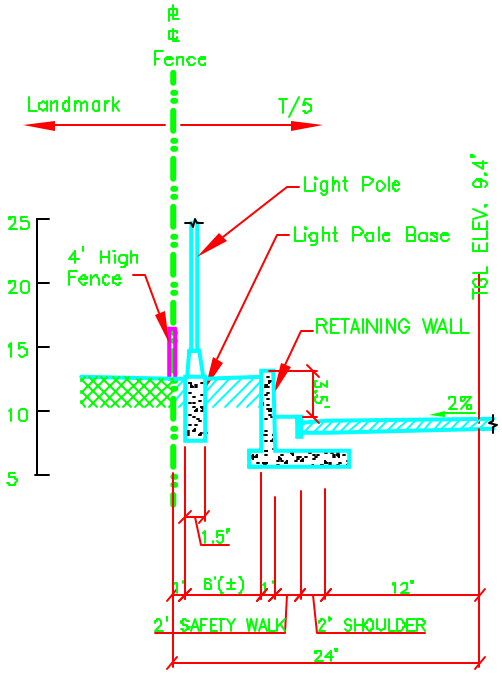


Site Restrictions
Temporary Support Area for T/5 Construction (From T/5 DBO 10/1/08)
On Premises of Building #60

Project No.	Sheet No.
	C2.6
Scale: As Shown	Date: July 20,2006



Detail 1



Section A

0 15 30

SCALE IN FEET

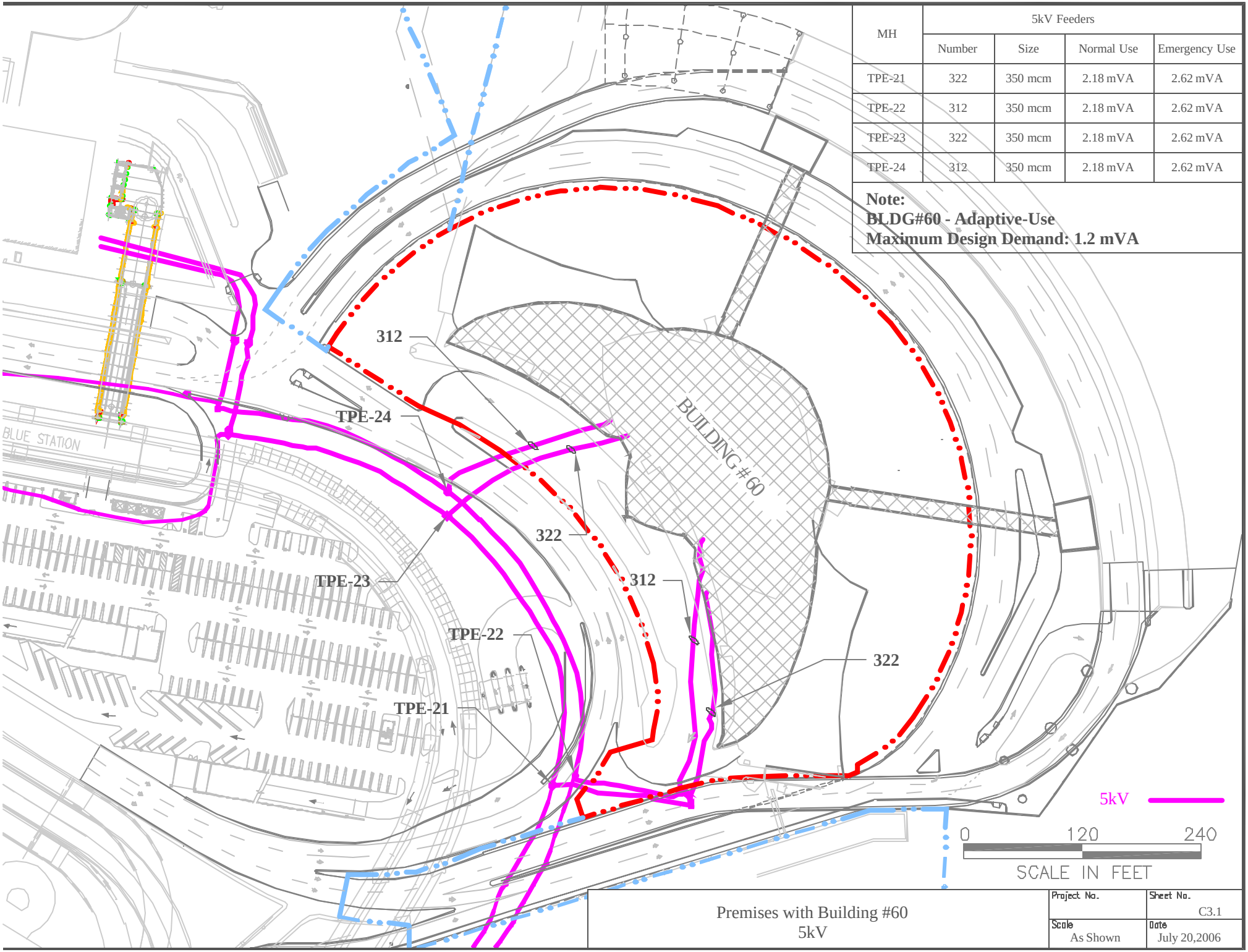
Site Restrictions Detail and Section at Property Line Between Building #60 and T/5	Project No.	Sheet No. C2.7
	Scale As Shown	Date July 20,2006

T/5 Encroachment/Encumbrance/Required Corrective Action on the Bldg # 60 site (current listing) – Impacts not shown on “C2.series attachments.

- Plaza flooding, potential affect on needed demolition by adaptive reuse.
- Plaza general condition left by J/B, needing cleaning out of M.H’s, and SD’s.
- Plaza pavement replacement, cost offset, or other mitigation measure.
- Replace demolished Exhaust/Fire Dampers in rear of basement.
- Remove temp power (conduit, appurtenances, including patching), and restore switchgear and panels.
- Final limits of FIS tunnel demolition and leakage/flooding, pumps, drain interruptions, etc.
- Terminal basement leakage/flooding.
- Rectify flood damage, to walls, floors, and escalators.
- Restore adequate vehicle (delivery truck) access to existing Flight Center loading deck with reversed frontage road.
- Plaza drainage compatibility, interface, access, and responsibility.
- T/5 Plaza property line to A/road material selection, color, finish and grades.
- Temporary and permanent general and specific utility disconnects and interruptions to/from building and site, for existing Flight Center.
- Operation/maintenance of “bridges” (tubes)/new stair towers (external/internal including services/utilities and the extent of each by whom), and security interface,

Unresolved details and conditions for MOA satisfaction

- Determine Interpretive Display, its physical (volumetric) size, definition, utility/environmental/security, and other needed services and requirements.

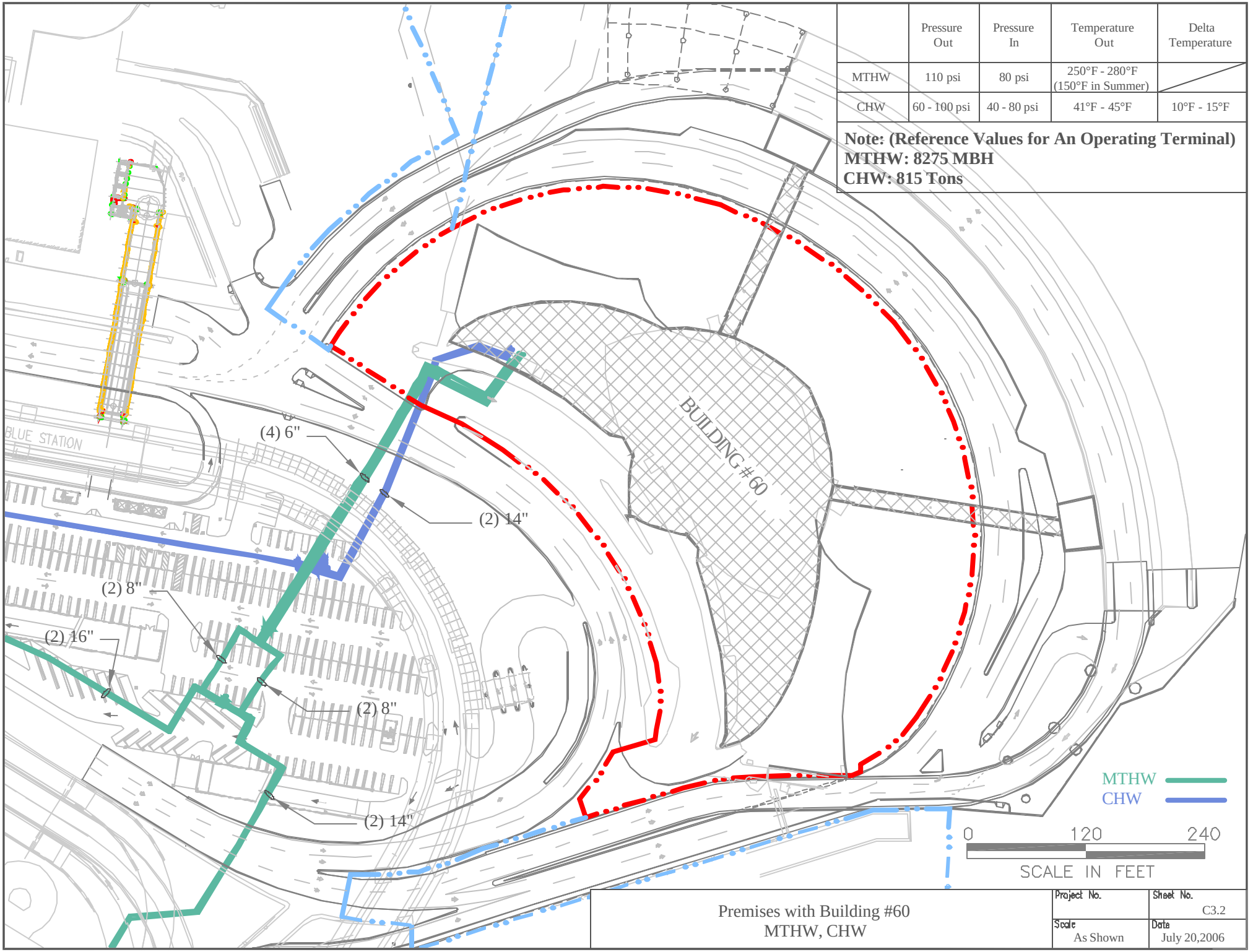


MH	5kV Feeders			
	Number	Size	Normal Use	Emergency Use
TPE-21	322	350 mcm	2.18 mVA	2.62 mVA
TPE-22	312	350 mcm	2.18 mVA	2.62 mVA
TPE-23	322	350 mcm	2.18 mVA	2.62 mVA
TPE-24	312	350 mcm	2.18 mVA	2.62 mVA

Note:
BLDG#60 - Adaptive-Use
Maximum Design Demand: 1.2 mVA

Premises with Building #60
5kV

Project No.	Sheet No.
	C3.1
Scale: As Shown	Date: July 20,2006

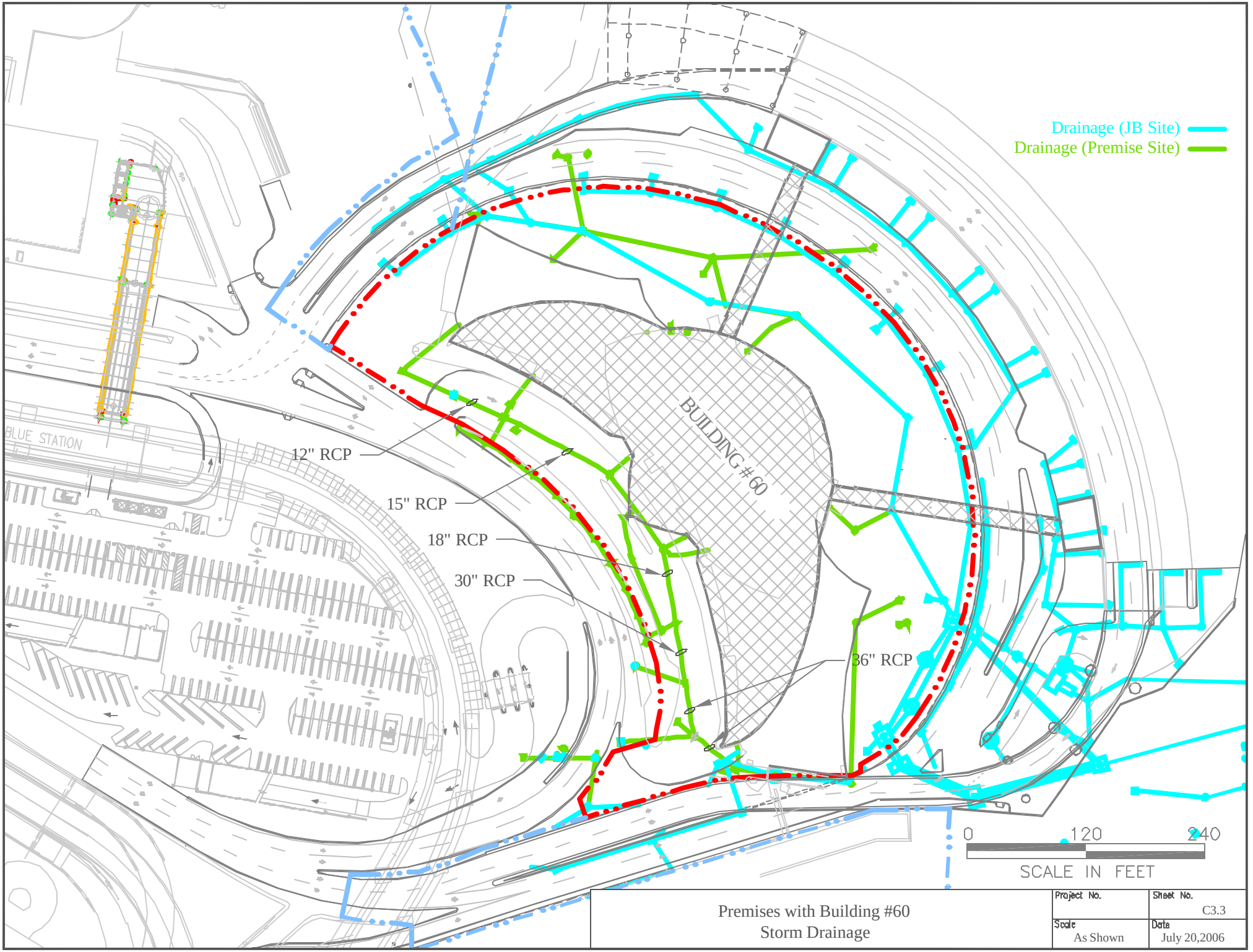


	Pressure Out	Pressure In	Temperature Out	Delta Temperature
MTHW	110 psi	80 psi	250°F - 280°F (150°F in Summer)	
CHW	60 - 100 psi	40 - 80 psi	41°F - 45°F	10°F - 15°F

Note: (Reference Values for An Operating Terminal)
MTHW: 8275 MBH
CHW: 815 Tons

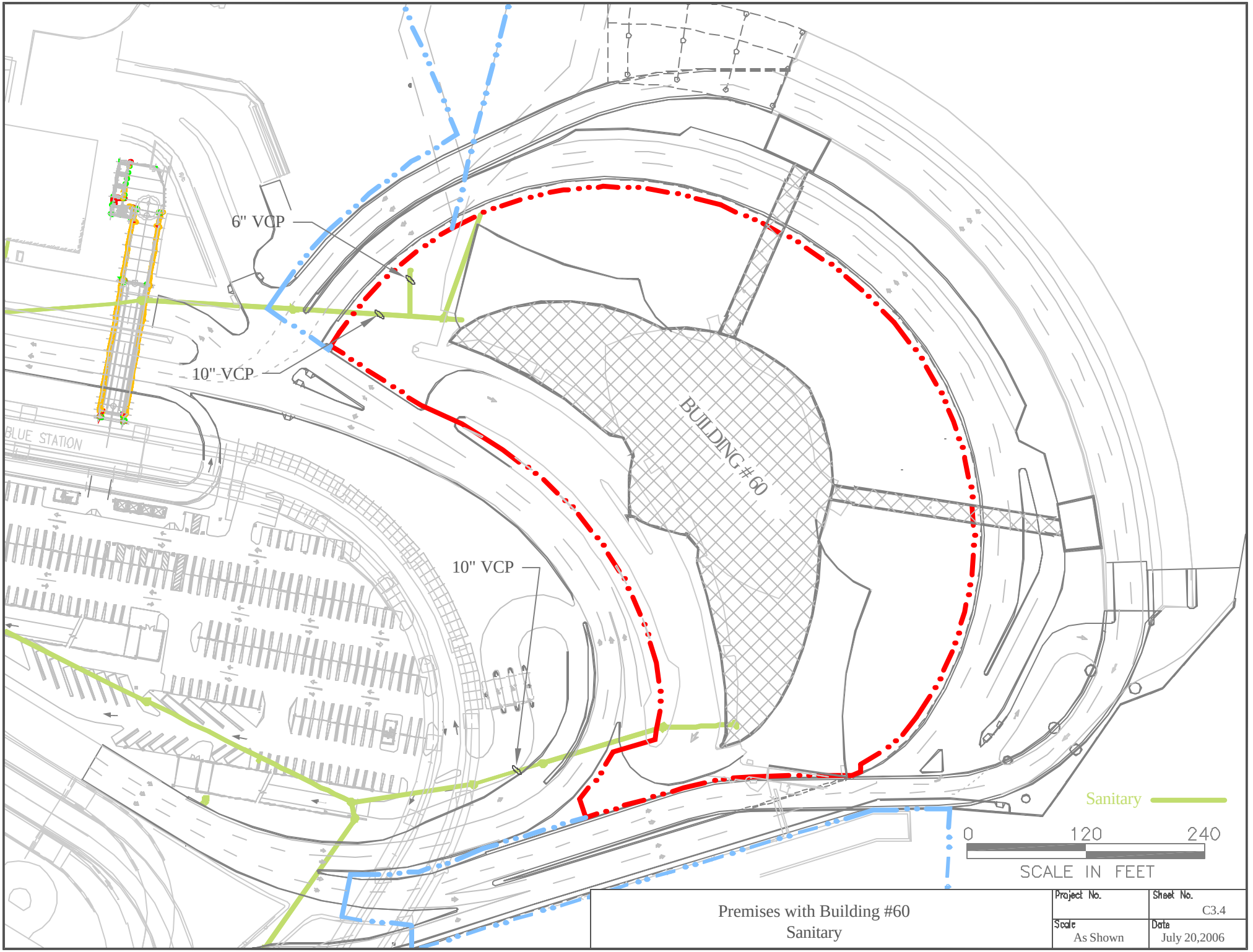
Premises with Building #60
MTHW, CHW

Project No.	Sheet No.
	C3.2
Scale: As Shown	Date: July 20,2006



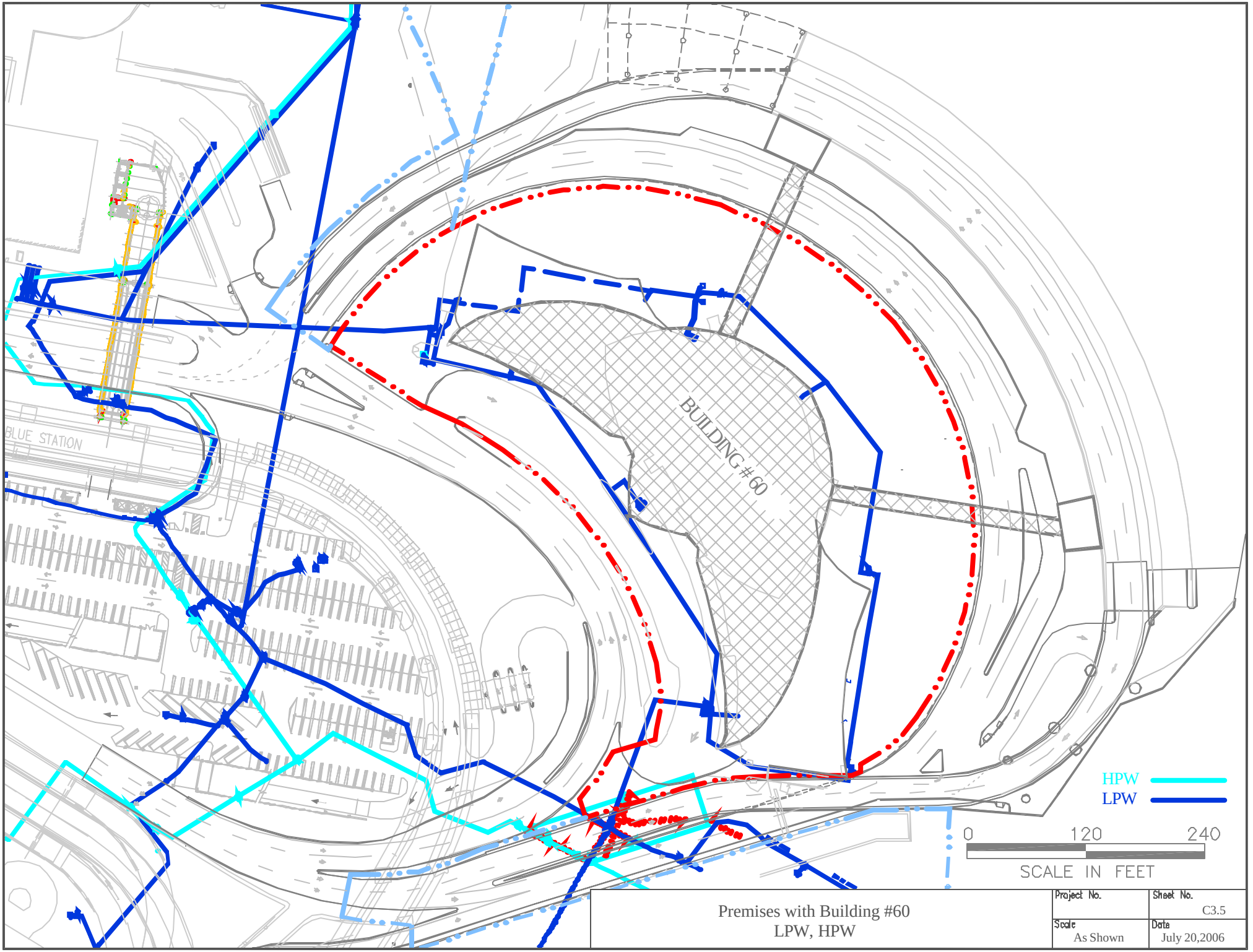
Premises with Building #60
Storm Drainage

Project No.	Sheet No.
	C3.3
Scale: As Shown	Date: July 20,2006



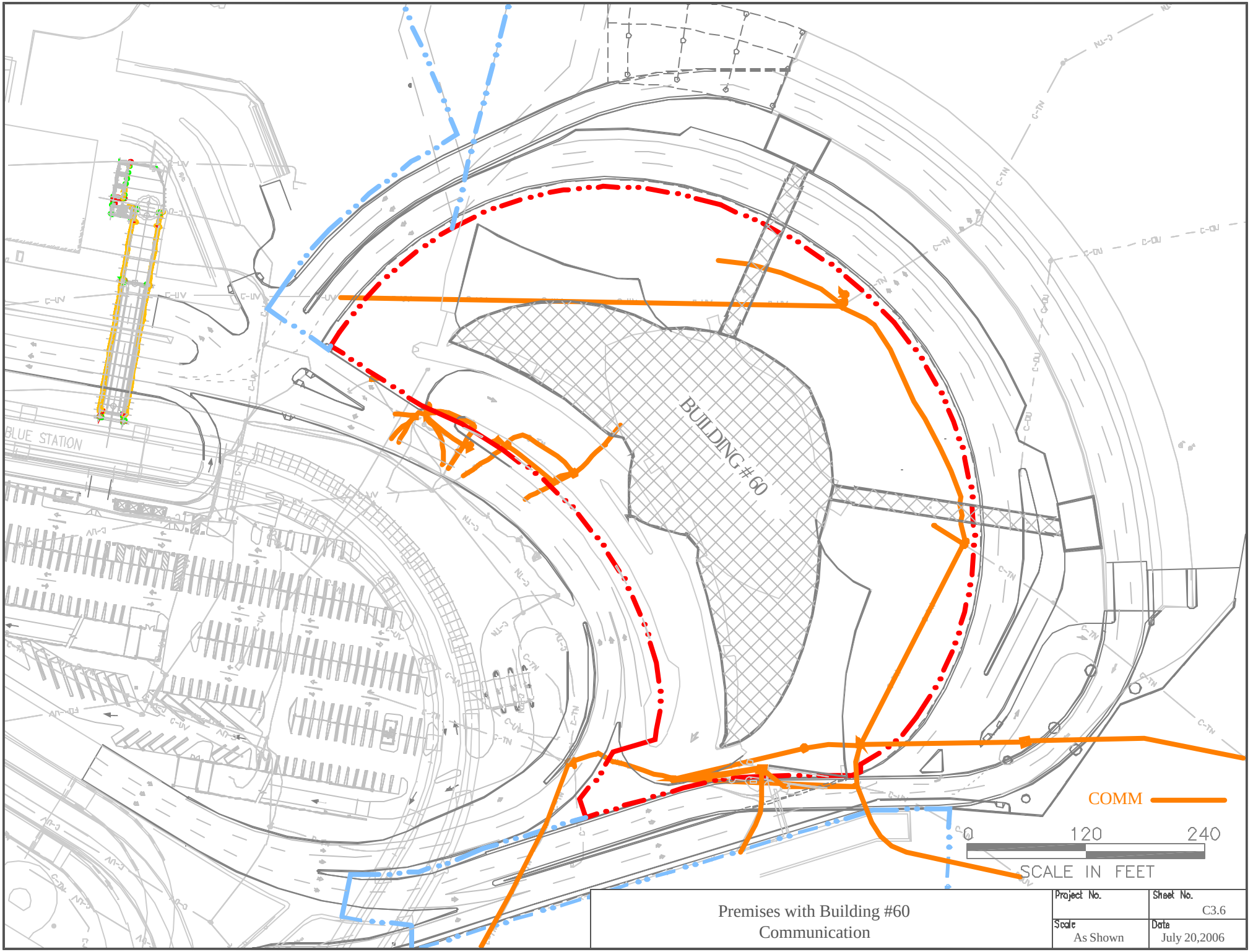
Premises with Building #60
Sanitary

Project No.	Sheet No.
	C3.4
Scale: As Shown	Date: July 20,2006



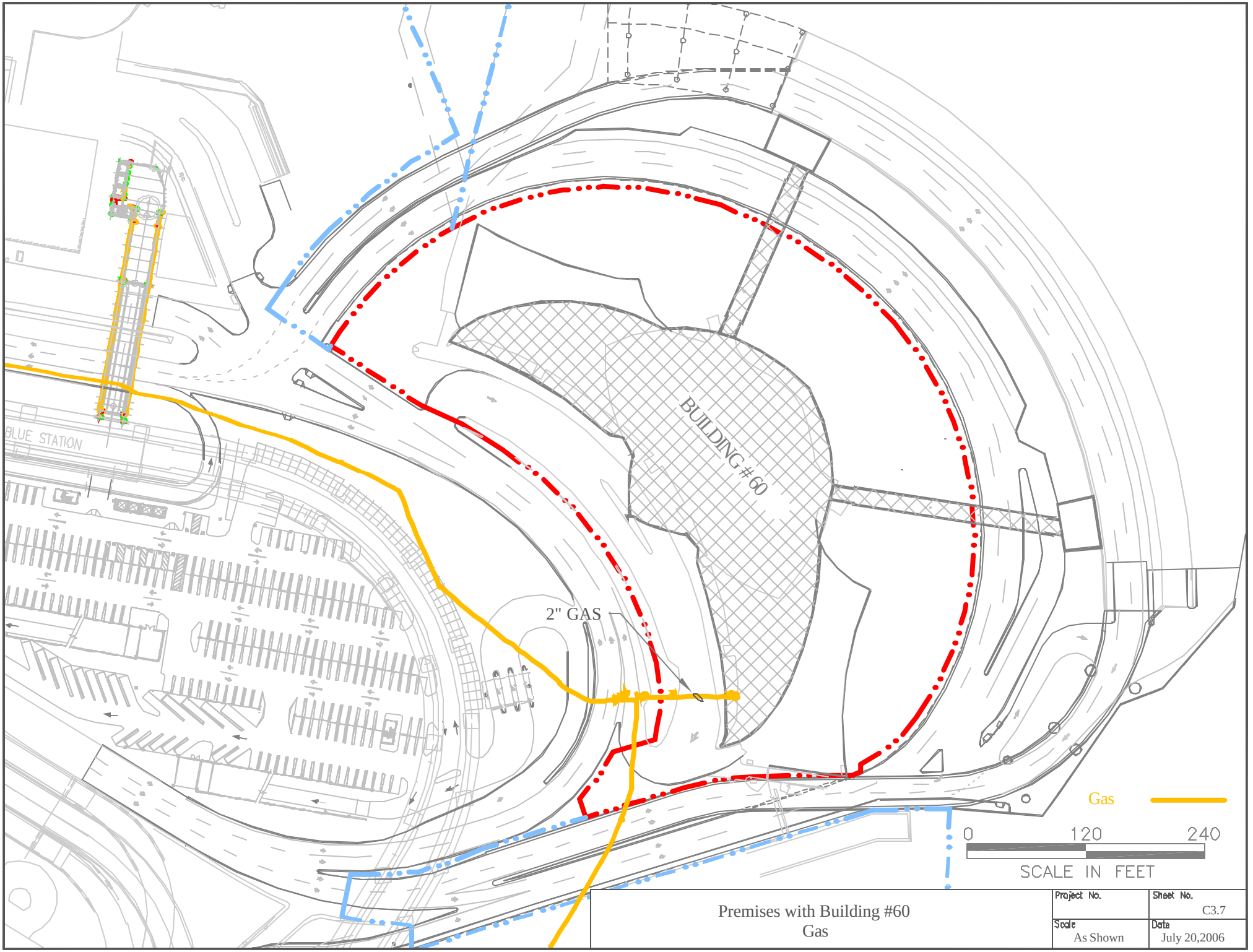
Premises with Building #60
LPW, HPW

Project No.	Sheet No.
	C3.5
Scale: As Shown	Date: July 20,2006



Premises with Building #60
Communication

Project No.	Sheet No.
	C3.6
Scale: As Shown	Date: July 20,2006



Premises with Building #60
Gas

Project No.	Sheet No.
	C3.7
Scale: As Shown	Date: July 20,2006

THE PORT AUTHORITY OF NY & NJ

One Madison Avenue
New York, NY 10010

May 16, 2011

SUBJECT: REQUEST FOR PROPOSALS FOR THE DEVELOPMENT, LEASING, MANAGEMENT AND OPERATION OF A HOTEL, INCORPORATING THE TWA FLIGHT CENTER AT JOHN F. KENNEDY INTERNATIONAL AIRPORT (RFP #24852)

Dear <<>>:

The Port Authority of New York and New Jersey (Authority) has completed its review of your submission in response to the Request for Qualifications relating to the subject project. The Authority hereby solicits your response to this Request for Proposals (RFP).

The Authority is seeking a developer (Developer) to enter into a long-term lease for financing, planning and design, brand-selection (if applicable), rehabilitation/restoration/construction, management, operation, and marketing of the proposed hotel (Hotel). The selected Developer shall have sole responsibility for obtaining all equity and debt necessary for the project. All conveyances and other financing must be subordinated to the Authority's interest as landlord under the lease.

Proposers responding to this RFP must confirm collaboration with the entities named in their RFQ submission. Technical consultants may continue to participate on more than one development team, as appropriate.

The RFP documents, which include this letter, are organized as follows:

RFP Letter - Project description, submission requirements, and selection criteria
Attachment A-1- Background information about the site and project, and available documents
Attachment B - Agreement on Terms of Discussion
Attachment C - Development Pro Forma
Attachment D - Sample Lease Provisions *(file forthcoming)*
Exhibit I - Reading Room Guidelines
Exhibit II - Certification of No Investigation

I. PROJECT DESCRIPTION

The Authority is seeking a creative and innovative hotel development that respects, and enhances, the historic significance of the TWA Flight Center (Flight Center) as an international icon of visionary architecture. The Flight Center is designated as a landmark by the City of New York and is listed on the National and State Registers of Historic Places. The scope and size of the proposed redevelopment must be in accordance with the terms of the Memorandum of Agreement (MOA) between the Authority, the Federal Aviation Administration, the New York State Historic Preservation Office and the Advisory Council on Historic Preservation (See Attachment A, Section II, item 4). Considering the Flight Center's location within the Central Terminal Area of John F. Kennedy International Airport

(Airport), the Authority seeks a high-quality development that is consistent with its recent investment to rehabilitate and restore portions of the building (See Attachment A, Section I) and with other major redevelopment activities at the Airport.

It is preferred that completion of design and construction occur within 24 months from execution of all required agreements and, to the greatest extent practical, that public areas of the Flight Center remain open during construction (See Attachment A, Section II, item 3). The selected Developer must develop and operate the Hotel consistent with the Authority's sustainability goals by minimizing, offsetting and/or eliminating carbon contributions from Hotel activities.

As noted in the RFQ, another on-airport hotel development is expected as a result of the Authority's recent public solicitation process for the redevelopment of the former Ramada Plaza Hotel located at the Airport's entrance. Details of the selection have not yet been made public.

II. PROPOSAL FORMAT REQUIREMENTS

To respond to this RFP, Proposers must submit a concise proposal complying with the following format requirements:

A. To be acceptable, proposals must be single-sided (except as noted otherwise) using 12-point or greater font size and no more than 100 pages in length, not including any resumes, reference letters, renderings, pro forma, or financial statements. Individual sheet size must not exceed 11" by 17". Brochures or other promotional materials should not be included. Pages must be numbered and bound or placed in a 3-ring binder, with the Proposer's full name, and **RFP Number 24852** clearly indicated on the cover.

B. Separate each section of the proposal with a tab divider that is labeled in accordance with the requirements specified below in Section III.

C. All proposals must be delivered in sealed envelopes and/or packages addressed to: The Port Authority of New York and New Jersey, One Madison Avenue, 7th Floor, New York, NY 10010, Attention: RFP Custodian. Do not address your proposal to any other name. You are requested to submit one (1) reproducible original, clearly labeled "Original Proposal Package," and twenty two (22) hard copies. In addition, submit two (2) electronic copies of the proposal on a USB flash drive or compact disc, which shall include a working Excel model of the Pro Forma and AutoCAD files requested in this RFP. In case of conflict, the reproducible original of the proposal will take precedence over material on the flash drive or compact disc.

   The Authority requests that all documents submitted be in a form that can be easily recycled (i.e., no plastic covers or binding), and that all supporting literature be in direct response to the RFP.

D. Each submission to the Authority, including all electronic and hard copies, must indicate the Proposer's **FULL LEGAL NAME WITHOUT ABBREVIATIONS**. Failure to comply with this requirement may delay or even preclude the proposal from being considered, and any such result will be the responsibility, and at the risk, of the Proposer.

E. Proposals should be forwarded in sufficient time so that the Authority receives them **no later than 2:00 p.m. on July 25, 2011**. The cover of your proposal must include the RFP Number (as stated above) and the RFP title.

F. The Authority assumes no responsibility for delays caused by any delivery services. For submissions delivered by messenger, it should be noted that only individuals with photo identification will be permitted access to the Authority's offices. Messengers without proper identification will be turned away and their packages not accepted.

III. PROPOSAL CONTENT REQUIREMENTS

The Authority requires a complete response to each item below, and reserves the right to deem a proposal non-responsive if the Authority determines, in its sole discretion, that a proposal is incomplete. Any changes to the Proposer's team members from those identified in its RFQ submission are subject to review and approval by the Authority. Unless subsequently modified in writing, proposal contents must include the following information:

A. General:

In the front of your proposal, a copy of Attachment B (Agreement on Terms of Discussion) signed by a duly authorized officer of your firm. If the Proposer is a joint venture, an authorized representative of each party shall sign a copy of Attachment B.

B. Developer/Owner:

1. A statement describing in detail the type, percentage share and dollar amount of financial investment that each principal in the team will provide, and the financial return each principal expects to receive.

2. A statement describing the amount and sources of debt and/or equity financing required for the project.

3. Confirmation of the development team, including a fully developed organizational chart, which must be consistent with the Proposer's RFQ submission, along with written acknowledgments from all team members (firms) confirming awareness of, and agreement to, their participation and role on the Proposer's team. Clearly identify any changes from the development team stated in the RFQ and include the qualifications and experience of any new team members.

4. The name, address, Employer Identification Number (EIN)/Federal Tax Identification Number, telephone number, facsimile number and email address for the Proposer, including each member of the proposed joint venture/ownership entity. Please identify the primary contact for information regarding the proposal.

5. A complete list of the Proposer's affiliates or its constituent entities. For this purpose, affiliates or constituent entities will mean any individual, company (including a limited liability company), corporation, partnership, joint venture, estate, trust, unincorporated association, any Federal, state, county or municipal government, bureau, department, agency or any other entity that directly or indirectly controls the Proposer. "Control" is hereby defined as any individual or entity that has (i) ownership of fifty percent (50%) or more of all voting stock of a corporation or more than fifty percent (50%) of all legal or equitable interests in any business entity or (ii) the power to cause the direction of management and/or policies of the Proposer's entity, its affiliates or constituent entities (whether through voting securities, by contract, by common directors, officers or trustees or otherwise). Affiliate will also include any person who is a family member (whether by birth or marriage) of an individual. For the purposes of this definition, family will include a spouse, a sibling (of whole or half blood), the spouse of any sibling, a lineal descendant or ancestor (including an individual related by or through legal adoption) of such individual or a trust for the benefit of such individual or any of the foregoing.

Note: All joint venture Proposers must provide documentation of their legal status. If the proposal is submitted by a joint venture that has not been established as a distinct legal entity (a "common law joint venture"), each participant of the joint venture will be held jointly and severally liable and must individually execute and perform all acts required by the proposal. Documents signed by a common law joint venture in connection with a proposal must include the names of all participants of the joint venture followed by the words "acting jointly and severally."

C. Hotel Management:

1. Describe the proposed management, operations and marketing approach, as required to enable the Authority to understand fully the Proposer's management strategy for the proposed Hotel. This must also include a summary of the following:

   a. marketing plan for the Hotel, indicating strategies for penetrating the appropriate lodging demand segments within the JFK Airport market area;

   b. Management Company's base and incentive fees, if separate from the Proposer;

   c. Franchisor's fee structure and services provided, if applicable.

2. Describe the technical approach to the routine maintenance and long-term preservation of the historic portions of the Flight Center.

D. Design and Construction:

The proposed design concept must be detailed in a design narrative, as well as two-dimensional plans and three-dimensional (3-D) renderings, showing the relationship of new construction to the Flight Center, surrounding airport structures, and roadways. It should be appropriate in its scale, location and materials to the historic building. While it is not necessary to replicate the historic building, design interventions must be compatible with the Flight Center. In addition, the design should retain the key character defining features of the Flight Center, including the restored central lobby, pedestrian bridges and the principal building façades.

1. Submit a narrative of the design concept, and describe the technical approach to the development program, engineering design of the structure, and foundation for new construction, enabling the Authority to determine the overall extent to which the proposed project meets the objectives set forth in this RFP. This must include a detailed description of the following:

    a. the type of hotel (limited-, select-, or full-service), proposed chain affiliation (if any), the proposed total square footage, the number and type of hotel rooms, square footage of facilities, proposed amenities and plans for back-of-the-house space;

    b. the proposed improvements to, and use of, the interior historic portions to be restored, modifications, if any, to the restored portions of the building, the treatment of the existing exterior of the building, and any proposed new construction both inside and outside of the existing structure;

    c. the technical approach to restoration of the TWA Flight Center with regard to treatment, materials and workmanship;

    d. any proposed new space, or any changes to the elevations, massing, exterior materials, streetscape and landscape, identifying changes to the historic scene or setting of the landmark structure. In addition, describe any additions or removal of signage, lighting, entrances, loading and service docks, skylights and other roof modifications.

    e. how the proposed project is consistent with the MOA, including compliance with the Secretary of the Interior's Standards for the Treatment of Historic Properties.

    f. sustainable building practices that shall be incorporated into the project, including the development, construction and operation of the building.

    g. building systems upgrades or other changes required to the existing structure, including mechanical, electrical, life safety, and other systems;

    h. a projection of the number of on-site and off-site parking spaces required to accommodate guests and employees for the proposed Hotel operation.

2. Submit visual representations of the design concept, including the following:

    a. A set of conceptual floor plans, sections and exterior elevations to illustrate the proposed design. Provide these on 11" by 17" paper and in a Computer-aided design (AutoCAD) file in Design Web Format (DWF) format.

    b. At a minimum, a set of high quality, 3-D color renderings of the proposed design, including the required exterior and interior locations indicated in Attachment A-1, Section II, item 4. The 3-D illustrations should identify the Flight Center in its setting and context, including street level and aerial views of the structure, exterior materials, streetscape and landscape plans, entry features and signage. Provide these on 11" by 17" paper and in a Computer-aided design (AutoCAD) file in Design Web Format (DWF) format.

    c. Additional renderings include typical guest room floor plans, interior public space layouts and site plans, showing interfaces with other existing or planned facilities.

Note: The Authority may require a 3-D animation "flyover" of the building and interior walkthrough at a future time to address specific landmark concerns.

3. If not included in your RFQ submission, identify the Mechanical, Structural, and Geotechnical (if applicable) Engineering firms and the intended leads on this project. Include a description of their relevant experience and qualifications in projects of similar size, scope and complexity.

E. Construction Budget:

Provide a budget indicating a preliminary cost estimate of the conceptual design and construction costs (including breakdown of hard costs, FF&E and soft costs), exclusive of debt service.

F. Project Schedule:

Prepare a project schedule indicating the proposed design, construction and operating sub-tasks, and milestones. Include the following with the project schedule:

1. A description of the phasing of construction, including demonstrated need, if any, to close portions of the Flight Center's public areas during construction. Since the construction site is in close proximity to other airport facilities, phasing should account for operational constraints to certain construction activities that may affect vehicular access to those facilities during peak hours.

2. A statement setting forth all construction contingencies and risks, and their potential effect on the timeline.

G. Ground Lease Term and Rentals:

The term of the ground lease agreement (Lease) subsequently entered into between the Authority and the selected Developer will be appropriate to permit the acquisition of sufficient financing to support the development proposal approved by the Authority. Proposers are required to propose specific terms and conditions for the Lease. The Flight Center site is currently leased by the Authority from the City of New York pursuant to a ground lease that expires in 2050 (Underlying City Lease). (See Attachment A-1, Section II, item 3.) A composite of Sample Lease Provisions is also attached to this RFP as Attachment D. The Authority reserves the right to modify or add provisions to Attachment D.

The Authority expects fair market value of the land to be achieved from the present value of proposed rentals, including additional participation in net proceeds of a refinancing or sale, to provide the Authority with a share of the financial project upside. The estimate of present value to the Authority will consider the level of risk associated with the source of each type of rental payment.

Considering the above, provide a full description of the proposed Lease rental terms, including each of the following items:

1. The proposed initial term and any optional renewal terms of the Lease.

2. A statement as to whether or not the term of the Underlying City Lease will be an issue and how it may affect the Proposer's ability to finance the project.

3. The amount to be paid to the Authority upon execution of the Lease. The Authority expects a minimum payment of $200,000.

4. The timing and amount of all payments to the Authority during the construction period. Specify whether these are a fixed dollar amount, based on construction progress, or some other calculation.

5. The timing and amount of regular lease payments to the Authority subsequent to the Hotel opening. These payments must include, at minimum, a fixed annual amount with regular escalations to reflect inflation.

6. A description of the following additional rentals which the Authority expects to receive, including participatory rentals to compensate the Authority for increases in value of the property over the term of the Lease:

   a. A statement of annual participation payments over the term of the Lease, preferably based on a percentage of gross revenue, and

   b. A statement of participation in the gross proceeds from the sale and refinancing of the Hotel.

7. Specify any contingencies pertaining to any proposed form of rental payment (e.g., commencement or completion of construction, etc.).

H. Financial Information and Plan:

1. Complete Attachment C, Development Pro Forma (Pro Forma), as required to enable the Authority to evaluate Proposer cost estimates and returns to the Authority. This information must be prepared in Microsoft Excel format. The model prepared by the Proposer shall be similar in format to Attachment C, and shall include all information requested therein. The Proposer is responsible for ensuring the accuracy and correctness of any Pro Forma model, or any other financial information submitted, whether or not it is based on the model included herewith as Attachment C. (The hard copies must be submitted in separate sealed envelopes clearly labeled "DEVELOPMENT PRO FORMA." The working Excel models must be included with the other electronic files in on a USB flash drive or compact disc, as noted in Section II.)

   The Pro Forma must include the following information:

   a. A 10-year annual Pro Forma model commencing on the estimated start date of January 1, 2012, which will also be the estimated Lease commencement date. Include a breakdown of all hard and soft costs, the financing costs, as well as the timing and amount of all construction costs, construction loan draw-down schedule, anticipated revenue sources, operating and other expenses, other deductions from revenue, and debt service.

b. A summary of the estimated operating income and expense assumptions for the stabilized year in 2011 dollars, as shown in Attachment C. Cleary indicate the following: year in which stabilization is anticipated to occur, the assumption for inflation of each line item, and the basis for each assumption using typical industry standards as follows:

   i. POR – per occupied room

   ii. PAR – per available room

   iii. % Room – percent of room revenues

   iv. % – percent of departmental revenue

   v. % Total – percent of total revenues

   vi. Total dollar amount

   If some other basis for calculation is used, it should be clearly stated. If the Proposer does not utilize the model provided in Attachment C, any items forecasted on a POR or PAR basis should include the constant dollar and inflated dollar amounts.

c. 3. Detailed assumptions for the estimated present value of all rentals to the Authority, including up-front payments, fixed annual payments, annual participation in gross revenues, and share of net proceeds of any sale or refinancing. Each type of income stream to the Authority will involve a unique level of risk to the Authority. As such, assign a unique discount rate reflecting the appropriate level of risk associated with that type of payment (e.g., fixed payments, annual participation in gross revenues, share of net proceeds, etc.).

2. Provide a financing plan, enabling the Authority to evaluate the Proposer's financial strength and ability to obtain equity and debt financing for the project. Provide reasonable assurance of the Developer's ability to deliver the proposed Hotel development within the expected timeframe. The financing plan must include the following:

   a. A description of the intended sources and amount of equity for the proposed project, including a contact person, mailing and email addresses, and phone number for each intended source of equity.

   b. A description of the intended sources and amount of debt financing. If available, provide a letter of commitment or interest from all persons or entities providing any debt for the proposed project.

   c. A statement disclosing whether or not the Proposer intends to utilize any public development programs, historic property preservation/renovation programs, or federal/state tax benefit programs. If applicable, describe how and the extent to which the Proposer intends to utilize such programs or tax benefits. The selected Developer will have sole responsibility for obtaining all equity and debt necessary for the project.

Note: The selected Developer must be prepared to provide more detailed information concerning the sources of financing and the certainty of their commitments to the project.

I. Business Opportunities for M/WBE, LBE/LEO and ACDBEs:

Submit participation plans demonstrating a good faith effort to achieve the goals for each effort (M/WBE and ACDBE) described below. Treating each effort separately, provide a plan with the following information:

1. Identification of M/WBEs and ACDBEs: Provide the names and addresses of all M/WBE and ACDBEs with which you intend to collaborate. If none are identified, describe the process for selecting participant firms/individuals in order to achieve the good faith goals as they will be established in the Lease between the Authority and the selected Developer.
2. Level of Participation: Indicate the expected percentage of participation achieved under each plan.
3. Scope of Work: Describe the scope of work to be performed by the M/WBEs and ACDBEs.
4. Previous Participation: Describe, for informational purposes, any previous or current experience with M/WBE and ACDBE participation in executing services similar to this project.

Minority-/Women-Owned Business Enterprises (M/WBE) – The Authority has a long-standing practice of making its business opportunities available to M/WBE. In addition, the Authority has taken affirmative steps to encourage such firms to seek business opportunities with the Authority and its tenants and contractors. The selected Developer will make a good faith effort to include 12 percent participation by MBEs and five percent participation by WBEs in all construction, procurement, subcontracting and ancillary service opportunities associated with the leasehold as defined in Schedule E of Attachment D.

Airport Concession Disadvantaged Business Enterprise (ACDBE) – In accordance with regulations of the U.S. Department of Transportation 49 Code of Federal Regulations (CFR) Part 23, the Authority implemented a ACDBE program under which qualified firms may have the opportunity to operate an on-airport business. The selected Developer will be subject to the requirements of 49 CFR Part 23 and, to the extent feasible, to the Authority's established ACDBE participation goal of 17 percent for this project, as measured by the total estimated annual gross receipts from concession operations and further defined in Schedule G of Attachment D.

Note: The Authority also requires that the selected Developer make a good faith effort to maximize the participation of Local Business Enterprises (LBE) in the Contract Work on this project, as well as make employment opportunities available to labor talent from the communities surrounding the airport, referred to as Local Employment Opportunity (LEO). For the purposes of this project, the local community is defined as individuals or businesses within the County of Queens, NY and as defined in Schedule F of Attachment D.

J. Conflict of Interest Disclosure:

If the Proposer or any employee, agent or subcontractor may have, or may give the appearance of, a possible conflict of interest, the Proposer must include in its submission, a statement indicating the nature of the conflict or possible conflict. If applicable, the Proposer must describe measures it will implement to minimize or eliminate a conflict of interest.

K. Certification Statement

Exhibit II, which includes clauses entitled "Certification of No Investigation (Criminal Or Civil Anti-Trust), Indictment, Conviction, Debarment, Suspension, Disqualification and Disclosure Of Other Information" and "Non-Collusive Proposing, and Code of Ethics Certification; Certification of No Solicitation Based on Commission, Percentage, Brokerage, Contingent or Other Fees." By submitting a proposal, the selected Developer will be deemed to have made the certifications contained therein unless a statement is included in its proposal explaining why any such certification(s) cannot be made. Such a submission must be submitted in a separate envelope along with the proposal, clearly marked "CERTIFICATION STATEMENT."

IV. SELECTION PROCESS

The Authority reserves the right to disqualify the Proposer if, in its sole discretion, determines that any interest disclosed from any source could create, or give the appearance of, a conflict of interest. The Authority's determination regarding any question(s) of conflict of interest will be final.

The Authority will review and evaluate proposals employing the following criteria. After evaluating submittals, the Authority may enter into negotiations with the Proposer(s) deemed best suited to meet the project objectives.

Category 1 - Developer/Owner

1. commitment and amount of equity and debt financing;
2. overall qualifications and experience of the team; and
3. confirmation of its prequalified development team, to the extent it is consistent with its previous qualifications submission and includes the required written acknowledgments from all team members

Category 2 – Hotel Management

1. technical approach for management, operations and marketing of the proposed Hotel
2. technical approach for the maintenance of the historic portions of the Flight Center

Category 3 – Design and Construction

1. quality of the design concept, including its innovation and compatibility with the airport facility and local lodging market
2. technical approach to the restoration aspects of the project and consistency with the setting, historical context and conformance to the requirements of the MOA

3. qualifications and experience of the proposed mechanical, structural, and geotechnical (as applicable) engineering firms on projects of similar size, scope and complexity
4. commitment of the team to achieving the sustainable building goals and the extent to which they will be incorporated into the building; and
5. approach to phasing the work and the schedule/timing for completing the improvements.

Category 4 – Ground Lease Terms and Financial Proposal

1. terms of the proposed Lease including the net present value of the proposed ground rents and any other payments to the Authority
2. feasibility of achieving projected cash flows as shown in its 10-year Pro Forma, including consideration of the overall project schedule, construction costs, the construction loan schedule, anticipated revenue sources, operating and other expenses, and debt service

   appropriateness of all costs, including construction, operating and maintenance costs, capital reserves and labor costs (estimated to support the proposed Hotel's competitive position and quality of operations), as well as costs to maintain the restored historic portions of the landmark structure.

V. ORAL PRESENTATIONS

Proposers may be asked to conduct oral presentations to the selection committee and others, as appropriate**.** Presentations will be limited to one (1) hour and are to include the material contained in your proposal. The presentation will be followed by a question and answe**r** session of approximately 45 minutes. The Proposer's ownership representative, who may be supported by no more than six (6) other senior staff members on this project, will lead the presentation. Provide the name, telephone, fax and e-mail address of the person who should be contacted for presentation scheduling, if applicable, as well as an alternate in the event that person is unavailable.

VI. PRE-PROPOSAL CONFERENCE AND SITE TOUR

A pre-proposal conference and site tour is scheduled at the Flight Center (directions to be provided upon attendance confirmation) on **Wednesday, June 1, 2011 at 9:00 a.m. and Wednesday, June 8, 2011 at 9:00 a.m.** to discuss the project and tour all portions of the site. Proposers are strongly encouraged to attend one of the sessions.

To attend this site visit, proposers are required to send a written request via e-mail to Laurie Spencer at the following e-mail address: lspencer@panynj.gov to confirm your attendance, including the Proposer's name, name(s) of attendee(s), and contact information of the one person from the Proposer's team to be notified of any changes in the conference location or restrictions as to the number of attendees.

VII. DOCUMENT REVIEW

The Authority will make related documents available for review by the Proposer. By its review, the Proposer agrees that it will not use such documents for any purpose other than in response to this RFP and further agrees that it will not disseminate the contents of any documents to a third party.

Some documents listed in the RFP are only available at the Authority's offices. Prior to viewing these documents, Proposers will be required to sign and submit a copy of the Reading Room Guidelines (Exhibit I). To arrange a document review appointment, send an email to Ms. Spencer as noted above.

VIII. ADDITIONAL INFORMATION

A. Governmental Assessments

The proposed Hotel is located on land controlled by the Authority and therefore not subject to real property taxes. However, the selected Developer will be required to pay all appropriate governmental assessments, including recordation and transfer taxes, hotel room taxes, excises, license fees, levies, duties, and charges levied against the Site or its operation. The foregoing is not meant to be an exhaustive representation, but merely illustrative of the fact that the selected Developer will pay all governmental assessments necessary for it to conduct its business.

B. Performance Bond

The selected Developer must provide the Authority with a performance bond issued by a responsible surety company licensed to do business in the State of New York and satisfactory to the Authority. Such bond must guarantee construction of the leasehold improvements at the site and be in an amount not less than 100 percent of the cost of said improvements.

C. Environmental Remediation

1. The selected Developer will be responsible for the removal or remediation, to the extent required by law, of above-ground (including building basement) hazardous substances and asbestos-containing materials found with underground utilities during construction. Requirements for removal and remediation will depend on the proposed restoration/construction plans.

2. The selected Developer, at its sole cost and at the expiration or termination of the Lease, will also be responsible for the remediation of any environmental condition not shown in the March 2010 Environmental Subsurface Baseline Report provided as part of the RFQ. (See also Attachment D.)

D. Requirements of the States of New York and New Jersey

It is Authority policy that its contractors, vendors and tenants comply with the legal requirements of the States of New York and New Jersey. Proposer's attention is therefore called to New York State's requirements that certain contractors, affiliates, subcontractors and subcontractors' affiliates register with the New York State Department of Taxation and Finance for the purpose of collection and remittance of sales and use taxes. Similarly, New Jersey requires business organizations to obtain appropriate Business Registration Certificates from the Division of Revenue of the State's Department of the Treasury.

Should you have any questions regarding this RFP, please e-mail them to Laurie Spencer, Procurement Manager, at lspencer@panynj.gov. All such emails must have "**RFP 24852"** in the subject line. All questions should be submitted no later than 4:00 P.M. ten (10) business days prior to the proposal due date. Neither Ms. Spencer nor any other employee of the Authority is authorized to interpret the provisions of this RFP or enclosed documents or give additional information as to its requirements. If interpretation or additional information is required, it will be communicated by written addendum issued by the undersigned and such writing will form a part of this RFP or the enclosed documents, as appropriate.

Proposal preparation costs are not reimbursable by the Authority, and the Authority will have no obligation to any firm except under a duly authorized agreement executed by the Authority.

No rights accrue to any Proposer except under a duly authorized definitive agreement for performance of the specified services.

The Authority reserves the right, in its sole and absolute discretion, to reject any or all proposals, to undertake discussions and modifications with one or more Proposers to waive defects in submissions, and to proceed with that proposal or modified proposal, if any, which in its judgment will, under all the circumstances, best serve the public interest.

Sincerely yours,

Tim Volonakis
Manager
Professional, Technical and Advisory Services Division
Procurement Department

Attachments

ATTACHMENT A-1

DEVELOPMENT, LEASING, MANAGEMENT AND OPERATION OF A HOTEL INCORPORATING THE TWA FLIGHT CENTER AT JOHN F. KENNEDY INTERNATIONAL AIRPORT

The following information supplements Attachment A of the Request for Qualifications (RFQ). Although some information from Attachment A is repeated here to provide context for new information, each document contains separate but equally important information. Proposers should carefully review both documents and the RFQ Addenda 1-5, as they provide information about the site, the project and additional documents containing related information.

I. The Site

A. Utilities

The 5.8-acre site includes the former Trans World Airways Flight Center (Flight Center) and is located in the eastern portion of the Central Terminal Area (CTA) of JFK International Airport (Airport) in Jamaica, New York. The site is bounded to the east by Terminal 5 (JetBlue Airways Corporation) and to the west by access roads, the AirTrain Station and the Yellow Parking garage. Utilities are available at the site, including electricity, gas, telephone, water and sewer service (See Section II, item 2).

B. Hotel Parking

Access to the site is from the southbound Van Wyck Expressway, via the ramp to the CTA. Hotel guests may also arrive via the AirTrain system, which services the passenger terminals, long- and short-term parking lots, and connections to Manhattan and other points of interest throughout the area.

Parking for hotel guests and employees may be available in the existing parking lots located at the Airport and will be negotiated as part of the business terms of the final lease agreement with the selected Developer. A projection of the Proposer's parking needs is requested as part of this RFP.

C. Tax Incentives

In 1994, the New York City Landmarks Preservation Commission designated the Flight Center as a historic landmark. In 2005, this facility was listed on the National and New York State Registers of Historic Places. Listing on the National Register recognizes the importance of this property to the history of the country. Listing also makes restoration or rehabilitation work eligible for Historic Preservation Tax Incentives.

D. Development Requirements and Related Information

Code Compliance:

The selected Developer must comply with all relevant standards required by the Port Authority Tenant Alteration Application (See Attachment A, Section II, item 9). Americans with Disabilities Act and NYC Building Code requirements will depend on the proposed development and use of the affected spaces. The Proposer, together with its historic consultant, architect and code expert, should examine code requirements with

respect to their proposed work. The Authority will evaluate the Proposer's design as part of the Tenant Alteration Application process to assess code compliance with respect to historic and non-historic spaces.

There is no site-specific floor area ratio (FAR) requirement for the Flight Center site. All structures on the site are subject to line-of-sight height restrictions (See Attachment A, Section II, item 2), as well as the requirement to retain the historic portions of the building (See Attachment A, Section II, item 3). While the historic portions of the Flight Center must remain intact, changes/modifications to the non-historic portions of the building may be proposed. All design concepts will be reviewed for compatibility with the setting and context of the landmark, as indicated below and in Attachment A, Section I, items C and D.

Restoration Responsibilities:

The scope and size of the proposed redevelopment must be in accordance with the terms of the Memorandum of Agreement (MOA) between the Authority, the Federal Aviation Administration, the New York State Historic Preservation Office (SHPO) and the Advisory Council on Historic Preservation (See Attachment A, Section II, item 4). The MOA will govern the restoration and rehabilitation of the historic portions of the existing structure as well as any proposed new construction, which will be reviewed for compatibility with the setting and context of the landmark.

The Authority, following review and comment by the Redevelopment Advisory Committee (RAC), and in consultation with the SHPO, will have to approve any changes to the height or massing in connection with new improvements at the site. The RAC was created to advise on the restoration/rehabilitation and reuse of the Flight Center to minimize adverse effects on the historic building.

The selected Developer will be bound by the same requirements that bind the Authority with respect to the development, operation and maintenance obligations of the Flight Center, as described in the MOA.

Guidelines for the restoration and rehabilitation work are described in the TWA Flight Center Restoration and Rehabilitation Guideline Report and Drawings (See Attachment A, Section II, item 7). The report outlines construction requirements and the scope of restoration and rehabilitation treatments, and was the basis for the restoration and rehabilitation work performed by the Authority.

Public Space Responsibilities:

The project must incorporate public access through the Flight Center, which will provide additional food and beverage or other ancillary revenue opportunities for the selected Developer. The following are select requirements as detailed in the MOA:

1. Accommodate a minimum of two (2) electronic ticketing kiosks in an appropriate setting within the Flight Center for use by airline passengers without the need to check baggage. The Authority will require any airline responsible for the ticketing kiosks to install, operate, and maintain the kiosks and monitor their usage.

2. Accommodate an interpretive display on the TWA Terminal and its relationship to JFK International Airport placed by the Authority in a prominent location at the Flight Center and accessible to the public during the normal operating hours after the hotel development is complete.
3. Establish and develop an outdoor plaza that is within the leased premises.
4. It is preferred that, to the greatest extent practical, public areas of the Flight Center remain open during construction.

Functional Requirements and Information:

1. The proposed design should consider the following:
    a. Maintain unobstructed views of the Flight Center from Terminal 5, between the Flight Tubes.
    b. Maintain views of the Flight Center's character defining features from the main public roadways in the CTA, on approach to the Flight Center.
    c. Maintain access from the landside entrance of the Flight Center to Terminal 5 via the upper lobby and connecting tubes.
    d. Some of the existing building systems (including, but not limited to, HVAC, power, lighting and communications) were incorporated into the architectural elements within the building. Rehabilitation of those systems must be undertaken with sensitivity toward preserving the historical aspects of the Flight Center.
    e. The ground floor of the east wing of the original building, adjacent to the loading dock, housed a kitchen and an employee cafeteria. These areas are not considered historic and can be modified.
    f. Traffic flow and frontage roads for the Flight Center, including the location of the loading dock.
    g. Subsurface conditions, including utilities, geotechnical data and groundwater elevations (See Attachment A, Section II, item 5).
2. The site's frontage must be maintained in a presentable condition during construction.
3. The Authority will soon complete the installation of a public safety radio system to ensure radio coverage throughout the site. The system will need to remain in service and any new construction on the site may require additional antennas or supporting equipment. (See Attachment A, Section II, item 8)
4. The Proposer's design and construction documents must comply with the guidelines provided as part of the RFQ: Port Authority Tenant Construction Review Manual; Port Authority Tenant Alteration Procedures and Standards Guide; Line of Sight Height Restrictions; and the Port Authority Building and Sustainability Guidelines and Customer Service Standards.

II. INFORMATION PROVIDED BY THE AUTHORITY

The Authority makes the following documents available as additional information to the Proposer. The Authority makes no representation or guarantee as to their accuracy, completeness or pertinence, and will not be responsible for any conclusions drawn from these documents. Documents marked with an asterisk "*" will be available to recipients of the RFP at the Authority offices at One Madison Avenue, New York, New York during regular business hours and as indicated in the RFP Letter.

The available documents are as follows:

1. Electrical System – Stage I Report – March 2009
2. Underground Utility Systems Drawings
3. Underlying City Lease between the Port Authority and the City of New York
4. Required Exterior and Interior Design Views
5. Tenant Alternation Applications for Terminal 5, Including the Vicinity of Building 60 – Site Preparation (April 2009) and Civil Landside (May 2009)*

* * *

THE PORT AUTHORITY OF NY & NJ

August 8, 2014

SUBJECT: REQUEST FOR PROPOSALS FOR THE DEVELOPMENT, LEASING, MANAGEMENT AND OPERATION OF A HOTEL INCORPORATING THE TWA FLIGHT CENTER AT JOHN F. KENNEDY INTERNATIONAL AIRPORT (RFP #38826)

Dear Proposer:

The Port Authority of New York and New Jersey (Authority) hereby invites real estate developers and hotel owners/operators (Proposers) to respond to this Request for Proposals (RFP). This RFP is part of a process to identify a development team (Developer) capable of completing an adaptive reuse of the landmark Trans World Airlines Flight Center, Building #60 (Flight Center), located at John F. Kennedy International Airport (Airport), as a high-quality hotel (Hotel) that is economically viable and respects the historic significance of this property.

To accomplish the redevelopment, the Authority is seeking a Developer to lease the Flight Center under a long-term lease for financing, planning and design, brand-selection (if applicable), rehabilitation/restoration/construction, management, operation, and marketing of the proposed Hotel. The Developer will have sole responsibility for obtaining all equity and debt necessary for the project. All conveyances and other financing must be subordinated to the Authority's interest as landlord under the lease.

Proposers may collaborate with other entities as required to complete the Hotel project. Historic preservation and other technical consultants may participate on more than one Proposer's team. Only one submission from each Proposer will be accepted.

The RFP documents, which include this letter, are organized as follows:

RFP Letter - Project description, submission requirements, and selection criteria

Attachment A - Background information about the site and project

Attachment B - Agreement on Terms of Discussion

Attachment C - Development Pro Forma

Attachment D - Sample Flight Center Lease

Exhibit I, Ia, Ib - Non-Disclosure Agreement, Electronic Portal Access Form, and Reading Room Guidelines

Exhibit II - Conflict of Interest Disclosure Statement

Exhibit III - Certification of No Investigation

Exhibit IV - Exterior and Interior Design Views

Exhibit V - List of Available Documents

I. PROJECT DESCRIPTION

The Authority is seeking a creative and innovative hotel development that respects, and enhances, the historic significance of the Flight Center as an international icon of visionary architecture. The Flight Center is designated as a landmark by the City of New York and is listed on the National and State Registers of Historic Places. The scope and size of the proposed redevelopment must be in accordance with the terms of the Memorandum of Agreement (MOA) among the Authority, the Federal Aviation Administration, the New York State Historic Preservation Office and the Advisory Council on Historic Preservation (See Exhibit V, item 5). Considering the Flight Center's location within the Central Terminal Area (CTA) of the Airport, the Authority seeks a high-quality development that is consistent with its recent investment to rehabilitate and restore portions of the building and with other major redevelopment activities at the Airport.

It is preferred that completion of design and construction occur within 24 months from execution of all required agreements (See Attachment D, Sample Flight Center Lease). The selected Developer must develop and operate the Hotel consistent with the Authority's sustainability goals by minimizing, offsetting and/or eliminating carbon contributions from Hotel activities.

II. PROPOSAL FORMAT REQUIREMENTS

To respond to this RFP, Proposers must submit a concise proposal complying with the following format requirements:

A. To be acceptable, proposals must be single-sided (except as noted otherwise) using 12-point or greater font size and no more than 100 pages in length, not including any resumes, reference letters, renderings, pro forma, or financial statements. Individual sheet size must not exceed 11" by 17". Brochures or other promotional materials should not be included. Pages must be numbered and bound or placed in a 3-ring binder, with the Proposer's full name, and **RFP Number 38826** clearly indicated on the cover.

B. Each section of the proposal shall be separated with a tab divider that is labeled in accordance with the requirements specified below in Section III.

C. All proposals must be delivered in sealed containers addressed to: The Port Authority of New York and New Jersey, Two Montgomery Street, 3rd Floor, Jersey City, NJ 07302, Attention: RFP Custodian. Proposals shall not be addressed to any other name. One (1) reproducible original, clearly labeled "Original Proposal Package," and twenty (20) hard copies shall be submitted. In addition, two (2) electronic copies of the proposal shall be submitted on a USB flash drive or compact disc, which shall include a working Excel model of the Pro Forma and AutoCAD files requested in this RFP. In case of conflict, the reproducible original of the proposal will take precedence over material on the flash drive or compact disc.

The Authority requests that all documents submitted be in a form that can be easily recycled (i.e., no plastic covers or binding), and that all supporting literature be in direct response to the RFP.

D. Each submission to the Authority, including all electronic and hard copies, must indicate the Proposer's **FULL LEGAL NAME WITHOUT ABBREVIATIONS**. Failure to comply with this requirement may delay or even preclude the proposal from being considered, and any such result will be the responsibility, and at the risk, of the Proposer.

E. Proposals should be forwarded in sufficient time so that the Authority receives them no later than 2:00 p.m. on September 23, 2014. The cover of your proposal must include the RFP Number (as stated above) and the RFP title.

F. The Authority assumes no responsibility for delays caused by any delivery services. For submissions delivered by messenger, it should be noted that only individuals with photo identification will be permitted access to the Authority's offices. Messengers without proper identification will be turned away and their packages not accepted.

III. PROPOSAL CONTENT REQUIREMENTS

The Authority requires a complete response to each item below, and reserves the right to deem a proposal non-responsive if the Authority determines, in its sole discretion, that a proposal is incomplete. The Proposer's team members must be disclosed and are subject to review and approval by the Authority. Unless subsequently modified in writing, proposal contents must include the following information:

General:

In the front of your proposal, a copy of Attachment B (Agreement on Terms of Discussion) signed by a duly authorized officer of your firm. If the Proposer is a joint venture, an authorized representative of each party shall sign a copy of Attachment B.

A. Developer/Owner

1. Structure of Ownership Entity/Ground Lessee – A description of the proposed ownership structure of the Proposer shall include, but not be limited to:

   a. A description of the Proposer's ownership entity (ground lessee), each of its partners/members and percentage ownership of each party;

   b. An organization chart illustrating the relationships between the various partners/members;

   c. A statement identifying the owner's managing individual(s), principal partner(s), and/or co-venturer(s); and

   d. A resume of the owner's intended lead manager/contact person for this project. All joint venture Proposers must provide documentation of their legal status (or documentation of its pending status). If the qualifications package is submitted by a joint venture that has not been established as a distinct legal entity (a "common

law joint venture"), each participant of the joint venture shall be held jointly and severally liable and must individually execute and perform all acts required by the RFP. Documents signed by a common law joint venture in connection with a submission shall include the names of all participants of the joint venture followed by the words "acting jointly and severally."

2. Hotel Development and Ownership Experience – Demonstrate experience in the development and ownership of hotels. Submittals will be considered from Proposers (its principals, members and partners, collectively or individually) exhibiting experience in the following areas:

   a. Real estate development business, highlighting the rehabilitation and development of hotels during the last ten (10) years and the number of rooms in each property, date completed and total project cost; and

   b. Current ownership of hotels, representing over 200 rooms in aggregate, of a similar service and quality level to the proposed Hotel in a major metropolitan city(ies) or at a major international airport(s).

3. Historic Restoration Experience – Provide details of any relevant experience with historic restoration, or adaptive reuse, projects of similar size, scope and complexity. Highlight any projects involving properties listed in the National Register of Historic Places, locally designated landmarks or historically significant buildings, as well as the strategy employed to integrate improvements within existing historic structures.

4. Hotel Financing Experience – Demonstrate a history of successful financing for similar projects by providing the following information:

   a. Summaries of the financial structures of past projects indicated in 2(a) above;

   b. Two (2) reference letters from banking/financial institutions for the ownership entity;

   c. Three (3) years of certified financial statements for the ownership entity (if an ownership entity has been or will be formed specifically for this Hotel project, the financial statements for each constituent entity); and

   d. Any other documentation attesting to the Proposer's ability to finance the Hotel.

B. Hotel Management Company/Franchise Affiliation

Provide the following:

1. A description of the hotel management company and its relevant qualifications and experience in managing and operating hotels of the type proposed, highlighting any experience with operating hotels: in a major metropolitan city(ies), at a major international airport(s), and/or in a historic landmark building(s);

2. A resume of the management company's intended lead manager for this project.

3. A description of the Hotel's proposed franchise affiliation (if any), including a letter of interest in the Hotel project from the proposed franchisor; and

4. A description of the hotel management company's experience (or the experience of

other hotel management professionals on the team) with the proposed franchise affiliation (if applicable).

C. Design Team

1. Provide a description of the relevant experience of the design team in designing projects of similar size, scope and complexity, including the dollar value of each project identified. The design team must have experience in the design of adaptive reuse projects for historic buildings. Highlight in the description of experience any projects involving historic buildings and demonstrate relevant experience with any of the following areas:

    a. Mid-century Modern landmarks

    b. The design of significant historic interior and exterior restoration

    c. Cast-in-place construction

    d. Egress and life safety design within historic buildings

    e. Integration of engineering systems within history buildings

    f. Specification of long-term maintenance programs for landmark buildings

    g. Working with the New York State (or other state) Historic Preservation Office and/or the Advisory Council on Historic Preservation

2. Provide a resume for the design team's project director. Note that the proposed architect or engineer of record must be licensed in New York State.

D. Historic Restoration Consultant(s)

Demonstrate the relevant experience (and specific role), and qualifications of the historic restoration consultant(s) in projects of similar size, scope and complexity, including the dollar value of each project, where applicable. Include a resume of the intended lead consultant for this project. Highlight projects within the last ten (10) years, demonstrating experience with the following:

1. The design and construction of restoration and/or modifications to landmarked buildings, and knowledge of state and federal guidelines for renovating historic buildings;

2. Advising on the long-term maintenance of a landmark building, describing the type of facility, location, and length/nature of contribution;

3. Experience working with the New York (or other) State Historic Preservation Office and/or the Advisory Council on Historic Preservation; and

4. Relevant experience with any of the following areas:

    a. Mid-century Modern landmarks;

    b. Consulting, as part of a design team, on the appropriateness of design interventions, and

    c. Consulting on the integration of exterior improvements which may affect the

historic aspects of a structure, including lighting, signage, rooftop mechanical equipment, skylights, and appurtenances.

E. Construction Firm(s)

Provide the following:

1. A description of the relevant experience and qualifications of the construction firm(s) in building and renovating hotel projects of similar size, scope and complexity, including a statement of the dollar value of such projects, where applicable; and

2. The construction manager's resume, demonstrating qualifications for and experience with building and renovating hotel projects of similar size, scope and complexity, including the dollar value of such projects and references for any experience with historically significant buildings. Please also highlight any specific hotel projects completed in the last 5 years valued at or above $30 million.

F. Engineering Firm(s)

Provide the identity of the Mechanical, Structural, and Geotechnical (if applicable) Engineering firms and the intended leads on this project. Include a description of their relevant experience and qualifications in projects of similar size, scope and complexity.

G. Design and Construction:

The proposed design concept must be detailed in a design narrative, as well as two-dimensional plans and three-dimensional (3-D) renderings, showing the relationship of new construction to the Flight Center, surrounding airport structures, and roadways. It should be appropriate in its scale, location and materials to the historic building. While it is not necessary to replicate the historic building, design interventions must be compatible with the Flight Center. In addition, the design should retain the key character defining features of the Flight Center, including the restored central lobby, pedestrian bridges and the principal building façades.

1. Submit a narrative of the design concept, and describe the technical approach to the development program, engineering design of the structure, and foundation for new construction, enabling the Authority to determine the overall extent to which the proposed project meets the objectives set forth in this RFP. This must include a detailed description of the following:

   a. the type of hotel (limited-, select-, or full-service), proposed chain affiliation (if any), the proposed total square footage, the number and type of hotel rooms, square footage of facilities, proposed amenities and plans for back-of-the-house space;

   b. the proposed improvements to, and use of, the interior historic portions to be restored, modifications, if any, to the restored portions of the building, the treatment of the existing exterior of the building, and any proposed new construction both inside and outside of the existing structure;

Note: *Using public spaces or dedicated meeting rooms for banquets or events is permitted in the Flight Center, however code and sensitivity to passenger flow through the main space as well as maintaining the historic aspects of the space will be taken into consideration when evaluating the proposer's concept.*

c. the technical approach to restoration of the TWA Flight Center with regard to treatment, materials and workmanship;

d. any proposed new space, or any changes to the elevations, massing, exterior materials, streetscape and landscape, identifying changes to the historic scene or setting of the landmark structure. In addition, describe any additions or removal of signage, lighting, entrances, loading and service docks, skylights and other roof modifications.

e. how the proposed project is consistent with the MOA, including compliance with the Secretary of the Interior's Standards for the Treatment of Historic Properties.

f. sustainable building practices that shall be incorporated into the project, including the development, construction and operation of the building.

g. building systems upgrades or other changes required to the existing structure, including mechanical, electrical, life safety, and other systems;

h. a projection of the number of on-site and off-site parking spaces required to accommodate guests and employees for the proposed Hotel operation. Any hotel parking at airport lots (other than on the Flight Center site) would entail a separate fee to the Port Authority to be negotiated.

4. Submit visual representations of the design concept, including the following:

a. A set of conceptual floor plans, sections and exterior elevations to illustrate the proposed design. Provide these on 11" by 17" paper and in a Computer-aided design (AutoCAD) file in Design Web Format (DWF) format.

b. At a minimum, a set of high quality, 3-D color renderings of the proposed design, including the required exterior and interior locations indicated in Attachment A-1, Section II, item 4. The 3-D illustrations should identify the Flight Center in its setting and context, including street level and aerial views of the structure, exterior materials, streetscape and landscape plans, entry features and signage. Provide these on 11" by 17" paper and in a Computer-aided design (AutoCAD) file in Design Web Format (DWF) format.

c. Additional renderings should include typical guest room floor plans, interior public space layouts and site plans, showing interfaces with other existing or planned facilities.

Note: The Authority may require a 3-D animation "flyover" of the building and interior walkthrough at a future time to address specific landmark concerns.

H. <u>Construction Budget:</u>

Provide a budget indicating a cost estimate of the conceptual design and construction

costs (including breakdown of hard costs, FF&E and soft costs), exclusive of debt service.

I. Project Schedule:

Prepare a project schedule indicating the proposed design, construction and operating sub-tasks, and milestones. Include the following with the project schedule:

1. A description of the phasing of construction. There is a desire to open the Flight Center to the public and it should be indicated when this can happen during or after the construction. Since the construction site is in close proximity to other airport facilities, phasing should account for operational constraints to certain construction activities that may affect vehicular access to those facilities during peak hours.

2. A statement setting forth all construction contingencies and risks, and their potential effect on the timeline.

J. Lease Term and Rentals:

A form of ground lease specific to the Flight Center is attached as Attachment D to the RFP. The Proposer should review and include with its proposal a redlined version showing all proposed changes to the form of ground lease in order to allow the Authority to determine the likelihood of coming to terms with the proposer within a reasonable time frame; this will be part of the evaluation criteria, as noted in Section IV. The Authority has spent a considerable amount of time preparing the form of ground lease specific to the Flight Center. The term of the actual ground lease agreement (Lease) subsequently entered into between the Authority and the selected Developer will be appropriate to permit the acquisition of sufficient financing to support the development proposal approved by the Authority. The Airport, including the Flight Center site, is currently leased by the Authority from the City of New York pursuant to a ground lease that expires in 2050 (City Lease) (Exhibit V, item 4.) The Lease could have a term of up to 75 years, subject to the expiration or earlier termination of the underlying City Lease. However, to assure its continuing ability to lease the Hotel after 2050, the Developer would have to enter into an "Agreement to Enter into Lease" with the City of New York, which would probably involve a "ULURP". The Authority reserves the right to modify or add provisions to Attachment D.

The Authority expects fair market value of the land to be achieved from the present value of proposed rentals, including additional participation in the gross proceeds of refinancings and sales of the project, and sales of direct and indirect equity interests in the Lessee, to provide the Authority with a share of the financial project upside. The estimate of present value to the Authority will consider the level of risk associated with the source of each type of rental payment.

Considering the above, provide a full description of the proposed Lease rental terms, including each of the following items:

1. The proposed initial term and any optional renewal terms of the Lease.

2. A statement as to whether or not the term of the underlying City Lease (expiring in 2050) will be an issue and how it may affect the Proposer's ability to finance the project versus requesting an extension from the City for a total of a 75-year lease term.

3. The timing and amount of all payments to the Authority during the construction

period. Specify whether these are a fixed dollar amount, based on construction progress, or some other calculation.

4. The timing and amount of regular lease payments to the Authority subsequent to the Hotel opening. These payments must include, at minimum, a fixed annual amount with regular escalations to reflect inflation (i.e., MAG).

5. A description of the following additional rental payments which the Authority expects to receive, including participatory rentals to compensate the Authority for increases in value of the property over the term of the Lease:

   a. A statement of annual participation payments over the term of the Lease, preferably based on a percentage of gross revenue, and

   b. A statement of participation in the gross proceeds of refinancing and sales of the Hotel project, and sales of direct and indirect equity interests in the Lessee.

6. Specify any contingencies pertaining to any proposed form of rental payment (e.g., commencement or completion of construction, etc.).

7. The Port Authority is capital constrained, has already invested over $20 million in the Flight Center and is not expecting to invest additional funds. However, if the only means to achieve project feasibility is the infusion of additional capital by the Port Authority, the amount should be detailed in the sources and uses, with a justification of need for the required capital and the impact on the IRR. Describe the terms of the required investment from the Port Authority (grant, loan term and interest rate, etc.)

K. Financial Information and Plan:

1. Complete Attachment C, Development Pro Forma (Pro Forma), as required to enable the Authority to evaluate Proposer cost estimates and returns to the Authority. This information must be prepared in Microsoft Excel format. The model prepared by the Proposer shall be in the format of Attachment C, and shall include all information requested therein. The Proposer is responsible for ensuring the accuracy and correctness of any Pro Forma model, or any other financial information submitted, whether or not it is based on the model included herewith as Attachment C. (The hard copies must be submitted in separate sealed envelopes clearly labeled "DEVELOPMENT PRO FORMA." The working Excel models must be included with the other electronic files on a USB flash drive or compact disc, as noted in Section II.)

   The Pro Forma must include the following information:

   a. A 10-year annual Pro Forma model commencing on the estimated start date of January 1, 2016, which will also be the estimated Lease commencement date. Include a breakdown of all hard and soft costs, the financing costs, as well as the timing and amount of all construction costs, construction loan draw-down schedule, anticipated revenue sources, operating and other expenses, other deductions from revenue, and debt service.

   b. A summary of the estimated operating income and expense assumptions for the

stabilized year in 2014 dollars, as shown in Attachment C. The following shall be clearly indicated in the following: year in which stabilization is anticipated to occur, the assumption for inflation of each line item, and the basis for each assumption using typical industry standards as follows:

i. POR – per occupied room

ii. PAR – per available room

iii. % Room – percent of room revenues

iv. % – percent of departmental revenue

v. % Total – percent of total revenues

vi. Total dollar amount

If some other basis for calculation is used, it should be clearly stated. If the Proposer does not utilize the model provided in Attachment C, any items forecasted on a POR or PAR basis should include the constant dollar and inflated dollar amounts.

c. Detailed assumptions for the estimated present value of all rentals to the Authority, including fixed annual payments, annual participation in gross revenues, and share of proceeds of refinancings and sales (including sales of direct and indirect equity interests in the Lessee). Each type of income stream to the Authority will involve a unique level of risk to the Authority. As such, assign a unique discount rate reflecting the appropriate level of risk associated with that type of payment (e.g., fixed payments, annual participation in gross revenues, share gross proceeds, etc.).

2. Provide a financing plan, enabling the Authority to evaluate the Proposer's financial strength and ability to obtain equity and debt financing for the project. Provide reasonable assurance of the Developer's ability to deliver the proposed Hotel development within the expected timeframe. The selected Developer will have sole responsibility for obtaining all equity and debt necessary for the project. The financing plan must include the following:

a. A description of the intended sources and amount of equity for the proposed project, including a contact person, mailing and email addresses, and phone number for each intended source of equity.

b. A description of the intended sources and amount of debt financing. If available, provide a letter of commitment or interest from all persons or entities providing any debt for the proposed project.

c. A statement disclosing whether or not the Proposer intends to utilize any public development programs, historic property preservation/renovation programs, or federal/state tax benefit programs. If applicable, describe how and the extent to which the Proposer intends to utilize such programs or tax benefits.

d. If the developer requires additional investment by the Port Authority (as described in J. 7), provide the reasons and justification, including use of funds.

Note: If requested the selected Developer must be prepared to provide more detailed information concerning the sources of financing and the certainty of their commitments to the project.

L. Business Opportunities for M/WBE, LBE/LEO and ACDBEs:

Submit participation plans demonstrating a good faith effort to achieve the goals for each effort (M/WBE and ACDBE) described below. Treating each effort separately, provide a plan with the following information:

1. Identification of M/WBEs and ACDBEs: Provide the names and addresses of all M/WBE and ACDBEs with which you intend to collaborate. If none are identified, describe the process for selecting participant firms/individuals in order to achieve the good faith goals as they will be established in the Lease between the Authority and the selected Developer.
2. Level of Participation: Indicate the expected percentage of participation achieved under each plan.
3. Scope of Work: Describe the scope of work to be performed by the M/WBEs and ACDBEs.
4. Previous Participation: Describe, for informational purposes, any previous or current experience with M/WBE and ACDBE participation in executing services similar to this project.
5. Minority-/Women-Owned Business Enterprises (M/WBE) – The Authority has a long-standing practice of making its business opportunities available to M/WBE. In addition, the Authority has taken affirmative steps to encourage such firms to seek business opportunities with the Authority and its tenants and contractors. The selected Developer will make a good faith effort to include 12 percent participation by MBEs and five percent participation by WBEs in all construction, procurement, subcontracting and ancillary service opportunities associated with the leasehold as defined in Schedule E of Attachment D.
6. Airport Concession Disadvantaged Business Enterprise (ACDBE) – In accordance with regulations of the U.S. Department of Transportation 49 Code of Federal Regulations (CFR) Part 23, the Authority implemented a ACDBE program under which qualified firms may have the opportunity to operate an on-airport business. The selected Developer will be subject to the requirements of 49 CFR Part 23 and, to the extent feasible, to the Authority's established ACDBE participation goal of 17 percent for this project, as measured by the total estimated annual gross receipts from concession operations and further defined in Schedule G of Attachment D.

Note: The Authority also requires that the selected Developer make a good faith effort to maximize the participation of Local Business Enterprises (LBE) in the Contract Work on this project, as well as make employment opportunities available to labor talent from the communities surrounding the airport, referred to as Local Employment Opportunity (LEO). For the purposes of this project, the local community is defined as individuals or businesses within the County of Queens,

NY and as defined in Schedule F of Attachment D.

M. Conflict of Interest Disclosure:

Exhibit II, which indicates that if the Proposer or any employee, agent or subcontractor may have, or may give the appearance of, a possible conflict of interest, the Proposer must include in its submission, a statement indicating the nature of the conflict or possible conflict. If applicable, the Proposer must describe measures it will implement to minimize or eliminate a conflict of interest.

N. Certification Statement

Exhibit III, which includes clauses entitled "Certification of No Investigation (Criminal Or Civil Anti-Trust), Indictment, Conviction, Debarment, Suspension, Disqualification and Disclosure Of Other Information" and "Non-Collusive Proposing, and Code of Ethics Certification; Certification of No Solicitation Based on Commission, Percentage, Brokerage, Contingent or Other Fees." By submitting a proposal, the selected Developer will be deemed to have made the certifications contained therein unless a statement is included in its proposal explaining why any such certification(s) cannot be made. Such a submission must be submitted in a separate envelope along with the proposal, clearly marked "CERTIFICATION STATEMENT."

IV. SELECTION PROCESS

The Authority reserves the right to disqualify the Proposer if the Authority, in its sole discretion, determines that any interest disclosed from any source could create, or give the appearance of, a conflict of interest. The Authority's determination regarding any question(s) of conflict of interest will be final.

The Authority will review and evaluate proposals employing the following criteria. After evaluating submittals, the Authority may enter into negotiations with one or more Proposers deemed best suited to meet the project objectives.

Category 1 – Design and Construction

1. quality of the design concept, including its innovation and compatibility with the airport facility and local lodging market
2. technical approach to the restoration aspects of the project and consistency with the setting, historical context and conformance to the requirements of the MOA
3. qualifications and experience of the proposed mechanical, structural, and geotechnical (as applicable) engineering firms on projects of similar size, scope and complexity
4. commitment of the team to achieving the sustainable building goals and the extent to which they will be incorporated into the building recognizing that this is a historic rehabilitation and the greatest opportunity exists in the new hotel portions; and
5. approach to phasing the work and the schedule/timing for completing the improvements.

Category 2 - Developer/Owner

1. overall qualifications and experience of the team including the quality of prior hotels
2. commitment and amount of equity and debt financing.

Category 3 – Ground Lease Terms and Financial Proposal

1. terms of the proposed Lease, including the net present value of the proposed ground rents, any other payments to the Authority and the net impact of any funding requested from the Authority
2. feasibility of achieving projected cash flows as shown in its 10-year Pro Forma, including consideration of the overall project schedule, construction costs, the construction loan schedule, anticipated revenue sources, operating and other expenses, and debt service
3. appropriateness of all costs, including construction, operating and maintenance costs, capital reserves and labor costs (estimated to support the proposed Hotel's competitive position and quality of operations), as well as costs to maintain the restored historic portions of the landmark structure.

Category 4 – Hotel Management

1. technical approach for management, operations and marketing of the proposed Hotel
2. technical approach for the maintenance of the historic portions of the Flight Center

V. ORAL PRESENTATIONS

Proposers may be asked to conduct oral presentations to the selection committee and others, as appropriate**.** Presentations will be limited to one (1) hour and are to include the material contained in your proposal. The presentation will be followed by a question and answer session of approximately 45 minutes. The Proposer's ownership representative, who may be supported by no more than six (6) other senior staff members on this project, will lead the presentation. Provide the name, telephone, fax and e-mail address of the person who should be contacted for presentation scheduling, if applicable, as well as an alternate in the event that person is unavailable.

VI. PRE-PROPOSAL CONFERENCE AND SITE TOUR

A pre-proposal conference and site tour is scheduled at the Flight Center (directions to be provided upon attendance confirmation) on Tuesday, August 19, 2014, at 10:00 am. to discuss the project and tour all portions of the site. Proposers are strongly encouraged to attend the session. Team members capable of assessing site conditions and capital improvements required to complete construction are encouraged to attend.

To attend this site visit, Proposers are required to send a written request via e-mail to Laurie E. Spencer at the following e-mail address: lspencer@panynj.gov to confirm your attendance, including the Proposer's name, name(s) of attendee(s), and contact information of the one person from the Proposer's team to be notified of any changes in

the conference location or restrictions as to the number of attendees.

VII. DOCUMENT REVIEW

The Authority will make related documents available for review by the Proposer. These Documents listed in Exhibit V are considered "Proprietary Information" and shall only be made available to respondents to this RFP that have completed and submitted a copy of the Authority's *Non-Disclosure Agreement*, Exhibit I. The documents will be made available via an electronic portal. To view the documents, send a scanned copy of the signed NDA to Laurie Spencer at lspencer@panynj.gov, along with a completed Electronic Portal Access Form, Exhibit Ia. By its review, the Proposer agrees that it will not use such documents for any purpose other than in response to this RFP and further agrees that it will not disseminate the contents of any documents to a third party. The original, signed NDA must be submitted, in person, or by mail, to The Port Authority of New York and New Jersey, Procurement Department, 2 Montgomery Street, 3rd Floor, Jersey City, NJ 07302, Attention: Laurie E. Spencer. The Port Authority Information Security Handbook referenced in Exhibit I can be found at http://www.panynj.gov/business-opportunities/pdf/Corporate-Information-Security-Handbook.pdf

In addition, for ease of review, the Authority will also make available for viewing in hard copy certain drawings in a "Reading Room" at the Airport. To make arrangements to visit the Reading Room, please contact Laurie Spencer at the email address above. Persons viewing documents in the Reading Room must comply with and sign the Reading Room Instructions attached herewith as Exhibit I-B, in addition to submitting the NDA as described above.

VIII. ADDITIONAL INFORMATION

A. Governmental Assessments

The proposed Hotel is located on land controlled by the Authority and therefore not subject to real property taxes. However, the selected Developer will be required to pay all appropriate governmental assessments, including recordation and transfer taxes, hotel room taxes, excises, license fees, levies, duties, and charges levied against the Hotel or its operation. The foregoing is not meant to be an exhaustive representation, but merely illustrative of the fact that the selected Developer will pay all governmental assessments necessary for it to conduct its business.

B. Performance Bond

The selected Developer must provide the Authority with a performance bond issued by a responsible surety company licensed to do business in the State of New York and satisfactory to the Authority. Such bond must guarantee construction of the leasehold improvements at the site and be in an amount not less than 100 percent of the cost of said improvements.

C. Environmental Remediation

1. The selected Developer will be responsible for the removal or remediation, to the extent required by law, of all hazardous substances including asbestos containing materials (including building basement locations and hazardous substances and asbestos-containing materials found within above and underground utilities disturbed or encountered during construction.) Requirements for removal and remediation will depend on the proposed restoration/construction plans in compliance with Tenant Alteration Application permit and applicable law.

2. The selected Developer, at its sole cost and at the expiration or termination of the Lease, will also be responsible for the remediation of any environmental condition not shown in the March 2010 Environmental Subsurface Baseline Report. (See Attachment D.)

D. Utility Contract and Effective Costs

Energy requirements for JFK are currently met by a 110 MW natural gas-fired cogeneration plant located on-airport, the Kennedy International Airport Cogeneration (KIAC) Plant. The agreements with KIAC's current operator will expire on January 31, 2020. Currently, KIAC is responsible for the operation and maintenance of the Plant, and for supplying all the electricity requirements to the entire Airport as well as the requirements for thermal energy to heat and cool the Airport's Central Terminal Area buildings. The Plant provides the Authority with electricity in the form of sold electricity (the Plant is not directly connected, electrically, to the Airport), and hot and chilled water for the Authority's own consumption and for resale to Airport tenants of the Authority. The Authority currently sub-meters and sub-bills Airport tenants for electricity and thermal energy purchased from the Plant. Electric rates charged to tenants are based on applicable rates that would otherwise be charged by the local regulated utility, Con Edison. Thermal energy rates are based on formulae established in the Authority's contract with the Plant's current operator. The Authority plans to identify an operator/developer to replace or rehabilitate or redesign, as well as operate and maintain the Plant for a new term to start on February 1, 2020 and end on or about January 31, 2040.

	Electricity	**Thermal Heating**	**Thermal Cooling**	**Water**
	$ /kWh	**$ /MMBtu**	**$ /MMBtu**	**$ /Cubic ft.**
January	0.3040	43.8282	112.2184	0.099
February	0.2140	43.5431	111.3594	0.099
March	0.1590	37.7886	121.7205	0.099
April	0.1380	29.3375	113.4400	0.099
May	0.1640	28.3498	113.4677	0.099
June	0.1800	27.7296	112.4476	0.099

Note: energy service rates for January-March 2014 were significantly higher than expected due to the extreme cold weather. The cold weather impacted the natural gas supply and produced challenging electrical system conditions across New York State.

E. Requirements of the States of New York and New Jersey

It is Authority policy that its contractors, vendors and tenants comply with the legal requirements of the States of New York and New Jersey. Proposer's attention is therefore called to New York State's requirements that certain contractors, affiliates, subcontractors and subcontractors' affiliates register with the New York State Department of Taxation and Finance for the purpose of collection and remittance of sales and use taxes. Similarly, New Jersey requires business organizations to obtain appropriate Business Registration Certificates from the Division of Revenue of the State's Department of the Treasury.

Should you have any questions regarding this RFP, please e-mail them to Laurie E. Spencer at lspencer@panynj.gov. All such emails must have **"RFP No. 38826"** in the subject line. All questions should be submitted no later than 4:00 P.M. ten (10) business days prior to the proposal due date. Neither Ms. Spencer nor any other employee of the Authority is authorized to interpret the provisions of this RFP or enclosed documents or give additional information as to its requirements. If interpretation or additional information is required, it will be communicated by written addendum issued by the undersigned and such writing will form a part of this RFP or the enclosed documents, as appropriate.

Proposal preparation costs are not reimbursable by the Authority, and the Authority will have no obligation to any firm except under a duly authorized agreement executed by the Authority.

No rights accrue to any Proposer except under a duly authorized definitive agreement for performance of the specified services.

The Authority reserves the right, in its sole and absolute discretion, to reject any or all proposals, to undertake discussions and modifications with one or more Proposers to waive defects in submissions, and to proceed with that proposal or modified proposal, if any, which in its judgment will, under all the circumstances, best serve the public interest.

Sincerely yours,

Laurie E. Spencer
Manager, Alternative Project Delivery
Procurement

Attachments

ATTACHMENT A

DEVELOPMENT, LEASING, MANAGEMENT AND OPERATION OF A HOTEL INCORPORATING THE TWA FLIGHT CENTER AT JOHN F. KENNEDY INTERNATIONAL AIRPORT (RFP #38826)

BACKGROUND

The Port Authority of New York and New Jersey (the "Port Authority" or "Authority") is an agency of the States of New York and New Jersey, created and existing by virtue of the Compact of April 30, 1921, made by and between the two States, and thereafter consented to by the Congress of the United States. It is charged with providing transportation, terminal and other facilities of trade and commerce within the Port District. The Port District comprises an area of about 1,500 square miles in both States, centering about New York Harbor. The Port District includes the Cities of New York and Yonkers in New York State, and the cities of Newark, Jersey City, Bayonne, Hoboken and Elizabeth in the State of New Jersey, and over 200 other municipalities, including all or part of seventeen counties, in the two States. The Authority manages and/or operates all of the region's major commercial airports (Newark Liberty International, John F. Kennedy International, Teterboro, LaGuardia Stewart International, Atlantic City), marine terminals in both New Jersey and New York (Port Newark and Elizabeth, Howland Hook and Brooklyn Piers), and its interstate tunnels and bridges (the Lincoln and Holland Tunnels; the George Washington, Bayonne, and Goethals Bridges; and the Outerbridge Crossing), which are vital "Gateways to the Nation."

The Airport is located on Jamaica Bay in the Borough of Queens, New York. It is the principal international airport in the New York metropolitan region, providing domestic and international passenger and air cargo services. The airport spans approximately 4,960 acres and includes the following principal facilities: two pairs of parallel runways; a central terminal area with seven passenger terminals, five of which contain Federal Inspection Services facilities for processing international passengers; 123 aircraft contact gates; and AirTrain, a light-rail transit system linking passenger terminals with each other and with public transit lines. For more information about JFK, please visit www.panynj.info.

The legal address of the Flight Center is John F. Kennedy International Airport, Building #60, Jamaica, New York, 11430. A site plan is included in the list of Supplemental Documents (see Section II below).

A. The Site

The 5.8-acre site is located in the eastern portion of the Central Terminal Area of John F. Kennedy International Airport in Jamaica, New York. It is adjacent to Terminal 5 and includes the former Trans World Airways Flight Center and the grounds around it. Airplanes operate at JFK 24 hours a day, 7 days a week, 365 days a year. The site is bounded to the east by Terminal 5 (JetBlue Airways Corporation) and to the west by access roads, the AirTrain Station and the Yellow Parking garage. Utilities are

available at the site, including electricity, gas, telephone, water and sewer service.

As indicated in the Area Map below, access to the site is from southbound Van Wyck Expressway via the ramp to the CTA. Hotel guests may also arrive at the property via the AirTrain system, which provides access to the passenger terminals, Manhattan and other points of interest throughout the area.

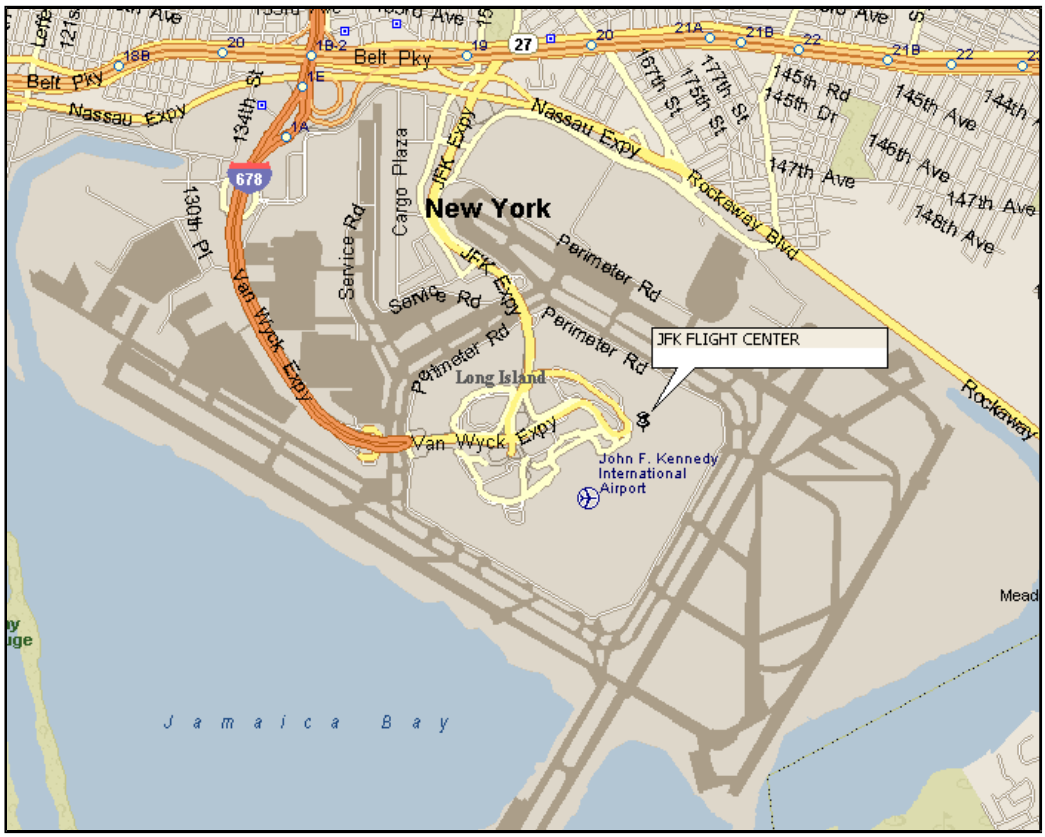
Since 2004, the AirTrain provides complimentary mass-transit access among the car rental area (Federal Circle), the eight passenger terminals and, for a $5 fare, links with the Long Island Rail Road and New York City subway system. Travel time via the AirTrain and these public transit systems to Manhattan is less than one hour.

Parking for hotel guests and employees may be available in the existing parking lots located at the Airport and will be negotiated as part of the business terms of the final lease agreement with the selected Developer. A projection of the Proposer's parking needs is requested as part of this RFP.

Area Map


JFK FLIGHT CENTER
Hackensack
Teaneck
Englewood Cliffs
Garfield
Bogota
Passaic
Leonia
Hasbrouck Heights
Little Ferry
Ridgefield Park
Wood-Ridge
BERGEN
Fort Lee
East Rutherford
Rutherford
Carlstadt
Ridgefield
Fairview
Cliffside Park
Lyndhurst
North Bergen
NEW JERSEY
Guttenberg
West New York
Columbia Park
Union City
Manhattan
Hoboken
HUDSON
Lincroft
Jersey City
Liberty State Park
Liberty Island
New York
Bayonne
Upper New York Bay
Staten Island Ferry
Kill Van Kull
Grasmere Lake
RICHMOND
Staten Island
Lower New York Bay
Brooklyn
KINGS
Prospect Park Lake
Empire Blvd
Eastern Pky
Belt Pky
Floyd Bennett Field
Jamaica Bay
Atlantic Ocean
Surf Ave
Avenue U
Bronx Park
BRONX
Bronx
Evers Airport
Port Washington North
Manorhaven
County Park
Port Washington
Kings Point
Flower Hill
Great Neck
Manhasset
Great Neck Estates
Great Neck Plaza
Lake Success
North New Hyde Park
Floral Park
Elmont
Franklin Square
North Valley Stream
Valley Stream
Hewlett
Woodmere
Cedarhurst
Inwood
Lawrence
Atlantic Beach
Ferry Point Park
Wards Island
Flushing Airport
Socrates Sculpture Park
Queens
NEW YORK
QUEENS
Willow Lake
Newtown Creek
Metropolitan Ave
Grand Central Pky
Jamaica Ave
Long Island
Baisley Pond
South Valley Stream
John F. Kennedy International Airport
Belt Pky
Rockaway Blvd
Atlanta Ave
Linden Blvd
Merrick Blvd
Francis Lewis Blvd
Utopia Pky
Cross Island Pky
Long Island Sound
Shore Rd
Bruckner Blvd
Grand Central Pky
Harlem River
Jerome Park Reservoir
NASSAU

Neighborhood Map



B. History of the Flight Center

The Flight Center was designed for TWA in the late 1950s by Eero Saarinen, one of the preeminent architects of mid-20th century modernism in America. Saarinen's most significant projects include: the Flight Center in New York City, the Gateway Arch in St. Louis, Missouri; Dulles Airport in Chantilly, Virginia; and the CBS Headquarters in New York City. Opening in May 1962, the Flight Center was intended to be an expression of "the excitement of travel." This was one of Saarinen's last and most influential designs.

The building consists of four reinforced-concrete vaults separated by narrow skylights and supported on four reinforced-concrete buttresses, forming a shell 50 feet high and 315 feet long. Green-tinted glazed curtain walls are set within the vaults. The main building is flanked by wing-shaped single-story extensions on either side, which follow the curve of the roadway. Two elevated pedestrian connector bridges (Flight Tubes), constructed of steel framing with a stucco finish and oval in section, extend from the rear of the building and connect to Terminal 5.

The interior of the Flight Center is divided into three levels and contains many curvilinear sculptural elements, which echo the exterior design. The sculptural forms of signs, information boards, railings and counters help to create a unified interior environment.

In 1994, the New York City Landmarks Preservation Commission designated the Flight

Center's terminal building, Flight Tubes and Flight Wing 2 as a historic landmark (Flight Wing 2 was subsequently removed in connection with the approved project for the new Terminal 5.) In 2005, this facility was listed on the National and New York State Registers of Historic Places. Listing on the National Register recognizes the importance of this property to the history of our country. This listing also makes restoration or rehabilitation work eligible for Historic Preservation Tax Incentives.

C. Site Master Plan and Work Completed to Date

The federal environmental approval process for the redevelopment of the Terminal 5/6 site was conducted pursuant to the National Environmental Policy Act of 1970 and the Section 106 Process required by the National Historic Preservation Act. The Authority, the Federal Aviation Administration, the New York State Historic Preservation Office (SHPO), and the Advisory Council on Historic Preservation entered into a Memorandum of Agreement (MOA) in 2004 to establish the guidelines for the rehabilitation, restoration, adaptive reuse, operation and maintenance of the Flight Center as part of the master plan for the redevelopment of the Terminal 5/6 site (Master Plan).

Following review and comment by the Redevelopment Advisory Committee (RAC), the Authority, in consultation with the SHPO, would have to approve any changes to the height or massing in connection with new improvements at the site. The RAC was created to advise on the restoration/rehabilitation and reuse of the Flight Center in order to minimize adverse effects on the historic building. The MOA will govern the restoration and rehabilitation of the historic portions of the existing structure as well as any proposed new construction, which will be reviewed for compatibility with the setting and context of the landmark.

As part of Phase I of the Master Plan, Terminal 5 and a parking garage directly across from the Flight Center were completed in 2008. In addition, the existing Flight Tubes were connected to Terminal 5, allowing a public passageway through the Flight Center. Terminal 5 International Arrivals is currently under construction. The operation of Terminal 5 and the parking garage generate significant passenger traffic and related activities immediately adjacent to the proposed location of the Hotel. Flight Center construction will need to be carefully coordinated with these other uses.

The Authority has spent approximately $20 million performing extensive restoration work on the Flight Center. In summary, the work consisted of replacing soundproofing material on the ceiling of the main hall, restoration of the lower and upper lobby areas of the main hall, replacement of skylights, restoration of the "East Flight Tube" bridge and removal and restoration of portions of the exterior. The work has been completed. Details of the work are described more fully in the contract documents (Exhibit V, item 16). Additional areas require restoration, as shown in Historic and Non-Historic Area Floor Plans and the Restoration and Rehabilitation Guidelines Report, included herewith and made a part hereof.

Phase II of the Master Plan includes redevelopment by JetBlue Airlines of the remaining portions of the Terminal 5/6 site.

D. Public Space Responsibilities

The project must incorporate public access through the Flight Center, which will provide additional food and beverage or other ancillary revenue opportunities for the selected Developer. The following are select requirements as detailed in the MOA:

1. Accommodate a minimum of two (2) electronic ticketing kiosks in an appropriate setting within the Flight Center for use by airline passengers without the need to check baggage. The Authority will require any airline responsible for the ticketing kiosks to install, operate, and maintain the kiosks and monitor their usage.

2. Accommodate an interpretive display on the TWA Terminal and other historic terminals and their relationship to JFK International Airport placed by the Authority in a prominent location at the Flight Center and accessible to the public during the normal operating hours after the hotel development is complete.

3. It is preferred that public access to the Flight Center be available as soon as practical, and the Proposer should identify when that can happen.

E. Zoning and Other Development Restrictions

As a bi-state agency, the Authority is not subject to local laws and regulations. However, pursuant to its lease with the City of New York for the Airport, the Authority has agreed as a matter of policy to conform to the extent practicable to the enactments, ordinances, resolutions and regulations of the City and its various departments, boards and bureaus with regard to the construction and maintenance of all improvements, and to life safety, health and fire protection. Therefore, as a matter of policy, the Authority will require the Developer to conform to New York City zoning and building codes and regulations. The Developer's plans and construction work shall be subject to the review and approval of the Authority, not the NYC Buildings Department.

The historic portions of the Flight Center must remain intact. Restoration/rehabilitation of the Flight Center's historic portions and any reconstruction or proposed addition to the structure is subject to review and approval in accordance with the MOA. Work must be in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties (http://www.nps.gov/hps/tps/standguide). A drawing indicating the landmarked areas of the Site and Flight Center are included herewith and made a part hereof.

1. The proposed project shall comply with the following requirements:

   a. Maintain unobstructed views of the Flight Center from Terminal 5, between the Flight Tubes.

   b. Maintain views of the Flight Center's character defining features from the main public roadways in the CTA, on approach to the Flight Center.

   c. Maintain access from the landside entrance of the Flight Center to Terminal 5 via the upper lobby and connecting tubes.

d. Some of the existing building systems (including, but not limited to, HVAC, power, lighting and communications) were incorporated in the architectural elements within the building. Rehabilitation of those systems must be undertaken with sensitivity toward preserving the historical aspects of the Flight Center.

e. The ground floor of the east wing of the original building, adjacent to the loading dock, housed a kitchen and an employee cafeteria. There is also a west wing baggage area. Although these areas are not considered historic and can be modified all building changes require review by the Redevelopment Advisory Committee--RAC (Historic Preservation).

f. Traffic flow and frontage roads for the Flight Center, including the location of the truck dock may be modified at the Proposer's cost so the direction of traffic can be altered from what currently exists to improve efficiency. Any proposed changes are subject to approval by the Port Authority.

g. Subsurface conditions, including utilities, geotechnical data and groundwater elevations.

2. The site's frontage must be maintained in a presentable condition during construction.

3. The Authority will soon complete the installation of a public safety radio system to ensure radio coverage throughout the site. The system will need to remain in service and any new construction on the site may require additional antennas or supporting equipment.

4. The Proposer's design and construction documents shall also comply with the following guidelines, included herewith and made a part hereof: Port Authority Tenant Construction Review Manual (Exhibit V, item 11); Port Authority Tenant Alteration Procedures and Standards Guide (Exhibit V, item 12), Line of Sight Height Restrictions (Exhibit V, item 2); the Port Authority Building and Sustainability Guidelines (Exhibit V, item13), and Port Authority Customer Service Standards (Exhibit V, item 14).

F. <u>New York City Lodging Market</u>

The property is located in the New York City lodging market, which achieves higher Average Daily Rate (ADR) and guest room revenue per available room (RevPAR) levels than any other major metropolitan market in the United States. While hotels are located throughout all five boroughs of the City, Manhattan by far contains the highest concentration of properties and guest rooms, and is considered the most desirable hotel location in the City, appealing broadly to business travelers, tourists and meeting attendees.

Hotels throughout New York City achieved very strong growth in occupancy, ADR and RevPAR throughout the recent economic recovery. Between 2009 and 2013, RevPAR increased 30% for Manhattan hotels and 50% for JFK area hotels. This tremendous improvement, which occurred despite new hotels opening in both market areas and continued economic uncertainty, reflects the remarkable appeal of New York City to all types of overnight visitors.

The following table presents relevant operating statistics for all Manhattan hotels from January 2008 through December 2013.

Table 1 – Manhattan Hotels 2008 – 2014

Year	Occupancy (%)	ADR ($)	RevPAR ($)	Available Rooms	Room Night Demand	Rooms Revenue ($)
2008	84.3%	306.17	258.09	24,536,071	20,683,639	6,332,613,833
2009	80.2%	236.84	189.89	25,812,724	20,696,281	4,901,677,410
2010	83.5%	256.28	213.88	27,173,960	22,678,024	5,811,967,569
2011	83.5%	270.53	226.02	28,756,522	24,025,049	6,499,563,571
2012	85.9%	277.34	238.36	29,305,136	25,186,078	6,985,067,352
2013	86.6%	286.25	248.02	30,047,455	26,034,770	7,452,462,530
Average Occupancy	84.0%					
CAGR (2008-2013)	0.6%	-1.3%	-0.8%	4.1%	4.7%	3.3%
Year-to-Date	Occupancy (%)	ADR ($)	RevPAR ($)	Available Rooms	Room Night Demand	Rooms Revenue ($)
YTD 6/30/2013	84.4%	264.36	223.06	14,745,980	12,442,430	3,289,254,994
YTD 6/30/2014	84.9%	271.25	230.20	15,569,634	13,213,573	3,584,146,470
% Change	0.6%	2.6%	3.2%	5.6%	6.2%	9.0%

Source: Smith Travel Research

Occupancy levels for Manhattan hotels ranged from a low of 80% in 2009, the first full calendar year after the 2008 financial crisis, to a high of 87% in 2013. Between 2008 and 2013 the average occupancy for these hotels was 84%. Although occupancies did decrease in 2009 due to the recent recession and a 5% increase in available guest rooms, occupancy levels for these properties remained above 80%. Further, occupancies in 2010 and 2001 rebounded sharply to near historic highs despite continued economic difficulties and increases in available guest rooms of 5% and 6%, respectively, during those years.

ADR levels for Manhattan hotels in 2013 were $286, still below the record-high of $306 in 2008. This reflects the period's challenging economy, and an increase of over 22% in available guest room nights in Manhattan. According to STR nearly 15,100 hotel rooms were added to the market between 2008 and 2013, increasing nightly guest room supply by over 5.5 million.

As a result of the 2008 financial crisis, RevPAR for Manhattan hotels decreased 26%, from a record $258 in 2008 to $190 in 2009. However, the strong recovery in occupancy and consistent increases in ADR since 2009 resulted in a 2013 RevPar of $248 for Manhattan hotels, just 4% below their 2008 record.

The above statistics indicate that the Manhattan hotel market, the premier location within the New York City area, began to recover in 2010 despite significant increases in new inventory during 2009, 2010, and 2011. Further, NYC & Company, the City's convention and visitor's bureau, indicates that a record 52.7 million visitors came to the City in 2012. As occupancy and ADR levels continue to increase in Manhattan, other markets in the City, including the JFK International Airport market, will continue to experience strong overflow demand and will likely experience increases to occupancy and ADR.

The underlying strength of the Manhattan hotel market is also evident in room night demand trends. Between 2008 and 2013, room night demand increased at a Compounded Annual Growth Rate (CAGR) of 4.1%. Despite tremendous economic difficulties, room night demand for 2009 increased slightly compared with 2008 levels, and room night demand for 2013 was a record high of over 26 million.

Guest room supply in Manhattan increased every year during this period, from 24.5 million in 2008 to 30.0 million in 2013. However, the 4.1% CAGR in available guest rooms remains below the 4.7% CAGR in room night demand during this period, suggesting an increasingly tight market despite these additions to supply.

New hotels are currently under construction, planned or proposed throughout New York City, especially in Lower Manhattan. However, given pressure from competing land uses, a relative dearth of available hotel sites and the current lending environment, it is anticipated that the Manhattan lodging market will continue to have a favorable supply/demand imbalance for the long term.

Year-to-date statistics through June 30, 2014 for Manhattan hotels indicate continued growth in occupancy, ADR and RevPAR, with demand for hotel rooms continuing to outpace increases in supply. As such, guest room revenue for Manhattan hotels increased 9% for YTD 2014 compared with the same period in 2013, from $3.3 billion to nearly $3.6 billion.

G. JFK Airport Lodging Market – Midscale to Upper Upscale Hotels

To better understand trends in the local lodging market, a Smith Travel Research report for midscale through upper upscale hotels in the vicinity of JFK was obtained. The following table presents statistics for these ten hotels, which together contain 2,219 guest rooms.

Table 2 – Selected JFK Airport/Queens Hotels

Year	Occupancy (%)	ADR ($)	RevPAR ($)	Available Rooms	Room Night Demand	Rooms Revenue ($)
2008	80.0%	146.47	117.18	838,750	671,001	98,283,329
2009	74.3%	126.62	94.05	790,739	587,366	74,370,533
2010	84.1%	134.48	113.09	672,744	565,715	76,077,714
2011	79.0%	138.40	109.37	639,525	505,385	69,947,511
2012	79.5%	155.68	123.79	678,205	539,281	83,957,150
2013	87.5%	159.81	139.81	689,120	602,885	96,345,682
Average Occupancy	80.7%					
CAGR (2008-2013)	1.8%	1.8%	3.6%	-3.9%	-2.1%	-0.4%
Year-to-Date	Occupancy (%)	ADR ($)	RevPAR ($)	Available Rooms	Room Night Demand	Rooms Revenue ($)
YTD 6/30/2013	87.6%	165.46	144.95	341,728	299,375	49,533,642
YTD 6/30/14	78.3%	149.95	117.42	401,608	314,477	47,156,489
% Change	-10.6%	-9.4%	-19.0%	17.5%	5.0%	-4.8%

Source: Smith Travel Research

Sample Includes: Hilton Garden Inn JFK, Sheraton JFK, Radisson JFK, Garden Inn & Suites, Fairfield Inn JFK Holiday Inn Express JFK, Crowne Plaza JFK, Hampton Inn JFK, Courtyard JFK, Hilton JFK, Ramada Plaza JFK (closed)

Although JFK Airport/Queens hotels underperform Manhattan hotels overall, these competitors achieve higher occupancy, ADR, and RevPAR levels than most domestic lodging markets.

Between 2008 and 2013, occupancies in the local lodging market ranged from a low of 74.3% in 2009 to a high of 87.5% in 2013, and averaged 80.7% for this five-year period. The record high occupancy in 2013 resulted from a strong 12% increase in room night demand, reflecting increased travel to the New York City area.

ADRs for the area hotels ranged from a low of nearly $127 in 2009 to a high of nearly $160 in 2013. The $160 ADR was a record high for the competitive market, surpassing the previous high of $156 in 2012.

It should be noted that the ADR for the JFK Airport/Queens hotels in 2013 was $126 below the average for Manhattan hotels in that year. While this discount declined from $160 in 2008, JFK Airport/Queens hotels still reflect a significant savings compared with hotels located elsewhere in New York. With the introduction of the AirTrain service at the end of 2003, the ability of local hotels to compete more effectively with those located throughout the City significantly increased.

The number of occupied room nights in the market decreased between 2008 and 2013 in the local market due to the closing of the Ramada Plaza and the resulting decrease in available supply. As a result, current occupancies have increased to high levels, suggesting the remaining hotels were frequently turning away demand for potential business during the 2009 to 2013 period.

The most recent addition to guest room supply in the market is the 330 room Crowne Plaza JFK, which was previously affiliated with Hilton and Best Western, but had not operated as a hotel since the 1980s. This redeveloped property opened in January of 2014 and increased available rooms by over 18%. As a result, year-to-date occupancy, ADR and RevPAR through June 30, 2014 decreased compared with the prior year, as typically happens when a new hotel opens in a market. However, room night demand did increase 5% during the first six months of 2014, indicating that turnaway demand does exist in the market. Even with the opening of the Crowne Plaza the number of available rooms in the market still remain below 2008 levels.

This fact, together with the continued increases in passenger traffic anticipated at JFK, and the continued growth in NYC visitation, strongly supports the long-term viability of the JFK lodging market. The proposed Hotel, which is located on the airport in the Central Terminal Area, and is therefore the closest lodging facility to the area's primary demand generator, should have a significant competitive advantage over other hotels in the market.

H. New Supply

To the Authority's knowledge, there are no new hotels currently under construction or proposed in the competitive market area.

ATTACHMENT B
REQUEST FOR PROPOSALS FOR THE DEVELOPMENT, LEASING, MANAGEMENT AND OPERATION OF A HOTEL INCORPORATING THE TWA FLIGHT CENTER AT JOHN F. KENNEDY INTERNATIONAL AIRPORT
(RFP #38826)

AGREEMENT ON TERMS OF DISCUSSION

The Port Authority's receipt or discussion of any information (including information contained in any proposal, vendor qualification, ideas, models, drawings, or other material communicated or exhibited by us or on our behalf) shall not impose any obligations whatsoever on the Port Authority or entitle us to any compensation therefor (except to the extent specifically provided in such written agreement, if any, as may be entered into between the Port Authority and us). Any such information given to the Port Authority before, with or after this Agreement on Terms of Discussion ("Agreement"), either orally or in writing, is not given in confidence. Such information may be used, or disclosed to others, for any purpose at any time without obligation or compensation and without liability of any kind whatsoever. Any statement which is inconsistent with this Agreement, whether made as part of or in connection with this Agreement, shall be void and of no effect. This Agreement is not intended, however, to grant to the Port Authority rights to any matter, which is the subject of valid existing or potential letters patent. The foregoing applies to any information, whether or not given at the invitation of the Authority.

Notwithstanding the above, and without assuming any legal obligation, the Port Authority will employ reasonable efforts, subject to the provisions of the Port Authority's Freedom of Information Policy and Procedure adopted by the Port Authority's Board of Commissioners on November 20, 2008, which may be found on the Port Authority website at: *http://www.panynj.gov/corporate-information/freedom-of-information.cfm*, not to disclose to any competitor of the undersigned, information submitted which are trade secrets or is maintained for the regulation or supervision of commercial enterprise which, if disclosed, would cause substantial injury to the competitive position of the enterprise, and which information is identified by the Proposer as proprietary, which may be disclosed by the undersigned to the Port Authority as part of or in connection with the submission of a proposal.

_____
(Company)

_____
(Signature)

_____
(Title)

_____
(Date)

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EXHIBIT IA

JFK FLIGHT CENTER RFP 38826
ELECTRONIC PORTAL ACCESS FORM

THE PORT AUTHORITY
OF NY & NJ

Section A USER INFORMATION (All fields must be filled in)		
Last Name:	First Name:	Middle Initial:
Company Title:	Organization:	Date of Birth (MM/DD):
Street:		
City:	State/Country:	Zip:
Direct Phone Number:	Corporate Phone Number:	
Non-Disclosure Agreement: Y/N	Email:	

Section B AUTHORIZATIONS	
User Name:	User Signature:

EXHIBIT I B

READING ROOM INSTRUCTIONS

REQUEST FOR PROPOSALS FOR PERFORMANCE OF EXPERT SERVICES AS REQUIRED TO DEVELOP, LEASE, OPERATE AND MANAGE A HOTEL, INCORPORATING THE TWA FLIGHT CENTER AT JOHN F. KENNEDY INTERNATIONAL AIRPORT (RFP# 38826)

To all Proposers:

Welcome to the Reading Room.

The documents provided in this Reading Room have been made available for your examination. The Port Authority makes no representation or guarantee, and shall not be responsible for their accuracy, completeness or pertinence, and, in addition, shall not be responsible for the conclusions drawn therefrom. These documents are made available merely for the purpose of making available such information as is in the possession of the Port Authority and which it is able to make available, whether or not such information may be accurate, complete or pertinent or of any value to prospective Proposers.

Please take a moment to read and become familiar with the guidelines that are to be followed while using the Reading Room.

1. Documents provided cannot be removed from the Reading Room.

2. When handling the documents, take the following precautions:

- Do not make any marks on the pages.
- Do not spindle, fold or mutilate any pages.
- Do not trace, alter, tear or bend or handle the pages in such a way as to cause damage to any pages.
- Do not tear out any pages.
- Do not refold pages in a new or different way.
- Use only Post-It notes or slips of paper for marking your place. Remove all page markers before leaving the Reading Room.

3. Reasonable duplication of documents by camera, scanner, photocopier or other means is allowed.

4. Laptop or other device for taking notes is permitted, but the Proposers must supply their own electrical (110v-120v) connections.

5. The Port Authority shall not be held responsible for the loss, damage or theft of any Proposer's electronic equipment or personal items brought into the Reading Room.

6. Access to the documents is by appointment only. If you require further examination of the documents provided, kindly schedule another appointment by contacting Laurie Spencer during the hours of 9:00 AM through 3:00 PM, Monday through Friday at 201-395-3444.

****

If you have read and accept the guidelines, please fill out the information requested below. Failure to sign this statement and agree to all the above conditions shall preclude you from having access to the available documents.

Name: _____

Title: _____

Company: _____

Address: _____

Phone/email: _____

Date and Time: _____

EXHIBIT II

CONFLICT OF INTEREST DISCLOSURE STATEMENT (RFP #38826)

Name of Proposer: _____ (the "**Proposer**")

Reference is made to the Request for Proposals for the TWA Flight Center (RFP No.) (the "**RFP**") issued by The Port Authority of New York and New Jersey (the "**Port Authority**"). All capitalized terms used but not defined herein shall have the meanings set forth in the RFP (the "**ITP**").

Proposer's attention is directed to Section 1.7.2 (*Organizational Conflicts of Interest*) of the ITP regarding organizational conflicts of interest and the restrictions applicable to such conflicts. Proposers are advised that certain firms will not be allowed to participate on any Proposer's team for the Project because of their work with the Port Authority in connection with the procurement of the Project or the Supporting Projects.

1. Required Disclosure of Conflicts

In the space provided below, and on supplemental sheets as necessary, identify all relevant facts relating to past, present, or planned interest(s) of the Proposer's team (including the Proposer, and in the case of a joint Proposal each party thereto, proposed subcontractors, and their respective chief executives, directors, and lead personnel for the Project which may result, or could be viewed as, an organizational conflict of interest in connection with the RFP. Proposer should disclose (a) any current contractual relationships with the Port Authority, (b) any past, present, or planned contractual or employment relationships with any officer or employee of the Port Authority, and (c) any other circumstances that might be considered to create a financial interest in the contract by the Port Authority member, officer or employee if the Proposer is selected.. The Proposer should also disclose matters such as ownership of 10% or more of the stock of, or having directors in common with, any of the individuals or entities involved in preparing the RFP. The Proposer should also disclose contractual relationships (*i.e.*, joint ventures) with any of the individuals or entities involved in preparing the RFP, as well as relationships wherein such individual or entity is a contractor or consultant (or subcontractor or subconsultant) to the Proposer or a member of the Proposer's team. The foregoing is provided by way of example, and shall not constitute a limitation on the disclosure obligations.

_____

_____

_____

_____

2. Explanation

In the space provided below, and on supplemental sheets as necessary, identify steps the Proposer or other entities have taken or will take to avoid, neutralize, or mitigate any organizational conflicts of interest described herein.

_____
_____
_____

3. Certification

On behalf of the Proposer, the undersigned hereby certifies on and as of this _____ day of _____, 201[_], to the best of its knowledge, no interest exists that is required to be disclosed in this Conflict of Interest Disclosure Statement, other than as disclosed above.

	[ENTITY NAME]
	By: _____
	Name: _____
	Title: _____

EXHIBIT III

CERTIFICATION OF NO INVESTIGATION (CRIMINAL OR CIVIL ANTI-TRUST), INDICTMENT, CONVICTION, SUSPENSION, DEBARMENT, DISQUALIFICATION, PREQUALIFICATION DENIAL OR TERMINATION; BACKGROUND QUALIFICATIONS QUESTIONNAIRE, AUDIT, INTEGRITY MONITOR (RFP #38826)

By submitting its Proposal, each of the Proposer, and any person signing on behalf of the Proposer, certifies, and in the case of a joint Proposal each party thereto certifies as to its own organization, that it, and each parent and/or affiliate of each of them, has not: (a) been indicted or convicted in any jurisdiction; (b) been suspended, debarred, found not responsible or otherwise disqualified from entering into contracts with any governmental agency or been denied a government contract for failure to meet prequalification standards; (c) had a contract terminated by any governmental agency for breach of contract or for any cause related directly or indirectly to an indictment or conviction; (d) changed its name and/or Employer Identification Number (taxpayer identification number) following its having been indicted, convicted, suspended, debarred or otherwise disqualified, or had a contract terminated as more fully provided in (a), (b) and (c) above; (e) ever used a name, trade name or abbreviated name, or an Employer Identification Number different from those inserted in the Proposal; (f) been denied a contract by any governmental agency for failure to provide the required security, including bid, payment or performance bonds or any alternative security deemed acceptable by the agency letting the contract; (g) failed to file any required tax returns or failed to pay any applicable federal, state or local taxes; (h) had a lien imposed upon its property based on taxes owed and fines and penalties assessed by any agency of the federal, state or local government; (i) been, and is not currently, the subject of a criminal investigation by any federal, state or local prosecuting or investigative agency and/or a civil anti-trust investigation by any federal, state or local prosecuting or investigative agency, including an inspector general of a governmental agency or public authority; and (j) had any sanctions imposed as a result of a judicial or administrative proceeding with respect to any professional license held or with respect to any violation of a federal, state or local environmental law, rule or regulation.

The foregoing certification as to (a) through (j) above shall be deemed to have been made by the Proposer, as follows: if any of them is a corporation, such certification shall be deemed to have been made not only with respect to such Person itself, but also with respect to each director and officer, as well as, to the best of the certifier's knowledge and belief, each stockholder with an ownership interest in excess of 10%; if any of them is a partnership, such certification shall be deemed to have been made not only with respect to such Person itself, but also with respect to each partner. Moreover, the foregoing certification, if made by a corporation, shall be deemed to have been authorized by the Board of Directors of such corporation, and such authorization shall be deemed to include the signing and submission of the bid and the inclusion therein of such certification as the act and deed of the corporation.

In any case where the Proposer cannot make the foregoing certification, such Person shall so state and shall furnish with the signed bid a signed statement which sets forth in detail the

reasons therefor. If such Person is uncertain as to whether it can make the foregoing certification, it shall so indicate in a signed statement furnished with its Proposal, setting forth an explanation for its uncertainty.

Notwithstanding that the certification may be an accurate representation of the Proposer's status with respect to the enumerated circumstances provided for in the first paragraph as requiring disclosure at the time that the Proposal is submitted, the Proposer agrees to immediately notify the Port Authority in writing of any change in circumstances during the period of irrevocability, or any extension thereof.

The foregoing certification or signed statement shall be deemed to have been made by each of the Proposer with full knowledge that it would become a part of the records of the Port Authority and that the Port Authority will rely on its truth and accuracy in selecting the Proposer. In the event that the Port Authority determines at any time prior or subsequent to award that the Proposer has falsely certified as to any material item in the foregoing certification; willfully or fraudulently submitted any signed statement pursuant to this clause which is false in any material respect; or has not completely and accurately represented its status with respect to the circumstances provided for in this clause as requiring disclosure, the Port Authority may determine that the Proposer is not a responsible proposer with respect to its Proposal for this RFP or with respect to future proposals and may, in addition to exercising any other rights or remedies available to it, exercise any of the rights or remedies set forth in the Lease. In addition, the Proposer is advised that knowingly providing a false certification or statement pursuant hereto may be the basis for prosecution for offering a false instrument for filing (*see e.g.*, New York Penal Law, Section 175.30 et seq.). The Proposer is also advised that the inability to make such certification will not in and of itself disqualify a Proposer, and that in each instance the Port Authority will evaluate the reasons therefor provided by the Proposer.

Background Qualifications Questionnaire; Audit; Integrity Monitor

If selected:

(i) The Proposer (or the Lessee, as applicable) shall be required to comply with, and shall require that its construction subcontractors and subconsultants, comply with, the provisions of the OIG Background Qualifications Questionnaire Package ("**BQQ Package**") available at http://www.panynj.gov/inspector-general/inspector-general-programs.html. The Proposer (or the Lessee, as applicable) shall obtain from each construction subcontractor and subconsultant the necessary certifications and disclosure forms.

(ii) Prospective subcontractors and subconsultants may be required to execute an additional Contractor Certification. The Proposer (or the Lessee, as applicable), or its prospective subcontractors and subconsultants may be required to enter into a Monitoring Agreement under which it will be required to take certain specific actions, including compensating an Integrity Monitor to be selected by the Port Authority. Said Integrity Monitor shall be charged with, among other things, auditing the actions of the Proposer (or the Lessee, as applicable), the subcontractors and/or subconsultants to determine

whether its business practices and relationships indicate a level of integrity sufficient to permit it to continue involvement with the Project.

(iii) Notwithstanding anything to the contrary, the Port Authority, including its Inspector General, Audit Department and Integrity Monitor, each shall have the right to audit all of the records of the Proposer (or the Lessee, as applicable) with respect to the Work and the Project, including, without limitation, records pertaining to any compensation paid, payable, or to be paid under the Lease. The Proposer (or the Lessee, as applicable), shall not be entitled to any reimbursement or other compensation for costs associated with such audit, investigation, or certification. The Proposer (or the Lessee, as applicable) agrees to pay for the cost of any audit or investigation conducted by, or on behalf of the Port Authority, in which any criminal activity, ethics violations, or professional misconduct by the Proposer (or the Lessee, as applicable) or any of its employees are discovered. The Proposer (or the Lessee, as applicable) further agrees that should it fail or refuse to pay for any such audit or investigation, the Port Authority is authorized to deduct from any sum owing the Proposer (or the Lessee, as applicable) an amount equal to the cost of such audit and the damages resulting therefrom. The determination of the value of any such costs and decision to charge for or withhold any such payments are at the sole discretion of the Port Authority (including its Inspector General). This paragraph must be included in any agreement the Proposer (or the Lessee, as applicable) enters into with any contractor or any other entity at any tier with respect to the Work or the Project.

(iv) The Proposer (or the Lessee, as applicable) and any construction subcontractors and subconsultants, shall cooperate fully with the Port Authority's Inspector General. In addition, the Proposer (or the Lessee, as applicable), and all construction subcontractors and subconsultants, shall cooperate fully with its Integrity Monitor. Such cooperation will include, but is not limited to, providing complete access to all personnel and records in any way related to the work performed in connection with the Project. A material failure to cooperate may result in a default and/or removal of the Proposer (or the Lessee, as applicable) subcontractor or subconsultant. This paragraph must be included in any agreement the Proposer (or the Lessee, as applicable) enters into with any contractor or any other entity at any tier with respect to the Work or the Project.

As used in this Exhibit III, the following terms shall mean:

Affiliate - An entity in which the parent of the Proposer owns more than 50% of the voting stock or has the power to direct or cause the direction of the management and policies of such entity by contract or otherwise, or an entity in which a group of principal owners which owns more than 50% of the Proposer also owns more than 50% of the voting stock or has the power to direct or cause the direction of the management and policies of such entity by contract or otherwise.

Agency or Governmental Agency - Any federal, state, city or other local agency, including departments, offices, quasi-public agencies, public authorities and corporations, boards of education and higher education, public development corporations, local development corporations and others.

Employer Identification Number - The tax identification number assigned to firms by the Federal government for tax purposes.

Investigation - Any inquiries made by any federal, state or local criminal prosecuting or investigative agency, including an inspector general of a governmental agency or public authority, and any inquiries concerning civil anti-trust investigations made by any federal, state or local governmental agency. Except for inquiries concerning civil anti-trust investigations, the term does not include inquiries made by any civil government agency concerning compliance with any regulation, the nature of which does not carry criminal penalties, nor does it include any background investigations for employment, or federal, state, and local inquiries into tax returns.

Officer - Any individual who serves as chief executive officer, chief financial officer, or chief operating officer of the Proposer by whatever titles known.

Parent - An individual, partnership, joint venture or corporation which owns more than 50% of the voting stock of the Proposer.

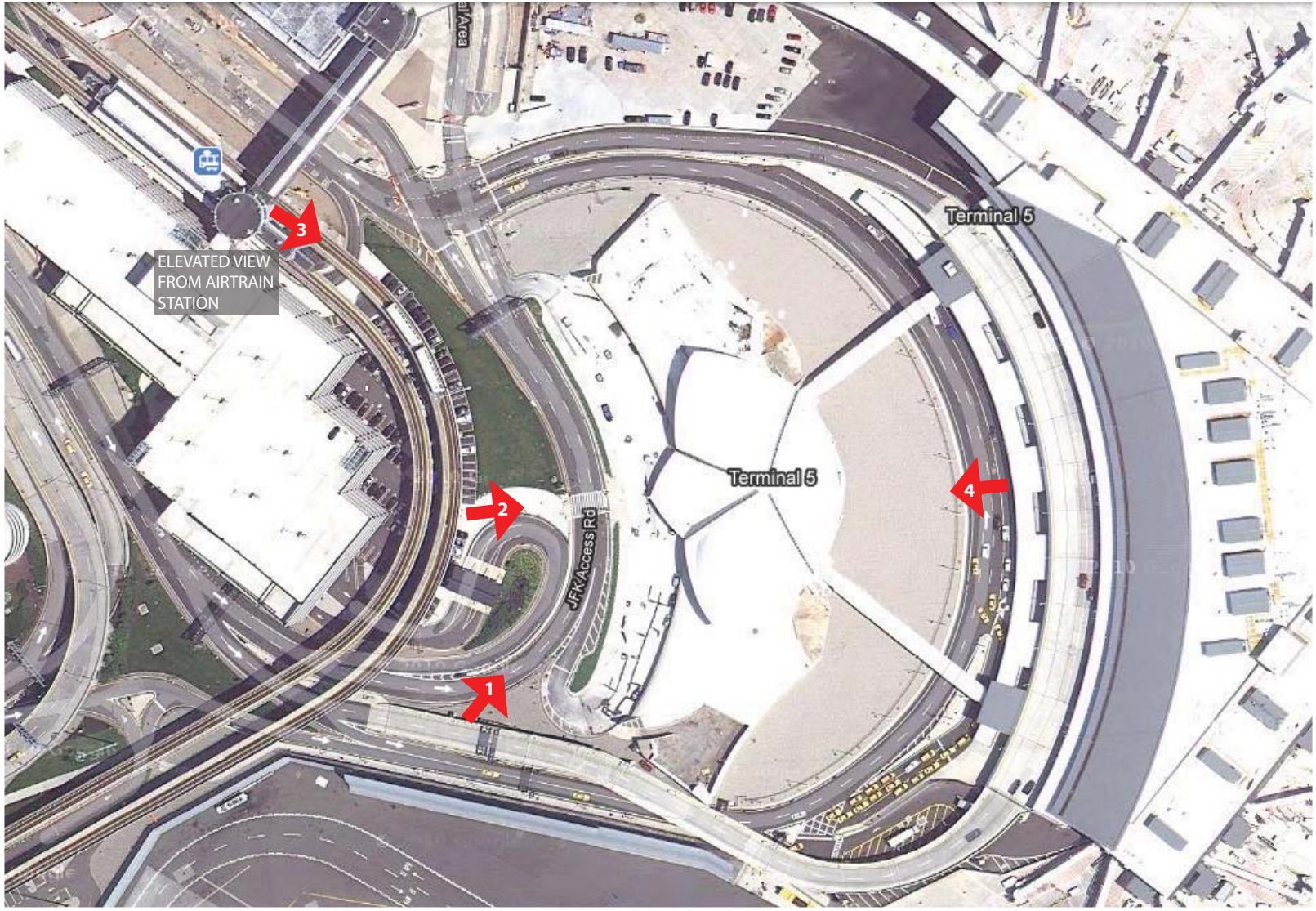
EXHIBIT V

The available documents are as follows:

1. Site Plan
2. Line of Sight Height Restrictions
3. Historic and Non-Historic Area Floor Plans
4. Underlying City Lease between the Port Authority and the City of New York
5. Memorandum of Agreement between the Port Authority, the Federal Aviation Administration, New York State Historic Preservation Office and the Advisory Council on Historic Preservation.
6. Subsurface Environmental Baseline Report - March 2010
7. Electrical System – Stage I Report - March 2009
8. Underground Utility Systems Drawings
9. Reference Drawings – TWA terminal Architectural, Structural, Mechanical, Electrical and Plumbing (RD-1 – RD-34)
10. Restoration and Rehabilitation Guideline Report and drawings – TWA Flight Center - 2006 (2 volumes: 8 ½ x 11 and 11 x 17)
11. Port Authority Tenant Construction Review Manual
12. Port Authority Tenant Alteration procedures and Standards Guide (Aviation Department)
13. Port Authority Building and Sustainability Requirements
14. Port Authority Airport Customer Service Standards
15. Bldg. 60 Adaptive Reuse – Phase I, Curtain Wall and Skylight Repairs Stage I Report Oct. 2009
16. Restoration Contract Drawings and Specifications – JFK-1008, JFK-1009, JFK1015
17. Prioritization Asbestos Assessment Study – Hall Kimbrell – 1989
18. JFK Building Condition Survey – Terminal 5 (TWA) – 2000
19. Terminal 5/6 Redevelopment Project – Environmental Assessment & DOT Section 4(f) Evaluation (EA) – (Volumes 1 and 2) – 2004
20. Terminal 5/6 Redevelopment Project – Environmental Determination – Finding of No Significant Impact (FONSI) and Record of Decision (ROD) – February 2005

The following document will only be available for review at the Airport Reading Room.

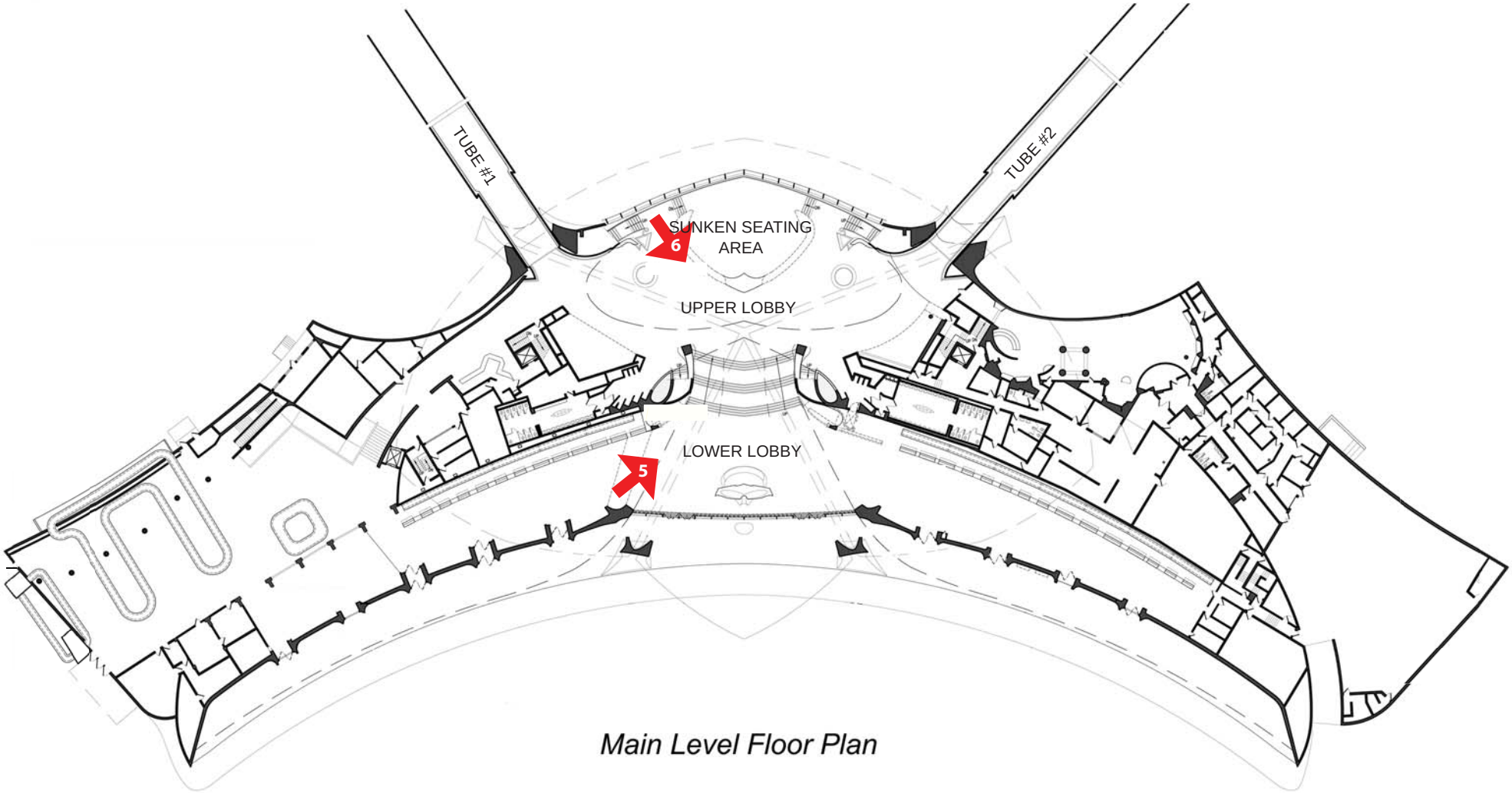
21. Tenant Alteration Applications for Terminal 5, Including the Vicinity of building 60 – Site Preparation (April 2009) and Civil Landside (May 2009)



EXTERIOR RENDERING VIEWPOINT

N

JFK AIRPORT - TWA FLIGHT CENTER

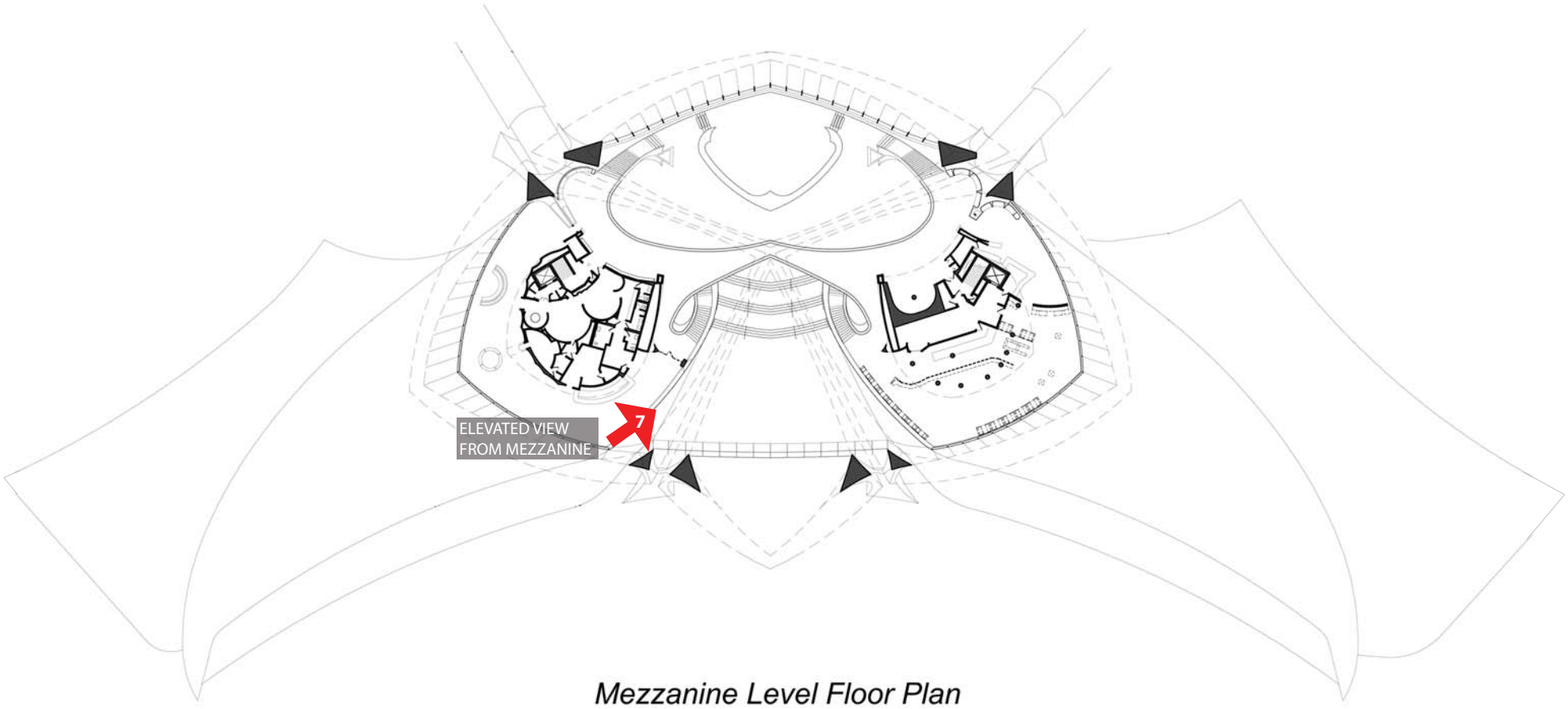


Main Level Floor Plan

INTERIOR RENDERING VIEWPOINT

N

JFK AIRPORT - TWA FLIGHT CENTER



Mezzanine Level Floor Plan

INTERIOR RENDERING VIEWPOINT

←N

JFK AIRPORT - TWA FLIGHT CENTER



View #1



View #2



View #3



View #4



View #5



View #6



View #7

Appendix B: 2004 Memorandum of Agreement

MEMORANDUM OF AGREEMENT
AMONG
THE PORT AUTHORITY OF NEW YORK & NEW JERSEY,
THE NEW YORK STATE HISTORIC PRESERVATION OFFICE,
THE FEDERAL AVIATION ADMINISTRATION, AND
THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
FOR THE REHABILITATION, RESTORATION, AND
ADAPTIVE REUSE OF TWA TERMINAL 5 AT
JOHN F. KENNEDY INTERNATIONAL AIRPORT
JAMAICA, NEW YORK

WHEREAS, the proposed redevelopment of the TWA Terminal site at John F. Kennedy International Airport (JFK), as part of the proposed Terminal 5/6 Redevelopment Project, has prompted the Port Authority of New York & New Jersey (Port Authority), as operator of JFK, to request the Federal Aviation Administration (FAA) to consider approving a change to the airport layout plan (ALP); and

WHEREAS, the TWA Terminal site includes the existing TWA Main Terminal Building, the Connecting Flight Tube to the present Flight Wing 1 ("West Tube"), the Connecting Flight Tube to the present Flight Wing 2 ("East Tube"), and "Flight Wings 1 and 2," and

WHEREAS, the existing TWA Main Terminal Building, the East and West Tubes, and Flight Wing 2 have been determined to be eligible for listing on the National and State Registers of Historic Places and

WHEREAS, the existing TWA Terminal was designed in the late 1950's and opened in 1962, and has been determined through an exploration of feasible and prudent alternatives to be inadequate in function and scale for contemporary airport terminal use at JFK; and

WHEREAS, the FAA notified the Advisory Council on Historic Preservation (ACHP) that the proposed redevelopment will have an Adverse Effect on the National and State Register-eligible TWA Terminal, and

WHEREAS, the FAA, the New York State Historic Preservation Office (SHPO), the Advisory Council on Historic Preservation (ACHP) and the Port Authority, as an invited signatory, have consulted pursuant to 36 C.F.R. Part 800, regulations implementing Section 106 of the National Historic Preservation Act, as amended (16 U.S.C. 470f); and

WHEREAS, The National Trust for Historic Preservation, The Municipal Art Society of New York, the New York City Partnership, Documentation and Conservation of Buildings, Sites and Neighborhoods of the Modern Movement (DOCOMOMO), the Finnish Consulate General, New York Landmarks Conservancy, Jet Blue Airways, the New York Building Congress, and John Cullinane & Associates – as interested parties, have requested and been invited by the FAA to be consulting parties and to participate in the Section 106 process as described at 36 C.F.R. Part 800, and have been invited to concur in this Memorandum of Agreement (MOA), and

WHEREAS, a new terminal will be constructed and the historic TWA Terminal and the East Tube will be restored/rehabilitated and adaptively reused as these projects are reflected herein and described in the "Revised Concept Master Plan" - consisting of the initial Concept Master Plan of July, 2000, as amended as of February 2001, as described in the October 29, 2001 PowerPoint Presentation "JFK Sites 5/6 Redevelopment Including the TWA Landmark" by Robert I. Davidson, FAIA, and as revised on October 10, 2003, as a result of additional consultation with the consulting parties. (See Attachment A – description of project, Attachment B – drawing of Revised Concept Master Plan, and Attachment C - October 10, 2003 Report to FAA on Consultation).

NOW THEREFORE, the FAA, the SHPO, the ACHP, and the Port Authority agree that the project to redevelop the Terminals 5/6 site at JFK shall be implemented in accordance with the following Stipulations in order to take into account the effect of the undertaking on the TWA Terminal site:

STIPULATIONS

If the FAA approves the undertaking, it will ensure that the following measures are carried out:

Planning

1. In December 2001 and January 2002, the Port Authority advertised in 19 local, national, and international publications a Solicitation of Interest (SOI) to identify entities with an interest in undertaking the restoration/rehabilitation and adaptive reuse of the TWA Terminal. As a result, the Port Authority sent a SOI package to 104 entities that responded to the advertisement. In addition, a SOI package was provided to each of the signatories to this MOA and the consulting parties. The Port Authority received 41 expressions of interest, and those entities, and any other interested party, will receive a RFP for the restoration/rehabilitation and adaptive reuse of the TWA Terminal. The Port Authority will seek, through a Request For Proposals (RFP) process, to execute an agreement with an adaptive reuse developer providing for the appropriate design, construction, restoration, rehabilitation, operation and maintenance of the TWA Main Terminal Building and the Connecting Flight Tubes. The Port Authority will use its best efforts to issue the RFP as soon as possible following receipt of FAA approval for the Terminal 5/6 Redevelopment Project and expects to request that proposals be submitted to it no later than four months after issuance. The Port Authority will require that any adaptive reuse developer selected as a result of the RFP or any other process, must agree to adhere to the terms and conditions in this Memorandum of Agreement. The Port Authority shall give each consulting party the opportunity to comment on the Draft RFP documents prior to issuance in order to receive their input on design and preservation issues in those documents, which are within the scope of this MOA. The Port Authority shall also give the consulting parties the opportunity to comment on the proposals received in response to the RFP. The comments of the consulting parties shall be provided to the Selection Committee for their consideration during the selection process.

2. In accordance with the Port Authority's October 10, 2003 report to the FAA on the consultation process, the adaptive reuse will accommodate the provision of, at minimum, two (2) electronic ticketing kiosks in an appropriate setting within the TWA Main Terminal for use by airline passengers with carry-on luggage only. The Port Authority will require that any airline

responsible for the ticketing kiosks will install, operate and maintain the kiosks and monitor their usage.

3. In order to seek input from interested parties, on the implementation of the Revised Concept Master Plan for the Terminal 5/6 site at JFK, in accordance with the Stipulations in this MOA, including the restoration, rehabilitation and reuse of the TWA Terminal Building and efforts to minimize any adverse effects of the site redevelopment on the TWA Terminal Building, a Redevelopment Advisory Committee (RAC) will be formed and will operate in accordance with the Guidelines in Attachment D to this MOA. The RAC will consist of the consulting parties that express an interest in participating, the SHPO and Port Authority.

4. In order to avoid, minimize or mitigate any adverse effect of the new terminal in each development phase on the historic building, the siting and design of a new terminal on the airside of the historic building shall provide an appropriate setting for the TWA Terminal Building. The goal will be to retain the individual identity of the historic building, separate from the new terminal. The new terminal will include improved public access to the TWA Main Terminal through the Connecting Flight Tubes, and will be separated from the TWA Main Terminal by an outdoor plaza and arrivals roadway. As reflected in the Port Authority's October 10, 2003 report to the FAA on the consultation process, and as reflected in the Revised Concept Master Plan, the Port Authority will enhance public access to the TWA Main Terminal by providing enclosed connectors from the light rail station (AirTrain JFK) to the TWA Main Terminal. The connection will contain signage to allow for passage of air terminal passengers, patrons of the adaptive reuse, and the general public to the TWA Main Terminal and its features. In compliance with the July 18, 1997 record of decision on the Environmental Impact Statement for the JFK Light Rail System, this connection shall be constructed in such a way as to minimize physical and visual impacts to the historic resource. Additionally, as more detailed plans for the siting and design of the new terminal are developed, including the connections from the TWA Main Terminal to Air Train JFK and to the new terminal, those plans will be forwarded to the SHPO, and in accordance with RAC Guidelines, to the RAC for review and comment. The roadway system will also allow vehicles to access either the TWA Main Terminal frontage or the arrivals/departures roadways of the new terminal.

5. The final design plans for the restoration, rehabilitation and adaptive reuse of the TWA Main Terminal and the East Tube, and any plans for alteration of the West Tube shall be submitted by the Port Authority to the SHPO for comment as to whether those plans conform to the conditions set forth in Stipulation 12 governing the standards for performance of the restoration and rehabilitation work. Subsequently, the SHPO and the Port Authority shall give the consulting parties, and the RAC, in accordance with the RAC Guidelines, an opportunity to provide comment on those plans, including comment on whether those plans conform to the standards set forth in Stipulation 12. All such comments shall be considered by the Port Authority and the SHPO and the SHPO shall consult with the Port Authority before the Port Authority approves the final TWA Terminal and Connecting Flight Tubes design plans. The Port Authority shall notify all signatories, all consulting parties and all members of RAC of its approval of the final TWA Terminal and Connecting Flight Tubes design plans.

6. As part of its public education effort, the Port Authority shall develop an interpretative display illustrating the history and significance of the TWA Terminal site and its relationship to the overall development of JFK International Airport. The exhibit shall be placed in a prominent location in the TWA Main Terminal Building or in another appropriate setting proximal to that building. The display shall be accessible to the public during normal operating hours after the rehabilitation/restoration is complete.

7. The Port Authority shall have a consultant that meets the professional qualifications established by the U.S. Department of the Interior and set forth in 62 Fed. Reg. 33,707 (June 20, 1997) prepare a National Register of Historic Places nomination for the TWA Main Terminal Building, the Connector Tubes and the Flight Wings prior to demolition of the Flight Wings and shall support such listing on the Register.

8. The Port Authority shall record the TWA Main Terminal Building, Flight Wing 2, and the Connecting Flight Tubes to Level 1 Historical Architectural Building Survey/Historic American Engineering Record (HABS/HAER) standards of the National Park Service. The consultant chosen by the Port Authority to conduct the documentation shall meet the professional qualifications established by the U.S. Department of the Interior and set forth in 36 C.F.R. 61. Copies of the recordation shall be sent to the National Park Service - HABS/HAER Coordinator, the New York State Archives, the Port Authority and the SHPO.

9. As reflected in the Port Authority's October 10, 2003 report to the FAA on the consulting process, the preservation of the East Tube may require structural modifications to the column(s) in order to allow roadways to pass under the existing tube.

10. The Port Authority will not begin to remove the Flight Wings as set forth in Stipulation 14 until a development plan for a new terminal is in place and a lease agreement is reached between the Port Authority and a tenant(s) for the new terminal.

Interim Maintenance

11. The Port Authority shall ensure and commit adequate resources so that the TWA Main Terminal Building, including portions not eligible for listing as historic landmarks, and the Connecting Flight Tubes are properly maintained and cared for from the present until an on-going maintenance obligation for the TWA Main Terminal and Connecting Flight Tubes is undertaken by the adaptive reuse developer consistent with Stipulations 12 and 13. Such interim maintenance shall include, but not be limited to, regularly scheduled inspections of the building (including the roof), cleaning, preventive maintenance routines for HVAC equipment, temperature control, plumbing, and fire systems, and shall be supervised by the Port Authority. Necessary repairs/maintenance identified through the regularly scheduled inspections will be done by the Port Authority in a timely manner. During this interim period, the SHPO shall be given the opportunity by the Port Authority to inspect the building to ensure that it is being properly maintained. The Port Authority shall ensure the maintenance efforts described above are continually undertaken in the event that the adaptive reuse is interrupted or temporarily discontinued at any time.

Restoration and Rehabilitation

12. As a condition of reuse, the Port Authority, through consultation with the SHPO, shall assure that the TWA Main Terminal Building and East Tube are restored and rehabilitated by the adaptive reuse developer in accordance with the Secretary of Interior Standards for the Treatment of Historic Properties ("Secretary's Standards"). The TWA Main Terminal and the East Tube shall, as a whole, be treated in accordance with the Standards for the Treatment of Historic Properties – Rehabilitation. As per Stipulation 9, structural modifications may be required to the column(s) of the East Tube. The existing façade, including the landside entrances and window walls, the airside window walls, the concrete roof shell, the lower and upper main lobby spaces, the interior of the East Flight Tube and the Ambassador Club on the north mezzanine in the Main Terminal interior shall be restored in accordance with the Standards for the Treatment of Historic Properties – Restoration.

13. The plan to be approved by the Port Authority for the restoration, rehabilitation and adaptive reuse of the TWA Main Terminal Building by an adaptive reuse developer will retain the entire visible exterior length of the existing East Tube. As reflected in the Port Authority's October 10, 2003 report to the FAA on the consultation process, the West Tube may be modified. For this connector tube, a hierarchy of options will be investigated, in consultation with RAC, as part of the design for the new terminal. The first option would seek to adapt the existing configuration in a minimally intrusive manner to improve public access. If analysis finds this option to be infeasible, then a design for reconstructing the connecting walkway to incorporate a moving walkway system in a manner consistent with the original design will be undertaken. Should such an effort prove to be inconsistent with the objective of improving public access, after consultation with the RAC, in accordance with RAC Guidelines, the Port Authority shall assure that a contemporary and appropriate design will be constructed to replace the West Tube. Both tubes will provide public access between the rehabilitated/restored TWA Terminal and the newly constructed terminal building.

14. As reflected in the Port Authority's October 10, 2003 report to the FAA on the consultation process, both Flight Wing 1 and Flight Wing 2 will be demolished. Prior to the demolition, reuse of two of the gate lounge "trumpets," as well as other architecturally significant elements, will be investigated as part of the new terminal concourse and/or gate holdroom area. If feasible, the inclusion of all or part of the "trumpets" and their original interiors would be relocated and included as part of the new terminal concourse.

15. The restoration work shall include the removal of non-historic additions to the original TWA Main Terminal Building and Connecting Flight Tubes including, but not limited to, entrance vestibules, security booths, the south baggage facility and the pedestrian canopy. The work on the interior lobby spaces shall include the restoration of the marble tile flooring and wall surfaces, the information desk, the Solari flight information display surround, railings, stairs and ventilation enclosures. Remaining non-historic kiosks, signage and furnishings shall be removed. The Port Authority shall continue to consult with the SHPO on the restoration, rehabilitation and adaptive reuse until the restoration and rehabilitation work is completed by the adaptive reuse developer.

16. After its completion, the rehabilitation/restoration work performed in accordance with Stipulation 12 shall be approved for conformance with the standards set forth in Stipulation 12 by the SHPO. The SHPO, upon being informed by the Port Authority that the rehabilitation/restoration work has been completed, shall notify all consulting parties and the RAC that the SHPO's approval under this Stipulation is being sought. The consulting parties and members of RAC shall have 60 days from such notification to provide the Port Authority and the SHPO with their comments as to whether the rehabilitation/restoration work has been performed in conformance with the standards set forth in Stipulation 12. In order to facilitate their comment, the consulting parties and the members of the RAC during this 60-day period shall be given an opportunity to tour, as a group, the newly renovated and rehabilitated TWA Main Terminal Building and East Tube. After receiving such comments, the SHPO, when it is satisfied that the work has been performed in conformance with the conditions set forth in Stipulation 12, shall approve the rehabilitation/restoration work. The Port Authority shall notify all signatories, all consulting parties and the RAC of the SHPO approval.

Ongoing Maintenance and Preservation

17. The Port Authority shall prepare maintenance and preservation guidelines for the treatment of the TWA Main Terminal Building and East Tube. The guidelines shall address the replacement and repair of historic materials, on-going façade maintenance and cleaning, and the repair of historic and replacement elements such as light fixtures, hardware and entrances. The guidelines shall prescribe periodic inspections and maintenance for systems and assemblies on a five-year cycle. The guidelines shall prescribe that the inspection shall review the condition of the restored historic fabric including but not limited to the concrete roof shell, the glass window walls and entrances, the interior finishes and the railings, stairs and historic furnishings. The guidelines shall be submitted to SHPO for review and approval following completion of the rehabilitation/restoration work referenced in Stipulations 12 -16.

18. After the restoration and rehabilitation work is completed by the adaptive reuse developer, the Port Authority shall perform an inspection of the TWA Main Terminal Building and East Tube every five years in accordance with the maintenance and preservation guidelines referenced in Stipulation 17 and submit a certified copy of the report to the SHPO for approval. A copy of the report approved by the SHPO shall be provided by the Port Authority to the signatories to the MOA. The inspection shall be conducted by an architect or engineer experienced in the restoration of historic structures.

Termination of Memorandum of Agreement

19. The maintenance and inspection obligations referenced in Stipulations 17 and 18 above shall continue as outlined in those Stipulations. This agreement shall expire after the co-Chairs of RAC notify all members of RAC and the FAA that the consultation process for RAC has been completed, and after any objections raised pursuant to the Dispute Resolution process in Stipulation 21 have been considered in accordance with that Stipulation. The FAA shall notify all signatories when this MOA expires.

20. If any signatory determines that the terms of the MOA cannot be or are not being carried out, then this signatory shall give written notice of such determination to all other signatories to

the MOA. If the MOA is not amended by consultation between the signatories within three months after issuance of such notice, then any signatory may terminate the MOA (with the exception of the maintenance and inspection obligations referenced in Stipulations 17 and 18), by providing thirty (30) calendar days written notice to the other signatories. The FAA shall then either execute a new agreement with the signatories pursuant to 36 CFR 800.6 (c)(1), or request and respond to the comments of the Council under 36 CFR 800.7(a). If the Port Authority has not executed an agreement with an adaptive reuse developer for the rehabilitation/restoration work within five (5) years after this agreement has been executed by the signatories, the Port Authority shall notify the signatories of this fact, and the signatories shall reconsider the terms of the agreement, other than the maintenance and inspection obligations referenced in Stipulation 11, and consult among themselves to amend this agreement pursuant to this Stipulation.

21. Should any member of the public or other interested party, including the signatories to this MOA and the members of the RAC, object within the 30 days of the approval, pursuant to Stipulation 5, of the restoration/rehabilitation plans or the approval, pursuant to Stipulation 16 of the restoration/rehabilitation work, or any other action proposed with regard to the restoration/rehabilitation of the TWA Terminal and East Tube, the Port Authority shall consult with the objecting party to resolve the objection. If the Port Authority, after consultation with the SHPO and the objecting party, determines that the objection cannot be resolved, the Port Authority shall request the further comments of the Advisory Council for Historic Preservation. Any Council comment provided in response to such request shall be taken into account by the Port Authority, in further consultation with the SHPO with reference only to the subject of dispute; the Port Authority's responsibility to carry out all actions under this agreement that are not subjects of this dispute shall remain unchanged.

EXECUTION AND AMENDMENT

Execution of this Memorandum by the FAA, the SHPO, the ACHP, and the Port Authority, and implementation of its terms, will be evidence that FAA has afforded consulting parties an opportunity to comment on the undertaking and its effects on the historic property, and that the FAA has taken into account the effect of the undertakings on the historic property, and has completed all processes in accordance with Section 106 of the National Historic Preservation Act.

Until the Port Authority enters into an agreement with an adaptive reuse developer for the rehabilitation/restoration work on the TWA Terminal Building, any signatory to this agreement may propose to the other signatories that this agreement be amended, whereupon the FAA shall consult with the other signatories to this MOA in accordance with 36 C.F.R. 800.6(c)(7), (8) to consider such an amendment.

SIGNATORY PAGES* (PAGE 1 OF 4)

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY

BY: _____ DATE: 8/25/04

Print/Type Name: Ernesto L. Butcher

Print/Type Title: Chief Operating Officer

* A separate signature page is being executed by each signatory to this Agreement.

SIGNATORY PAGES* (PAGE 2 OF 4)

FEDERAL AVIATION ADMINISTRATION

By: _____ Date: 9/2/04

Print/Type Name: ARLENE B. FELDMAN

Print/Type Title: REGIONAL ADMINISTRATOR EASTERN REGION
FEDERAL AVIATION ADMINISTRATION

* A separate signature page is being executed by each signatory to this Agreement.

SIGNATORY PAGES* (PAGE 3 OF 4)

NEW YORK STATE HISTORIC PRESERVATION OFFICE

By: _____ Date: 9/22/04

Print/Type Name: Bernadette CASTRO

Print/Type Title: SHPO / Commissioner

* A separate signature page is being executed by each signatory to this Agreement.

SIGNATORY PAGES* (PAGE 4 OF 4)

ADVISORY COUNCIL FOR HISTORIC PRESERVATION

BY: John M. Fowler DATE: 9/16/04

Print/Type Name: JOHN M. FOWLER

Print/Type Title: EXECUTIVE DIRECTOR

* A separate signature page is being executed by each signatory to this Agreement.

CONSULTING PARTIES CONCURRENCE — PAGE 1 OF 3

JETBLUE AIRWAYS CORPORATION

By: _____ Date: 10/15/04

Print/Type Name: Richard Smyth, VP Redevelopment

THE NATIONAL TRUST FOR HISTORIC PRESERVATION

By: _____ Date: _____

Print/Type Name: _____

THE MUNICIPAL ART SOCIETY OF NEW YORK

By: _____ Date: _____

Print/Type Name: _____

CONSULTING PARTIES CONCURRENCE — PAGE 1 OF 3

JETBLUE AIRWAYS CORPORATION

By: _____ Date: _____

Print/Type Name: _____

THE NATIONAL TRUST FOR HISTORIC PRESERVATION

By: Paul W. Edmondson Date: Oct 7, 2004

Print/Type Name: Paul W. Edmondson, General Counsel

THE MUNICIPAL ART SOCIETY OF NEW YORK

By: _____ Date: _____

Print/Type Name: _____

CONSULTING PARTIES CONCURRENCE — PAGE 1 OF 3

JETBLUE AIRWAYS CORPORATION

By: _____ Date: _____

Print/Type Name: _____

THE NATIONAL TRUST FOR HISTORIC PRESERVATION

By: _____ Date: _____

Print/Type Name: _____

THE MUNICIPAL ART SOCIETY OF NEW YORK

By: Frank Sanchis Date: 10/4/04

Print/Type Name: FRANK SANCHIS

CONSULTING PARTIES CONCURRENCE — PAGE 2 OF 3

THE NEW YORK CITY PARTNERSHIP

By: _____ Date: 9-30-2004

Print/Type Name: Kathryn Wylde, President + CEO

DOCUMENTATION AND CONSERVATION OF BUILDINGS, SITES AND NEIGHBORHOODS OF THE MODERN MOVEMENT (DOCOMOMO)

By: _____ Date: _____

Print/Type Name: _____

THE CONSULATE GENERAL OF FINLAND, NEW YORK

By: _____ Date: _____

Print/Type Name: _____

CONSULTING PARTIES CONCURRENCE — PAGE 2 OF 3

THE NEW YORK CITY PARTNERSHIP

By: _____ Date: _____.

Print/Type Name: _____

DOCUMENTATION AND CONSERVATION OF BUILDINGS, SITES AND NEIGHBORHOODS OF THE MODERN MOVEMENT (DOCOMOMO)

By: _____ Date: 10.21.04

Print/Type Name: Theodore H.M. Prudon, Ph.D., FAIA

THE CONSULATE GENERAL OF FINLAND, NEW YORK

By: _____ Date: _____

Print/Type Name: _____

CONSULTING PARTIES CONCURRENCE — PAGE 2 OF 3

THE NEW YORK CITY PARTNERSHIP

By: _____ Date: _____

Print/Type Name: _____

DOCUMENTATION AND CONSERVATION OF BUILDINGS, SITES AND NEIGHBORHOODS OF THE MODERN MOVEMENT (DOCOMOMO)

By: _____ Date: _____

Print/Type Name: _____

THE CONSULATE GENERAL OF FINLAND, NEW YORK

By: Osmo Lipponen Date: 4.10.04

Print/Type Name: Osmo Lipponen

CONSUL GENERAL

CONSULTING PARTIES CONCURRENCE — PAGE 3 OF 3

NEW YORK LANDMARKS CONSERVANCY

By: _____ Date: 10/04/04

Print/Type Name: Peg Breen

THE NEW YORK BUILDING CONGRESS

By: _____ Date: _____

Print/Type Name: _____

JOHN CULLINANE & ASSOCIATES

By: _____ Date: _____

Print/Type Name: _____

CONSULTING PARTIES CONCURRENCE — PAGE 3 OF 3

NEW YORK LANDMARKS CONSERVANCY

By: _____ Date: _____

Print/Type Name: _____

THE NEW YORK BUILDING CONGRESS

By: _____ Date: 9/27/04

Print/Type Name: John T. Anderson, President

JOHN CULLINANE & ASSOCIATES

By: _____ Date: _____

Print/Type Name: _____

CONSULTING PARTIES CONCURRENCE --- PAGE 3 OF 3

NEW YORK LANDMARKS CONSERVANCY

By: _____ Date: _____

Print/Type Name: _____

THE NEW YORK BUILDING CONGRESS

By: _____ Date: _____

Print/Type Name: _____

JOHN CULLINANE & ASSOCIATES

By: _____ Date: 10/13/04

Print/Type Name: JOHN CULLINANE

Attachment A

Description of Project

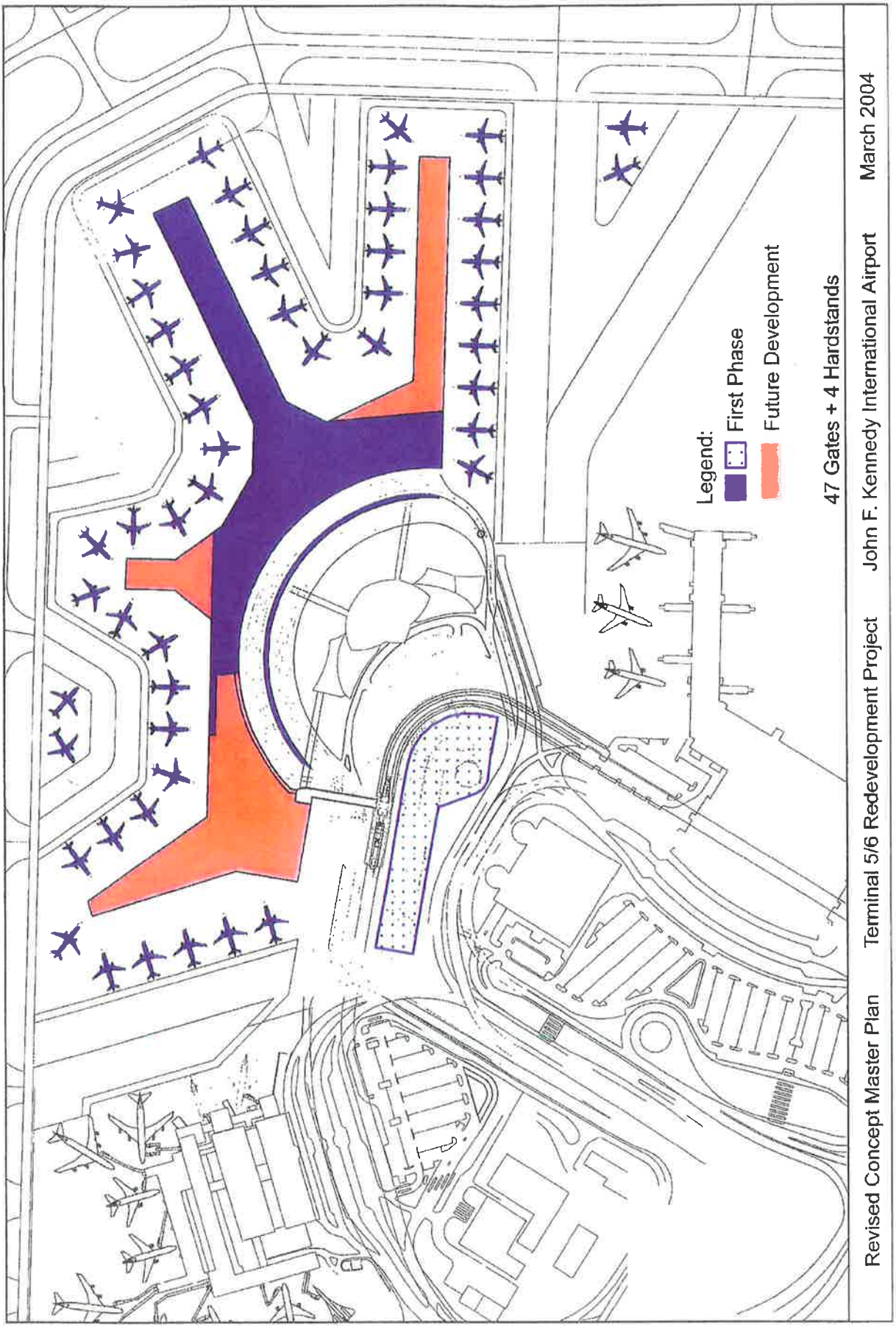
The Port Authority has proposed redevelopment of the entire Terminal 5/6 site at JFK. The Revised Concept Master plan calls for the phased construction of a new terminal complex consisting of a total of 47 contact gates and four (4) hardstand positions.

The existing Flight Wings 1 and 2 of the TWA Terminal would be demolished in order to accommodate the construction of a new terminal for Jet Blue. However, the Flight Wings would not be demolished until a lease agreement is reached between the Port Authority and Jet Blue Airways for the new terminal. Prior to demolition of Flight Wing 2, the feasibility of removing and/or reusing interior elements of gate lounge(s) in the new terminal will be explored by the Port Authority, with input from the Consulting Parties.

The Port Authority will seek to restore/rehabilitate and adaptively reuse the Main TWA Terminal and the East Tube. The adaptive reuse will be determined through a Request for Proposals process to be managed by the Port Authority, with input from the Consulting Parties. The Port Authority will ensure that the adaptive reuse in the TWA Terminal will accommodate electronic ticketing kiosks for airline passengers without the need to check baggage.

Jet Blue's new terminal will have 26 contact gates and be connected to the TWA Terminal through the existing Connector Tubes. Once construction of this phase of the Revised Concept Master plan is completed, Jet Blue would move its operations from Terminal 6 to the new terminal. The next phase of the redevelopment would entail demolition of Terminal 6 to accommodate construction of the next phase of the Revised Concept Master Plan. This phase will proceed as the anticipated need for additional gates at JFK materializes and a lease agreement is reached with an airline (or airlines) for the next phase of the Revised Concept Master Plan. In addition, a new parking garage will be constructed across the roadway and AirTrain guide way from the existing Terminal 6 and be connected to the AirTrain station at the existing Terminal 6. Interested Consulting Parties will have input on these phases of the Concept Master Plan as they relate to the TWA Terminal/historic resource.

The entire TWA Terminal site will be nominated for listing on the State and federal Registers of Historic Places. Public access to the TWA Terminal will be provided via a new direct link from the existing Terminal 6 AirTrain connector and by vehicular access from the airport roadway system.


Legend:
First Phase
Future Development
47 Gates + 4 Hardstands
Revised Concept Master Plan Terminal 5/6 Redevelopment Project John F. Kennedy International Airport March 2004

ATTACHMENT C

Port Authority of New York and New Jersey
October 10, 2003 Report

At the September 18, 2003 meeting of the consulting parties for the Terminal 5 and 6 Redevelopment Project at John F. Kennedy International Airport (JFK) it was agreed that the consulting parties along with the Port Authority of New York and New Jersey (PANYNJ) and the New York State Historic Preservation Office (SHPO) would take the next 15 days to meet and make another effort toward working together in order to reach agreement on issues associated with the proposed concept master plan.

The following represents the results of those most recent meetings (attendance by organization listed below) regarding the concept master plan for the Terminal 5/6 site at JFK Airport. Our discussions resulted in a targeted review of 4 elements of the master plan: the connecting walkways or "tubes" which link the Main Terminal to the flight wings and gate holdrooms; the removal and reuse of Flight Wing II; accessibility to/from the Airtrain and the proposed parking garage to both the landmark structure and the new terminal; and the adaptive reuse of the Main Terminal.

It was agreed that the goal of preserving the Main Terminal through an adaptive reuse program would be enhanced by allowing Jetblue Airways to place self-service ticketing machines within the Main Terminal and by providing easy accessibility between the Main Terminal and the New Terminal. Connections between the new terminal and landmark Main Terminal would be a vital part of realizing a plan that maintains a significant component of the original structure while supporting an adaptive reuse of the landmark Main Terminal. In order to meet that objective we agreed that the original connecting walkway serving Flight Wing II would be preserved in its current configuration. Such preservation may require structural modifications to the column(s) in order to allow roadways to pass under the existing "tube". With regards to the connecting walkway serving Flight Wing I, a hierarchy of options would be investigated as part of the design for the new terminal. The first option would seek to adapt the existing configuration in a minimally intrusive manner to improve such access. If analysis finds this option to be infeasible, then a design for reconstructing the connecting walkway to incorporate a moving walkway system in a manner consistent with the original design will be undertaken. Should such an effort prove to be inconsistent with the objective, and then a contemporary and appropriate design will be constructed.

After considerable review, it was agreed that both Flight Wing I and Flight Wing II would be removed, though reuse of two of the gate lounge "trumpets", as well as other architecturally significant elements as part of the new terminal concourse and gate holdroom area would be investigated. If feasible, the inclusion of all or part of the "trumpets" and their original interiors would be relocated and included as part of the new terminal concourse.

It was agreed that the objective of restoring the Main Terminal for adaptive reuse, including Jetblue's placement of electronic ticketing machines within the Main Terminal and re-establishing uses such as restaurants, would be greatly enhanced by the connectivity of the AirTrain and parking facilities to the Main Terminal and the new terminal. Providing for such direct access via realignment of the enclosed connectors from AirTrain that are included in the concept master plan would be undertaken as part of the new terminal design. As well, it was agreed that efforts will be made to allow vehicular traffic that approach the terminal complex the opportunity to access the original frontage that served the Main Terminal.

As part of the Port Authority's effort to identify a program for restoring and reusing the Main Terminal so it will remain a vital part of the airport and this terminal complex, including using the imagery of the landmark terminal as part of the airport and the Terminal 5 and 6 site, a
working committee consisting of those consulting parties interested, would be formed to assist the Port Authority as part of an ongoing effort to ensure an appropriate process and program is implemented.

I believe that these objectives can be incorporated into the concept master plan as proposed. (see attached drawings)

Attending Organizations: MAS, NYSHPO, PANYNJ, Jetblue Airways, NY Landmarks Conservancy, NY Building Congress

ATTACHMENT D

Redevelopment Advisory Committee Guidelines

1. The consulting parties who voluntarily agree to do so, shall serve as members of the Redevelopment Advisory Committee (RAC). A representative of the Port Authority, the SHPO, and a representative of one of the consulting parties that concur in the MOA, shall serve as Co-Chairs of the RAC. The consulting party members of the RAC shall select the consulting party Co-Chair of the RAC. The Co-Chairs shall be responsible for convening meetings of the RAC, preparing and maintaining a written summary of the comments received at those meetings as well as those comments received after those meetings within the time frame set forth in paragraph 5 below, and for submitting a report of any action taken by the Port Authority or the SHPO on those comments to the members of RAC.

2. Parties agreeing to be voluntary members of the RAC shall, to the best of their ability, fully participate in all the proceedings of the RAC.

3. The RAC will meet on the first Tuesday of every other month, or as needed, at a location(s) to be determined by the Co-Chairs.

4. The RAC shall be given an opportunity at the bi-monthly meetings to provide, at the appropriate time and stage of the development, as determined by a majority of the Co-Chairs, input and comment on the following:

   a. Plans, designs, and submittals to SHPO for the rehabilitation/restoration and adaptive reuse of the TWA Terminal and East Flight Tube. Such comments shall include comment on the final design plans for restoration, rehabilitation and adaptive reuse of the TWA Terminal Building set forth in Stipulation 5 as well as comment after the completion of such work as set forth in Stipulation 16.

   b. A feasibility study and cost analysis for the removal, restoration, and relocation into the new terminal of selected interior elements of Flight Wing 2 prior to its demolition.

   c. Plans and designs for work to implement the removal, restoration and relocation of any selected interior elements of Flight Wing 2 (Stipulation 14).

   d. Plans and designs for the roadway, pedestrian, and light rail access to the TWA Terminal.

   e. Analysis of options for the reconfiguration of the West Flight Tube as specified in Stipulation 13, including the plans and designs for any work to be done in the West Flight Tube to enhance access between the TWA Terminal and the new terminal.

   f. Plans and designs that may be required to structurally modify columns of the East Flight Tube in order to allow roadways to pass under the existing tube (See Stipulation 9).

ATTACHMENT D

Redevelopment Advisory Committee Guidelines

g. Plans and designs for each development phase of the new terminal to be built on the Terminal 5/6 site in order to meet the goal specified in Stipulation 4 of retaining the individual identity of the historic building, separate from the new terminal in order to avoid, minimize or mitigate any adverse effect of the new terminal on the historic building.

h. Plans, designs and content for the interpretative display illustrating the history and significance of the TWA Terminal site and its relationship to the overall development of JFK International Airport set forth in Stipulation 6.

i. Maintenance and preservation guidelines for the treatment of the TWA Main Terminal Building and East Tube (Stipulation 17).

j. The completed restoration and rehabilitation of the TWA Terminal Building in accordance with the Secretary's standards as set forth in Stipulation 16.

5. In order for the RAC to provide meaningful comment and input at the bi-monthly meetings in a timely manner so as to not adversely affect design and construction schedules, any plans/designs or other material relating to specific meeting agenda items shall, to the greatest extent possible, be provided to RAC members ten (10) days prior to the bi-monthly meetings.

6. In addition to any comments submitted or discussed in the meetings, the RAC members may provide written comments to the Co-Chairs within ten (10) days following the meeting.

7. After receipt of all meeting comments, including those received in writing after the meeting, the Co-Chairs shall prepare a written summary of those comments and forward them to all RAC members.

8. The Port Authority shall prepare a report on any action taken by the Port Authority or SHPO on any of the comments summarized in the report prepared in accordance with paragraph 6 above. Such report shall include any recommendations, or actual modifications of the studies, analyses, plans and designs, which were the subject of RAC comment. A copy of the reports shall be forwarded to the FAA and the ACHP.

9. When a Report is submitted by the Co-Chairs on the last item or items to be considered by the RAC in accordance with these Guidelines, the Co-Chairs shall inform the FAA that the consultation process for RAC has been completed.

Appendix B: First Amendment to the 2004 Memorandum of Agreement

FIRST AMENDMENT TO THE 2004 MEMORANDUM OF AGREEMENT AMONG THE PORT AUTHORITY OF NEW YORK & NEW JERSEY, THE NEW YORK STATE HISTORIC PRESERVATION OFFICE, THE FEDERAL AVIATION ADMINISTRATION, AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION FOR THE REHABILITATION, RESTORATION, AND ADAPTIVE REUSE OF TWA TERMINAL 5 AT JOHN F. KENNEDY INTERNATIONAL AIRPORT JAMAICA, NEW YORK

THIS FIRST AMENDMENT TO THE 2004 MEMORANDUM OF AGREEMENT FOR THE REHABILITATION, RESTORATION, AND ADAPTIVE REUSE OF TWA TERMINAL 5 AT JOHN F. KENNEDY INTERNATIONAL AIRPORT, JAMAICA, NEW YORK (this "**First Amendment to the 2004 MOA**") is entered into as of July 12, 2016 by and among the Federal Aviation Administration of the United States of America (the "**FAA**"), the New York State Historic Preservation Office (the "**SHPO**"), the Advisory Council on Historic Preservation (the "**ACHP**"), and the Port Authority of New York and New Jersey (the "**Port Authority**") (collectively, the "**Signatories**").

WHEREAS, the Signatories have entered into a certain Memorandum of Agreement [dated August 20, 2004 and transmitted by the FAA on November 1, 2004 to the ACHP] regarding the "Rehabilitation, Restoration, and Adaptive Reuse of TWA Terminal 5" (the "**2004 MOA**"), which sets forth certain agreements and understandings relating to the TWA Terminal (also known as the TWA Flight Center and as Building 60) at John F. Kennedy International Airport (the "**Airport**"); and

WHEREAS, over ten years have elapsed since the date of the 2004 MOA, during which many of the conditions provided therein have been accomplished or are no longer required; and

WHEREAS, at the date of the 2004 MOA, the TWA Terminal site included the TWA Main Terminal Building, the West Tube and the East Tube (both as defined in the 2004 MOA; and defined collectively in the 2004 MOA as the "Connecting Flight Tubes"), and Flight Wings 1 and 2; and

WHEREAS, the requirements set forth in Stipulations 7 & 8 of the 2004 MOA have been completed. Specifically, the TWA building was listed in the National Register of Historic Places in 2005 (#05000994) and a copy of such listing is attached as Attachment E; and the TWA Terminal has been recorded according to HABS/HAER Level 1; and

WHEREAS, the 2004 MOA provided, in Stipulation 1, that the Port Authority would seek, through a Request for Proposals (RFP) process, to execute an agreement with an adaptive reuse developer providing for the appropriate design, construction, restoration, rehabilitation, operation and maintenance of the historic portions of the TWA Terminal; and

WHEREAS, pursuant to Stipulation 11 of the 2004 MOA, the Port Authority has committed over $20 million in resources for a structure needing considerable attention, so that the TWA Main Terminal Building and the Connecting Flight Tubes have been properly maintained and cared for, and necessary repairs/maintenance identified through inspections have been performed, and the Port Authority has continued to make inspections of and perform repairs/maintenance on the TWA Main Terminal Building and Connecting Flight Tubes as needed until these responsibilities are delegated to the adaptive reuse developer; and

WHEREAS, pursuant to Stipulation 12 of the 2004 MOA, the Port Authority, through consultation with the SHPO, has restored and rehabilitated portions of the TWA Main Terminal Building and the East Tube in accordance with the Secretary's Standards (as defined in the 2004 MOA), and all other historic areas not restored or rehabilitated by the Port Authority are intended to be restored or rehabilitated by the adaptive reuse developer in accordance with the Secretary's Standards; and

WHEREAS, as contemplated by the 2004 MOA, a new Terminal 5 has been built, which, along with the surrounding roadway network, now physically separates the TWA Terminal site from the Airport's airside areas; and

WHEREAS, due to construction of the new Terminal 5 and in accordance with Stipulations 13 & 14 of the 2004 MOA, the original satellite Flight Wings 1 and 2 have been removed; and the remaining Connecting Flight Tubes provide direct access to the new Terminal 5 over the surrounding roadway network; and

WHEREAS, the FAA, the SHPO, the ACHP and the Port Authority consulted pursuant to 36 C.F.R. Part 800, regulations implementing Section 106 of the National Historic Preservation Act, as amended (54 U.S.C. 306108) (the "**Section 106 Process**") in connection with the 2004 MOA; and

WHEREAS, certain interested parties were invited by the FAA to participate in the Section 106 Process and to concur in the 2004 MOA (such interested parties, collectively, the "**Consulting Parties**"); and

WHEREAS, the Consulting Parties in 2016 presently consist of The National Trust for Historic Preservation, The Municipal Art Society of New York, the New York City Partnership, Docomomo US/New York Tri-State, the Finnish Consulate General, New York Landmarks Conservancy, and the New York Building Congress, which have been invited to concur on this First Amendment to the 2004 MOA; and

WHEREAS, pursuant to Stipulation 3 of the 2004 MOA, a Redevelopment Advisory Committee, or the RAC (as defined in the 2004 MOA), comprised of the SHPO, the Port Authority and the Consulting Parties, was formed pursuant to the 2004 MOA, and has operated in accordance with the Guidelines set forth in Attachment D to the 2004 MOA, and the RAC has met since August 2004 to review various proposals for the redevelopment of the TWA Terminal; and

WHEREAS, consistent with the 2004 MOA, the Port Authority proposed a plan, put forth by a joint venture of MCR Development LLC and JetBlue Airways Corporation (collectively, the "**Developer**"), whereby in connection with its rehabilitation, the TWA Terminal would be redeveloped as a hotel to serve the needs of the Airport and the traveling public (the "**TWA Flight Center Hotel**"); and the RAC met in May and June 2015 to review and discuss the TWA Flight Center Hotel proposal; and

WHEREAS, the evolving plans for the TWA Flight Center Hotel, as developed and revised by the Developer and reviewed and commented on by the RAC during the RAC meetings in May and June 2015, as further refined, are shown in the "Revised Concept Master Plan" - consisting of the Conceptual Design dated December 1 2015, a copy of which is attached as Attachment F; and

WHEREAS, some of the RAC members do not fully support the proposed design of the TWA Flight Center Hotel, but these RAC members have been actively engaged in consultation to develop this First Amendment and have stated their interest in continuing to be involved in the design review process after this First Amendment has been executed; and

WHEREAS, the plan for the TWA Flight Center Hotel requires a change to the Airport's Airport Layout Plan, which requires the approval of the FAA, and in connection therewith the FAA is required to conduct an environmental review and render a final Federal environmental determination, pursuant to the National Environmental Policy Act (NEPA), as well as other requisite Federal actions and approvals; and

WHEREAS, the 2004 MOA is herein amended to reflect the role of the Developer in the adaptive reuse of the TWA Main Terminal; and

WHEREAS, this First Amendment to the 2004 MOA includes Flight Center Hotel LLC, a joint venture of MCR Development LLC and JetBlue Airways Corporation, which has been invited to concur on this First Amendment to the 2004 MOA.

NOW, THEREFORE, the FAA, the SHPO, the ACHP and the Port Authority agree that the 2004 MOA is hereby amended as follows:

AMENDMENTS TO THE 2004 MOA

1. Amendments to 2004 MOA Stipulations.

(a) There shall be inserted following Stipulation 1 of the 2004 MOA, a new Stipulation 1A as follows:

> "1A. The signatories agree that Flight Center Hotel LLC (the "Developer"), a joint venture of MCR Development LLC and JetBlue Airways, has been selected by the Port Authority through the RFP process as the adaptive reuse developer, and that the Developer has agreed to adhere to the terms and conditions of this MOA, as amended; the Port Authority agrees that such agreement by the Developer shall be contained in the long-term lease to be entered into between the Port Authority and the Developer for the TWA Terminal site, which shall provide for the adaptive reuse of the TWA Terminal as a hotel (the "TWA Flight Center Hotel")."

(b) There shall be inserted in place of Stipulation 5 of the 2004 MOA, new Stipulations 5A, 5B and 5C that address the adaptive reuse as follows:

> "5A. The preliminary and pre-final design plans for the TWA Flight Center Hotel, which shall include the preliminary and pre-final design plans for the restoration, rehabilitation and adaptive reuse of the TWA Main Terminal and the Connecting Flight Tubes, shall be submitted by the Port Authority to the consulting parties and the RAC for comment as to whether those plans conform to the conditions set forth in Stipulation 12 governing the standards for performance of the restoration and rehabilitation work. The preliminary and pre-final design plans (which shall show the entire approximately six-acre site, as shown in Attachment G) will be posted on a web-based FTP site, and the Port Authority will send a

notice to the consulting parties, and the RAC, of the availability of such plans, with instructions as to how to access the web-based FTP site; comments shall be submitted by the consulting parties within 14 calendar days following the date of such notice.

5B. The design plans for the TWA Flight Center Hotel shall provide for the Developer to build two new structures comprising integral components of the hotel; they will contain guest rooms, conference facilities, and other uses located within the existing and proposed structures, as shown conceptually in Attachment F. The TWA Flight Center Hotel will also include, pursuant to Stipulation 6 of this MOA, an interpretative display illustrating the history and significance of the TWA Terminal site and its relationship to the overall development of the Airport (to be provided by the adaptive reuse developer), the information desk and the restored Solari Flight Information Display (as provided in Stipulation 15 below); and, pursuant to Stipulation 4 of this MOA, updated approach roadways and a covered pedestrian walkway and associated improvements from the AirTrain station (to be constructed at the cost of the Port Authority); as well as associated landscaping.

5C. The Port Authority and the SHPO shall notify all signatories, all consulting parties and all members of the RAC of its approval of the final design plans for the restoration, rehabilitation and adaptive reuse of the TWA Terminal and Connecting Flight Tubes. If the final Tenant Construction Application (*i.e.*, the design and construction documents submitted for the Port Authority's review and approval in connection with all construction to be undertaken on property within the jurisdiction of the Port Authority) shows that the TWA Flight Center Hotel design differs substantially from that shown in the pre-final designs referred to in Stipulation 5A above, the consulting parties and the RAC shall be reconvened to review and comment on the design changes. "Differs substantially", as used in the preceding sentence, shall be defined as: Any changes from the pre-final design plans impacting the footprint or height of the proposed new construction; any proposed changes to the historic exterior façade of the TWA building including the concrete shell, window walls, skylights or tubes;

or any interior changes to the Character-Defining Features."

(c) There shall be inserted following Stipulation 15 of the 2004 MOA, new Stipulations 15A, 15B and 15C as follows:

"15A. Unanticipated Discovery Of Archaeological Properties During Rehabilitation Of TWA Terminal.

Should previously unidentified archaeological properties be discovered during the rehabilitation of the TWA Terminal, rehabilitation activities in the area of the previously unidentified archaeological properties shall immediately cease. The person or persons encountering such properties shall immediately notify the Port Authority. The Port Authority shall notify the FAA and the SHPO within 24 hours and provide documentation regarding the discovery and comply with the requirements of 36 CFR Section 800.13(b). Work activities in the immediate area of the discovery(ies) that are not the subject of the review shall resume immediately.

15B. Unanticipated Adverse Effects During Rehabilitation Of TWA Terminal.

Should unanticipated adverse effects occur during the rehabilitation of the TWA Terminal, the person or persons encountering such effects shall immediately notify the Port Authority. The Port Authority shall notify the FAA and the NY SHPO within 24 hours and provide documentation regarding the discovery and comply with the requirements of 36 CFR Section 800.13(b).

15C. Monitoring and Reporting.

The FAA and the Port Authority shall provide a status report to all consulting parties and the RAC 12 months following the execution of the First Amendment to this MOA. Subsequently, annual reports are required by January 30th of each year until this MOA, as amended, expires or is terminated. The reports shall include a summary detailing work undertaken pursuant to the terms of this MOA, as amended; scheduling changes proposed; problems encountered in project implementation and the resolution that was implemented; and any disputes and objections received and the manner in which FAA and the Port Authority resolved them. Should any of the consulting parties or the RAC request a meeting following their review of

the annual report, the party shall submit a written request to the FAA and the Port Authority, and shall provide copies to the other signatories and all the consulting parties. The FAA may arrange a meeting among the consulting parties, the RAC and the signatories, as needed."

(d) There shall be inserted following Stipulation 17 of the 2004 MOA, a new Stipulation 17A as follows:

"17A. The Port Authority shall require the Developer to prepare maintenance and preservation guidelines for the treatment of the TWA Main Terminal Building and East Tube. The guidelines shall be submitted to the Port Authority and the SHPO for review and approval following completion of the TWA Terminal rehabilitation/restoration work."

(e) The following shall be inserted after Stipulation 21 of the 2004 MOA:

"DURATION

This MOA, as amended by the First Amendment hereto, shall remain in effect until (x) the completion of the TWA Terminal rehabilitation/restoration work and the procedures set forth in Stipulation 16 hereof, or (y) January 31, 2023, whichever occurs first.

AMENDMENT

If the TWA Flight Center Hotel has not been fully constructed and completed and the terms of this MOA, as amended by the First Amendment hereto, have not been implemented by January 31, 2023, the signatories shall discuss whether the terms of this MOA, as so amended, need to be extended, amended, or terminated, as appropriate."

2. Addition of New Attachments.

There shall be added to the 2004 MOA a new Attachment E, "National Register of Historic Places Listing", and a new Attachment F, "Revised Concept Master Plan - TWA Flight Center Hotel", both as attached to this First Amendment to the 2004 MOA.

3. Effect of Amendments.

Except as expressly amended by this First Amendment to the 2004 MOA, all of the terms, covenants, provisions, conditions and agreements of the 2004 MOA shall remain in full force and effect.

EXECUTION

Execution of this First Amendment to the 2004 MOA by the FAA, the SHPO, the ACHP, and the Port Authority, and implementation of its terms, will be evidence that the FAA has afforded the Consulting Parties an opportunity to comment on the undertaking and its effects on the historic property, and that the FAA has taken into account the effect of the undertakings on the historic property, and has completed all processes in accordance with Section 106 of the National Historic Preservation Act.

IN WITNESS WHEREOF, the Parties hereby set their hand as of the date set forth above.

SIGNATORY PAGES (PAGE 1 OF 4)

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY

BY: _____ DATE: 6/28/16

Print/Type Name: Patrick J. Foye

Print/Type Title: Executive Director

* A separate signature page is being executed by each signatory to this First Amendment to the 2004 MOA.

SIGNATORY PAGES (PAGE 2 OF 4)

FEDERAL AVIATION ADMINISTRATION

BY: _____ DATE: 07-05-2016

Print/Type Name: CARMINE W. GALLO

Print/Type Title: REGIONAL ADMINISTRATOR - EASTERN REGION AEA-1

* A separate signature page is being executed by each signatory to this First Amendment to the 2004 MOA.

SIGNATORY PAGES (PAGE 3 OF 4)

NEW YORK STATE HISTORIC PRESERVATION OFFICE

BY: Ruth L Pierpont DATE: 6/29/16

Print/Type Name: Ruth L. Pierpont

Print/Type Title: DSHPO

* A separate signature page is being executed by each signatory to this First Amendment to the 2004 MOA.

SIGNATORY PAGES (PAGE 4 OF 4)

ADVISORY COUNCIL FOR HISTORIC PRESERVATION

BY: John M. Fowler DATE: 7/12/16

Print/Type Name: JOHN M. FOWLER

Print/Type Title: EXECUTIVE DIRECTOR

* A separate signature page is being executed by each signatory to this First Amendment to the 2004 MOA.

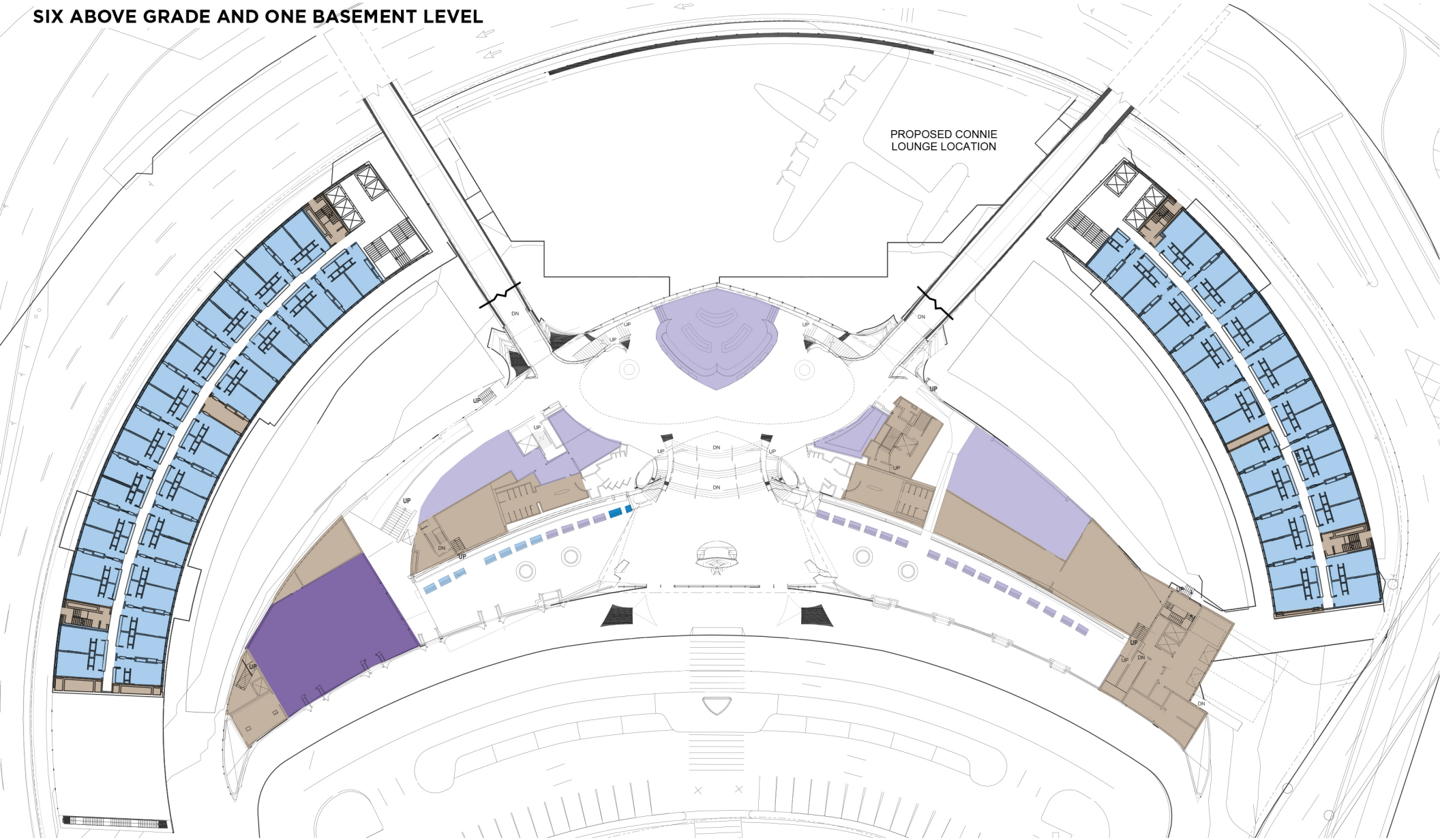
MCR DEVELOPMENT jetBlue HOTEL BEYER BLINDER BELLE LUBRANO CIAVARRA

N

KEY

GUEST ROOM		BALLROOM	
JETBLUE		SPA	
CIRCULATION		CONFERENCE	
MECHANICAL/ BACK OF HOUSE		RETAIL & RESTAURANT	
		MUSEUM	

APPROXIMATELY 505 HOTEL GUEST ROOMS TOTAL
SIX ABOVE GRADE AND ONE BASEMENT LEVEL



CONCEPT 1ST FLOOR PLAN

NOTE: INTERNAL FUNCTIONS AND LOCATIONS ARE FOR ILLUSTRATIVE PURPOSES ONLY.

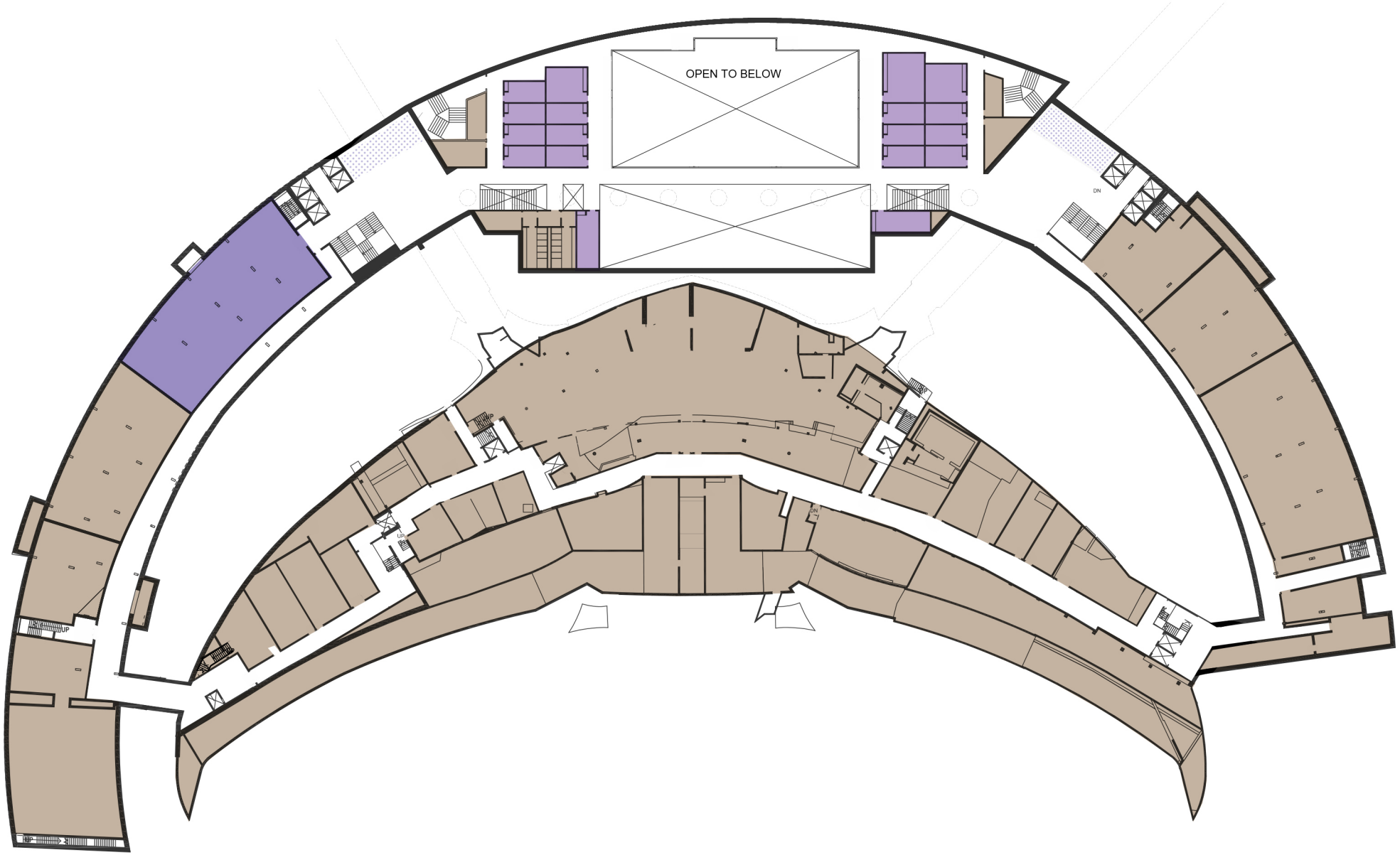
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KEY

GUEST ROOM		BALLROOM	
JETBLUE		SPA	
CIRCULATION		CONFERENCE	
MECHANICAL/ BACK OF HOUSE		RETAIL & RESTAURANT	
		MUSEUM	

APPROXIMATELY 505 HOTEL GUEST ROOMS TOTAL



CONCEPT BELOW GRADE LEVEL 1 AND BELOW GRADE LEVEL 2 PLAN

NOTE: ① INTERNAL FUNCTIONS AND LOCATIONS ARE FOR ILLUSTRATIVE PURPOSES ONLY. ② LOCATION OF EXTERIOR WALLS APPROXIMATE; FEASIBILITY WILL BE EVALUATED.

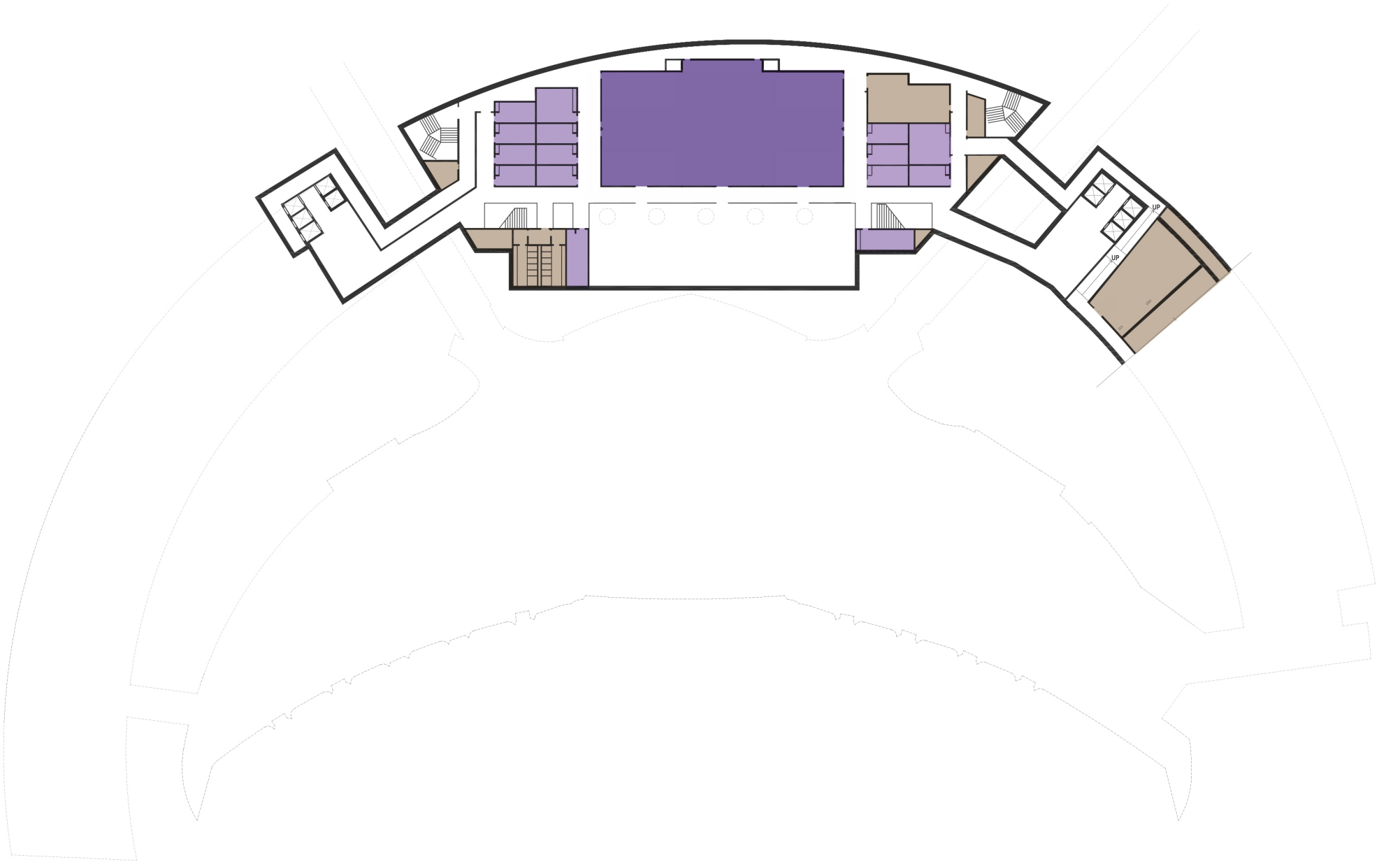
MCR DEVELOPMENT jetBlue HOTEL BEYER BLINDER BELLE LUBRANO CIAVARRA

N

KEY

GUEST ROOM		BALLROOM	
JETBLUE		SPA	
CIRCULATION		CONFERENCE	
MECHANICAL/ BACK OF HOUSE		RETAIL & RESTAURANT	
		MUSEUM	

APPROXIMATELY 505 HOTEL GUEST ROOMS TOTAL



CONCEPT BELOW GRADE LEVEL 3 PLAN

NOTE: ① INTERNAL FUNCTIONS AND LOCATIONS ARE FOR ILLUSTRATIVE PURPOSES ONLY. ② LOCATION OF EXTERIOR WALLS APPROXIMATE; FEASIBILITY WILL BE EVALUATED.

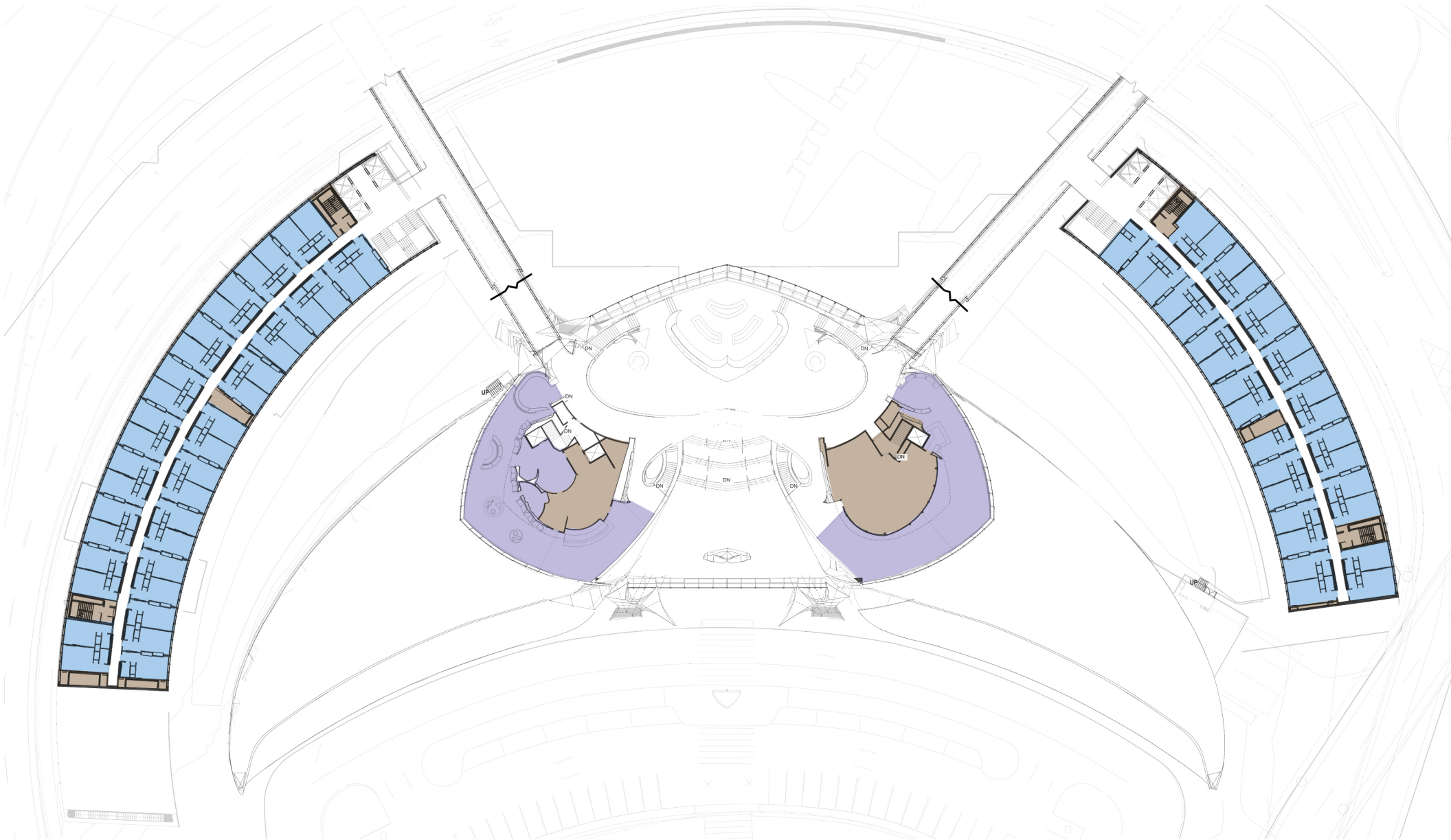
MCR DEVELOPMENT jetBlue HOTEL BEYER BLINDER BELLE LUBRANO CIAVARRA

N

KEY

GUEST ROOM		BALLROOM	
JETBLUE		SPA	
CIRCULATION		CONFERENCE	
MECHANICAL/ BACK OF HOUSE		RETAIL & RESTAURANT	
		MUSEUM	

APPROXIMATELY 505 HOTEL GUEST ROOMS TOTAL



CONCEPT FLIGHT CENTER MEZZANINE AND TYPICAL HOTEL GUESTROOM BUILDING FLOOR PLAN

NOTE: INTERNAL FUNCTIONS AND LOCATIONS ARE FOR ILLUSTRATIVE PURPOSES ONLY.

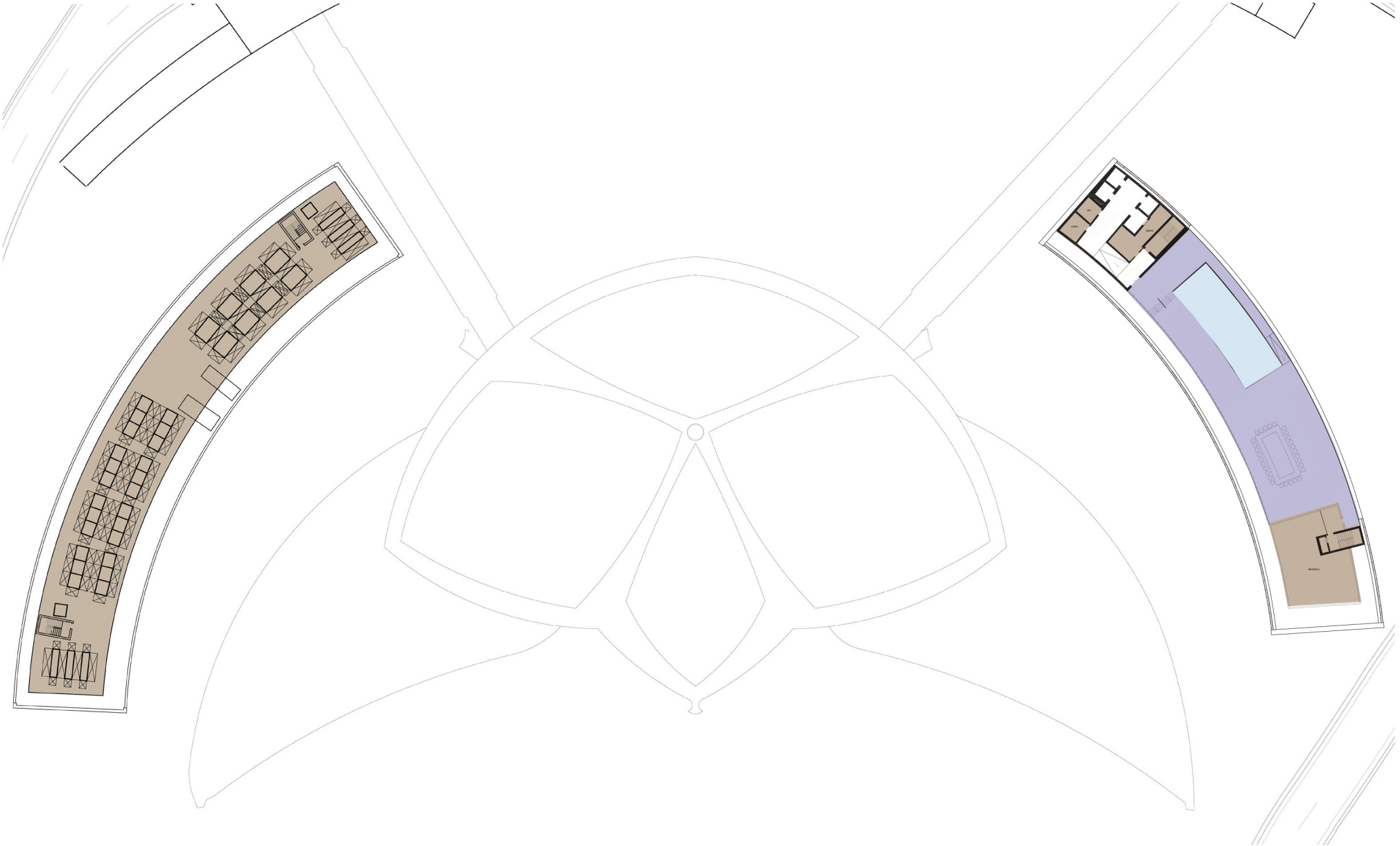
MCR DEVELOPMENT jetBlue HOTEL BEYER BLINDER BELLE LUBRANO CIAVARRA

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KEY

GUEST ROOM		BALLROOM	
JETBLUE		SPA	
CIRCULATION		CONFERENCE	
MECHANICAL/ BACK OF HOUSE		RETAIL & RESTAURANT	
		MUSEUM	

APPROXIMATELY 505 HOTEL GUEST ROOMS TOTAL



CONCEPT ROOF PLAN

NOTE: INTERNAL FUNCTIONS AND LOCATIONS ARE FOR ILLUSTRATIVE PURPOSES ONLY.

Appendix C: RAC Meeting Minutes and ACHP Correspondence

MEMORANDUM

Meeting Minutes *RAC Meeting #29*

Meeting Date: December 14, 2012
Subject: JFK T5/6 Redevelopment Advisory Committee Meeting #29
Location: JFK Airport - Building 60 – Flight Center
Attendees: See attached sign-in sheet

Introduction

The twenty-ninth meeting of the Redevelopment Advisory Committee (RAC) to discuss the progress of the Terminal 5/6 Redevelopment Project at John F. Kennedy International Airport was held on December 14, 2012 at JFK Airport Flight Center, and chaired by the Port Authority of New York and New Jersey (PA).

Discussion

Jim Steven (PA) opened the meeting and provided an overview of the agenda for the meeting, including construction progress to date, update to the Memorandum of Agreement (MOA) and a presentation of the concept for adaptive reuse of the Flight Center as a hotel in response to the PA's Request for Proposals. He noted that the PA has held several events in the Flight Center in recent months to allow various groups to see the restoration work.

Item 1. TWA Flight Center Construction Update

J. Steven advised that the interior contract work was completed, including some additional life safety, lighting and signage work. He noted the extensive work that was performed and reminded the RAC members that additional tile was available for restoration of the remaining areas by the developer. The restoration of the skylights was completed and the Flight Information board is in service. He expected final permits to be issued soon.

Item 2: Memorandum Of Agreement – Status Update

J. Steven advised the Status Update to the Memorandum of Agreement was issued with the invitation for this RAC meeting (#29). The Status Update reflected the PA assessment of all of the Stipulations and he requested that the parties confirm the update or provide any additional clarifications or information as soon as possible. He said some planning work had progressed on the interpretive display required by the MOA. This was done internally within the PA with input

from Beyer Blinder Belle (BBB), the PA historical consultant. The current plan is to work with the developer to define the display as it fits into the overall development plan.

Item 3: JFK Flight Center RFP (Hotel)

J. Steven summarized the events of the previous year and a half including that the PA had prepared and issued the Request For Proposals (RFP) for adaptive reuse of the Flight Center. He said that the proposals submitted were reviewed by members of the RAC who had signed the Non-Disclosure Agreement (offered to all Signatories and Consulting Parties). The PA is in discussions with one of the developer teams and the information remained confidential - emphasizing that no agreement has been made yet. No announcement has been made by either party. Discussions are ongoing to resolve open issues.

Beth Cumming (SHPO) asked about a rough timeframe for resolution and was advised that there were a few issues remaining, including the PA lease with the City of NY, set to expire in 2050. Executive level discussions are ongoing to extend the lease, but no agreement has been reached. D. Free (PA) added that the PA was working toward a lease extension with NYC, or perhaps a non-disturbance clause, but needed to have a draft lease with the developer to advance an ATEIL, which would be followed by the ULURP process. J. Steven noted that developers typically want very long leases for favorable project economics, and amortization would also be considered. I. Gonzalez (PA) added that it was important to settle on a design as a first step.

The lead architect for the developer team (Todd Schlieman of Ennead), presented the concept for adaptive reuse as a hotel, starting with some background and his and the firm's extensive work on historic properties. He noted many examples, highlighting his appreciation of the quality of modern landmarks. He began with the restoration of the interior. Based on research of the Yale archives, including photos of the Flight Center design process itself, the intention was to capture the atmosphere of the time and continue that era. He said that some of the furniture was still available and would be used in the restoration. The concept is to recreate the lifestyle and the flight experience – the spaces remain and would be redone very much as before. Samples of the materials Saarinen used are available and would be the inspiration for the restoration. Even the typography used for the terminal graphics, invented for TWA, would be reused.

The restoration would put back elements from earlier times. The upper lobby would have a newsstand and coffee bar – and additional detail would be added. The historic views of the Flight Center would be preserved, both between the pedestrian bridges and the front of the building. He noted that some additional area would be needed in accordance with the business plan for a hotel. New wings were proposed – they were placed as far away as possible and have minimum contact with the Flight Center. J. Steven noted that through the RFP process, a minimum of 275 – 300 rooms were needed for a hotel project to work financially.

He continued with the description of the plans for the lower lobby, wings and the Kevin Roche additions. The functions for these areas included ticketing kiosks (as an airline function), hotel check-in, museum and conference center. The Constellation Lounge would be redone and some of the original back of house areas would be repurposed. The new buildings were placed on either side of the pedestrian bridges. Access from the Flight Center would be down to a connector partially below grade. Garden areas would fill-in between the Flight Center and wings. Two airplanes are proposed for the restored tarmac area – a 707 and a Constellation, which was

the first type of plane used at the TWA terminal – the idea is to connect the airplanes to the architecture.

The lower level would contain the mechanical rooms; the baggage spaces would be repurposed. The second level would have the Lisbon Lounge and the Paris Café which would remain and be renewed – little change was anticipated. The Ambassador Lounge would be restored. The developer is proposing a green roof on the wings – the area of the original Saarinen designed building would be mapped. Access to the east and west decks would be through new doors toward the north – with the design modeled after the most recent restoration work – they would not be seen in the historic views being preserved.

The hotel wings (new construction) were described using cross sections and showing their relationship to the Flight Center and other airport buildings to illustrate their size. The impression of the Flight Center is much larger than it actually is. The wings were pushed down as low as possible – the water table and site utilities constrained the lower floor elevation. J. Steven recalled that the Terminal 5 project installed drainage utilities on this site in response to design constraints for that portion of the project.

A detail cross section of the wings was described showing the first floor room in relation to the existing T5 arrivals road, and intermediate wall with plantings. The five floors above were also described, noting that the curtain wall design was kept simple to respect the Saarinen design. Triple glazed windows may be required for acoustic needs at the rooms and the gaskets in the upper curtain wall of the Flight Center would be replaced. The placement of the wings carefully considered their proximity to the pedestrian bridges (flight tubes). They are designed not to compete and have sculpted ends. The concavity of the wings faces the Flight Center; new fenestration is proposed for the Kevin Roche additions and landscaping between the wings and Flight Center.

Views of the project were shown, including the perspectives of how it would be perceived on arrival at JetBlue Terminal 5 – both on the upper departure roadway and lower arrival roadway. The reflective glass would make the wings lighter. Views of the Flight Center from the center of the roadway, between the flight tubes were also shown. These views would illustrate the relationship of the airplanes to the Flight Center.

Also presented was an interior view analysis based on the Ezra Stoller photographs. They used the original Stoller views looking out of the terminal from several locations and added the new wings to assess the effect. The views included looking east and west toward Terminal 5 from the upper lobby, looking west and north from the Lisbon Lounge and looking north from the Ambassador club. They also showed the front of the building both with and without the wings.

T. Schlieman introduced Ray Pepe from Building Conservation Associates (BCA), the Historic Preservation Consultant for the developer team. R. Pepe described BCA experience in historic preservation, noting that they recently did work on modernism including the GM Tech Center in Michigan. He described his personal experience years ago at the Flight Center as a travel in time – to experience the future - and indicated that this project would re-people the Flight Center. He talked about the "Saarinen experience" of passing through the Flight Center. He said the project would comply with the Secretary of the Interior Standards as implemented by the State Historic Preservation Office, however, it may or may not pursue the historic tax credit,. He noted that the

Standards themselves were not specific in all regards, but were subject to consultation for ultimate agreement.

Emphasizing that the project complied with the Standards, it was important to recognize and acknowledge the beauty of the Flight Center – nothing would be sacrificed – it would be restored. In preserving the interior, the developer would reintroduce previous functionality such as restaurants. It would retain a flight function with the information boards, ticketing kiosks and connection to air travel – occupants would still see the passenger bridges and airplanes.

The circulation within the building would be maintained, including entries, stairs, etc. The additions would reflect contemporary standards, yet be removed as far as possible from the Flight Center to minimize its presence. The additions were pushed down below grade, the curved shape genuflects to the landmark and is intended to be complimentary. Maximum separation is a fantastic approach.

T. Schlieman added that they tried to keep the building as thin as possible. They turned the orientation of the rooms to minimize the section. It appears to approximate a ¾ scale of the Flight Center. R. Pepe stated that consideration was given to the height – it is lower than the Flight Center. He said it still needs to be a great work of architecture and needed to acknowledge a connection and relationship to the Flight Center. The concept presented would need additional detail and he expressed confidence that it would get better.

The historic views have been preserved. The illustrated views included looking at the front, and looking from the lounge area out – with the connection to air travel. The curtain wall on the wings was not intended to replicate the Flight Center, but to get the conversation going. He noted that Saarinen pioneered gasketing for curtain wall systems working with GM automotive engineers and evolving to suit buildings. He noted that some curtain wall had already been restored – the design not compromised – and future work would be similar. Hal Hayes (H3 Architecture) commented on the gasketing and the stiffener. T. Schlieman said they intended to keep the single pane glass. R. Pepe said that the restored front entrance doors provided a good model for the new penetrations on the second level.

The RFP required the proposers to address maintenance of the Flight Center as a landmark. BCA developed software specifically for historic buildings – it is schedule based. The software can incorporate photos and specifications for individual items. It can also generate and issue Work Orders and track costs. BCA will license the application to the developer. J. Steven mentioned that sustainability was a PA goal. The commissioning and ongoing O&M for the building was a component of the RFP. He noted that the PA looked closely at the developer teams regarding their attention to detail and dedication exhibited in their submissions and presentations.

The floor was opened to questions and comments. Frank Sanchis, representing Municipal Art Society (MAS), asked about the participants in the RFP process. J. Steven advised that SHPO, NY Landmarks Conservancy and JetBlue signed the Non-Disclosure Agreement; no other Consulting Parties signed. F. Sanchis advised that he wanted to review his thoughts with the MAS before commenting. J. Steven acknowledged his position and noted that the plan shown represented the most recent iteration of the concept that evolved based on feedback from the NDA participants of the RAC and the PA's historic consultant. B. Cumming added that the developer has expressed a commitment to restoring the atmosphere of the Flight Center through a quality restoration.

The brand for the hotel and the content planned for a young, more sophisticated clientele in an affordable hotel was described by the developer. The project will bring attention to detail, restoring the interior to a mid-century look with furniture and fixtures. The guest experience is important – it will be a privilege to restore the Robert Lowey interior and bring a depth to the experience. Back of house spaces will be adapted as needed. The new rooms will be in a curved structure that looks at the historic building and will recreate the view of the tarmac – it will make the era come alive. The developers hotels apply best practices based on worldwide studies of amenities and guest experience.

They plan to make the Flight Center an entryway to the airport - a unique feeling and experience to attract people and restore it as a portal to JFK. The developer will look to improve the passenger experience as well, and will explore options to improve the check-in and security clearance process. Following the original intent of Saarinen's TWA Flight Center fits the hotel's business model and the brand will help make it successful.

J. Steven said that the input from Ennead and BCA showed a respect for the property – shared by the PA – and their plans would not make changes to the landmark, but adapt it and make it successful.

B. Cumming offered that she preferred the additions to be smaller, but understands the need for the construction. The hyphenated composition, set away from the Flight Center was good. The sightlines are respected. Although it is difficult to accept the additions, she can't come up with anything better. A-B said care had been taken with the design of the wings – height and width. They rearranged the rooms and the current plan is dramatically more elegant. As a comparison the Standard High Line fits the surrounding environment well. B. Cumming noted that the current design resulted from several iterations – it is now much lighter, thinner and agreed, more elegant. R. Pepe said that the use of two additions vs a single larger one would cost more – both to construct and operate, but it resulted in a better product – more light, air, space and better views.

Rich Smyth (JetBlue) said that the JetBlue reaction was similar to that of B. Cumming, although he would prefer that it be closer to the Flight Center to allow more room adjacent to the JetBlue Arrivals road. He liked the sleekness of the design and understood the need to compromise. He added that the design does work and looks forward to the opening and synergy expected from the project. He liked the Constellation airplane. He concluded by saying that the reuse was the best for the overall terminal development program.

H. Hayes said that from his perspective, it was a good plan – thoughtful, appropriate and reasonable – there was a lot to like. He offered a few thoughts/questions: where would the JetBlue check-in kiosks be located; the passenger experience would be different – originally not a hotel; he worked on the curtain wall of the GM building and would like to discuss further; Beyer Blinder Belle looked at glazing, but he understood the need for multiple panes, especially for the guest rooms; and how would the guests get into the airplanes.

The developer responded that the hotel would be two operations – much more than a lobby – and loved the idea that it could be an entrance to Terminal 5. They would like it to be an entrance to the entire airport with check-in for all airlines – and potentially provide expedited access to secure areas and check bags for all airlines. Amenities would include a conference center, retail,

food and beverage and events – more traffic would be better. They expected it would become a destination – both during the day and at night. The airplanes could be refitted (interiors) and used for private parties – handicap access would be by lift; others would use staircases. The large windows in the Flight Center would allow the guests to participate in the travel experience.

T. Schlieman said that Ennead would look at the mullions – and discussed the new additions – profile and vertical elements to accent the curve. He said window gaskets would be replaced on the upper level and suggested that additional reinforcement might not be needed.

F. Sanchis returned to the overall plan and how the pieces come together. He felt it was an opportunity for all parties to come together and move forward to preserve the landmark building. He said the PA effort to preserve the Flight Center was laudable. He recapped the journey of the Flight Center efforts from the earliest plans to the revised plans to minimize the visual impact of the new construction and the PA decision to take on the restoration itself. He would like to work as a group to make it happen – and likes the idea to use it for more than JetBlue alone. He asked to discuss the expansion of Terminal 5 with respect to the road plan as it relates to the overall site plan. He expressed a desire for all to participate in the discussion and would present his thoughts to the president of the MAS.

J. Steven summed up the presentation by noting that this discussion of the development plans could not have happed without a developer and conceptual plan. He added that although discussions were in progress, no firm commitment had been made.

Marie Jenet (FAA) mentioned that the FAA would like to review the process as it relates to the new construction and modifications to the Airport Layout Plan. J. Steven noted that the T5/6 Mater Plan contemplated the development of the entire Terminal 5/6 site. M. Jenet will look at the Memorandum Of Agreement regarding adaptive reuse and Part 106 compliance to see if any additional action might be required. The FAA, PA and SHPO will consult on next steps.

The presentation portion of the meeting was adjourned.

Item 4: Flight Center Visit

Attendees were invited to tour the TWA Flight Center, to observe the work performed and enjoy the views.

Next Meeting – TBD

The above represents our understanding of the topics discussed and decisions reached. Any comments or corrections regarding the above items should be sent to Jim Steven with a copy to Beth Cumming in writing within 10 business days of receipt.





JFK FLIGHT CENTER

Memorandum of Agreement – August 20, 2004
Status Update of MOA Stipulations – October 5, 2012

Status update for each of the stipulations of the Memorandum Of Agreement to reflect progress to date, items completed or no longer needed and future items.

Planning

1. The Port Authority (PA) sought, through a Request for Proposal (RFP) process in December 2006, to execute an agreement with an adaptive reuse developer providing for the design, construction, restoration, rehabilitation operation and maintenance of the TWA Main Terminal Building and Connecting Flight Tubes. The PA RFP required that any adaptive reuse developer selected as a result of the RFP, must agree to adhere to the terms of this Memorandum of Agreement (MOA). The PA gave the members of the Redevelopment Advisory Committee (RAC) an opportunity to comment on the design and preservation portions of the Draft RFP. Only one response was tendered to the RFP and after review, the PA determined that it was non-responsive and cancelled the RFP.
The PA undertook a revised approach for more specific adaptive reuse as a hotel in 2010. The PA gave the members of the RAC, subject to a confidentiality agreement, the opportunity to comment on the design and preservation portions of the Draft RFQ/RFP. The RFQ was issued in February 2011. Following an evaluation of submissions, an RFP was issued to a number of qualified firms in May 2011. The PA received proposals in July 2011 and the proposals were evaluated. The proposals were provided to the participating RAC members (those who signed the Non-Disclosure Agreement - NDA) for comments and those comments were provided to the Selection Committee for their consideration during the evaluation process. Questions relating to the concepts and historic preservation aspects of the project for each developer were submitted to the developers and they responded. A meeting including members of the Selection Committee, the NDA RAC members and developers was held in September 2011 to further discuss the questions and responses. Subsequently, the Evaluation Committee identified a preferred developer for further discussions and negotiations. ***Status: Ongoing – The PA and developer have entered into negotiations regarding the lease and adaptive reuse. The developer is preparing revised conceptual plans to reflect the feedback from the NDA RAC members and the PA. The developer will present their plans in the fall of 2012. SHPO, RAC and PA concurrence on conceptual plans are a pre-requisite for the lease agreement for adaptive reuse. SHPO approvals are required on more specific plans for construction as details are developed in accordance with the Secretary of the Interior Standards for Treatment of Historic Properties . Presentation of the conceptual plans to the RAC will also be scheduled in the fall of 2012.***





2. In accordance with the Port Authority's October 10, 2003 report to the FAA on the consultation process, the adaptive reuse will accommodate the provision of, at minimum, two (2) electronic ticketing kiosks in an appropriate setting within the TWA Main Terminal for use by airline passengers with carry-on luggage only. The Port Authority will require that any airline responsible for the ticketing kiosks will install, operate and maintain the kiosks and monitor their usage. ***Status: Ongoing – jetBlue Airways has installed two electronic ticketing kiosks, including power and communication lines to a location in the lower lobby of the TWA Main Terminal. PA will keep SHPO and RAC advised of progress regarding activation.***

3. A Redevelopment Advisory Committee (RAC) was formed and functioned in accordance with the Guidelines in Attachment D to the MOA. ***Status: Formation of the Redevelopment Advisory Committee (RAC) completed – RAC will continue to meet throughout the adaptive reuse process and until all stipulations under the MOA have been concluded.***

4. In order to minimize or mitigate any adverse effect of the new terminal on the historic building, the siting and design of the new terminal was discussed at numerous RAC meetings. The discussions resulted in adjustments to the siting and design to minimize any adverse effect and provide an appropriate setting for the TWA Terminal Building. The new terminal provides improved public access to the TWA Main Terminal through the connecting flight tubes and is separated from the TWA Main Terminal by an outdoor plaza area and arrivals roadway. Public access to the TWA Main Terminal is provided through an enclosed connector from the light rail system (JFK AirTrain). The connector was constructed to minimize the physical and visual impacts to the TWA Main Terminal. The plans for the new terminal and connector were provided to the SHPO and the RAC for review. The roadway system allows access to either the TWA Main Terminal frontage or the arrivals/departures roadway for the new terminal, as required by the MOA. ***Status: Siting and design of Terminal 5 has been completed in consultation with the RAC. jetBlue is planning for expansion in accordance with the master plan for the site.***





5. The final design plans for the restoration and rehabilitation of the TWA Main Terminal and the East Tube under PA contract, and plans for alteration of the West Tube, under JetBlue contract, were submitted by the Port Authority to the SHPO for comment as to whether those plans conform to the conditions set forth in Stipulation 12 governing the standards for performance of the restoration and rehabilitation work. The SHPO and the Port Authority gave the consulting parties and the RAC an opportunity to provide comment on those plans. All comments were considered by the Port Authority and the SHPO and following consultation, the Port Authority approved the TWA Terminal and Connecting Flight Tubes design plans. ***Status: Ongoing – The design plans for the East and West tubes and large portions of the Main Terminal were reviewed by the RAC and approved by SHPO and work on the East and West Tubes has been completed. A large portion of historic areas of the terminal including upper and lower lobby areas, façade, frontage and interim outdoor plaza has been substantially completed. PA will keep SHPO and RAC advised of progress of associated work, expected to be completed late in 2012, and for work on the remaining historic areas to be performed by the adaptive reuse developer.***

6. As part of its public education effort, the Port Authority commenced development of an interpretive display illustrating the history and significance of the TWA Terminal site and its relationship to the overall development of JFK International Airport. The exhibit will be placed in a prominent location in the TWA Main Terminal Building or in another appropriate setting proximal to that building. The display will be accessible to the public during normal operating hours after rehabilitation/restoration is complete. ***Status: Ongoing – The adaptive reuse developer has indicated they will satisfy this requirement in their development plans. PA will collect additional information regarding display, location and content from the developer and keep SHPO and RAC advised.***

7. The PA had Beyer Blinder Belle, a consultant meeting the professional qualifications established by the U.S. Department of Interior, prepare a National Register of Historic Places Nomination for the TWA Main Terminal Building, the Connector Tubes and Flight Wings prior to the demolition of the Fight Wings. The PA supported the listing on the Register as documented in the PA letter to SHPO dated February 25, 2005. The nomination was accepted and SHPO notified the PA that the TWA Flight Center was listed on the National Register of Historic Places in a letter dated October 31, 2005. ***Status: Completed. The nomination was made, the PA supported and the TWA Flight Center was listed on the National Register of Historic Places as confirmed in a letter dated October 31, 2005.***





8. The PA had a consultant, Beyer Blinder Belle, record the TWA Main Terminal, Flight Wing 2 and the Connecting Flight Tubes to Level 1 Historic Architectural Building Survey/Historic American Engineering Record (HABS/HAER) standards of the National Park Service. Copies of the recordation were sent to the National Park Service – HABS/HAER Coordinator, the New York State Archives, the PA and SHPO. ***Status: Completed – HABS/HAER was performed and recorded.***

9. The PA October 10, 2003 report to the FAA stated that the East Tube may require modifications to the columns to allow roadways to pass underneath. The design and construction of the roadways was accommodated without any changes to the columns. ***Status: Completed – Design and construction in the area of the East Tube has been completed.***

10. The Flight Wings could not be removed until the development plan for the new terminal was in place and a lease agreement was reached between the PA and JetBlue Airways. The lease was executed on November 22, 2005. ***Status: Completed – A lease agreement between the PA and JetBlue was executed on November 22, 2005; removal work followed.***

Interim Maintenance

11. The PA committed resources so that the TWA Main Terminal Building, including portions not eligible for listing as historic landmarks, and the Connecting Flight Tubes were properly maintained and cared for. Necessary repairs/maintenance identified through inspections have been performed. The SHPO has been given several opportunities to inspect the building and has done so. ***Status: Ongoing – PA will make inspections of and perform repairs/maintenance on the TWA Main Terminal and Connecting Flight Tubes as needed until these responsibilities are delegated to the adaptive reuse developer. The SHPO may inspect the facilities at any time.***

Restoration & Rehabilitation

12. The PA, through consultation with the SHPO, is restoring and rehabilitating large portions of the TWA Main Terminal Building and East Tube in accordance with the Secretary of Interior Standards for the Treatment of Historic Properties ("Secretary's Standards"). The TWA Main Terminal and the East Tube were, as a whole, treated in accordance with the Standards for Treatment of Historic properties – Rehabilitation. The PA will assure that the remaining portions of the historic spaces will be restored and rehabilitated by the adaptive reuse developer. As per Stipulation 9, structural modifications to the columns of the East Tube were not required. ***Status: Ongoing – The lower and upper main lobby spaces, the interior of the East Flight Tube, existing façade, including most landside entrances and front window wall and skylights, have been restored and rehabilitated under PA contracts. The Ambassador Club on the north mezzanine in the Main Terminal interior and all other historic areas not restored by the PA will be restored by the adaptive reuse developer in accordance with the Standards for Treatment of Historic Properties. The PA will keep SHPO and the RAC advised of progress.***

13. The entire visible exterior length of the existing East Tube was retained. A hierarchy of options for treatment of the West Tube was explored in consultation with the SHPO and the RAC. It was determined that a partial replacement of the West Tube was the best solution. The West Tube design was provided to the SHPO and the RAC for concurrence and construction work was performed under a JetBlue contract. Both the East and West Tubes provide public access between the TWA Terminal and the new terminal building. ***Status: Completed - The entire visible exterior length of the existing East Tube was retained.***

14. Flight Wing 1 and Flight Wing 2 were removed. Prior to removal, reuse of the gate lounge "trumpets" and other significant architecturally significant elements were investigated for inclusion as part of the new terminal concourse or gate hold area. After consultation with the SHPO and the RAC, the trumpets were not incorporated into the new terminal. ***Status: Completed - After consultation with the SHPO and the RAC, the trumpets were not incorporated into the new terminal.***





15. The restoration work included the removal of non-historic additions to the TWA Main Terminal Building and Connecting Flight Tubes, including the entrance vestibules, security booths, south baggage facility and the pedestrian canopy. The work on the interior lobby spaces includes the restoration of the marble tile flooring and all surfaces, the information desk, Solari flight information display surround, railings, stairs and ventilation enclosures. Other non-historic kiosks, signage and furnishings were removed. ***Status: Ongoing – Much restoration and rehabilitation work has been performed by PA; some work remains in progress; remaining work will be performed by adaptive reuse developer. The PA continues to consult with the SHPO on the restoration and rehabilitation work.***

16. After its completion, the rehabilitation/restoration work performed in accordance with Stipulation 12 will be approved by the SHPO. The SHPO will notify the consulting parties and the RAC that the SHPO's approval is being sought. The consulting parties will be given the opportunity to tour, as a group, the renovated and rehabilitated TWA Main Terminal Building and East Tube and the members of RAC will provide the Port Authority and the SHPO with their comments. The SHPO will approve the rehabilitation/restoration work when satisfied the work is properly completed. The Port Authority shall notify the signatories, the consulting parties and the RAC of SHPO approval. ***Status: Restoration and rehabilitation work for large portions of the TWA Terminal and East Tube are substantially complete. The consulting parties and members of the RAC have been given an opportunity to tour the TWA Terminal and East Tube and may visit at any time. The PA will seek SHPO approval for remaining work to be performed by the adaptive reuse developer.***

Ongoing Maintenance and Preservation

17. The PA will prepare maintenance and preservation guidelines for the treatment of the TWA Main Terminal and the East Tube. The guidelines will be submitted to SHPO for review and approval following completion of the restorations/rehabilitation work in Stipulations 12-16. ***Status: The adaptive reuse developer will prepare maintenance and preservation guidelines for all work***.

18. After the restoration and rehabilitation work is completed by the adaptive reuse developer, the PA will perform an inspection of the TWA Main Terminal Building and East Tube every five years in accordance with the maintenance and preservation guidelines in Stipulation 17 and submit a certified copy of the report to the SHPO for approval. A copy of the report approved by the SHPO will be provided to the signatories to the MOA. ***Status: Guidelines will be prepared by the developer for review as the restoration/rehabilitation work is performed. Formal approval will follow completion of the restoration rehabilitation work. The 5 year inspection requirement will be included in the agreement between the PA and the adaptive reuse developer***.

Termination of Memorandum Of Agreement

19. This agreement shall expire after the co-Chairs of RAC notify all members of the RAC and FAA that the consultation process for RAC has been completed, and after any objections raised pursuant to the Dispute Resolution process in Stipulation 21 have been considered in accordance with that Stipulation. The FAA shall notify all signatories when this MOA expires. ***Status: Future – The consultation process will continue throughout the adaptive reuse developer work. FAA needs to notify all signatories.***

20. If any signatory determines the terms of the MOA cannot or are not being carried out, then this signatory shall give written notice and the MOA may be amended, with provisions if not amended. If the Port Authority has not executed an agreement with an adaptive reuse developer for the rehabilitation/restoration work, the signatories shall consult among themselves to amend this agreement. ***Status: No signatory has given notice that the terms of the MOA are not being carried out. No action***.

21. If any member of the public or interested party, including the signatories to the MOA object within 30 days of approval of the restoration/rehabilitation work or other action with regard to the restoration/rehabilitation of the TWA Terminal and East Tube, the PA will consult with the objecting party to resolve the objection. ***Status: Future - The restoration/rehabilitation work is not fully complete. No action***.

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MEMORANDUM

Meeting Minutes *RAC Meeting #30*

Meeting Date: March 5, 2013
Subject: JFK T5/6 Redevelopment Advisory Committee Meeting #30
Location: 225 Park Ave South – Room 930
Attendees: See attached sign-in sheet

Introduction

The thirtieth meeting of the Redevelopment Advisory Committee (RAC) to discuss the progress of the Terminal 5/6 Redevelopment Project at John F. Kennedy International Airport was held on March 5, 2013 at Port Authority Offices at 225 Park Avenue South – Room 930, and chaired by the Port Authority of New York and New Jersey (PA).

Discussion

Jim Steven (PA) opened the meeting and provided a brief overview of the project including the Memorandum Of Agreement, Request for Proposals (RFP) issued by the Authority and receipt of proposals for adaptive reuse of the Flight Center as a hotel in response to the PA's RFP for the new participants. He referenced the Non-Disclosure Agreement signed by several members of the RAC and noted the presentation to the RAC at the December 14, 2012 meeting of the proposed Hotel development. He asked if there were any comments on the RAC #29 meeting minutes. None were offered.

Item 1: JFK Flight Center RFP (Hotel)

Jim Steven expanded on the history of the project, giving additional background on the MOA and JetBlue Terminal 5 development project. He noted that the Authority has invested $20 million in the restoration of significant areas for the building and elaborated on the RFP for adaptive reuse as a hotel, indicating that the proposals received had similar concepts. Discussions with a developer are in progress and some "tweaking" of the design may still be needed. Business terms for the Lease agreement are still to be worked out.

J. Steven summarized the obligations of the MOA, noting that many of the stipulations had been completed. He suggested that although the RAC would officially come to an end once the stipulations had been met, an informal meeting / gathering of former RAC signatories and consulting parties could be convened periodically to observe the developer's custodianship of the historical maintenance requirements. F. Sanchis (MAS) stated that he had not signed the NDA

and felt free to speak on the concept. N. Rappaport (DOCOMOMO) expressed that she was in a similar position. J. Steven reminded the participants that the information was not to be shared in public at this time.

F,. Sanchis asked whether the Landmarks Preservation Commission (LPC) needed to weigh in on the design of this project. B. Cumming advised that NY City owned the property and believed it was not necessary to go to the LPC. F. Sanchis made reference to an earlier concept for development of the site, suggesting that LPC was briefed on that plan. J. Steven said he would check internally on the need to go to the LPC.

F. Sanchis reminded the attendees of several initial points made earlier in the development process and noted that the working sessions with the Authority and the RAC had successfully reduced the impact of the development on the Flight Center. He noted that the connectivity to integrate the JetBlue Terminal into the site, including the introduction of ticketing kiosks and the opportunity for some portion of 1+ million passengers to experience the building was a great benefit.

F. Sanchis advised that he had discussed the concept with the MAS committee and offered feedback. The adaptive reuse of the headhouse interior (Flight Center) as a hotel was a great idea. The proposal by a high end developer was good and the additions for hotel rooms has merit. The restoration of the remaining areas for a complete facility was a great idea. J. Steven added that the developer expressed passion for the facility and I. Gonzales added that they intended to restore and recreate the interiors.
F. Sanchis provided feedback received from MAS: he complimented the high quality of the new hotel addition design work, noting the use of a top architecture firm. He added that the approach was good, especially looking to Saarinen's other designs. The hotelier's vision for connectivity and use by the entire airport, as well as Terminal 5 and parking, illustrated good thinking and was viewed positively by MAS.

Some additional MAS thoughts for consideration: the height of the hotel room buildings are a concern – explore reducing height; the right side building (looking at the front) impedes the view of the tarmac; the additions to the original (low) wings are not protected, they could be removed; symmetry of the buildings is not necessary, given that Terminal 5 will be expanded to the west in the future; removing a portion of the later addition to the existing (low) wing and lengthening the new hotel room building could reduce the height; connectivity could be improved with high speed connector to Terminal 5 with the addition of moving walkways in the connectors and escalators at Terminal 5; construction of a covered sidewalk at grade and clear directional signage from parking and AirTrain to the Flight Center.

J. Steven acknowledged the input and said that the developer planned to use the wing additions for back of house functions. The room count was needed for a financially successful operation. He noted that several other RAC members had concerns regarding the height of the new structures and modifications had been made to minimize their height and massing.

Following up on MAS thoughts, N. Rappaport asked whether one of the annex buildings could be higher than the other. J. Steven noted that renderings prepared by the developer showed the views from the Flight Center with the new hotel room buildings in place. I. Gonzales added that tarmac-like views would be recreated with planes visible from the Flight Center. J. Steven said that he would share these ideas with the developer.

F. Sanchis recalled that H. Hayes (H3Architecture) had proposed some concepts early in the review process that included building below ground in the courtyard area for additional program space with views up to the Flight Center. R. Smyth stated that he recalled PA Engineering looked at it and was determined to be too costly.

Further discussion on the suggestions to modify the hotel room buildings followed. F. Sanchis suggested the west hotel room building could be extended and encroach on the low addition portion of the Flight Center wing. A lower, longer building could retain the key count. B. Cumming expressed some reservation about removing any portion of the building, which could affect the eligibility for tax credits by the National Park Service. She noted that the addition has gained importance over time. B. Cumming also was not in favor of abandoning symmetry.

F. Sanchis noted that the material selection reflected other Saarinen work and was a good premise for the design. He expressed an interest in wanting to see the plans work.

J. Steven said that the authority would discuss the ideas with the developer, especially regarding the massing to explore the potential to make further changes.

N. Rappaport said she would like to present the conceptual plan to DOCOMOMO on April 3. There was some discussion regarding whether the architect could make the presentation, with the permission of the developer. As a follow up, N Rappaport made a presentation to DOCOMOMO. Attached to these minutes please find N. Rappaport's e-mail summary of the DOCOMOMO's observations.

R. Smyth expressed concern regarding parking, noting that there were times when the Yellow garage was full. He said there was potential to expand the garage above the toll plaza area. D. Free (PA) noted that the times when the garage was full were rare, e.g. President's Day. R. Smyth advised that with the addition of their business partners Aer Lingus and Hawaiian, it would be better to plan for additional demand. J. Steven said that there was ample parking in the CTA for the foreseeable future, which would not warrant the expansion of the Yellow garage. Connectivity via at grade vehicle connector or AirTrain was available. R. Smyth added that the addition of all JetBlue international arrival in 2015 should be taken into account.

Discussion of business related issues included the lease term and relationship to Authority lease with NYC. J. Steven said that the ULURP process would be needed for the ATEIL because the proposed Flight Center lease term would continue beyond the present Authority lease with NY City.

N. Rappaport asked whether a phased opening was possible. I. Gonzales said it was under discussion. R. Smyth also requested exploring and early opening. J. Steven said that significant staffing and expense would be required if the Authority were to open it.

M. Jenet (FAA) provided guidance on the process required from a regulatory perspective. After the development footprint and massing is determined, the NEPA process would need to follow, showing the specific development proposed. She advised the project was not likely to qualify for a Categorical Exclusion, which is for passenger processing facilities. She added that with the

change to the site footprint and construction activity, an environmental Assessment (EA) is required.
The exploration of the alternatives suggested today need to be considered prior to the EA. The EA would be used to make changes to the Airport Layout Plan (ALP). If needed, parking changes/requirements could be part of the same submission. Additional information is needed to document the environmental impact. The EA will also look at other airport work and the cumulative effects on air quality, etc.
Following initial preparation of the EA, 30 days is required for FAA review, followed by a 30 day public comment period and a public hearing. Approximately 6 months should be allowed for the EA process.

J. Steven noted that a proposal would be developed, Category X – or EA – and the rationale.

M. Jenet also referenced Stipulation 20 (Termination of the Memorandum of Agreement) of the MOA regarding notices and whether any amendment would be required. The PA , FAA and SHPO will review the stipulation and confirm the approach to closing it out, however
J. Steven indicated he planned to continue with the RAC throughout the hotel development process.

Next Meeting – TBD (tentatively May 2013)

Meeting Organizer: Jim Steven
Date: May 12, 2015
Location: JFK Building 14 – Room 3E

RAC # 32 Notes and Follow Up:

MCR Development and their team spent about an hour presenting their design for the Flight Center Hotel to the RAC.

Significant take a ways:

- Eric Kuchar (NYSHPO) indicated that on the surface, it did not appear as though there were any "fatal flaws" with regard to the Secretary of the Interiors or NYS Historic Preservation office guidelines. In addition, that the "bat wings" were not included in the historic fabric of the building.
- With regard to RAC member regrets with regard to the scale of the adaptive re-use ("500 rooms", "conference center", "6 stories" vs. initial expectations of a "boutique hotel"), Eric Kuchar summed up feelings "it is hard for preservationists to say that this is the appropriate solution".
- Alex Herrera (NY Landmarks Conservancy) echoed those concerns stating that "we (the RAC) were going in the wrong direction" and that "perhaps the building should be shuttered for 5 years and try again" and that he believed he may have difficulty in getting his Board to fully support the program.
- Frank Sanchez (World Monuments) and Alex Herrera both commented on the significantly high costs associated with simply brining the building up to code and a base from which the adaptive re-development could continue … the $65M on top of the $20M invested by the PA was quite an eye opener.
- Marie Jenet (FAA) indicated that because the development will be materially effecting the landmark structure (removal of the "bat wings"), an EA vs. a CatX would be required. Nate Kimball reinforced that we would assist MCR-jetBlue in the development of the EA and that it should be relatively simple since the elements are already well defined.

With regard to the actual structure and architectural elements:

- The RAC was generally pleased with the program and its attention to preservation.
- The annex hotel structures come across as "monumental" (Hal Hayes, H3 Architecture) and too "mono tone" (Nina Rappaport, DOCOMOMO). More focus and thought should be given to "sculpting the massing of the exterior walls" (a nod to the façade step backs rendered in the last round of Andres Balasz The Standard, proposals)
- Nina Rappaport further stated that "it's not about what Saarinen did somewhere else (IBM, Yale, etc)is as what he did here, but was lost (reference to the "trumpets" and gate buildings)". Ennaed, the Standards architect had adapted their curtain wall design from the curtain wall on the trumpet)
- Frank Sanchez asked that MRC-jetBlue undertake a quick "massing study" that would better represent material selection and views (T5i + the future final T5 expansion should be rendered; more street views that better reflect vehicle and pedestrian approaches to the Flight Center)

- The collective RAC also asked that additional consideration be given to removing the 6th floor …. Even suggesting that the symmetry of the annex structures could be altered to allow the “north” hotel annex to be longer to accommodate the 6th floor rooms. It was also asked that they look at more partially below grade “garden rooms”.
- I asked for an expect to receive written comments from the members so that I can send them on to the developer.

Meeting Organizer: Jim Steven
Date: June 16, 2015
Location: Highline Hotel - 180 Tenth Ave

RAC # 32.1 Notes and Follow Up:

I opened the meeting with a brief recap of the previous RAC meeting # 32 that took place on May 12, 2015 and I also thanked everyone who provided me with recent letters and comments.

Based on letters and comments I received from RAC consulting parties, there appears to be a general consensus that although the developers proposal is very encouraging, the size of the hotel wings are a concern.

The developer demonstrated to the RAC consulting parties that the hotel wings are absolutely necessary to support the restoration and ongoing maintenance of the historical Flight Center.

The RAC consulting parties had also suggested that in addition to the $20M the Port Authority has already spent on restoring certain public areas, curtain wall and portions of the roof of the Flight Center, that they also pay another $65M (estimate) to complete the Flight Center restoration in-turn allowing for a smaller hotel. It was explained that the Port Authority is capital constrained and investing an addition $65M plus into the Flight Center is not possible. We have requested our financial team to show in a general way that the economics of a sustainable hotel business is driven by the number of hotel rooms and that even if the developer reduced the hotel by 84 rooms (i.e. two floors on each wing) the hotel would still not be financially viable.

Another suggestion made by the consulting parties was to relocate some of the hotel rooms to jetBlue's T5i and also reduce the size of the conference space to make room for more hotel rooms within the Flight Center itself. It was explained to the RAC that conference room space is a necessary amenity to the hotel especially being at the airport to accommodate business meetings, banquet events, weddings, etc. Moving hotel rooms off-site to T5i is not a realistic option from a hotel management and operations perspective.

I cannot overstate both the PA and Developers commitments to working with the RAC with regard to material selections and other tweaks to the current plan that would reduce the perception of the massing issues, but hotel rooms are the drivers to a sustainable development.

Steven, Jim

From: Kate Slevin [kslevin@mas.org]
Sent: Tuesday, July 14, 2015 4:50 PM
To: Steven, Jim
Cc: Margaret Newman; Sami Naim
Subject: TWA Flight Center
Attachments: TWA Flight Center letter to Port Authority.doc

Jim,

Please find the attached letter from the Municipal Art Society regarding the TWA Flight Center. Thanks for the opportunity to submit comments.

We hope you and MCR will come present to our Preservation Committee this fall so we ca have a more detailed comments on the proposal.

Thanks.

Kate

Kate Slevin
Vice President, Planning and Policy
Municipal Art Society of New York
@masnyc | MAS.org | 212.935.3960 x1286

The Municipal Art Society of New York
MAS NYC

James Steven, P.E.
Manager JFK Physical Plant and Redevelopment
Port Authority of NY and NJ
JFK

RE: TWA Hotel Redevelopment Proposal, John F. Kennedy International Airport

Dear Mr. Steven:

Thank you for the opportunity to submit comments on the TWA Flight Center Redevelopment Proposal. The Municipal Art Society (MAS) is a private, non-profit membership organization that advocates for intelligent urban planning, design, and preservation through education, dialogue and advocacy.

MAS has long admired the Flight Center, designed by Eero Saarinen and completed in 1962, as an architectural gem. We were a consulting party in the Section 106 Review and a member of the TWA Flight Center Redevelopment Advisory Committee.

When MAS first became involved with the project in 2000, plans materialized to take Saarinen's masterpiece out of airport service and surround it with a new terminal building. MAS opposed the plan at that time, and believed it would overwhelm the architectural treasure and doom it to an uncertain future without a maintenance plan. Working with H3 Architecture, MAS put forth viable alternatives that would have preserved the airport use and preserved the various historic elements of the site. In 2013, MAS and other consulting parties supported a proposal by Andre Balasz to construct a 300-room hotel, but the proposal was ultimately withdrawn by the developer.

At this point, given the long history of the TWA Flight Center and the importance of preserving and reusing the site, MAS supports advancing the MCR proposal into the ULURP process, to embark on a more public conversation about the future of the TWA Flight Center. We are encouraged by the initial renderings of this adaptive reuse project, the construction of a new museum and public observation deck, and connections to the JetBlue Terminal.

However, we still have outstanding questions about the size of the 500-room hotel, and hope the Port Authority and MCR will release more detailed numbers to further explain why it believes this size hotel is appropriate and necessary, and to clarify to the consulting parties why it believes the project cannot be financed through its own budget.

We understand that circumstances have changed since we became involved in 2000. 9/11 has increased airport security and intensified pressure on the Port Authority's budget, and infrastructure maintenance needs throughout the region have grown. We understand that the Port Authority's primary mission remains operating critical transportation in the New York and New Jersey region. Still, we need more information before we can unequivocally support this project. We hope this information will be released

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MAS.org

as the ULURP process proceeds. We also urge the PANYNJ and developer to continue working with the NYC Landmarks Preservation Commission to ensure they are supportive of the final proposal.

In conclusion, MAS is supportive of an adaptive reuse proposal which preserves and restores the existing structure of the TWA Flight Center. In order to fully support the proposed development project, it will be critical to have the underlying financial data for the project, especially at it relates to the 500-room hotel.

Sincerely,
Margaret Newman
Executive Director

RAC #32.1
PFNYC
July 2015

Steven, Jim

From: Merrill Pond [mpond@pfnyc.org]
Sent: Tuesday, June 30, 2015 12:48 PM
To: Steven, Jim
Subject: PFNYC Comments on TWA Flight Center
Attachments: TWA_06.30.15.pdf

Hi Jim,

Please see the attached letter of support for the MCR Development's proposed plan for the TWA Flight Center. A hard copy is in the mail as well. Please do let me know if you need anything else from the Partnership on this.

Kind regards,
Merrill

Merrill Pond
Senior Vice President, Research
PARTNERSHIP *for* New York City
One Battery Park Plaza | New York, NY 10004
212.493.7515 (Direct) | 917.538.8336 (Mobile)
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PARTNERSHIP
for New York City

June 30, 2015

James Steven, P.E.
Manager, JFK Physical Plant & Redevelopment
The Port Authority of New York and New Jersey
JFK Building 14, 3rd Floor
Jamaica, NY 11430

Re: Support for the Restoration, Adaptive Re-Use and Development Plan Submitted by MCR Development

Dear Mr. Steven,

The Partnership for New York City represents the city's largest private sector employers, investors and leading entrepreneurs. We work with government, labor and the non-profit sector to build the economy of New York.

The Partnership fully supports the Restoration, Adaptive Re-Use and Development plan for the TWA Flight Center submitted by the team led by MCR Development. Global cities are only as great as their basic infrastructure, and airport capacity and condition are among the most important infrastructure facilities. Our airports serve over 117 million passengers, with 42 million coming from overseas. This plan preserves the historic nature if an iconic terminal, creates a new destination within the airport, and provides critically needed hotel capacity within the airport.

The TWA Flight Center, designated by the National Registry of Historic Places, helped define the "jet age." This is memorialized in the MCR plan, which keeps the Flight Center Head House open to the public as a prominent visitor attraction. Preservation of the Flight Center required the development of a major hotel to both offset the significant costs associated with bringing the full site into viable re-use and serving traveler needs. Without an income-generating hotel and retail space, the Port Authority would have been forced to close the building permanently.

The proposal will not only enhance JFK as a destination but will result in 509 permanent jobs, 600 construction and restoration jobs and 700 jobs in related industries. These will largely be union jobs filled by New Yorkers from the city's five boroughs.

The Partnership for New York City, as a member of the RAC, fully supports the project proposal put forth by MCR Development. Not only does the project help bolster New York's position as a global gateway, it also promotes economic activity, is fiscally sound and is committed to preserving the original design elements of the terminal. MCR Development has proven its capacity to achieve these objectives with development of the High Line Hotel.

We look forward to working with the Port Authority, the FAA, the State Historic Preservation Office and the Advisory Council to permanently open the TWA Flight Center to the public.

Sincerely,

Kathryn S. Wylde
President & CEO

Steven, Jim

From:	Betsy Merritt [emerritt@savingplaces.org]
Sent:	Wednesday, July 08, 2015 12:30 PM
To:	Steven, Jim
Cc:	Charlene Vaughn; rnelson@achp.gov; ngabriel@achp.gov; mjenet@faa.gov; kandrus@faa.gov; beth.cumming@parks.ny.gov; eric.kuchar@parks.ny.gov; Alex Herrera; pegbreen@nylandmarks.org; kati.laakso@formin.fi; mnewman@mas.org; Alicia Leuba; seri.worden@gmail.com
Subject:	National Trust comments on TWA Terminal
Attachments:	National Trust comments to Port Authority re Hotel July 8 2015.pdf

Please see the attached comment letter from the National Trust for Historic Preservation regarding the proposed hotel development at the site of the TWA Flight Center at JFK International Airport.

Thank you for considering the National Trust's comments.

Sincerely,
Elizabeth Merritt

Elizabeth S. Merritt, Deputy General Counsel
National Trust for Historic Preservation
2600 Virginia Ave. NW, Suite 1100
Washington, DC 20037
(202) 588-6026 | (202) 297-4133 (mobile)

Note my new e-mail address:
emerritt@skanavingplaces.org



National Trust *for*
Historic Preservation
Save the past. Enrich the future.

July 8, 2015

To: James Steven
Manager JFK Physical Plant & Redevelopment
Port Authority of New York and New Jersey

via email: jsteven@panynj.gov

Re: The TWA Flight Center

The National Trust for Historic Preservation appreciates the opportunity to comment on the proposed redevelopment of Eero Saarinen's TWA Flight Center at John F. Kennedy Airport as part of a hotel and conference center. We have been involved with the Section 106 process as a formal "consulting party" since 2001.[1] During this time many compromises and concessions have been made regarding the future of this iconic building.

The current proposal by MCR Development in partnership with Jet Blue Airlines would include a $65 million restoration of the historic TWA Flight Center, in the context of a total project budget that would approach one billion dollars. Much of this estimated cost would be to finish basic work that in our view should be the responsibility of the Port Authority, and not a financial burden driving the increased size and scope of the hotel project. Other components of the proposed restoration package could potentially be deferred.

The National Trust is pleased that the proposal includes a plan to adaptively reuse the iconic TWA Flight Center, and to bring the public back to this Modern masterpiece. However, the National Trust has serious objections to the scale of the proposed hotel construction within the narrow area between the historic building and the Jet Blue terminal. An earlier proposal, which all parties supported, would have included a hotel with approximately 300 rooms. The new proposal, by contrast, is hugely disproportionate, and would dramatically increase the number of rooms to more than 500, and increase the height to six stories, without any corresponding increase in preservation or other benefits.

Although we could support the adaptive reuse of the Flight Center as part of a hotel complex to ensure its ongoing use, the current proposal is simply too massive and monolithic, and would completely overwhelm the historic TWA terminal. We would also

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[1] The National Trust for Historic Preservation is a private, non-profit organization chartered by Congress in 1949 to lead the private historic preservation movement in this country, to promote public participation in the preservation of our nation's heritage, and to further the historic preservation policy of the United States. The National Trust has been designated by Congress as a member of the Advisory Council on Historic Preservation, which is responsible for overseeing the implementation of Section 106 of the National Historic Preservation Act.

The Watergate Office Building 2600 Virginia Avenue NW Suite 1100 Washington, DC 20037
E law@savingplaces.org P 202.588.6035 F 202.588.6272 www.PreservationNation.org

like to see more careful consideration of the connectivity between the historic TWA Flight Center and the new Jet Blue Terminal.

In addition to our objections to the disproportionate size of the proposed hotel building, we also have serious procedural concerns about the conduct of the Section 106 consultation process. In response to the parties' criticism and concerns about the size of the hotel, the Port Authority has essentially threatened the consulting parties, rather than engaging in consultation. The Section 106 regulations define "consultation" as "the process of seeking, discussing, and considering the views of other participants, and, where feasible, seeking agreement with them regarding matters arising in the section 106 process." 36 C.F.R. § 800.16(f). Unfortunately, that is not the dynamic underway in this case. Furthermore, no effort has been made to seek alternatives or modifications to the project that would minimize the degree of harm to the historic TWA terminal, also in violation of the Section 106 regulations. *Id.* §§ 800.1(a), 800.6(a).

In sum, we continue to be concerned about the future of the historic TWA headhouse, and we would welcome the opportunity to further engage in dialogue and consultation regarding the existing proposal.

Sincerely,

Elizabeth S. Merritt

Elizabeth S. Merritt
Deputy General Counsel

cc: Charlene Vaughn, Najah Gabriel, and Reid Nelson, ACHP
Katherine Andrus, Federal Preservation Officer, FAA
Marie Jenet, FAA
Beth Cumming and Eric Kuchar, NY State Historic Preservation Office
Alex Herrera, N.Y. Landmarks Conservancy
Frank Sanchis, World Monuments Fund
Margaret Newman, Municipal Art Society
Kati Laakso, Finnish Consul General
Alicia Leuba and Seri Worden, National Trust for Historic Preservation

RAC #32.1
NY Landmarks Conservancy
July 2015

Steven, Jim

From: Alex Herrera [alexherrera@nylandmarks.org]
Sent: Wednesday, July 01, 2015 4:11 PM
To: Steven, Jim
Cc: Marie C. Jenet; Kuchar, Eric (PARKS) (Eric.Kuchar@parks.ny.gov); 'Beth.Cumming@parks.ny.gov'; Frank E. Sanchis (fsanchis@wmf.org); 'Seri Worden (seri.worden@gmail.com)'; kati.laakso@formin.fi; Margaret Newman (mnewman@mas.org); 'nina@ninarappaport.com'
Subject: RAC Comments, Former TWA Flight Center Redevelopment Proposal
Attachments: TWA RAC Jul 1 NYLC.pdf

Jim, Attached are the New York Landmarks Conservancy's findings on the latest TWA redevelopment proposal. Thank you for arranging the recent RAC meetings and for affording the Landmarks Conservancy the opportunity to comment.
Alex Herrera

Alex Herrera
Director of Technical Services
The New York Landmarks Conservancy
1 Whitehall Street, 21st Floor
New York, NY 10004
212-995-5260

THE NEW YORK
LANDMARKS
CONSERVANCY

July 1, 2015

James Steven, P.E.
Manager JFK Physical Plant & Redevelopment
Port Authority of NY & NJ
JFK International Airport

Re: TWA Redevelopment Proposal

Dear Mr. Steven:

Thank you for inviting the New York Landmarks Conservancy to view and comment on the latest proposal to adapt and reuse the former TWA Flight Center at JFK International Airport. The project calls for completing restoration and upgrades to the Saarinen terminal and the construction of two new hotel additions and a subterranean conference center in the area between the landmark and the Jet Blue terminal.

The Landmarks Conservancy has been involved in the review of major changes at this site for many years both as a consulting party in the Section 106 Review and then as a member of the Redevelopment Advisory Committee (RAC). The Conservancy has from the beginning, supported the adaptive reuse of the landmark because it was clear to us that without a great many damaging alterations, it was no longer suited for its original use. Furthermore we supported the earlier scheme to add hotel wings on the site that would connect with the terminal. That scheme involved the introduction of approximately 300 hotel rooms. The latest scheme we saw is very similar except that the hotel would contain approximately 500 rooms housed in taller additions.

The TWA Flight Center is not a large building. We believe that hotel additions of the size and height most recently proposed would overwhelm the landmark and loom over and around it. We hoped that the additions could be downsized somewhat to bring them more into conformance with the height and scale of the landmark but were informed that due to the cost of the outstanding restoration work on the landmark, which is to be borne by the developer, the extra rooms are necessary. It is important to note that the amount needed to finish the restoration of the landmark is a modest fraction of the overall cost of the project, which including the Jet Blue terminal, comes to about a billion dollars. The outstanding work to the terminal is estimated at about 65 million. About half of that amount, $33 million, includes coating removal, new window walls, asbestos abatement and fees. We believe that this work at least should be the responsibility of the Port Authority. It amounts to about 3.3% of the overall cost of the project.

The Conservancy wishes to see a project happen here and to see the terminal revitalized and reused. It is a shame that after so many years and so much effort, the Port Authority cannot find the relatively modest additional funds to finish the job and thereby reduce the number of rooms that the developer's math dictates. It was always our understanding throughout the review process, that the Port Authority would restore the building's envelope and landmark interiors.

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The building would be brought to a state of excellent repair so as to not put the financial burden entirely on the RFP responder. We are disappointed that the Port Authority cannot complete the restoration of its famous landmark because if they did so, the proposed additions could shrink in height making the project far better.

We therefore believe that it is in the best interests of the landmark to wait until such time as the Port Authority can contribute further funds to finish the building restoration.

It should be noted that although not 100% restored, the building is in better condition today than it has been in decades. The restoration work done to date is first rate and in fact won our Lucy G. Moses Award for excellence. The exterior is freshly painted, the windows that were damaged have been replaced, and all the skylights have been replaced. We believe that the building is in no danger of significant deterioration should it become necessary to close it for a time in order to achieve a better proposal in the future

The Conservancy has supported the Port Authority and its consultants throughout the lengthy review process. We are disappointed that we cannot recommend that the project be approved as is.

In summation, the most recent proposal has many excellent aspects that the Conservancy could support, just as we supported the prior proposal. However we understand that math, not appropriateness, is driving the number of rooms, and therefore the size of the proposed additions. We believe that these additions are too large and will, when built, overwhelm and subsume the delicate former flight center. We strongly urge the Port Authority to at least share the cost of the outstanding restoration items with the developer with the hope of downsizing the physical size of the additions. We commend the developer, MCR Development LLC, for stepping up to the plate and committing the necessary funds to complete the restoration and upgrading of the landmark. We understand that this financial commitment means that more rooms need to be added to the hotel in order to make it viable as a business. Nevertheless, we cannot approve a scheme that we believe attempts to fit too much program in too small a site. We urge the Port Authority and MCR to find a way to make the additions less tall. Until that occurs, the New York Landmarks Conservancy cannot recommend approval of the proposal.

Sincerely,

Alex Herrera
Director of Technical Services

cc: consulting party colleagues

RAC #32.1
DOCOMOMO
July 2015

Steven, Jim

From: Nina Rappaport [rappaporthall@sprintmail.com]
Sent: Thursday, July 09, 2015 4:31 AM
To: Steven, Jim
Cc: Nina Rappaport
Subject: TWA Flight Center letter
Attachments: Docomomo NY Tri TWA letter.pdf

Dear Jim,

I am so sorry for our delay with our Docomomo NY/Tri-State letter concerning the new proposal for the TWA Flight Center. It is attached here.

Best Regards,
Nina

Documentation and Conservation of buildings,
sites and neighborhoods of the Modern Movement

do.co.mo.mo_US
NEW YORK | TRI-STATE

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New York, NY 10025
info@docomomo-nytri.org
www.docomomo-nytri.org

July 7, 2015

James Steven
Manager JFK Physical Plant
Port Authority of NY & NJ
JFK International Airport

Dear Mr. Steven,

DOCOMOMO New York/Tri-State, as a member of the Redevelopment Advisory Committee, is pleased that the Port Authority remains committed to seeing the TWA Flight Center project through redevelopment and that a developer who recognizes the significance and potential of this Modern architecture heritage site has submitted a proposal.

DOCOMOMO New York/Tri-State would like to commend MCR Development for being committed to the restoration of the TWA Flight Center and to a project that allows public access to the building. Overall we think the proposed design is appropriate and exciting. Yet after careful consideration our Executive Committee believes the proposal's significant shortcoming in terms of protecting and celebrating the Flight Center is the height of the two proposed hotel blocks combined with their proximity to the historic structure.

We urge the Port Authority to work with MCR Development to reduce the overall height of the hotel wings by one-story.

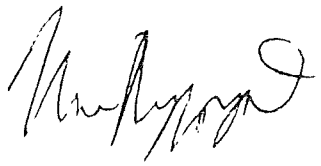
DOCOMOMO New York/Tri-State supported the previous proposal for a slightly lower 300-room hotel and anticipated similar sized new construction in the current proposal. It was our understanding from the initial RFP forward that the Port Authority would restore the Flight Center's envelope and the central landmark interior space and handle asbestos remediation. We are disappointed that after such excellent work on the restoration to date—having won public praise and professional awards—the Port Authority is prepared to short change this historic property by permitting the hotel structures to create a looming wall close behind and above the Saarinen structure.

We would like to underscore that DOCOMOMO NY/Tri-State's foremost concern is to see a successful TWA Flight Center redevelopment completed. We understand that this is a critical moment of the project; we do not want to see the building mothballed for another decade. In

continued

the interest of having the Flight Center revitalized and accessible to future generations we support the MCL Development proposal overall while advocating for a revision that would moderate the building height.

On behalf of the Executive Committee
Yours Sincerely,



Nina Rappaport
Vice President
DOCOMOMO New York/Tri-State

Steven, Jim

From: Laakso Kati [Kati.Laakso@formin.fi]
Sent: Wednesday, July 15, 2015 5:46 PM
To: Steven, Jim
Subject: RE: JFK Flight Center RAC #32.1 Follow Up

Dear Jim,

Thank you for your message. I believe we will not prepare a separate formal comment sheet but I do agree with several of the other RAC members, hoping the Port Authority would consider taking on the responsibility of the renovation of the TWA Headhouse which is a very valuable building in terms of architectural history and the legacy of Eero Saarinen. Our wish is that the Port Authority would value the building and take financial responsibilty that it will survive intact for future generations.

The developers can not take on the cost of a renovation of the Headhouse without making the hotel building unnecessarily large, nor do I think they should. Since the Headhouse is a valuable part of the JFK and Port Authority it should be under those organizations interest to make sure it will survive for future generations. I hope this clarifies our standpoint, sorry for being this late with it!

I wish you a lovely summer and really hope a solution can be found that will please all partners. It would be a huge shame if the terminal could not be used, and if the plans with the current developer would fall through. I sincerely believe that the current developer would be willing and able to honor the legacy of the work of Eero Saarinen if only they would be given the chance to do so.

Best,
Kati

Kind regards,
Kati Laakso
Cultural Attaché

CONSULATE GENERAL OF FINLAND
866 United Nations Plaza, Suite 250
New York, NY 10017

Office +1.212.750.4400 / Cell +1.917.379.7934
Fax +1.212.750.4418 / Email: kati.laakso@formin.fi
www.finland.org

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From: Steven, Jim [mailto:jsteven@panynj.gov]
Sent: 15. heinäkuuta 2015 16:01
To: Laakso Kati
Subject: JFK Flight Center RAC #32.1 Follow Up

Good afternoon Kati .... I hope you are doing well. In the last RAC presentation that was held at the Highline Hotel, I had requested that the RAC members provide me with their formal comment on the MCR development proposal. I have received several, but since you have been an active participant recently, I was wondering what your position was ? I will tell you that so far the reactions have been mixed (very similar to the reactions we heard at the meeting).

I will be consolidating all the responses and distributing them early next week. That will be followed up by a telecom wrap up and a more definitive position from the RAC voting membership.

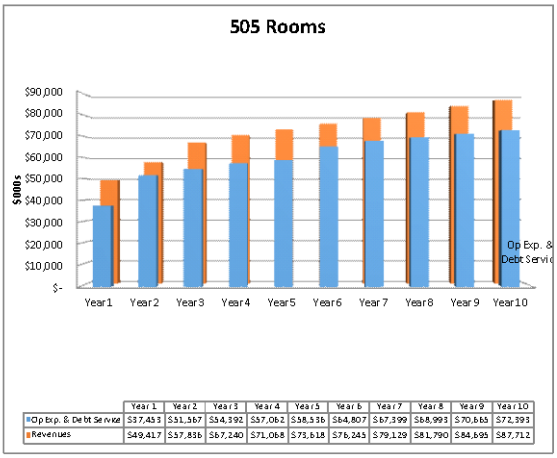
Hope to hear back from you !

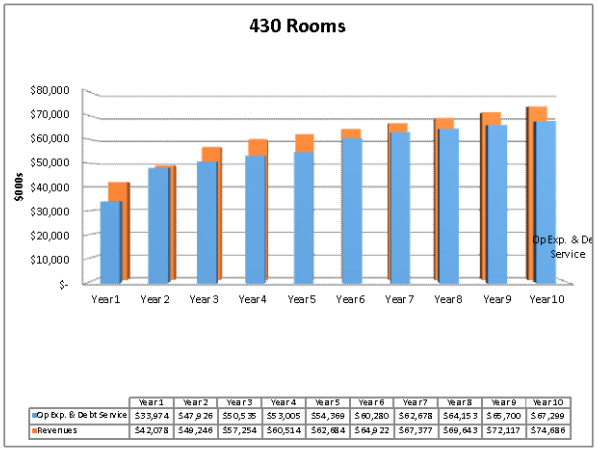
Cheers

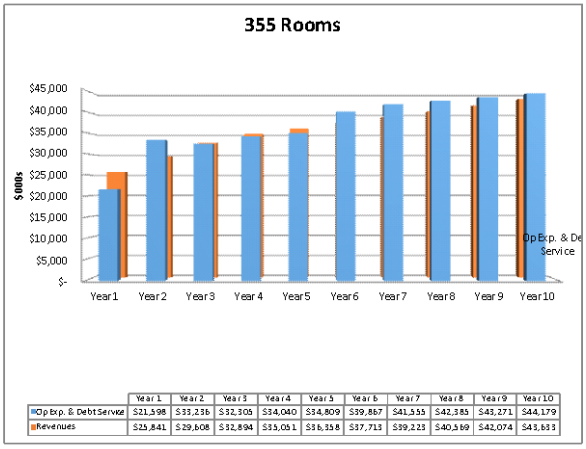
Jim

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Hotel Financial Performance vs. Number of Hotel Rooms

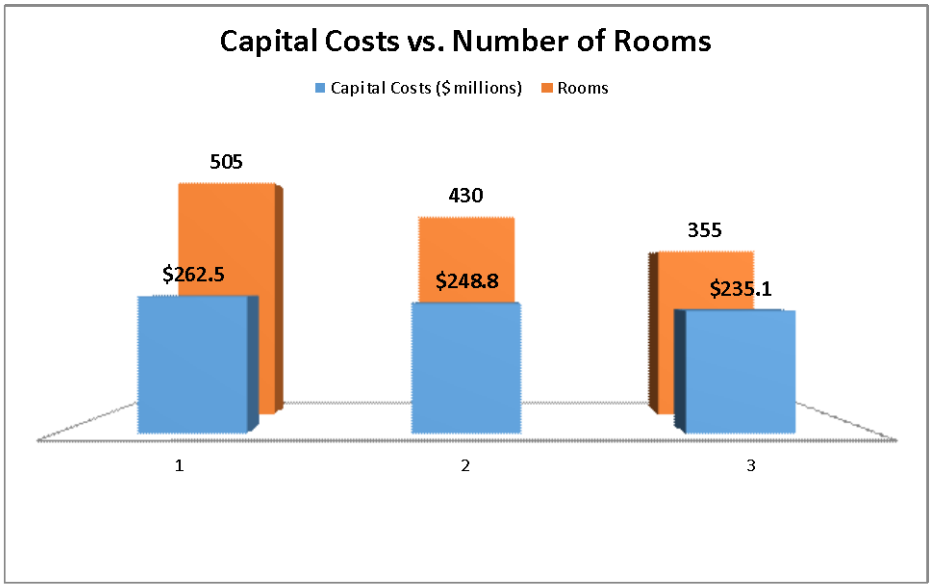






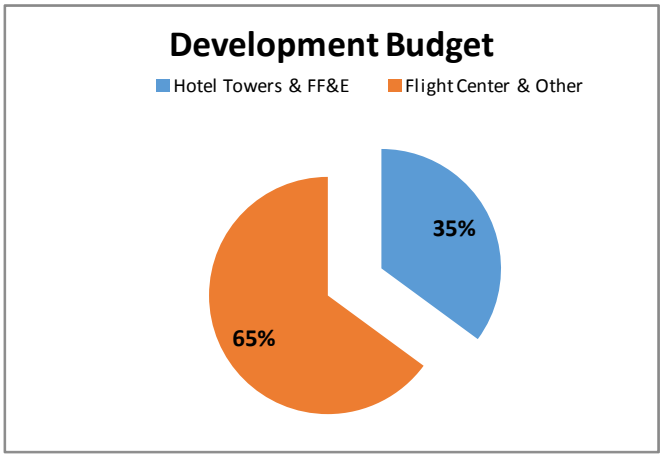
Looking at the first ten years of operations, operating costs and debt service (Principal and Interest) exceed revenues as the number of hotel rooms is decreased from 505 to 430 and then to 355. This result is driven by the large amount of investment and fixed costs associated with the Flight Center.

Hotel Investment vs. Number of Hotel Rooms

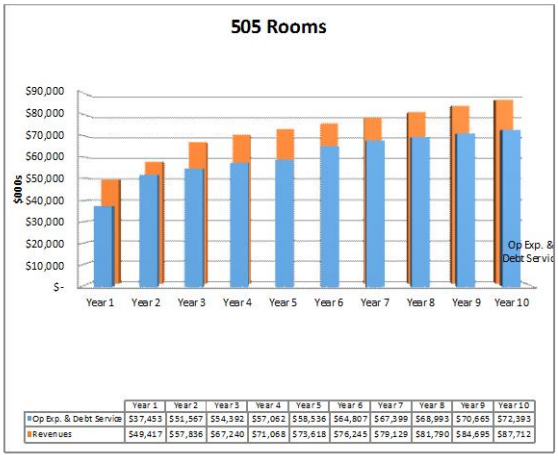


Room Reduction (505 to 355)	**-30%**
Capital Cost Reduction ($262.5 M to $235.1 M)	**-11%**

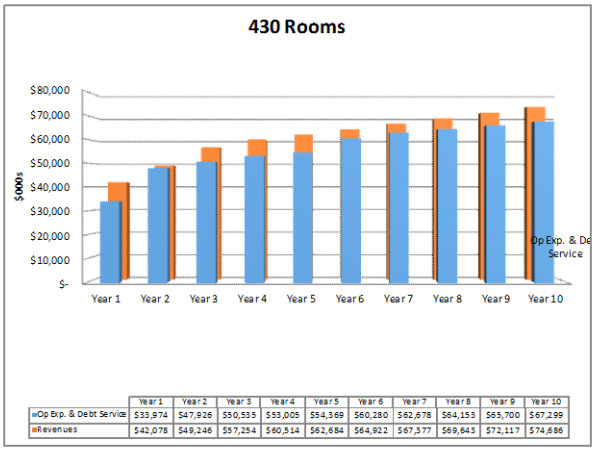
The cost of the hotel towers, rooms and FF&E is disproportionately small as compared to the cost of renovating and modernizing the Flight Center.



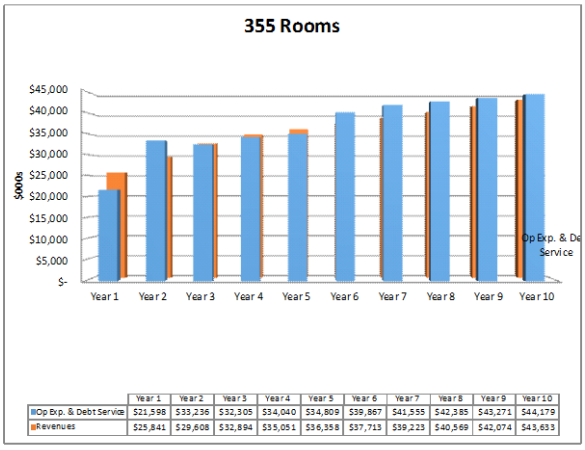
Hotel Financial Performance vs. Number of Hotel Rooms



	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Op Exp. & Debt Service	$37,453	$51,567	$54,392	$57,062	$58,536	$64,807	$67,399	$68,993	$70,665	$72,393
Revenues	$49,417	$57,836	$67,240	$71,068	$73,618	$76,245	$79,129	$81,790	$84,695	$87,712



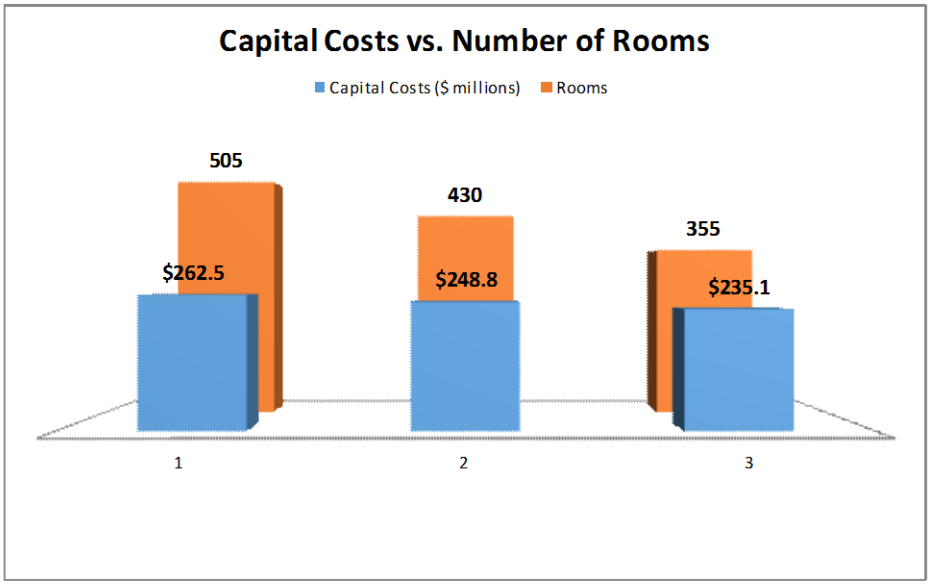
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Op Exp. & Debt Service	$33,974	$47,926	$50,535	$53,005	$54,369	$60,280	$62,678	$64,153	$65,700	$67,299
Revenues	$42,078	$49,246	$57,254	$60,514	$62,684	$64,922	$67,377	$69,643	$72,117	$74,686



	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Op Exp. & Debt Service	$21,598	$33,236	$32,305	$34,040	$34,809	$39,867	$41,555	$42,385	$43,271	$44,179
Revenues	$25,841	$29,608	$32,894	$35,051	$36,358	$37,713	$39,223	$40,569	$42,074	$43,633

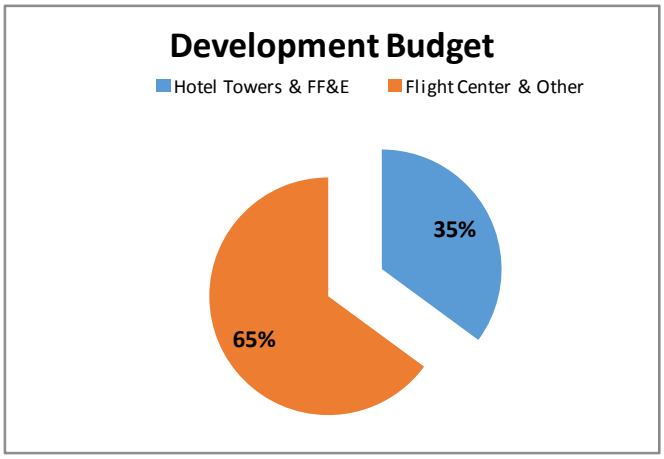
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Hotel Investment vs. Number of Hotel Rooms



Room Reduction (505 to 355)	**-30%**
Capital Cost Reduction ($262.5 M to $235.1 M)	**-11%**

The cost of the hotel towers, rooms and FF&E is disproportionately small as compared to the cost of renovating and modernizing the Flight Center.



From: Steven, Jim [mailto:jsteven@panynj.gov]
Sent: Monday, December 07, 2015 5:26 PM
To: tkelly@mas.org; Frank Emile Sanchis III; 'Alex Herrera'; kslevin@mas.org; 'ngabriel@achp.gov'; 'mpond@pfnyc.org'; 'nina@ninarappaport.com';Kati.Laakso@formin.fi; Tyler Morse; Brook Jackson; 'cvaughn@achp.gov'; Richard Smyth; Seri Worden; Leddy, James; 'marie.jenet@faa.gov'; 'Beth.Cumming@parks.ny.gov'; Betsy_Merritt@nthp.org
Cc: Kimball, Nathaniel; Lee, John; gail.butler@faa.gov; Knoesel, Edward; Schmidt, Michael; Free, Don; Rogak, Elizabeth; Pierpont, Ruth (PARKS)
Subject: RAC Meeting #33 Follow Up - Draft MOA Amendment

Dear RAC Members,

We appreciate your continuing involvement in the RAC discussions aimed at the restoration and building of the TWA Flight Center Hotel. At the December 1 RAC meeting we discussed revising the Draft MOA Amendment with the verbal comments we received during the RAC meeting. The redlined version of the draft MOA Amendment showing those changes is attached for review and comment. Also attached is the attendee list from the December 1 RAC meeting. Please review and provide your comments on the Draft MOA Amendment by December 14 .

In revising the MOA Amendment we noticed a reference in a Whereas clause to an August 2015 Conceptual Plan. That was not correct. We held RAC meetings in May and June and not August. The Concept Plan exhibit that was included in the December 1 meeting notice was the latest version based on the design presented during the two summer meetings and further evolved based on due diligence activities such as locating footings and structural elements for the Flight Center tubes leading to Terminal 5. Those structural elements constrained options for below grade circulation and spaces which was revised as shown on the plan attached to the December 1 meeting notice. That drawing which was provided two weeks ago has since been amended to include a date of December 1 and more prominently show the word “Concept” along the top.

An issue was raised during the RAC meeting about the review times. I will be posting the preliminary and pre-final drawings (list of specific drawing to be provided at a later point) on an web-based FTP accessible to all RAC members with notification that it has been posted and how to access the web-based FTP site. We would then look for your comments within 14 days of the notification to you and the posting.

During the December 1 RAC meeting clarification was provided on the MOA Amendment/Environmental Assessment (EA) process. For your convenience a summary is provided. RAC consulting party comments will be reviewed by the RAC Signatories and a determination made as to what changes need to be made to the Draft MOA Amendment. The Draft MOA Amendment would then become part of the draft Environmental Assessment (EA) submittal that the Port Authority would make to the FAA related to changes to the Airport Layout Plan. Once the FAA has reviewed and commented on the draft EA, and the Port Authority revised the document accordingly, it will be released to the public for review and comment. After the FAA considers all comments received and is satisfied that all comments were adequately responded to, it will make an environmental determination. The MOA Amendment would be signed by the signatories, the consulting parties would have an opportunity to sign (concur), and the MOA Amendment would then become part of the Final EA.

As discussed at the December 1 RAC meeting, please submit any additional comments on the Draft MOA Amendment by December 14. Please do not hesitate to contact me with any questions.

Thanks—Jim
James Steven, P.E.
Program Director JFK Redevelopment

Office: (718) 244-4502
Cell: (917) 567-9269

MEETING TITLE: **RAC Meeting #33 - Draft Amendment to MOA**

DATE: December 1, 2015, Tuesday

LOCATION: 25-05/06

	NAME (PLEASE PRINT)	COMPANY	SIGNATURE
1	Michael Schmidt	PA - Aviation	
2	Jim Steven	PA - JFK Aviation	
3	Dan Fee	PA - Properties	
4	Yusuke Iimura	PA - Aviation	Yusuke Iimura
5	TYLER MORSE	MCR	
6	RICHARD SAUTHWICK	Beya Blinder Belle	
7	Brook Jackson	PFor NYC	
8	Nate Kimball	PA - Aviation	
9	Marie Jenel	FAA - NYASU	
10	WARD DENNIS	HQ	
11	FRANK SANCHIS	NPS	
12	Nina Rappaport	DOCOMOMO NYNJ	
13	Ruth Pierpont	NYSHPO	Ruth Pierpont
14	Elizabeth Rogak	PA LAW	
15	Jim Leddy	JETBLUE	
16	Richard Smyth	JetBlue	
17	Seri Worden	Nat'l Trust	
18	TINA KELLY	NPS	
19	Alex Herrera	NYLC	
20	ED KNOESEL	PA	
21	Charlene Vaughn	ACHP	
22	Nayah Gabriel	ACHP	
23	Beth Cumming	SHPO	
24	Gail Butler	FAA	
25	Betsy Merritt	Nat'l Trust Historic Preservation	
26			

Jan phone

RAC #34

MEETING SIGN-IN SHEET

Project: TWA Flight Center	**Meeting Date:** 2-26-16
Facilitator:	**Place/Room:** 4 WTC, 18

Name	Company	Phone	E-Mail
Dan Fee	Port Authority	212-435 6652	dfree@PANYNJ.GOV
Mike Schmidt	Port Authority	212-435 6622	mschmidt@panynj.gov
Jim Steven	Port Authority - JFK	718 244 4502	JSTEVEN@PANYNJ.GOV
Nate Kimball	PANYNJ - Aviation	212-435-3783	nkimball@panynj.gov
Marc Jenet	FAA - NYADO	718-995 5777	marc.jenet@faa.gov
Merrill Pond	Partnership for NYC	212-493-7515	mpond@pfnyc.org
Kevin Costello	JetBlue Airways	718-709-3349	kevin.costello@jetblue.com
Beth Cummings	SHPO		
Ruth Pierpoint	SHPO		
Gail Buttler	FAA		
TYLER MORSE	MCR	212.277.5601	tmorse@MRRDEVELOPMENTLLC.com
Russ Shattan	MCR	212 277 5639	RSHATTAN@MRRDEVELOPMENTLLC.COM
Stephen LeFlowich	Friedl Freed	212-854-8200	LCF@COSTEFFEST.COM
Frank Sanchis	MAS	9146590914	FSanchis@WMF.org
TARA KELLY	MAS	2129353960	TKELLY@MAS.ORG
GINA POLLARA	MAS	2129353960	gpollara@mas.org
Alex Herrera	NY Landmarks Consv.	212-995-5260	alexherrera@NYLandmarks.org
Nina Rappaport	Docomomo NY	2125373972	nina@ninarappaport.com
Dale Lunan	Lubrano Ciavarra	718-522-3893	Dale@LCNY.com

MEETING SIGN-IN SHEET

Project:	Meeting Date:
Facilitator:	Place/Room:

Name	Company	Phone	E-Mail
ANNE MARIE LUBRANO	LUBRANO CIVARRA ARCHITECTS	718 522.3884	AM@LCNYC.COM
ED KNOESEL	PORT AUTHORITY	212 435 3747	eknoesel@panynj.gov
Seri Worden	Nat'l Trust Hist. Pres.	646-576-4184	sworden@savingplaces.org
Richard Southwick	Beyer Blinder Belle Archits.	212 777.7800	tsouthwick@bbbarch.com
BETSY MERRIS			
Doug Hassebroek	Beyer Blinder Belle Architects	212 614 1977	dhassebroek@bbbarch.com
Kaunteya Chitnis	MCR Development	212-277-5858	kchitnis@mcrdevelopmentllc.com

Meeting Minutes RAC Meeting #34

Meeting Date:	February 26, 2016
Subject:	JFK Redevelopment Advisory Committee Meeting #34
Location:	4 WTC – Conf Rm 18 A & B
Attendees:	See attached sign-in sheet

Introduction

The thirty-fourth meeting of the Redevelopment Advisory Committee (RAC) was convened to present to the full committee progress made by the Developer's design team prior to the public review of the projects Environmental Analysis. The meeting was held on February 26, 2016 at Port Authority Offices at 4 World Trade Center – Room 18 A & B, and chaired by the Port Authority of New York and New Jersey (PA).

Discussion

Jim Steven (PA) opened the meeting with an introduction of the attendees, including Ms. Gina Pollara, the new President & CEO of The Municipal Art Society of New York and several attendees via telcon and webx. He then turned the program over to Tyler Morse of MCR to provide a detailed update of progress sine the last RAC meeting.

Mr. Morse, began by updating all on the progress being made with NYC through the ULURP process and MCR's successfully securing 100% approval from the Community Boards and Queens Boro Presidents Office. He indicated that things were on track for City Planning Commission's vote on March 9th. Mr. Frank Sanchez, MAS voiced his concern that the RAC had not been made aware of the various community board meetings. Many of the consulting parties echoed that concern. Mr. Steven reminded the meeting attendees that the ULURP process should not have been a surprise since the RAC had been made aware of them (in general manner, without specific dates) during the summer of 2015, at a RAC gathering in the Fall of 2015 and again at the December 1st RAC #33 meeting. Mr. Lefkowitz, MCR's Council, reminded the attendees that the ULURP process was a "real-estate" proceeding and that design elements are not presented, discussed or a factor in the leasing aspects of the ULURP process. That explanation cleared the air and members were satisfied that they were not being cut out of the process.

That conversation followed with more discussion on what information has been shared with regard to the design. Both Mr. Steven and Mr. Southwick reiterated that what is being shared with the RAC is not public and exclusive to the RAC members only. Ms. Marie Janet, FAA, further explained that the information being presented today would become public when the EA is issued (current forecast is within a month). The EA will then be available for public commentary for 30 days.

Mr. Morse, then turned the meeting over to Mr. Richard Southwick, BBB and Anne Marie Lubrano, Lubrano Ciavarra Architects, to present progress made on the design. The presentation included a previously circulated PowerPoint that was made available to those attending by phone via a web-x.

The presentation began with a conceptual design for the restoration of the original parking area in front of the Flight Center including a pathway from the Yellow Garage to the Flight Center's main entrance. Mr. Sanchez, advised the group that he had another commitment but wanted to take this opportunity to remind the RAC of previous thoughts and consideration of parking garage to Flight Center access. He restated his prior suggestions that there is a need for an elevator at corner of the parking garage to provide more direct access to facilitate upwards of 2 million annual visitors. He also advised that he thought the hotel and conference area access proposal via the Flight Tubes was clever. Mr. Sanchez concluded by again reminding the RAC of his concern that there remains a need to build an improvement to the connection at the end of the Flight Tubes into Terminal 5.

The presentation then went in some level of detail thru guest flows between the historic Flight Center and the new hotel buildings, including design challenges that would be faced by attempting to connect anywhere other than through the flight tubes. The team also presented proposed solution to curtain wall glazing as well as architectural treatments to the ends of the building and setbacks on the roof levels. A number of positive reactions came from various parties including:

- A "closed cavity curtain wall system that relies on positive air pressure in the interstitial spaces to minimize noise.
- Mullion and glazing colors
- Textured concrete panels at the ends of the building

The RAC was reminded that the design is still developing and that they will be looped in. Mr. Steven also reminded them that he is working with Mr. Southwick on preparing a design review schedule that will afford the RAC the opportunity to weigh in on aspects of the design that "touch" on the historic Flight Center. The current stage of design is expected to take another 5 months and be completed in mid-July.

Mr. Steven offered to the RAC members a visit / tour of the Flight Center and asked that they coordinate with each other and propose a few dates.

The meeting concluded with the Port Authority requesting that the attendees please provide their written comments to the presentation by March 4th.

Next Meeting – TBD (tentatively April / May 2016)

The above represents our understanding of the topics discussed and decisions reached. Any comments or corrections regarding the above items should be sent to Jim Steven with a copy to Beth Cumming in writing..

Preserving America's Heritage

July 16, 2015

Mr. James Steven, P.E.
Manager, JFK Physical Plant and Redevelopment
Port Authority of New York and New Jersey
JFK International Airport, Building 14, 3rd Floor
Jamaica, NY 11430

Ref: Redevelopment of the TWA Main Terminal Site

Dear Mr. Steven:

The Advisory Council on Historic Preservation appreciated the opportunity to participate in the consultation meeting convened by the Port Authority of New York and New Jersey (Port Authority) to discuss the proposed redevelopment of the TWA Main Terminal site at the John F. Kennedy (JFK) International Airport. We found the meeting constructive as it provided an opportunity for the Federal Aviation Administration (FAA), the New York State Historic Preservation Officer (SHPO) and local preservation organizations including the Redevelopment Advisory Committee (RAC) to hear from MCR Development LLC and its contractors about the proposed redevelopment of the TWA Flight Center. We note that a number of important issues were raised during the meeting regarding the proposal to construct two six-story wings that will accommodate 500 hotel rooms. Until these issues are addressed, we cannot proceed to endorse the redevelopment project under the terms of the Memorandum of Agreement executed in 2004 among the FAA, Port Authority, New York SHPO, and ACHP.

The Port Authority made it clear in the meeting that it had not received many redevelopment proposals for the adaptive reuse for the TWA Main Terminal Building when it issued the Request for Proposals in 2014, after another proposal approved by the RAC did not materialize. As such, when the Port Authority received the $265 million redevelopment proposal from MCR, it worked with them to develop a viable proposal. Unfortunately, the RAC saw major flaws with this redevelopment proposal, particularly with the construction of two wings that they felt overwhelmed the TWA Flight Center with the design and materials. Further, the cost estimate of $265 million includes an estimated $100 million in remediation and conservation costs that must be absorbed by the developer. This appeared to be a questionable expense given that the Port Authority owns this 1960s Eero Saarinen designed building.

Another concern that was not resolved was whether or not the proposed design would compromise the setting of the TWA Main Terminal. Given the passage of time and the construction of the Jet Blue terminal, the setting of the TWA Main Terminal has obviously been compromised so much so that airplanes can no longer be seen from the property. Suggestions that the height of the proposed wings should be reduced to preserve the integrity and site lines of the building were not fully addressed. Nevertheless, clarity on this issue is critical as we discuss the design of the hotel.

As we understand, the developer initially considered a reduced number of rooms (250). However, as the cost of conservation and historic preservation were revealed and the need to pay for hazardous remediation, the number of rooms increased to 500.

The developer acknowledged that many of the issues regarding design and materials had not been fully considered yet. In fact, the contractors acknowledged that they had not had time to consider a full range of options that would have been complimentary to the character of the historic TWA Main Terminal. As the meeting adjourned, it was our understanding that the design team would complete additional work and consult further with the NY SHPO and the RAC.

We are in receipt of the July 1, 2015 letter from the New York Landmarks Conservancy, and the July 8, 2015 letter from the National Trust for Historic Preservation to the Port Authority regarding the status of the proposed redevelopment. The ACHP heard many of these issues raised during the meeting and endorses the need for an analysis of alternatives and consideration of other designs that will not obscure the TWA Main Terminal. In addition, we have additional concerns we would like the Port Authority to consider. Once you have consulted with FAA and the developer regarding the following questions, we request that Port Authority and FAA schedule a teleconference with the consulting parties to discuss next steps regarding the redevelopment proposal and adherence to the terms of the MOA.

- Would revising the scale of the new hotel and eliminating some of the proposed programs allow the developer to reduce the need for a six-story two wing building?
- Is the remediation of hazardous materials for the TWA Main Terminal related to the current condition of the building, or based on the desire to incorporate it into the proposed redevelopment?
- Can the developer share with the consulting parties various design schemes it reviewed to meet the specifications of the RFP issued by the Port Authority? Can the dimensions of hotel rooms, conference facilities, and dining and entertainment areas by provided?
- How will the proposed redevelopment project connect to the Jet Blue Terminal?
- Has the Port Authority presented to its Board the need to develop a long-term lease with MCR? If so, what was the response from the Board?
- What steps will the Port Authority and FAA take to comply with Stipulations 12 to 18 of the executed MOA if the MCR Development proposal does not go forth?
- Can the Port Authority continue to mothball the TWA Main Terminal until it can develop with the RAC specific criteria to be included in a Request for Proposal for the redevelopment project?

In closing, the ACHP would like to clarify that from our perspective the RAC has made it clear that they would like the project selected for the redevelopment of the TWA Main Terminal to showcase an iconic building. We commend MCR Development and its contractors for attempting to design the redevelopment project to be compatible with the TWA Main Terminal. If they had had the benefit of the RAC's guidance, perhaps the design of the hotel wings could have been approached differently. We believe it is important that you clarify for the consulting parties the framework for the redevelopment project so that the Port Authority and FAA can make decisions about the status of this undertaking.

If you have questions, feel free to contact Charlene Dwin Vaughn, AICP, at 202-517-0207, or via e-mail at cvaughn@achp.gov. We look forward to hearing from you regarding the schedule for a teleconference.

Sincerely,

Reid J. Nelson
Director
Office of Federal Agency Programs

RECEIVED
JUL 30 2015
By JFK PP&R

August 13, 2015

Mr. Reid J. Nelson, Director
Office of Federal Agency Programs
Advisory Council on Historic Preservation
401 F Street NW, Suite 308
Washington, DC 20001-2637

Dear Mr. Nelson:

In reply to comments received from the Advisory Council on Historic Preservation dated 16 July 2015 regarding the proposal presented Flight Center Hotel LLC, a joint venture between MCR Development and jetBlue, to adapt and reuse the former TWA Flight Center at JFK International Airport as a hotel and conference center, we respectfully submit the following response:

A) *Would revising the scale of the new hotel and eliminating some of the proposed programs allow the developer to reduce the need for a six-story two-wing building?*

1. It is not possible to reduce the scale of the hotel wings and proposed programs without adversely impacting the ability to complete the Flight Center renovations and ongoing maintenance. The project is reliant upon a proper balance between the hotel room and associated programs that support it.
2. The TWA Flight Center project consists of three major program components of the project: hotel rooms, conference/business center and food service plus the back of house support spaces to service these functions. The proposed wings house only the hotel rooms; the service spaces for these are in fact located in the lower level of the flight center. This minimizes the size of the wings.
3. A 505-room hotel requires restaurant/food facilities of a specific size and similarly a conference center, which is proportional to the required room count. Other contemporary examples of similar airport hotels with the same three basic program Comparable Projects Support this Conclusion:
    1. Westin Denver Airport (Opens Nov 2015)
        a. 519 rooms | 37,500 sf Conference | 7,500 sf Ballroom |Modern Spa & Fitness Center | 1 Full Service Restaurant
        b. DIA: 53,472,514 yearly passengers
    2. Newark Airport Marriot
        a. 585 rooms | 30,000 sf Conference | 10,000 sf Ballroom |Modern Spa & Fitness Center | 2 Full Service Restaurants
        b. EWR: 35,610,759 yearly passengers
    3. Proposed Flight Center Hotel
        a. 505 rooms | 30,000 sf Conference |4,600 sf Ballroom |Modern Spa & Fitness Center | 1 Full Service Restaurant
        b. JFK: 53,254,533 yearly passengers

JFK International Airport
Building 14 - Third Floor
Jamaica, NY 11430

4. Furthermore, if either the conference or food service functions were to be reduced in size, to allow some of the 505 rooms to be located in the Saarinen structure, it would be operationally very difficult to service rooms in both the new and existing buildings, and would compromise the clean division of private functions (hotel rooms) in the wings and public functions (restaurants, meeting spaces, etc.) in the historic building. Most importantly, though, this space is not available due to the space requirements of the conference and food service functions in the Saarinen building.

B) *Is the remediation of hazardous materials for the TWA Main Terminal related to the current condition of the building, or based on the desire to incorporate it into the proposed redevelopment?*

1. The immediate objective is opening this building for public use. It has been vacant for fifteen years and despite the recent renovation, cannot be maintained as well as a building, which is occupied. The remediation of hazardous materials for the TWA Main Terminal is required to open the building in its entirety to the public regardless of whether the new hotel wings are constructed.
    i. All public spaces not previously restored must be remediated.
    ii. All back of house service spaces and associated equipment must be remediated to provide HVAC and life safety to open the building for the public. Current systems generally date back to the original 1960's construction and are functionally obsolete.

C) *Can the developer share with the consulting parties various design schemes it reviewed to meet the specifications of the RFP issued by the Port Authority? Can the dimensions of hotel rooms, conference facilities, and the dining and entertainment areas be provided?*

[Descriptions of the proposed scheme and three study schemes are below and related drawings are enclosed.]

1. **Proposed Scheme**: Removing the 1970 additions maximizes the separation between the historic Flight Center and the symmetrical Hotel Guest Room Buildings. The first floors of the new buildings are set below prevailing grade to minimize the overall height of the structures. This scheme includes 505 rooms ranging in size from 225-275 SF; 22 of which are 550SF suites. The subterranean 30,000SF Conference Center Facility is located between the Flight Tubes. Other amenities include 4,500 square foot ballroom; 15,800 square feet of Restaurant and Lounge; 13,000 square feet of Retail; 6,200 square foot Spa; and designated areas for Interpretive Display.
    i. Pros:
        1. The landside façades of the new hotel wings create a neutral backdrop against which the signature view of the TWA Flight Center is highlighted.
        2. The symmetrical curved structures provide frame Saarinen's building while ensuring the Flight Center is the prominent structure in the most historically significant views. The historic scene (view from the foreground) is improved with the more uniform context compared to the less consistent roadway and JetBlue Terminal background.

3. New Buildings do not visibly touch the historic Flight Center, giving visual clarity to Saarinen's masterpiece.
4. Removing the existing post 1962 additions maximizes the distance from the new buildings to the Flight Center. The previously approved scheme had a separation of 20 feet; this proposal ranges from 52 feet to 102 feet away.

ii. Cons:

1. Building Height is 10 feet taller than the Flight Center.
2. Excavation necessary for Conference Center is expensive.

2. **Study A - Extended Scheme**: This approach extends the North Guest Room Building down to the eastern edge of the Site. A total of 505 rooms ranging from 245 to 275 square feet including 22 suites, 550 square feet each. Similar to the Proposed Scheme, this study includes 30,000SF Conference Center; 4,500 square foot ballroom; 15,800 square feet of Restaurant and Lounge; 13,000 square feet of Retail; 6,200 square feet Spa; and designated areas for Interpretive Display.

i. Pros:

1. Building height is equal to the height of the Flight Center.

ii. Cons:

1. The symmetry of the site is destroyed to reduce the height of the hotel wings by floor. Symmetry is one of the key organizing principals in the design of the Flight Center and appears throughout Saarinen's project. In addition, symmetry is critical for the legibility of the Historic Terminal as it allows the Flight Center to take visual prominence on the landside.
2. The extension blocks the view of the Flight Center from the Sky Walk Arrival at the Air Train.

3. **Study B - Towers Scheme**: This approach leaves the 1970 additions in place and proposes two small symmetrical bar buildings to house the Guest Rooms. The average rooms are 275 square feet to 300 square feet in this scheme. This study offers the following amenities: Conference Center, Ballroom, Retail, Spa, Restaurants, Lounges and Interactive Display. Given that it did not satisfy the number of required rooms, it was not developed extensively.

i. Pros:

1. The entire Flight Center as it currently exists remains intact.
2. Symmetry of the project is conserved.

ii. Cons:

1. At nine stories, the maximum height before intersecting the allowable height for control tower sightlines, only 452 rooms are provided.
2. The new buildings are taller than any other structure in the area except for the control tower.
3. At the closest point, the proposed Guest Room Buildings sit only 5 feet from the Flight Center.

4. **Study C - Courtyard Scheme**: This idea integrates the new Hotel Guest Rooms directly into the existing Flight Center Hotel. In an effort to keep the building low, courtyards are added to both additions to provide light and air for interior facing guest rooms. The 469 rooms range from 275 square feet to 400 square feet and 36 suites range from 425 square feet to 675 square feet. This study offers the following amenities: 19,000 square feet of Conference Center; 6,000 square feet Ballroom; 7,800 square feet Retail; 5,000 square feet Spa; 12,000 square feet of Restaurant and Lounge; and designated areas for Interpretive Display.
    i. Pros:
        1. Building Height is equal to the Height of the Flight Center Hotel.
        2. Required 500 rooms are met.
    ii. Cons:
        1. Fully integrated into Flight Center, there is an unclear legibility between Historic Flight Center and New Addition.
        2. The proportions of the Guest Room Additions are wide and heavy – thus overpowering the delicacy of Saarinen's thin shell concrete.
        3. Interior Facing Rooms cannot be rented at equal rates per night; therefore, while 500 rooms are achieved, the required revenue stream is not met.
        4. At only 13,000 square feet, the Conference Center is undersized and will not produce sufficient revenues to help support the Hotel operations.

5. **Comparative Chart**

	Separation (distance from Flight Center)	Height (above grade)	Floor # (in addition to habitable basement)	Rooms #	Room Size (Typical, SF)	Conference Center (SF)	Restaurants #
Proposed	52' - 102'	62'-6"	6	505	225-275	30,000	6-8
Scheme A	41' - 102'	52'-11"	5	505	225-275	30,000	6-8
Scheme B	5'	86'-8"	8	452	275-300	7,400	6-8
Scheme C	0'	52'-11"	5	505	275-300	13,000	6-8

D) *How will the proposed redevelopment project connect to the Jet Blue Terminal?*

1. The existing connection, which consists of 'catcher mitts' receiving each Flight Tube and then circulating vertically to the jetBlue arrivals level will remain.

i. The design of Terminal 5 has offset roadways, resulting in a sectional condition where circulating directly from the Flight Tubes into the JetBlue departures level is cost prohibitive.
ii. Modifications to the vertical circulation within Terminal 5 are outside the parameters of this proposal.
iii. Where the 'catcher mitts' serve as points of entry into the Flight Tubes, a portion of the MOA required Interpretive Exhibit will be installed.

E) *Has the Port Authority presented to its Board the need to develop long-term lease with MCR? If so, what was the response from the Board?*

1. Yes, Port Authority staff has presented to its Board the background of the Flight Center RFP process as well as the specifics of the lease with MCR. The Board acknowledged that the lease was negotiated in the context of the redevelopment of a historic building and is anticipating that staff will return to the Board in September to request formal lease approval. The restoration of the TWA Flight Center Hotel redevelopment was featured in a July 27, 2015 public announcement by the Governor and the Vice President, who are supportive of returning the TWA Flight Center to the public realm.

F) *What steps will the Port Authority and FAA take to comply with Stipulations 12 to 18 of the executed MOA if the MCR Development proposal does not go forth?*

1. Stipulation 12—The TWA Main Terminal Building and the East Tube are to be restored and rehabilitated in accordance with the Standards for the Treatment of Historic Properties.
    i. The Port Authority has and continues to meet its obligations under this stipulation and has spent nearly $20 million in capital improvements and further has maintained the Flight Center for the last 15 years since the American Airlines lease for the building ended. However, additional capital investments are needed to continue to address preservation issues associated with the roof and curtain wall. Modifications to the Terminal's electrical distribution system and replacement of the existing mechanical systems, among other things, are also necessary in order to achieve the intended "adaptive re-use". The issuance of public solicitations to interest developers in making further improvements, to construct a hotel to offset those costs and to take over on-going maintenance has been a priority.
2. Stipulation 13—the entire visible exterior length of the existing East Tube will be retained (West Tube may be modified).
    i. The East and West Tubes have been retained and there are no plans for modifications or changes.
3. Stipulation 14—Trumpets
    i. The trumpets are no longer part of the Flight Center; that determination was made many years ago with RAC involvement and acceptance.
4. Stipulation 15—Removal of non-historic portions such as entrance vestibules, security booths, south baggage facility and pedestrian canopy. Restoration of marble flooring and wall surfaces, Solari FIDS, etc.; and non-historic kiosks, signage and furnishings shall be removed.

i. The work scope for the nearly $20 million the Port Authority has spent is attached and includes most of the items mentioned in Stipulation 15, such as removal of entrance vestibules, security booths, and pedestrian canopy; restoration of tile flooring in main public areas; and removal of non-historic kiosks, signage and furnishings.

5. Stipulation 16—Completion of restoration work and notification to SHPO.
   i. While some restoration work was completed, SHPO and the RAC were informed that there is still a substantial amount of work that needs to take place. Eleven years have passed since the MOA was signed, and a very qualified developer who has committed resources and hired top-level professional consultants with extensive experience, has been selected to restore the Flight Center.
6. Stipulation 17—Preparation of Maintenance and Preservation Guidelines
   i. MCR, the TWA Flight Center developer, will prepare the Maintenance and Preservation Guidelines, which will be reviewed and approved, by the Port Authority and New York State Office for Historic Preservation.
7. Stipulation 18—Port Authority inspection of the Flight Center.
   i. The Port Authority still controls the operations and maintenance of the Flight Center. In addition to the building being "watched" 24x7 by on site security personnel, the building's infrastructure is monitored on a daily basis by a JFK building maintenance contract. The Port Authority will continue to undertake any "immediate need" maintenance deficiencies that are identified during that daily monitoring.

   In regard to any future building alterations, the Port Authority is responsible for building code compliance at the airport, and any facilities such as the Flight Center will be required to submit plans for minor and major repairs and modifications for Port Authority approval. . The Port Authority employs inspectors who would visit the Flight Center during and after that work to ensure it is consistent with the approved plans.

G) *Can the Port Authority continue to mothball the TWA Main Terminal until it can develop with the RAC specific criteria to be included in a Request for Proposal for the redevelopment project?*

1. There may never be as opportune a time as the present to underwrite the restoration of the TWA Terminal: interest rates, i.e. financing is very affordable, the economic cycle is robust and the building unfortunately will just continue to deteriorate if the restoration is deferred. A very fundamental preservation objective for any historic property is to find and sustain a sustainable use so that it does not sit vacant and irrelevant.
2. The low wings flanking the main central portion of the Saarinen building exhibited severe concrete deterioration during the restoration campaign of 2012. Significant spalls and exposed rebar were encountered. This was repaired and recoated with an appropriate breathable cementitious coating (Mapei – Mapelastic). The main concrete shell is as thin as 8 inches in areas and was coated with the same GAF product (Topcoat CRT) as the wings, which have a permeability rating of less than 1.0 perms. A rating of 10.0 is recommended for concrete. We are very concerned that the coating applied in 1998 intended to slow further damage, and that delaying

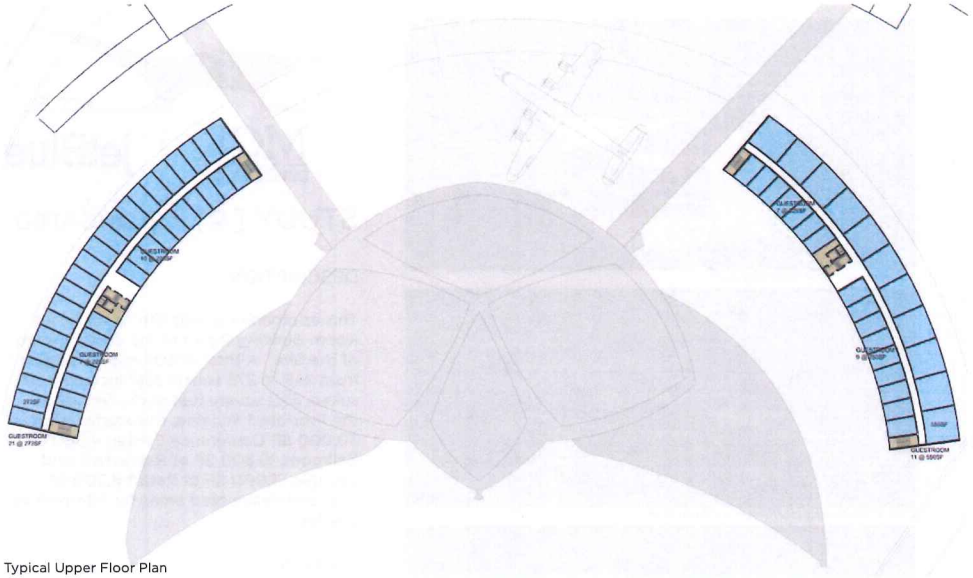
the removal and repair of this integral part of the building could cause additional and irreversible damage.

3. The Port Authority does not have the funding in its capital plan for the Flight Center and this building would continue to be closed to the public and possibly deteriorate from lack of use and proper attention. The Port Authority instead prefers to enliven the Flight Center by once again having it act as a gathering spot for travelers. We strongly believe the current proposal is correct for this site and that the selected developer has the strongest interest in restoring and protecting the Flight Center. The selection of MCR is the result of the third RFP issued for the building. The Governor and Vice President participated in a public announcement on the benefits of restoring the TWA Flight Center, major JFK airlines and terminal operators have issued public statements of support, and the Port Authority Board of Commissioners have scheduled a vote for lease approval on their September Agenda.

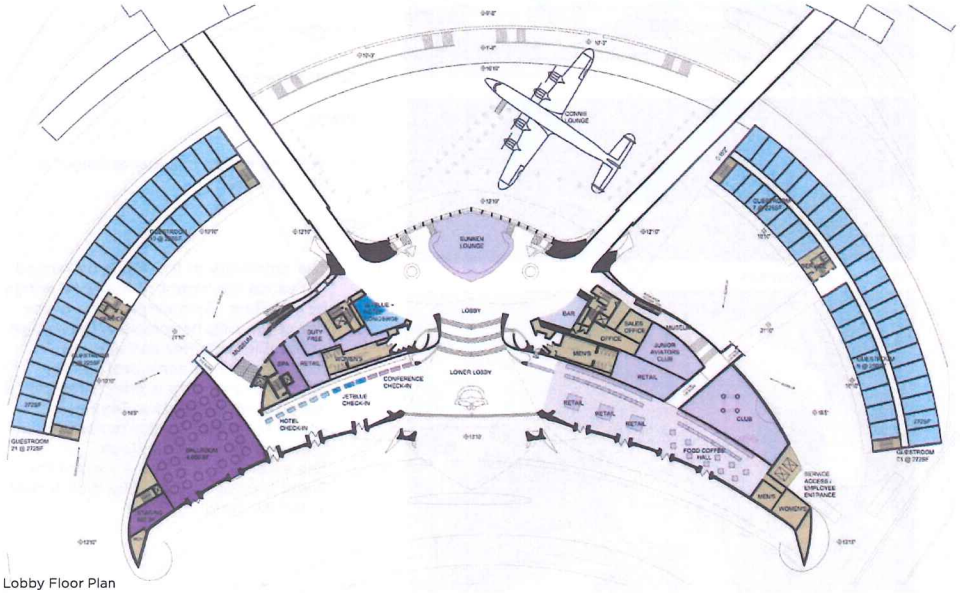
Respectfully,

James Steven, P.E.
Program Director JFK Redevelopment

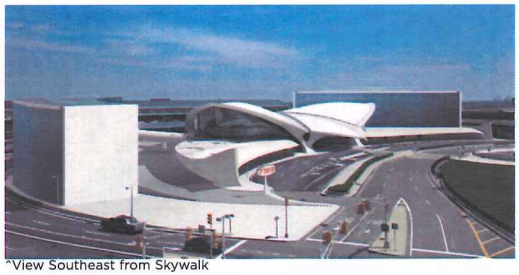
cc: Ms. Charlene Vaughn (ACHP)
Ms. Marie Jenet (FAA)
Ms. Beth Cumming (NYSHPO)
Mr. Don Free (PANYNJ)



Typical Upper Floor Plan



Lobby Floor Plan



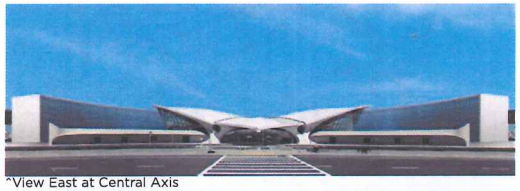
^View Southeast from Skywalk



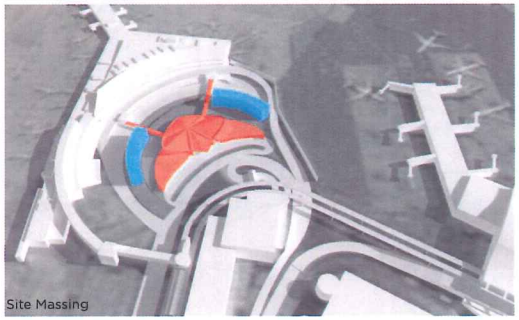
^View Northeast from Primary Approach



^View West from Terminal 5



^View East at Central Axis



Site Massing

HOTEL
MCR DEVELOPMENT | jetBlue

PROPOSED SCHEME

DESCRIPTION

Removing the 1970 additions maximizes separation between the historic Flight Center and the symmetrical Hotel Guest Room Buildings. These new buildings are pushed down into the site to minimize height to achieve 505 rooms total. Typical rooms range in size from 225-275 SF and there are 22 suites at 550SF each. The 30,000 SF Conference Center submerged between the Flight Tubes to diminish the massing the program demands. Other amenities include 4,500 SF Ballroom; 15,800 SF of Restaurant and Lounge; 13,000 SF of Retail; 6,200 SF Spa; and designated areas for Interpretive Display.

FLOORS

6 Floors plus Habitable Basement

HEIGHT

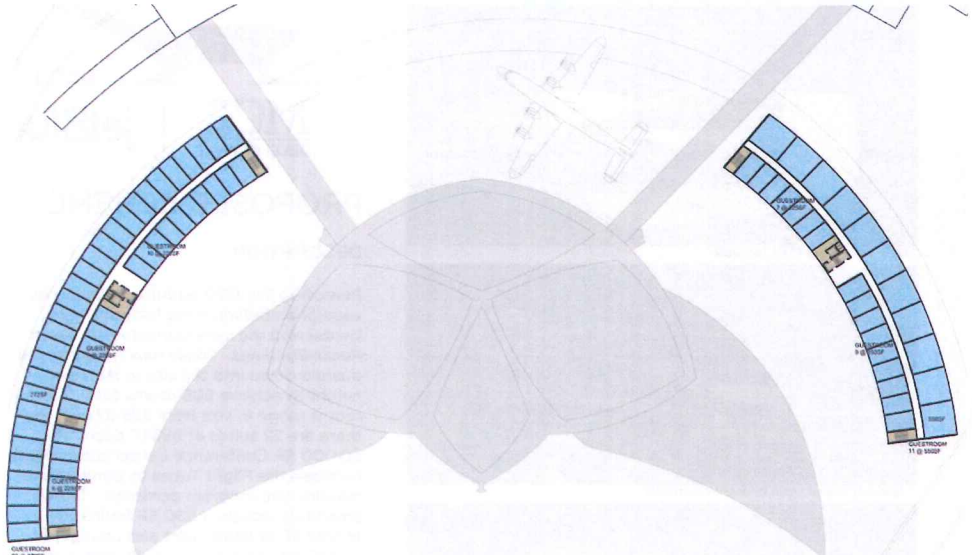
62'-6" above grade

PROS

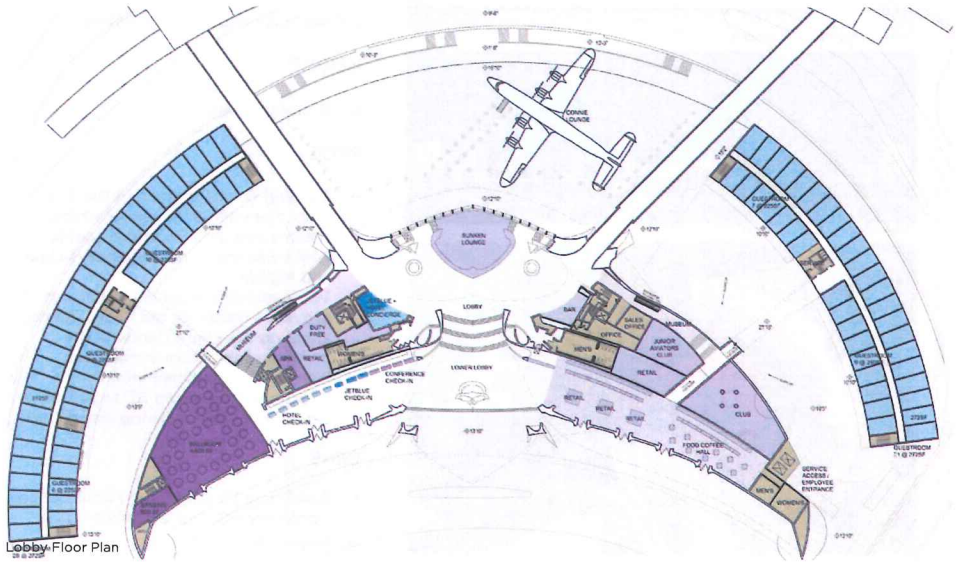
- Building height is equal to the Sky Walk, the interior facade of which creates a neutral backdrop against which Saarinen's masterpiece is clear and legible.
- The symmetrical curved structures provide a frame for the Flight Center, ensuring the Flight Center is the prominent structure in the most historically significant views.
- Additions range from 52' to 102' away from Flight Center, giving visual clarity.

CONS

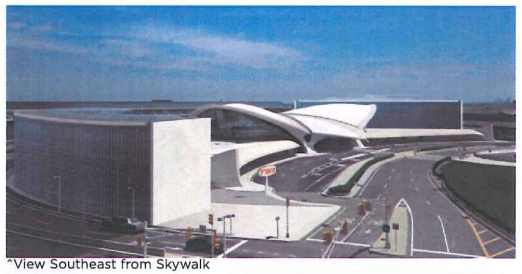
- Building is 10' taller than Flight Center.
- Conference Center excavation cost.



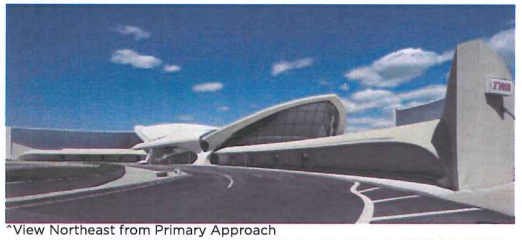
Typical Upper Floor Plan



Lobby Floor Plan



^View Southeast from Skywalk



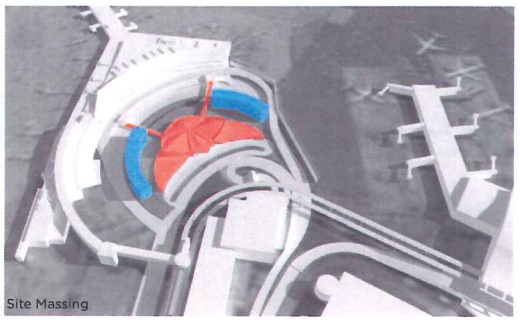
^View Northeast from Primary Approach



^View West from Terminal 5



^View East at Central Axis



Site Massing

HOTEL

MCR DEVELOPMENT | jetBlue

STUDY [A] - ELONGATED

DESCRIPTION

This approach extends the North Guest Room Building Down to the eastern edge of the Site. A total of 505 rooms ranging from 245 to 275 square feet including 22 suites, 550 square feet each. Similar to the Proposed Scheme, this study includes 30,000 SF Conference Center; 4,500 SF Ballroom; 15,800 SF of Restaurant and Lounge; 13,000 SF of Retail; 6,200 SF Spa, and designated areas for Interpretive Display.

FLOORS

5 Floors plus Habitable Basement

HEIGHT

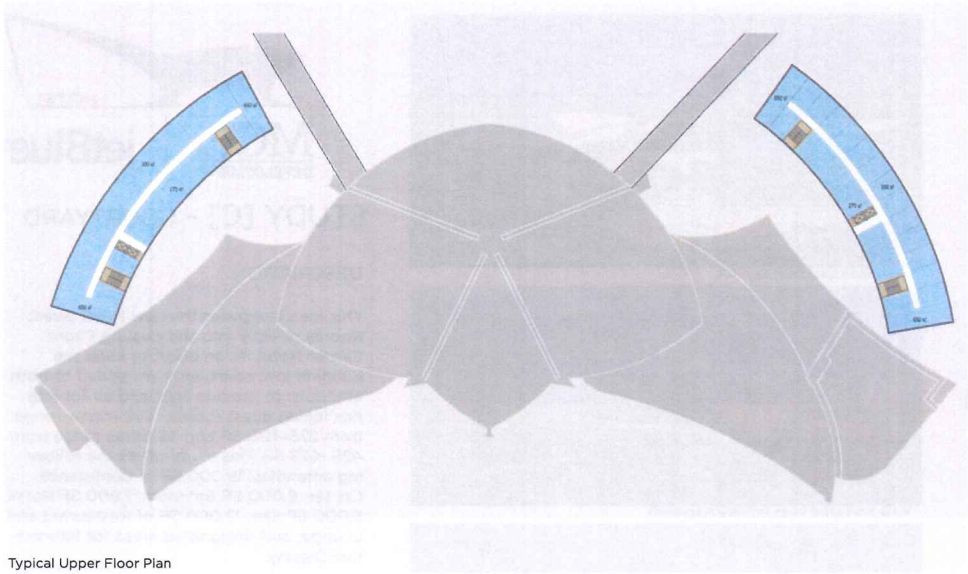
52'-11" above grade

PROS

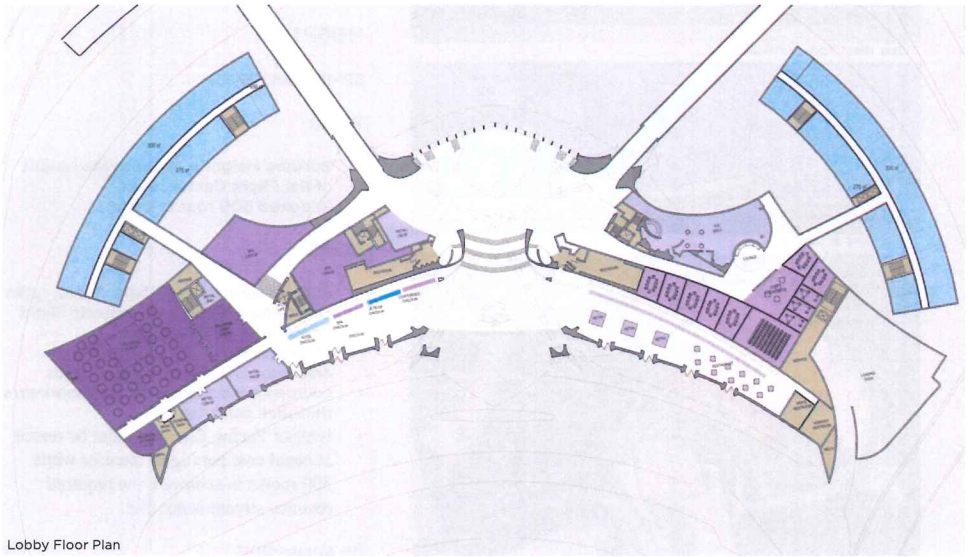
- Building height is equal to height of Flight Center.

CONS

- The symmetry of the site is destroyed to reduce the height of the hotel wings by one floor. Symmetry is one of the key organizing principals in the design of the Flight Center and appears throughout Saarinen's project. In addition, symmetry is critical for the legibility of the Historic Terminal as it allows the Flight Center to take visual prominence on the landside.
- The extension blocks the view of the Flight Center from the Sky Wall Arrival at the Air Train.



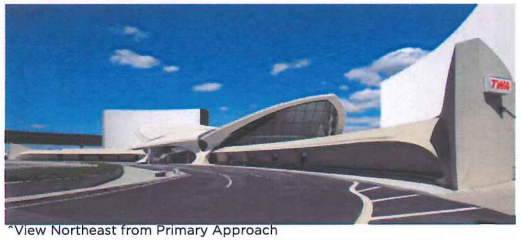
Typical Upper Floor Plan



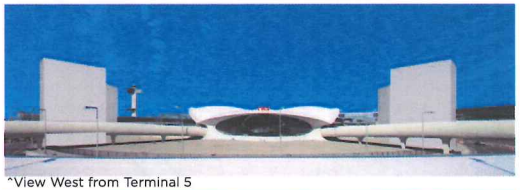
Lobby Floor Plan



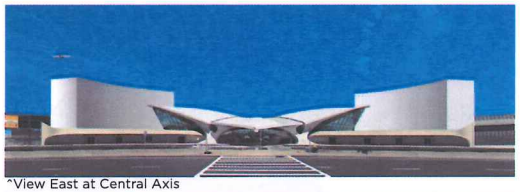
^View Southeast from Skywalk



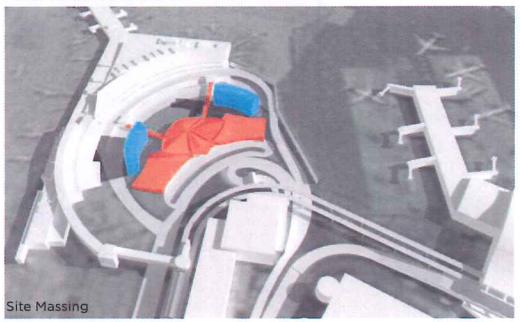
^View Northeast from Primary Approach



^View West from Terminal 5



^View East at Central Axis



Site Massing

HOTEL

MCR DEVELOPMENT | jetBlue

STUDY [B] - TOWERS

DESCRIPTION

This approach leaves the 1970 additions in place and proposes two small symmetrical bar buildings to house the Guest Rooms. The average rooms are 275 square feet to 300 square feet in this scheme. This study offers the following amenities: Conference Center, Ballroom, Retail, Spa, Restaurants, Lounges and Interactive Display. Given that it didn't satisfy the number of required rooms it was not developed extensively.

FLOORS

9 Floors

HEIGHT

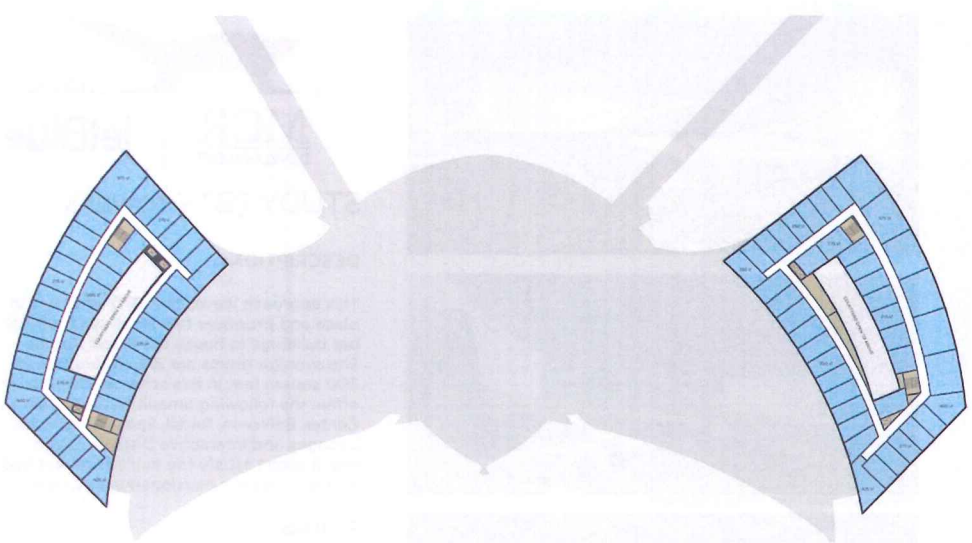
86'-8" above grade

PROS

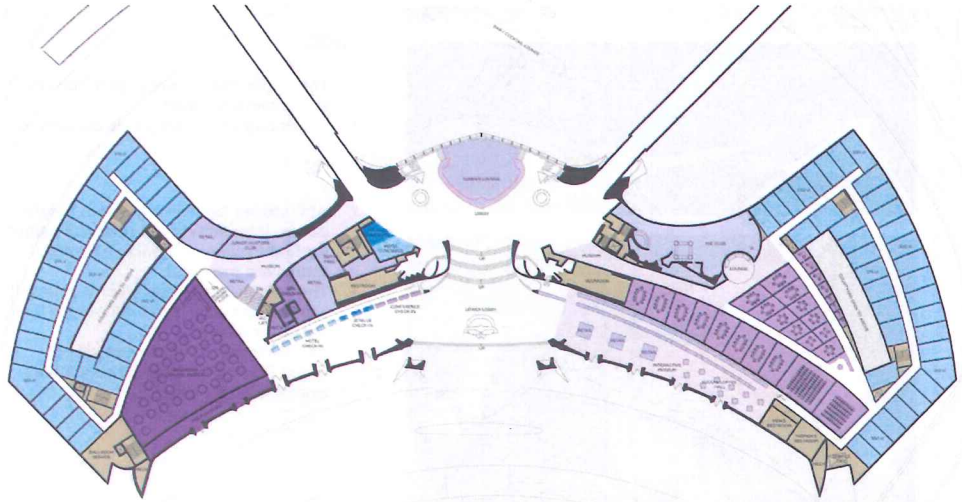
- The entire Flight Center as it currently exists remains intact.
- Symmetry of the project is conserved.

CONS

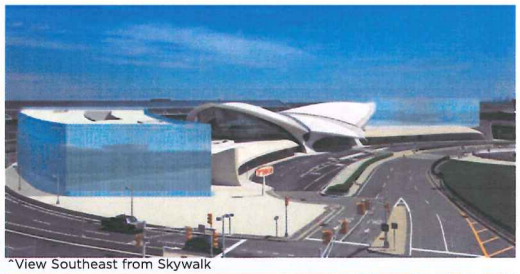
- At 9 stories tall, the maximum height before intersecting the required height for flight plane clearance, only 452 rooms are provided.
- The new buildings are taller than any other structure in the area except for the control tower.
- At the closest point, the proposed Guest Room Buildings sit only 5 feet from the Flight Center.



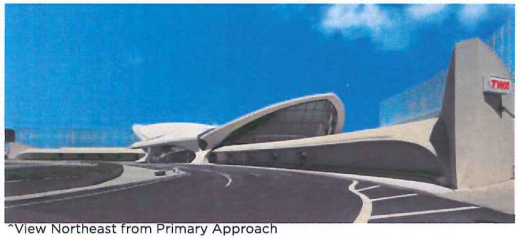
Typical Upper Floor Plan



Lobby Floor Plan



^View Southeast from Skywalk



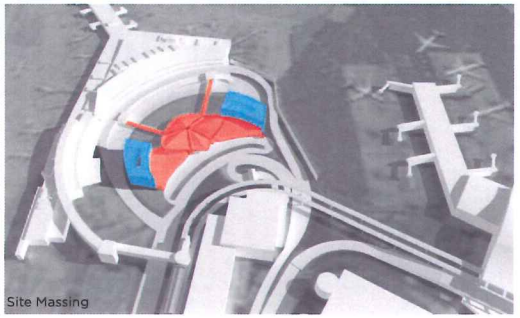
^View Northeast from Primary Approach



^View West from Terminal 5



^View East at Central Axis



Site Massing

HOTEL

MCR DEVELOPMENT | jetBlue

STUDY [C] - COURTYARD

DESCRIPTION

This idea integrates the new Hotel Guest Rooms directly into the existing Flight Center Hotel. In an effort to keep the building low, courtyards are added to both additions to provide light and air for interior facing guest rooms. 469 rooms range from 275-400 SF and 36 suites range from 425 -675 SF. This study offers the following amenities: 19,000 SF of Conference Center; 6,000 SF Ballroom; 7,800 SF Retail, 5,000 SF Spa; 12,000 SF of Restaurant and Lounge; and designated areas for Interpretive Display.

FLOORS

5 Floors plus Habitable Basement

HEIGHT

52'-11" above grade

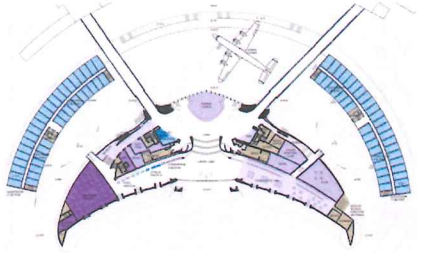
PROS

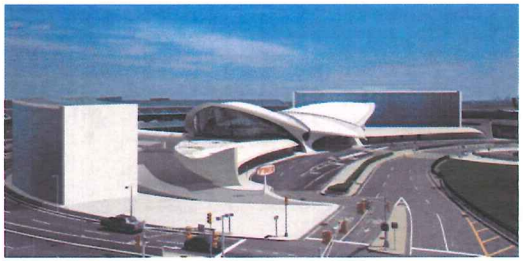
- Building Height is equal to the Height of the Flight Center Hotel.
- Required 500 rooms is met.

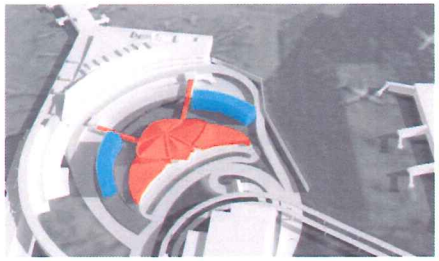
CONS

- Fully Integrated into Flight Center lacks clear legibility between Historic Flight Center and New Addition.
- The proportion of the Guest Room Additions is wide and heavy - thus overpowering the delicacy of Saarinen's thin shell concrete.
- Interior Facing Rooms cannot be rented at equal cost per night; therefor while 500 rooms is achieved, the required revenue stream is not met.

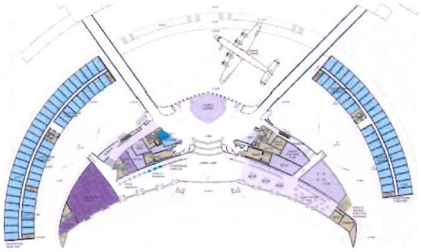
PROPOSED SCHEME

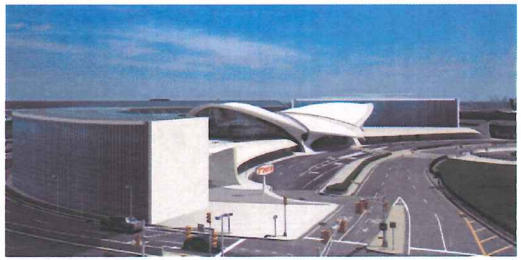


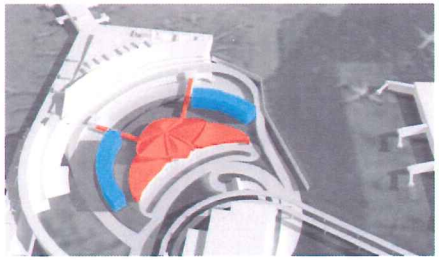




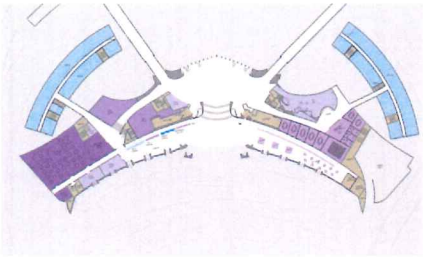
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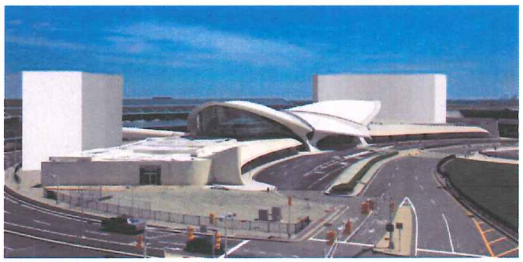


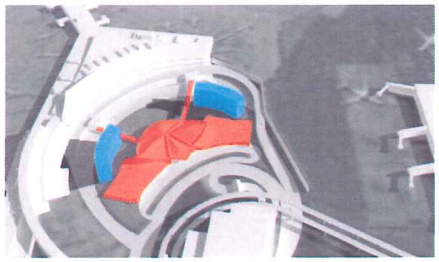




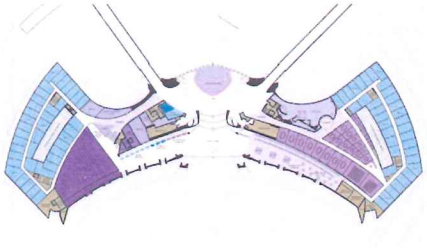
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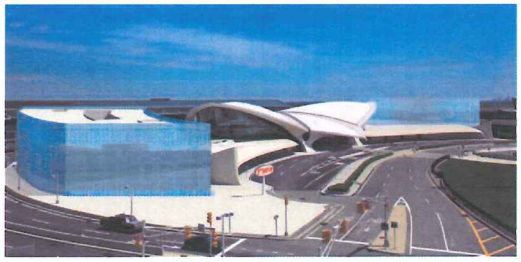


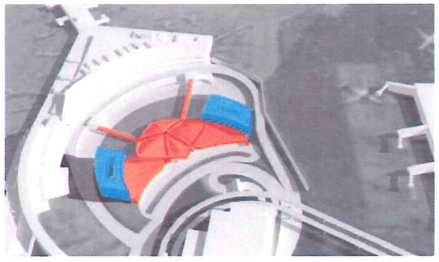




STUDY [C]
- COURTYARD -







HOTEL
MCR DEVELOPMENT | jetBlue

U. S. Department
of Transportation

**Federal Aviation
Administration**

New York Airports District Office
159-30 Rockaway Blvd, Suite 111
Jamaica, New York 11434

June 28, 2016

Re: TWA Flight Center Hotel
First Amendment to the 2004 Memorandum of Agreement for the Rehabilitation, Restoration, and Adaptive Reuse of TWA Terminal 5 at John. F. Kennedy International Airport, Jamaica, New York

Dear Consulting Party Member:

This letter serves to update you on the status of the First Amendment to the 2004 Memorandum of Agreement for the Rehabilitation, Restoration, and Adaptive Reuse of TWA Terminal 5 at John. F. Kennedy (JFK) International Airport, Jamaica, New York.

Prior to the December 1, 2015 meeting of the Redevelopment Advisory Committee (RAC) a draft First Amendment to the 2004 Memorandum of Agreement for the Rehabilitation, Restoration, and Adaptive Reuse of TWA Terminal 5 at John. F. Kennedy (JFK) International Airport, Jamaica, New York, was provided to you for review and comment. During the December 1, 2015 RAC meeting, the draft First Amendment to the 2004 MOA was presented and discussed.

Since our receipt of the comments from the RAC, the signatory agencies, (the Federal Aviation Administration [FAA], the Advisory Council on Historic Preservation [ACHP], the New York State Historic Preservation Office [SHPO], and the Port Authority of NY & NJ [PANYNJ]) have revised the draft First Amendment to the 2004 MOA in an effort to address comments and issues raised.

At this point in time, the signatory agencies have reviewed the revised draft First Amendment to the 2004 MOA (dated 6/20/16, copy enclosed) and have found it to be accurate and reflective of the extensive coordination that took place during its development. The consultation conducted pursuant to Section 106 of the National Historic Preservation Act has culminated in this First Amendment to the 2004 MOA. The signatory agencies believe that the provisions of the First Amendment to the 2004 MOA balance the interests of all involved.

As part of the National Environmental Policy Act (NEPA) Environmental Assessment (EA) process for the proposed TWA Flight Center Hotel, the PANYNJ solicited public comments on the Draft EA for the subject project from April 7-May 7, 2016. Of 12 total comments received, 11 comments were in support of the proposed project, and recommended that the FAA, serving as the lead federal agency for the NEPA review, approve the proposed project as described in the Draft EA. One comment, which was signed by preservation organizations, noted several concerns related to design issues, including the wings and north and south tubes, visual effects, soil borings, and the cogeneration facility. Also, concerns were raised about pedestrian access, hazardous materials, and air quality.

The comments and responses to those comments are enclosed with this letter. The FAA, as well as the other MOA signatory agencies, believe that information in the Draft EA, as well as additional information included in the comment responses, adequately respond to the historic preservation issues highlighted, and that the analysis in the Draft EA is thorough and it supports the conclusions in the document. The Draft EA, therefore, fulfills FAA's

requirements for preparation of an EA pursuant to NEPA, and it also documents compliance with Federal Executive Orders 11988 and 13690: Floodplain Management; Section 106 of the National Historic Preservation Act; and, the Department of Transportation Act of 1966, Section 4(f). With the conclusion of the public comment period and project concurrence received from the U.S. Department of Interior on May 31, 2016, the next step in the NEPA process is to finalize the EA.

In order to finalize the EA, the signatories to the First Amendment to the 2004 MOA must enter into the agreement by providing signature; this process is currently underway. The signed First Amendment to the 2004 MOA will be included in the final EA.

As consulting parties who provided substantial and valuable input in the Draft EA, Section 106 consultation, and redevelopment process for the TWA Flight Center, we will be inviting you to concur in the the First Amendment to the 2004 MOA after it has been signed by the signatory agencies. Please consider becoming a concurring party to show that you are familiar with the terms of the First Amendment to the 2004 MOA and do not object to it. We are hopeful that you will concur, given your involvement with this important project. As discussed in previous RAC meetings, your continued participation on the RAC is not dependent upon your concurring on the First Amendment to the 2004 MOA, and you may choose not to sign, as you find appropriate.

We will send you the signed the First Amendment to the 2004 MOA as soon as the signatory agencies have provided their signatures.

Should you have any questions, please call me at (718) 995-5777, or email me at marie.jenet@faa.gov.

Sincerely,

Marie C. Jenet
Environmental Specialist
New York Airports District Office

Enclosure

cc: J. Steven, PANYNJ
R. Pierpont, NYSHPO
B. Cummings, NYSHPO
C. Vaughn, ACHP

JFK TWA Flight Center Hotel
2016 Consulting Parties

The National Trust for Historic Preservation
Attn: Betsy Merritt
2600 Virginia Ave., NW
Suite 1100
Washington, DC 20037

The Municipal Art Society of New York
Attn: Gina Pollara
488 Madison Ave
Suite 1900
New York, NY 10022

The New York City Partnership
Attn: Merrill Pond
One Battery Park Plaza, 5th Floor
New York, NY 10004-1479

DOCOMOMO US/New York Tri-State
Attn: Nina Rappaport
Nina Rappaport
240 W. 102nd Street, #62
New York, NY 10025

The Consulate General of Finland, New York
Attn: Kati Laakso
866 United Nations Plaza, Suite 250
New York, NY 10017

New York Landmarks Conservancy
Attn: Alex Herrera
One Whitehall Street
New York, NY 10004

The New York Building Congress
Attn: Richard Anderson
44 West 28th St., 12th Floor
New York, NY 10001

Flight Center Hotel, LLC
c/o Tyler Morse, CEO MCR
152 West 57th St 46th Floor
New York, NY 10019

DEVELOPER CONCURRENCE (PAGE 1 of 1)

FLIGHT CENTER HOTEL LLC

BY: _____ DATE: 7/14/16.

Print/Type Name: R. TYLER MORSE

Print/Type Title: MANAGING MEMBER

* A separate signature page is being offered for execution by each concurring party to this First Amendment to the 2004 MOA.

THE NEW YORK
LANDMARKS
CONSERVANCY

July 21, 2016

Mr. James Steven, P.E.
Manager JFK Physical Plant and Redevelopment
Port Authority of NY and NJ
JFK

RE: TWA Hotel Redevelopment Proposal, John F. Kennedy International Airport

Dear Mr. Steven,

The New York Landmarks Conservancy has always been supportive of the adaptive reuse of the iconic terminal. However, we are not comfortable signing the MOA because the final hotel design is larger and higher than we believe appropriate for the landmark.

We do not blame the developer. He is responsible for tens of millions of dollars of exterior restoration work on the terminal that we believe is the responsibility of the Port Authority. In fact, we appreciate that the developer has agreed to take this on.

The Conservancy is nevertheless still interested in the ongoing evolution of the project, in receiving updates from the Port Authority, and most importantly, seeing a complete restoration of the terminal. We plan to continue attending the RAC meetings.

Sincerely,

Alex Herrera
Director, Technical Services
New York Landmarks Conservancy

One Whitehall Street, New York NY 10004
tel 212.995.5260 fax 212.995.5268 nylandmarks.org

CONSULTING PARTIES CONCURRENCE (PAGE 3 of 7)

THE NEW YORK CITY PARTNERSHIP

BY: Kathryn Wylde DATE: 7/22/16

Print/Type Name: Kathryn Wylde

Print/Type Title: President + CEO

* A separate signature page is being offered for execution by each concurring party to this First Amendment to the 2004 MOA.

July 25, 2016

Ms. Marie C. Jenet, Environmental Specialist
New York Airports District Office
159-30 Rockaway Boulevard, Suite 111
Jamaica, New York 11434

RE: TWA Flight Center
First Amendment to the 2004 Memorandum of Agreement for the Rehabilitation, Restoration, and Adaptive Reuse of TWA Terminal 5 at John F. Kennedy International Airport, Jamaica, New York
Invitation to Become a Concurring Party

Dear Ms. Jenet,

We appreciate the opportunity to concur with the First Amendment to the 2004 Memorandum of Agreement (MOA) recently distributed to members of the Redevelopment Advisory Committee (RAC).

While we enthusiastically support the restoration of the TWA Flight Center and look forward to a compatible new use, we maintain our position, as stated previously, that the proposed hotel wings diminish the landmark, reduce natural light into the Flight Center, and obscure views to and from the building. Therefore we do not concur with the MOA and will not sign it.

We look forward to future discussions regarding the restoration of the Flight Center, and will continue to participate in RAC meetings.

Sincerely,

Nina Rappaport
Founding Member
DOCOMOMO New York/Tri-State

Frank E. Sanchis III
Member, MAS Preservation Committee
Municipal Art Society

Tara Kelly
Senior Director, Preservation
Municipal Art Society

Elizabeth S. Merritt
Deputy General Counsel
National Trust for Historic Preservation

Gina Pollara
President
Municipal Art Society

Seri Worden
Senior Field Officer
National Trust for Historic Preservation

CONSULTING PARTIES CONCURRENCE (PAGE 7 of 7)

THE NEW YORK BUILDING CONGRESS

BY: _____ DATE: 7/26/16

Print/Type Name: Richard T. Anderson

Print/Type Title: President

* A separate signature page is being offered for execution by each concurring party to this First Amendment to the 2004 MOA.

From: Yletyinen Anna <anna.yletyinen@formin.fi>
Date: July 28, 2016 at 11:18:51 AM EDT
To: "Steven, Jim" <jsteven@panynj.gov>
Cc: Kati Laakso <kati@katilaakso.com>, "Free, Don" <dfree@panynj.gov>, "Schmidt, Michael" <mschmidt@panynj.gov>, Pietikäinen Jukka <Jukka.Pietikainen@formin.fi>, Komulainen Veijo <Veijo.Komulainen@formin.fi>
Subject: RE: JFK Flight Center Amendment to Memorandum of Agreement

Dear Mr. Steven,

Thank you for your messages and my apologizes for late reply. I have just returned to office and was not previously familiar with this matter.

After reviewing the documents and consulting our contacts, I must inform that while the Consulate General of Finland supports the idea of developing the TWA Flight Center, it will not sign the amendment.

Thank you again for the opportunity to contribute.

Sincerely,

Anna Yletyinen

Deputy Consul General

Consulate General of Finland
866 United Nations Plaza, Suite 250
New York, NY 10017
Tel: +1 212 750 4400
Fax: +1 212 750 4418
anna.yletyinen@formin.fi
www.finland.org

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Appendix D: Natural Resources Agency Correspondence

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Division of Fish, Wildlife & Marine Resources
New York Natural Heritage Program
625 Broadway, 5th Floor, Albany, New York 12233-4757
Phone: (518) 402-8935 • **Fax:** (518) 402-8925
Website: www.dec.ny.gov

Joe Martens
Commissioner

July 27, 2015

Keri A. Cibelli
AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Re: Terminal 5 at John F. Kennedy International Airport
Town/City: New York. County: Queens.

Dear Keri A. Cibelli:

In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to the above project.

Enclosed is a report of rare or state-listed animals and plants, and significant natural communities, which our databases indicate occur, or may occur, on your site or in the immediate vicinity of your site.

For most sites, comprehensive field surveys have not been conducted; the enclosed report only includes records from our databases. We cannot provide a definitive statement as to the presence or absence of all rare or state-listed species or significant natural communities. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

Our databases are continually growing as records are added and updated. If this proposed project is still under development one year from now, we recommend that you contact us again so that we may update this response with the most current information.

The presence of the plants and animals identified in the enclosed report may result in this project requiring additional review or permit conditions. For further guidance, and for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the appropriate NYS DEC Regional Office, Division of Environmental Permits, as listed at www.dec.ny.gov/about/39381.html.

Sincerely,

Nicholas Conrad
Information Resources Coordinator
New York Natural Heritage Program

754

The following state-listed animals have been documented at your project site, or in its vicinity.

The following list includes animals that are listed by NYS as Endangered, Threatened, or Special Concern; and/or that are federally listed or are candidates for federal listing.

For information about potential impacts of your project on these populations, how to avoid, minimize, or mitigate any impacts, and any permit considerations, contact the Wildlife Manager at the NYSDEC Regional Office for the region where the project is located. A listing of Regional Offices is at http://www.dec.ny.gov/about/558.html.

The following species have been documented at John F. Kennedy International Airport, near the project site. Potential onsite and offsite impacts from the project may need to be addressed.

COMMON NAME	*SCIENTIFIC NAME*	*NY STATE LISTING*	*FEDERAL LISTING*	
Birds				
Short-eared Owl *Breeding*	*Asio flammeus*	Endangered		211
Northern Harrier *Breeding*	*Circus cyaneus*	Threatened		1641
Upland Sandpiper *Breeding*	*Bartramia longicauda*	Threatened		10924

This report only includes records from the NY Natural Heritage databases. For most sites, comprehensive field surveys have not been conducted, and we cannot provide a definitive statement as to the presence or absence of all rare or state-listed species. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

If any rare plants or animals are documented during site visits, we request that information on the observations be provided to the New York Natural Heritage Program so that we may update our database.

Information about many of the listed animals in New York, including habitat, biology, identification, conservation, and management, are available online in Natural Heritage's Conservation Guides at www.guides.nynhp.org, and from NYSDEC at www.dec.ny.gov/animals/7494.html.

U.S. Fish & Wildlife Service

JFK

IPaC Trust Resource Report

Generated July 01, 2015 09:54 AM MDT



US Fish & Wildlife Service

IPaC Trust Resource Report

Project Description

NAME

JFK

PROJECT CODE

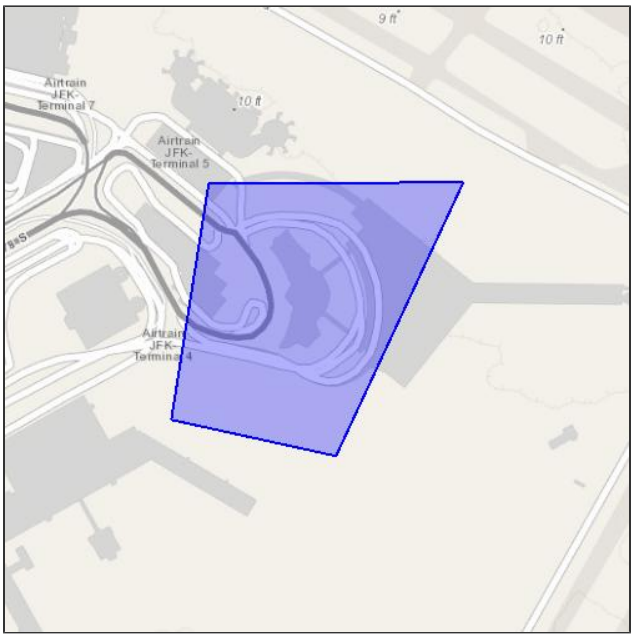
DSGXJ-N7KSB-G5VNV-FFHUA-QSGIY4

LOCATION

Queens County, New York

DESCRIPTION

No description provided



U.S. Fish & Wildlife Contact Information

Species in this report are managed by:

Long Island Ecological Services Field Office
340 Smith Road
Shirley, NY 11967
(631) 286-0485

Endangered Species

Proposed, candidate, threatened, and endangered species that are managed by the Endangered Species Program and should be considered as part of an effect analysis for this project.

This unofficial species list is for informational purposes only and does not fulfill the requirements under Section 7 of the Endangered Species Act, which states that Federal agencies are required to "request of the Secretary of Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action." This requirement applies to projects which are conducted, permitted or licensed by any Federal agency.

A letter from the local office and a species list which fulfills this requirement can be obtained by returning to this project on the IPaC website and requesting an Official Species List from the regulatory documents section.

Birds

Piping Plover Charadrius melodus — **Threatened**

CRITICAL HABITAT
There is **final** critical habitat designated for this species.

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B079

Red Knot Calidris canutus rufa — **Threatened**

CRITICAL HABITAT
No critical habitat has been designated for this species.

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0DM

Roseate Tern Sterna dougallii dougallii — **Endangered**

CRITICAL HABITAT
No critical habitat has been designated for this species.

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B07O

Flowering Plants

Seabeach Amaranth Amaranthus pumilus — **Threatened**

CRITICAL HABITAT
No critical habitat has been designated for this species.

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=Q2MZ

Critical Habitats

Potential effects to critical habitat(s) within the project area must be analyzed along with the endangered species themselves.

There is no critical habitat within this project area

Migratory Birds

Birds are protected by the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act.

Any activity which results in the take of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service (1). There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

You are responsible for complying with the appropriate regulations for the protection of birds as part of this project. This involves analyzing potential impacts and implementing appropriate conservation measures for all project activities.

American Oystercatcher Haematopus palliatus — **Bird of conservation concern**
Year-round
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0G8

American Bittern Botaurus lentiginosus — **Bird of conservation concern**
Season: Breeding
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0F3

Bald Eagle Haliaeetus leucocephalus — **Bird of conservation concern**
Year-round
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B008

Black Skimmer Rynchops niger — **Bird of conservation concern**
Season: Breeding
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0EO

Black Rail Laterallus jamaicensis — **Bird of conservation concern**
Season: Breeding
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B09A

Black-billed Cuckoo Coccyzus erythropthalmus — **Bird of conservation concern**
Season: Breeding
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0HI

Blue-winged Warbler Vermivora pinus — **Bird of conservation concern**
Season: Breeding

Canada Warbler Wilsonia canadensis — **Bird of conservation concern**
Season: Breeding

Fox Sparrow Passerella iliaca — **Bird of conservation concern**
Season: Wintering

Gull-billed Tern Gelochelidon nilotica — **Bird of conservation concern**
Season: Breeding

Hudsonian Godwit Limosa haemastica — **Bird of conservation concern**
Season: Migrating

Least Bittern Ixobrychus exilis — **Bird of conservation concern**
Season: Breeding

Least Tern Sterna antillarum — **Bird of conservation concern**
Season: Breeding

Pied-billed Grebe Podilymbus podiceps — **Bird of conservation concern**
Year-round

Prairie Warbler Dendroica discolor — **Bird of conservation concern**
Season: Breeding

Purple Sandpiper Calidris maritima — **Bird of conservation concern**
Season: Wintering

Red Knot Calidris canutus rufa — **Bird of conservation concern**
Season: Wintering
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0DM

Rusty Blackbird Euphagus carolinus — **Bird of conservation concern**
Season: Wintering

Saltmarsh Sparrow Ammodramus caudacutus — **Bird of conservation concern**
Season: Breeding

Seaside Sparrow Ammodramus maritimus — **Bird of conservation concern**
Year-round

Short-eared Owl Asio flammeus — **Bird of conservation concern**
Season: Wintering
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0HD

Snowy Egret Egretta thula — **Bird of conservation concern**
Season: Breeding

Upland Sandpiper Bartramia longicauda — **Bird of conservation concern**
Season: Breeding
https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0HC

Wood Thrush Hylocichla mustelina — **Bird of conservation concern**
Season: Breeding

Worm Eating Warbler Helmitheros vermivorum — **Bird of conservation concern**
Season: Breeding

Refuges

Any activity proposed on National Wildlife Refuge lands must undergo a 'Compatibility Determination' conducted by the Refuge. If your project overlaps or otherwise impacts a Refuge, please contact that Refuge to discuss the authorization process.

There are no refuges within this project area

Wetlands

Impacts to NWI wetlands and other aquatic habitats from your project may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes.

Project proponents should discuss the relationship of these requirements to their project with the Regulatory Program of the appropriate U.S. Army Corps of Engineers District.

DATA LIMITATIONS

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

DATA EXCLUSIONS

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

DATA PRECAUTIONS

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Wetland data is unavailable at this time.

Appendix E: USDOT Section 4(f) Evaluation

United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
15 State Street – Suite 400
Boston, Massachusetts 02109-3572

May 31, 2016

9043.1
ER 16/0228

Ms. Marie Jenet
FAA Eastern Regional Office
159-30 Rockaway Blvd., Suite 111
Jamaica, NY 11434

RE: COMMENTS
Draft Section 4(f) Evaluation Proposed TWA Flight Center Hotel Project
John F. Kennedy International Airport, Queens, New York

Dear Ms. Jenet:

The U.S. Department of the Interior (Department) has reviewed the Draft Section 4(f) Evaluation for the proposed TWA Flight Center Hotel Project at John F. Kennedy International Airport, in Queens, NY. This project includes the rehabilitation, restoration, and repurposing of the historic TWA Flight Center. The preferred alternative will demolish non-historic portions of the former terminal and construct two new guest room buildings, as well as below-grade conference and service areas, and will also complete restoration of the historic TWA Flight Center, to serve as an airport hotel and conference center. The following comments on this project are offered for your consideration.

Section 4(f) Evaluation Comments

The Department concurs that there is no prudent and feasible alternative to the proposed use of 4(f) lands, which consist of the TWA Flight Center, which is listed on the National Register of Historic Places (NRHP). The measures to minimize harm must be explicitly consistent with the proposed amendment to the existing Memorandum of Agreement (MOA) developed in consultation with the New York State Historic Preservation Office, Federal Aviation Administration, the Port Authority of New York and New Jersey, and the Advisory Council on Historic Preservation. We recommend that a signed copy of the amendment to the MOA be included in the final documentation of compliance for the project to reflect procedures for protecting cultural resources.

Thank you for the opportunity to review and comment on this project. If you have questions regarding these comments, please contact Cheryl Sams at (215) 597-5822 or Cheryl_Sams@nps.gov. Please contact me at (617) 223-8565 if I can be of further assistance.

Sincerely,



Andrew L. Raddant
Regional Environmental Officer

cc: SHPO-NY (ruth.pierpont@parks.ny.gov)

USDOT Section 4(f) Evaluation

TWA Flight Center Hotel Project
John F. Kennedy International Airport
Queens, New York

Prepared For:
U.S. Department of Transportation Federal Aviation Administration

Sponsored By:
The Port Authority of NY & NJ

Prepared by:
AKRF, Inc.

July 2016

This Section 4(f) assessment becomes a Federal document when evaluated, signed, and dated by the Responsible FAA Official.

_____ _____
Responsible FAA Official Date

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Chapter 1: Introduction

1-1 INTRODUCTION

This document is the Draft Section 4(f) Evaluation for the TWA Flight Center Hotel Project (the Project). This evaluation was prepared in coordination with the TWA Flight Center Hotel Draft Environmental Assessment (EA) to satisfy the requirements of Section 4(f) of the U.S. Department of Transportation (USDOT) Act of 1966. In 1983, Section 4(f) of the USDOT Act was codified as 49 USC § 303(c), but this law is still commonly referred to as Section 4(f). This evaluation was also prepared in accordance with the Federal Aviation Administration (FAA) implementing regulations for Section 4(f) at FAA Order 1050 1.F.

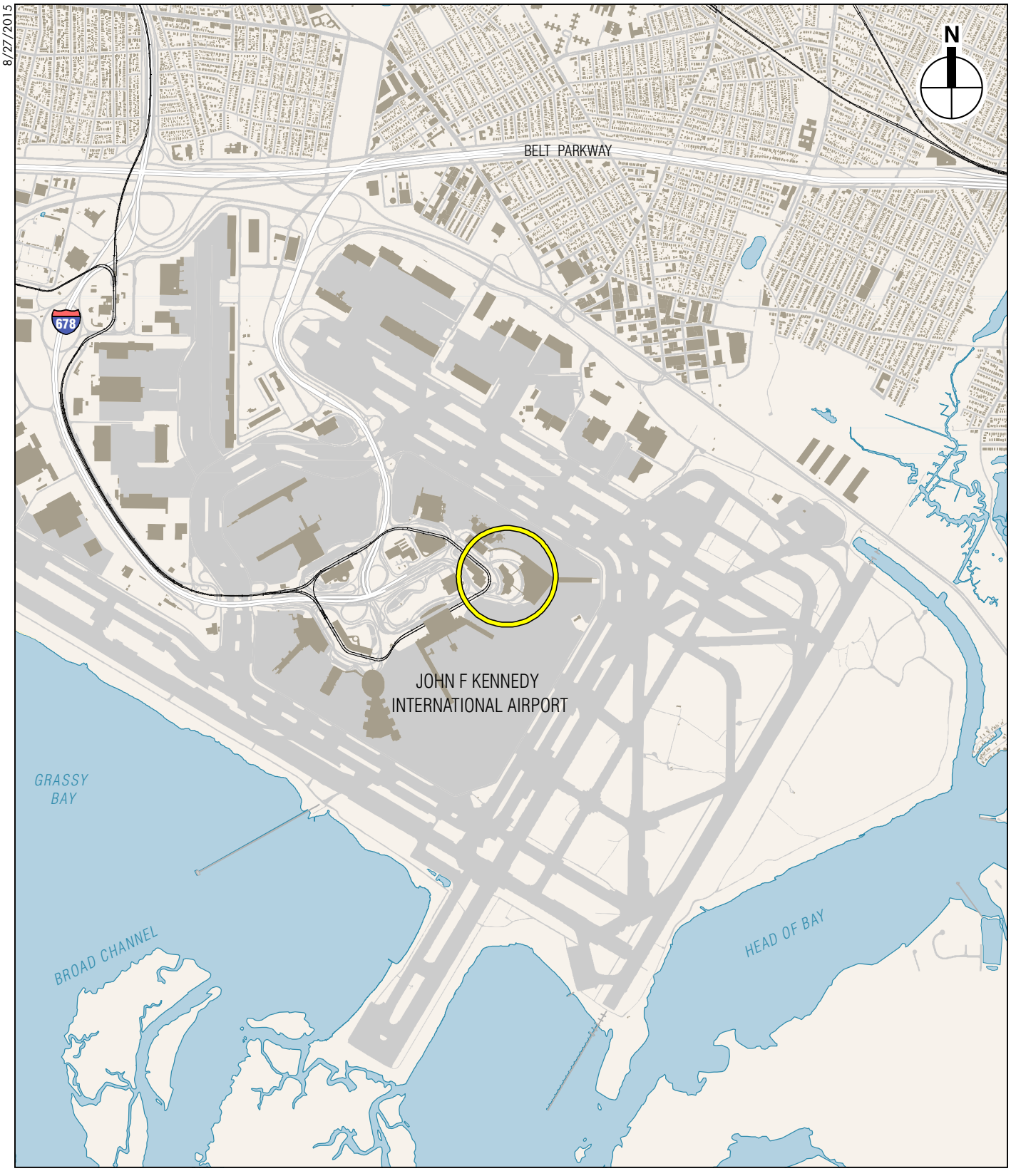
The Port Authority of New York and New Jersey (Port Authority) proposes to develop the TWA Flight Center Hotel as an adaptive reuse of the historic TWA Flight Center at John F. Kennedy International Airport (JFK) in Jamaica in the borough of Queens, New York City (see **Figure 1-1**). The Proposed Project would require the use of an historic building (TWA Flight Center) that is protected under Section 4(f) (see **Figure 1-2**).

1-2 PROJECT BACKGROUND

The centerpiece of the Proposed Project is the rehabilitation, restoration, and re-purposing of the historic TWA Flight Center. The TWA Flight Center was designed by Eero Saarinen and opened in 1962. Additions were completed in the 1960s and 1970s, along with further alterations undertaken in later years including the construction of Terminal 5/6 (jetBlue Terminal) to the north. The TWA Flight Center is a vaulted reinforced concrete structure designed with a sunken waiting area with a glazed façade that originally faced the runway, and with balcony levels where bar, restaurant and first-class waiting areas were located. The TWA Flight Center, with is sweeping and aerodynamic architectural forms, is recognized as a significant example of Post-War Modern architecture in the United States.

In 2004, jetBlue and the Port Authority initiated comprehensive redevelopment of Terminals 5 and 6, which ultimately resulted in the construction of existing JFK Terminal 5 and the demolition of JFK Terminal 6. In 2004, an *EA and Section 4(f) Evaluation for the Terminal 5/6 Redevelopment Project: JFK International Airport* (referred to herein as the 2004 EA) was prepared. To address the impact on historic resources during the redevelopment of the terminals, the FAA, the Advisory Council on Historic Preservation (ACHP), the New York State Historic Preservation Office (SHPO), and the Port Authority entered into a Memorandum of Agreement (MOA) for the Rehabilitation, Restoration, and Adaptive Reuse of the TWA Flight Center (referred to herein as the 2004 MOA). Alterations to the TWA Flight Center included the removal of both flight wings and the reconstruction of the West Tube. The East and West Tubes now connect

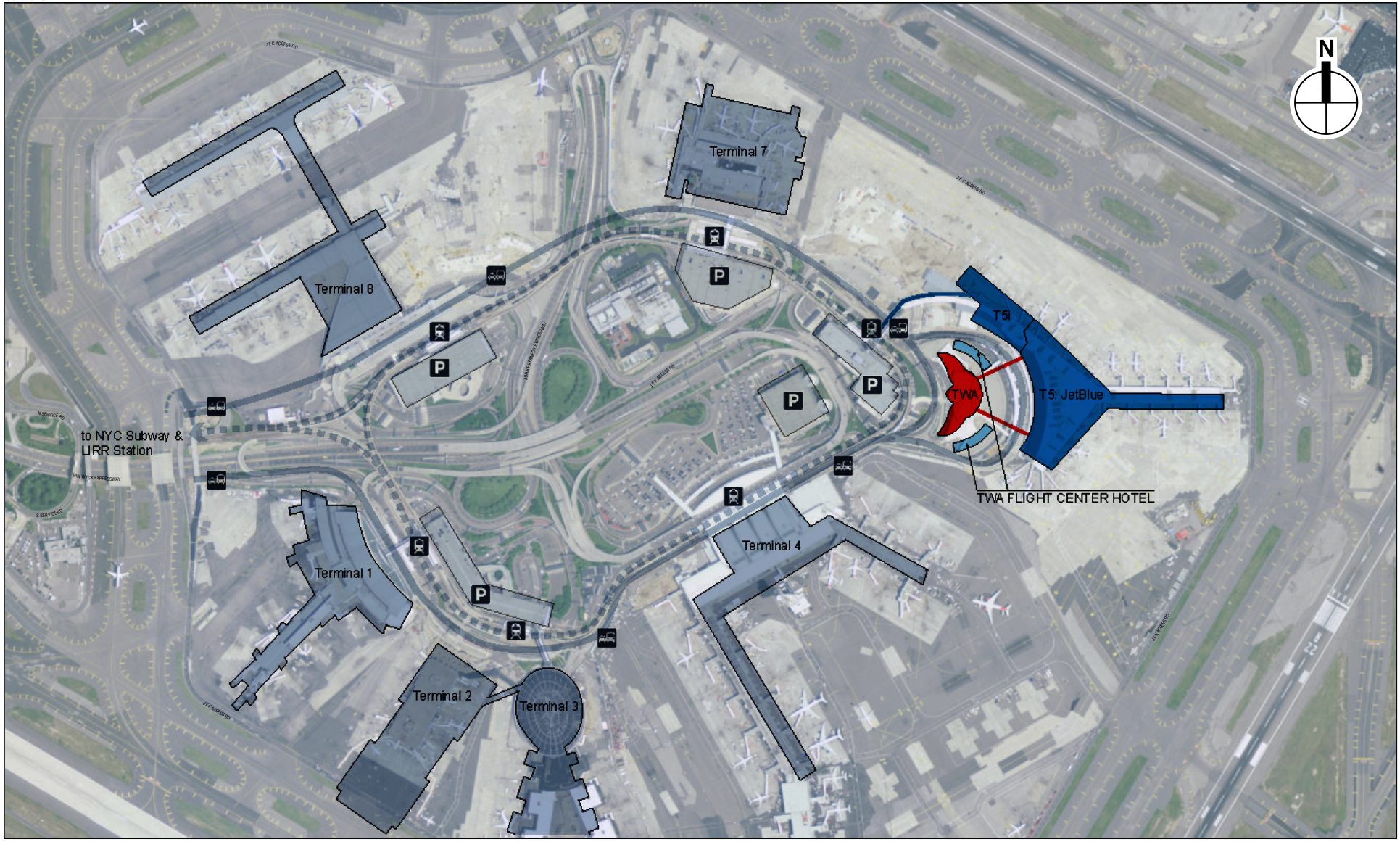
8/27/2015



TWA Flight Center Hotel

Project Location
Figure 1-1

8.27.15



TWA Flight Center Hotel

Proposed Site Plan
Figure 1-2

to the jetBlue Terminal, with the West Tube having been reconstructed as part of the Terminal 5/6 Redevelopment Project.

Stipulation 7 of the 2004 MOA required that the "TWA Terminal" (the name used for the TWA Flight Center in the Section 106 documentation, referred to as the TWA Flight Center throughout this document), including the Main Terminal Building, Flight Wings, and East and West Tubes be nominated to the National Register prior to the demolition of the Flight Wings. As a result of this stipulation, the TWA Terminal was formally listed on the National Register in October 2005. Since the 2004 EA, the Port Authority has performed approximately $19 million in extensive restoration work on the TWA Flight Center, plus annual maintenance while searching for an appropriate adaptive reuse developer for the building. The 2004 MOA stipulated that an adaptive reuse developer should be retained to develop the TWA Terminal in accordance with the Secretary of Interior Standards for the Treatment of Historic Properties.

The proposed long-term lease for financing, planning and design, rehabilitation / restoration / construction, management, operation and marketing of the TWA Flight Center Hotel is based on a Request for Proposals (RFP) selection process undertaken by the Port Authority. To date, there have been a total of three RFP's for the Adaptive Re-Use and Historic Preservation of the former TWA Flight Center. The initial tender in 2006 for an unspecified type of development opportunity garnered only a single respondent, who indicated that for a price, any program developed by the Port Authority would be considered. The proposal was determined to be "non-responsive" and was ended. Subsequent discussions internally at the Port Authority and with the Redevelopment Advisory Committee (RAC) led to the Port Authority taking on limited restoration of the TWA Flight Center and a decision on what next steps should be taken towards adaptive reuse. Ultimately, consensus was reached that the most sustainable business adaptive re-use and development would likely be a hotel. JFK airport has a need for a full service hotel within the central terminal area (CTA).

1-3 APPLICABILITY OF SECTION 4(F) TO THE PROJECT

Section 4(f) of the U.S. Department of Transportation Act of 1966 (49 USC § 303; 23 CFR § 774) prohibits the FHWA from approving any program or project that requires the "use" of (1) any publicly owned parkland, recreation area, or wildlife and waterfowl refuge of national, state, or local significance; or (2) any land from a historic site of national, state, or local significance (collectively "Section 4(f) resources"), unless there is no feasible and prudent avoidance alternative to the use of such land; and the action includes all possible planning to minimize harm to the park, recreation area, wildlife refuge, or historic resource resulting from such use; or it is determined that the use of the property, including measures to minimize harm, will have a *de minimis* impact on the property.

A project "uses" a Section 4(f) resource when:

1) It permanently incorporates land from the resource into a transportation facility;

2) It temporarily but adversely occupies land that is part of the resource (e.g., when all or part of the Section 4(f) property is required for project construction-related activities); or

3) It "constructively" uses the resource, which occurs "when the transportation project does not incorporate land from a Section 4(f) resource, but the proximity impacts are so severe that the protected activities, features, or attributes that qualify a resource for protection under Section 4(f) are substantially impaired" (23 CFR Part 774.15(a)).

The Project would require the permanent use of the historic TWA Flight Center, a property that qualifies for protection under Section 4(f). Whenever a Section 4(f) property must be used for a transportation project, documentation must be prepared to demonstrate that:

- No feasible and prudent alternative exists to the use of the Section 4(f) property; and
- The project includes all possible planning to minimize harm to the property.

As defined in 23 CFR § 774.17, an alternative is not feasible if it cannot be built as a matter of sound engineering judgment. An alternative is not prudent if:

- It compromises the project to a degree that it is unreasonable to proceed with the project in light of its stated purpose and need;
- It results in unacceptable safety or operational problems;
- After reasonable mitigation, it still causes:
  - Severe social, economic, or environmental impacts;
  - Severe disruption to established communities;
  - Severe disproportionate impacts to minority or low income populations; or
  - Severe impacts to environmental resources protected under other federal statutes;
- It results in additional construction, maintenance, or operational costs of an extraordinary magnitude;
- It causes other unique problems or unusual factors; or
- It involves multiple factors of the above, that while individually minor, cumulatively cause unique problems or impacts of extraordinary magnitude.

If there is no feasible and prudent avoidance alternative, FHWA may approve only the alternative that causes the least overall harm in light of the statute's preservation purpose. As stated in 23 CFR § 774.3, the "least overall harm" is determined by balancing the following list of factors:

- The ability to mitigate adverse impacts to each Section 4(f) property (including any measures that result in benefits to the property);
- The relative severity of the remaining harm, after mitigation, to the protected activities, attributes, or features that qualify each Section 4(f) property for protection;
- The relative significance of each Section 4(f) property;
- The views of the official(s) with jurisdiction over each Section 4(f) property;

- The degree to which each alternative meets the purpose and need for the project;
- After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f); and
- Substantial differences in costs among the alternatives.

As set forth in 23 CFR § 774.5, the Section 4(f) evaluation should be provided for coordination and comment to the U.S. Department of the Interior (DOI) and to officials with jurisdiction over the Section 4(f) resource that would be used by the Project—in this case the New York State Office of Parks, Recreation and Historic Preservation (OPRHP), and the State Historic Preservation Officer (SHPO).

Chapter 2: Purpose and Need

2-1 STATEMENT OF PURPOSE AND NEED

The purpose and need of the Proposed Project is to fulfill several important goals that will benefit all airport users (passengers, tenant airlines and their employees, Port Authority, and other customers), as well as the general public. These include:

- Restoration, rehabilitation, and adaptive reuse of the historic TWA Flight Center;
- Addition of a high-quality and full service hotel, conference center, and related facilities within the CTA and with AirTrain and inter-terminal connections;
- Enhance customer convenience and on-airport experiences; and,
- Economic benefits in terms of new private investment, public revenues to the Port Authority and other jurisdictions, and new employment opportunities and economic activity generated at the airport.

2-1-1 NEED FOR TWA FLIGHT CENTER REUSE

As documented in the 2004 EA, the historic TWA Flight Center was found inadequate to be operated as an active airline terminal. The final approved development plan for Terminal 5, which now surrounds the TWA Flight Center, was based on a commitment to incorporate an adaptive reuse strategy pursuant to the MOA entered into by the FAA, Port Authority, SHPO, ACHP, jetBlue, and other consulting parties to the Section 106 review undertaken as part of the Terminal 5 approval process.

As detailed in Chapter 5, *Environmental Consequences,* of the 2016 TWA Flight Center Hotel Project EA, the MOA resulted in a process to ensure ongoing maintenance, initial restoration and rehabilitation work, and to solicit, review, and approve adaptive reuse proposals. To date, the Port Authority has invested about $19 million on extensive restoration work including replacing soundproofing materials on the ceiling of the main hall, restoration of the Lower and Upper Lobby areas, replacement of skylights, restoration of the East Flight Tube and removal and restoration of exterior areas.

Discussions internally at the Port Authority and with the RAC led to a decision on what next steps should be taken towards adaptive reuse. Ultimately consensus was reached that the most sustainable business adaptive re-use and development would likely be a hotel.

The proposed TWA Flight Center Hotel is a direct response by the developer to RFP #38826 issued by Port Authority. Development plans have been reviewed by the RAC. The proposal will provide an adaptive reuse that will provide for rehabilitation and restoration pursuant to the guidelines established in the MOA and consistent with Secretary of the Interior's *Standards for the Treatment of Historic Properties - Rehabilitation*.

2-1-2 NEED FOR FULL SERVICE HOTEL

JFK is one of the most important airports in global aviation serving as a domestic and international gateway to the New York City region. Like other major airports, JFK is a major center of economic activity with about 37,000 employees and serves over 50 million passengers per year. As a full service hotel with conference facilities, the proposed TWA Flight Center Hotel will provide a major new asset to all airport users and further enhance the market competitiveness of the airport.

As airports continue to evolve with more diverse economic activities, airport hotels are increasingly seen as important market segments with meeting and conference elements and growing room night demand. Top ranked international and North American airport hotels overwhelmingly have direct terminal access and have broad user amenities and conference facilities. The consistently top ranked North American Hotel is the Vancouver Airport Fairmount Hotel which, like the proposed TWA Flight Center Hotel, provides both of these critical elements. In addition, the proposed TWA Flight Center Hotel has the unique attribute of using the internationally recognized and iconic TWA Flight Center serving as the centerpiece of the proposed hotel.

As analyzed by the Port Authority and summarized in the 2014 developer RFP[1], the proposed TWA Flight Center Hotel would be introduced within a robust lodging market with consistently strong economic performance in occupancy, room rates, and revenue per available room (RevPAR). The local market for airport hotels at JFK, with about 10 full service or larger hotels of 100 rooms or more have shown continuous growth in RevPAR between 2009 and 2013. The proposed TWA Flight Center Hotel would expand the market choices available to the overnight lodging marketplace.

As part of their response to the RFP, the Developer analyzed hotel economic data obtained from standard industry sources (STR Research) from three on-airport hotels—Marriott Newark Airport, Marriott Philadelphia Airport, Marriott Tampa Airport—as well as six of the adjacent JFK Airport hotels to evaluate the performance of the proposed TWA Flight Center Hotel.

2-1-3 ENHANCED CUSTOMER CONVENIENCE AND EXPERIENCE

As set forth in the developer's RFP and business model, the proposed TWA Flight Center Hotel would primarily serve existing and future demand presently at JFK. Among the 30 large hub airports in the United States, JFK has the fourth fastest projected annual compound growth rate at 2.43% between 2013 and 2040. FAA data indicates that JFK had 27.737 million enplanements (the sum of originating and connecting passengers but not arriving passengers) in 2013 and has a projected 47.337 million enplanements by 2040.

The Developer estimates that its market segmentation would be based on: 17 percent of the hotel room demand generated by airlines in lodging for crew layovers or crew and passengers for irregular operations (IRROPs); 31 percent by the demand for airport-

[1] Port Authority of NY&NJ. "Request for Proposals for the Development, Leasing, Management and Operation of a Hotel Incorporating the TWA Flight Center at John F. Kennedy International Airport (RFP#38826). August 8, 2014

based meetings, conferences, and other events; and 52 percent would be by arriving or departing passenger demand for hotel room nights.

Room utilization and traveler bookings are based on capturing existing and future demand from airport operations and offer substantial market value through its direct connection to the CTA via the AirTrain. This also has a secondary benefit to the region by limiting vehicular traffic (vans, buses, taxis, and private cars) to and from airport to accommodate this demand. Airport-based conferences and meetings would include new opportunities based on a lack of existing facilities and a more efficient way to capture existing meeting and conference demand that already exists based on short-term travel demand to and from the New York region.

2-1-4 ADDITIONAL ECONOMIC BENEFITS

As estimated by the Developer, the proposed TWA Flight Center Hotel would provide an expansion of economic activity at JFK, from construction activities and through permanent operation of the new hotel. However, the Proposed Project would not increase the number of flights at JFK or alter any airside operations.

The development will invest some $265 million in equity and debt during the construction period. This expenditure will result in additional spending in the local economy and will generate new taxes and other revenues at a local, state and federal level.

Once opened, the project is anticipated to generate approximately 500 to 600 permanent full and part time jobs. Operation of the hotel will generate revenue to the Port Authority in terms of base rent and percentage rent and a profit share. Taxes will accrue based on payroll and income taxes on employee wages as well as on sales taxes for goods and services as well as specific hotel occupancy taxes.

Chapter 3: Project Description

The centerpiece of the Proposed Project is the rehabilitation, restoration, and re-purposing of the historic TWA Flight Center. The iconic TWA Flight Center was designed by Eero Saarinen and opened in 1962. While the adjacent jetBlue Terminal T5 construction was completed in 2009, the TWA Flight Center has not been in use as a functioning terminal building since 2001. The MOA prepared as part of the Terminal 5/6 Redevelopment Plan specifically identified the need and process for seeking adaptive re-use alternatives for the TWA Flight Center, and the Proposed Project is a direct outcome of that process. The project has the following elements specific to the development and re-use of the former terminal building.

3-1 DEMOLITION OF NON-HISTORIC ADDITIONS

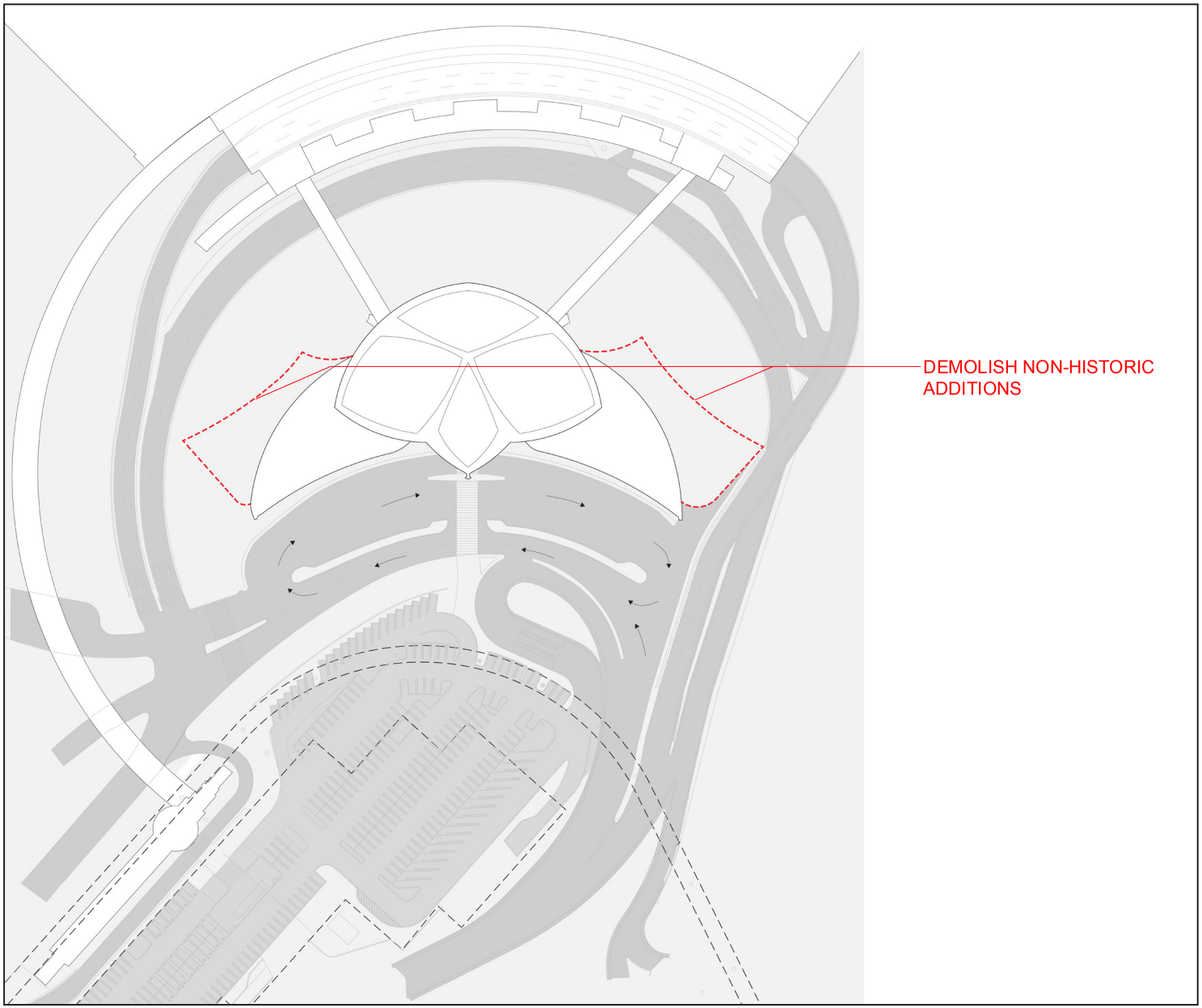
The initial step in the development of the site is the demolition of the non-historic portions of the TWA Flight Center building (see **Figure 3-1)**. Two additions were added around 1970 and altered the original footprint of the 1962 building. The demolition of these additions would allow the area needed for new construction.

3-2 NEW HOTEL GUEST ROOM BUILDINGS

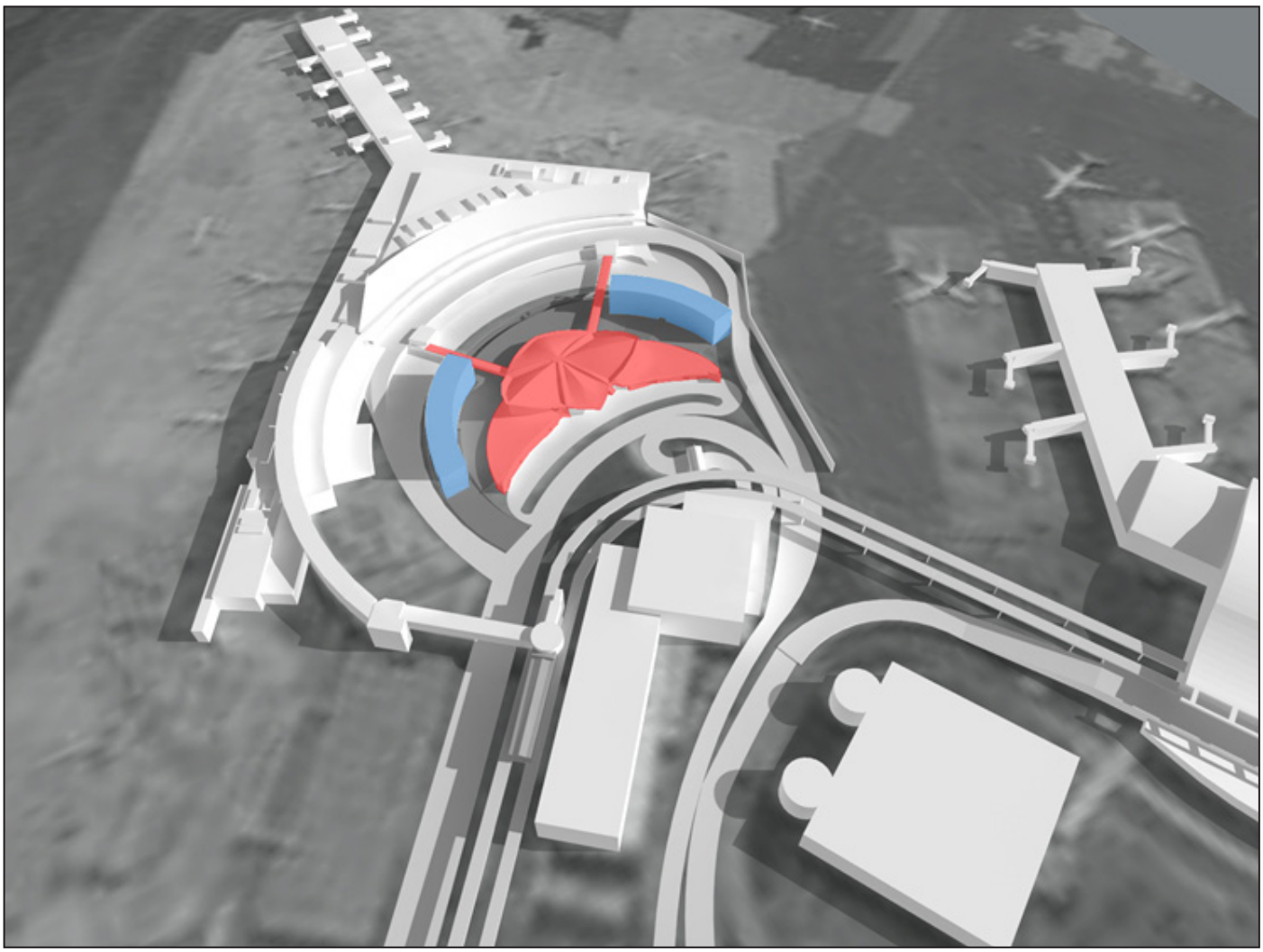
The Proposed Project includes the construction of two new guest room buildings on either side of the TWA Flight Center (see **Figure 3-2**). Approximately 505 guest rooms are proposed to be split between the two guest room buildings, including 20 suites.

The floor area of all new above-grade construction will total about 220,000 square feet, while the combined footprint of the newly constructed guest room buildings will total 31,400 square feet. The total Proposed Project including the restored TWA Flight Center and the new conference facilities would total about 440,000 square feet (including about 140,000 square feet of space retained in the existing terminal building and 50,000 square feet of newly constructed below grade conference space, and 30,000 square feet of newly constructed below grade service space). There would also be a cogeneration facility located on the rooftop of the west guest room building. Each hotel room building would be about 110,000 square feet and would be about one quarter of the overall volume of space.

The height of the new buildings will be up to 84 feet (including parapet wall but exclusive of mechanical areas such as elevator shafts), which is contextually within the building heights of surrounding buildings (such as the jetBlue Terminal 5 Skyway) and slightly taller than the TWA Flight Center itself. The curtain walls of the new guest room buildings will be clad with glass on the north and south facades. Additionally, a 5,000-square-feet roof-top observation deck with a cocktail lounge and a shallow splash-pool would be located on the south guest room building with views of the nearby runways.



Existing Conditions
Figure 3-1



Proposed Action Alternative

Figure 3-2

3-3 TWA FLIGHT CENTER RESTORATION

Since the EA for the Terminal 5/6 Redevelopment Project was completed in 2004, the Port Authority has performed restoration work on the TWA Flight Center. The Proposed Project would complete the restoration of additional areas requiring extensive work. The original historic main TWA Flight Center Terminal building would be repurposed as the Lobby area and amenities for the hotel. Iconic public spaces would be restored to recapture their original grandeur, designs, and concepts. The East and West connector tubes provide pedestrian walkways from the Lobby level of the TWA Flight Center to the jetBlue Terminal 5, as well as the new guest room buildings. New passageways would be cantilevered from the guest room buildings to connect to the East and West Tubes. While the East Tube has been restored, the West tube was reconstructed as part of the Terminal 5/6 Redevelopment Project.

3-3-1 LOWER LOBBY LEVEL

The interior of the TWA Flight Center is divided into three levels. The TWA Flight Center Hotel Lower Lobby is located at street level. Both ticketing areas at the Lower Lobby would be physically restored and repurposed. The South ticketing area would serve as a combination of Retail space and food hall. The North ticketing area would feature a new row of counters based on original design from 1962 to accommodate hotel and event check-in, including hotel baggage check-in which would be offered to all hotel visitors at street level to minimize the impact of wheeled luggage on the restored entrance staircases. No baggage check-in for flights would be accommodated. New ramps would be constructed to connect the Lower Lobby to the Lobby Level, following the historic path of circulation. Below grade walkways for staff would connect the Below Grade Level of the TWA Flight Center to the Below Grade Level of the guest room buildings.

3-3-2 LOBBY LEVEL

The main focus of the Lobby Level is the TWA Flight Center's iconic sunken lounge, as well as entrances to the East and West Tubes. This level would also include a Concierge, Junior Aviator's Club, Duty-Free Shop, Ballroom, and Retail space. Exhibit areas for historic interpretive displays would be developed throughout the hotel Lobby in partnership with the New-York Historical Society and the New York City Landmarks Preservation Commission. The historic interpretive displays would feature the history of the TWA Flight Center, Eero Saarinen, JFK Airport, TWA, and aviation in New York City.

Accommodations for airline travelers would be provided by the hotel. The Lobby would include a minimum of two electronic ticketing kiosks for use by jetBlue airline passengers (as set forth in the 2004 MOA), as well as check-in counters for select customers. The Solari Board with flight information would be rebuilt from its original 1958 plans and remain as a unique, historic feature of the Lobby. The mechanical board would retain its distinct, audible clicking as flight information is updated.

One of the cocktail lounges, "The Connie Bar", would be located inside a re-purposed Lockheed "Super G" Constellation Airplane (the "Connie"). The airplane would be located between the two connector tubes and accessed via walkways from the guest room buildings.

3-3-3 MEZZANINE LEVEL

The Mezzanine Level would include three restaurant and lounge areas original to the TWA Flight Center: The First Class Lounge, Lisbon Lounge, and Paris Café. Efforts would be made to replace the existing undersized elevator systems while preserving historic integrity.

3-3-4 BELOW GRADE LEVELS

The hotel would offer a total of 50,000 square feet of conference space, located mainly on the newly expanded Below Grade Levels with flexible meeting rooms of varying capacities. The Below Grade Level would also include the kitchens, mechanical rooms, laundry, fitness center, and additional space for the historic interpretive displays.

3-3-5 SUMMARY

The total area of the proposed full service hotel, including existing areas to remain, and all Below Grade Level areas will be 440,000 square feet. The height of the existing TWA Flight Center was taken into consideration in the design and siting of the Proposed Project. As such, the proposed hotel guest rooms and amenities would be partially submerged to create a habitable basement level. This approach also offers a direct relationship between the guest accommodations and the hotel back of house.

Chapter 4: Description of Section 4(f) Resources

The project site contains the TWA Flight Center, designed by Eero Saarinen and constructed in 1962, with additions completed in the 1960s and 1970s and with further alterations undertaken in later years including as part of the construction of Terminal 5/6 (jetBlue Terminal) to the north. The TWA Main Terminal building is a vaulted reinforced concrete structure designed with a sunken waiting area with a glazed façade that originally faced the runway, and with balcony levels where bar, restaurant and first-class waiting areas were located. The TWA Flight Center, with is sweeping and aerodynamic architectural forms, is recognized as a significant example of Post-War Modern architecture in the United States.

Stipulation 7 of the MOA required that the "TWA Terminal" (the name used for the TWA Flight Center in the Section 106 documentation), including the Main Terminal Building, Flight Wings, and East and West Tubes be nominated to the National Register prior to the demolition of the Flight Wings. As a result of this stipulation, the TWA Terminal was formally listed on the National Register in October 2005. As defined in the National Register nomination, the boundary consists of a polygon that encompassed all the existing components of the terminal complex, including the Main Terminal Building, East and West Tubes, both Flight Wings, and certain land beyond the boundary of these structures. The period of significance established in the National Register nomination spans between 1962 and 1970, which corresponds to the initial construction of the TWA Terminal through completion of the baggage wings.

The building was originally designed with one raised and enclosed walkway or "tube"-the East Tube – which connected to a flight wing (Flight Wing 2), which contained boarding gates where passengers boarded and deplaned. In 1967, a second and larger flight wing was added (Flight Wing 1) and was connected to the Main Terminal Building by another raised tube, the West Tube, which was longer and different in design to the East Tube. Between 1967 and 1970, additions were constructed to the runway, or airside, of the building on either side of the waiting area glazed façade, to house additional baggage handling, ticketing and office functions. These additions, or wings, were also constructed of concrete, altered the original footprint of the 1962 building, and are not included in the listing on the National Register..

Construction of Terminal 5/6 resulted in further alterations to the TWA Flight Center. These include the removal of both flight wings and the reconstruction of the West Tube in conformance with the 2004 MOA. The East and West Tubes now connect to the jetBlue Terminal, with the West Tube having been reconstructed as part of the Terminal 5/6 Redevelopment Project. The TWA Flight Center site is defined by the airport access roads that surround it, including those built as part of the Terminal 5/6 Redevelopment Project. The areas of the Proposed Project site that are not occupied by the existing building's footprint include a loading dock area at the east end of the building, and stone gravel throughout the remainder of the site. Since the EA for the Terminal 5/6

Redevelopment Project was completed in 2004, the Port Authority has performed approximately $19 million in extensive restoration work on the TWA Flight Center, plus annual maintenance. In summary, the work consisted of replacing soundproofing material on the ceiling of the main hall, restoration of the tiles in Lower and Upper Lobby areas of the main hall, replacement of skylights, restoration of the East connector tube, and restoration of portions of the exterior.

The TWA Flight Center is vacant; American Airlines acquired TWA's assets in 2001 and subsequently vacated the building in 2002 when TWA's lease expired.

Chapter 5: Alternatives

5-1 AVOIDANCE ALTERNATIVES

5-1-1 NO BUILD / NO ACTION ALTERNATIVE

In the No Build, or No Action, Alternative the proposed TWA Flight Center Hotel would not be built, and the historic TWA Flight Center would not have an adaptive reuse program and would not undergo the complete rehabilitation and restoration as set forth in the 2004 MOA. With the No Action Alternative, there would be no use of the building and basic services would not be provided. There would be no public access to the building. There would be no new on-airport hotel and no enhancement for customer experience at the airport, and the TWA Flight Center would not result in new employment and economic activity at the airport.

In terms of the adaptive re-use of the TWA Flight Center, and as set forth in Stipulation 20 of the 2004 MOA, if the Port Authority has not reached agreement with an adaptive reuse developer, the signatories to the MOA shall reconsider the terms of the agreement. As the Port Authority has indicated, no other funding resources are available and absent a private development partner, there is no anticipated ability to continue with the restoration and rehabilitation of the TWA Flight Center. The complete restoration project is estimated to require a total of $87 million, of which only a portion (approximately $19 million) has been funded by the Port Authority.

The absence of a high quality on-airport hotel is an increasingly notable omission compared with other international gateway airports. At JFK all adjacent hotels are off airport grounds and are not connected by transit or walkways to terminals. The Newark International Airport has an on-airport Marriott although it is not directly connected to any one terminal or a stop on its AirTrain. Market trends, nationally and locally as researched by the Developer and by the Port Authority, indicate that there is substantial value to on-airport hotel operations (increased occupancy, higher rates) and terminal connected hotels add to the economic value of the airport itself.[2]

The No Action Alternative would not add additional on-airport employment opportunities or expand market opportunities as available from the on-airport hotel and conference facilities and would therefore not contribute to JFK's prominence as an important

[2] Based on market analysis of other airport hotels and interviews with American Airlines and jetBlue (MCR Responses to Port Authority RFP Questions, November 2014). jetBlue and MCR Development. "Flight Center Hotel LLC, RFP Question Responses." November 6, 2014.

regional economic center of activity. In summary, the alternative does not meet any of the identified needs.

5-1-2 HOTEL AT ANOTHER LOCATION AT JFK AIRPORT

5-1-2-1 WITHIN CENTRAL TERMINAL AREA

The first choice would be to find an alternative hotel site that would be as conveniently located within the CTA as with the Proposed Project. As shown in **Figure 5-1**, the TWA Flight Center site is the only viable location in the CTA that could accommodate new hotel facilities without requiring extensive relocation or incursion into or above parking garages, circulation roadways, or terminal structures. Therefore, based on the configuration of the CTA, no other locations would be available to build a hotel and connect directly to a terminal or the AirTrain system. Another location within the CTA would not meet the stated purpose and need of creating an adaptive reuse for the historic TWA Flight Center.

5-1-2-2 FORMER RAMADA PLAZA HOTEL

The former Ramada Plaza Hotel (JFK Building 144) hotel is located in the far northern section of the airport adjacent to the Belt Parkway and the Van Wyck Expressway. The hotel was originally opened in 1958 as a Travelodge and was closed in 2009 after many years of interim uses and deteriorating conditions. It is not connected to the AirTrain and does have any proposed redevelopment interest as a hotel facility. Redeveloping the Ramada Plaza site would allow for an on-airport hotel facility but it would for all practical purposes operate in the same manner as the existing airport adjacent hotels since it would not be directly connected to the terminal or to transit. This alternative would also not meet the goal of creating an adaptive reuse for the historic TWA Flight Center. At a later date, a solicitation will be issued for a Developer to restore the former Ramada Hotel. However, as mentioned above, the Port Authority envisions it as a full or limited service hotel outside of the CTA, and would not meet the purpose and need of this project.

5-1-3 HOTEL AT ANOTHER LOCATION OFF JFK AIRPORT

There are numerous airport-oriented hotels located just off the airport property, primarily along the service roads of the Belt Parkway and the Nassau Expressway/Rockaway Boulevard. New hotels as allowed by local zoning and land use controls and in response to market demand are already a component of the lodging market.

This alternative would not meet the purposed and need of providing for an adaptive reuse of the TWA Flight Center or of providing an on-airport full service hotel.

5-1-4 SUMMARY

Avoidance alternatives would not be practical in terms of providing a reasonable development site and would not meet the purpose and need of the project as an adaptive reuse of the historic TWA Flight Center resulting in the rehabilitation and restoration of the facility. These alternatives were found not to be feasible and prudent avoidance alternatives, as defined in the Section 4(f) regulations.



2014 Aerial of Central Terminal Area

Figure 5-1

5-2 LEAST HARM ALTERNATIVES

As set forth in the Section 4(f) regulations, if the analysis conducted concludes that there is no feasible and prudent avoidance alternative, then FAA may approve, from among the remaining alternatives that use Section 4(f) property, the alternative that causes the least overall harm in light of the statute's preservation purpose (23 CFR § 774.3). During development of alternatives for the Project, design alternatives were considered that would not constitute avoidance alternatives, because the use of Section 4(f) resources would still be required, as discussed in this section.

5-2-1 SMALLER HOTEL AT THE TWA FLIGHT CENTER

Smaller hotel proposals were considered in earlier proposals considered and not carried forward by the Port Authority in response to earlier developer RFPs. In review and negotiation of the these smaller hotel proposals, in each case it was determined that the hotel proposal was not financially viable and could not support the development of the hotel or the rehabilitation, restoration, and maintenance of the TWA Flight Center pursuant to the MOA and the 2004 Terminal 5 EA.

In responding the Port Authority's 2014 RFP for adaptive reuse of the TWA Flight Center, the Developer presented a detailed financial model based on the comprehensive restoration of the TWA Flight Center and the development of the hotel itself including the TWA Flight Center, the new hotel room buildings, and related improvements to entire site. The project is reliant upon a balance between the hotel guest rooms and associated programs that support them. Alternative design schemes were considered and rejected due to site constraints and efforts to give visual clarity to the Flight Center. It is an important feature of the proposed design to distinguish between the historic structure and new spaces.

The size of the Proposed Project is in good part based on the restoration of the Flight Center which adds a considerable premium to the overall cost of development. As presented by the Developer to the RAC, this additional cost is estimated at approximately $87 million, of which an initial $19 million was funded by the Port Authority and the remaining $68 million will be funded by the Developer and integrated into the overall projection of costs that need to be offset by future revenues.

As with any hotel operations, guest rooms drive revenue and the proposed approximately 505 guest rooms are critical to the financial viability of the overall Proposed Project and, as modeled by the designated Developer, represent about 70 percent of total revenues. Analysis by the designated Developer highlights the sensitivity of building a smaller hotel in that there is a high level of fixed costs that remain regardless of the number of hotel rooms. In terms of construction, this results in a higher construction cost per room. On an operating basis, a smaller hotel does not offer the benefit of substantial cost savings relative to the loss of revenue. For example, the size difference would likely reduce the employment number by only 20 employees with an approximately 100 room reduction. This could reduce labor costs by an estimated $1.0 million while it would also result in a drop in revenue by approximately $10 million; thus revenue losses are almost 10 times the cost reduction. This is illustrated in **Table 5-1,** which provides a comparison of approximately 400 and 505 room hotels.

Table 5-1
Comparison of 400 Room Hotel to Proposed 505 Rooms

	Reduced Approximately 400 Rooms	Proposed Approximately 505 Rooms	Change
Total Approximate Construction Costs	$260,944,000	$277,671,357	-$16,656,000
Approximate Cost of Construction Per Room	$652,360	$549,844	$102,516 per room
Estimated Number of Employees	480	500	-20
Estimated Payroll ($50,000 per employee)	$24,000,000	$25,000,000	-$1,000,000
Estimated Hotel Room Revenue ($1 million per room per year)	$40,000,000	$50,000,000	-$10,000,000
Sources: MCR/Flight Center LLC			

The implications of a reduced hotel room count would be insufficient revenue to ensure a viable financial basis. This could affect terms of lease and revenue payments to the Port Authority or affect other aspects of the overall business plan including the upfront and ongoing costs for the restoration and rehabilitation of the TWA Flight Center.

5-2-2 OTHER USES CONSIDERED FO THE TWA FLIGHT CENTER

Other uses considered for the TWA Flight Center consisted of an Airline Terminal, Conference Center, and a Museum. Consideration of reopening the TWA Flight Center as an airline terminal was eliminated as a possibility in the 2004 EA. Consideration of repurposing the TWA Flight Center as a Conference Center or a Museum were not practical since neither one would generate enough revenue to rehabilitate, restore and support the on-going maintenance of this historic facility. The TWA Flight Center has open public spaces that were meant to accommodate large numbers of people leaving or returning from their flights. A Museum was not feasible however even if it was it would not have recreated the same energy as when it operated as an airline terminal. A hotel and conference facility would help to bring the public back to the building to create that high energy environment.

5-2-3 SUMMARY

The least harm analysis considered smaller hotel projects as alternatives. Based on the evaluation of proposals and financial analyses, it has been confirmed that a smaller hotel would not be financially viable and does not meet the purpose and need for the project.

Chapter 6: Mitigation

6-1 MEASURES TO MINIMIZE HARM

In the absence of a prudent and feasible alternative that avoids all use of Section 4(f) land, it was demonstrated that reuse of the TWA Flight Center incorporates all possible planning to minimize harm to the resource. The MOA stipulates the mitigation measures for the adverse effects under the Section 106 process, and for the continued involvement of the RAC. The stipulations were developed with comment and input from the signatories (the FAA, SHPO, the Port Authority, and the ACHP) and consulting parties. The stipulations of the MOA and its First Amendment proposed adaptive reuse of the TWA Fight Center Terminal, including the preparation of a HABS/HAER document, maintenance and preservation guidelines, public education efforts, and preparation of a rehabilitation and reuse plan. The development of jetBlue's Terminal 5 eliminated the potential reuse of the TWA Flight Center as an operable airport terminal.

As the proposed TWA Flight Center Hotel is subject to the approval from the FAA, the proposed project is subject to review pursuant to Section 106 of the National Historic Preservation Act of 1966 (NHPA) as implemented by federal regulations appearing in 36 CFR Part 800. Section 106 of the NHPA mandates that federal agencies consider the effect of their actions on any properties listed in or determined eligible for listing on the National Register of Historic Places (NRHP, "historic properties") and afford the ACHP a reasonable opportunity to comment on such undertakings.

Section 106 requires the lead federal agency, in consultation with the SHPO and appropriate Consulting Parties, to determine whether a Proposed Project would have any adverse effects on historic properties within the area of potential effects for that action. Section 106 requires consultation with the SHPO, federally recognized Indian tribes that might attach religious and cultural significance to historic properties affected by the Proposed Project, and additional Consulting Parties with a demonstrated interest in the proposed based on a legal or economic relation to affected properties, or an interest in the Proposed Project's effects on historic properties. In addition, the ACHP has participated in consultation for the resolution of adverse effects. Revised Section 106 regulations became effective in January 2001, with amendments effective in August 2004.

Consultation pursuant to Section 106 for the TWA Flight Center Hotel is proceeding pursuant to an MOA executed among the Port Authority, SHPO, the FAA, and the ACHP in October 2004 for the Terminal 5/6 Redevelopment Project. As part of the planning and environmental review conducted for the Terminal 5/6 Redevelopment Project, consultation was undertaken pursuant to Section 106 to assess the project's potential effects on historic properties. At the time of this consultation, the TWA Flight Center, including the Main Terminal Building, Flight Wing 2, and East and West Tubes, had been determined eligible for listing on the State/National Register of Historic

Places. The TWA Flight Center, consisting of the Main Terminal Building, East and West Tubes, and Flight Wing 2, had also been designated a New York City Landmark (including portions of the interior of the Main Terminal Building, the East and West Tubes, and Flight Wing 2) in 1994.

Consultation pursuant to Section 106 identified that the Terminal 5/6 Redevelopment Project would result in an Adverse Effect on the TWA Terminal, due to the planned removal of the original Flight Wing 2 and anticipated modifications to the West Tube. This Adverse Effect and measures that were developed to mitigate the Adverse Effect were memorialized in the 2004 MOA. The MOA set forth a number of measures that would be undertaken to avoid, minimize and mitigate the Adverse Effect of Terminal 5/6 Redevelopment Project, including how consultation would proceed regarding the future treatment and reuse of the TWA Terminal.

The TWA Flight Center Hotel is a direct outcome of, and serves to implement certain stipulations of the MOA with respect to the restoration, rehabilitation, and adaptive reuse of the TWA Flight Center. Consultation for the TWA Flight Center Hotel is consistent with and within the Section 106 framework established by the MOA.

The MOA and RFP issued by the Port Authority to solicit adaptive reuse proposals for hotel use require the selected developer to comply with the stipulations of the MOA. These stipulations and the status of compliance are described below.[3]

6-1-1 FIRST AMENDMENT TO THE 2004 MOA

Based on the Section 106 consultation with SHPO and the RAC regarding the design of the proposed TWA Flight Center Hotel and the adaptive reuse of the TWA Flight Center, a First Amendment to the 2004 MOA has been drafted. As described above, the Proposed Project would result in the removal of the additions completed in 1970 to the airside of the TWA Main Terminal Building. This proposed modification has been reviewed by SHPO and the RAC. As these additions have not attained significance on their own or as part of the overall understanding of the TWA Flight Center, their removal would be consistent with the Secretary of the Interior's Standards for Rehabilitation. Removal of these additions would return the TWA Flight Center to its 1967 configuration, the year in which the West Tube was completed, and allow for a greater separation between the TWA Main Terminal Building and the proposed hotel.

The proposed hotel has been designed with two separate guest room buildings to be constructed east and west of the TWA Main Terminal Building. The proposed crescent-shaped footprints of the hotel buildings follow a similar curvature as the façade of the original TWA Main Terminal Building (prior to the 1970s) additions. Pedestrian access to the proposed guest room buildings would be via new passageways connected to the East and West tubes, thereby not interfering with the sculptural quality of the TWA Main Terminal Building. The passageways would be cantilevered from the new guest room buildings to minimize changes to the East and West tubes. The proposed glass and

[3] Stipulations 1 through 18 contain commitments related to design, rehabilitation, restoration and maintenance and are described below. Stipulations 19 through 21 relate to the administration of the MOA and therefore are not evaluated for their compliance status.

metal primary facades have been designed to complement and not compete with the masonry TWA Flight Center.

6-1-2 MOA COMPLIANCE

The 2004 MOA established the initial framework that created the developer request for proposals ultimately leading to the Port Authority's selection of the Developer and the proposed TWA Flight Center Hotel development plan. This section summarizes compliance with the stipulations of the agreement, as well as stipulations detailed in the First Amendment. The stipulations are shortened and summarized in the EA and the entire 2004 MOA and its First Amendment is found in Attachment A.

6-1-2-1MOA Planning Stipulations

1. Issuance of RFP and execution of an agreement with an adaptive reuse developer for the adaptive reuse and restoration of the TWA Terminal (TWA Flight Center).

Compliance Status: The Port Authority has issued three RFPs and the Proposed Project is specifically in response to RFP #38826. SHPO, RAC and the Port Authority concurrence on conceptual plans is a pre-requisite for the lease agreement for adaptive reuse. SHPO approvals are required on more specific plans for construction as details are developed in accordance with the Secretary of the Interior *Standards for Treatment of Historic Properties - Rehabilitation*.

Amendment 1A. The adaptive reuse developer will adhere to the terms and conditions of the amended 2004 MOA, as contained in the long-term lease for the site.

Compliance Status: Flight Center Hotel LLC and the Port Authority have entered a long-term lease, which provides for the adaptive reuse of the site in accordance with the stipulations in the 2004 MOA and its First Amendment.

2. Installation of two electronic ticketing kiosks in the TWA Terminal (TWA Flight Center).

Compliance Status: Two kiosks including power and communication lines have been installed on the main Lower Lobby level of the TWA Main Terminal Building east of the main roadway entrance. The Port Authority will keep SHPO and the RAC advised regarding their activation.

3. Formation of an RAC, consisting of Section 106 consulting parties that choose to participate, along with the SHPO and the Port Authority, to provide input regarding the Terminal 5/6 Redevelopment Project and reuse/restoration of the TWA Terminal (TWA Flight Center).

Compliance Status: The RAC has been formed and has been providing input regarding the proposed TWA Flight Center Hotel design and adaptive reuse of the TWA Terminal. The RAC will continue to meet until all stipulations under the MOA have been concluded.

4/5. Provision of design guidance regarding design of the new Terminal in relation to the historic TWA Terminal (TWA Flight Center), including the requirement that designs be forwarded to SHPO and the Port Authority as well as to the RAC for review and comment.

Compliance Status: Terminal 5 (Jet Blue) has been constructed and design consultation with the RAC is ongoing with respect to the adaptive reuse of the TWA Terminal. A portion of the restoration of historic areas of the terminal has been substantially completed, including Upper and Lower Lobby areas, façade, frontage and the interim outdoor plaza. The complete restoration project is estimated to require a total of $84 million, of which only a portion (approximately $19 million) has been completed by the Port Authority. Restoration of the remaining historic areas would be performed by the adaptive reuse developer, Flight Center Hotel, LLC.

Amendment 5A. Provision of preliminary and pre-final design guidance regarding the TWA Flight Center Hotel and adaptive reuse of the historic TWA Terminal (TWA Flight Center) and the Connecting Flight Tubes, including the requirement that designs be forwarded to all consulting parties, as well as to the RAC, for review and comment via a web-based FTP site.

Compliance Status: Design plans for the restoration, rehabilitation, and adaptive reuse of the TWA Terminal by Flight Center Hotel, LLC, were developed in coordination with SHPO, the Port Authority, and the RAC.

Amendment 5B. The design plans for the TWA Flight Center Hotel will include two new structures, a historical interpretive display, the restored Solari Flight information Display, updated roadways, pedestrian access, and landscaping.

Compliance Status: The adaptive reuse developer, Flight Center Hotel, LLC, is committed to providing the abovementioned integral components for the TWA Flight Center Hotel.

Amendment 5C. If final design plans for the TWA Flight Center Hotel "differ substantially" from those approved by the Port Authority and SHPO, then the consulting parties and RAC shall reconvene to review and comment on the design changes.

Compliance Status: The following design changes would be avoided to the fullest extent possible: any changes impacting the footprint or height of the proposed new construction; any proposed changes to the historic exterior façade (i.e. concrete shell, window walls, skylights, or tubes); or any interior changes to the character-defining features. The consulting parties and RAC would have the opportunity to review any necessary design changes.

6. Installation of an interpretive exhibit illustrating the history and significance of the TWA Terminal.

Compliance Status: The developer, Flight Center Hotel, LLC is committed to providing an educational exhibit. This exhibit is planned at the ground level of the TWA Main Terminal Building, and consists of the two areas at the base of the circulation cores (escalators, stairs, elevator) that will provide access from the Lobby level to the proposed conference center at ground level.

7. Preparation by a qualified professional of a National Register of Historic Places nomination for the TWA Main Terminal Building, Connector Tubes, and Flights wings prior to the demolition of the flight wings.

Compliance Status: The nomination was prepared, and the TWA Terminal was listed on the National Register of Historic Places in 2005.

8. Recordation of the TWA Main Terminal Building to Level 1 Historical Architectural Building Survey/Historic American Engineering Record (HABS/HAER) standards.

Compliance Status: The HABS/HAER documentation was recorded with the National Parks Service, New York State Archives, the Port Authority, and the SHPO. The work was conducted by a consultant chosen by the Port Authority who meets the professional qualifications established by the United States Department of the Interior as set forth in 36 CFR 61).

9. Acknowledgement that the columns that support the East Tube may need to be altered to allow the proposed roadway to be built between the TWA Terminal (TWA Flight Center) and new Terminal 5 to pass beneath the tube.

Compliance Status: Design and construction of the roadway was completed without the need to modify the East Tube's support columns.

10. Provision that the Flight Wings may not be removed until the plan for the new Terminal 5 has been established and a lease agreement is in place between the Port Authority and the Terminal 5 tenant.

Compliance Status: A lease agreement between the Port Authority and jetBlue was executed on November 22, 2005, and the Flight Wings have since been removed as part of the construction of the new Terminal.

6-1-2-2MOA Interim Maintenance Stipulation

11. The MOA provides for the maintenance of the TWA Terminal by the Port Authority until such time as these responsibilities are transferred to the adaptive reuse developer.

Compliance Status: This maintenance has been ongoing, including inspections and repairs, as needed.

6-1-2-3MOA Restoration and Rehabilitation Stipulations

12/13. Restoration and rehabilitation of the TWA Main Terminal Building and the East Tube shall be in accordance with the Secretary of the Interior's Standards, with the full visible exterior of the East Tube retained and modifications to the West Tube to be undertaken in consultation with the RAC.

Compliance Status: A number of the exterior and interior spaces have been restored and rehabilitated by the Port Authority, including the Lower Lobby and upper main Lobby spaces, the interior of the East Tube, the existing façade including most of the landside entrances and front window wall and skylights. The balcony areas will be restored by the Flight Center Hotel, LLC as per the Secretary of the Interiors Standards – Restoration, and in consultation with SHPO and the RAC. The full visible exterior length of the East Tube has been retained, and the West Tube has been modified and has a similar appearance to the East Tube. Both Tubes connect the TWA Main Terminal Building with Terminal 5 (jetBlue).

14. Investigation of the potential reuse of the Flight Wing 1 and 2 gate lounge "trumpets" or other significant architectural elements as part of the new Terminal design.

Compliance Status: Based on consultation with SHPO and the RAC, the "trumpets" were not incorporated into the design of the new Terminal.

15. Restoration of the TWA Main Terminal Building and Flight Tubes will include the removal of non-historic additions and restoration of certain original interior features of the TWA Main Terminal Building.

Compliance Status: This work is ongoing. Additions as specified in the MOA including entrance vestibules, security booths, the south baggage facility and the pedestrian canopy have been removed. The interior Lobby spaces have been restored with non-historic signage and furniture removed. The east and west balcony levels will be restored and rehabilitated by TWA Flight Center Hotel, for use as lounge, restaurant, café, and retail space in coordination with SHPO and the RAC. In addition, though not specified in the MOA, the Proposed Project would also remove the non-contributing 1970s additions placed on the airside of the Main Terminal Building to house office, ticketing, and baggage functions, consistent with the 1967 period of restoration and as described in greater detail below.

Amendment 15A. Should previously unidentified archaeological properties be discovered during rehabilitation of the TWA Terminal (TWA Flight Center), work activities should cease and the Port Authority would notify the FAA and SHPO in accordance with 36 CFR Section 800.13(b).

Compliance Status: The adaptive reuse developer and its contractors are committed to the protocols following the unanticipated discovery of archaeological resources. The FAA and SHPO would be notified within 24 hours to provide documentation.

Amendment 15B. Should unanticipated adverse effects occur during rehabilitation of the TWA Terminal (TWA Flight Center), the Port Authority would notify the FAA and SHPO in accordance with 36 CFR Section 800.13(b).

Compliance Status: The adaptive reuse developer and its contractors are committed to the protocols following the unanticipated adverse effects during construction. The FAA and SHPO would be notified within 24 hours to provide documentation.

Amendment 15C. The FAA and the Port Authority shall provide a status report 12 months following the execution of the First Amendment to the 2004 MOA. Annual reports shall also be provided by January 30th of each year until the MOA expires or is terminated. Following review of the annual reports, the consulting parties and the RAC may request a meeting, as needed.

Compliance Status: A status report and subsequent annual reports will be submitted, including a summary detailing work undertaken; any proposed scheduling changes; problems and resolutions; and any resolutions to disputes and objections.

16. Approval of the SHPO will be sought once the restoration and rehabilitation work at the TWA Main Terminal Building and the East Tube has been completed as set forth by Stipulation 12 of the MOA. In addition, the SHPO will notify the RAC once they have

been notified of completion by the Port Authority, to give the RAC the opportunity to comment and also tour the restored and rehabilitated spaces.

Compliance Status: As discussed above, a portion of the restoration and rehabilitation work has been completed by the Port Authority, with additional restoration and rehabilitation to be undertaken by TWA Flight Center Hotel, LLC. Consultation with SHPO and the RAC is ongoing regarding the adaptive reuse design for the TWA Main Terminal Building and the design of the TWA Flight Center Hotel.

6-1-2-4MOA Ongoing Maintenance and Preservation Stipulations

17/18. The MOA require that the Port Authority prepare maintenance and preservation guidelines for the TWA Main Terminal Building and East Tube upon completion of the rehabilitation and restoration work, for submission to SHPO for review and approval, and that the Port Authority perform an inspection of the TWA Main Terminal Building and East Tube every five years and that the report documenting the inspections and approved by SHPO be provided to the signatories of the MOA by the Port Authority.

Compliance Status: The adaptive reuse developer will prepare maintenance and preservation guidelines for the repair of historic materials and fixtures and for façade maintenance and cleaning, with the requirement of inspections included in the agreement between the Port Authority and the adaptive reuse developer.

Amendment 17A. The developer shall prepare maintenance and preservation guidelines for treatment of the TWA Main Terminal Building and East Tube. The guidelines shall be submitted to the Port Authority and, SHPO, and the RAC, following completion of the rehabilitation and restoration work.

Compliance Status: The adaptive reuse developer will submit maintenance and preservation guidelines for review and approval.

Chapter 7: Public Outreach and Agency Coordination

The Port Authority and FAA have involved the public, coordinated with agencies, and engaged with consulting parties regarding this project. Section 4(f) determinations require input from agencies having jurisdiction over affected Section 4(f) resources. The Department of Interior (DOI) reviews the Section 4(f) evaluation during a 45-day review period.

7-1 NEPA

To satisfy requirements for public involvement, a Notice of Public Availability was published in the Queens Borough President newsletter, *New York Newsday, Daily News (Queens edition), Queens Chronicle, Queens Courier, Queens Times Ledger, Queens Ledger, Long Island Herald, and South East Queens Press,* newspapers. Additionally, the Notice of Public Availability was distributed to the Coordinating Committee of the NY Airports Community Airports Roundtable (NYCAR). The Draft EA was available at the Port Authority's Administration Building at JFK and Port Authority's central staff office in Manhattan (4 World Trade Center). A copy of the document was also available for review on the website, http://www.panynj.gov/about/studies-reports.html. A 30 day comment period extended from April 7, 2016 to May 7, 2016. The DOI Section 4(f) consistency review extended from April 12, 2016 to May 27, 2016.

To ensure that interested parties are informed, another advertisement was placed in the local newspapers announcing the FAA's decision. Copies of the Final EA and the FAA's decision are available at the Port Authority's Administration Building at JFK, and Port Authority's central staff office in Manhattan.

7-2 SECTION 106 COORDINATION WITH AGENCIES AND CONSULTING PARTIES

The Port Authority and FAA have coordinated with public agencies, and engaged with consulting parties regarding the Proposed Project and issues addressed in this EA. A consultation under Section 106 of the NHPA has occurred as part of the environmental planning for the Proposed Project because the Proposed Project involves a resource listed in the National Register of Historic Places. Both NEPA and NHPA and their associated regulations, require public and agency involvement before FAA can render a decision on the Proposed Project. A public notice and comment period will be part of the NEPA process. The intent of public and agency involvement is to ensure that the public and resource agencies can review the adaptive reuse of the historic resource and provide input on the Proposed Project. In addition, the RAC continues to provide the agency coordination and guidance in the review of this Proposed Project in accordance with Section 106 of the National Historic Preservation Act. The proposed TWA Flight Center Hotel, LLC project has been presented to the RAC at four meetings—May 11, 2015, June 17, 2015, December 1, 2015, and February 26, 2016. A

detailed discussion on the Section 106 process is included in Section 5-2, Historical, Architectural, Archaeological, and Cultural Resources.

7-3 NEW YORK CITY UNIFORM LAND USE REVIEW PROCEDURE

The public has had several opportunities to learn about and share comments on the proposed TWA Flight Center Hotel through public meetings and hearing associated with the New York City Uniform Land Use Review Procedure (ULURP), a process which establishes several opportunities for public review and comment. The ULURP process is in support of the proposed project sponsor's seeking a long term lease commitment directly with New York City which would only be required if the City's lease with the Port Authority is not renewed.

Specifically, the project has been presented at regularly scheduled public meetings including to the three local Community Boards (10, 12, and 13) that are located adjacent to the airport, the Queens Borough President's office, and the New York City Planning Commission. In each instance, the project sponsor provided an overview presentation of the project in terms of the proposed development program, the specific need for the lease commitment by the City, the restoration of the historic TWA Flight Center, and a visual depiction of the project in relationship to the surrounding buildings of this portion of the Central Terminal Area. Board members and the general public were allowed to ask questions and comment on the proposed project.

As part of their role and input to the ULURP process, each of the Community Boards and the Borough President's office have recommended approval of the proposed project. The New York City Planning Commission approved the ULURP application on March 9, 2016. The ULURP process concludes with a final hearing by the New York City Council. In chronological order, the location and dates of meetings held to date on the proposed TWA Flight Center Hotel are listed below:

Queens Community Board 13 Land Use Committee
Monday, December 14, 2015 at 7:00 pm
Community Board 13 Office
219-41 Jamaica Avenue
Queens Village, NY 11428

Queens Community Board 13 Full Board Meeting
Monday, December 21, 2015 at 7:30
Bellerose Assembly of God
240-15 Hillside Avenue,
Bellerose, NY 11426

Queens Community Board 12 Land Use Committee
Tuesday, January 5, 2016 at 7:00pm
Community Board 12 Office
90-28 161st Street
Jamaica, NY 11432

Queens Community Board 10 Land Use Committee
Wednesday, January 6, 2016 at 7pm
115-01 Lefferts Blvd.
South Ozone Park, NY 11420

Queens Community Board 10 Full Board Meeting
Thursday, January 7, 2016 at 7:45pm
Knights of Columbus Hall
135-45 Lefferts Boulevard
South Ozone Park, NY 11420

Queens Community Board 12 Full Board Meeting
Wednesday, January 20, 2016 at 7pm
Robert Ross Johnson Family Life Center
172-17 Linden Boulevard
Jamaica, NY 11434

Queens Borough President Hearing
Thursday, January 28, 2016 at 10:30am
Queens Borough Hall
120-55 Queens Boulevard
Jamaica, NY 11424

Queens Borough Board Meeting
Monday, February 8, 2016 at 5:30pm
Queens Borough Hall
120-55 Queens Boulevard
Jamaica, NY 11424

City Planning Commission Review Session
Monday, February 22, 2016 at 10am
Spector Hall
22 Reade Street
New York, NY 10007

City Planning Commission Public Hearing
Wednesday, February 24, 2016 at 10am
Spector Hall
22 Reade Street
New York, NY 10007

Chapter 8: Conclusion

This evaluation has been prepared to assess the potential effects of the Proposed Project on Section 4(f) resources and to evaluate alternatives that avoid or minimize impacts to those resources. Based on the above considerations, there is no prudent and feasible alternative to this use of the historic TWA Flight Center. The Proposed Project includes all possible planning to minimize harm to the Section 4(f) resource resulting from such use. Additionally, the purpose of the project includes the preservation of the historic transportation facility and the implementation of the 2004 MOA and its First Amendment.

Attachments: Table of Contents

Attachment A: 2004 Memorandum of Agreement*

First Amendment to the 2004 Memorandum of Agreement

Attachment B: RAC Meeting Minutes and ACHP Correspondence**

*** See EA Appendix B**
**** See EA Appendix C**

Appendix F: Coastal Zone Consistency Determination

STATE OF NEW YORK
DEPARTMENT OF STATE
ONE COMMERCE PLAZA
99 WASHINGTON AVENUE
ALBANY, NY 12231-0001

ANDREW M. CUOMO
GOVERNOR

CESAR A. PERALES
SECRETARY OF STATE

November 12, 2015

Mr. Marc Helman
Supervisor, Permits and Governmental Approvals
Port Authority of New York & New Jersey (PANYNJ)
4 World Trade Center
New York, New York 10007

Re: **F-2015-0763**
Federal Aviation Administration (FAA) –
Approval of change to Airport Layout Plan,
TWA Flight Center and Hotel Project;
John F. Kennedy (JFK) Airport, Queens, NY
Jamaica Bay

General Concurrence – No Objection

Dear Mr. Helman:

The Department of State received your submittal requesting consistency concurrence for the above-referenced matter on November 12, 2015. The Department has no objection to the FAA approval of the above proposed changes to the airport layout plan. Therefore, further review of the proposed activity by the Department of State and the Department's concurrence with an individual consistency certification for the proposed activity is not required.

This General Concurrence is without prejudice to and does not obviate the need to obtain all other applicable licenses, permits, other forms of authorization or approval that may be required pursuant to existing State statutes. When communicating with us regarding this matter, please contact Jeffrey Zappieri at (518) 474-6000 and refer to our file #F-2014-0763.

Sincerely,

Jeffrey Zappieri
Supervisor, Consistency Review Unit
Office of Planning and Development

JZ/ ts

From: Allan Zaretsky (DCP) [mailto:AZARETSKY@planning.nyc.gov]
Sent: Tuesday, November 17, 2015 9:46 AM
To: Helman, Marc; Charles, Thzaira
Cc: Michael Marrella (DCP); Caldwell, Denise (DOS)
Subject: WRP Consistency Review: TWA Flight Center Hotel (WRP #15-121)

Hello Mr. Helman,

We have completed the review of the project as described below for consistency with the policies and intent of the New York City Waterfront Revitalization Program (WRP).

TWA Flight Center Hotel: Adaptive reuse and development of an on-airport hotel with 5050 rooms at JFK Airport utilizing the historic TWA Flight Center located in the Central Terminal Area.

Based on the information submitted, the Waterfront Open Space Division, on behalf of the New York City Coastal Commission, having reviewed the waterfront aspect of this action, finds that the actions will not substantially hinder the achievement of any Waterfront Revitalization Program (WRP) policy and hereby provides its finding to the New York State Department of State (DOS) that this action is consistent with the WRP policies and the local program. Please note that the proposed action(s) are subject to consistency review and approval by the New York State Department of State (DOS) in accordance with the New York State Coastal Management Program.
This finding is only applicable to the information received and the current proposal. Any additional information or project modifications would require an independent consistency review.

For your records, this project has been assigned WRP # 15-121. If there are any questions regarding this review, please contact me.

Regards,
Allan Zaretsky

ALLAN ZARETSKY
PLANNER | WATERFRONT & OPEN SPACE DIVISION

NYC DEPT. OF CITY PLANNING
22 READE STREET • NEW YORK, NY 10007 • **t** 212.720.3448
www.nyc.gov/planning/resiliency

For Internal Use Only:	WRP no.
Date Received:	DOS no.

NEW YORK CITY WATERFRONT REVITALIZATION PROGRAM
Consistency Assessment Form

Proposed action subject to CEQR, ULURP, or other Local, State or Federal Agency Discretionary Actions that are situated within New York City's designated Coastal Zone Boundary must be reviewed and assessed for their consistency with the *New York City Waterfront Revitalization Program (WRP)*. The WRP was adopted as a 197-a Plan by the Council of the City of New York on October 13, 1999, and approved in coordination with local, state and Federal laws and regulations, including the State's Coastal Management Program (Executive Law, Article 42) and the Federal Coastal Zone Management Act of 1972 (P.L. 92-583). As a result of these approvals, state and federal discretionary actions within the city's coastal zone must be consistent to the maximum extent practicable with the WRP policies and the city must be given the opportunity to comment on all state and federal projects within its coastal zone.

This form is intended to assist an applicant in certifying that the proposed activity is consistent with the WRP. It should be completed when the local, state, or federal application is prepared. The completed form and accompanying information will be used by the New York State Department of State, other State Agency or the New York City Department of City Planning in its review of the applicant's certification of consistency.

A. APPLICANT

1. Name:
Port Authority of New York and New Jersey (Attn: Marc Helman)

Address:
4 World Trade Center, 150 Greenwich Street, 20th Floor, New York, NY 10007

3. Telephone: (212) 435-6112 Fax: (212) 435-6251

E-mail Address:
mhelman@panynj.gov

4. Project site owner:
Port Authority of New York and New Jersey

B. PROPOSED ACTIVITY

1. Brief description of activity:
Development of an on-airport hotel with 505 rooms at JFK Airport and utilizing this historic TWA Flight Center located in the Central Terminal Area

2. Purpose of activity:
Adaptive reuse of historic landmark, new airport hotel, enhanced customer experience, new economic activity

3. Location of activity: **Jamaica** Borough: **Queens**

Street Address or Site Description:
Terminal 5 in the Central Terminal Area of JFK International Airport

Proposed Activity Cont'd

4. If a federal or state permit or license was issued or is required for the proposed activity, identify the permit type(s), the authorizing agency and provide the application or permit number(s), if known:

   NYSDOS Coastal Zone Consistency Determination; Authorization to discharge dewatering effluent under JFK SPDES Permit No. 0008109; Stormwater Pollution Prevention Plan (SWPPP); and Long Island Well Permit

5. Is federal or state funding being used to finance the project? If so, please identify the funding source(s).

   No

		Yes	No
6.	Will the proposed project result in any large physical change to a site within the coastal area that will require the preparation of an environmental impact statement?		
	If yes, identify Lead Agency:		X

7. Identify **City** discretionary actions, such as **zoning amendment or adoption of an urban renewal plan**, required for the proposed project.

   N/A

C. COASTAL ASSESSMENT

The following questions represent, in a broad sense, the policy of the WRP. The number in the parentheses after each question indicated the policy or policies that are the focus of the question. A detailed explanation of the Waterfront Revitalization Program and its policies are contained in the publication the *New York City Waterfront Revitalization Program.*

Check either "Yes" or "No" for each of the following questions. Once the checklist is completed, assess how the proposed project affects the policy or standards indicated in "( )" after each question with a Yes response. Explain how the action is consistent with the goals of the policy or standard.

Location Questions:		**Yes**	**No**
1.	Is the project site on the waterfront or at the water's edge?		X
2.	Does the proposed project require a waterfront site?		X
3.	Would the action result in a physical alteration to a waterfront site, including land along the shoreline, land underwater, or coastal waters?		X

Policy Questions:		**Yes**	**No**

The following questions represent, in a broad sense, the policies of the WRP. Numbers in parentheses after each questions indicate the policy or policies addressed by the question. The new Waterfront Revitalization Program offers detailed explanations of the policies, including criteria for consistency determinations.

Check either "Yes" or "No" for each of the following questions. For all "yes" responses, provide an attachment assessing the effects of the proposed activity on the relevant policies or standards. Explain how the action would be consistent with the goals of those policies and standards.

4.	Will the proposed project result in revitalization or redevelopment of a deteriorated or under- used waterfront site? (1)		X
5.	Is the project site appropriate for residential or commercial redevelopment? (1.1)	X	
6.	Will the action result in a change in scale or character of a neighborhood? (1.2)		X
7.	Will the proposed activity require provision of new public services or infrastructure in undeveloped or sparsely populated sections of the coastal area? (1.3)		X

Policy Questions cont'd:		Yes	No
8.	Is the action located in one of the designated Significant Maritime and Industrial Areas (SMIA): South Bronx, Newtown Creek, Brooklyn Navy Yard, Red Hook, Sunset Park, or Staten Island? (2)		X
9.	Are there any waterfront structures, such as piers, docks, bulkheads or wharves, located on the project sites? (2)		X
10.	Would the action involve the siting or construction of a facility essential to the generation or transmission of energy, or a natural gas facility, or would it develop new energy resources? (2.1)		X
11.	Does the action involve the siting of a working waterfront use outside of a SMIA? (2.2)		X
12.	Does the proposed project involve infrastructure improvement, such as construction or repair of piers, docks, or bulkheads? (2.3, 3.2)		X
13.	Would the action involve mining, dredging, or dredge disposal, or placement of dredged or fill materials in coastal waters? (2.3, 3.1, 4, 5.3, 6.3)		X
14.	Would the action be located in a commercial or recreational boating center, such as City Island, Sheepshead Bay or Great Kills or an area devoted to water-dependent transportation? (3)		X
15.	Would the proposed project have an adverse effect upon the land or water uses within a commercial or recreation boating center or water-dependent transportation center? (3.1)		X
16.	Would the proposed project create any conflicts between commercial and recreational boating? (3.2)		X
17.	Does the proposed project involve any boating activity that would have an impact on the aquatic environment or surrounding land and water uses? (3.3)		X
18.	Is the action located in one of the designated Special Natural Waterfront Areas (SNWA): Long Island Sound-East River, Jamaica Bay, or Northwest Staten Island? (4 and 9.2)		X
19.	Is the project site in or adjacent to a Significant Coastal Fish and Wildlife Habitats? (4.1)		X
20.	Is the site located within or adjacent to a Recognized Ecological Complex: South Shore of Staten Island or Riverdale Natural Area District? (4.1and 9.2)		X
21.	Would the action involve any activity in or near a tidal or freshwater wetland? (4.2)		X
22.	Does the project site contain a rare ecological community or would the proposed project affect a vulnerable plant, fish, or wildlife species? (4.3)		X
23.	Would the action have any effects on commercial or recreational use of fish resources? (4.4)		X
24.	Would the proposed project in any way affect the water quality classification of nearby waters or be unable to be consistent with that classification? (5)		X
25.	Would the action result in any direct or indirect discharges, including toxins, hazardous substances, or other pollutants, effluent, or waste, into any waterbody? (5.1)	X	
26.	Would the action result in the draining of stormwater runoff or sewer overflows into coastal waters? (5.1)	X	
27.	Will any activity associated with the project generate nonpoint source pollution? (5.2)		X

Policy Questions cont'd:		Yes	No
28.	Would the action cause violations of the National or State air quality standards? (5.2)		X
29.	Would the action result in significant amounts of acid rain precursors (nitrates and sulfates)? (5.2C)		X
30.	Will the project involve the excavation or placing of fill in or near navigable waters, marshes, estuaries, tidal marshes or other wetlands? (5.3)		X
31.	Would the proposed action have any effects on surface or ground water supplies? (5.4)		X
32.	Would the action result in any activities within a Federally designated flood hazard area or State designated erosion hazards area? (6)	X	
33.	Would the action result in any construction activities that would lead to erosion? (6)	X	
34.	Would the action involve construction or reconstruction of flood or erosion control structure? (6.1)		X
35.	Would the action involve any new or increased activity on or near any beach, dune, barrier island, or bluff? (6.1)		X
36.	Does the proposed project involve use of public funds for flood prevention or erosion control? (6.2)		X
37.	Would the proposed project affect a non-renewable source of sand? (6.3)		X
38.	Would the action result in shipping, handling, or storing of solid wastes; hazardous materials, or other pollutants? (7)	X	
39.	Would the action affect any sites that have been used as landfills? (7.1)		X
40.	Would the action result in development of a site that may contain contamination or has a history of underground fuel tanks, oil spills, or other form or petroleum product use or storage? (7.2)	X	
41.	Will the proposed activity result in any transport, storage, treatment, or disposal of solid wastes or hazardous materials, or the siting of a solid or hazardous waste facility? (7.3)	X	
42.	Would the action result in a reduction of existing or required access to or along coastal waters, public access areas, or public parks or open spaces? (8)		X
43.	Will the proposed project affect or be located in, on, or adjacent to any federal, state, or city park or other land in public ownership protected for open space preservation? (8)		X
44.	Would the action result in the provision of open space without the provision for its maintenance? (8.1)		X
45.	Would the action result in any development along the shoreline but NOT include new water enhanced or water dependent recreational space? (8.2)		X
46.	Will the proposed project impede visual access to coastal lands, waters and open space? (8.3)		X
47.	Does the proposed project involve publically owned or acquired land that could accommodate waterfront open space or recreation? (8.4)		X
48.	Does the project site involve lands or waters held in public trust by the state or city? (8.5)		X

Policy Questions cont'd:		Yes	No
49.	Would the action affect natural or built resources that contribute to the scenic quality of a coastal area? (9)		X
50.	Does the site currently include elements that degrade the area's scenic quality or block views to the water? (9.1)		X
51.	Would the proposed action have a significant adverse impact on historic, archeological, or cultural resources? (10)		X
52.	Will the proposed activity affect or be located in, on, or adjacent to an historic resource listed on the National or State Register of Historic Places, or designated as a landmark by the City of New York? (10)	X	

For all "Yes" responses to Policy Questions 4-52, please see Section F. "Waterfront Revitalization Program". The policy questions above cross reference the relevant policies in parenthesis.

D. CERTIFICATION

The applicant must certify that the proposed activity is consistent with New York City's Waterfront Revitalization Program, pursuant to the New York State Coastal Management Program. If this certification cannot be made, the proposed activity shall not be undertaken. If the certification can be made, complete this section.

"The proposed activity complies with New York State's Coastal Management Program as expressed in New York City's approved Local Waterfront Revitalization Program, pursuant to New York State's Coastal Management Program, and will be conducted in a manner consistent with such program."

Contact's Name: Port Authority of New York and New Jersey (Attn: Marc Helman)

Address: 4 World Trade Center, 150 Greenwich Street, 20th Floor, New York, NY 10007

Telephone: 212-435-6112

Contact's Signature: Marc Helman Date: 24 September 2015

NEW YORK STATE DEPARTMENT OF STATE
COASTAL MANAGEMENT PROGRAM

Federal Consistency Assessment Form

An applicant, seeking a permit, license, waiver, certification or similar type of approval from a federal agency which is subject to the New York State Coastal Management Program (CMP), shall complete this assessment form for any proposed activity that will occur within and/or directly affect the State's Coastal Area. This form is intended to assist an applicant in certifying that the proposed activity is consistent with New York State's CMP as required by U.S. Department of Commerce regulations (15 CFR 930.57). It should be completed at the time when the federal application is prepared. The Department of State will use the completed form and accompanying information in its review of the applicant's certification of consistency.

A. **APPLICANT** (please print)

1. Name: Port Authority of New York and New Jersey (Attn: Marc Helman)

2. Address: 4 World Trade Center, 150 Greenwich Street, 20th Floor, New York, NY 10007

3. Telephone: Area Code 212-435-6112

B. **PROPOSED ACTIVITY**

1. Brief description of activity:

Development of an on-airport hotel with 505 rooms at JFK Airport and utilizing the historic TWA Flight Center located within the Central Terminal Area

2. Purpose of activity

Adaptive reuse of historic landmark, new airport hotel, enhanced customer experience, new economic activity

3. Location of activity

Queens	**Jamaica**	**JFK International Airport**
County	City, Town, or Village	Street or Site Description

4. Type of federal permit/license required: **Approval of Change to the Airport Layout Plan (ALP)**

5. Federal application number, if known: **NA**

6. If a state permit/license was issued or is required for the proposed activity, identify the state agency and provide the application or permit number, if known:

NA

C. **COASTAL ASSESSMENT** Check either "YES" or "NO" for each of these questions. The numbers following each question refer to the policies described in the CMP document (see footnote on page 2) which may be affected by the proposed activity.

1. Will the proposed activity result in any of the following:	YES	NO
a. Large physical change to a site within the coastal area which will require the preparation of an environmental impact statement? (11, 22, 25, 32, 37, 38, 41, 43)	☐	☒
b. Physical alteration of more than two acres of land along the shoreline, land under water or coastal waters? (2, 11, 12, 20, 28, 35, 44)	☐	☒
c. Revitalization/redevelopment of a deteriorated or underutilized waterfront site? (1)	☐	☒
d. Reduction of existing or potential public access to or along coastal waters? (19, 20)	☐	☒
e. Adverse effect upon the commercial or recreational use of coastal fish resources? (9, 10)	☐	☒
f. Siting of a facility essential to the exploration, development and production of energy resources in coastal waters or on the Outer Continental Shelf? (29)	☐	☒
g. Siting of a facility essential to the generation or transmission of energy? (27)	☐	☒
h. Mining, excavation, or dredging activities, or the placement of dredged or fill material in coastal waters? (15, 35)	☐	☒
i. Discharge of toxics, hazardous substances or other pollutants into coastal waters? (8, 15, 35)	☐	☒
j. Draining of stormwater runoff or sewer overflows into coastal waters? (33)	☒	☐
k. Transport, storage, treatment, or disposal of solid wastes or hazardous materials? (36, 39)	☒	☐
l. Adverse effect upon land or water uses within the State's small harbors? (4)	☐	☒

2. Will the proposed activity affect, or be located in, on, or adjacent to any of the following:	YES	NO
a. State designated freshwater or tidal wetland? (44)	☐	☒
b. Federally designated flood and/or state designated erosion hazard area? (11, 12, 17)	☒	☐
c. State designated significant fish and/or wildlife habitat? (7)	☐	☒
d. State designated significant scenic resource or area? (24)	☐	☒
e. State designated important agricultural lands? (26)	☐	☒
f. Beach, dune or barrier island? (12)	☐	☒
g. Major ports of Albany, Buffalo, Ogdensburg, Oswego or New York? (3)	☐	☒
h. State, county, or local park? (19, 20)	☐	☒
i. Historic resource listed on the National or State Register of Historic Places? (23)	☒	☐

3. Will the proposed activity require any of the following:	YES	NO
a. Waterfront site? (2, 21, 22)	☐	☒
b. Provision of new public services or infrastructure in undeveloped or sparsely populated sections of the coastal area? (5)	☐	☒
c. Construction or reconstruction of a flood or erosion control structure? (13, 14, 16)	☐	☒
d. State water quality permit or certification? (30, 38, 40)	☐	☒
e. State air quality permit or certification? (41, 43)	☐	☒

4. Will the proposed activity occur within and/or affect an area covered by a State approved local waterfront revitalization program? (see policies in local program document)	YES	NO
	☒	☐

D. **ADDITIONAL STEPS**

1. If all of the questions in Section C are answered "NO", then the applicant or agency shall complete Section E and submit the documentation required by Section F.

2. If any of the questions in Section C are answered "YES", then the applicant or agent is advised to consult the CMP, or where appropriate, the local waterfront revitalization program document*. The proposed activity must be analyzed in more detail with respect to the applicable state or local coastal policies. On a separate page(s), the applicant or agent shall: (a) identify, by their policy numbers, which coastal policies are affected by the activity, (b) briefly assess the effects of the activity upon the policy; and, (c) state how the activity is consistent with each policy. Following the completion of this written assessment, the applicant or agency shall complete Section E and submit the documentation required by Section F.

E. **CERTIFICATION**

The applicant or agent must certify that the proposed activity is consistent with the State's CMP or the approved local waterfront revitalization program, as appropriate. If this certification cannot be made, the proposed activity shall not be undertaken. If this certification can be made, complete this Section.

"The proposed activity complies with New York State's approved Coastal Management Program, or with the applicable approved local waterfront revitalization program, and will be conducted in a manner consistent with such program."

Contact's Name: Port Authority of New York and New Jersey (Attn: Marc Helman)

Address: 4 World Trade Center, 150 Greenwich Street, 20th Floor, New York, NY 10007

Telephone: Area Code 212-435-6112

Contact's Signature: Marc Helman Date: 24 September 2015

F. **SUBMISSION REQUIREMENTS**

1. The applicant or agent shall submit the following documents to the **New York State Department of State, Office of Coastal, Local Government and Community Sustainability, Attn: Consistency Review Unit, 1 Commerce Plaza, 99 Washington Avenue – Suite 1010, Albany, New York 12231.**

    a. Copy of original signed form.
    b. Copy of the completed federal agency application.
    c. Other available information which would support the certification of consistency.

2. The applicant or agent shall also submit a copy of this completed form along with his/her application to the federal agency.

3. If there are any questions regarding the submission of this form, contact the Department of State at (518) 474-6000.

*These state and local documents are available for inspection at the offices of many federal agencies, Department of Environmental Conservation and Department of State regional offices, and the appropriate regional and county planning agencies. Local program documents are also available for inspection at the offices of the appropriate local government.

CONSISTENCY OF THE PROPOSED PROJECT WITH COASTAL ZONE POLICIES

As the project requires approval from the Federal Aviation Administration (FAA), it is subject to the New York State Coastal Zone Management Program (CZMP) and compliance with its 44 coastal policies. New York City's Waterfront Revitalization Program (WRP) also includes 10 principal policies. These policies were designed to maximize the benefits derived from economic development, environmental preservation, and public use of the waterfront, while minimizing the conflicts among those objectives. For each policy and sub-policy question that was answered "yes" in the Coastal Assessment Forms, this analysis includes a discussion of the policy's applicability to the proposed project and the proposed project's consistency with the respective policy.

WATERFRONT REVITALIZATION PROGRAM POLICIES

WRP POLICY 1

Support and facilitate commercial and residential development in areas well-suited to such development.

Policy 1.1: Encourage commercial and residential redevelopment in appropriate Coastal Zone areas.

The proposed action is located in a Coastal Zone area that is already an actively used airport. The TWA Flight Center Terminal building is an existing building at JFK Airport that would be repurposed as the Lobby area and amenities for the hotel. Two new hotel guest room buildings would be constructed on either side of the TWA Flight Center Terminal. Therefore, the proposed project is consistent with this policy.

WRP POLICY 5

Protect and improve water quality in the New York City coastal area.

Policy 5.1: Manage direct or indirect discharges to waterbodies.

JFK is serviced by an independent storm sewer system that collects stormwater runoff from the Airport and discharges to Jamaica Bay at 26 separate outfall locations. All discharges occurring via the stormwater conveyance system would be in accordance with the requirements set forth in the existing State Pollutant Discharge Elimination System (SPDES) permit. Erosion and sediment control measures and stormwater management measures would be developed as part of the Stormwater Pollution Prevention Plan (SWPPP). The Proposed Action would not discharge large quantities of freshwater into Jamaica Bay, which is a tidal waterbody. Groundwater recovered during any construction dewatering would be treated, as necessary, prior to discharge to the storm sewer system. Therefore, the proposed project is consistent with this policy.

WRP POLICY 6

Minimize loss of life, structures, infrastructure, and natural resources caused by flooding and erosion, and increase resilience to future conditions created by climate change.

A section of the Proposed Action would encroach in the special flood hazard area subject to inundation by the 500-year floodplain as designated by Federal Emergency Management Agency (FEMA) in the Preliminary Flood Insurance Rate Maps (FIRMS) released January 30,

2015. However, the Proposed Action is not considered a "critical action," as defined in the Water Resources Council Floodplain Management Guidelines. The proposed action would occur in a previously developed area and, therefore, construction would not involve activities that would lead to erosion. Therefore, there would be no floodplain impacts associated with the Proposed Action. Therefore, the proposed project is consistent with this policy.

WRP POLICY 7

Minimize environmental degradation and negative impacts on public health from solid waste, toxic pollutants, hazardous materials, and industrial materials that may post risks to the environment and public health and safety.

Policy 7.2: Prevent and remediate discharge of petroleum products

Various subsurface investigations in the vicinity of the project site have identified soil and groundwater impacted by jet fuel, gasoline, diesel, and other petrochemical products. Between 1999 and 2005, five separate investigations were performed during which numerous monitoring wells were installed and soil and groundwater samples were collected. The petroleum contamination is currently being remediated under a New York State Department of Environmental Conservation (NYSDEC) approved Remedial Action Workplan (RAWP). An Environmental Management Plan (EMP) will be prepared for the project and will include measures to be implemented to prevent and remediate additional petroleum contamination that may be discovered during site construction. Therefore, the proposed project is consistent with this policy.

Policy 7.3: Transport solid waste and hazardous substance and site solid and hazardous waste facilities in a manner that minimizes potential degradation of coastal resources.

All solid waste and hazardous substances at the site would be transported and disposed of in accordance with applicable regulations. The proposed project would not result in the degradation of coastal resources. Therefore, the proposed project is consistent with this policy.

WRP POLICY 10

Protect, preserve and enhance resources significant to the historical, archaeological, and cultural legacy of the New York City coastal area.

The proposed action provides for the adaptive reuse of the historic TWA Flight Center, which was listed on the National Register of Historic Places in 2005. The development plan is subject to a 2015 Memorandum of Agreement (MOA) developed through the consultation process of Section 106 of the National Historic Preservation Act. The MOA outlines requirements for the restoration and preservation of the TWA Flight Center. The MOA was developed by the Redevelopment Advising Committee (RAC). The RAC signatories are the Port Authority of New York and New Jersey (Port Authority), the State Historic Preservation Office (SHPO), the Federal Aviation Administration (FAA) and the Advisory Council for Historic Preservation (ACHP). The RAC consulting parties consist of the National Trust for Historic Preservation, the Municipal Art Society of New York, the New York City Partnership, Documentation, and Conservation of Buildings,Sites and Neighborhoods of the Modern Movement (DOCOMOMO), the Finnish Council, New York Landmarks Conservancy and the New York Building Congress. The subject MOA will be completed and filed upon approval from the RAC. Based on the above, the proposed project is consistent with this policy.

NEW YORK STATE COASTAL ZONE MANAGEMENT PROGRAM POLICIES

CZMP POLICY 11

Buildings and other structures will be sited in the coastal area so as to minimize damage to property and the endangering of human lives caused by flooding and erosion.

Although a section of the Proposed Action would encroach in the special flood hazard area subject to inundation by the 500-year floodplain as designated by Federal Emergency Management Agency (FEMA) in the Preliminary Flood Insurance Rate Maps (FIRMS) released January 30, 2015. However, the Proposed Action is not considered a "critical action," as defined in the Water Resources Council Floodplain Management Guidelines. In addition, the project is not sited near the shoreline or in an area subject to erosion. Therefore, the proposed project is consistent with this policy.

CZMP POLICY 12

Activities or development in the coastal area will be undertaken so as to minimize damage to natural resources and property from flooding and erosion by protecting natural protective features including beaches, dunes, barrier islands and bluffs.

The project would be constructed on land areas that do not include natural protective features such as beaches, dunes, barrier islands, and bluffs. Therefore Policy 12 is not applicable.

CZMP POLICY 17

Non-structural measures to minimize damage to natural resources and property from flooding and erosion shall be used whenever possible.

Non-structural measures, such as the set-back of buildings, use of vegetation, etc. are not applicable to the project. The Proposed Action would not cause shoreline erosion or increases in area flooding. Therefore, the project would be consistent with Policy 17.

CZMP POLICY 23

Protect, enhance, and restore structures, districts, areas or sites that are of significance in the history, architecture, archeology or culture of the state, its communities, or the nation.

The proposed action provides for the adaptive reuse of the historic TWA Flight Center, which was listed on the National Register of Historic Places in 2005. The development plan is subject to a 2015 Memorandum of Agreement (MOA) developed through the consultation process of Section 106 of the National Historic Preservation Act. The MOA outlines requirements for the restoration and preservation of the TWA Flight Center. The MOA was developed by the Redevelopment Advising Committee (RAC). The RAC signatories are the Port Authority of New York and New Jersey (Port Authority), the State Historic Preservation Office (SHPO), the Federal Aviation Administration (FAA) and the Advisory Council for Historic Preservation (ACHP). The RAC consulting parties consist of the National Trust for Historic Preservation, the Municipal Art Society of New York, the New York City Partnership, Documentation, and Conservation of Buildings,Sites and Neighborhoods of the Modern Movement (DOCOMOMO), the Finnish Council, New York Landmarks Conservancy and the New York Building Congress.

The subject MOA will be completed and filed upon approval from the RAC. Based on the above, the proposed project is consistent with this policy.

CZMP POLICY 33

Best management practices will be used to ensure the control of storm water runoff and combined sewer overflows draining into coastal waters.

JFK is serviced by an independent storm sewer system that collects stormwater runoff from the Airport and discharges to Jamaica Bay at 26 separate outfall locations. All discharges occurring via the stormwater conveyance system would be in accordance with the requirements set forth in the existing State Pollutant Discharge Elimination System (SPDES) permit. Erosion and sediment control measures and stormwater management measures would be developed as part of the Stormwater Pollution Prevention Plan (SWPPP). The Best Management Practices Plan (BMPP) for JFK which includes requirements to manage stormwater runoff would be implemented as a part of the Proposed Action. Groundwater recovered during any construction dewatering would be treated, as necessary, prior to discharge to the storm sewer system. Therefore, the proposed project would be consistent with Policy 33.

CZMP POLICY 36

Activities related to the shipment and storage of petroleum and other hazardous materials will be conducted in a manner that will prevent or at least minimize spills into coastal waters; all practicable efforts will be undertaken to expedite the cleanup of such discharges; and restitution for damages will be required when these spills occur.

All solid waste and hazardous substances at the site would be stored, transported and disposed of in accordance with applicable regulations. The proposed project would not be expected to result in spills into coastal waters. Therefore, the proposed project is consistent with this policy.

CZMP POLICY 39

The transport, storage, treatment and disposal of solid wastes, particularly hazardous wastes, within coastal areas will be conducted in such a manner so as to protect groundwater and surface water supplies, significant fish and wildlife habitats, recreation areas, important agricultural lands and scenic resources.

Any transport, storage, treatment and disposal of hazardous materials would be the responsibility of the contractor and would comply with relevant laws and regulations. Therefore, the proposed project is consistent with this policy.

Appendix G: Response to Comments

1 INTRODUCTION

This document summarizes and responds to comments on the Environmental Assessment (EA) for the Trans World Airlines (TWA) Flight Center Hotel at John F. Kennedy International Airport (JFK), issued by the Federal Aviation Administration (FAA). A public review period for the EA was established from April 7, 2016 through May 7, 2016, and comments received are provided in **Attachment A**.

Section 2 contains a summary of the comments received during the public comment period and a response to each. These summaries convey the substance of the comments made, but do not necessarily quote the comments verbatim. Comments are organized by subject matter that generally parallel sections of the EA. Where more than one commenter expressed similar views, those comments have been grouped and addressed together. Section 3 lists the organizations and individuals that provided comments on the EA.

2 COMMENTS AND RESPONSES ON THE EA

2-1 GENERAL

Comment 1: A number of commenters supported the project and urged the Port Authority and FAA to issue a Finding of No Significant Impact (FONSI). Various reasons included the following: the preservation and restoration of the TWA Flight Center; the opportunity for construction and permanent jobs; the benefits to JFK as a modern transit hub; the addition of conference and meeting space in Queens; and the project's eco-friendly LEED certification.

Response: Comment Noted. Please note that only FAA issues NEPA determinations, and not the Port Authority.

2-2 ALTERNATIVES

Comment 2: The proposed 505-room, six-story hotel complex of an unspecified height is not appropriate to the historic Flight Center. Alternate designs that lower the height or reposition the hotel buildings should be explored.

Response: A number of alternative sitings of the guest room buildings were considered and evaluated, including alternative building heights. In response to comments received from the Advisory Council on Historic Preservation, dated July 16, 2015 (attached in Appendix C of the EA), three study schemes were presented and analyzed in comparison to the

proposed scheme. The proposed siting and height was determined to be the most appropriate way to accommodate 505 guest rooms, which are needed to make the project financially feasible. It is not possible to reduce the scale of the hotel wings and proposed amenities without adversely impacting the financial feasibility of the Proposed Project and the developer's ability to complete the TWA Flight Center renovations and ongoing maintenance. As described in Section 3-3-3, on page 3-6 of the EA, a reduced hotel room count or reduced support facilities would result in insufficient revenue to ensure a viable project and would not meet the purpose and need for the Proposed Project.

2-3 VISUAL EFFECTS

Comment 3: The wings of the existing structure must remain visually unencumbered by the proposed hotel structures from east viewpoints of the Flight Center. The EA does not present an analysis of views of the Flight Center in relation to the hotel buildings. Nor does it explore views from the Flight Center to the larger airport context. The hotel buildings have the potential to overwhelm the Flight Center, creating a claustrophobic, fish bowl experience in the various lounge spaces.

Response: The proposed project has been designed to avoid visual effects on the TWA Flight Center. As described in Section 5-2-1, on page 5-4 of the EA, the crescent-shaped footprints of the new guest room buildings have been designed to follow the curvature of the façade of the original TWA Flight Center prior to the 1970s additions, with the glazing of the primary facades designed to complement and not compete with the masonry of the TWA Flight Center.

The new guest room buildings would be located approximately 50 to 100 feet distant from the ground floor of the TWA Flight Center (after removal of the non-historic wings). They would be 90 to 150 feet from the second floor (balcony) level of the TWA Flight Center. This would provide substantial clearance between the historic building and the new buildings, so that the sculptural quality of the building would remain visually prominent on all sides. The proposed siting of the new buildings would also allow for sufficient space between the public lounge spaces in the building, especially the lounge spaces on the balcony level that have north and south facing window walls, and the new guest room buildings, so as not to impact the experience of the users of these spaces. The north and south facing window walls are curved, and in addition to providing views north and south, also provide views west that would not include the new guest room buildings.

No buildings would be constructed on the east side of the TWA Flight Center between the east and west tubes, historically the runway side of the building. This would preserve the design intent of the sunken waiting area and the east window wall, which originally provided TWA patrons with views to the runways, but now includes views of Terminal 5 (jetBlue Terminal). One of the cocktail lounges, "The Connie Bar", would be located inside a re-purposed Lockheed "Super G" Constellation Airplane (the "Connie"). The airplane would be located between the two connector tubes and accessed via walkways from the guest room buildings. As no above-grade structures would be constructed in the area between the two tubes and between the TWA Flight Center and Terminal 5, views from the east, which would include views from Terminal 5 of the TWA Flight Center, would remain unchanged from current conditions.

Views east of the west (airport) side of the TWA Flight Center would not be affected by the Project, including views at ground level from the JFK Access Road that passes in front of the TWA Flight Center, and views from the JFK AirTrain and the Yellow Garage across the JFK Access Road. While views of the TWA Flight Center would be obstructed from a section of the Terminal 5 AirTrain Skywalk by the north guest room building, the TWA Flight Center would remain prominently visible from the glazed Skywalk elevator structures on either side of the JFK Airport Access Road and from the section of the Skywalk that spans above the roadway. Views from the south consist of motorists' views on the elevated roadway that provides access to Terminal 5. Immediately south of the elevated roadway is a tall wall with horizontal slats that extends above the height of the elevated roadway, precluding northerly views from areas south of it (Terminal 4 tarmac). While views from a section of the elevated roadway would be obstructed by the south guest room building, views of the TWA Flight Center would still be available from the section of the elevated roadway that crosses over the at grade JFK Access Road, as well as from areas farther west on the elevated roadway's connecting ramp from the JFK Access Road.

Comment 4: The EA does not address potential shadow impacts of the proposed hotel buildings on the Flight Center exterior and interior. We ask that analysis be conducted and presented.

Response: Results of a shadows study are included here in **Attachment B**. The attached shadow study shows moments in time-- 9am, 12 noon, and 3pm-- on June 21, the summer solstice, and December 21, the winter solstice. These dates represent the two opposite ends of the yearly variation. On June 21, new shadows from the proposed guest room buildings do not reach the TWA Flight Center at any time of day and only

very limited shadows reach the tubes at 3pm. On December 21, shadows from the southern guest room building would fall on the southern tube and the southern portion of the building roof and façade at 9am, including a portion (approximately one third) of one linear skylight as well as portions of the window walls facing the south guest room building. By 12 noon, the southern guest room building's shadow would move off all but a small portion of the TWA Flight Center and southern tube, and by 3pm only very small shadows would remain on portions of the tubes.

Neither the tubes nor the concrete façade and roof of the TWA Flight Center are architectural resources that depend on direct sunlight for their enjoyment, and as noted, the extent and duration of shadows on these elements would be limited. Although the guest room building would cast some shadows on the southern window wall of the TWA Flight Center and approximately one-third of one of its skylights during a portion of the year, the existing roof overhangs the windows and casts shade on the southern window wall already. Moreover, the window walls and skylight are comprised of transparent glass and are not sunlight sensitive in the manner of, for example, stained glass windows.

Additionally, the building's history has shown that solar control has always been a concern. There have been attempts to reduce sunlight in the building by using blinds, window glazing, and colored mylar. The green-tinted glass is original to the building and is important for transparency and contrast with the concrete. Eero Saarinen's team (the building architect) had installed vertical blinds on the southern windows as part of the original construction. A purple film was installed on the windows during the 1980's or 1990's, which was removed in the 2008 restoration campaign.

Therefore, the potential shadow cast on the TWA Flight Center would not adversely impact the historic character nor public's enjoyment of the building as a) shadows on the building and tubes are very limited in their extent and duration, and the enjoyment of these features does not depend on direct sunlight, b) the shadows only fall on the south window wall and small portion of one linear skylight in the winter analysis period, c) the large extent of glazing elsewhere in the building would not be affected by the Project during any portion of the year, d) design measures were integrated into the original design of the building (tinted glass, vertical blinds) as well as later (mylar film) to control sunlight into the building, and e) there would be 90 to 150 feet between the south

window wall and the south hotel wing so as to maximize access to daylight at that window wall.

2-4 TRANSPORTATION

Comment 5: We are concerned that the connections of the tubes at Terminal 5/6 will be insufficient to accommodate the anticipated pedestrian traffic once the facility is in operation, and a thorough analysis of the circulation must be conducted.

Response: The proposed design is expected to incorporate the appropriate connectivity and circulation space in accommodating anticipated pedestrian traffic between the TWA Flight Center, guest room buildings, and Terminal 5. The connector tubes are approximately 12 feet, 9 inches wide and can comfortably accommodate peak pedestrian flows. Below grade walkways for staff would also connect the Below Grade Level of the TWA Flight Center to the Below Grade Level of the guest room buildings. Additionally, exterior walkways would connect the TWA Flight Center to the guest room buildings, as well as one of the cocktail lounges, “The Connie Bar”.

2-5 HAZARDOUS MATERIALS, SOLID WASTE, AND POLLUTION PREVENTION

Comment 6: In August 2015, LiRo recommended 12 additional borings to identify soil characteristics on the eastern portion of site (the location of conference center and guest room buildings). The EA does not provide any additional information regarding the results of the soil characteristics at the 12 boring sites. It only gives marsh deposit and groundwater depths. We request a copy of LiRo’s Site Specific Sampling Plan and the results of the soil and groundwater sampling analyses.

Response: Results of the soil sampling by LiRo on December 10, 2015 are included here in **Attachment C**. Sample results were compared to NYSDEC Part 375-6.8(b) Restricted Use Protection of Public Health (Commercial) soil cleanup objectives (SCOs), NYSDEC Part 375-6.8(b) Restricted Use Protection of Groundwater SCOs, 6 NYCRR Part 371 hazardous waste limits and RCRA Subtitle C characteristic thresholds. The analytical results did not detect any compounds at levels above these regulatory thresholds.

2-6 AIR QUALITY

Comment 7: According to the EA, the Flight Center Hotel, including the lobby and two guest room buildings, would be powered by an underground cogeneration facility located in a 7,500 sf below-grade vault on the north edge of the site adjacent to the north hotel building. It is further stated

that the units would be vented through a common exhaust stack ducted to the roof of the hotel building. However, the drawings provided in the EA do not show the location of the cogeneration facility. Furthermore, mechanical equipment (i.e., cooling towers, heat exchangers) are shown on the top floor of the north hotel building in the revised plan presented to the RAC. Has the plan for a location of the cogeneration plant changed? If the cogeneration plan is to be situated below grade, how will it be protected against flooding?

Response: The cogeneration facility will be located on the rooftop of the west hotel room building. The location of the cogeneration facility has been updated throughout the EA document, analysis, and narrative. The analysis remains the same. The roofline remains consistent with what was shown in the draft EA document and what was shown to the RAC, and the placement of the cogeneration facility on the roof does not alter the building's visual profile in any way. The cogeneration units would be vented through a common exhaust stack at the roof. Maximum annual emissions of regulated pollutants, as presented in Section 5-5-3-3, would be well below major source thresholds as defined in NYSDEC regulations at 6 NYCRR Part 201. Therefore, a federal Title V operating permit would not be required. In addition, based on their capacity (twelve 100kW units, including two standby units, for an operational capacity of 1MW) the proposed units would be exempt from NYSDEC minor source air permitting regulations. Therefore, the proposed cogeneration facility would be exempt from federal and New York State air permitting. Regardless of location, all elements of the proposed project incorporate flood-proofing measures in accordance with the Port Authority's *Design Guidelines-Climate Resilience* and Appendix G of the New York City Building Code.

3 LIST OF INDIVIDUALS AND ORGANIZATIONS THAT COMMENTED ON THE EA

Commenter	Date	Comment Number(s)
Louis J. Coletti, President and CEO Alliance of BTEA Union Contractors	April 26, 2016	1
Angela Pinsky, Executive Director Association for a Better New York	April 26, 2016	1
John Banks, President Real Estate Board of New York	April 26, 2016	1
Francis A. DiMola, Executive Director Terminal 4 Airline Consortium	April 29, 2016	1
Thomas Wright, President Regional Plan Association	May 1, 2016	1
Stephen Sigmund, Executive Director Global Gateway Alliance	May 3, 2016	1
Gary LaBarbera, President Building & Construction Trades Council of Greater New York	May 3, 2016	1
Kathleen Culhane, President Nontraditional Employment for Women	May 4, 2016	1
Peter Ward, President Hotel Trades Council	May 4, 2016	1
Thomas J. Grech, Executive Director Queens Chamber of Commerce	May 5, 2016	1
Andrew S. Hollweck, Senior Vice President New York Building Congress	May 5, 2016	1
Nina Rappaport, Founding Member DOCOMOMO-US and New York Tri-State	May 7, 2016	2 through 7
Tara Kelly, Senior Director Preservation and Design Municipal Art Society of New York	May 7, 2016	2 through 7
Gina Pollara, President Municipal Art Society of New York	May 7, 2016	2 through 7
Elizabeth S. Merritt, Deputy General Counsel National Trust for Historic Preservation	May 7, 2016	2 through 7

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Attachment A: Comment Letters on Environmental Assessment

Attachment B: Shadow Study Renderings

Attachment C: LiRo Pre-characterization of Soil Results (on CD)

Attachment A: Comment Letters on Environmental Assessment

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DOMINICK M. SERVEDIO
MARILYN JORDAN TAYLOR
DANIEL R. TISHMAN
RICHARD L. TOMASETTI

NEW YORK BUILDING CONGRESS

May 5, 2016

Attn: Edward Knoesel
The Port Authority of NY & NJ
4 World Trade Center/150 Greenwich Street
18th Floor
New York, NY 10006

Dear Mr. Knoesel:

The New York Building Congress urges the Port Authority and Federal Aviation Administration (FAA) to issue a Finding of No Significant Impact (FONSI) regarding the Environmental Assessment (EA) for the proposed adaptive reuse of the TWA Flight Center.

The TWA Flight Center Hotel will bring a signature airport hotel to JFK, helping to remedy a longstanding deficiency at the region's largest air transit hub. The TWA Flight Center hotel is also significant because it reclaims what was once a gateway to America for a new generation of New Yorkers and visitors from around the globe. The project also represents the best of government/private sector partnerships by leveraging a government asset to generate economic opportunity for a part of the City ready for investment and growth.

The Building Congress believes the numerous beneficial impacts the project will have on Southeast Queens and New York City at large should bear substantially on the findings of the EA and drive a finding of No Significant Impact.

Sincerely,

Andrew S. Hollweck
Senior Vice President

REBNY®
REAL ESTATE BOARD OF NEW YORK

John Banks
President

April 26, 2016

Attn: Edward Knoesel
The Port Authority of NY & NJ
4 World Trade Center/150 Greenwich Street
18th Floor
New York, NY 10006

Dear Mr. Knoesel:

The Real Estate Board of New York, Inc. (REBNY) is a broadly based trade association with 17,000 owners, developers, brokers, managers and real estate professionals active throughout New York City. We support the TWA Flight Center Hotel at JFK Airport, and we urge the Port Authority of New York and New Jersey and Federal Aviation Administration (FAA) to issue a Finding of No Significant Impact (FONSI) regarding the Environmental Assessment (EA).

This project will preserve the iconic TWA Terminal, designed by the noted architect Eero Saarinen; it will rehabilitate the national landmark which originally opened in 1962 and include an innovative museum focusing on New York as the birthplace of the Jet Age, on the storied history of TWA, and on the Midcentury Modern design movement.

In addition, it will deliver a world-class hotel to New York that is LEED-certified. The new TWA Flight Center Hotel will continue to help New York City grow and thrive as an important global hub of commerce and tourism, will add to the growing supply of hotel rooms and will demonstrate that the market can provide for full service hotels where there is a clear need for such facilities.

The redevelopment plan will be part of a public-private partnership between MCR Development, JetBlue, and the Port Authority of New York and New Jersey. It will be union built and operated, delivering more than 3,700 construction and permanent jobs.

MCR Development's project is setting a leading example for how New York can balance economic growth with preservation-sensitive development. We offer our support for this ULURP application for the improvements it makes to the airport, the rehabilitation of an important City landmark, and thousands of construction and permanent jobs it the project will generate.

Sincerely,

John Banks

John Banks

TFAC
Terminal 4 Airline Consortium

Francis A. DiMola
Executive Director
Terminal 4 - JFKIAT, Room 262
John F. Kennedy International Airport
Jamaica, New York 11430
Office: 718-751-3010

April 29, 2016

Edward Knoesel
Senior Manager, Aviation Environmental & Noise Programs
The Port Authority of New York & New Jersey
4 World Trade Center
51 Greenwich Street
New York, N.Y 10006

Re: John F. Kennedy International Airport – MCR Development - Former TWA Flight Center

Dear Mr. Knoesel: Ed,

First of all, it has been quite a while since we have spoken and I hope you are doing well.

You may recall that upon my retirement from the Port Authority in 2011 I assumed the position of Executive Director of the Terminal 4 Airlines Consortium (TFAC) located at Terminal 4, John F. Kennedy International Airport (JFK Airport). I want to take this opportunity to voice TFAC's strong support for MCR Development's construction of a new hotel in the former TWA Flight Center.

TFAC is a consortium of 30 airlines, both domestic and international, operating at Terminal 4. The TFAC airlines serve approximately 19 million travelers per year, making Terminal 4 the busiest terminal at JFK Airport, and arguably the largest international terminal in the United States in terms of passenger volume. As you are well aware, Terminal 4 is home to Delta Air Lines at JFK Airport.

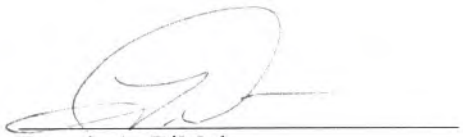
In 2001 when TWA ceased operations, the Port Authority had the foresight to acknowledge the historical significance of the former TWA Flight Center and preserve this terminal for an appropriate adaptive reuse. As you know, the former TWA Flight Center was designed by Eero Saarinen which opened as a TWA airline terminal in 1962, commemorating the new age of aviation with jet propelled aircraft. MCR Development's proposal to construct a 505 room hotel with conference rooms and food/beverage outlets while preserving the iconic landmarked Saarinen terminal offers JFK Airport and our surrounding communities a very unique opportunity to celebrate the glory of aviation in the past, while providing much needed on-airport hotel facilities today.

This rehabilitation project will provide a very important amenity to passengers travelling though JFK Airport, as it will be the only on-airport hotel and one that is easily accessible to all passengers who are departing or arriving from the airport's 6 passenger terminals. I know from discussions that I have

had with airline management that there is currently a strong demand for an on-airport hotel that accommodates passengers who choose to arrive at the airport the night prior for an early morning departure, or as often happens, accommodating passengers who are stranded because of extensive delays or cancellations due to unforeseen circumstances such as bad weather. While there are fine hotels located off-airport, we know from experience that passengers would much prefer on-airport hotel accommodations in close proximity to their departing terminal. It is also worth mentioning that JFK Airport is the only major airport in the United States that does not provide on-airport hotel accommodations, and that the highest rated airports in the world in terms of passenger satisfaction provide for on-airport hotel accommodations.

In closing, on behalf of Terminal 4's 30 airlines and its 19 million annual passengers, we are excited about this very unique and important hotel development project, and we would like to see the construction for this hotel development project commence as quickly as possible. Therefore, I respectfully request that Port Authority and the Federal Aviation Administration issue a Finding of No Significant Impact (FONSI) regarding the environmental Assessment (EA).

Thank you and warm regards,



Francis A. DiMola

Global Gateway Alliance
25 W 39th Street
New York, NY 10018

May 3, 2016

Attn: Edward Knoesel
The Port Authority of NY & NJ
4 World Trade Center/150 Greenwich Street
18th Floor
New York, NY 10006

Dear Mr. Knoesel:

On behalf of the Global Gateway Alliance, I am pleased to offer our full support to MCR Development's plan to open a hotel in the TWA Flight Center at JFK, a project that will benefit local communities in the long term.

The plan for the hotel will not only bring a much-needed amenity to the airport, but it will also reopen the iconic building to the public. And the careful design will ensure the building's longstanding history is preserved. Last, rehabilitating the old terminal into a functioning facility will strengthen the regional economy, help revitalize the airport, and bring strong union jobs to the area.

Leaving this iconic structure dormant does not benefit anyone and the plans set forth by MCR offer an excellent opportunity to reimagine the space. As such, we urge the Port Authority and Federal Aviation Administration (FAA) to issue a Finding of No Significant Impact (FONSI) regarding the Environmental Assessment (EA).

Sincerely,



Stephen Sigmund
Executive Director, Global Gateway Alliance

William C. Rudin
Chairman

Angela Sung Pinsky
Executive Director

Association for a Better New York
355 Lexington Avenue
New York, NY 10017

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www.abny.org

April 26, 2016

Mr. Edward Knoesel
The Port Authority of NY & NJ
4 World Trade Center/150 Greenwich Street
18th Floor
New York, NY 10006

Dear Mr. Knoesel,

The Association for a Better New York (ABNY) is among the city's longest standing civic organizations advocating for the policies, programs and projects that make New York a better place to live, work and visit. We represent the broad fabric of New York's economy and our membership includes New York's most influential businesses, not-for-profits, arts & culture organizations, educational institutions, labor unions and entrepreneurs.

I am writing to you today to express ABNY's support of the ULURP application for the TWA Flight Center Hotel by MCR Development. Not only is the revitalization of the TWA Flight Center is a tribute from New York City to its history, but JFK employees, New York City residents and the millions of travelers passing through the airports gates will be able to enjoy this rehabilitation and the benefits it brings to the key transit hub. Additionally, this effort is being undertaken by a wide-ranging coalition of stakeholders, including MCR Development, the Port Authority of New York and New Jersey, and JetBlue Airways, speaking to its broad importance to the City. Finally, this project, upon completion, will take us one large step forward in ensuring our transportation hubs are modernized and equipped for the 21st century traveler's needs.

MCR Development is creating a truly first-class development with this innovative hotel and event space proposal, and so we urge the Port Authority and Federal Aviation Administration (FAA) to issue a Finding of No Significant Impact (FONSI) regarding the Environmental Assessment (EA).

Thank you for taking our position into account.

Sincerely,

Angela Pinsky
Executive Director

Queens
Chamber of Commerce

Albert F. Pennisi, President
Terri Thomson, First Vice President
Mayra DiRico, Treasurer
Vincent Petraro, Secretary
Th omas J. Grech, Executive Director

75-20 Astoria Blvd. Suite 140
Jackson Heights, NY 11370
P: 718-898-8500
F: 718-898-8599
info@queenschamber.org

Attn: Edward Knoesel
The Port Authority of NY & NJ
4 World Trade Center/150 Greenwich Street
18th Floor
New York, NY 10006

Dear Mr. Knoesel:

For nearly 105 years, the Queens Chamber of Commerce has advocated to ensure the borough's economy remains vibrant, where entrepreneurs can succeed and communities remain strong. After hearing the plans for MCR Development, we believe the revitalization of the TWA Flight Center Hotel will create jobs and help businesses in Queens and the rest of the city.

Today, JFK Airport generates $37.3 billion in economic activity that creates 256,000 jobs. As we look to ensure JFK remains this economic force, bringing in a variety of amenities that can ensure business is conducted in Queens is essential.

Unfortunately, since it closed in 2001, the terminal has sat desolate leaving a large part of this economic hub lagging.

MCR Development's proposal will no doubt create a place for business while adding 3,700 construction and permanent jobs. When complete, we are excited to let Queens businesses know that they will have the 40,000 square feet of conference and meeting space to host perspective new clients, a trade show, or holiday party.

What is also commendable about this project is that they are keeping much of the history intact. This national landmark will have a museum that focuses on New York as the Midcentury Modern design that the Terminal embraced. Also, the rehabilitation will keep much of the original look and feel for when it was first opened in 1962.

It is great to see some of Queens' major partner's work together on this project. For decades the Port Authority of New York and New Jersey has helped to ensure both JFK and La Guardia airports have all the necessary infrastructure to keep them operating; and since the companies beginning JetBlue has called Queens home, and their support of this project shows their commitment to our borough.

We are also confident MCR Development will be able to successfully manage this operation and, as such, urge the Port Authority and Federal Aviation Administration (FAA) to issue a Finding of No Significant Impact (FONSI) regarding the Environmental Assessment (EA).

Sincerely,

Thomas J. Grech, Executive Director

Regional Plan Association

Chairman
Elliot G. Sander

President
Thomas K. Wright

Vice Chair and Co-Chair, New York Committee
Robert L. Billingsley

Vice Chair and Co-Chair, New York Committee
Lynne Sagalyn

Vice Chair and Co-Chair, Connecticut Committee
Michael J. Critelli

Vice Chair and Chair of the Nominating Committee
Denise M. Richardson

Vice Chair and Co-Chair, New Jersey Committee
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Vice Chair and Co-Chair, New Jersey Committee
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Emil H. Frankel
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Timur F. Galen
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John S. Griswold Jr.
Richard J. Haray
Suzanne Heidelberger
Dylan Hixon
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Kenneth T. Jackson
Marc Joseph
Anaita Kasad
Marcia V. Kelzs
Gregory A. Kelly
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Mitchell A. Korbey
John Z. Kukral
Judith Lagano
Trent Lethco
Christopher D. Levendos
Charles J. Maikish
Mark Marcucci
Debra A. McDowell
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Jan Nicholson
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Sotiris A. Pagdadis
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Milton Puryear
Richard Ravitch
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Marc Ricks
Gary D. Rose
Janette Sadik-Khan
Thomas Santiago
Samuel I. Schwartz
Peggy Shepard
H. Claude Shostal
James Simpson
Susan L. Solomon
Monica Slater Stokes
Robert Stromsted
Michael J. Sweeney
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Sharon C. Taylor
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Princeton, NJ 08542
609.228.7080

Connecticut
Two Landmark Square, Suite 108
Stamford, CT 06901
203.356.0390

www.rpa.org

May 1, 2016

Attn: Edward Knoesel
The Port Authority of New York and New Jersey
4 World Trade Center/150 Greenwich Street
18th Floor
New York, NY 10006

Re: TWA Flight Center Letter of Support

Dear Mr. Knoesel:

Regional Plan Association is proud to add its name to the list of supporters for the rehabilitation of the TWA Flight Center and hotel at John F. Kennedy airport.

The plans for the TWA Flight Center will preserve a world-famous mid-century landmark and provide important new amenities at JFK airport. The New York region lags behind other metropolitan areas in the availability of hotel and conference space, so this plan helps meet an important need while also fostering economic activity around the airport.

We urge the Port Authority of New York and New Jersey and the Federal Aviation Administration to issue a finding of no significant impact (FONSI) regarding the environmental assessment for this project.

Sincerely,

Thomas K. Wright

Tom Wright
President

BTEA
ALLIANCE OF UNION CONTRACTORS

New York's Construction Leaders

1430 Broadway, Suite 1106 • New York, NY 10018 • www.bteany.com
Telephone: 212.704.9745 • Facsimile: 212.704.4367

Louis J. Coletti
President & CEO

April 26, 2016

The Port Authority of NY & NJ
Attn: Edward Knoesel
4 World Trade Center/150 Greenwich Street
18th Floor
New York, NY 10006

Dear Mr. Knoesel;

The Building Trades Employers' Association (BTEA) represents 27 trade union contractor associations, representing the over 2,000 construction managers, general contractors and specialty subcontractor firms in New York City, who employ 120,000 people. I am writing to convey the BTEA's support of the proposed renovation and upgrade for the TWA Flight Center Hotel at John F. Kennedy Airport.

The project will deliver more than 3,700 construction and permanent jobs. The TWA Flight Center Hotel at JFK Airport will be union built and operated, which means good paying jobs for middle class Queens workers. Turner Construction, who has been selected as the general contractor, has a long institutional history in New York City and will demand the highest levels of safety and respect for the site's neighbors from its staff and workers.

The TWA Flight Center Hotel will preserve the iconic Saarinen terminal, restoring the landmark to its Jet Age condition for generations to enjoy. Complete rehabilitation of national landmark to its 1962 glory. Plans to include an innovative museum focusing on New York as the birthplace of the Jet Age, the storied history of TWA Airlines, and the Midcentury Modern design movement will be a draw for many visitors.

The TWA Flight Center Hotel at JFK Airport will deliver a world-class airport hotel to NYC, with 505 guestrooms, 40,000 square feet of conference, event and meeting space it'll be a great addition to the emerging worldwide HUB that is - Queens. In addition, its LEED certification will ensure its operation in an energy efficient, eco-friendly manner.

The BTEA is wholeheartedly behind this proposal.

Sincerely,

Louis J. Coletti

Louis J. Coletti
President and CEO

NEW
Nontraditional Employment for Women
Hard Hats. Strong Women. Building the Future.
Kathleen Culhane, President

May 4, 2016

Edward Knoesel
The Port Authority of NY & NJ
4 World Trade Center/150 Greenwich Street
18th Floor
New York, NY 10006

Dear Mister Edward Knoesel,

Nontraditional Employment for Women (NEW) supports the ULURP application for TWA Flight Center Hotel by MCR Development. There are limited opportunities for low-income and minority women to obtain secure jobs that provide a living wage and essential benefits, such as health insurance. NEW students, particularly minority women - the population NEW chiefly serves, often face the greatest challenges.

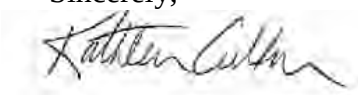
Careers in the unionized construction trades provide opportunities for minority and low-income women to secure jobs that are at a living wage and include essential benefits. After participating in NEW's programs, the improvement in wages and standard of living is dramatic. The average wage for NEW permanent job placements is $17 per hour. These wages go up to around $40 per hour after a four to five year apprenticeship program. NEW's program and direct entry opportunity into union apprenticeship programs allows low-income women in New York City to provide a secure future for themselves and their families.

Founded in 1978, NEW prepares, trains and places women in careers in the skilled construction, utility and maintenance trades, helping women achieve economic independence and a secure future. In that work we have the opportunity to work directly with the New York City Building and Construction Trades Apprenticeship programs.

The revitalization of the TWA Flight Center will provide opportunities for women from across New York City. The TWA Flight Center Hotel at JFK Airport will be union built and operated. An agreement is in place with the Building and Construction Trades Council, a longstanding partner of NEW, and the project will deliver more than 3,700 construction and permanent jobs. As such, we urge the Port Authority and Federal Aviation Administration (FAA) to issue a Finding of No Significant Impact (FONSI) regarding the Environmental Assessment (EA).

NEW is proud to support the revitalization of the TWA Flight Center and to support MCR Development, JetBlue, the Port Authority of New York and New Jersey, and Turner Construction in this effort. This project will provide opportunities for economic security for women and their families.

Sincerely,



Kathleen Culhane

New York Hotel and Motel Trades Council, AFL-CIO • 707 Eighth Avenue, New York, NY 10036 • Telephone (212) 245-8100 • Political & Strategic Affairs Department Fax (212) 977-9461 • www.hotelworkers.org

Attn: Edward Knoesel
The Port Authority of NY & NJ
4 World Trade Center/150 Greenwich Street
18th Floor
New York, NY 10006

May 4, 2016

Dear Mr. Edward Knoesel,

I am writing you on behalf of the 32,000 members of the New York Hotel Trades Council in strong support of the TWA Flight Center Hotel.

I would like to urge the Port Authority and Federal Aviation Administration (FAA) to issue a Finding of No Significant Impact (FONSI) regarding the Enviromental Assessment (EA).

The plan for the TWA Flight Center calls for a new hotel with 505 guest rooms and will include 40,000 square feet of conference, event and meeting space. It will also include potentially over half a dozen food and beverage outlets.

This project will also help compliment the character of the iconic Saarinen terminal, and will help preserve this important landmark for future generations.

Importantly, by including all stakeholders in the process, the TWA Flight Center development is a great example of how new hotel development should be carried out in our city. It shows what a benefit it can be to the community, when done right.

I strongly encourage you to approve this important project. Thank you.

Sincerely,

Peter Ward
President

BUILDING & CONSTRUCTION TRADES COUNCIL OF GREATER NEW YORK

AFFILIATED WITH THE
BUILDING CONSTRUCTION TRADES DEPARTMENT
OF WASHINGTON D.C.

BUILDING AND CONSTRUCTION TRADES COUNCIL
OF NEW YORK STATE

AMERICAN FEDERATION OF LABOR OF CONGRESS
OF INDUSTRIAL ORGANIZATION

GARY LaBARBERA
PRESIDENT

May 3, 2016

Edward Knoesel
The Port Authority of NY & NJ
4 World Trade Center/150 Greenwich Street
18th Floor
New York, NY 10006

Dear Mr. Knoesel,

On behalf of the Building and Construction Trades Council of Greater New York, an organization consisting of local affiliates of 15 national and international unions representing 100,000 working men and women in the New York City, we offer our full support to the rehabilitation and reopening of The TWA Flight Center.

MCR Development will provide construction workers with opportunities for jobs with good wages, health insurance and retirement security. With agreements in place with our Council as well as the Hotel Trades Council, more than 3,700 construction and permanent jobs will be created through this project. This rehabilitation will be a model for others in honoring the City's history while creating good jobs.

We look forward to supporting the repurposing of this iconic symbol in aviation history and urge The Port Authority and Federal Aviation Administration to issue a Finding of No Significant Impact regarding the Environmental Assessment.

Sincerely,

Gary LaBarbera

71 WEST 23rd STREET • SUITE 501-03 • NEW YORK, NEW YORK 10010
TEL. (212) 647-0700 • FAX (212) 647-0705

From: <tkelly@mas.org>
Date: May 7, 2016 at 3:28:38 PM CDT
To: <TWAFlightCenterEA@panynj.gov>
Cc: <gpollara@mas.org>, <tdevaney@mas.org>, <rappaporthall@sprintmail.com>, <emerritt@savingplaces.org>
Subject: TWA Flight Center EA COMMENT

May 7, 2016

The Port Authority of NY & NJ
4 World Trade Center/150 Greenwich Street
18th Floor
New York, NY 10006
Attn: Edward Knoesel

RE: TWA Flight Center EA COMMENT

Dear Mr. Knoesel,

Thank you for the opportunity to provide comments regarding the Environmental Assessment and USDOT Section 4(f) Evaluation for the proposed TWA Flight Center Hotel Project (Proposed Project) at JFK International Airport. The parties signing this letter have been involved with the project since 2000 when the initial plans to take the Flight Center out of service and construct a new terminal building for JetBlue surfaced. We are all consulting parties in the Section 106 review process with the State Historic Preservation Office (SHPO) and we also serve on the TWA Flight Center Redevelopment Advisory Committee (RAC).

From an overall project standpoint, our position has always focused on preserving Eero Saarinen's mid-century masterpiece. We supported the 2013 proposal by Andre Balasz to construct a 300-room hotel. However, we remain steadfast in our position that the new proposal for a 505-room, six-story hotel complex of an unspecified height is not appropriate to the historic Flight Center. Moreover, we hold that alternate designs that lower the height or reposition the hotel buildings should be explored. The wings of the existing structure must remain visually unencumbered by the proposed hotel structures from east viewpoints of the Flight Center. We also remain concerned that the connections of the north and south tubes at Terminal 5/6 will be insufficient to accommodate the anticipated pedestrian traffic once the facility is in operation, and that a thorough analysis of the circulation must be conducted.

Our comments regarding the Environmental Assessment (EA) are as follows:

Visual Effects

Based on the integrated design of the new hotel buildings the EA concludes that the Proposed Project is contextually compatible with the historic TWA Flight Center, and that the placement of the hotel buildings within the development area of the existing Terminal 5 would not result in adverse visual effects. However, the EA does not present an analysis of views of the Flight Center in relation to the hotel buildings. Nor does it explore views from the Flight Center to the larger airport context, a key feature of this Jet Age landmark. Furthermore, the EA does not address potential shadow impacts of the proposed hotel buildings on the Flight Center exterior and interior. The hotel buildings have the potential to overwhelm the Flight Center, creating a claustrophobic, fish bowl experience in the various lounge spaces. Based on the fact that the Flight Center is listed on the National Register of Historic Places, we ask that these analyses be conducted and presented. In our view, the hotel buildings would result in adverse visual effects to the TWA Flight Center.

Hazardous Materials

According to the EA, there were several remedial investigations at the Terminal 5 site dating back to 2002. During construction of the terminal, 160,500 cubic yards of contaminated soil were removed and 28.6 million gallons of fluids were processed by the dewatering system. The Port Authority completed soil and groundwater investigations in 2011, at which time three areas were identified for groundwater impacted by jet fuel-related petroleum that exceeded state standards. A remedial action workplan (RAW) was developed to address residual jet fuel groundwater impacts. In June 2015, LiRo Engineering (LiRo) prepared a Site Specific Sampling Plan for the TWA project site based on an Environmental Subsurface Baseline Investigation Report completed in March 2010. According to the EA, a total of six soil borings were drilled to establish permanent monitoring wells to determine the direction of groundwater flow at the site. Soil and groundwater samples were analyzed and indicated "minimal contamination at the site." In August 2015, LiRo recommended 12 additional borings to identify soil characteristics on the eastern portion of site (the location of conference center and guest room buildings).

The EA does not provide any additional information regarding the results of the soil characteristics at the 12 boring sites. It only gives marsh deposit and groundwater depths. We request a copy of LiRo's Site Specific Sampling Plan and the results of the soil and groundwater sampling analyses.

Cogeneration Plant

According to the EA, the Flight Center Hotel, including the lobby and two guest room buildings, would be powered by an underground cogeneration facility located in a 7,500 sf below-grade vault on the north edge of the site adjacent to the north hotel building. It is further stated that the units would be vented through a common exhaust stack ducted to the roof of the hotel building. However, the drawings provided in the EA do not show the location of the cogeneration facility. Furthermore, mechanical equipment (i.e., cooling towers, heat exchangers) are shown on the top floor of the north hotel building in the revised plan presented to the RAC. Has the plan for a location of the cogeneration plant changed? If the cogeneration plan is to be situated below grade, how will it be protected against flooding?

In sum, there is considerable work needed to ensure that truly no adverse impacts result from this project.

Sincerely,

Nina Rappaport
Founding Member
DOCOMOMO-US and New York Tri-State

Tara Kelly
Senior Director, Preservation and Design
Municipal Art Society of New York

Gina Pollara
President
Municipal Art Society of New York

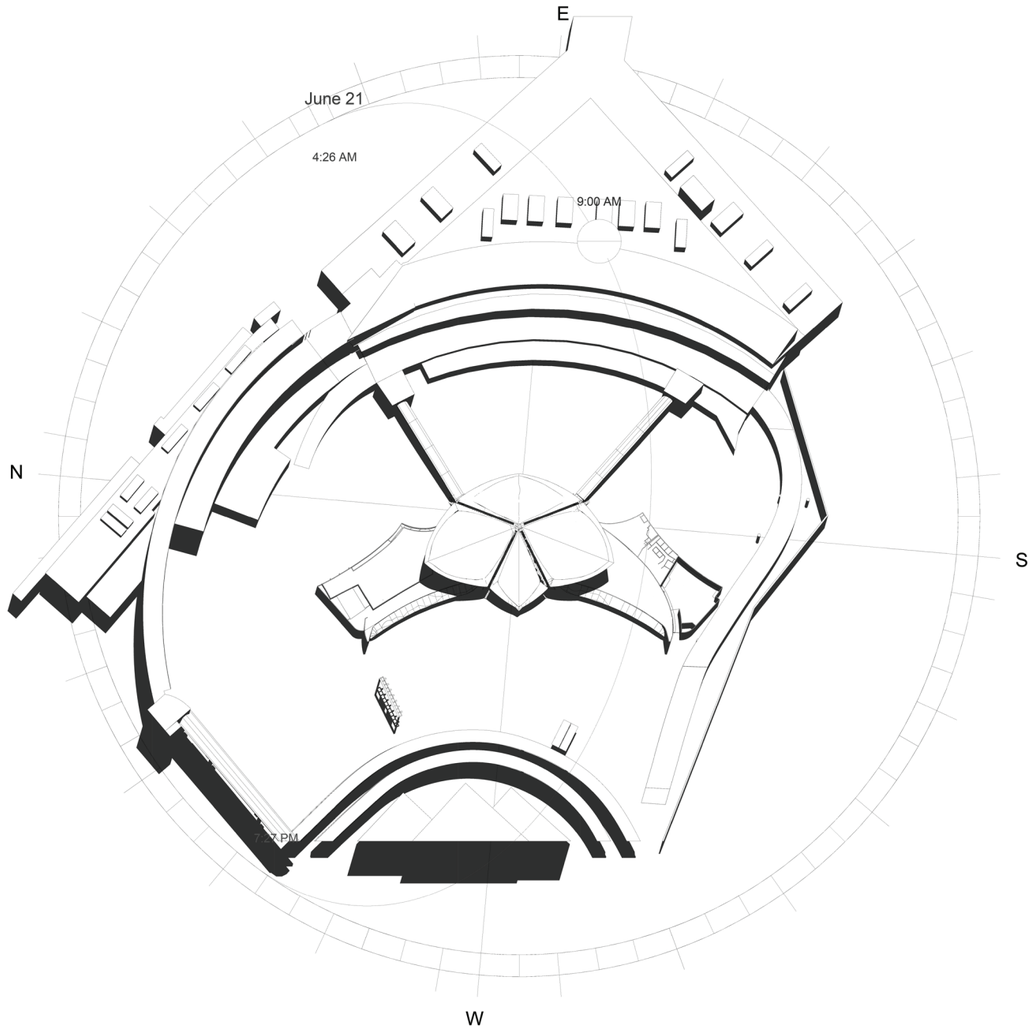
Elizabeth S. Merritt
Deputy General Counsel
National Trust for Historic Preservation

Attachment B: Shadow Study Renderings

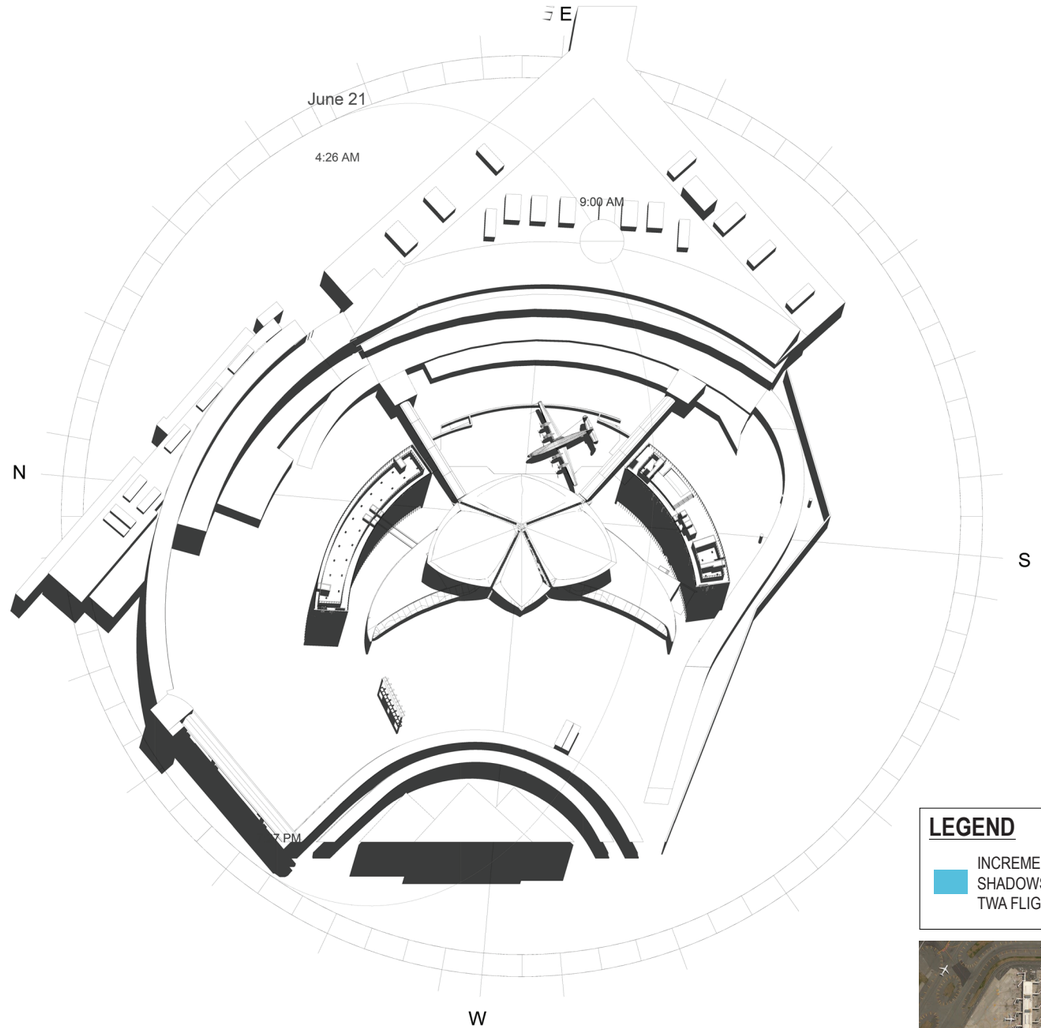
SHADOW STUDIES

June 21st, 9 AM

EXISTING



PROPOSED



NO INCREMENTAL SHADOWS ON THE TWA FLIGHT CENTER

LEGEND

INCREMENTAL SHADOWS ON THE TWA FLIGHT CENTER

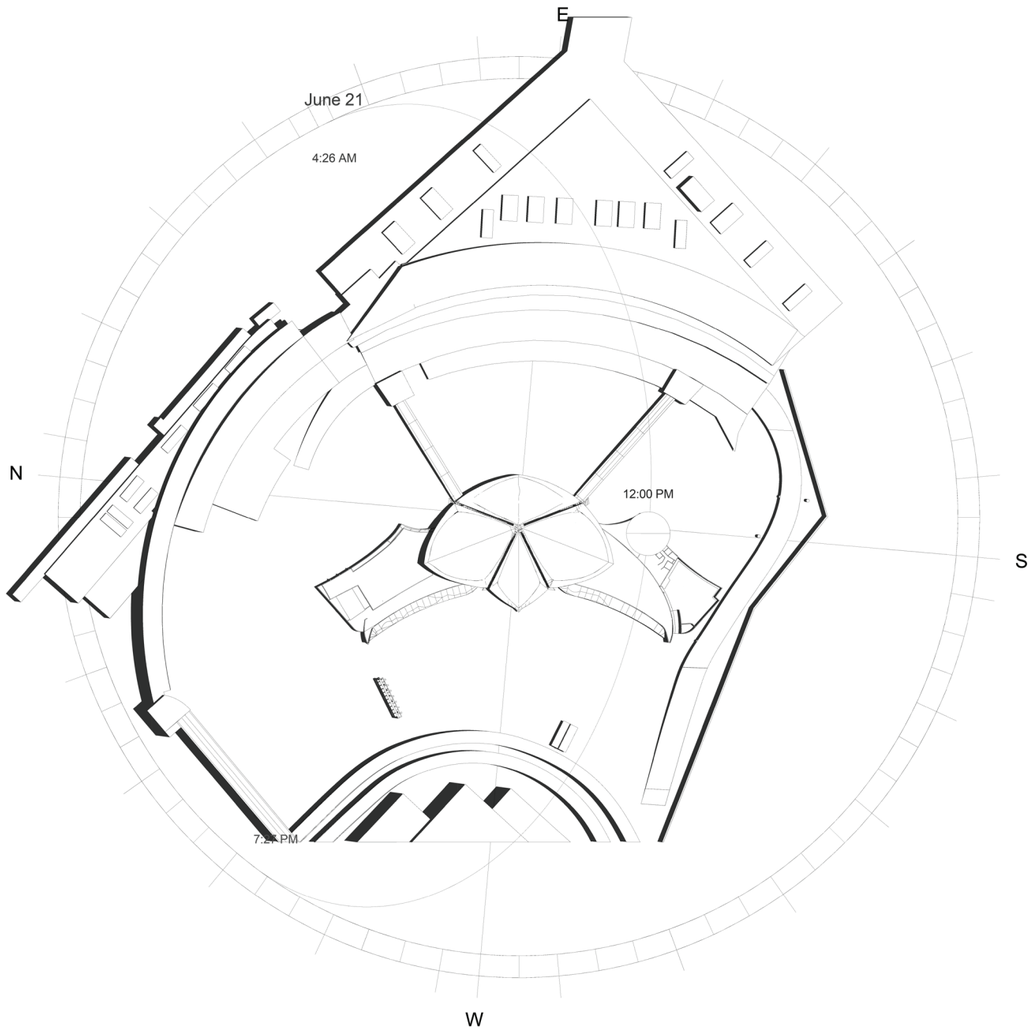


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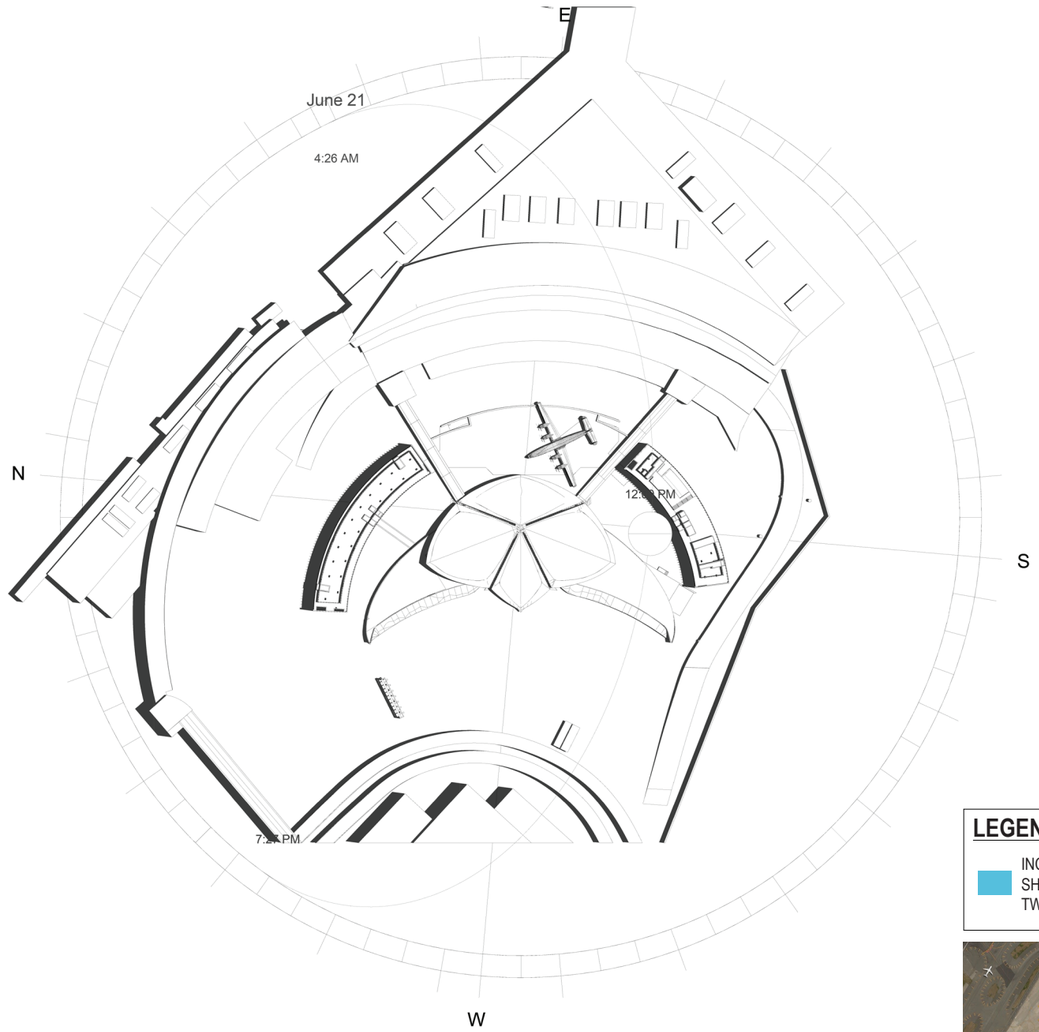
SHADOW STUDIES

June 21st, 12 PM

EXISTING



PROPOSED



NO INCREMENTAL SHADOWS ON THE TWA FLIGHT CENTER

LEGEND

INCREMENTAL SHADOWS ON THE TWA FLIGHT CENTER

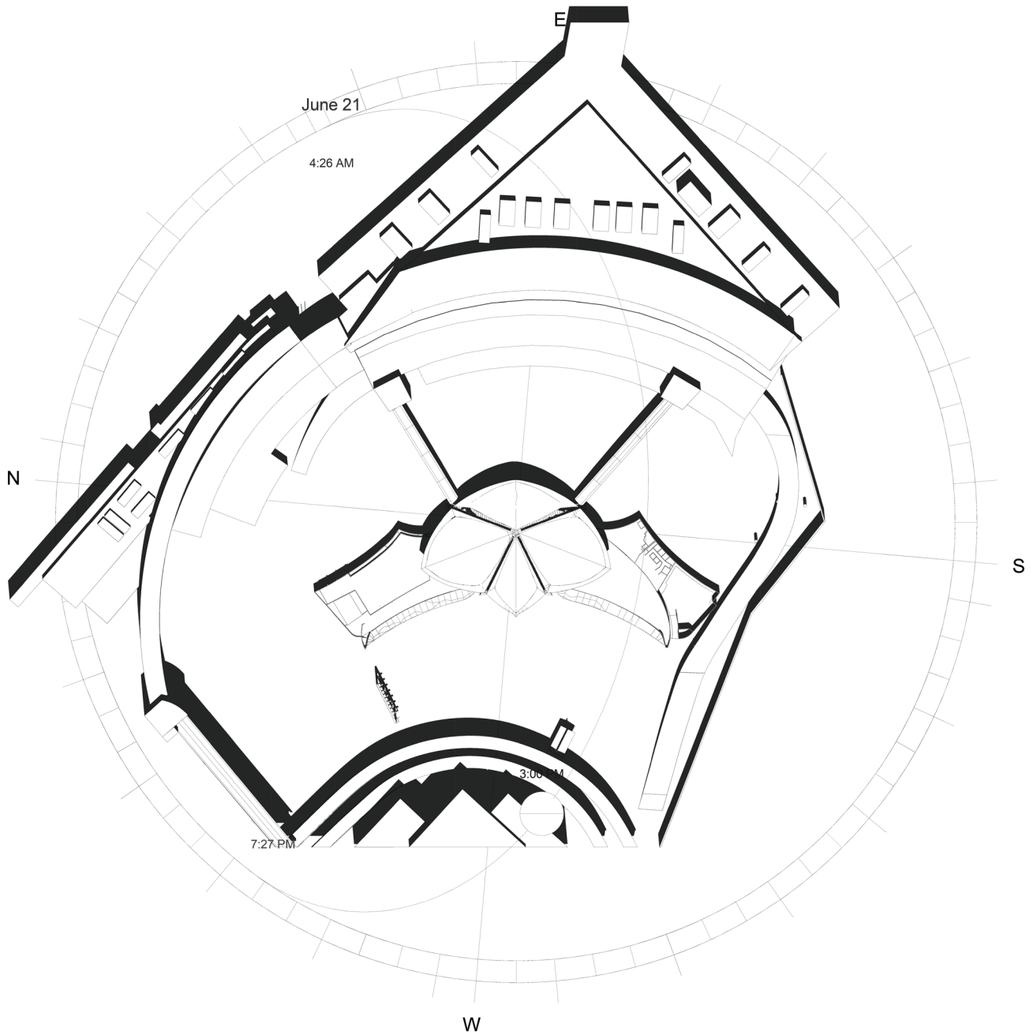


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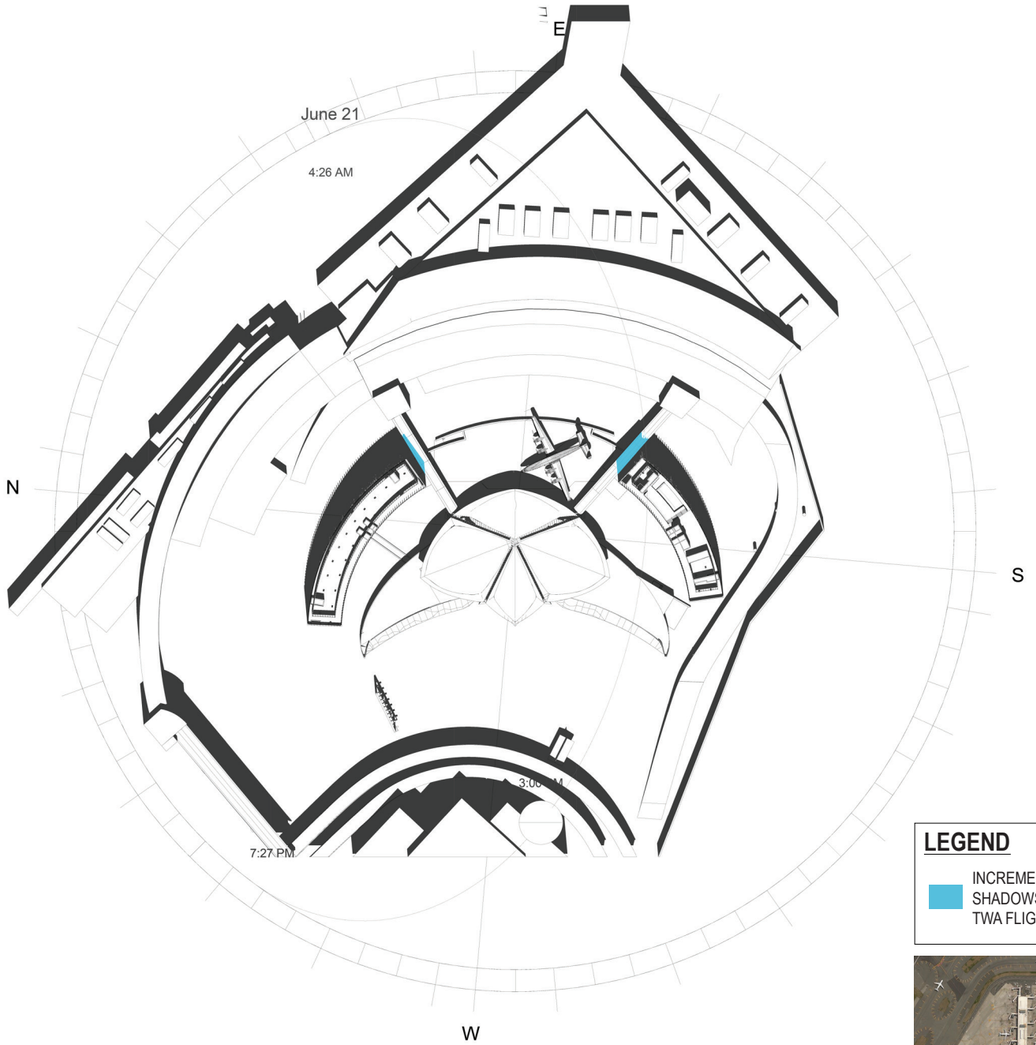
SHADOW STUDIES

June 21st, 3 PM

EXISTING



PROPOSED



LEGEND

INCREMENTAL SHADOWS ON THE TWA FLIGHT CENTER

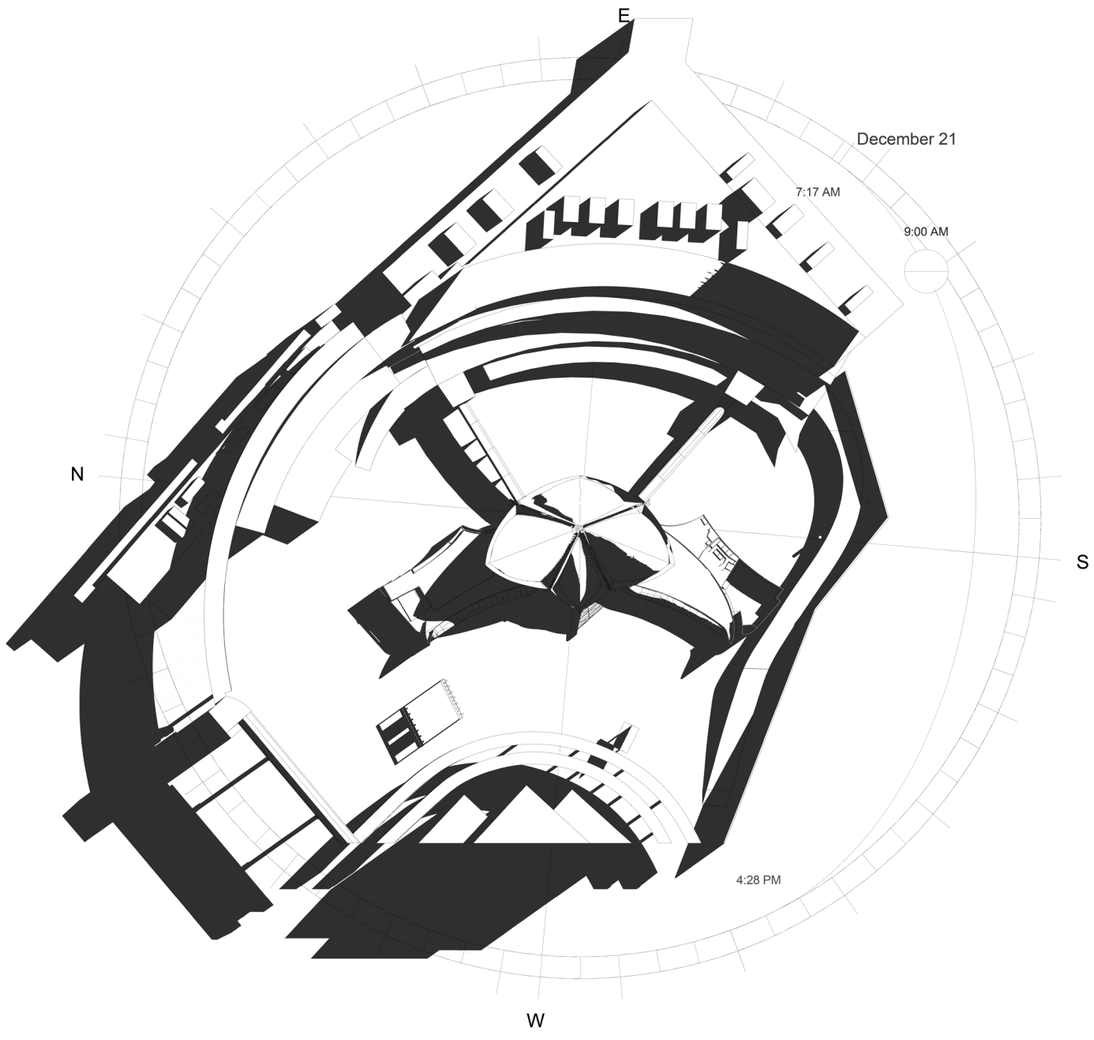


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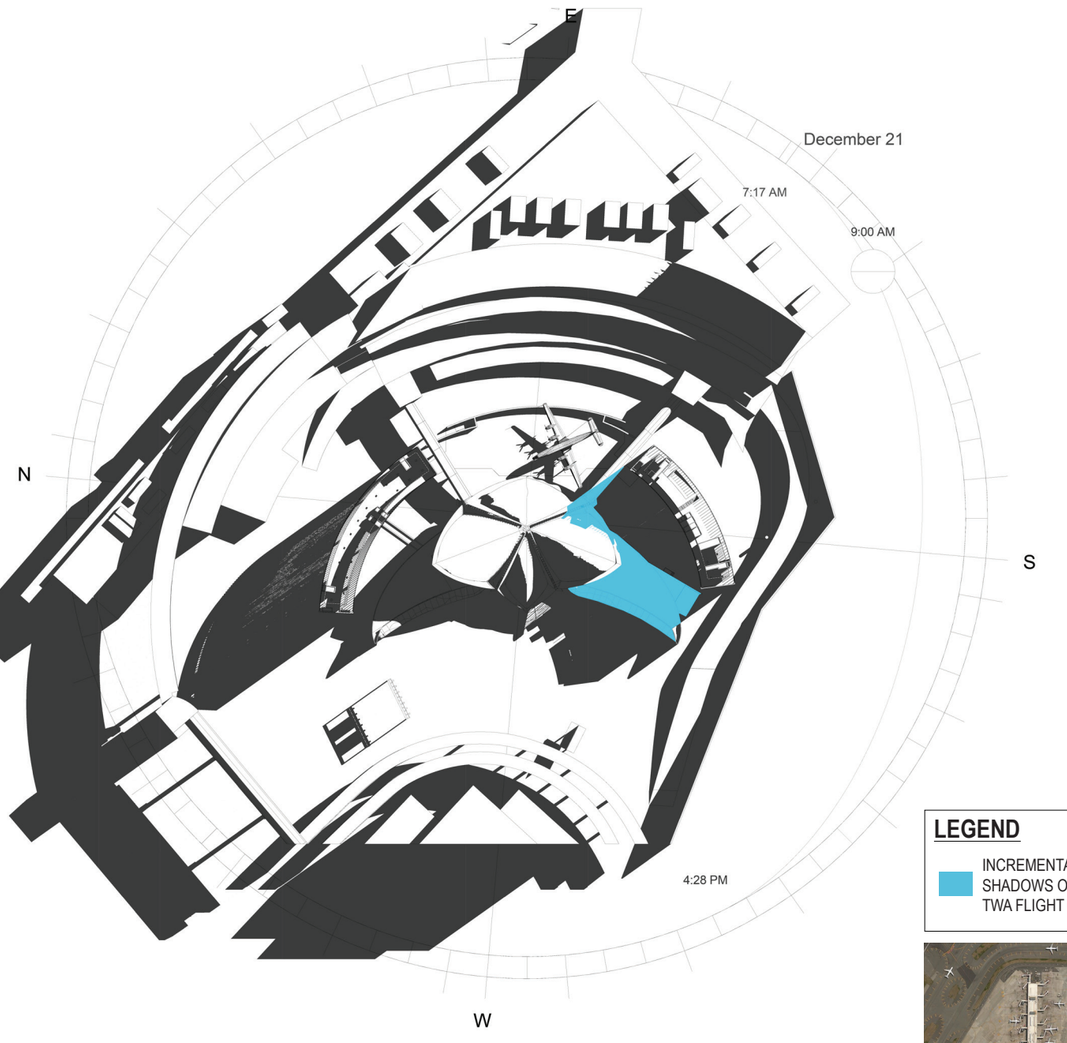
SHADOW STUDIES

December 21st, 9 AM

EXISTING



PROPOSED



LEGEND

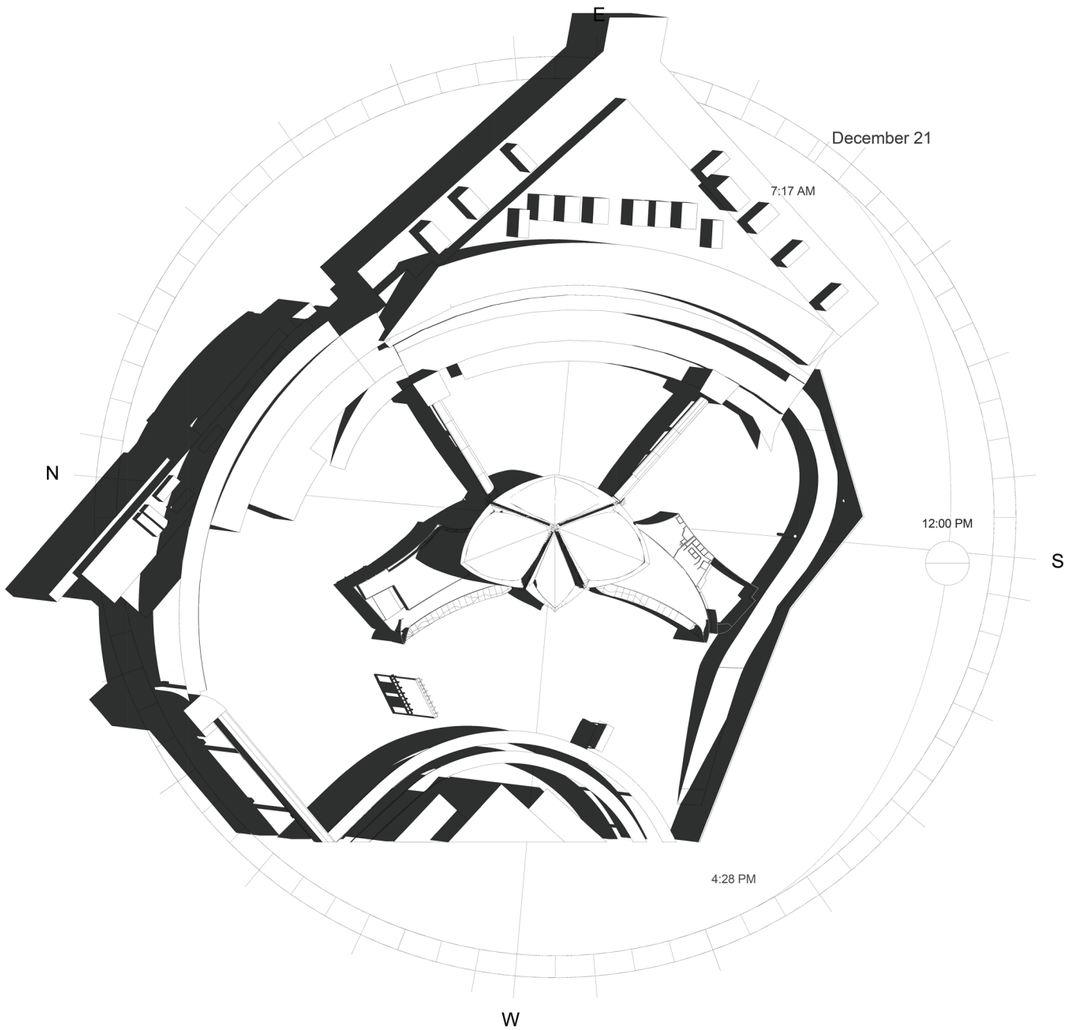
INCREMENTAL SHADOWS ON THE TWA FLIGHT CENTER



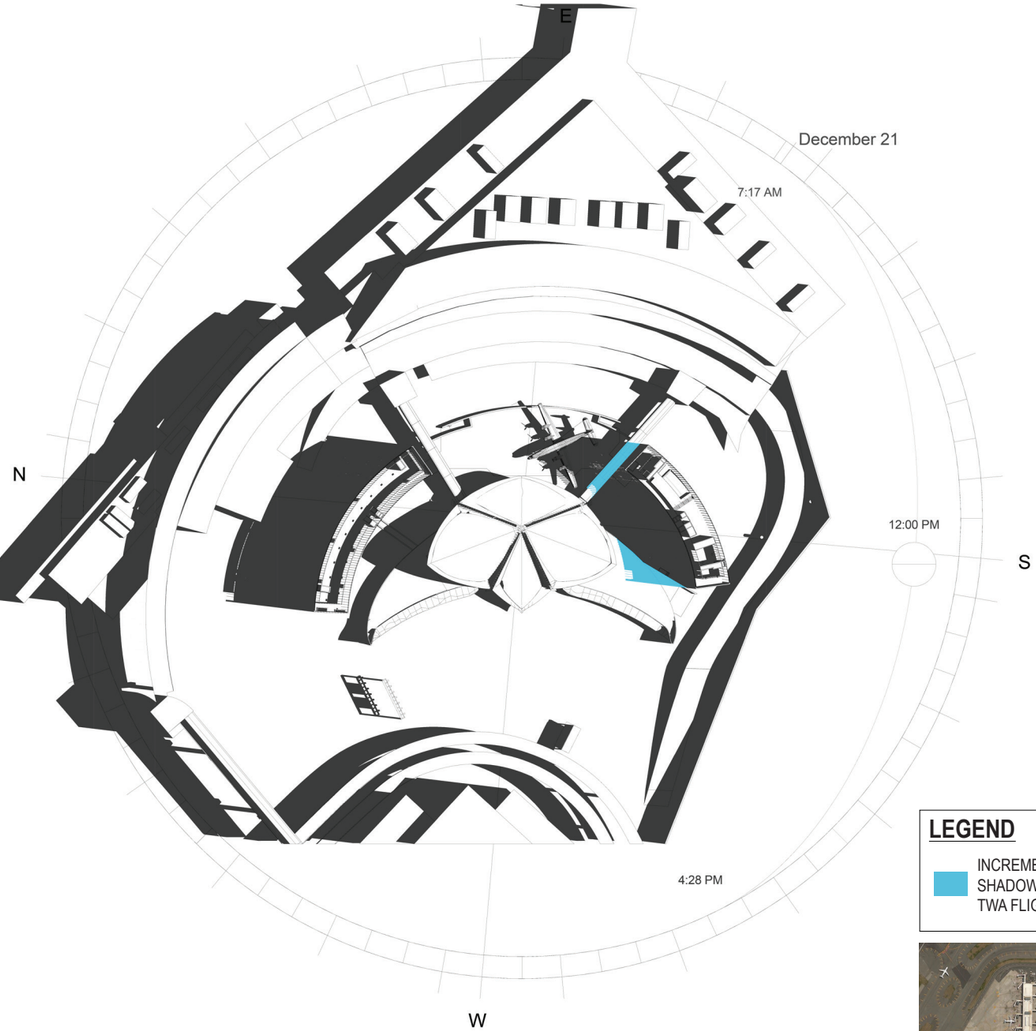
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SHADOW STUDIES
December 21st, 12 PM

EXISTING



PROPOSED



LEGEND

INCREMENTAL SHADOWS ON THE TWA FLIGHT CENTER

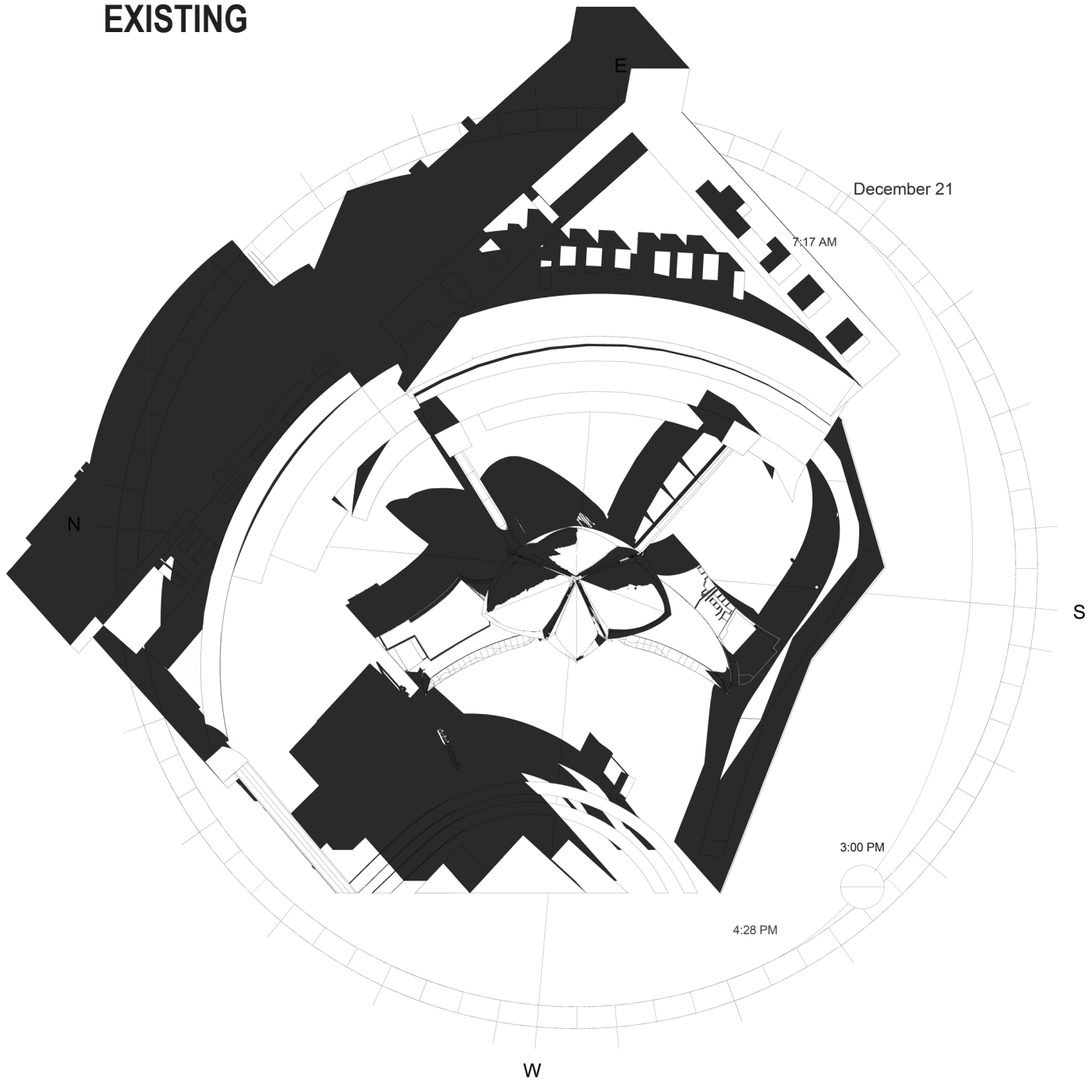


HOTEL

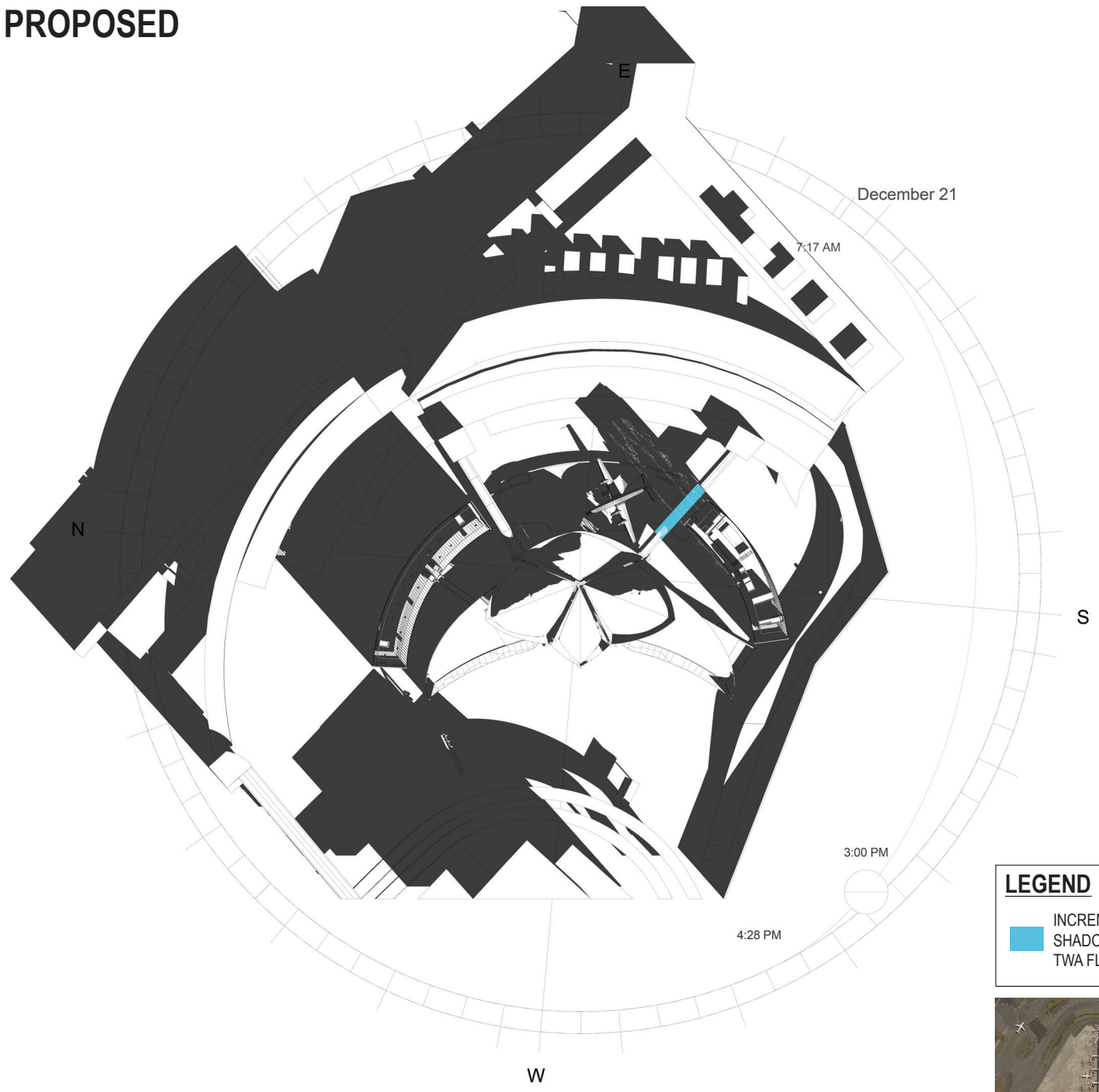
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SHADOW STUDIES
December 21st, 3 PM

EXISTING



PROPOSED



LEGEND

INCREMENTAL SHADOWS ON THE TWA FLIGHT CENTER



BEYER BLINDER BELLE

Attachment C: LiRo Pre-characterization of Soil Results (on CD)

LiRo Engineers, Inc.
A LiRo Group Company
Three Aerial Way, Syosset, NY 11791 Telephone 516.938.5476 Facsimile 516.937.5421

January 18, 2016

Mr. Tyler Morse
MCR Development, LLC
152 West 57th Street, 46th Floor
New York, New York 10019

RE: Environmental Support Services for the TWA Flight Center Hotel Project at JFK International Airport: Pre-Characterization of Soil

Dear Mr. Morse:

LiRo Engineers, Inc. (LiRo) has prepared this letter to summarize the December 2015 results of the Pre-Characterization testing to support the TWA Flight Center Hotel project. The purpose of the testing was to provide information that can be used to evaluate off-site disposal options and costs.

On December 10, 2015, LiRo collected one (1) soil sample from geotechnical borings advanced by Langan. LiRo also collected five (5) soil samples from test pits conducted by Turner Construction Company (Turner) on December 10, December 11, and December 15, 2015.

The boring and test pit locations were chosen by Langan and Turner, respectively. LiRo selected soil samples for environmental analysis to best represent the proposed hotel and conference center excavation areas. Turner's test pit plan included deeper pits that would penetrate the peat layer, however, Turner determined in the field to terminate test pits at the top of the peat layer and therefore, LiRo was unable to acquire environmental soil samples from below the peat layer. The sample locations are shown on Figure 1.

Field screening using a Photo Ionization Detection (PID) of the test pits and geotechnical borings did not indicate readings above background. The sampled soils consisted primarily of fine to medium sands with traces of silt. Deeper soils collected by Langan for geotechnical purposes, were screened for evidence of petroleum contamination; evidence of petroleum was not detected. Groundwater was encountered within two test pits (TP-4 and TP-6) at a depth of approximately 10 feet BG; there was no evidence of petroleum product on the groundwater.

Samples were transmitted to York Analytical Laboratories Inc. (York), a NYSDOH ELAP and NJ certified laboratory, for laboratory chemical analysis. Chemical analyses were performed for parameters that are anticipated to be required for acceptance into a wide range of potential disposal facilities including Beneficial Use Determination (BUD) sites and facilities permitted to accept petroleum contaminated soil. The following potential disposal facilities (which have previously been acceptable to the Port Authority) were considered:

Facility	Location	Type
Staten Island Marine Development	Staten Island, New York	Beneficial Use Site
CleanEarth, Inc. - Teterboro Landing	Morrisville, Pennsylvania	Beneficial Use Site
Soil Safe, Inc.	Lincoln Park West Landfill Closure Site	Beneficial Use Site
Soil Safe, Inc.	Logan Twp., New Jersey	Contaminated Soil Site
Clean Earth of Carteret, Inc.	Kearny, New Jersey	Contaminated Soil Site

Laboratory analysis of the pre-characterization soil samples included: (a) TCL / Part 375 Volatile Organic Compounds (VOCs) using USEPA method 8260; (b) TCL/Part 375 Semi-volatile Organic Compounds (SVOCs) using USEPA method 8270; (c) TAL Metals (Total, including Trivalent and Hexavalent Chromium) using EPA method 6010/7000; (d) TCL Part 375 Pesticides and Polychlorinated Biphenyls (PCBs) using USEPA methods 8081 and 8082; (e) Toxicity Characteristics Leaching Procedure (TCLP) Metals using USEPA method 1311 and applicable USEPA methods for metals, (f) Resource Conservation and Recovery Act (RCRA) Characteristics (ignitability, reactivity, and corrosivity) by applicable USEPA methods; (g) Extractable Petroleum Hydrocarbons (EPH) by NJ Method EPH; and Paint Filter by method SW846 9095.

Each sample was collected with a grab fraction for VOC analysis and a five point composite fraction for analysis of all other parameters. The table below summarizes the sampling locations, depths and analysis conducted:

Sample ID	Type	PID Screening (ppm)	Sample Depths (Feet BG)		Analysis
			5-point Composite	VOC Grab	
TWA- TP1	Test Pit	0	2, 4, 5, 6.5, 7.5	7.5	TCL/TAL & CR+3 and CR+6, TCLP Metals, RCRA Char., EPH, Paint Filter
TWA-TP2	Test Pit	0	3, 4, 6, 7, 8.5	3	TCL/TAL & CR+3 and CR+6, TCLP Metals, RCRA Char., EPH, Paint Filter
TWA-TP4	Test Pit	0	2.5, 4, 6, 8, 10	8	TCL/TAL & CR+3 and CR+6, TCLP Metals, RCRA Char., EPH, Paint Filter
TWA-TP7	Test Pit	0	2.5, 4, 6, 8, 9	8	TCL/TAL & CR+3 and CR+6, TCLP Metals, RCRA Char., EPH, Paint Filter
TWA-TP10	Test Pit	0	2, 3, 6, 8, 9	2	TCL/TAL & CR+3 and CR+6, TCLP Metals, RCRA Char., EPH, Paint Filter
TWA-RB2,TB2, TB1	Boring	0	7-9 & 9-11 at RB2 5-7 & 7-9 at TB2 5-7 at TB1	---	TCL/TAL & CR+3 and CR+6, TCLP Metals, RCRA Char., EPH, Paint Filter
TWA-RB2	Boring	0	---	7-9	

Sample results were compared to NYSDEC Part 375-6.8(b) Restricted Use Protection of Public Health (Commercial) soil cleanup objectives (SCOs), NYSDEC Part 375-6.8(b) Restricted Use Protection of Groundwater SCOs, 6 NYCRR Part 371 hazardous waste limits and RCRA Subtitle C characteristic thresholds. These are typical criteria for acceptance into BUD sites. The analytical results did not detect any compounds at levels above these regulatory thresholds. A summary table of the analytical results is included as Attachment 1; the laboratory analytical data reports are included as Attachment 2.

LiRo Engineers, Inc.
A LiRo Group Company
Three Aerial Way, Syosset, NY 11791 Telephone 516.938.5476 Facsimile 516.937.5421

As noted above, Turner terminated all test pits at the peat layer and therefore, environmental samples were only collected above the peat layer. Based on observations from deeper geotechnical borings, LiRo does not anticipate the widespread presence of contamination below the peat layer based on the relative absence of contamination detected at shallower depths. Although higher level contamination is not expected in the peat layer, LiRo notes that the peat layer may require segregation and dewatering or a separate off-site disposal location based on its physical characteristics, particularly moisture content.

Based on construction plans, an excess of soil material will be generated by the project and must be disposed of off-site. Per Port Authority policy, no soil excavated at the JFK International Airport may be disposed of off-site as clean fill; the soil must be disposed of at a controlled facility permitted to accept the material. The sampling results indicate that most excavated soils will meet acceptance criteria at a Port Authority approved BUD facility. This will likely be the lowest cost disposal option.

Petroleum impacted soil and groundwater have historically been detected immediately to the north of the project site during past investigations (location PMW-121 on Figure 1) and it is reasonable to assume that contaminated soil may be encountered during excavation activities for the project. Therefore, provisions should be included in the excavation protocols to screen for and segregate petroleum impacted soil if encountered.

Characterization sampling will be required to during construction to meet specific disposal facility frequency requirements. Characterization may be accomplished by sampling stockpiled soil or by sampling soil *in-situ* to support a live-load approach. This procedure should be detailed in the Prime Contractor's Soil Excavation and Staging Plan.

Please contact me at 718-321-3136 if you require further information or have any questions.

Sincerely,
LiRo Engineers, Inc.

Robert Kreuzer
Vice President

cc: Samantha Rothberg, Lehrer
Norbert Young, Lehrer
Gary McAssey, Turner
Doug Hassebroek, Beyer Blinder Belle
Richard Southwick, Beyer Blinder Belle

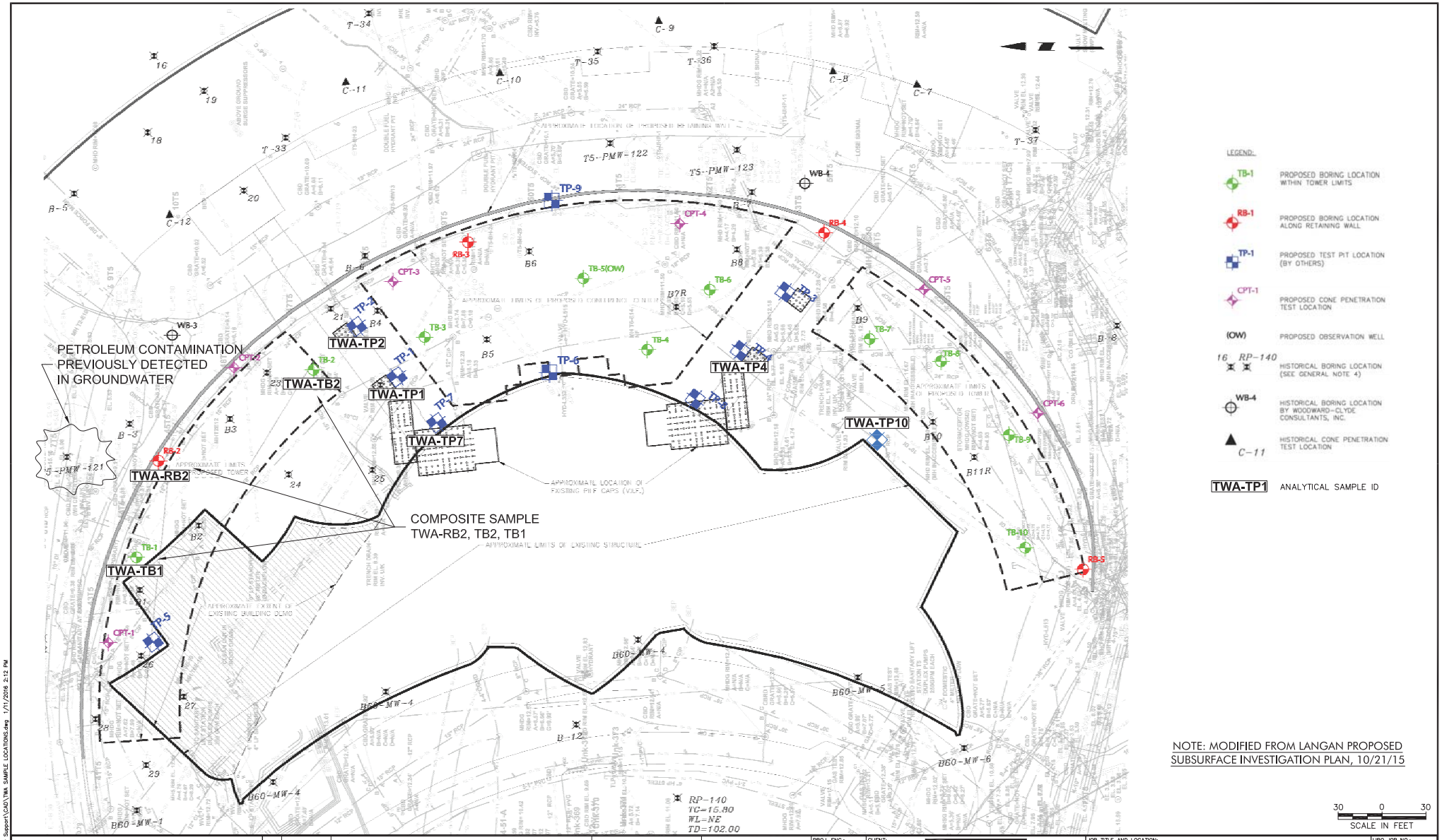
Figures: 1 – December 2015 Sample Locations

Attachments: 1 – Analytical Summary Table
2 –Analytical Data Reports

LiRo Engineers, Inc.
A LiRo Group Company
Three Aerial Way, Syosset, NY 11791 Telephone 516.938.5476 Facsimile 516.937.5421

FIGURE

December 2015 Sample Locations



WARNING
IT IS A VIOLATION OF SECTION 7209, SUBDIVISION 2, OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, OTHER THAN THOSE WHOSE SEAL APPEARS ON THIS DRAWING, TO ALTER IN ANY WAY AN ITEM ON THIS DRAWING. IF AN ITEM IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DATE	DESCRIPTION
		REVISIONS

LiRo Engineers, Inc.
Three Aerial Way
Syosset, New York

PROJ. ENG.:
DESIGNED BY:
CHECKED BY:
DRAWN BY:
CLIENT: TWA FLIGHT CENTER HOTEL
DATE: JANUARY 2016
SCALE: AS SHOWN

JOB TITLE AND LOCATION: TWA FLIGHT CENTER HOTEL QUEENS, NEW YORK
LIRO JOB NO.: 15-111-0324
SHEET 1 OF 1
DRAWING TITLE: TWA FLIGHT CENTER HOTEL DECEMBER 2015 SAMPLE LOCATIONS
FIGURE NO. 1

J:\15-111-0324 TWA-JFK Env Support\CAD\TWA SAMPLE LOCATIONS.dwg 1/21/2016 2:12 PM

LiRo Engineers, Inc.
A LiRo Group Company
Three Aerial Way, Syosset, NY 11791 Telephone 516.938.5476 Facsimile 516.937.5421

ATTACHMENT 1

Analytical Summary Table

Summary of Pre-Characterization of Soil
TWA Flight Center Hotel Project
JFK International Airport

Parameter	NYSDEC Part 375-6.8 (b) Restricted Use of Soil Cleanup Objectives Protection of Public Health, Commercial	NYSDEC Part 375-6.8 (b) Restricted Use of Soil Cleanup Objectives Protection of Groundwater	6 NYCRR Part 371 and RCRA	Sample ID, Date Collected TWA-TP1 12/10/2015	Sample ID, Date Collected TWA-TP2 12/11/2015	Sample ID, Date Collected TWA-TP4 12/10/2015	Sample ID, Date Collected TWA-TP7 12/15/2015	Sample ID, Date Collect TWA-TP10 12/11/2015	Sample ID, Date Collected TWA-RB2 12/10/2015	Sample ID, Date Collected TWA-RB2,TB2,TB1 12/10/2015
TCL VOCs	ug/kg	ug/kg		ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Methylene Chloride	500000	50		ND	ND	ND	21.0	ND	ND	NA
TCLSVOCs	**ug/kg**	**ug/kg**		ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Benzyl butyl phthalate	NS	NS		99.8	ND	ND	ND	ND	NA	ND
Benzo(k)fluoranthene	56,000	1,700		ND	ND	ND	ND	51.5 J	NA	ND
Bis(2-ethylhexyl)phthalate	NS	NS		ND	58.4 J	ND	ND	ND	NA	ND
Chrysene	56,000	1,000		ND	ND	ND	ND	58.7 J	NA	ND
Fluoranthene	500,000	1,000,000		ND	ND	ND	ND	86.6 J	NA	ND
Phenanthrene	500,000	1,000,000		ND	ND	ND	ND	53.0 J	NA	ND
Pyrene	500,000	1,000,000		ND	ND	ND	ND	87.3 J	NA	ND
PESTs	ug/kg	ug/kg		ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
4,4'-DDT	47,000	136,000		ND	ND	ND	9.91	ND	NA	ND
Dieldrin	1,400	100		ND	ND	ND	12.9	ND	NA	ND
PCBs	ug/kg	ug/kg		ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
				ND	ND	ND	ND	ND	NA	ND
EPH	mg/kg	mg/kg								
				ND	ND	ND	ND	ND	NA	ND
TAL METALs	mg/kg	mg/kg		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Aluminum	NS	NS		2,820.0	2210.0	2330.0	2,920.0	2,670.0	NA	2,150.0
Arsenic	16	16		1.8	1.1	1.2	3.3	ND	NA	ND
Barium	400	820		19.1	16.1	15.7	29.4	17.2	NA	11.3
Calcium	NS	NS		10,200.0	2730.0	2090.0	57,400.0	3,390.0	NA	529.0
Chromium (Total)	1,500	NS		8.1	6.4	6.8	7.1	7.9	NA	6.1
Cobalt	NS	NS		2.3	2.0	2.1	2.7	2.6	NA	2.0
Copper	270	1,720		5.2	4.4	4.8	12.8	5.4	NA	1.8
Iron	NS	NS		6,190.0	4620.0	5150.0	6,640.0	5,210.0	NA	4,030.0
Lead	1,000	450		8.1	5.8	9.5	19.6	7.3	NA	1.6
Magnesium	NS	NS		1,410.0	1310.0	880.0	3,600.0	1,170.0	NA	724.0
Manganese	10,000	2,000		57.8	34.9	36.4	180.0	55.0	NA	29.9
Nickel	310	130		5.8	4.5	5.4	6.6	5.8	NA	5.3
Potassium	NS	NS		727.0	596.0	687.0	702.0	637.0	NA	596.0
Selenium	1,500	4.0		ND	ND	ND	ND	1.2	NA	ND
Sodium	NS	NS		69.5	ND	44.6	87.5	45.3	NA	84.3
Vanadium	NS	NS		11.0	8.4	9.2	10.0	9.2	NA	7.5
Zinc	10,000	2,480		16.1	16.4	14.0	36.3	18.2	NA	8.0
TCLP METALs			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Barium			100.0	0.177	0.157	0.0109	0.363	0.280	NA	0.9
Cadmium			1.0	ND	ND	ND	0.004	0.008	NA	ND
Chromium (Total)			5.0	ND	ND	ND	ND	0.009	NA	ND
Lead			5.0	0.004	0.01	0.007	0.89	0.009 B	NA	0.005
Selenium			1.0	0.024	0.20 B	0.024	0.022	0.024 B	NA	0.015
MISC. PARAMETERS (units)										
Reactivity Sulfide (mg/kg)			500	ND	ND	ND	ND	ND	NA	ND
Reactivity Cyanide (mg/kg)			250	ND	ND	ND	ND	ND	NA	ND
pH (SU)			2-12.5	9.32	9.55	9.17	9.71	9.38	NA	4.31
Ignitability			>140 °F	Non-Ignitable	Non-Ignitable	Non-Ignitable	Non-Ignitable	Non-Ignitable	NA	Non-Ignitable
Paint Filter			NS	No Free Liquid	No Free Liquid	No Free Liquid	No Free Liquid	No Free Liquid	NA	No Free Liquid

Notes:
Five point composite sample. VOCs are random grabs; no PIDs detected.
NS = No Standard
ND = Compound not detected above method detection limit (see attached lab report for mdl's)
NA = Not Analyzed
SU = Standard unit
mg/Kg = milligram per kilogram
mg/L = millogram per liter
ug/Kg = microgram per kilogram
J = The result is an estimated concentration.
B = Analyte found in the associated blank.
BOLD = Concentration exceeds NYSDEC Part 375 Restricted Use of SCO, Protection of Public Health, Commercial.
Italacized = Concentration exceeds NYSDEC Part 375 Restricted Use of SCO, Protection of Groundwater.
** = Concentration exceeds 6 NYCRR Part 371 and RCRA Toxicity Characteristic Regulatory Levels for Hazardous Waste.

LiRo Engineers, Inc.
A LiRo Group Company
Three Aerial Way, Syosset, NY 11791 Telephone 516.938.5476 Facsimile 516.937.5421

ATTACHMENT 2

Analytical Data Reports

Technical Report

prepared for:

LiRo Engineers
690 Delaware Ave.
Buffalo NY, 14209-2202
Attention: Steve Frank

Report Date: 12/18/2015
Client Project ID: TWA Flight Ctr Hotel 15-111-0324
York Project (SDG) No.: 15L0442

Report Date: 12/18/2015
Client Project ID: TWA Flight Ctr Hotel 15-111-0324
York Project (SDG) No.: 15L0442

LiRo Engineers
690 Delaware Ave.
Buffalo NY, 14209-2202
Attention: Steve Frank

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on December 11, 2015 and listed below. The project was identified as your project: **TWA Flight Ctr Hotel 15-111-0324**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the attachment to this report, and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

York Sample ID	Client Sample ID	Matrix	Date Collected	Date Received
15L0442-01	TWA-TP4	Soil	12/10/2015	12/11/2015
15L0442-02	TWA-TP1	Soil	12/10/2015	12/11/2015
15L0442-03	TWA-RB2,TB2,TB1	Soil	12/10/2015	12/11/2015
15L0442-04	TWA-RB2	Soil	12/10/2015	12/11/2015

General Notes for York Project (SDG) No.: 15L0442

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation, unless otherwise noted.
6. All analyses conducted met method or Laboratory SOP requirements. See the Qualifiers and/or Narrative sections for further information.
7. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
8. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.

Approved By: 

Date: 12/18/2015

Benjamin Gulizia
Laboratory Director

Sample Information

Client Sample ID: TWA-TP4 **York Sample ID:** 15L0442-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0442	TWA Flight Ctr Hotel 15-111-0324	Soil	December 10, 2015 10:10 am	12/11/2015

Volatile Organics, 8260 - Comprehensive

Log-in Notes: VOA-CONT **Sample Notes:** VOA-CONT

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/16/2015 17:17	12/17/2015 07:42	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/16/2015 17:17	12/17/2015 07:42	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/16/2015 17:17	12/17/2015 07:42	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/16/2015 17:17	12/17/2015 07:42	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/16/2015 17:17	12/17/2015 07:42	SS
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/16/2015 17:17	12/17/2015 07:42	SS
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/16/2015 17:17	12/17/2015 07:42	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	12/16/2015 17:17	12/17/2015 07:42	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	12/16/2015 17:17	12/17/2015 07:42	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	12/16/2015 17:17	12/17/2015 07:42	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/16/2015 17:17	12/17/2015 07:42	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/16/2015 17:17	12/17/2015 07:42	SS
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/16/2015 17:17	12/17/2015 07:42	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/16/2015 17:17	12/17/2015 07:42	SS
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/16/2015 17:17	12/17/2015 07:42	SS
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/16/2015 17:17	12/17/2015 07:42	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/16/2015 17:17	12/17/2015 07:42	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/16/2015 17:17	12/17/2015 07:42	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/16/2015 17:17	12/17/2015 07:42	SS
123-91-1	1,4-Dioxane	ND		ug/kg dry	54	110	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	12/16/2015 17:17	12/17/2015 07:42	SS
78-93-3	2-Butanone	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/16/2015 17:17	12/17/2015 07:42	SS

Sample Information

Client Sample ID: TWA-TP4 **York Sample ID:** 15L0442-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0442	TWA Flight Ctr Hotel 15-111-0324	Soil	December 10, 2015 10:10 am	12/11/2015

Volatile Organics, 8260 - Comprehensive

Log-in Notes: VOA-CONT **Sample Notes:** VOA-CONT

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	2-Hexanone	ND		ug/kg dry	2.7	5.4	1	EPA 8260C	12/16/2015 17:17	12/17/2015 07:42	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	2.7	5.4	1	EPA 8260C	12/16/2015 17:17	12/17/2015 07:42	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
67-64-1	Acetone	ND		ug/kg dry	5.4	11	1	EPA 8260C	12/16/2015 17:17	12/17/2015 07:42	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
107-02-8	Acrolein	ND		ug/kg dry	5.4	11	1	EPA 8260C	12/16/2015 17:17	12/17/2015 07:42	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
107-13-1	Acrylonitrile	ND		ug/kg dry	2.7	5.4	1	EPA 8260C	12/16/2015 17:17	12/17/2015 07:42	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
71-43-2	Benzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C	12/16/2015 17:17	12/17/2015 07:42	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
74-97-5	Bromochloromethane	ND		ug/kg dry	2.7	5.4	1	EPA 8260C	12/16/2015 17:17	12/17/2015 07:42	SS
								Certifications:	NELAC-NY10854,NJDEP		
75-27-4	Bromodichloromethane	ND		ug/kg dry	2.7	5.4	1	EPA 8260C	12/16/2015 17:17	12/17/2015 07:42	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
75-25-2	Bromoform	ND		ug/kg dry	2.7	5.4	1	EPA 8260C	12/16/2015 17:17	12/17/2015 07:42	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
74-83-9	Bromomethane	ND		ug/kg dry	2.7	5.4	1	EPA 8260C	12/16/2015 17:17	12/17/2015 07:42	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
75-15-0	Carbon disulfide	ND		ug/kg dry	2.7	5.4	1	EPA 8260C	12/16/2015 17:17	12/17/2015 07:42	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
56-23-5	Carbon tetrachloride	ND		ug/kg dry	2.7	5.4	1	EPA 8260C	12/16/2015 17:17	12/17/2015 07:42	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
108-90-7	Chlorobenzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C	12/16/2015 17:17	12/17/2015 07:42	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
75-00-3	Chloroethane	ND		ug/kg dry	2.7	5.4	1	EPA 8260C	12/16/2015 17:17	12/17/2015 07:42	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
67-66-3	Chloroform	ND		ug/kg dry	2.7	5.4	1	EPA 8260C	12/16/2015 17:17	12/17/2015 07:42	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
74-87-3	Chloromethane	ND		ug/kg dry	2.7	5.4	1	EPA 8260C	12/16/2015 17:17	12/17/2015 07:42	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C	12/16/2015 17:17	12/17/2015 07:42	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C	12/16/2015 17:17	12/17/2015 07:42	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
110-82-7	Cyclohexane	ND		ug/kg dry	2.7	5.4	1	EPA 8260C	12/16/2015 17:17	12/17/2015 07:42	SS
								Certifications:	NELAC-NY10854,NJDEP		
124-48-1	Dibromochloromethane	ND		ug/kg dry	2.7	5.4	1	EPA 8260C	12/16/2015 17:17	12/17/2015 07:42	SS
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
74-95-3	Dibromomethane	ND		ug/kg dry	2.7	5.4	1	EPA 8260C	12/16/2015 17:17	12/17/2015 07:42	SS
								Certifications:	NELAC-NY10854,NJDEP		
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	2.7	5.4	1	EPA 8260C	12/16/2015 17:17	12/17/2015 07:42	SS
								Certifications:	NELAC-NY10854,NJDEP		

Sample Information

Client Sample ID: TWA-TP4 **York Sample ID:** 15L0442-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0442	TWA Flight Ctr Hotel 15-111-0324	Soil	December 10, 2015 10:10 am	12/11/2015

Volatile Organics, 8260 - Comprehensive

Log-in Notes: VOA-CONT **Sample Notes:** VOA-CONT

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-41-4	Ethyl Benzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications:	12/16/2015 17:17	12/17/2015 07:42 CTDOH,NELAC-NY10854,NJDEP,PADEP	SS
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications:	12/16/2015 17:17	12/17/2015 07:42 NELAC-NY10854,NJDEP	SS
98-82-8	Isopropylbenzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications:	12/16/2015 17:17	12/17/2015 07:42 CTDOH,NELAC-NY10854,NJDEP	SS
79-20-9	Methyl acetate	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications:	12/16/2015 17:17	12/17/2015 07:42 NELAC-NY10854,NJDEP	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications:	12/16/2015 17:17	12/17/2015 07:42 CTDOH,NELAC-NY10854,NJDEP	SS
108-87-2	Methylcyclohexane	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications:	12/16/2015 17:17	12/17/2015 07:42 NELAC-NY10854,NJDEP	SS
75-09-2	Methylene chloride	ND		ug/kg dry	5.4	11	1	EPA 8260C Certifications:	12/16/2015 17:17	12/17/2015 07:42 CTDOH,NELAC-NY10854,NJDEP,PADEP	SS
104-51-8	n-Butylbenzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications:	12/16/2015 17:17	12/17/2015 07:42 CTDOH,NELAC-NY10854,NJDEP	SS
103-65-1	n-Propylbenzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications:	12/16/2015 17:17	12/17/2015 07:42 CTDOH,NELAC-NY10854,NJDEP	SS
95-47-6	o-Xylene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications:	12/16/2015 17:17	12/17/2015 07:42 CTDOH,NELAC-NY10854	SS
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	5.4	11	1	EPA 8260C Certifications:	12/16/2015 17:17	12/17/2015 07:42 CTDOH,NELAC-NY10854	SS
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications:	12/16/2015 17:17	12/17/2015 07:42 CTDOH,NELAC-NY10854,NJDEP	SS
135-98-8	sec-Butylbenzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications:	12/16/2015 17:17	12/17/2015 07:42 CTDOH,NELAC-NY10854,NJDEP	SS
100-42-5	Styrene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications:	12/16/2015 17:17	12/17/2015 07:42 CTDOH,NELAC-NY10854,NJDEP	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications:	12/16/2015 17:17	12/17/2015 07:42 NELAC-NY10854,NJDEP	SS
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications:	12/16/2015 17:17	12/17/2015 07:42 CTDOH,NELAC-NY10854,NJDEP	SS
127-18-4	Tetrachloroethylene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications:	12/16/2015 17:17	12/17/2015 07:42 CTDOH,NELAC-NY10854,NJDEP,PADEP	SS
108-88-3	Toluene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications:	12/16/2015 17:17	12/17/2015 07:42 CTDOH,NELAC-NY10854,NJDEP,PADEP	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications:	12/16/2015 17:17	12/17/2015 07:42 CTDOH,NELAC-NY10854,NJDEP	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications:	12/16/2015 17:17	12/17/2015 07:42 CTDOH,NELAC-NY10854,NJDEP,PADEP	SS
79-01-6	Trichloroethylene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications:	12/16/2015 17:17	12/17/2015 07:42 CTDOH,NELAC-NY10854,NJDEP,PADEP	SS
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications:	12/16/2015 17:17	12/17/2015 07:42 CTDOH,NELAC-NY10854,NJDEP,PADEP	SS

Sample Information

Client Sample ID: TWA-TP4 **York Sample ID:** 15L0442-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0442	TWA Flight Ctr Hotel 15-111-0324	Soil	December 10, 2015 10:10 am	12/11/2015

Volatile Organics, 8260 - Comprehensive

Log-in Notes: VOA-CONT **Sample Notes:** VOA-CONT

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/16/2015 17:17	12/17/2015 07:42	SS
1330-20-7	Xylenes, Total	ND		ug/kg dry	8.1	16	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/16/2015 17:17	12/17/2015 07:42	SS

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: 1,2-Dichloroethane-d4*	*97.5 %*	*77-125*
2037-26-5	*Surrogate: Toluene-d8*	*99.6 %*	*85-120*
460-00-4	*Surrogate: p-Bromofluorobenzene*	*103 %*	*76-130*

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1'-Biphenyl	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP	12/17/2015 08:26	12/18/2015 13:40	KH
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		ug/kg dry	90.2	180	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP	12/17/2015 08:26	12/18/2015 13:40	KH
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 13:40	KH
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications: NELAC-NY10854	12/17/2015 08:26	12/18/2015 13:40	KH
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP	12/17/2015 08:26	12/18/2015 13:40	KH
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications: NELAC-NY10854	12/17/2015 08:26	12/18/2015 13:40	KH
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications: NELAC-NY10854	12/17/2015 08:26	12/18/2015 13:40	KH
58-90-2	2,3,4,6-Tetrachlorophenol	ND		ug/kg dry	90.2	180	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP	12/17/2015 08:26	12/18/2015 13:40	KH
95-95-4	2,4,5-Trichlorophenol	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP	12/17/2015 08:26	12/18/2015 13:40	KH
88-06-2	2,4,6-Trichlorophenol	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 13:40	KH
120-83-2	2,4-Dichlorophenol	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 13:40	KH
105-67-9	2,4-Dimethylphenol	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 13:40	KH
51-28-5	2,4-Dinitrophenol	ND		ug/kg dry	90.2	180	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 13:40	KH
121-14-2	2,4-Dinitrotoluene	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 13:40	KH
606-20-2	2,6-Dinitrotoluene	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 13:40	KH

Sample Information

Client Sample ID: TWA-TP4 **York Sample ID:** 15L0442-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0442	TWA Flight Ctr Hotel 15-111-0324	Soil	December 10, 2015 10:10 am	12/11/2015

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-58-7	2-Chloronaphthalene	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 13:40	KH
95-57-8	2-Chlorophenol	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 13:40	KH
91-57-6	2-Methylnaphthalene	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP	12/18/2015 13:40	KH
95-48-7	2-Methylphenol	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 13:40	KH
88-74-4	2-Nitroaniline	ND		ug/kg dry	90.2	180	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 13:40	KH
88-75-5	2-Nitrophenol	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 13:40	KH
65794-96-9	3- & 4-Methylphenols	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP	12/18/2015 13:40	KH
91-94-1	3,3'-Dichlorobenzidine	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications:	12/17/2015 08:26 NELAC-NY10854,NJDEP,PADEP	12/18/2015 13:40	KH
99-09-2	3-Nitroaniline	ND		ug/kg dry	90.2	180	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 13:40	KH
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/kg dry	90.2	180	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP	12/18/2015 13:40	KH
101-55-3	4-Bromophenyl phenyl ether	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 13:40	KH
59-50-7	4-Chloro-3-methylphenol	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 13:40	KH
106-47-8	4-Chloroaniline	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 13:40	KH
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 13:40	KH
100-01-6	4-Nitroaniline	ND		ug/kg dry	90.2	180	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 13:40	KH
100-02-7	4-Nitrophenol	ND		ug/kg dry	90.2	180	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 13:40	KH
83-32-9	Acenaphthene	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 13:40	KH
208-96-8	Acenaphthylene	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 13:40	KH
98-86-2	Acetophenone	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications:	12/17/2015 08:26 NELAC-NY10854,NJDEP	12/18/2015 13:40	KH
62-53-3	Aniline	ND		ug/kg dry	181	361	2	EPA 8270D Certifications:	12/17/2015 08:26 NELAC-NY10854,NJDEP,PADEP	12/18/2015 13:40	KH
120-12-7	Anthracene	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 13:40	KH
1912-24-9	Atrazine	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications:	12/17/2015 08:26 NELAC-NY10854,NJDEP	12/18/2015 13:40	KH

Sample Information

Client Sample ID: TWA-TP4 **York Sample ID:** 15L0442-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0442	TWA Flight Ctr Hotel 15-111-0324	Soil	December 10, 2015 10:10 am	12/11/2015

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-52-7	Benzaldehyde	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP	12/17/2015 08:26	12/18/2015 13:40	KH
92-87-5	Benzidine	ND		ug/kg dry	181	361	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854	12/17/2015 08:26	12/18/2015 13:40	KH
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 13:40	KH
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 13:40	KH
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 13:40	KH
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 13:40	KH
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 13:40	KH
65-85-0	Benzoic acid	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP	12/17/2015 08:26	12/18/2015 13:40	KH
100-51-6	Benzyl alcohol	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 13:40	KH
85-68-7	Benzyl butyl phthalate	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 13:40	KH
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 13:40	KH
111-44-4	Bis(2-chloroethyl)ether	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 13:40	KH
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 13:40	KH
117-81-7	Bis(2-ethylhexyl)phthalate	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 13:40	KH
105-60-2	Caprolactam	ND		ug/kg dry	90.2	180	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP	12/17/2015 08:26	12/18/2015 13:40	KH
86-74-8	Carbazole	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 13:40	KH
218-01-9	Chrysene	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 13:40	KH
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 13:40	KH
132-64-9	Dibenzofuran	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP	12/17/2015 08:26	12/18/2015 13:40	KH
84-66-2	Diethyl phthalate	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 13:40	KH
131-11-3	Dimethyl phthalate	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 13:40	KH
84-74-2	Di-n-butyl phthalate	ND		ug/kg dry	45.2	90.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 13:40	KH

Sample Information

Client Sample ID: TWA-TP4 **York Sample ID:** 15L0442-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0442	TWA Flight Ctr Hotel 15-111-0324	Soil	December 10, 2015 10:10 am	12/11/2015

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
117-84-0	Di-n-octyl phthalate	ND		ug/kg dry	45.2	90.2	2	EPA 8270D	12/17/2015 08:26	12/18/2015 13:40	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
206-44-0	Fluoranthene	ND		ug/kg dry	45.2	90.2	2	EPA 8270D	12/17/2015 08:26	12/18/2015 13:40	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
86-73-7	Fluorene	ND		ug/kg dry	45.2	90.2	2	EPA 8270D	12/17/2015 08:26	12/18/2015 13:40	KH
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
118-74-1	Hexachlorobenzene	ND		ug/kg dry	45.2	90.2	2	EPA 8270D	12/17/2015 08:26	12/18/2015 13:40	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	45.2	90.2	2	EPA 8270D	12/17/2015 08:26	12/18/2015 13:40	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
77-47-4	Hexachlorocyclopentadiene	ND		ug/kg dry	45.2	90.2	2	EPA 8270D	12/17/2015 08:26	12/18/2015 13:40	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
67-72-1	Hexachloroethane	ND		ug/kg dry	45.2	90.2	2	EPA 8270D	12/17/2015 08:26	12/18/2015 13:40	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	45.2	90.2	2	EPA 8270D	12/17/2015 08:26	12/18/2015 13:40	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
78-59-1	Isophorone	ND		ug/kg dry	45.2	90.2	2	EPA 8270D	12/17/2015 08:26	12/18/2015 13:40	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
91-20-3	Naphthalene	ND		ug/kg dry	45.2	90.2	2	EPA 8270D	12/17/2015 08:26	12/18/2015 13:40	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
98-95-3	Nitrobenzene	ND		ug/kg dry	45.2	90.2	2	EPA 8270D	12/17/2015 08:26	12/18/2015 13:40	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
62-75-9	N-Nitrosodimethylamine	ND		ug/kg dry	45.2	90.2	2	EPA 8270D	12/17/2015 08:26	12/18/2015 13:40	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
621-64-7	N-nitroso-di-n-propylamine	ND		ug/kg dry	45.2	90.2	2	EPA 8270D	12/17/2015 08:26	12/18/2015 13:40	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
86-30-6	N-Nitrosodiphenylamine	ND		ug/kg dry	45.2	90.2	2	EPA 8270D	12/17/2015 08:26	12/18/2015 13:40	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
87-86-5	Pentachlorophenol	ND		ug/kg dry	45.2	90.2	2	EPA 8270D	12/17/2015 08:26	12/18/2015 13:40	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
85-01-8	Phenanthrene	ND		ug/kg dry	45.2	90.2	2	EPA 8270D	12/17/2015 08:26	12/18/2015 13:40	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
108-95-2	Phenol	ND		ug/kg dry	45.2	90.2	2	EPA 8270D	12/17/2015 08:26	12/18/2015 13:40	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
129-00-0	Pyrene	ND		ug/kg dry	45.2	90.2	2	EPA 8270D	12/17/2015 08:26	12/18/2015 13:40	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

	Surrogate Recoveries	Result	Acceptance Range
367-12-4	*Surrogate: 2-Fluorophenol*	*38.8 %*	*20-108*
4165-62-2	*Surrogate: Phenol-d5*	*43.3 %*	*23-114*
4165-60-0	*Surrogate: Nitrobenzene-d5*	*39.0 %*	*22-108*
321-60-8	*Surrogate: 2-Fluorobiphenyl*	*43.3 %*	*21-113*
118-79-6	*Surrogate: 2,4,6-Tribromophenol*	*42.1 %*	*19-110*
1718-51-0	*Surrogate: Terphenyl-d14*	*42.3 %*	*24-116*

Sample Information

Client Sample ID: **TWA-TP4** **York Sample ID:** **15L0442-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0442	TWA Flight Ctr Hotel 15-111-0324	Soil	December 10, 2015 10:10 am	12/11/2015

Pesticides, 8081 target list

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND		ug/kg dry	1.79	1.79	5	EPA 8081B	12/16/2015 08:27	12/16/2015 22:59	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
72-55-9	4,4'-DDE	ND		ug/kg dry	1.79	1.79	5	EPA 8081B	12/16/2015 08:27	12/16/2015 22:59	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
50-29-3	4,4'-DDT	ND		ug/kg dry	1.79	1.79	5	EPA 8081B	12/16/2015 08:27	12/16/2015 22:59	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
309-00-2	Aldrin	ND		ug/kg dry	1.79	1.79	5	EPA 8081B	12/16/2015 08:27	12/16/2015 22:59	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
319-84-6	alpha-BHC	ND		ug/kg dry	1.79	1.79	5	EPA 8081B	12/16/2015 08:27	12/16/2015 22:59	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
5103-71-9	alpha-Chlordane	ND		ug/kg dry	1.79	1.79	5	EPA 8081B	12/16/2015 08:27	12/16/2015 22:59	AMC
								Certifications:	NELAC-NY10854,NJDEP		
319-85-7	beta-BHC	ND		ug/kg dry	1.79	1.79	5	EPA 8081B	12/16/2015 08:27	12/16/2015 22:59	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
57-74-9	Chlordane, total	ND		ug/kg dry	71.4	71.4	5	EPA 8081B	12/16/2015 08:27	12/16/2015 22:59	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
319-86-8	delta-BHC	ND		ug/kg dry	1.79	1.79	5	EPA 8081B	12/16/2015 08:27	12/16/2015 22:59	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
60-57-1	Dieldrin	ND		ug/kg dry	1.79	1.79	5	EPA 8081B	12/16/2015 08:27	12/16/2015 22:59	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
959-98-8	Endosulfan I	ND		ug/kg dry	1.79	1.79	5	EPA 8081B	12/16/2015 08:27	12/16/2015 22:59	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
33213-65-9	Endosulfan II	ND		ug/kg dry	1.79	1.79	5	EPA 8081B	12/16/2015 08:27	12/16/2015 22:59	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
1031-07-8	Endosulfan sulfate	ND		ug/kg dry	1.79	1.79	5	EPA 8081B	12/16/2015 08:27	12/16/2015 22:59	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
72-20-8	Endrin	ND		ug/kg dry	1.79	1.79	5	EPA 8081B	12/16/2015 08:27	12/16/2015 22:59	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7421-93-4	Endrin aldehyde	ND		ug/kg dry	1.79	1.79	5	EPA 8081B	12/16/2015 08:27	12/16/2015 22:59	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
53494-70-5	Endrin ketone	ND		ug/kg dry	1.79	1.79	5	EPA 8081B	12/16/2015 08:27	12/16/2015 22:59	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
58-89-9	gamma-BHC (Lindane)	ND		ug/kg dry	1.79	1.79	5	EPA 8081B	12/16/2015 08:27	12/16/2015 22:59	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
5566-34-7	gamma-Chlordane	ND		ug/kg dry	1.79	1.79	5	EPA 8081B	12/16/2015 08:27	12/16/2015 22:59	AMC
								Certifications:	NELAC-NY10854,NJDEP		
76-44-8	Heptachlor	ND		ug/kg dry	1.79	1.79	5	EPA 8081B	12/16/2015 08:27	12/16/2015 22:59	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
1024-57-3	Heptachlor epoxide	ND		ug/kg dry	1.79	1.79	5	EPA 8081B	12/16/2015 08:27	12/16/2015 22:59	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
72-43-5	Methoxychlor	ND		ug/kg dry	8.93	8.93	5	EPA 8081B	12/16/2015 08:27	12/16/2015 22:59	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Sample Information

Client Sample ID: TWA-TP4 **York Sample ID:** 15L0442-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0442	TWA Flight Ctr Hotel 15-111-0324	Soil	December 10, 2015 10:10 am	12/11/2015

Pesticides, 8081 target list

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
8001-35-2	Toxaphene	ND		ug/kg dry	90.3	90.3	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP	12/16/2015 08:27	12/16/2015 22:59	AMC

	Surrogate Recoveries	Result	Acceptance Range
877-09-8	*Surrogate: Tetrachloro-m-xylene*	*78.0 %*	*30-140*
2051-24-3	*Surrogate: Decachlorobiphenyl*	*57.9 %*	*30-140*

Polychlorinated Biphenyls (PCB)

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		mg/kg dry	0.0180	0.0180	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	12/16/2015 08:27	12/16/2015 19:39	AMC
11104-28-2	Aroclor 1221	ND		mg/kg dry	0.0180	0.0180	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	12/16/2015 08:27	12/16/2015 19:39	AMC
11141-16-5	Aroclor 1232	ND		mg/kg dry	0.0180	0.0180	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	12/16/2015 08:27	12/16/2015 19:39	AMC
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0180	0.0180	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	12/16/2015 08:27	12/16/2015 19:39	AMC
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0180	0.0180	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	12/16/2015 08:27	12/16/2015 19:39	AMC
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0180	0.0180	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	12/16/2015 08:27	12/16/2015 19:39	AMC
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0180	0.0180	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	12/16/2015 08:27	12/16/2015 19:39	AMC
1336-36-3	* Total PCBs	ND		mg/kg dry	0.0180	0.0180	1	EPA 8082A Certifications:	12/16/2015 08:27	12/16/2015 19:39	AMC

	Surrogate Recoveries	Result	Acceptance Range
877-09-8	*Surrogate: Tetrachloro-m-xylene*	*55.7 %*	*30-140*
2051-24-3	*Surrogate: Decachlorobiphenyl*	*65.2 %*	*30-140*

NJDEP EPH (Cat. 2 Non-Fractionated)

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	* Total EPH	ND		mg/kg dry	54.1	54.1	1	NJDEP EPH Rev 3.0 Certifications: NJDEP	12/17/2015 08:34	12/17/2015 18:23	AMC

	Surrogate Recoveries	Result	Acceptance Range
3386-33-2	*Surrogate: 1-Chlorooctadecane*	*53.1 %*	*40-140*
84-15-1	*Surrogate: o-Terphenyl*	*61.1 %*	*40-140*

Sample Information

Client Sample ID: **TWA-TP4** **York Sample ID:** **15L0442-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0442	TWA Flight Ctr Hotel 15-111-0324	Soil	December 10, 2015 10:10 am	12/11/2015

Metals, Target Analyte

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	**Aluminum**	**2330**		mg/kg dry	5.41	5.41	1	EPA 6010C Certifications:	12/14/2015 10:10	12/14/2015 21:49 CTDOH,NELAC-NY10854,NJDEP	ALD
7440-36-0	Antimony	ND		mg/kg dry	0.541	0.541	1	EPA 6010C Certifications:	12/14/2015 10:10	12/14/2015 21:49 CTDOH,NELAC-NY10854,NJDEP,PADEP	ALD
7440-38-2	**Arsenic**	**1.24**		mg/kg dry	1.08	1.08	1	EPA 6010C Certifications:	12/14/2015 10:10	12/14/2015 21:49 CTDOH,NELAC-NY10854,NJDEP,PADEP	ALD
7440-39-3	**Barium**	**15.7**		mg/kg dry	1.08	1.08	1	EPA 6010C Certifications:	12/14/2015 10:10	12/14/2015 21:49 CTDOH,NELAC-NY10854,NJDEP,PADEP	ALD
7440-41-7	Beryllium	ND		mg/kg dry	0.108	0.108	1	EPA 6010C Certifications:	12/14/2015 10:10	12/14/2015 21:49 CTDOH,NELAC-NY10854,NJDEP	ALD
7440-43-9	Cadmium	ND		mg/kg dry	0.325	0.325	1	EPA 6010C Certifications:	12/14/2015 10:10	12/14/2015 21:49 CTDOH,NELAC-NY10854,NJDEP,PADEP	ALD
7440-70-2	**Calcium**	**2090**		mg/kg dry	0.541	5.41	1	EPA 6010C Certifications:	12/14/2015 10:10	12/14/2015 21:49 CTDOH,NELAC-NY10854,NJDEP	ALD
7440-47-3	**Chromium**	**6.76**		mg/kg dry	0.541	0.541	1	EPA 6010C Certifications:	12/14/2015 10:10	12/14/2015 21:49 CTDOH,NELAC-NY10854,NJDEP,PADEP	ALD
7440-48-4	**Cobalt**	**2.09**		mg/kg dry	0.541	0.541	1	EPA 6010C Certifications:	12/14/2015 10:10	12/14/2015 21:49 CTDOH,NELAC-NY10854,NJDEP	ALD
7440-50-8	**Copper**	**4.81**		mg/kg dry	0.541	0.541	1	EPA 6010C Certifications:	12/14/2015 10:10	12/14/2015 21:49 CTDOH,NELAC-NY10854,NJDEP	ALD
7439-89-6	**Iron**	**5150**		mg/kg dry	2.16	2.16	1	EPA 6010C Certifications:	12/14/2015 10:10	12/14/2015 21:49 CTDOH,NELAC-NY10854,NJDEP	ALD
7439-92-1	**Lead**	**9.50**		mg/kg dry	0.325	0.325	1	EPA 6010C Certifications:	12/14/2015 10:10	12/14/2015 21:49 CTDOH,NELAC-NY10854,NJDEP,PADEP	ALD
7439-95-4	**Magnesium**	**880**		mg/kg dry	5.41	5.41	1	EPA 6010C Certifications:	12/14/2015 10:10	12/14/2015 21:49 CTDOH,NELAC-NY10854,NJDEP	ALD
7439-96-5	**Manganese**	**36.4**		mg/kg dry	0.541	0.541	1	EPA 6010C Certifications:	12/14/2015 10:10	12/14/2015 21:49 CTDOH,NELAC-NY10854,NJDEP	ALD
7440-02-0	**Nickel**	**5.37**		mg/kg dry	0.541	0.541	1	EPA 6010C Certifications:	12/14/2015 10:10	12/14/2015 21:49 CTDOH,NELAC-NY10854,NJDEP,PADEP	ALD
7440-09-7	**Potassium**	**687**		mg/kg dry	5.41	5.41	1	EPA 6010C Certifications:	12/14/2015 10:10	12/14/2015 21:49 CTDOH,NELAC-NY10854,NJDEP	ALD
7782-49-2	Selenium	ND		mg/kg dry	1.08	1.08	1	EPA 6010C Certifications:	12/14/2015 10:10	12/14/2015 21:49 CTDOH,NELAC-NY10854,NJDEP,PADEP	ALD
7440-22-4	Silver	ND		mg/kg dry	0.541	0.541	1	EPA 6010C Certifications:	12/14/2015 10:10	12/14/2015 21:49 CTDOH,NELAC-NY10854,NJDEP,PADEP	ALD
7440-23-5	**Sodium**	**44.6**		mg/kg dry	10.8	10.8	1	EPA 6010C Certifications:	12/14/2015 10:10	12/14/2015 21:49 CTDOH,NELAC-NY10854,NJDEP	ALD
7440-28-0	Thallium	ND		mg/kg dry	1.08	1.08	1	EPA 6010C Certifications:	12/14/2015 10:10	12/14/2015 21:49 CTDOH,NELAC-NY10854,NJDEP	ALD
7440-62-2	**Vanadium**	**9.16**		mg/kg dry	1.08	1.08	1	EPA 6010C Certifications:	12/14/2015 10:10	12/14/2015 21:49 CTDOH,NELAC-NY10854,NJDEP	ALD
7440-66-6	**Zinc**	**14.0**		mg/kg dry	1.08	1.08	1	EPA 6010C Certifications:	12/14/2015 10:10	12/14/2015 21:49 CTDOH,NELAC-NY10854,NJDEP	ALD

Metals, TCLP RCRA

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Information

Client Sample ID: TWA-TP4 **York Sample ID:** 15L0442-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0442	TWA Flight Ctr Hotel 15-111-0324	Soil	December 10, 2015 10:10 am	12/11/2015

Sample Prepared by Method: EPA 3015A/1311

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	ND		mg/L	0.004	0.004	1	EPA 6010C/1311	12/17/2015 13:20	12/18/2015 01:34	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-39-3	**Barium**	**0.109**		mg/L	0.011	0.011	1	EPA 6010C/1311	12/17/2015 13:20	12/18/2015 01:34	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-43-9	Cadmium	ND		mg/L	0.003	0.003	1	EPA 6010C/1311	12/17/2015 13:20	12/18/2015 01:34	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-47-3	Chromium	ND		mg/L	0.006	0.006	1	EPA 6010C/1311	12/17/2015 13:20	12/18/2015 01:34	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7439-92-1	**Lead**	**0.007**	B	mg/L	0.003	0.003	1	EPA 6010C/1311	12/17/2015 13:20	12/18/2015 01:34	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7782-49-2	**Selenium**	**0.024**	M-SeT C, B	mg/L	0.011	0.011	1	EPA 6010C/1311	12/17/2015 13:20	12/18/2015 01:34	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-22-4	Silver	ND		mg/L	0.006	0.006	1	EPA 6010C/1311	12/17/2015 13:20	12/18/2015 01:34	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

Mercury by 7470/7471

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: EPA SW846-7471

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/kg dry	0.0357	0.0357	1	EPA 7471B	12/16/2015 23:41	12/16/2015 23:41	AA
								Certifications: CTDOH,NJDEP,NELAC-NY10854,PADEP			

Mercury TCLP by 7473

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: EPA 7473 water

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.0000390	0.000200	1	EPA 7473/1311	12/16/2015 13:25	12/17/2015 13:52	ALD
								Certifications: CTDOH,NJDEP,PADEP,NELAC-NY10854			

Ignitability

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	* Ignitability	Non-Ignit.		-	1	1	1	EPA 1030P	12/17/2015 17:32	12/17/2015 20:22	AA
								Certifications: CTDOH,PADEP			

Paint Filter Test

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	* Paint Filter Test	No Free Liquid		-	0	0	1	EPA 9095A	12/15/2015 14:24	12/15/2015 15:36	AA
								Certifications:			

Total Solids

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst

Sample Information

Client Sample ID: TWA-TP4 **York Sample ID:** 15L0442-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0442	TWA Flight Ctr Hotel 15-111-0324	Soil	December 10, 2015 10:10 am	12/11/2015

Total Solids

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**92.4**		%	0.100	0.100	1	SM 2540G	12/12/2015 20:44	12/14/2015 12:34	KK
								Certifications: CTDOH			

Chromium, Hexavalent

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: EPA SW846-3060

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
18540-29-9	Chromium, Hexavalent	ND		mg/kg dry	0.379	0.541	1	EPA 7196A	12/15/2015 07:42	12/15/2015 14:24	SC
								Certifications: NJDEP,CTDOH,NELAC-NY10854			

Chromium, Trivalent

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16065-83-1	*** Chromium, Trivalent**	**6.76**		mg/kg	0.250	0.500	1	Calculation	12/17/2015 15:25	12/17/2015 15:28	SC
								Certifications:			

Corrosivity

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	pH	**9.17**	HT-pH	pH units		0.500	1	EPA 9045D	12/18/2015 12:00	12/18/2015 14:35	KK
								Certifications: NELAC-NY10854,CTDOH,PADEP			

Reactivity-Cyanide

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	* Reactivity - Cyanide	ND		mg/kg	0.250	0.250	1	EPA SW-846 Ch.7.3.3	12/17/2015 11:28	12/17/2015 13:43	AD
								Certifications: CTDOH,PADEP			

Reactivity-Sulfide

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	* Reactivity - Sulfide	ND		mg/kg	15.0	15.0	1	EPA SW-846 Ch.7.3.4	12/17/2015 12:37	12/17/2015 14:01	AD
								Certifications: CTDOH,PADEP			

TCLP Extraction for METALS EPA 1311

Log-in Notes: VOA-CONT **Sample Notes:** EXT-Temp

Sample Prepared by Method: EPA SW 846-1311 TCLP ext. for metals

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	TCLP Extraction	Completed		N/A	1.00	1.00	1	EPA 1311	12/14/2015 17:26	12/15/2015 13:47	CLS
								Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP			

Sample Information

Client Sample ID: TWA-TP1 **York Sample ID:** 15L0442-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0442	TWA Flight Ctr Hotel 15-111-0324	Soil	December 10, 2015 1:00 pm	12/11/2015

Volatile Organics, 8260 - Comprehensive

Log-in Notes: VOA-CONT **Sample Notes:** VOA-CONT

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/16/2015 17:17	12/17/2015 08:12	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/16/2015 17:17	12/17/2015 08:12	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/16/2015 17:17	12/17/2015 08:12	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/16/2015 17:17	12/17/2015 08:12	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/16/2015 17:17	12/17/2015 08:12	SS
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/16/2015 17:17	12/17/2015 08:12	SS
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/16/2015 17:17	12/17/2015 08:12	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	12/16/2015 17:17	12/17/2015 08:12	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	12/16/2015 17:17	12/17/2015 08:12	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	12/16/2015 17:17	12/17/2015 08:12	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/16/2015 17:17	12/17/2015 08:12	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/16/2015 17:17	12/17/2015 08:12	SS
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/16/2015 17:17	12/17/2015 08:12	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/16/2015 17:17	12/17/2015 08:12	SS
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/16/2015 17:17	12/17/2015 08:12	SS
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/16/2015 17:17	12/17/2015 08:12	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/16/2015 17:17	12/17/2015 08:12	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/16/2015 17:17	12/17/2015 08:12	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/16/2015 17:17	12/17/2015 08:12	SS
123-91-1	1,4-Dioxane	ND		ug/kg dry	54	110	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	12/16/2015 17:17	12/17/2015 08:12	SS
78-93-3	2-Butanone	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/16/2015 17:17	12/17/2015 08:12	SS

Sample Information

Client Sample ID: TWA-TP1 **York Sample ID:** 15L0442-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0442	TWA Flight Ctr Hotel 15-111-0324	Soil	December 10, 2015 1:00 pm	12/11/2015

Volatile Organics, 8260 - Comprehensive

Log-in Notes: VOA-CONT **Sample Notes:** VOA-CONT

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	2-Hexanone	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/16/2015 17:17	12/17/2015 08:12	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/16/2015 17:17	12/17/2015 08:12	SS
67-64-1	Acetone	ND		ug/kg dry	5.4	11	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/16/2015 17:17	12/17/2015 08:12	SS
107-02-8	Acrolein	ND		ug/kg dry	5.4	11	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/16/2015 17:17	12/17/2015 08:12	SS
107-13-1	Acrylonitrile	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/16/2015 17:17	12/17/2015 08:12	SS
71-43-2	Benzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/16/2015 17:17	12/17/2015 08:12	SS
74-97-5	Bromochloromethane	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	12/16/2015 17:17	12/17/2015 08:12	SS
75-27-4	Bromodichloromethane	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/16/2015 17:17	12/17/2015 08:12	SS
75-25-2	Bromoform	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/16/2015 17:17	12/17/2015 08:12	SS
74-83-9	Bromomethane	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/16/2015 17:17	12/17/2015 08:12	SS
75-15-0	Carbon disulfide	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/16/2015 17:17	12/17/2015 08:12	SS
56-23-5	Carbon tetrachloride	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/16/2015 17:17	12/17/2015 08:12	SS
108-90-7	Chlorobenzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/16/2015 17:17	12/17/2015 08:12	SS
75-00-3	Chloroethane	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/16/2015 17:17	12/17/2015 08:12	SS
67-66-3	Chloroform	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/16/2015 17:17	12/17/2015 08:12	SS
74-87-3	Chloromethane	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/16/2015 17:17	12/17/2015 08:12	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/16/2015 17:17	12/17/2015 08:12	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/16/2015 17:17	12/17/2015 08:12	SS
110-82-7	Cyclohexane	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	12/16/2015 17:17	12/17/2015 08:12	SS
124-48-1	Dibromochloromethane	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP,PADEP	12/16/2015 17:17	12/17/2015 08:12	SS
74-95-3	Dibromomethane	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	12/16/2015 17:17	12/17/2015 08:12	SS
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	12/16/2015 17:17	12/17/2015 08:12	SS

Sample Information

Client Sample ID: TWA-TP1 **York Sample ID:** 15L0442-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0442	TWA Flight Ctr Hotel 15-111-0324	Soil	December 10, 2015 1:00 pm	12/11/2015

Volatile Organics, 8260 - Comprehensive

Log-in Notes: VOA-CONT **Sample Notes:** VOA-CONT

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-41-4	Ethyl Benzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications:	12/16/2015 17:17	12/17/2015 08:12 CTDOH,NELAC-NY10854,NJDEP,PADEP	SS
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications:	12/16/2015 17:17	12/17/2015 08:12 NELAC-NY10854,NJDEP	SS
98-82-8	Isopropylbenzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications:	12/16/2015 17:17	12/17/2015 08:12 CTDOH,NELAC-NY10854,NJDEP	SS
79-20-9	Methyl acetate	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications:	12/16/2015 17:17	12/17/2015 08:12 NELAC-NY10854,NJDEP	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications:	12/16/2015 17:17	12/17/2015 08:12 CTDOH,NELAC-NY10854,NJDEP	SS
108-87-2	Methylcyclohexane	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications:	12/16/2015 17:17	12/17/2015 08:12 NELAC-NY10854,NJDEP	SS
75-09-2	Methylene chloride	ND		ug/kg dry	5.4	11	1	EPA 8260C Certifications:	12/16/2015 17:17	12/17/2015 08:12 CTDOH,NELAC-NY10854,NJDEP,PADEP	SS
104-51-8	n-Butylbenzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications:	12/16/2015 17:17	12/17/2015 08:12 CTDOH,NELAC-NY10854,NJDEP	SS
103-65-1	n-Propylbenzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications:	12/16/2015 17:17	12/17/2015 08:12 CTDOH,NELAC-NY10854,NJDEP	SS
95-47-6	o-Xylene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications:	12/16/2015 17:17	12/17/2015 08:12 CTDOH,NELAC-NY10854	SS
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	5.4	11	1	EPA 8260C Certifications:	12/16/2015 17:17	12/17/2015 08:12 CTDOH,NELAC-NY10854	SS
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications:	12/16/2015 17:17	12/17/2015 08:12 CTDOH,NELAC-NY10854,NJDEP	SS
135-98-8	sec-Butylbenzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications:	12/16/2015 17:17	12/17/2015 08:12 CTDOH,NELAC-NY10854,NJDEP	SS
100-42-5	Styrene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications:	12/16/2015 17:17	12/17/2015 08:12 CTDOH,NELAC-NY10854,NJDEP	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications:	12/16/2015 17:17	12/17/2015 08:12 NELAC-NY10854,NJDEP	SS
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications:	12/16/2015 17:17	12/17/2015 08:12 CTDOH,NELAC-NY10854,NJDEP	SS
127-18-4	Tetrachloroethylene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications:	12/16/2015 17:17	12/17/2015 08:12 CTDOH,NELAC-NY10854,NJDEP,PADEP	SS
108-88-3	Toluene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications:	12/16/2015 17:17	12/17/2015 08:12 CTDOH,NELAC-NY10854,NJDEP,PADEP	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications:	12/16/2015 17:17	12/17/2015 08:12 CTDOH,NELAC-NY10854,NJDEP	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications:	12/16/2015 17:17	12/17/2015 08:12 CTDOH,NELAC-NY10854,NJDEP,PADEP	SS
79-01-6	Trichloroethylene	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications:	12/16/2015 17:17	12/17/2015 08:12 CTDOH,NELAC-NY10854,NJDEP,PADEP	SS
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications:	12/16/2015 17:17	12/17/2015 08:12 CTDOH,NELAC-NY10854,NJDEP,PADEP	SS

Sample Information

Client Sample ID: TWA-TP1 **York Sample ID:** 15L0442-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0442	TWA Flight Ctr Hotel 15-111-0324	Soil	December 10, 2015 1:00 pm	12/11/2015

Volatile Organics, 8260 - Comprehensive

Log-in Notes: VOA-CONT **Sample Notes:** VOA-CONT

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/kg dry	2.7	5.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/16/2015 17:17	12/17/2015 08:12	SS
1330-20-7	Xylenes, Total	ND		ug/kg dry	8.1	16	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/16/2015 17:17	12/17/2015 08:12	SS

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: 1,2-Dichloroethane-d4*	*99.6 %*	*77-125*
2037-26-5	*Surrogate: Toluene-d8*	*99.5 %*	*85-120*
460-00-4	*Surrogate: p-Bromofluorobenzene*	*101 %*	*76-130*

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1'-Biphenyl	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP	12/17/2015 08:26	12/18/2015 14:11	KH
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		ug/kg dry	89.8	179	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP	12/17/2015 08:26	12/18/2015 14:11	KH
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 14:11	KH
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications: NELAC-NY10854	12/17/2015 08:26	12/18/2015 14:11	KH
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP	12/17/2015 08:26	12/18/2015 14:11	KH
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications: NELAC-NY10854	12/17/2015 08:26	12/18/2015 14:11	KH
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications: NELAC-NY10854	12/17/2015 08:26	12/18/2015 14:11	KH
58-90-2	2,3,4,6-Tetrachlorophenol	ND		ug/kg dry	89.8	179	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP	12/17/2015 08:26	12/18/2015 14:11	KH
95-95-4	2,4,5-Trichlorophenol	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP	12/17/2015 08:26	12/18/2015 14:11	KH
88-06-2	2,4,6-Trichlorophenol	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 14:11	KH
120-83-2	2,4-Dichlorophenol	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 14:11	KH
105-67-9	2,4-Dimethylphenol	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 14:11	KH
51-28-5	2,4-Dinitrophenol	ND		ug/kg dry	89.8	179	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 14:11	KH
121-14-2	2,4-Dinitrotoluene	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 14:11	KH
606-20-2	2,6-Dinitrotoluene	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 14:11	KH

Sample Information

Client Sample ID: TWA-TP1 **York Sample ID:** 15L0442-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0442	TWA Flight Ctr Hotel 15-111-0324	Soil	December 10, 2015 1:00 pm	12/11/2015

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-58-7	2-Chloronaphthalene	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:11	KH
95-57-8	2-Chlorophenol	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:11	KH
91-57-6	2-Methylnaphthalene	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP	12/18/2015 14:11	KH
95-48-7	2-Methylphenol	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:11	KH
88-74-4	2-Nitroaniline	ND		ug/kg dry	89.8	179	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:11	KH
88-75-5	2-Nitrophenol	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:11	KH
65794-96-9	3- & 4-Methylphenols	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP	12/18/2015 14:11	KH
91-94-1	3,3'-Dichlorobenzidine	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications:	12/17/2015 08:26 NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:11	KH
99-09-2	3-Nitroaniline	ND		ug/kg dry	89.8	179	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:11	KH
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/kg dry	89.8	179	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP	12/18/2015 14:11	KH
101-55-3	4-Bromophenyl phenyl ether	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:11	KH
59-50-7	4-Chloro-3-methylphenol	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:11	KH
106-47-8	4-Chloroaniline	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:11	KH
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:11	KH
100-01-6	4-Nitroaniline	ND		ug/kg dry	89.8	179	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:11	KH
100-02-7	4-Nitrophenol	ND		ug/kg dry	89.8	179	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:11	KH
83-32-9	Acenaphthene	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:11	KH
208-96-8	Acenaphthylene	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:11	KH
98-86-2	Acetophenone	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications:	12/17/2015 08:26 NELAC-NY10854,NJDEP	12/18/2015 14:11	KH
62-53-3	Aniline	ND		ug/kg dry	180	360	2	EPA 8270D Certifications:	12/17/2015 08:26 NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:11	KH
120-12-7	Anthracene	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:11	KH
1912-24-9	Atrazine	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications:	12/17/2015 08:26 NELAC-NY10854,NJDEP	12/18/2015 14:11	KH

Sample Information

Client Sample ID: TWA-TP1 **York Sample ID:** 15L0442-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0442	TWA Flight Ctr Hotel 15-111-0324	Soil	December 10, 2015 1:00 pm	12/11/2015

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-52-7	Benzaldehyde	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP	12/17/2015 08:26	12/18/2015 14:11	KH
92-87-5	Benzidine	ND		ug/kg dry	180	360	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854	12/17/2015 08:26	12/18/2015 14:11	KH
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 14:11	KH
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 14:11	KH
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 14:11	KH
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 14:11	KH
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 14:11	KH
65-85-0	Benzoic acid	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP	12/17/2015 08:26	12/18/2015 14:11	KH
100-51-6	Benzyl alcohol	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 14:11	KH
85-68-7	**Benzyl butyl phthalate**	**99.8**		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 14:11	KH
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 14:11	KH
111-44-4	Bis(2-chloroethyl)ether	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 14:11	KH
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 14:11	KH
117-81-7	Bis(2-ethylhexyl)phthalate	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 14:11	KH
105-60-2	Caprolactam	ND		ug/kg dry	89.8	179	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP	12/17/2015 08:26	12/18/2015 14:11	KH
86-74-8	Carbazole	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 14:11	KH
218-01-9	Chrysene	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 14:11	KH
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 14:11	KH
132-64-9	Dibenzofuran	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP	12/17/2015 08:26	12/18/2015 14:11	KH
84-66-2	Diethyl phthalate	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 14:11	KH
131-11-3	Dimethyl phthalate	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 14:11	KH
84-74-2	Di-n-butyl phthalate	ND		ug/kg dry	45.0	89.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 14:11	KH

Sample Information

Client Sample ID: TWA-TP1 **York Sample ID:** 15L0442-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0442	TWA Flight Ctr Hotel 15-111-0324	Soil	December 10, 2015 1:00 pm	12/11/2015

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
117-84-0	Di-n-octyl phthalate	ND		ug/kg dry	45.0	89.8	2	EPA 8270D	12/17/2015 08:26	12/18/2015 14:11	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
206-44-0	Fluoranthene	ND		ug/kg dry	45.0	89.8	2	EPA 8270D	12/17/2015 08:26	12/18/2015 14:11	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
86-73-7	Fluorene	ND		ug/kg dry	45.0	89.8	2	EPA 8270D	12/17/2015 08:26	12/18/2015 14:11	KH
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
118-74-1	Hexachlorobenzene	ND		ug/kg dry	45.0	89.8	2	EPA 8270D	12/17/2015 08:26	12/18/2015 14:11	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	45.0	89.8	2	EPA 8270D	12/17/2015 08:26	12/18/2015 14:11	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
77-47-4	Hexachlorocyclopentadiene	ND		ug/kg dry	45.0	89.8	2	EPA 8270D	12/17/2015 08:26	12/18/2015 14:11	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
67-72-1	Hexachloroethane	ND		ug/kg dry	45.0	89.8	2	EPA 8270D	12/17/2015 08:26	12/18/2015 14:11	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	45.0	89.8	2	EPA 8270D	12/17/2015 08:26	12/18/2015 14:11	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
78-59-1	Isophorone	ND		ug/kg dry	45.0	89.8	2	EPA 8270D	12/17/2015 08:26	12/18/2015 14:11	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
91-20-3	Naphthalene	ND		ug/kg dry	45.0	89.8	2	EPA 8270D	12/17/2015 08:26	12/18/2015 14:11	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
98-95-3	Nitrobenzene	ND		ug/kg dry	45.0	89.8	2	EPA 8270D	12/17/2015 08:26	12/18/2015 14:11	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
62-75-9	N-Nitrosodimethylamine	ND		ug/kg dry	45.0	89.8	2	EPA 8270D	12/17/2015 08:26	12/18/2015 14:11	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
621-64-7	N-nitroso-di-n-propylamine	ND		ug/kg dry	45.0	89.8	2	EPA 8270D	12/17/2015 08:26	12/18/2015 14:11	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
86-30-6	N-Nitrosodiphenylamine	ND		ug/kg dry	45.0	89.8	2	EPA 8270D	12/17/2015 08:26	12/18/2015 14:11	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
87-86-5	Pentachlorophenol	ND		ug/kg dry	45.0	89.8	2	EPA 8270D	12/17/2015 08:26	12/18/2015 14:11	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
85-01-8	Phenanthrene	ND		ug/kg dry	45.0	89.8	2	EPA 8270D	12/17/2015 08:26	12/18/2015 14:11	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
108-95-2	Phenol	ND		ug/kg dry	45.0	89.8	2	EPA 8270D	12/17/2015 08:26	12/18/2015 14:11	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
129-00-0	Pyrene	ND		ug/kg dry	45.0	89.8	2	EPA 8270D	12/17/2015 08:26	12/18/2015 14:11	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

	Surrogate Recoveries	Result	Acceptance Range
367-12-4	*Surrogate: 2-Fluorophenol*	*38.2 %*	*20-108*
4165-62-2	*Surrogate: Phenol-d5*	*41.6 %*	*23-114*
4165-60-0	*Surrogate: Nitrobenzene-d5*	*36.7 %*	*22-108*
321-60-8	*Surrogate: 2-Fluorobiphenyl*	*41.6 %*	*21-113*
118-79-6	*Surrogate: 2,4,6-Tribromophenol*	*38.0 %*	*19-110*
1718-51-0	*Surrogate: Terphenyl-d14*	*43.7 %*	*24-116*

Sample Information

Client Sample ID: **TWA-TP1** **York Sample ID:** **15L0442-02**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0442	TWA Flight Ctr Hotel 15-111-0324	Soil	December 10, 2015 1:00 pm	12/11/2015

Pesticides, 8081 target list

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND		ug/kg dry	1.78	1.78	5	EPA 8081B	12/16/2015 08:27	12/16/2015 23:10	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
72-55-9	4,4'-DDE	ND		ug/kg dry	1.78	1.78	5	EPA 8081B	12/16/2015 08:27	12/16/2015 23:10	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
50-29-3	4,4'-DDT	ND		ug/kg dry	1.78	1.78	5	EPA 8081B	12/16/2015 08:27	12/16/2015 23:10	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
309-00-2	Aldrin	ND		ug/kg dry	1.78	1.78	5	EPA 8081B	12/16/2015 08:27	12/16/2015 23:10	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
319-84-6	alpha-BHC	ND		ug/kg dry	1.78	1.78	5	EPA 8081B	12/16/2015 08:27	12/16/2015 23:10	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
5103-71-9	alpha-Chlordane	ND		ug/kg dry	1.78	1.78	5	EPA 8081B	12/16/2015 08:27	12/16/2015 23:10	AMC
								Certifications:	NELAC-NY10854,NJDEP		
319-85-7	beta-BHC	ND		ug/kg dry	1.78	1.78	5	EPA 8081B	12/16/2015 08:27	12/16/2015 23:10	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
57-74-9	Chlordane, total	ND		ug/kg dry	71.1	71.1	5	EPA 8081B	12/16/2015 08:27	12/16/2015 23:10	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
319-86-8	delta-BHC	ND		ug/kg dry	1.78	1.78	5	EPA 8081B	12/16/2015 08:27	12/16/2015 23:10	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
60-57-1	Dieldrin	ND		ug/kg dry	1.78	1.78	5	EPA 8081B	12/16/2015 08:27	12/16/2015 23:10	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
959-98-8	Endosulfan I	ND		ug/kg dry	1.78	1.78	5	EPA 8081B	12/16/2015 08:27	12/16/2015 23:10	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
33213-65-9	Endosulfan II	ND		ug/kg dry	1.78	1.78	5	EPA 8081B	12/16/2015 08:27	12/16/2015 23:10	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
1031-07-8	Endosulfan sulfate	ND		ug/kg dry	1.78	1.78	5	EPA 8081B	12/16/2015 08:27	12/16/2015 23:10	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
72-20-8	Endrin	ND		ug/kg dry	1.78	1.78	5	EPA 8081B	12/16/2015 08:27	12/16/2015 23:10	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7421-93-4	Endrin aldehyde	ND		ug/kg dry	1.78	1.78	5	EPA 8081B	12/16/2015 08:27	12/16/2015 23:10	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
53494-70-5	Endrin ketone	ND		ug/kg dry	1.78	1.78	5	EPA 8081B	12/16/2015 08:27	12/16/2015 23:10	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
58-89-9	gamma-BHC (Lindane)	ND		ug/kg dry	1.78	1.78	5	EPA 8081B	12/16/2015 08:27	12/16/2015 23:10	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
5566-34-7	gamma-Chlordane	ND		ug/kg dry	1.78	1.78	5	EPA 8081B	12/16/2015 08:27	12/16/2015 23:10	AMC
								Certifications:	NELAC-NY10854,NJDEP		
76-44-8	Heptachlor	ND		ug/kg dry	1.78	1.78	5	EPA 8081B	12/16/2015 08:27	12/16/2015 23:10	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
1024-57-3	Heptachlor epoxide	ND		ug/kg dry	1.78	1.78	5	EPA 8081B	12/16/2015 08:27	12/16/2015 23:10	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
72-43-5	Methoxychlor	ND		ug/kg dry	8.88	8.88	5	EPA 8081B	12/16/2015 08:27	12/16/2015 23:10	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Sample Information

Client Sample ID: TWA-TP1 **York Sample ID:** 15L0442-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0442	TWA Flight Ctr Hotel 15-111-0324	Soil	December 10, 2015 1:00 pm	12/11/2015

Pesticides, 8081 target list

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
8001-35-2	Toxaphene	ND		ug/kg dry	89.9	89.9	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP	12/16/2015 08:27	12/16/2015 23:10	AMC

	Surrogate Recoveries	Result	Acceptance Range
877-09-8	*Surrogate: Tetrachloro-m-xylene*	*58.0 %*	*30-140*
2051-24-3	*Surrogate: Decachlorobiphenyl*	*43.7 %*	*30-140*

Polychlorinated Biphenyls (PCB)

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		mg/kg dry	0.0179	0.0179	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	12/16/2015 08:27	12/16/2015 20:08	AMC
11104-28-2	Aroclor 1221	ND		mg/kg dry	0.0179	0.0179	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	12/16/2015 08:27	12/16/2015 20:08	AMC
11141-16-5	Aroclor 1232	ND		mg/kg dry	0.0179	0.0179	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	12/16/2015 08:27	12/16/2015 20:08	AMC
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0179	0.0179	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	12/16/2015 08:27	12/16/2015 20:08	AMC
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0179	0.0179	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	12/16/2015 08:27	12/16/2015 20:08	AMC
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0179	0.0179	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	12/16/2015 08:27	12/16/2015 20:08	AMC
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0179	0.0179	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	12/16/2015 08:27	12/16/2015 20:08	AMC
1336-36-3	* Total PCBs	ND		mg/kg dry	0.0179	0.0179	1	EPA 8082A Certifications:	12/16/2015 08:27	12/16/2015 20:08	AMC

	Surrogate Recoveries	Result	Acceptance Range
877-09-8	*Surrogate: Tetrachloro-m-xylene*	*58.7 %*	*30-140*
2051-24-3	*Surrogate: Decachlorobiphenyl*	*62.8 %*	*30-140*

NJDEP EPH (Cat. 2 Non-Fractionated)

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	* Total EPH	ND		mg/kg dry	53.8	53.8	1	NJDEP EPH Rev 3.0 Certifications: NJDEP	12/17/2015 08:34	12/17/2015 19:49	AMC

	Surrogate Recoveries	Result	Acceptance Range
3386-33-2	*Surrogate: 1-Chlorooctadecane*	*84.6 %*	*40-140*
84-15-1	*Surrogate: o-Terphenyl*	*84.5 %*	*40-140*

Sample Information

Client Sample ID: **TWA-TP1** **York Sample ID:** **15L0442-02**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0442	TWA Flight Ctr Hotel 15-111-0324	Soil	December 10, 2015 1:00 pm	12/11/2015

Metals, Target Analyte

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	**Aluminum**	**2820**		mg/kg dry	5.38	5.38	1	EPA 6010C Certifications:	12/14/2015 10:10 CTDOH,NELAC-NY10854,NJDEP	12/14/2015 22:06	ALD
7440-36-0	Antimony	ND		mg/kg dry	0.538	0.538	1	EPA 6010C Certifications:	12/14/2015 10:10 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/14/2015 22:06	ALD
7440-38-2	**Arsenic**	**1.83**		mg/kg dry	1.08	1.08	1	EPA 6010C Certifications:	12/14/2015 10:10 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/14/2015 22:06	ALD
7440-39-3	**Barium**	**19.1**		mg/kg dry	1.08	1.08	1	EPA 6010C Certifications:	12/14/2015 10:10 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/14/2015 22:06	ALD
7440-41-7	Beryllium	ND		mg/kg dry	0.108	0.108	1	EPA 6010C Certifications:	12/14/2015 10:10 CTDOH,NELAC-NY10854,NJDEP	12/14/2015 22:06	ALD
7440-43-9	Cadmium	ND		mg/kg dry	0.323	0.323	1	EPA 6010C Certifications:	12/14/2015 10:10 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/14/2015 22:06	ALD
7440-70-2	**Calcium**	**10200**		mg/kg dry	0.538	5.38	1	EPA 6010C Certifications:	12/14/2015 10:10 CTDOH,NELAC-NY10854,NJDEP	12/14/2015 22:06	ALD
7440-47-3	**Chromium**	**8.05**		mg/kg dry	0.538	0.538	1	EPA 6010C Certifications:	12/14/2015 10:10 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/14/2015 22:06	ALD
7440-48-4	**Cobalt**	**2.28**		mg/kg dry	0.538	0.538	1	EPA 6010C Certifications:	12/14/2015 10:10 CTDOH,NELAC-NY10854,NJDEP	12/14/2015 22:06	ALD
7440-50-8	**Copper**	**5.22**		mg/kg dry	0.538	0.538	1	EPA 6010C Certifications:	12/14/2015 10:10 CTDOH,NELAC-NY10854,NJDEP	12/14/2015 22:06	ALD
7439-89-6	**Iron**	**6190**		mg/kg dry	2.15	2.15	1	EPA 6010C Certifications:	12/14/2015 10:10 CTDOH,NELAC-NY10854,NJDEP	12/14/2015 22:06	ALD
7439-92-1	**Lead**	**8.09**		mg/kg dry	0.323	0.323	1	EPA 6010C Certifications:	12/14/2015 10:10 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/14/2015 22:06	ALD
7439-95-4	**Magnesium**	**1410**		mg/kg dry	5.38	5.38	1	EPA 6010C Certifications:	12/14/2015 10:10 CTDOH,NELAC-NY10854,NJDEP	12/14/2015 22:06	ALD
7439-96-5	**Manganese**	**57.8**		mg/kg dry	0.538	0.538	1	EPA 6010C Certifications:	12/14/2015 10:10 CTDOH,NELAC-NY10854,NJDEP	12/14/2015 22:06	ALD
7440-02-0	**Nickel**	**5.75**		mg/kg dry	0.538	0.538	1	EPA 6010C Certifications:	12/14/2015 10:10 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/14/2015 22:06	ALD
7440-09-7	**Potassium**	**727**		mg/kg dry	5.38	5.38	1	EPA 6010C Certifications:	12/14/2015 10:10 CTDOH,NELAC-NY10854,NJDEP	12/14/2015 22:06	ALD
7782-49-2	Selenium	ND		mg/kg dry	1.08	1.08	1	EPA 6010C Certifications:	12/14/2015 10:10 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/14/2015 22:06	ALD
7440-22-4	Silver	ND		mg/kg dry	0.538	0.538	1	EPA 6010C Certifications:	12/14/2015 10:10 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/14/2015 22:06	ALD
7440-23-5	**Sodium**	**69.5**		mg/kg dry	10.8	10.8	1	EPA 6010C Certifications:	12/14/2015 10:10 CTDOH,NELAC-NY10854,NJDEP	12/14/2015 22:06	ALD
7440-28-0	Thallium	ND		mg/kg dry	1.08	1.08	1	EPA 6010C Certifications:	12/14/2015 10:10 CTDOH,NELAC-NY10854,NJDEP	12/14/2015 22:06	ALD
7440-62-2	**Vanadium**	**11.0**		mg/kg dry	1.08	1.08	1	EPA 6010C Certifications:	12/14/2015 10:10 CTDOH,NELAC-NY10854,NJDEP	12/14/2015 22:06	ALD
7440-66-6	**Zinc**	**16.1**		mg/kg dry	1.08	1.08	1	EPA 6010C Certifications:	12/14/2015 10:10 CTDOH,NELAC-NY10854,NJDEP	12/14/2015 22:06	ALD

Metals, TCLP RCRA

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Information

Client Sample ID: TWA-TP1 **York Sample ID:** 15L0442-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0442	TWA Flight Ctr Hotel 15-111-0324	Soil	December 10, 2015 1:00 pm	12/11/2015

Sample Prepared by Method: EPA 3015A/1311

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	ND		mg/L	0.004	0.004	1	EPA 6010C/1311	12/17/2015 13:20	12/18/2015 02:06	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-39-3	**Barium**	**0.177**		mg/L	0.011	0.011	1	EPA 6010C/1311	12/17/2015 13:20	12/18/2015 02:06	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-43-9	Cadmium	ND		mg/L	0.003	0.003	1	EPA 6010C/1311	12/17/2015 13:20	12/18/2015 02:06	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-47-3	Chromium	ND		mg/L	0.006	0.006	1	EPA 6010C/1311	12/17/2015 13:20	12/18/2015 02:06	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7439-92-1	**Lead**	**0.004**	B	mg/L	0.003	0.003	1	EPA 6010C/1311	12/17/2015 13:20	12/18/2015 02:06	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7782-49-2	**Selenium**	**0.024**	M-SeT C, B	mg/L	0.011	0.011	1	EPA 6010C/1311	12/17/2015 13:20	12/18/2015 02:06	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-22-4	Silver	ND		mg/L	0.006	0.006	1	EPA 6010C/1311	12/17/2015 13:20	12/18/2015 02:06	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

Mercury by 7470/7471

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: EPA SW846-7471

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/kg dry	0.0355	0.0355	1	EPA 7471B	12/16/2015 23:41	12/16/2015 23:41	AA
								Certifications: CTDOH,NJDEP,NELAC-NY10854,PADEP			

Mercury TCLP by 7473

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: EPA 7473 water

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.0000390	0.000200	1	EPA 7473/1311	12/16/2015 13:25	12/17/2015 13:52	ALD
								Certifications: CTDOH,NJDEP,PADEP,NELAC-NY10854			

Ignitability

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	* Ignitability	Non-Ignit.		-	1	1	1	EPA 1030P	12/17/2015 17:32	12/17/2015 20:22	AA
								Certifications: CTDOH,PADEP			

Paint Filter Test

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	* Paint Filter Test	No Free Liquid		-	0	0	1	EPA 9095A	12/15/2015 14:24	12/15/2015 15:36	AA
								Certifications:			

Total Solids

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst

Sample Information

Client Sample ID: TWA-TP1 **York Sample ID:** 15L0442-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0442	TWA Flight Ctr Hotel 15-111-0324	Soil	December 10, 2015 1:00 pm	12/11/2015

Total Solids

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**92.9**		%	0.100	0.100	1	SM 2540G	12/12/2015 20:44	12/14/2015 12:34	KK
								Certifications: CTDOH			

Chromium, Hexavalent

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: EPA SW846-3060

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
18540-29-9	Chromium, Hexavalent	ND		mg/kg dry	0.377	0.538	1	EPA 7196A	12/15/2015 07:42	12/15/2015 14:24	SC
								Certifications: NJDEP,CTDOH,NELAC-NY10854			

Chromium, Trivalent

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16065-83-1	*** Chromium, Trivalent**	**8.05**		mg/kg	0.250	0.500	1	Calculation	12/17/2015 15:25	12/17/2015 15:28	SC
								Certifications:			

Corrosivity

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	pH	**9.32**	HT-pH	pH units		0.500	1	EPA 9045D	12/18/2015 12:00	12/18/2015 14:35	KK
								Certifications: NELAC-NY10854,CTDOH,PADEP			

Reactivity-Cyanide

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	* Reactivity - Cyanide	ND		mg/kg	0.250	0.250	1	EPA SW-846 Ch.7.3.3	12/17/2015 11:28	12/17/2015 13:43	AD
								Certifications: CTDOH,PADEP			

Reactivity-Sulfide

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	* Reactivity - Sulfide	ND		mg/kg	15.0	15.0	1	EPA SW-846 Ch.7.3.4	12/17/2015 12:37	12/17/2015 14:01	AD
								Certifications: CTDOH,PADEP			

TCLP Extraction for METALS EPA 1311

Log-in Notes: VOA-CONT **Sample Notes:** EXT-Temp

Sample Prepared by Method: EPA SW 846-1311 TCLP ext. for metals

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	TCLP Extraction	Completed		N/A	1.00	1.00	1	EPA 1311	12/14/2015 17:26	12/15/2015 13:47	CLS
								Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP			

Sample Information

Client Sample ID: **TWA-RB2,TB2,TB1** **York Sample ID:** **15L0442-03**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0442	TWA Flight Ctr Hotel 15-111-0324	Soil	December 10, 2015 4:30 pm	12/11/2015

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1'-Biphenyl	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications:	12/17/2015 08:26 NELAC-NY10854,NJDEP	12/18/2015 14:42	KH
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		ug/kg dry	97.5	195	2	EPA 8270D Certifications:	12/17/2015 08:26 NELAC-NY10854,NJDEP	12/18/2015 14:42	KH
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:42	KH
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications:	12/17/2015 08:26 NELAC-NY10854	12/18/2015 14:42	KH
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications:	12/17/2015 08:26 NELAC-NY10854,NJDEP	12/18/2015 14:42	KH
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications:	12/17/2015 08:26 NELAC-NY10854	12/18/2015 14:42	KH
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications:	12/17/2015 08:26 NELAC-NY10854	12/18/2015 14:42	KH
58-90-2	2,3,4,6-Tetrachlorophenol	ND		ug/kg dry	97.5	195	2	EPA 8270D Certifications:	12/17/2015 08:26 NELAC-NY10854,NJDEP	12/18/2015 14:42	KH
95-95-4	2,4,5-Trichlorophenol	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP	12/18/2015 14:42	KH
88-06-2	2,4,6-Trichlorophenol	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:42	KH
120-83-2	2,4-Dichlorophenol	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:42	KH
105-67-9	2,4-Dimethylphenol	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:42	KH
51-28-5	2,4-Dinitrophenol	ND		ug/kg dry	97.5	195	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:42	KH
121-14-2	2,4-Dinitrotoluene	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:42	KH
606-20-2	2,6-Dinitrotoluene	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:42	KH
91-58-7	2-Chloronaphthalene	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:42	KH
95-57-8	2-Chlorophenol	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:42	KH
91-57-6	2-Methylnaphthalene	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP	12/18/2015 14:42	KH
95-48-7	2-Methylphenol	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:42	KH
88-74-4	2-Nitroaniline	ND		ug/kg dry	97.5	195	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:42	KH
88-75-5	2-Nitrophenol	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:42	KH

Sample Information

Client Sample ID: TWA-RB2,TB2,TB1 **York Sample ID:** 15L0442-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0442	TWA Flight Ctr Hotel 15-111-0324	Soil	December 10, 2015 4:30 pm	12/11/2015

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
65794-96-9	3- & 4-Methylphenols	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP	12/17/2015 08:26	12/18/2015 14:42	KH
91-94-1	3,3'-Dichlorobenzidine	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 14:42	KH
99-09-2	3-Nitroaniline	ND		ug/kg dry	97.5	195	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 14:42	KH
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/kg dry	97.5	195	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP	12/17/2015 08:26	12/18/2015 14:42	KH
101-55-3	4-Bromophenyl phenyl ether	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 14:42	KH
59-50-7	4-Chloro-3-methylphenol	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 14:42	KH
106-47-8	4-Chloroaniline	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 14:42	KH
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 14:42	KH
100-01-6	4-Nitroaniline	ND		ug/kg dry	97.5	195	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 14:42	KH
100-02-7	4-Nitrophenol	ND		ug/kg dry	97.5	195	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 14:42	KH
83-32-9	Acenaphthene	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 14:42	KH
208-96-8	Acenaphthylene	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 14:42	KH
98-86-2	Acetophenone	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP	12/17/2015 08:26	12/18/2015 14:42	KH
62-53-3	Aniline	ND		ug/kg dry	195	391	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 14:42	KH
120-12-7	Anthracene	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 14:42	KH
1912-24-9	Atrazine	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP	12/17/2015 08:26	12/18/2015 14:42	KH
100-52-7	Benzaldehyde	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP	12/17/2015 08:26	12/18/2015 14:42	KH
92-87-5	Benzidine	ND		ug/kg dry	195	391	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854	12/17/2015 08:26	12/18/2015 14:42	KH
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 14:42	KH
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 14:42	KH
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 14:42	KH
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:26	12/18/2015 14:42	KH

Sample Information

Client Sample ID: TWA-RB2,TB2,TB1 **York Sample ID:** 15L0442-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0442	TWA Flight Ctr Hotel 15-111-0324	Soil	December 10, 2015 4:30 pm	12/11/2015

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:42	KH
65-85-0	Benzoic acid	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications:	12/17/2015 08:26 NELAC-NY10854,NJDEP	12/18/2015 14:42	KH
100-51-6	Benzyl alcohol	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications:	12/17/2015 08:26 NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:42	KH
85-68-7	Benzyl butyl phthalate	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:42	KH
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:42	KH
111-44-4	Bis(2-chloroethyl)ether	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:42	KH
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:42	KH
117-81-7	Bis(2-ethylhexyl)phthalate	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:42	KH
105-60-2	Caprolactam	ND		ug/kg dry	97.5	195	2	EPA 8270D Certifications:	12/17/2015 08:26 NELAC-NY10854,NJDEP	12/18/2015 14:42	KH
86-74-8	Carbazole	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:42	KH
218-01-9	Chrysene	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:42	KH
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:42	KH
132-64-9	Dibenzofuran	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP	12/18/2015 14:42	KH
84-66-2	Diethyl phthalate	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:42	KH
131-11-3	Dimethyl phthalate	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:42	KH
84-74-2	Di-n-butyl phthalate	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:42	KH
117-84-0	Di-n-octyl phthalate	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:42	KH
206-44-0	Fluoranthene	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:42	KH
86-73-7	Fluorene	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications:	12/17/2015 08:26 NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:42	KH
118-74-1	Hexachlorobenzene	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:42	KH
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:42	KH
77-47-4	Hexachlorocyclopentadiene	ND		ug/kg dry	48.9	97.5	2	EPA 8270D Certifications:	12/17/2015 08:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 14:42	KH

Sample Information

Client Sample ID: TWA-RB2,TB2,TB1 **York Sample ID:** 15L0442-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0442	TWA Flight Ctr Hotel 15-111-0324	Soil	December 10, 2015 4:30 pm	12/11/2015

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
67-72-1	Hexachloroethane	ND		ug/kg dry	48.9	97.5	2	EPA 8270D	12/17/2015 08:26	12/18/2015 14:42	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	48.9	97.5	2	EPA 8270D	12/17/2015 08:26	12/18/2015 14:42	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
78-59-1	Isophorone	ND		ug/kg dry	48.9	97.5	2	EPA 8270D	12/17/2015 08:26	12/18/2015 14:42	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
91-20-3	Naphthalene	ND		ug/kg dry	48.9	97.5	2	EPA 8270D	12/17/2015 08:26	12/18/2015 14:42	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
98-95-3	Nitrobenzene	ND		ug/kg dry	48.9	97.5	2	EPA 8270D	12/17/2015 08:26	12/18/2015 14:42	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
62-75-9	N-Nitrosodimethylamine	ND		ug/kg dry	48.9	97.5	2	EPA 8270D	12/17/2015 08:26	12/18/2015 14:42	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
621-64-7	N-nitroso-di-n-propylamine	ND		ug/kg dry	48.9	97.5	2	EPA 8270D	12/17/2015 08:26	12/18/2015 14:42	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
86-30-6	N-Nitrosodiphenylamine	ND		ug/kg dry	48.9	97.5	2	EPA 8270D	12/17/2015 08:26	12/18/2015 14:42	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
87-86-5	Pentachlorophenol	ND		ug/kg dry	48.9	97.5	2	EPA 8270D	12/17/2015 08:26	12/18/2015 14:42	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
85-01-8	Phenanthrene	ND		ug/kg dry	48.9	97.5	2	EPA 8270D	12/17/2015 08:26	12/18/2015 14:42	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
108-95-2	Phenol	ND		ug/kg dry	48.9	97.5	2	EPA 8270D	12/17/2015 08:26	12/18/2015 14:42	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
129-00-0	Pyrene	ND		ug/kg dry	48.9	97.5	2	EPA 8270D	12/17/2015 08:26	12/18/2015 14:42	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

	Surrogate Recoveries	Result	Acceptance Range
367-12-4	*Surrogate: 2-Fluorophenol*	*40.1 %*	*20-108*
4165-62-2	*Surrogate: Phenol-d5*	*44.8 %*	*23-114*
4165-60-0	*Surrogate: Nitrobenzene-d5*	*39.8 %*	*22-108*
321-60-8	*Surrogate: 2-Fluorobiphenyl*	*43.7 %*	*21-113*
118-79-6	*Surrogate: 2,4,6-Tribromophenol*	*43.6 %*	*19-110*
1718-51-0	*Surrogate: Terphenyl-d14*	*48.1 %*	*24-116*

Pesticides, 8081 target list

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND		ug/kg dry	1.93	1.93	5	EPA 8081B	12/16/2015 08:27	12/16/2015 23:22	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
72-55-9	4,4'-DDE	ND		ug/kg dry	1.93	1.93	5	EPA 8081B	12/16/2015 08:27	12/16/2015 23:22	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
50-29-3	4,4'-DDT	ND		ug/kg dry	1.93	1.93	5	EPA 8081B	12/16/2015 08:27	12/16/2015 23:22	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Sample Information

Client Sample ID: TWA-RB2,TB2,TB1 **York Sample ID:** 15L0442-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0442	TWA Flight Ctr Hotel 15-111-0324	Soil	December 10, 2015 4:30 pm	12/11/2015

Pesticides, 8081 target list

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
309-00-2	Aldrin	ND		ug/kg dry	1.93	1.93	5	EPA 8081B	12/16/2015 08:27	12/16/2015 23:22	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
319-84-6	alpha-BHC	ND		ug/kg dry	1.93	1.93	5	EPA 8081B	12/16/2015 08:27	12/16/2015 23:22	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
5103-71-9	alpha-Chlordane	ND		ug/kg dry	1.93	1.93	5	EPA 8081B	12/16/2015 08:27	12/16/2015 23:22	AMC
								Certifications: NELAC-NY10854,NJDEP			
319-85-7	beta-BHC	ND		ug/kg dry	1.93	1.93	5	EPA 8081B	12/16/2015 08:27	12/16/2015 23:22	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
57-74-9	Chlordane, total	ND		ug/kg dry	77.2	77.2	5	EPA 8081B	12/16/2015 08:27	12/16/2015 23:22	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
319-86-8	delta-BHC	ND		ug/kg dry	1.93	1.93	5	EPA 8081B	12/16/2015 08:27	12/16/2015 23:22	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
60-57-1	Dieldrin	ND		ug/kg dry	1.93	1.93	5	EPA 8081B	12/16/2015 08:27	12/16/2015 23:22	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
959-98-8	Endosulfan I	ND		ug/kg dry	1.93	1.93	5	EPA 8081B	12/16/2015 08:27	12/16/2015 23:22	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
33213-65-9	Endosulfan II	ND		ug/kg dry	1.93	1.93	5	EPA 8081B	12/16/2015 08:27	12/16/2015 23:22	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
1031-07-8	Endosulfan sulfate	ND		ug/kg dry	1.93	1.93	5	EPA 8081B	12/16/2015 08:27	12/16/2015 23:22	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
72-20-8	Endrin	ND		ug/kg dry	1.93	1.93	5	EPA 8081B	12/16/2015 08:27	12/16/2015 23:22	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7421-93-4	Endrin aldehyde	ND		ug/kg dry	1.93	1.93	5	EPA 8081B	12/16/2015 08:27	12/16/2015 23:22	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
53494-70-5	Endrin ketone	ND		ug/kg dry	1.93	1.93	5	EPA 8081B	12/16/2015 08:27	12/16/2015 23:22	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
58-89-9	gamma-BHC (Lindane)	ND		ug/kg dry	1.93	1.93	5	EPA 8081B	12/16/2015 08:27	12/16/2015 23:22	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
5566-34-7	gamma-Chlordane	ND		ug/kg dry	1.93	1.93	5	EPA 8081B	12/16/2015 08:27	12/16/2015 23:22	AMC
								Certifications: NELAC-NY10854,NJDEP			
76-44-8	Heptachlor	ND		ug/kg dry	1.93	1.93	5	EPA 8081B	12/16/2015 08:27	12/16/2015 23:22	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
1024-57-3	Heptachlor epoxide	ND		ug/kg dry	1.93	1.93	5	EPA 8081B	12/16/2015 08:27	12/16/2015 23:22	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
72-43-5	Methoxychlor	ND		ug/kg dry	9.65	9.65	5	EPA 8081B	12/16/2015 08:27	12/16/2015 23:22	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
8001-35-2	Toxaphene	ND		ug/kg dry	97.6	97.6	5	EPA 8081B	12/16/2015 08:27	12/16/2015 23:22	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP			

	Surrogate Recoveries	Result	Acceptance Range
877-09-8	*Surrogate: Tetrachloro-m-xylene*	*85.8 %*	*30-140*
2051-24-3	*Surrogate: Decachlorobiphenyl*	*61.6 %*	*30-140*

Polychlorinated Biphenyls (PCB)

Log-in Notes: **Sample Notes:**

Sample Information

Client Sample ID: TWA-RB2,TB2,TB1 **York Sample ID:** 15L0442-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0442	TWA Flight Ctr Hotel 15-111-0324	Soil	December 10, 2015 4:30 pm	12/11/2015

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		mg/kg dry	0.0195	0.0195	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	12/16/2015 08:27	12/16/2015 20:38	AMC
11104-28-2	Aroclor 1221	ND		mg/kg dry	0.0195	0.0195	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	12/16/2015 08:27	12/16/2015 20:38	AMC
11141-16-5	Aroclor 1232	ND		mg/kg dry	0.0195	0.0195	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	12/16/2015 08:27	12/16/2015 20:38	AMC
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0195	0.0195	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	12/16/2015 08:27	12/16/2015 20:38	AMC
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0195	0.0195	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	12/16/2015 08:27	12/16/2015 20:38	AMC
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0195	0.0195	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	12/16/2015 08:27	12/16/2015 20:38	AMC
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0195	0.0195	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	12/16/2015 08:27	12/16/2015 20:38	AMC
1336-36-3	* Total PCBs	ND		mg/kg dry	0.0195	0.0195	1	EPA 8082A Certifications:	12/16/2015 08:27	12/16/2015 20:38	AMC

	Surrogate Recoveries	Result	Acceptance Range
877-09-8	*Surrogate: Tetrachloro-m-xylene*	*72.1 %*	*30-140*
2051-24-3	*Surrogate: Decachlorobiphenyl*	*72.5 %*	*30-140*

NJDEP EPH (Cat. 2 Non-Fractionated)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	* Total EPH	ND		mg/kg dry	58.5	58.5	1	NJDEP EPH Rev 3.0 Certifications: NJDEP	12/17/2015 08:34	12/17/2015 20:17	AMC

	Surrogate Recoveries	Result	Acceptance Range
3386-33-2	*Surrogate: 1-Chlorooctadecane*	*71.1 %*	*40-140*
84-15-1	*Surrogate: o-Terphenyl*	*70.2 %*	*40-140*

Metals, Target Analyte

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	**Aluminum**	**2150**		mg/kg dry	5.85	5.85	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/14/2015 10:10	12/14/2015 22:11	ALD
7440-36-0	Antimony	ND		mg/kg dry	0.585	0.585	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/14/2015 10:10	12/14/2015 22:11	ALD
7440-38-2	Arsenic	ND		mg/kg dry	1.17	1.17	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/14/2015 10:10	12/14/2015 22:11	ALD
7440-39-3	**Barium**	**11.3**		mg/kg dry	1.17	1.17	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/14/2015 10:10	12/14/2015 22:11	ALD

Sample Information

Client Sample ID: **TWA-RB2,TB2,TB1** **York Sample ID:** **15L0442-03**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0442	TWA Flight Ctr Hotel 15-111-0324	Soil	December 10, 2015 4:30 pm	12/11/2015

Metals, Target Analyte

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-41-7	Beryllium	ND		mg/kg dry	0.117	0.117	1	EPA 6010C	12/14/2015 10:10	12/14/2015 22:11	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-43-9	Cadmium	ND		mg/kg dry	0.351	0.351	1	EPA 6010C	12/14/2015 10:10	12/14/2015 22:11	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-70-2	**Calcium**	**529**		mg/kg dry	0.585	5.85	1	EPA 6010C	12/14/2015 10:10	12/14/2015 22:11	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-47-3	**Chromium**	**6.14**		mg/kg dry	0.585	0.585	1	EPA 6010C	12/14/2015 10:10	12/14/2015 22:11	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-48-4	**Cobalt**	**2.03**		mg/kg dry	0.585	0.585	1	EPA 6010C	12/14/2015 10:10	12/14/2015 22:11	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-50-8	**Copper**	**1.83**		mg/kg dry	0.585	0.585	1	EPA 6010C	12/14/2015 10:10	12/14/2015 22:11	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7439-89-6	**Iron**	**4030**		mg/kg dry	2.34	2.34	1	EPA 6010C	12/14/2015 10:10	12/14/2015 22:11	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7439-92-1	**Lead**	**1.59**		mg/kg dry	0.351	0.351	1	EPA 6010C	12/14/2015 10:10	12/14/2015 22:11	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7439-95-4	**Magnesium**	**724**		mg/kg dry	5.85	5.85	1	EPA 6010C	12/14/2015 10:10	12/14/2015 22:11	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7439-96-5	**Manganese**	**29.9**		mg/kg dry	0.585	0.585	1	EPA 6010C	12/14/2015 10:10	12/14/2015 22:11	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-02-0	**Nickel**	**5.25**		mg/kg dry	0.585	0.585	1	EPA 6010C	12/14/2015 10:10	12/14/2015 22:11	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-09-7	**Potassium**	**596**		mg/kg dry	5.85	5.85	1	EPA 6010C	12/14/2015 10:10	12/14/2015 22:11	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7782-49-2	Selenium	ND		mg/kg dry	1.17	1.17	1	EPA 6010C	12/14/2015 10:10	12/14/2015 22:11	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-22-4	Silver	ND		mg/kg dry	0.585	0.585	1	EPA 6010C	12/14/2015 10:10	12/14/2015 22:11	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-23-5	**Sodium**	**84.3**		mg/kg dry	11.7	11.7	1	EPA 6010C	12/14/2015 10:10	12/14/2015 22:11	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-28-0	Thallium	ND		mg/kg dry	1.17	1.17	1	EPA 6010C	12/14/2015 10:10	12/14/2015 22:11	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-62-2	**Vanadium**	**7.45**		mg/kg dry	1.17	1.17	1	EPA 6010C	12/14/2015 10:10	12/14/2015 22:11	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-66-6	**Zinc**	**7.95**		mg/kg dry	1.17	1.17	1	EPA 6010C	12/14/2015 10:10	12/14/2015 22:11	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP			

Metals, TCLP RCRA

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3015A/1311

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	ND		mg/L	0.004	0.004	1	EPA 6010C/1311	12/17/2015 13:20	12/18/2015 02:12	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-39-3	**Barium**	**0.090**		mg/L	0.011	0.011	1	EPA 6010C/1311	12/17/2015 13:20	12/18/2015 02:12	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-43-9	Cadmium	ND		mg/L	0.003	0.003	1	EPA 6010C/1311	12/17/2015 13:20	12/18/2015 02:12	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

Sample Information

Client Sample ID: TWA-RB2,TB2,TB1 **York Sample ID:** 15L0442-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0442	TWA Flight Ctr Hotel 15-111-0324	Soil	December 10, 2015 4:30 pm	12/11/2015

Metals, TCLP RCRA

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3015A/1311

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-47-3	Chromium	ND		mg/L	0.006	0.006	1	EPA 6010C/1311	12/17/2015 13:20	12/18/2015 02:12	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7439-92-1	**Lead**	**0.005**	B	mg/L	0.003	0.003	1	EPA 6010C/1311	12/17/2015 13:20	12/18/2015 02:12	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7782-49-2	**Selenium**	**0.015**	M-SeT C, B	mg/L	0.011	0.011	1	EPA 6010C/1311	12/17/2015 13:20	12/18/2015 02:12	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-22-4	Silver	ND		mg/L	0.006	0.006	1	EPA 6010C/1311	12/17/2015 13:20	12/18/2015 02:12	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

Mercury by 7470/7471

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA SW846-7471

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/kg dry	0.0386	0.0386	1	EPA 7471B	12/16/2015 23:41	12/16/2015 23:41	AA
								Certifications: CTDOH,NJDEP,NELAC-NY10854,PADEP			

Mercury TCLP by 7473

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 7473 water

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.0000390	0.000200	1	EPA 7473/1311	12/16/2015 13:25	12/17/2015 13:52	ALD
								Certifications: CTDOH,NJDEP,PADEP,NELAC-NY10854			

Ignitability

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	* Ignitability	Non-Ignit.		-	1	1	1	EPA 1030P	12/17/2015 17:32	12/17/2015 20:22	AA
								Certifications: CTDOH,PADEP			

Paint Filter Test

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	* Paint Filter Test	No Free Liquid		-	0	0	1	EPA 9095A	12/15/2015 14:24	12/15/2015 15:36	AA
								Certifications:			

Total Solids

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**85.5**		%	0.100	0.100	1	SM 2540G	12/12/2015 20:44	12/14/2015 12:34	KK
								Certifications: CTDOH			

Sample Information

Client Sample ID: TWA-RB2,TB2,TB1 **York Sample ID:** 15L0442-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0442	TWA Flight Ctr Hotel 15-111-0324	Soil	December 10, 2015 4:30 pm	12/11/2015

Chromium, Hexavalent

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA SW846-3060

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
18540-29-9	Chromium, Hexavalent	ND		mg/kg dry	0.409	0.585	1	EPA 7196A	12/15/2015 07:42	12/15/2015 14:24	SC
								Certifications: NJDEP,CTDOH,NELAC-NY10854			

Chromium, Trivalent

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16065-83-1	*** Chromium, Trivalent**	**6.14**		mg/kg	0.250	0.500	1	Calculation	12/17/2015 15:25	12/17/2015 15:28	SC
								Certifications:			

Corrosivity

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	pH	**4.31**	HT-pH	pH units		0.500	1	EPA 9045D	12/18/2015 12:00	12/18/2015 14:35	KK
								Certifications: NELAC-NY10854,CTDOH,PADEP			

Reactivity-Cyanide

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	* Reactivity - Cyanide	ND		mg/kg	0.250	0.250	1	EPA SW-846 Ch.7.3.3	12/17/2015 11:28	12/17/2015 13:43	AD
								Certifications: CTDOH,PADEP			

Reactivity-Sulfide

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	* Reactivity - Sulfide	ND		mg/kg	15.0	15.0	1	EPA SW-846 Ch.7.3.4	12/17/2015 12:37	12/17/2015 14:01	AD
								Certifications: CTDOH,PADEP			

TCLP Extraction for METALS EPA 1311

Log-in Notes: **Sample Notes:** **EXT-Temp**

Sample Prepared by Method: EPA SW 846-1311 TCLP ext. for metals

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	TCLP Extraction	Completed		N/A	1.00	1.00	1	EPA 1311	12/14/2015 17:26	12/15/2015 13:47	CLS
								Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP			

Sample Information

Client Sample ID: TWA-RB2 **York Sample ID:** 15L0442-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0442	TWA Flight Ctr Hotel 15-111-0324	Soil	December 10, 2015 4:30 pm	12/11/2015

Sample Information

Client Sample ID: **TWA-RB2** **York Sample ID:** **15L0442-04**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0442	TWA Flight Ctr Hotel 15-111-0324	Soil	December 10, 2015 4:30 pm	12/11/2015

Volatile Organics, 8260 - Comprehensive

Log-in Notes: VOA-CONT **Sample Notes:** **VOA-CONT**

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/17/2015 08:30	12/17/2015 17:14	BK
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:30	12/17/2015 17:14	BK
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:30	12/17/2015 17:14	BK
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/17/2015 08:30	12/17/2015 17:14	BK
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:30	12/17/2015 17:14	BK
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:30	12/17/2015 17:14	BK
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:30	12/17/2015 17:14	BK
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	12/17/2015 08:30	12/17/2015 17:14	BK
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	12/17/2015 08:30	12/17/2015 17:14	BK
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	12/17/2015 08:30	12/17/2015 17:14	BK
95-63-6	1,2,4-Trimethylbenzene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/17/2015 08:30	12/17/2015 17:14	BK
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/17/2015 08:30	12/17/2015 17:14	BK
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/17/2015 08:30	12/17/2015 17:14	BK
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:30	12/17/2015 17:14	BK
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:30	12/17/2015 17:14	BK
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/17/2015 08:30	12/17/2015 17:14	BK
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/17/2015 08:30	12/17/2015 17:14	BK
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:30	12/17/2015 17:14	BK
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 08:30	12/17/2015 17:14	BK
123-91-1	1,4-Dioxane	ND		ug/kg dry	59	120	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	12/17/2015 08:30	12/17/2015 17:14	BK
78-93-3	2-Butanone	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/17/2015 08:30	12/17/2015 17:14	BK

Sample Information

Client Sample ID: TWA-RB2 **York Sample ID:** 15L0442-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0442	TWA Flight Ctr Hotel 15-111-0324	Soil	December 10, 2015 4:30 pm	12/11/2015

Volatile Organics, 8260 - Comprehensive

Log-in Notes: VOA-CONT **Sample Notes:** VOA-CONT

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	2-Hexanone	ND		ug/kg dry	3.0	5.9	1	EPA 8260C	12/17/2015 08:30	12/17/2015 17:14	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	3.0	5.9	1	EPA 8260C	12/17/2015 08:30	12/17/2015 17:14	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
67-64-1	Acetone	ND		ug/kg dry	5.9	12	1	EPA 8260C	12/17/2015 08:30	12/17/2015 17:14	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
107-02-8	Acrolein	ND		ug/kg dry	5.9	12	1	EPA 8260C	12/17/2015 08:30	12/17/2015 17:14	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
107-13-1	Acrylonitrile	ND		ug/kg dry	3.0	5.9	1	EPA 8260C	12/17/2015 08:30	12/17/2015 17:14	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
71-43-2	Benzene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C	12/17/2015 08:30	12/17/2015 17:14	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
74-97-5	Bromochloromethane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C	12/17/2015 08:30	12/17/2015 17:14	BK
								Certifications:	NELAC-NY10854,NJDEP		
75-27-4	Bromodichloromethane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C	12/17/2015 08:30	12/17/2015 17:14	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
75-25-2	Bromoform	ND		ug/kg dry	3.0	5.9	1	EPA 8260C	12/17/2015 08:30	12/17/2015 17:14	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
74-83-9	Bromomethane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C	12/17/2015 08:30	12/17/2015 17:14	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
75-15-0	Carbon disulfide	ND		ug/kg dry	3.0	5.9	1	EPA 8260C	12/17/2015 08:30	12/17/2015 17:14	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
56-23-5	Carbon tetrachloride	ND		ug/kg dry	3.0	5.9	1	EPA 8260C	12/17/2015 08:30	12/17/2015 17:14	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
108-90-7	Chlorobenzene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C	12/17/2015 08:30	12/17/2015 17:14	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
75-00-3	Chloroethane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C	12/17/2015 08:30	12/17/2015 17:14	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
67-66-3	Chloroform	ND		ug/kg dry	3.0	5.9	1	EPA 8260C	12/17/2015 08:30	12/17/2015 17:14	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
74-87-3	Chloromethane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C	12/17/2015 08:30	12/17/2015 17:14	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C	12/17/2015 08:30	12/17/2015 17:14	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C	12/17/2015 08:30	12/17/2015 17:14	BK
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
110-82-7	Cyclohexane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C	12/17/2015 08:30	12/17/2015 17:14	BK
								Certifications:	NELAC-NY10854,NJDEP		
124-48-1	Dibromochloromethane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C	12/17/2015 08:30	12/17/2015 17:14	BK
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
74-95-3	Dibromomethane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C	12/17/2015 08:30	12/17/2015 17:14	BK
								Certifications:	NELAC-NY10854,NJDEP		
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C	12/17/2015 08:30	12/17/2015 17:14	BK
								Certifications:	NELAC-NY10854,NJDEP		

Sample Information

Client Sample ID: TWA-RB2 **York Sample ID:** 15L0442-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0442	TWA Flight Ctr Hotel 15-111-0324	Soil	December 10, 2015 4:30 pm	12/11/2015

Volatile Organics, 8260 - Comprehensive

Log-in Notes: VOA-CONT **Sample Notes:** VOA-CONT

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-41-4	Ethyl Benzene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	12/17/2015 08:30	12/17/2015 17:14 CTDOH,NELAC-NY10854,NJDEP,PADEP	BK
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	12/17/2015 08:30	12/17/2015 17:14 NELAC-NY10854,NJDEP	BK
98-82-8	Isopropylbenzene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	12/17/2015 08:30	12/17/2015 17:14 CTDOH,NELAC-NY10854,NJDEP	BK
79-20-9	Methyl acetate	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	12/17/2015 08:30	12/17/2015 17:14 NELAC-NY10854,NJDEP	BK
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	12/17/2015 08:30	12/17/2015 17:14 CTDOH,NELAC-NY10854,NJDEP	BK
108-87-2	Methylcyclohexane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	12/17/2015 08:30	12/17/2015 17:14 NELAC-NY10854,NJDEP	BK
75-09-2	Methylene chloride	ND		ug/kg dry	5.9	12	1	EPA 8260C Certifications:	12/17/2015 08:30	12/17/2015 17:14 CTDOH,NELAC-NY10854,NJDEP,PADEP	BK
104-51-8	n-Butylbenzene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	12/17/2015 08:30	12/17/2015 17:14 CTDOH,NELAC-NY10854,NJDEP	BK
103-65-1	n-Propylbenzene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	12/17/2015 08:30	12/17/2015 17:14 CTDOH,NELAC-NY10854,NJDEP	BK
95-47-6	o-Xylene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	12/17/2015 08:30	12/17/2015 17:14 CTDOH,NELAC-NY10854	BK
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	5.9	12	1	EPA 8260C Certifications:	12/17/2015 08:30	12/17/2015 17:14 CTDOH,NELAC-NY10854	BK
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	12/17/2015 08:30	12/17/2015 17:14 CTDOH,NELAC-NY10854,NJDEP	BK
135-98-8	sec-Butylbenzene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	12/17/2015 08:30	12/17/2015 17:14 CTDOH,NELAC-NY10854,NJDEP	BK
100-42-5	Styrene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	12/17/2015 08:30	12/17/2015 17:14 CTDOH,NELAC-NY10854,NJDEP	BK
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/kg dry	5.9	12	1	EPA 8260C Certifications:	12/17/2015 08:30	12/17/2015 17:14 NELAC-NY10854,NJDEP	BK
98-06-6	tert-Butylbenzene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	12/17/2015 08:30	12/17/2015 17:14 CTDOH,NELAC-NY10854,NJDEP	BK
127-18-4	Tetrachloroethylene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	12/17/2015 08:30	12/17/2015 17:14 CTDOH,NELAC-NY10854,NJDEP,PADEP	BK
108-88-3	Toluene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	12/17/2015 08:30	12/17/2015 17:14 CTDOH,NELAC-NY10854,NJDEP,PADEP	BK
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	12/17/2015 08:30	12/17/2015 17:14 CTDOH,NELAC-NY10854,NJDEP	BK
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	12/17/2015 08:30	12/17/2015 17:14 CTDOH,NELAC-NY10854,NJDEP,PADEP	BK
79-01-6	Trichloroethylene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	12/17/2015 08:30	12/17/2015 17:14 CTDOH,NELAC-NY10854,NJDEP,PADEP	BK
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	12/17/2015 08:30	12/17/2015 17:14 CTDOH,NELAC-NY10854,NJDEP,PADEP	BK

Sample Information

Client Sample ID: **TWA-RB2** **York Sample ID:** **15L0442-04**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0442	TWA Flight Ctr Hotel 15-111-0324	Soil	December 10, 2015 4:30 pm	12/11/2015

Volatile Organics, 8260 - Comprehensive

Log-in Notes: VOA-CONT **Sample Notes:** **VOA-CONT**

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/kg dry	3.0	5.9	1	EPA 8260C	12/17/2015 08:30	12/17/2015 17:14	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
1330-20-7	Xylenes, Total	ND		ug/kg dry	8.9	18	1	EPA 8260C	12/17/2015 08:30	12/17/2015 17:14	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: 1,2-Dichloroethane-d4*	*97.3 %*	*77-125*
2037-26-5	*Surrogate: Toluene-d8*	*103 %*	*85-120*
460-00-4	*Surrogate: p-Bromofluorobenzene*	*100 %*	*76-130*

Total Solids

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**84.7**		%	0.100	0.100	1	SM 2540G	12/14/2015 12:09	12/14/2015 17:09	CLS
								Certifications: CTDOH			

Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
15L0442-01	TWA-TP4	4 oz. WM Clear Glass Cool to 4° C
15L0442-02	TWA-TP1	4 oz. WM Clear Glass Cool to 4° C
15L0442-04	TWA-RB2	4 oz. WM Clear Glass Cool to 4° C

Notes and Definitions

M-LSRD	Original sample conc <50 X reporting limit.
EXT-COMP	Completed
EXT-Temp	Extraction temperture slightly exceeded acceptance range.
HT-pH	HOLDING TIME EXCEEDED. Samples for pH must be measured in the field or within 15 minutes of sample collection.
IGN-01	Non-Ignit.
J	Detected below the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated concentration.
B	Analyte is found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants. Data users should consider anything <10x the blank value as artifact.
M-DB	Analyte in Method Blank >MDL. Sample conc. >10 X blank conc.
VOA-CONT	NON-COMPLIANT- the container(s) provided by the client for soil volatiles do not meet the requirements of EPA SW846-5035A. Results reported below 200 ug/kg may be biased low due to samples not being collected according to EPA SW846 5035A requirements.
M-MISpk	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The SRM was within acceptance limits, therefore data are acceptable.
M-RPD	Sample conc. <5 X reporting limit.
M-SeTC	It is noted that a known interference with selenium at the analytical line for analysis by ICP is caused by carbon emission from the TCLP or high organics matrix. The data user may subtract the matrix blank value from the data if needed.
PF-01	No Free Liquid
QL-02	This LCS analyte is outside Laboratory Recovery limits due the analyte behavior using the referenced method. The reference method has certain limitations with respect to analytes of this nature.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
M-CCVO	CCV Out. Samples bracketed by acceptable CCVs.

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*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis

Low Bias — Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.

High Bias — High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.

Non-Dir. — Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two.
For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.

YORK ANALYTICAL LABORATORIES
120 RESEARCH DR.
STRATFORD, CT 06615
(203) 325-1371
FAX (203) 357-0166

Field Chain-of-Custody Record

NOTE: York's Std. Terms & Conditions are listed on the back side of this document. This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

York Project No. 15L0442

YOUR Information

Company: LiRo Engineers Inc
Address: 703 Lorimer St Brooklyn NY 11211
Phone No. 516-662-5149
Contact Person: Mary Brzozowski
E-Mail Address: brzozowskim@liro.com

Report To:

Company: LiRo Engineers
Address: 690 Delaware Ave Buffalo NY 14209
Phone No. 718-321-3136
Attention: Steve Frank
E-Mail Address: franks@liro.com

Invoice To:

Company: SAME
Address:
Phone No.
Attention:
E-Mail Address:

YOUR Project ID

TWA Flight Ctr. Hotel
15-111-0324

Purchase Order No.

Samples from: CT ___ NY x NJ ___

Turn-Around Time

- RUSH - Same Day ☐
- RUSH - Next Day ☐
- RUSH - Two Day ☐
- RUSH - Three Day ☐
- RUSH - Four Day ☐
- Standard(5-7 Days) ☒

Report Type

- Summary Report X
- Summary w/ QA Summary
- CT RCP Package
- CTRCP DQA/DUE Pkg
- NY ASP A Package
- NY ASP B Package
- NJDEP Red. Deliv.

Electronic Data Deliverables (EDD)

- Simple Excel
- NYSDEC EQuIS
- EQuIS (std)
- EZ-EDD (EQuIS)
- NJDEP SRP HazSite EDD
- GIS/KEY (std)
- Other
- **York Regulatory Comparison Excel Spreadsheet** X

Compare to the following Regs. (please fill in): NJ Soil Cleanup NY Reg

Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.

Samples Collected/Authorized By (Signature)

Mary Brzozowski
Name (printed)

Matrix Codes
S - soil
Other - specify(oil, etc.)
WW - wastewater
GW - groundwater
DW - drinking water
Air-A - ambient air
Air-SV - soil vapor

Volatiles		Semi-Vols.	Pest/PCB/Herb	Metals	Misc. Org.	Full Lists	Misc.
8260 full	TICs	8270 or 625	8082PCB	RCRA8	TPH GRO	Pri.Poll.	Corrosivity
624	Site Spec.	STARS list	8081Pest	PP13 list	TPH DRO	TCL Organics	Reactivity
STARS list	Nassau Co.	BN Only	8151Herb	TAL	CT ETPH	TAL Met/CN	Ignitability
BTEX	Suffolk Co.	Acids Only	CT RCP	CT15 list	NY 310-13	Full TCLP	Flash Point
MTBE	Ketones	PAH list	App. IX	TAGM list	TPH 1664	Full App. IX	Sieve Anal.
TCL list	Oxygenates	TAGM list	Site Spec.	NJDEP list	Air TO14A	Part 360-Routine	Heterotrophs
TAGM list	TCLP list	CT RCP list	SPLP or TCLP	Total	Air TO15	Part 360-Baseline	TOX
CT RCP list	524.2	TCL list	TCLP Pest	Dissolved	Air STARS	Part 360-Expanded No Dioxins/Furans	BTU/lb.
Arom. only	502.2	NJDEP list	TCLP Herb	SPLP or TCLP	Air VPH	Part 360-Expanded Full List	Aquatic Tox.
Halog.only	NJDEP list	App. IX	Chlordane	Indiv. Metals	Air TICs	NYCDEP Sewer	TOC
App.IX list	SPLP or TCLP	TCLP BNA	608 Pest	LIST Below	Methane	NYSDEC Sewer	Asbestos
8021B list		SPLP or TCLP	608 PCB		Helium	TAGM	Silica

Sample Identification	Date/Time Sampled	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below	Container Description(s)
TWA-TP4	12/10/15 10[10]	S	SEE ATTACHED ANALYSES	(2) 8oz (1) 4oz
TWA-TP1	12/10/15 13[00]	S		(2) 8oz (1) 4oz
TWA-RB2,TB2,TB1	12/10/15 16[30]	S	(MS/MSD) ~~TCL/PART 375 SVOC 8270~~; SEE ATTACHED COMPOSITE LIST	(2) 8oz
TWA-RB2	12/10/15 16[30]	S	TCL/PART 375 VOC 8260	4(oz)

Comments: VOC IS RANDOM GRAB; NO PID READINGS REMAINING ANALYSIS IS 5:1 COMPOSITE

Preservation Check those Applicable
4°C ___ Frozen ___ HCl ___ MeOH ___ HNO_3 ___ H_2SO_4 ___ NaOH ___
ZnAc ___ Ascorbic Acid ___ Other ___

Special Instructions
Field Filtered ☐
Lab to Filter ☐

Samples Relinquished By: [signature] 12-11-15 7AM
Samples Relinquished By: K Barker 12-11-15
Samples Received By: K Barker 12/11/15 7AM
Samples Received in LAB by: T Cahill 12/11/15 1623

Temperature on Receipt 4.0 °C

15L0442

TWA FLIGHT CENTER HOTEL

Analysis	Method
TCL/Part 375 Volatile Organic Compounds (VOCs)	USEPA 8260 GRAB
TCL/Part 375 Semi-volatile organic compounds (SVOCs)	USEPA 8270
TAL Metals (Total) – including Cr+3 and Cr+6	USEPA 6010/7000
TCL/Part 375 Pesticides/Polychlorinated Biphenyls (PCBs)	USEPA 8081/8082
Toxicity Characteristic Leaching Procedure (TCLP) metals	USEPA 1311 and applicable USEPA methods
RCRA Characteristics includes ignitability, corrosivity (pH), reactivity	Applicable USEPA methods
EPH – Extractable Petroleum Hydrocarbons	NJ Method EPH
Paint filter	SW846 9095

COMPOSITE

Technical Report

prepared for:

LiRo Engineers
690 Delaware Ave.
Buffalo NY, 14209-2202
Attention: Steve Frank

Report Date: 12/24/2015
Client Project ID: TWA Flight Ctr Hotel 15-111-0324
York Project (SDG) No.: 15L0719

Report Date: 12/24/2015
Client Project ID: TWA Flight Ctr Hotel 15-111-0324
York Project (SDG) No.: 15L0719

LiRo Engineers
690 Delaware Ave.
Buffalo NY, 14209-2202
Attention: Steve Frank

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on December 17, 2015 and listed below. The project was identified as your project: **TWA Flight Ctr Hotel 15-111-0324**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the attachment to this report, and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

York Sample ID	Client Sample ID	Matrix	Date Collected	Date Received
15L0719-01	TWA-TP7-Grab	Soil	12/15/2015	12/17/2015
15L0719-02	TWA-TP7-Comp	Soil	12/15/2015	12/17/2015

General Notes for York Project (SDG) No.: 15L0719

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation, unless otherwise noted.
6. All analyses conducted met method or Laboratory SOP requirements. See the Qualifiers and/or Narrative sections for further information.
7. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
8. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.

Approved By: 

Date: 12/24/2015

Benjamin Gulizia
Laboratory Director

Sample Information

Client Sample ID: TWA-TP7-Grab **York Sample ID:** 15L0719-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0719	TWA Flight Ctr Hotel 15-111-0324	Soil	December 15, 2015 2:30 pm	12/17/2015

Volatile Organics, 8260 - Comprehensive

Log-in Notes: VOA-CONT **Sample Notes:** VOA-CONT

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/24/2015 08:45	12/24/2015 12:18	BK
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/24/2015 08:45	12/24/2015 12:18	BK
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/24/2015 08:45	12/24/2015 12:18	BK
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/24/2015 08:45	12/24/2015 12:18	BK
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/24/2015 08:45	12/24/2015 12:18	BK
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/24/2015 08:45	12/24/2015 12:18	BK
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/24/2015 08:45	12/24/2015 12:18	BK
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	12/24/2015 08:45	12/24/2015 12:18	BK
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	12/24/2015 08:45	12/24/2015 12:18	BK
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	12/24/2015 08:45	12/24/2015 12:18	BK
95-63-6	1,2,4-Trimethylbenzene	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/24/2015 08:45	12/24/2015 12:18	BK
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/24/2015 08:45	12/24/2015 12:18	BK
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/24/2015 08:45	12/24/2015 12:18	BK
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/24/2015 08:45	12/24/2015 12:18	BK
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/24/2015 08:45	12/24/2015 12:18	BK
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/24/2015 08:45	12/24/2015 12:18	BK
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/24/2015 08:45	12/24/2015 12:18	BK
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/24/2015 08:45	12/24/2015 12:18	BK
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/24/2015 08:45	12/24/2015 12:18	BK
123-91-1	1,4-Dioxane	ND		ug/kg dry	55	110	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	12/24/2015 08:45	12/24/2015 12:18	BK
78-93-3	2-Butanone	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/24/2015 08:45	12/24/2015 12:18	BK
591-78-6	2-Hexanone	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/24/2015 08:45	12/24/2015 12:18	BK
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/24/2015 08:45	12/24/2015 12:18	BK

Sample Information

Client Sample ID: TWA-TP7-Grab **York Sample ID:** 15L0719-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0719	TWA Flight Ctr Hotel 15-111-0324	Soil	December 15, 2015 2:30 pm	12/17/2015

Volatile Organics, 8260 - Comprehensive

Log-in Notes: VOA-CONT **Sample Notes:** VOA-CONT

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
67-64-1	Acetone	ND		ug/kg dry	5.5	11	1	EPA 8260C Certifications:	12/24/2015 08:45 CTDOH,NELAC-NY10854,NJDEP	12/24/2015 12:18	BK
107-02-8	Acrolein	ND		ug/kg dry	5.5	11	1	EPA 8260C Certifications:	12/24/2015 08:45 CTDOH,NELAC-NY10854,NJDEP	12/24/2015 12:18	BK
107-13-1	Acrylonitrile	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications:	12/24/2015 08:45 CTDOH,NELAC-NY10854,NJDEP	12/24/2015 12:18	BK
71-43-2	Benzene	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications:	12/24/2015 08:45 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/24/2015 12:18	BK
74-97-5	Bromochloromethane	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications:	12/24/2015 08:45 NELAC-NY10854,NJDEP	12/24/2015 12:18	BK
75-27-4	Bromodichloromethane	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications:	12/24/2015 08:45 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/24/2015 12:18	BK
75-25-2	Bromoform	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications:	12/24/2015 08:45 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/24/2015 12:18	BK
74-83-9	Bromomethane	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications:	12/24/2015 08:45 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/24/2015 12:18	BK
75-15-0	Carbon disulfide	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications:	12/24/2015 08:45 CTDOH,NELAC-NY10854,NJDEP	12/24/2015 12:18	BK
56-23-5	Carbon tetrachloride	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications:	12/24/2015 08:45 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/24/2015 12:18	BK
108-90-7	Chlorobenzene	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications:	12/24/2015 08:45 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/24/2015 12:18	BK
75-00-3	Chloroethane	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications:	12/24/2015 08:45 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/24/2015 12:18	BK
67-66-3	Chloroform	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications:	12/24/2015 08:45 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/24/2015 12:18	BK
74-87-3	Chloromethane	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications:	12/24/2015 08:45 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/24/2015 12:18	BK
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications:	12/24/2015 08:45 CTDOH,NELAC-NY10854,NJDEP	12/24/2015 12:18	BK
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications:	12/24/2015 08:45 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/24/2015 12:18	BK
110-82-7	Cyclohexane	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications:	12/24/2015 08:45 NELAC-NY10854,NJDEP	12/24/2015 12:18	BK
124-48-1	Dibromochloromethane	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications:	12/24/2015 08:45 NELAC-NY10854,NJDEP,PADEP	12/24/2015 12:18	BK
74-95-3	Dibromomethane	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications:	12/24/2015 08:45 NELAC-NY10854,NJDEP	12/24/2015 12:18	BK
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications:	12/24/2015 08:45 NELAC-NY10854,NJDEP	12/24/2015 12:18	BK
100-41-4	Ethyl Benzene	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications:	12/24/2015 08:45 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/24/2015 12:18	BK
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications:	12/24/2015 08:45 NELAC-NY10854,NJDEP	12/24/2015 12:18	BK
98-82-8	Isopropylbenzene	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications:	12/24/2015 08:45 CTDOH,NELAC-NY10854,NJDEP	12/24/2015 12:18	BK
79-20-9	Methyl acetate	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications:	12/24/2015 08:45 NELAC-NY10854,NJDEP	12/24/2015 12:18	BK

Sample Information

Client Sample ID: TWA-TP7-Grab **York Sample ID:** 15L0719-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0719	TWA Flight Ctr Hotel 15-111-0324	Soil	December 15, 2015 2:30 pm	12/17/2015

Volatile Organics, 8260 - Comprehensive

Log-in Notes: VOA-CONT **Sample Notes:** VOA-CONT

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/24/2015 08:45	12/24/2015 12:18	BK
108-87-2	Methylcyclohexane	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	12/24/2015 08:45	12/24/2015 12:18	BK
75-09-2	**Methylene chloride**	**21**		ug/kg dry	5.5	11	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/24/2015 08:45	12/24/2015 12:18	BK
104-51-8	n-Butylbenzene	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/24/2015 08:45	12/24/2015 12:18	BK
103-65-1	n-Propylbenzene	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/24/2015 08:45	12/24/2015 12:18	BK
95-47-6	o-Xylene	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854	12/24/2015 08:45	12/24/2015 12:18	BK
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	5.5	11	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854	12/24/2015 08:45	12/24/2015 12:18	BK
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/24/2015 08:45	12/24/2015 12:18	BK
135-98-8	sec-Butylbenzene	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/24/2015 08:45	12/24/2015 12:18	BK
100-42-5	Styrene	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/24/2015 08:45	12/24/2015 12:18	BK
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/kg dry	5.5	11	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	12/24/2015 08:45	12/24/2015 12:18	BK
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/24/2015 08:45	12/24/2015 12:18	BK
127-18-4	Tetrachloroethylene	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/24/2015 08:45	12/24/2015 12:18	BK
108-88-3	Toluene	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/24/2015 08:45	12/24/2015 12:18	BK
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/24/2015 08:45	12/24/2015 12:18	BK
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/24/2015 08:45	12/24/2015 12:18	BK
79-01-6	Trichloroethylene	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/24/2015 08:45	12/24/2015 12:18	BK
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/24/2015 08:45	12/24/2015 12:18	BK
75-01-4	Vinyl Chloride	ND		ug/kg dry	2.7	5.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/24/2015 08:45	12/24/2015 12:18	BK
1330-20-7	Xylenes, Total	ND		ug/kg dry	8.2	16	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/24/2015 08:45	12/24/2015 12:18	BK

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: 1,2-Dichloroethane-d4*	*104 %*	*77-125*
2037-26-5	*Surrogate: Toluene-d8*	*104 %*	*85-120*
460-00-4	*Surrogate: p-Bromofluorobenzene*	*95.3 %*	*76-130*

Sample Information

Client Sample ID: TWA-TP7-Grab **York Sample ID:** 15L0719-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0719	TWA Flight Ctr Hotel 15-111-0324	Soil	December 15, 2015 2:30 pm	12/17/2015

Total Solids **Log-in Notes:** VOA-CONT **Sample Notes:**

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**91.6**		%	0.100	0.100	1	SM 2540G Certifications: CTDOH	12/18/2015 13:17	12/18/2015 19:48	CLS

Sample Information

Client Sample ID: TWA-TP7-Comp **York Sample ID:** 15L0719-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0719	TWA Flight Ctr Hotel 15-111-0324	Soil	December 15, 2015 3:00 pm	12/17/2015

Semi-Volatiles, 8270 - Comprehensive **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1'-Biphenyl	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP	12/22/2015 14:03	12/24/2015 02:02	ZZZ
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		ug/kg dry	134	268	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP	12/22/2015 14:03	12/24/2015 02:02	ZZZ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/22/2015 14:03	12/24/2015 02:02	ZZZ
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications: NELAC-NY10854	12/22/2015 14:03	12/24/2015 02:02	ZZZ
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP	12/22/2015 14:03	12/24/2015 02:02	ZZZ
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications: NELAC-NY10854	12/22/2015 14:03	12/24/2015 02:02	ZZZ
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications: NELAC-NY10854	12/22/2015 14:03	12/24/2015 02:02	ZZZ
58-90-2	2,3,4,6-Tetrachlorophenol	ND		ug/kg dry	134	268	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP	12/22/2015 14:03	12/24/2015 02:02	ZZZ
95-95-4	2,4,5-Trichlorophenol	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP	12/22/2015 14:03	12/24/2015 02:02	ZZZ
88-06-2	2,4,6-Trichlorophenol	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/22/2015 14:03	12/24/2015 02:02	ZZZ
120-83-2	2,4-Dichlorophenol	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/22/2015 14:03	12/24/2015 02:02	ZZZ
105-67-9	2,4-Dimethylphenol	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/22/2015 14:03	12/24/2015 02:02	ZZZ
51-28-5	2,4-Dinitrophenol	ND		ug/kg dry	134	268	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/22/2015 14:03	12/24/2015 02:02	ZZZ
121-14-2	2,4-Dinitrotoluene	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/22/2015 14:03	12/24/2015 02:02	ZZZ

Sample Information

Client Sample ID: TWA-TP7-Comp

York Sample ID: 15L0719-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0719	TWA Flight Ctr Hotel 15-111-0324	Soil	December 15, 2015 3:00 pm	12/17/2015

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
606-20-2	2,6-Dinitrotoluene	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications:	12/22/2015 14:03	12/24/2015 02:02	ZZZ CTDOH,NELAC-NY10854,NJDEP,PADEP
91-58-7	2-Chloronaphthalene	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications:	12/22/2015 14:03	12/24/2015 02:02	ZZZ CTDOH,NELAC-NY10854,NJDEP,PADEP
95-57-8	2-Chlorophenol	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications:	12/22/2015 14:03	12/24/2015 02:02	ZZZ CTDOH,NELAC-NY10854,NJDEP,PADEP
91-57-6	2-Methylnaphthalene	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications:	12/22/2015 14:03	12/24/2015 02:02	ZZZ CTDOH,NELAC-NY10854,NJDEP
95-48-7	2-Methylphenol	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications:	12/22/2015 14:03	12/24/2015 02:02	ZZZ CTDOH,NELAC-NY10854,NJDEP,PADEP
88-74-4	2-Nitroaniline	ND		ug/kg dry	134	268	2	EPA 8270D Certifications:	12/22/2015 14:03	12/24/2015 02:02	ZZZ CTDOH,NELAC-NY10854,NJDEP,PADEP
88-75-5	2-Nitrophenol	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications:	12/22/2015 14:03	12/24/2015 02:02	ZZZ CTDOH,NELAC-NY10854,NJDEP,PADEP
65794-96-9	3- & 4-Methylphenols	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications:	12/22/2015 14:03	12/24/2015 02:02	ZZZ CTDOH,NELAC-NY10854,NJDEP
91-94-1	3,3'-Dichlorobenzidine	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications:	12/22/2015 14:03	12/24/2015 02:02	ZZZ NELAC-NY10854,NJDEP,PADEP
99-09-2	3-Nitroaniline	ND		ug/kg dry	134	268	2	EPA 8270D Certifications:	12/22/2015 14:03	12/24/2015 02:02	ZZZ CTDOH,NELAC-NY10854,NJDEP,PADEP
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/kg dry	134	268	2	EPA 8270D Certifications:	12/22/2015 14:03	12/24/2015 02:02	ZZZ CTDOH,NELAC-NY10854,NJDEP
101-55-3	4-Bromophenyl phenyl ether	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications:	12/22/2015 14:03	12/24/2015 02:02	ZZZ CTDOH,NELAC-NY10854,NJDEP,PADEP
59-50-7	4-Chloro-3-methylphenol	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications:	12/22/2015 14:03	12/24/2015 02:02	ZZZ CTDOH,NELAC-NY10854,NJDEP,PADEP
106-47-8	4-Chloroaniline	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications:	12/22/2015 14:03	12/24/2015 02:02	ZZZ CTDOH,NELAC-NY10854,NJDEP,PADEP
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications:	12/22/2015 14:03	12/24/2015 02:02	ZZZ CTDOH,NELAC-NY10854,NJDEP,PADEP
100-01-6	4-Nitroaniline	ND		ug/kg dry	134	268	2	EPA 8270D Certifications:	12/22/2015 14:03	12/24/2015 02:02	ZZZ CTDOH,NELAC-NY10854,NJDEP,PADEP
100-02-7	4-Nitrophenol	ND		ug/kg dry	134	268	2	EPA 8270D Certifications:	12/22/2015 14:03	12/24/2015 02:02	ZZZ CTDOH,NELAC-NY10854,NJDEP,PADEP
83-32-9	Acenaphthene	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications:	12/22/2015 14:03	12/24/2015 02:02	ZZZ CTDOH,NELAC-NY10854,NJDEP,PADEP
208-96-8	Acenaphthylene	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications:	12/22/2015 14:03	12/24/2015 02:02	ZZZ CTDOH,NELAC-NY10854,NJDEP,PADEP
98-86-2	Acetophenone	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications:	12/22/2015 14:03	12/24/2015 02:02	ZZZ NELAC-NY10854,NJDEP
62-53-3	Aniline	ND		ug/kg dry	268	537	2	EPA 8270D Certifications:	12/22/2015 14:03	12/24/2015 02:02	ZZZ NELAC-NY10854,NJDEP,PADEP
120-12-7	Anthracene	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications:	12/22/2015 14:03	12/24/2015 02:02	ZZZ CTDOH,NELAC-NY10854,NJDEP,PADEP
1912-24-9	Atrazine	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications:	12/22/2015 14:03	12/24/2015 02:02	ZZZ NELAC-NY10854,NJDEP
100-52-7	Benzaldehyde	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications:	12/22/2015 14:03	12/24/2015 02:02	ZZZ NELAC-NY10854,NJDEP

Sample Information

Client Sample ID: TWA-TP7-Comp **York Sample ID:** 15L0719-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0719	TWA Flight Ctr Hotel 15-111-0324	Soil	December 15, 2015 3:00 pm	12/17/2015

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
92-87-5	Benzidine	ND		ug/kg dry	268	537	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854	12/22/2015 14:03	12/24/2015 02:02	ZZZ
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/22/2015 14:03	12/24/2015 02:02	ZZZ
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/22/2015 14:03	12/24/2015 02:02	ZZZ
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/22/2015 14:03	12/24/2015 02:02	ZZZ
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/22/2015 14:03	12/24/2015 02:02	ZZZ
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/22/2015 14:03	12/24/2015 02:02	ZZZ
65-85-0	Benzoic acid	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP	12/22/2015 14:03	12/24/2015 02:02	ZZZ
100-51-6	Benzyl alcohol	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/22/2015 14:03	12/24/2015 02:02	ZZZ
85-68-7	Benzyl butyl phthalate	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/22/2015 14:03	12/24/2015 02:02	ZZZ
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/22/2015 14:03	12/24/2015 02:02	ZZZ
111-44-4	Bis(2-chloroethyl)ether	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/22/2015 14:03	12/24/2015 02:02	ZZZ
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/22/2015 14:03	12/24/2015 02:02	ZZZ
117-81-7	Bis(2-ethylhexyl)phthalate	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/22/2015 14:03	12/24/2015 02:02	ZZZ
105-60-2	Caprolactam	ND		ug/kg dry	134	268	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP	12/22/2015 14:03	12/24/2015 02:02	ZZZ
86-74-8	Carbazole	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/22/2015 14:03	12/24/2015 02:02	ZZZ
218-01-9	Chrysene	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/22/2015 14:03	12/24/2015 02:02	ZZZ
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/22/2015 14:03	12/24/2015 02:02	ZZZ
132-64-9	Dibenzofuran	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP	12/22/2015 14:03	12/24/2015 02:02	ZZZ
84-66-2	Diethyl phthalate	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/22/2015 14:03	12/24/2015 02:02	ZZZ
131-11-3	Dimethyl phthalate	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/22/2015 14:03	12/24/2015 02:02	ZZZ
84-74-2	Di-n-butyl phthalate	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/22/2015 14:03	12/24/2015 02:02	ZZZ
117-84-0	Di-n-octyl phthalate	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/22/2015 14:03	12/24/2015 02:02	ZZZ
206-44-0	Fluoranthene	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/22/2015 14:03	12/24/2015 02:02	ZZZ
86-73-7	Fluorene	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/22/2015 14:03	12/24/2015 02:02	ZZZ

Sample Information

Client Sample ID: TWA-TP7-Comp **York Sample ID:** 15L0719-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0719	TWA Flight Ctr Hotel 15-111-0324	Soil	December 15, 2015 3:00 pm	12/17/2015

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
118-74-1	Hexachlorobenzene	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications:	12/22/2015 14:03 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/24/2015 02:02	ZZZ
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications:	12/22/2015 14:03 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/24/2015 02:02	ZZZ
77-47-4	Hexachlorocyclopentadiene	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications:	12/22/2015 14:03 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/24/2015 02:02	ZZZ
67-72-1	Hexachloroethane	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications:	12/22/2015 14:03 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/24/2015 02:02	ZZZ
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications:	12/22/2015 14:03 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/24/2015 02:02	ZZZ
78-59-1	Isophorone	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications:	12/22/2015 14:03 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/24/2015 02:02	ZZZ
91-20-3	Naphthalene	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications:	12/22/2015 14:03 CTDOH,NELAC-NY10854,NJDEP	12/24/2015 02:02	ZZZ
98-95-3	Nitrobenzene	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications:	12/22/2015 14:03 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/24/2015 02:02	ZZZ
62-75-9	N-Nitrosodimethylamine	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications:	12/22/2015 14:03 CTDOH,NELAC-NY10854,NJDEP	12/24/2015 02:02	ZZZ
621-64-7	N-nitroso-di-n-propylamine	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications:	12/22/2015 14:03 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/24/2015 02:02	ZZZ
86-30-6	N-Nitrosodiphenylamine	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications:	12/22/2015 14:03 CTDOH,NELAC-NY10854,NJDEP	12/24/2015 02:02	ZZZ
87-86-5	Pentachlorophenol	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications:	12/22/2015 14:03 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/24/2015 02:02	ZZZ
85-01-8	Phenanthrene	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications:	12/22/2015 14:03 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/24/2015 02:02	ZZZ
108-95-2	Phenol	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications:	12/22/2015 14:03 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/24/2015 02:02	ZZZ
129-00-0	Pyrene	ND		ug/kg dry	67.2	134	2	EPA 8270D Certifications:	12/22/2015 14:03 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/24/2015 02:02	ZZZ

	Surrogate Recoveries	Result	Acceptance Range
367-12-4	*Surrogate: 2-Fluorophenol*	*62.8 %*	*20-108*
4165-62-2	*Surrogate: Phenol-d5*	*65.8 %*	*23-114*
4165-60-0	*Surrogate: Nitrobenzene-d5*	*52.8 %*	*22-108*
321-60-8	*Surrogate: 2-Fluorobiphenyl*	*63.0 %*	*21-113*
118-79-6	*Surrogate: 2,4,6-Tribromophenol*	*76.2 %*	*19-110*
1718-51-0	*Surrogate: Terphenyl-d14*	*81.3 %*	*24-116*

Pesticides, 8081 target list

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND		ug/kg dry	1.77	1.77	5	EPA 8081B Certifications:	12/23/2015 08:07 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/24/2015 14:43	AMC

Sample Information

Client Sample ID: TWA-TP7-Comp

York Sample ID: 15L0719-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0719	TWA Flight Ctr Hotel 15-111-0324	Soil	December 15, 2015 3:00 pm	12/17/2015

Pesticides, 8081 target list

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-55-9	4,4'-DDE	ND		ug/kg dry	1.77	1.77	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/23/2015 08:07	12/24/2015 14:43	AMC
50-29-3	**4,4'-DDT**	**9.91**		ug/kg dry	1.77	1.77	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/23/2015 08:07	12/24/2015 14:43	AMC
309-00-2	Aldrin	ND		ug/kg dry	1.77	1.77	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/23/2015 08:07	12/24/2015 14:43	AMC
319-84-6	alpha-BHC	ND		ug/kg dry	1.77	1.77	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/23/2015 08:07	12/24/2015 14:43	AMC
5103-71-9	alpha-Chlordane	ND		ug/kg dry	1.77	1.77	5	EPA 8081B Certifications: NELAC-NY10854,NJDEP	12/23/2015 08:07	12/24/2015 14:43	AMC
319-85-7	beta-BHC	ND		ug/kg dry	1.77	1.77	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/23/2015 08:07	12/24/2015 14:43	AMC
57-74-9	Chlordane, total	ND		ug/kg dry	70.7	70.7	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/23/2015 08:07	12/24/2015 14:43	AMC
319-86-8	delta-BHC	ND		ug/kg dry	1.77	1.77	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/23/2015 08:07	12/24/2015 14:43	AMC
60-57-1	**Dieldrin**	**12.9**		ug/kg dry	1.77	1.77	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/23/2015 08:07	12/24/2015 14:43	AMC
959-98-8	Endosulfan I	ND		ug/kg dry	1.77	1.77	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/23/2015 08:07	12/24/2015 14:43	AMC
33213-65-9	Endosulfan II	ND		ug/kg dry	1.77	1.77	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/23/2015 08:07	12/24/2015 14:43	AMC
1031-07-8	Endosulfan sulfate	ND		ug/kg dry	1.77	1.77	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/23/2015 08:07	12/24/2015 14:43	AMC
72-20-8	Endrin	ND		ug/kg dry	1.77	1.77	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/23/2015 08:07	12/24/2015 14:43	AMC
7421-93-4	Endrin aldehyde	ND		ug/kg dry	1.77	1.77	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/23/2015 08:07	12/24/2015 14:43	AMC
53494-70-5	Endrin ketone	ND		ug/kg dry	1.77	1.77	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP	12/23/2015 08:07	12/24/2015 14:43	AMC
58-89-9	gamma-BHC (Lindane)	ND		ug/kg dry	1.77	1.77	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/23/2015 08:07	12/24/2015 14:43	AMC
5566-34-7	gamma-Chlordane	ND		ug/kg dry	1.77	1.77	5	EPA 8081B Certifications: NELAC-NY10854,NJDEP	12/23/2015 08:07	12/24/2015 14:43	AMC
76-44-8	Heptachlor	ND		ug/kg dry	1.77	1.77	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/23/2015 08:07	12/24/2015 14:43	AMC
1024-57-3	Heptachlor epoxide	ND		ug/kg dry	1.77	1.77	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/23/2015 08:07	12/24/2015 14:43	AMC
72-43-5	Methoxychlor	ND		ug/kg dry	8.84	8.84	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/23/2015 08:07	12/24/2015 14:43	AMC
8001-35-2	Toxaphene	ND		ug/kg dry	89.4	89.4	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP	12/23/2015 08:07	12/24/2015 14:43	AMC

	Surrogate Recoveries	Result	Acceptance Range
877-09-8	*Surrogate: Tetrachloro-m-xylene*	*64.1 %*	*30-140*
2051-24-3	*Surrogate: Decachlorobiphenyl*	*58.9 %*	*30-140*

Sample Information

Client Sample ID: TWA-TP7-Comp **York Sample ID:** 15L0719-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0719	TWA Flight Ctr Hotel 15-111-0324	Soil	December 15, 2015 3:00 pm	12/17/2015

Polychlorinated Biphenyls (PCB)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		mg/kg dry	0.0178	0.0178	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	12/23/2015 08:07	12/24/2015 12:08	AMC
11104-28-2	Aroclor 1221	ND		mg/kg dry	0.0178	0.0178	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	12/23/2015 08:07	12/24/2015 12:08	AMC
11141-16-5	Aroclor 1232	ND		mg/kg dry	0.0178	0.0178	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	12/23/2015 08:07	12/24/2015 12:08	AMC
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0178	0.0178	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	12/23/2015 08:07	12/24/2015 12:08	AMC
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0178	0.0178	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	12/23/2015 08:07	12/24/2015 12:08	AMC
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0178	0.0178	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	12/23/2015 08:07	12/24/2015 12:08	AMC
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0178	0.0178	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	12/23/2015 08:07	12/24/2015 12:08	AMC
1336-36-3	* Total PCBs	ND		mg/kg dry	0.0178	0.0178	1	EPA 8082A Certifications:	12/23/2015 08:07	12/24/2015 12:08	AMC

	Surrogate Recoveries	Result	Acceptance Range
877-09-8	*Surrogate: Tetrachloro-m-xylene*	*56.7 %*	*30-140*
2051-24-3	*Surrogate: Decachlorobiphenyl*	*57.5 %*	*30-140*

NJDEP EPH (Cat. 2 Non-Fractionated)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	* Total EPH	ND		mg/kg dry	53.6	53.6	1	NJDEP EPH Rev 3.0 Certifications: NJDEP	12/22/2015 06:33	12/22/2015 15:33	AMC

	Surrogate Recoveries	Result	Acceptance Range
3386-33-2	*Surrogate: 1-Chlorooctadecane*	*48.1 %*	*40-140*
84-15-1	*Surrogate: o-Terphenyl*	*49.0 %*	*40-140*

Metals, Target Analyte

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	**Aluminum**	**2920**		mg/kg dry	5.36	5.36	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/18/2015 10:10	12/20/2015 20:22	ALD
7440-36-0	Antimony	ND		mg/kg dry	0.536	0.536	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 10:10	12/20/2015 20:22	ALD
7440-38-2	**Arsenic**	**3.25**		mg/kg dry	1.07	1.07	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 10:10	12/20/2015 20:22	ALD
7440-39-3	**Barium**	**29.4**		mg/kg dry	1.07	1.07	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 10:10	12/20/2015 20:22	ALD

Sample Information

Client Sample ID: TWA-TP7-Comp **York Sample ID:** 15L0719-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0719	TWA Flight Ctr Hotel 15-111-0324	Soil	December 15, 2015 3:00 pm	12/17/2015

Metals, Target Analyte

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-41-7	Beryllium	ND		mg/kg dry	0.107	0.107	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/18/2015 10:10	12/20/2015 20:22	ALD
7440-43-9	Cadmium	ND		mg/kg dry	0.321	0.321	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 10:10	12/20/2015 20:22	ALD
7440-70-2	**Calcium**	**57400**		mg/kg dry	0.536	5.36	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/18/2015 10:10	12/20/2015 20:22	ALD
7440-47-3	**Chromium**	**7.12**		mg/kg dry	0.536	0.536	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 10:10	12/20/2015 20:22	ALD
7440-48-4	**Cobalt**	**2.72**		mg/kg dry	0.536	0.536	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/18/2015 10:10	12/20/2015 20:22	ALD
7440-50-8	**Copper**	**12.8**	B	mg/kg dry	0.536	0.536	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/18/2015 10:10	12/20/2015 20:22	ALD
7439-89-6	**Iron**	**6640**		mg/kg dry	2.14	2.14	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/18/2015 10:10	12/20/2015 20:22	ALD
7439-92-1	**Lead**	**19.6**		mg/kg dry	0.321	0.321	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 10:10	12/20/2015 20:22	ALD
7439-95-4	**Magnesium**	**3600**		mg/kg dry	5.36	5.36	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/18/2015 10:10	12/20/2015 20:22	ALD
7439-96-5	**Manganese**	**180**		mg/kg dry	0.536	0.536	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/18/2015 10:10	12/20/2015 20:22	ALD
7440-02-0	**Nickel**	**6.55**		mg/kg dry	0.536	0.536	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 10:10	12/20/2015 20:22	ALD
7440-09-7	**Potassium**	**702**		mg/kg dry	5.36	5.36	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/18/2015 10:10	12/20/2015 20:22	ALD
7782-49-2	Selenium	ND		mg/kg dry	1.07	1.07	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 10:10	12/20/2015 20:22	ALD
7440-22-4	Silver	ND		mg/kg dry	0.536	0.536	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/18/2015 10:10	12/20/2015 20:22	ALD
7440-23-5	**Sodium**	**87.5**		mg/kg dry	10.7	10.7	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/18/2015 10:10	12/20/2015 20:22	ALD
7440-28-0	Thallium	ND		mg/kg dry	1.07	1.07	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/18/2015 10:10	12/20/2015 20:22	ALD
7440-62-2	**Vanadium**	**9.96**		mg/kg dry	1.07	1.07	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/18/2015 10:10	12/20/2015 20:22	ALD
7440-66-6	**Zinc**	**36.3**		mg/kg dry	1.07	1.07	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/18/2015 10:10	12/20/2015 20:22	ALD

Metals, TCLP RCRA

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A/1311

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	ND		mg/L	0.004	0.004	1	EPA 6010C/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2015 11:52	12/22/2015 02:39	ALD
7440-39-3	**Barium**	**0.363**		mg/L	0.011	0.011	1	EPA 6010C/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2015 11:52	12/22/2015 02:39	ALD

Sample Information

Client Sample ID: TWA-TP7-Comp **York Sample ID:** 15L0719-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0719	TWA Flight Ctr Hotel 15-111-0324	Soil	December 15, 2015 3:00 pm	12/17/2015

Metals, TCLP RCRA

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3015A/1311

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-43-9	**Cadmium**	**0.004**		mg/L	0.003	0.003	1	EPA 6010C/1311	12/21/2015 11:52	12/22/2015 02:39	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-47-3	Chromium	ND		mg/L	0.006	0.006	1	EPA 6010C/1311	12/21/2015 11:52	12/22/2015 02:39	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7439-92-1	**Lead**	**0.890**		mg/L	0.003	0.003	1	EPA 6010C/1311	12/21/2015 11:52	12/22/2015 02:39	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7782-49-2	**Selenium**	**0.022**	B, M-SeTC	mg/L	0.011	0.011	1	EPA 6010C/1311	12/21/2015 11:52	12/22/2015 02:39	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-22-4	Silver	ND		mg/L	0.006	0.006	1	EPA 6010C/1311	12/21/2015 11:52	12/22/2015 02:39	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

Mercury by 7473

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/kg dry	0.0321	0.0321	1	EPA 7473	12/22/2015 06:36	12/22/2015 15:20	ALD
								Certifications: CTDOH,NJDEP,NELAC-NY10854,PADEP			

Mercury TCLP by 7473

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 7473 water

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.00003900	0.0002000	1	EPA 7473/1311	12/21/2015 08:51	12/21/2015 11:07	ALD
								Certifications: NELAC-NY10854,NJDEP,CTDOH			

Ignitability

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	* Ignitability	Non-Ignit.		-	1	1	1	EPA 1030P	12/17/2015 17:32	12/17/2015 20:22	AA
								Certifications: CTDOH,PADEP			

Paint Filter Test

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	* Paint Filter Test	No Free Liquid		-	0	0	1	EPA 9095A	12/17/2015 17:35	12/17/2015 20:21	AA
								Certifications:			

Total Solids

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst

Sample Information

Client Sample ID: TWA-TP7-Comp **York Sample ID:** 15L0719-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0719	TWA Flight Ctr Hotel 15-111-0324	Soil	December 15, 2015 3:00 pm	12/17/2015

Total Solids

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**93.4**		%	0.100	0.100	1	SM 2540G	12/18/2015 13:17	12/18/2015 19:48	CLS
								Certifications: CTDOH			

Chromium, Hexavalent

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA SW846-3060

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
18540-29-9	Chromium, Hexavalent	ND		mg/kg dry	0.375	0.536	1	EPA 7196A	12/18/2015 18:04	12/18/2015 23:21	KK
								Certifications: NJDEP,CTDOH,NELAC-NY10854			

Chromium, Trivalent

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16065-83-1	*** Chromium, Trivalent**	**7.12**		mg/kg	0.250	0.500	1	Calculation	12/21/2015 08:00	12/21/2015 15:17	SC
								Certifications:			

Corrosivity

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	pH	**9.71**	HT-pH	pH units		0.500	1	EPA 9045D	12/21/2015 11:20	12/21/2015 16:57	CLS
								Certifications: NELAC-NY10854,CTDOH,PADEP			

Reactivity-Cyanide

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	* Reactivity - Cyanide	ND		mg/kg	0.250	0.250	1	EPA SW-846 Ch.7.3.3	12/24/2015 07:50	12/24/2015 11:26	AD
								Certifications: CTDOH,PADEP			

Reactivity-Sulfide

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	* Reactivity - Sulfide	ND		mg/kg	15.0	15.0	1	EPA SW-846 Ch.7.3.4	12/24/2015 07:52	12/24/2015 11:26	AD
								Certifications: CTDOH,PADEP			

TCLP Extraction for METALS EPA 1311

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA SW 846-1311 TCLP ext. for metals

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	TCLP Extraction	Completed		N/A	1.00	1.00	1	EPA 1311	12/17/2015 19:40	12/18/2015 13:46	CLS
								Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP			

Analytical Batch Summary

Batch ID: BL51033 **Preparation Method:** Analysis Preparation **Prepared By:** AA

YORK Sample ID	Client Sample ID	Preparation Date
15L0719-02	TWA-TP7-Comp	12/17/15

Batch ID: BL51034 **Preparation Method:** Analysis Preparation **Prepared By:** AA

YORK Sample ID	Client Sample ID	Preparation Date
15L0719-02	TWA-TP7-Comp	12/17/15

Batch ID: BL51037 **Preparation Method:** EPA SW 846-1311 TCLP ext. for meta **Prepared By:** CLS

YORK Sample ID	Client Sample ID	Preparation Date
15L0719-02	TWA-TP7-Comp	12/17/15
BL51037-BLK1	Blank	12/17/15

Batch ID: BL51061 **Preparation Method:** EPA 3050B **Prepared By:** ALD

YORK Sample ID	Client Sample ID	Preparation Date
15L0719-02	TWA-TP7-Comp	12/18/15
BL51061-BLK1	Blank	12/18/15
BL51061-SRM1	Reference	12/18/15

Batch ID: BL51077 **Preparation Method:** % Solids Prep **Prepared By:** CLS

YORK Sample ID	Client Sample ID	Preparation Date
15L0719-01	TWA-TP7-Grab	12/18/15
15L0719-02	TWA-TP7-Comp	12/18/15

Batch ID: BL51095 **Preparation Method:** EPA SW846-3060 **Prepared By:** KK

YORK Sample ID	Client Sample ID	Preparation Date
15L0719-02	TWA-TP7-Comp	12/18/15
BL51095-BLK1	Blank	12/18/15
BL51095-SRM1	Reference	12/18/15

Batch ID: BL51125 **Preparation Method:** Analysis Preparation **Prepared By:** SC

YORK Sample ID	Client Sample ID	Preparation Date
15L0719-02	TWA-TP7-Comp	12/21/15

Batch ID: BL51132 **Preparation Method:** EPA 7473 water **Prepared By:** ALD

YORK Sample ID	Client Sample ID	Preparation Date
15L0719-02	TWA-TP7-Comp	12/21/15
BL51132-BLK1	Blank	12/21/15
BL51132-SRM1	Reference	12/21/15

Batch ID: BL51143 **Preparation Method:** Analysis Preparation **Prepared By:** CLS

YORK Sample ID	Client Sample ID	Preparation Date
15L0719-02	TWA-TP7-Comp	12/21/15

Batch ID: BL51151 **Preparation Method:** EPA 3015A/1311 **Prepared By:** ALD

YORK Sample ID	Client Sample ID	Preparation Date
15L0719-02	TWA-TP7-Comp	12/21/15
BL51151-BLK1	Blank	12/21/15
BL51151-BLK2	Blank	12/21/15
BL51151-SRM1	Reference	12/21/15

Batch ID: BL51179 **Preparation Method:** EPA 3545A **Prepared By:** CM

YORK Sample ID	Client Sample ID	Preparation Date
15L0719-02	TWA-TP7-Comp	12/22/15
BL51179-BLK1	Blank	12/22/15
BL51179-BS1	LCS	12/22/15
BL51179-BSD1	LCS Dup	12/22/15
BL51179-DUP1	Duplicate	12/22/15
BL51179-MS1	Matrix Spike	12/22/15

Batch ID: BL51183 **Preparation Method:** EPA 7473 soil **Prepared By:** ALD

YORK Sample ID	Client Sample ID	Preparation Date
15L0719-02	TWA-TP7-Comp	12/22/15
BL51183-BLK1	Blank	12/22/15
BL51183-SRM1	Reference	12/22/15

Batch ID: BL51222 **Preparation Method:** EPA 3545A **Prepared By:** MGL

YORK Sample ID	Client Sample ID	Preparation Date
15L0719-02	TWA-TP7-Comp	12/22/15
BL51222-BLK1	Blank	12/22/15
BL51222-BS1	LCS	12/22/15
BL51222-BSD1	LCS Dup	12/22/15

Batch ID: BL51246 **Preparation Method:** EPA 3550C **Prepared By:** MGL

YORK Sample ID	Client Sample ID	Preparation Date
15L0719-02	TWA-TP7-Comp	12/23/15

15L0719-02	TWA-TP7-Comp	12/23/15
BL51246-BLK1	Blank	12/23/15
BL51246-BLK1	Blank	12/23/15
BL51246-BS1	LCS	12/23/15
BL51246-BS2	LCS	12/23/15
BL51246-BSD1	LCS Dup	12/23/15
BL51246-BSD2	LCS Dup	12/23/15

Batch ID: BL51332 **Preparation Method:** Analysis Preparation **Prepared By:** AD

YORK Sample ID	Client Sample ID	Preparation Date
15L0719-02	TWA-TP7-Comp	12/24/15
BL51332-BLK1	Blank	12/24/15

Batch ID: BL51333 **Preparation Method:** Analysis Preparation **Prepared By:** AD

YORK Sample ID	Client Sample ID	Preparation Date
15L0719-02	TWA-TP7-Comp	12/24/15
BL51333-BLK1	Blank	12/24/15

Batch ID: BL51342 **Preparation Method:** EPA 5035A **Prepared By:** BGS

YORK Sample ID	Client Sample ID	Preparation Date
15L0719-01	TWA-TP7-Grab	12/24/15
BL51342-BLK1	Blank	12/24/15
BL51342-BS1	LCS	12/24/15
BL51342-BSD1	LCS Dup	12/24/15

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BL51342 - EPA 5035A											
Blank (BL51342-BLK1)											
Prepared & Analyzed: 12/24/2015											
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg wet								
1,1,1-Trichloroethane	ND	5.0	"								
1,1,2,2-Tetrachloroethane	ND	5.0	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	"								
1,1,2-Trichloroethane	ND	5.0	"								
1,1-Dichloroethane	ND	5.0	"								
1,1-Dichloroethylene	ND	5.0	"								
1,2,3-Trichlorobenzene	2.6	5.0	"								
1,2,3-Trichloropropane	ND	5.0	"								
1,2,4-Trichlorobenzene	ND	5.0	"								
1,2,4-Trimethylbenzene	ND	5.0	"								
1,2-Dibromo-3-chloropropane	ND	5.0	"								
1,2-Dibromoethane	ND	5.0	"								
1,2-Dichlorobenzene	ND	5.0	"								
1,2-Dichloroethane	ND	5.0	"								
1,2-Dichloropropane	ND	5.0	"								
1,3,5-Trimethylbenzene	ND	5.0	"								
1,3-Dichlorobenzene	ND	5.0	"								
1,4-Dichlorobenzene	ND	5.0	"								
1,4-Dioxane	ND	100	"								
2-Butanone	ND	5.0	"								
2-Hexanone	ND	5.0	"								
4-Methyl-2-pentanone	ND	5.0	"								
Acetone	ND	10	"								
Acrolein	ND	10	"								
Acrylonitrile	ND	5.0	"								
Benzene	ND	5.0	"								
Bromochloromethane	ND	5.0	"								
Bromodichloromethane	ND	5.0	"								
Bromoform	ND	5.0	"								
Bromomethane	ND	5.0	"								
Carbon disulfide	ND	5.0	"								
Carbon tetrachloride	ND	5.0	"								
Chlorobenzene	ND	5.0	"								
Chloroethane	ND	5.0	"								
Chloroform	ND	5.0	"								
Chloromethane	ND	5.0	"								
cis-1,2-Dichloroethylene	ND	5.0	"								
cis-1,3-Dichloropropylene	ND	5.0	"								
Cyclohexane	ND	5.0	"								
Dibromochloromethane	ND	5.0	"								
Dibromomethane	ND	5.0	"								
Dichlorodifluoromethane	ND	5.0	"								
Ethyl Benzene	ND	5.0	"								
Hexachlorobutadiene	ND	5.0	"								
Isopropylbenzene	ND	5.0	"								
Methyl acetate	ND	5.0	"								
Methyl tert-butyl ether (MTBE)	ND	5.0	"								
Methylcyclohexane	ND	5.0	"								
Methylene chloride	ND	10	"								
n-Butylbenzene	ND	5.0	"								

Volatile Organic Compounds by GC/MS - Quality Control Data

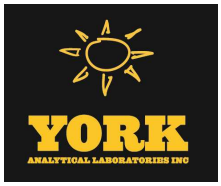
York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BL51342 - EPA 5035A											
Blank (BL51342-BLK1)								Prepared & Analyzed: 12/24/2015			
n-Propylbenzene	ND	5.0	ug/kg wet								
o-Xylene	ND	5.0	"								
p- & m- Xylenes	ND	10	"								
p-Isopropyltoluene	ND	5.0	"								
sec-Butylbenzene	ND	5.0	"								
Styrene	ND	5.0	"								
tert-Butyl alcohol (TBA)	ND	10	"								
tert-Butylbenzene	ND	5.0	"								
Tetrachloroethylene	ND	5.0	"								
Toluene	ND	5.0	"								
trans-1,2-Dichloroethylene	ND	5.0	"								
trans-1,3-Dichloropropylene	ND	5.0	"								
Trichloroethylene	ND	5.0	"								
Trichlorofluoromethane	ND	5.0	"								
Vinyl Chloride	ND	5.0	"								
Xylenes, Total	ND	15	"								
Surrogate: 1,2-Dichloroethane-d4	*47.8*		*ug/L*	*50.0*		*95.7*	*77-125*				
Surrogate: Toluene-d8	*51.8*		*"*	*50.0*		*104*	*85-120*				
Surrogate: p-Bromofluorobenzene	*49.5*		*"*	*50.0*		*99.0*	*76-130*				
LCS (BL51342-BS1)								Prepared & Analyzed: 12/24/2015			
1,1,1,2-Tetrachloroethane	58		ug/L	50.0		116	75-129				
1,1,1-Trichloroethane	58		"	50.0		115	71-137				
1,1,2,2-Tetrachloroethane	58		"	50.0		117	79-129				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	57		"	50.0		114	58-146				
1,1,2-Trichloroethane	56		"	50.0		113	83-123				
1,1-Dichloroethane	58		"	50.0		115	75-130				
1,1-Dichloroethylene	57		"	50.0		114	64-137				
1,2,3-Trichlorobenzene	58		"	50.0		116	81-140				
1,2,3-Trichloropropane	59		"	50.0		118	81-126				
1,2,4-Trichlorobenzene	63		"	50.0		126	80-141				
1,2,4-Trimethylbenzene	57		"	50.0		113	84-125				
1,2-Dibromo-3-chloropropane	58		"	50.0		116	74-142				
1,2-Dibromoethane	58		"	50.0		115	86-123				
1,2-Dichlorobenzene	57		"	50.0		114	85-122				
1,2-Dichloroethane	52		"	50.0		103	71-133				
1,2-Dichloropropane	57		"	50.0		114	81-122				
1,3,5-Trimethylbenzene	60		"	50.0		120	82-126				
1,3-Dichlorobenzene	59		"	50.0		117	84-124				
1,4-Dichlorobenzene	58		"	50.0		116	84-124				
1,4-Dioxane	1200		"	1000		118	10-228				
2-Butanone	67		"	50.0		134	58-147				
2-Hexanone	62		"	50.0		124	70-139				
4-Methyl-2-pentanone	56		"	50.0		112	72-132				
Acetone	85		"	50.0		171	36-155	High Bias			
Acrolein	60		"	50.0		120	10-238				
Acrylonitrile	53		"	50.0		107	66-141				
Benzene	54		"	50.0		109	77-127				
Bromochloromethane	54		"	50.0		109	74-129				
Bromodichloromethane	59		"	50.0		117	81-124				
Bromoform	61		"	50.0		122	80-136				
Bromomethane	57		"	50.0		113	32-177				

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BL51342 - EPA 5035A											
LCS (BL51342-BS1)								Prepared & Analyzed: 12/24/2015			
Carbon disulfide	53		ug/L	50.0		106	10-136				
Carbon tetrachloride	58		"	50.0		115	66-143				
Chlorobenzene	57		"	50.0		113	86-120				
Chloroethane	56		"	50.0		112	51-142				
Chloroform	54		"	50.0		107	76-131				
Chloromethane	53		"	50.0		106	49-132				
cis-1,2-Dichloroethylene	55		"	50.0		109	74-132				
cis-1,3-Dichloropropylene	58		"	50.0		115	81-129				
Cyclohexane	59		"	50.0		119	70-130				
Dibromochloromethane	57		"	50.0		115	10-200				
Dibromomethane	55		"	50.0		110	83-124				
Dichlorodifluoromethane	57		"	50.0		114	28-158				
Ethyl Benzene	59		"	50.0		118	84-125				
Hexachlorobutadiene	62		"	50.0		125	83-133				
Isopropylbenzene	60		"	50.0		121	81-127				
Methyl acetate	51		"	50.0		101	41-143				
Methyl tert-butyl ether (MTBE)	53		"	50.0		107	74-131				
Methylcyclohexane	61		"	50.0		121	70-130				
Methylene chloride	50		"	50.0		99.8	57-141				
n-Butylbenzene	59		"	50.0		118	80-130				
n-Propylbenzene	59		"	50.0		118	74-136				
o-Xylene	57		"	50.0		114	83-123				
p- & m- Xylenes	110		"	100		113	82-128				
p-Isopropyltoluene	61		"	50.0		121	85-125				
sec-Butylbenzene	59		"	50.0		118	83-125				
Styrene	57		"	50.0		114	86-126				
tert-Butyl alcohol (TBA)	50		"	50.0		99.1	70-130				
tert-Butylbenzene	57		"	50.0		114	80-127				
Tetrachloroethylene	59		"	50.0		117	80-129				
Toluene	58		"	50.0		116	85-121				
trans-1,2-Dichloroethylene	54		"	50.0		109	72-132				
trans-1,3-Dichloropropylene	58		"	50.0		116	78-132				
Trichloroethylene	61		"	50.0		121	84-123				
Trichlorofluoromethane	59		"	50.0		119	62-140				
Vinyl Chloride	56		"	50.0		112	52-130				
Surrogate: 1,2-Dichloroethane-d4	*48.2*		*"*	*50.0*		*96.4*	*77-125*				
Surrogate: Toluene-d8	*50.3*		*"*	*50.0*		*101*	*85-120*				
Surrogate: p-Bromofluorobenzene	*50.0*		*"*	*50.0*		*100*	*76-130*				



Volatile Organic Compounds by GC/MS - Quality Control Data

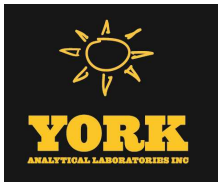
York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BL51342 - EPA 5035A											
LCS Dup (BL51342-BSD1)								Prepared & Analyzed: 12/24/2015			
1,1,1,2-Tetrachloroethane	56		ug/L	50.0		112	75-129		3.91	30	
1,1,1-Trichloroethane	60		"	50.0		119	71-137		3.33	30	
1,1,2,2-Tetrachloroethane	56		"	50.0		111	79-129		4.90	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	57		"	50.0		115	58-146		0.419	30	
1,1,2-Trichloroethane	56		"	50.0		111	83-123		1.41	30	
1,1-Dichloroethane	58		"	50.0		116	75-130		0.555	30	
1,1-Dichloroethylene	58		"	50.0		116	64-137		2.11	30	
1,2,3-Trichlorobenzene	60		"	50.0		120	81-140		3.29	30	
1,2,3-Trichloropropane	58		"	50.0		116	81-126		1.62	30	
1,2,4-Trichlorobenzene	61		"	50.0		122	80-141		2.47	30	
1,2,4-Trimethylbenzene	56		"	50.0		113	84-125		0.141	30	
1,2-Dibromo-3-chloropropane	54		"	50.0		108	74-142		7.29	30	
1,2-Dibromoethane	57		"	50.0		114	86-123		0.766	30	
1,2-Dichlorobenzene	56		"	50.0		113	85-122		1.22	30	
1,2-Dichloroethane	58		"	50.0		116	71-133		11.3	30	
1,2-Dichloropropane	57		"	50.0		113	81-122		0.475	30	
1,3,5-Trimethylbenzene	58		"	50.0		117	82-126		2.79	30	
1,3-Dichlorobenzene	59		"	50.0		118	84-124		0.578	30	
1,4-Dichlorobenzene	57		"	50.0		114	84-124		0.974	30	
1,4-Dioxane	1100		"	1000		114	10-228		3.32	30	
2-Butanone	61		"	50.0		123	58-147		8.65	30	
2-Hexanone	58		"	50.0		115	70-139		7.69	30	
4-Methyl-2-pentanone	49		"	50.0		98.5	72-132		13.1	30	
Acetone	76		"	50.0		152	36-155		11.7	30	
Acrolein	62		"	50.0		124	10-238		3.59	30	
Acrylonitrile	55		"	50.0		109	66-141		2.34	30	
Benzene	57		"	50.0		114	77-127		4.20	30	
Bromochloromethane	56		"	50.0		113	74-129		3.77	30	
Bromodichloromethane	58		"	50.0		115	81-124		1.82	30	
Bromoform	59		"	50.0		119	80-136		2.75	30	
Bromomethane	57		"	50.0		114	32-177		1.11	30	
Carbon disulfide	55		"	50.0		110	10-136		3.75	30	
Carbon tetrachloride	57		"	50.0		114	66-143		0.941	30	
Chlorobenzene	56		"	50.0		112	86-120		0.762	30	
Chloroethane	55		"	50.0		109	51-142		2.84	30	
Chloroform	56		"	50.0		112	76-131		4.78	30	
Chloromethane	55		"	50.0		109	49-132		3.19	30	
cis-1,2-Dichloroethylene	57		"	50.0		114	74-132		3.66	30	
cis-1,3-Dichloropropylene	57		"	50.0		114	81-129		1.17	30	
Cyclohexane	59		"	50.0		118	70-130		0.896	30	
Dibromochloromethane	57		"	50.0		113	10-200		1.32	30	
Dibromomethane	55		"	50.0		110	83-124		0.472	30	
Dichlorodifluoromethane	57		"	50.0		115	28-158		1.21	30	
Ethyl Benzene	58		"	50.0		116	84-125		2.05	30	
Hexachlorobutadiene	59		"	50.0		118	83-133		4.97	30	
Isopropylbenzene	60		"	50.0		119	81-127		1.52	30	
Methyl acetate	51		"	50.0		102	41-143		0.825	30	
Methyl tert-butyl ether (MTBE)	55		"	50.0		110	74-131		2.88	30	
Methylcyclohexane	59		"	50.0		118	70-130		2.36	30	
Methylene chloride	52		"	50.0		104	57-141		4.16	30	
n-Butylbenzene	59		"	50.0		118	80-130		0.237	30	

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BL51342 - EPA 5035A											
LCS Dup (BL51342-BSD1)								Prepared & Analyzed: 12/24/2015			
n-Propylbenzene	59		ug/L	50.0		119	74-136		0.898	30	
o-Xylene	58		"	50.0		116	83-123		1.18	30	
p- & m- Xylenes	110		"	100		112	82-128		1.39	30	
p-Isopropyltoluene	59		"	50.0		118	85-125		2.88	30	
sec-Butylbenzene	59		"	50.0		118	83-125		0.712	30	
Styrene	58		"	50.0		116	86-126		2.03	30	
tert-Butyl alcohol (TBA)	53		"	50.0		105	70-130		6.03	30	
tert-Butylbenzene	58		"	50.0		116	80-127		1.57	30	
Tetrachloroethylene	57		"	50.0		115	80-129		2.07	30	
Toluene	57		"	50.0		115	85-121		1.28	30	
trans-1,2-Dichloroethylene	56		"	50.0		112	72-132		2.73	30	
trans-1,3-Dichloropropylene	58		"	50.0		116	78-132		0.516	30	
Trichloroethylene	59		"	50.0		119	84-123		2.37	30	
Trichlorofluoromethane	61		"	50.0		122	62-140		2.85	30	
Vinyl Chloride	59		"	50.0		118	52-130		5.14	30	
Surrogate: 1,2-Dichloroethane-d4	*49.4*		*"*	*50.0*		*98.9*	*77-125*				
Surrogate: Toluene-d8	*50.1*		*"*	*50.0*		*100*	*85-120*				
Surrogate: p-Bromofluorobenzene	*50.1*		*"*	*50.0*		*100*	*76-130*				



Semivolatile Organic Compounds by GC/MS - Quality Control Data

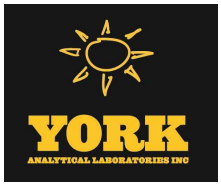
York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BL51222 - EPA 3545A											
Blank (BL51222-BLK1)											
Prepared: 12/22/2015 Analyzed: 12/23/2015											
1,1'-Biphenyl	ND	62.6	ug/kg wet								
1,2,4,5-Tetrachlorobenzene	ND	125	"								
1,2,4-Trichlorobenzene	ND	62.6	"								
1,2-Dichlorobenzene	ND	62.6	"								
1,2-Diphenylhydrazine (as Azobenzene)	ND	62.6	"								
1,3-Dichlorobenzene	ND	62.6	"								
1,4-Dichlorobenzene	ND	62.6	"								
2,3,4,6-Tetrachlorophenol	ND	125	"								
2,4,5-Trichlorophenol	ND	62.6	"								
2,4,6-Trichlorophenol	ND	62.6	"								
2,4-Dichlorophenol	ND	62.6	"								
2,4-Dimethylphenol	ND	62.6	"								
2,4-Dinitrophenol	ND	125	"								
2,4-Dinitrotoluene	ND	62.6	"								
2,6-Dinitrotoluene	ND	62.6	"								
2-Chloronaphthalene	ND	62.6	"								
2-Chlorophenol	ND	62.6	"								
2-Methylnaphthalene	ND	62.6	"								
2-Methylphenol	ND	62.6	"								
2-Nitroaniline	ND	125	"								
2-Nitrophenol	ND	62.6	"								
3- & 4-Methylphenols	ND	62.6	"								
3,3'-Dichlorobenzidine	ND	62.6	"								
3-Nitroaniline	ND	125	"								
4,6-Dinitro-2-methylphenol	ND	125	"								
4-Bromophenyl phenyl ether	ND	62.6	"								
4-Chloro-3-methylphenol	ND	62.6	"								
4-Chloroaniline	ND	62.6	"								
4-Chlorophenyl phenyl ether	ND	62.6	"								
4-Nitroaniline	ND	125	"								
4-Nitrophenol	ND	125	"								
Acenaphthene	ND	62.6	"								
Acenaphthylene	ND	62.6	"								
Acetophenone	ND	62.6	"								
Aniline	ND	250	"								
Anthracene	ND	62.6	"								
Atrazine	ND	62.6	"								
Benzaldehyde	ND	62.6	"								
Benzidine	ND	250	"								
Benzo(a)anthracene	ND	62.6	"								
Benzo(a)pyrene	ND	62.6	"								
Benzo(b)fluoranthene	ND	62.6	"								
Benzo(g,h,i)perylene	ND	62.6	"								
Benzo(k)fluoranthene	ND	62.6	"								
Benzoic acid	ND	62.6	"								
Benzyl alcohol	ND	62.6	"								
Benzyl butyl phthalate	ND	62.6	"								
Bis(2-chloroethoxy)methane	ND	62.6	"								
Bis(2-chloroethyl)ether	ND	62.6	"								
Bis(2-chloroisopropyl)ether	ND	62.6	"								
Bis(2-ethylhexyl)phthalate	ND	62.6	"								

Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

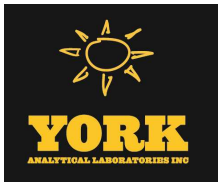
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BL51222 - EPA 3545A											
Blank (BL51222-BLK1)											
Prepared: 12/22/2015 Analyzed: 12/23/2015											
Caprolactam	ND	125	ug/kg wet								
Carbazole	ND	62.6	"								
Chrysene	ND	62.6	"								
Dibenzo(a,h)anthracene	ND	62.6	"								
Dibenzofuran	ND	62.6	"								
Diethyl phthalate	ND	62.6	"								
Dimethyl phthalate	ND	62.6	"								
Di-n-butyl phthalate	ND	62.6	"								
Di-n-octyl phthalate	ND	62.6	"								
Fluoranthene	ND	62.6	"								
Fluorene	ND	62.6	"								
Hexachlorobenzene	ND	62.6	"								
Hexachlorobutadiene	ND	62.6	"								
Hexachlorocyclopentadiene	ND	62.6	"								
Hexachloroethane	ND	62.6	"								
Indeno(1,2,3-cd)pyrene	ND	62.6	"								
Isophorone	ND	62.6	"								
Naphthalene	ND	62.6	"								
Nitrobenzene	ND	62.6	"								
N-Nitrosodimethylamine	ND	62.6	"								
N-nitroso-di-n-propylamine	ND	62.6	"								
N-Nitrosodiphenylamine	ND	62.6	"								
Pentachlorophenol	ND	62.6	"								
Phenanthrene	ND	62.6	"								
Phenol	ND	62.6	"								
Pyrene	ND	62.6	"								
Surrogate: 2-Fluorophenol	*4190*		*"*	*3760*		*111*	*20-108*				
Surrogate: Phenol-d5	*4590*		*"*	*3760*		*122*	*23-114*				
Surrogate: Nitrobenzene-d5	*2750*		*"*	*2500*		*110*	*22-108*				
Surrogate: 2-Fluorobiphenyl	*2550*		*"*	*2500*		*102*	*21-113*				
Surrogate: 2,4,6-Tribromophenol	*3070*		*"*	*3750*		*81.9*	*19-110*				
Surrogate: Terphenyl-d14	*2990*		*"*	*2500*		*119*	*24-116*				



Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

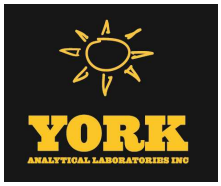
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BL51222 - EPA 3545A											
LCS (BL51222-BS1)								Prepared: 12/22/2015 Analyzed: 12/23/2015			
1,1'-Biphenyl	1510	62.6	ug/kg wet				22-103				
1,2,4,5-Tetrachlorobenzene	1760	125	"	2500		70.4	10-144				
1,2,4-Trichlorobenzene	1220	62.6	"	2500		48.7	23-130				
1,2-Dichlorobenzene	1120	62.6	"	2500		44.9	26-113				
1,2-Diphenylhydrazine (as Azobenzene)	1620	62.6	"	2500		64.7	10-140				
1,3-Dichlorobenzene	1120	62.6	"	2500		45.0	32-113				
1,4-Dichlorobenzene	1080	62.6	"	2500		43.2	28-111				
2,3,4,6-Tetrachlorophenol	1190	125	"	2500		47.5	30-130				
2,4,5-Trichlorophenol	1460	62.6	"	2500		58.2	14-138				
2,4,6-Trichlorophenol	1410	62.6	"	2500		56.6	27-122				
2,4-Dichlorophenol	1370	62.6	"	2500		54.6	23-133				
2,4-Dimethylphenol	1580	62.6	"	2500		63.1	15-131				
2,4-Dinitrophenol	1520	125	"	2500		60.7	10-149				
2,4-Dinitrotoluene	1450	62.6	"	2500		58.1	30-123				
2,6-Dinitrotoluene	1440	62.6	"	2500		57.5	30-125				
2-Chloronaphthalene	1260	62.6	"	2500		50.3	22-115				
2-Chlorophenol	1320	62.6	"	2500		52.9	25-121				
2-Methylnaphthalene	1440	62.6	"	2500		57.8	16-127				
2-Methylphenol	1430	62.6	"	2500		57.3	10-146				
2-Nitroaniline	1590	125	"	2500		63.8	24-126				
2-Nitrophenol	1360	62.6	"	2500		54.3	17-129				
3- & 4-Methylphenols	1370	62.6	"	2500		54.7	20-109				
3,3'-Dichlorobenzidine	2660	62.6	"	2500		106	10-147				
3-Nitroaniline	1610	125	"	2500		64.5	23-123				
4,6-Dinitro-2-methylphenol	1460	125	"	2500		58.5	10-149				
4-Bromophenyl phenyl ether	1240	62.6	"	2500		49.7	30-138				
4-Chloro-3-methylphenol	1650	62.6	"	2500		65.8	16-138				
4-Chloroaniline	1420	62.6	"	2500		57.0	10-117				
4-Chlorophenyl phenyl ether	1340	62.6	"	2500		53.7	18-132				
4-Nitroaniline	1670	125	"	2500		66.6	14-125				
4-Nitrophenol	655	125	"	2500		26.2	10-136				
Acenaphthene	1450	62.6	"	2500		58.1	17-124				
Acenaphthylene	1390	62.6	"	2500		55.4	16-124				
Acetophenone	1800	62.6	"	2500		72.0	28-105				
Aniline	1560	250	"	2500		62.6	10-111				
Anthracene	1450	62.6	"	2500		58.2	24-124				
Atrazine	1720	62.6	"	2500		69.0	22-120				
Benzaldehyde	1770	62.6	"	2500		70.9	21-100				
Benzo(a)anthracene	1830	62.6	"	2500		73.3	25-134				
Benzo(a)pyrene	1750	62.6	"	2500		69.9	29-144				
Benzo(b)fluoranthene	1590	62.6	"	2500		63.8	20-151				
Benzo(g,h,i)perylene	2120	62.6	"	2500		84.9	10-153				
Benzo(k)fluoranthene	1490	62.6	"	2500		59.6	10-148				
Benzoic acid	1850	62.6	"	2500		74.0	10-116				
Benzyl alcohol	1620	62.6	"	2500		64.9	17-128				
Benzyl butyl phthalate	1520	62.6	"	2500		60.9	10-132				
Bis(2-chloroethoxy)methane	1720	62.6	"	2500		68.8	10-129				
Bis(2-chloroethyl)ether	1540	62.6	"	2500		61.6	14-125				
Bis(2-chloroisopropyl)ether	2370	62.6	"	2500		94.7	14-122				
Bis(2-ethylhexyl)phthalate	1720	62.6	"	2500		68.9	10-141				
Caprolactam	2450	125	"	2500		98.0	10-123				



Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

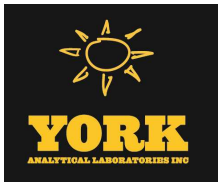
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BL51222 - EPA 3545A											
LCS (BL51222-BS1)								Prepared: 12/22/2015 Analyzed: 12/23/2015			
Carbazole	1500	62.6	ug/kg wet	2500		60.0	31-120				
Chrysene	1550	62.6	"	2500		62.1	24-116				
Dibenzo(a,h)anthracene	2140	62.6	"	2500		85.5	17-147				
Dibenzofuran	1400	62.6	"	2500		55.9	23-123				
Diethyl phthalate	1320	62.6	"	2500		52.7	23-122				
Dimethyl phthalate	1360	62.6	"	2500		54.5	28-127				
Di-n-butyl phthalate	1360	62.6	"	2500		54.4	19-123				
Di-n-octyl phthalate	1700	62.6	"	2500		68.0	10-132				
Fluoranthene	1550	62.6	"	2500		61.9	36-125				
Fluorene	1410	62.6	"	2500		56.5	16-130				
Hexachlorobenzene	1170	62.6	"	2500		46.6	10-129				
Hexachlorobutadiene	1090	62.6	"	2500		43.7	22-153				
Hexachlorocyclopentadiene	1070	62.6	"	2500		42.8	10-134				
Hexachloroethane	1190	62.6	"	2500		47.5	20-112				
Indeno(1,2,3-cd)pyrene	2030	62.6	"	2500		81.1	10-155				
Isophorone	1540	62.6	"	2500		61.5	14-131				
Naphthalene	1480	62.6	"	2500		59.4	20-121				
Nitrobenzene	1470	62.6	"	2500		58.8	20-121				
N-Nitrosodimethylamine	1480	62.6	"	2500		59.4	10-124				
N-nitroso-di-n-propylamine	1470	62.6	"	2500		58.9	21-119				
N-Nitrosodiphenylamine	1590	62.6	"	2500		63.6	10-163				
Pentachlorophenol	1170	62.6	"	2500		46.8	10-143				
Phenanthrene	1510	62.6	"	2500		60.4	24-123				
Phenol	1580	62.6	"	2500		63.3	15-123				
Pyrene	1640	62.6	"	2500		65.7	24-132				
Surrogate: 2-Fluorophenol	*2740*		"	*3760*		*72.9*	*20-108*				
Surrogate: Phenol-d5	*2890*		"	*3760*		*76.9*	*23-114*				
Surrogate: Nitrobenzene-d5	*1760*		"	*2500*		*70.6*	*22-108*				
Surrogate: 2-Fluorobiphenyl	*1570*		"	*2500*		*63.0*	*21-113*				
Surrogate: 2,4,6-Tribromophenol	*2020*		"	*3750*		*54.0*	*30-130*				
Surrogate: Terphenyl-d14	*1720*		"	*2500*		*68.7*	*24-116*				



Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BL51222 - EPA 3545A											
LCS Dup (BL51222-BSD1)								Prepared: 12/22/2015 Analyzed: 12/23/2015			
1,1'-Biphenyl	1350	62.6	ug/kg wet				22-103		11.2	30	
1,2,4,5-Tetrachlorobenzene	1550	125	"	2500		62.0	10-144		12.7	30	
1,2,4-Trichlorobenzene	1130	62.6	"	2500		45.1	23-130		7.81	30	
1,2-Dichlorobenzene	1030	62.6	"	2500		41.0	26-113		9.03	30	
1,2-Diphenylhydrazine (as Azobenzene)	1440	62.6	"	2500		57.5	10-140		11.7	30	
1,3-Dichlorobenzene	1030	62.6	"	2500		41.2	32-113		8.82	30	
1,4-Dichlorobenzene	984	62.6	"	2500		39.4	28-111		9.25	30	
2,3,4,6-Tetrachlorophenol	1060	125	"	2500		42.3	30-130		11.7	30	
2,4,5-Trichlorophenol	1300	62.6	"	2500		52.2	14-138		11.0	30	
2,4,6-Trichlorophenol	1270	62.6	"	2500		50.7	27-122		11.0	30	
2,4-Dichlorophenol	1240	62.6	"	2500		49.4	23-133		9.99	30	
2,4-Dimethylphenol	1440	62.6	"	2500		57.5	15-131		9.32	30	
2,4-Dinitrophenol	1270	125	"	2500		50.9	10-149		17.6	30	
2,4-Dinitrotoluene	1280	62.6	"	2500		51.4	30-123		12.3	30	
2,6-Dinitrotoluene	1300	62.6	"	2500		52.1	30-125		9.92	30	
2-Chloronaphthalene	1130	62.6	"	2500		45.2	22-115		10.7	30	
2-Chlorophenol	1210	62.6	"	2500		48.5	25-121		8.80	30	
2-Methylnaphthalene	1320	62.6	"	2500		53.0	16-127		8.63	30	
2-Methylphenol	1300	62.6	"	2500		52.1	10-146		9.40	30	
2-Nitroaniline	1430	125	"	2500		57.1	24-126		11.1	30	
2-Nitrophenol	1220	62.6	"	2500		49.0	17-129		10.4	30	
3- & 4-Methylphenols	1240	62.6	"	2500		49.5	20-109		9.94	30	
3,3'-Dichlorobenzidine	2380	62.6	"	2500		95.2	10-147		10.9	30	
3-Nitroaniline	1540	125	"	2500		61.8	23-123		4.21	30	
4,6-Dinitro-2-methylphenol	1300	125	"	2500		52.0	10-149		11.9	30	
4-Bromophenyl phenyl ether	1090	62.6	"	2500		43.8	30-138		12.7	30	
4-Chloro-3-methylphenol	1500	62.6	"	2500		60.1	16-138		9.15	30	
4-Chloroaniline	1280	62.6	"	2500		51.4	10-117		10.4	30	
4-Chlorophenyl phenyl ether	1210	62.6	"	2500		48.3	18-132		10.6	30	
4-Nitroaniline	1600	125	"	2500		64.2	14-125		3.76	30	
4-Nitrophenol	610	125	"	2500		24.4	10-136		7.20	30	
Acenaphthene	1310	62.6	"	2500		52.4	17-124		10.3	30	
Acenaphthylene	1240	62.6	"	2500		49.5	16-124		11.3	30	
Acetophenone	1650	62.6	"	2500		66.2	28-105		8.40	30	
Aniline	1420	250	"	2500		56.9	10-111		9.54	30	
Anthracene	1300	62.6	"	2500		52.1	24-124		11.1	30	
Atrazine	1550	62.6	"	2500		61.8	22-120		10.9	30	
Benzaldehyde	1630	62.6	"	2500		65.0	21-100		8.57	30	
Benzo(a)anthracene	1560	62.6	"	2500		62.3	25-134		16.3	30	
Benzo(a)pyrene	1420	62.6	"	2500		56.9	29-144		20.6	30	
Benzo(b)fluoranthene	1330	62.6	"	2500		53.1	20-151		18.2	30	
Benzo(g,h,i)perylene	1790	62.6	"	2500		71.7	10-153		16.9	30	
Benzo(k)fluoranthene	1300	62.6	"	2500		52.0	10-148		13.7	30	
Benzoic acid	1730	62.6	"	2500		69.2	10-116		6.65	30	
Benzyl alcohol	1480	62.6	"	2500		59.0	17-128		9.43	30	
Benzyl butyl phthalate	1290	62.6	"	2500		51.6	10-132		16.5	30	
Bis(2-chloroethoxy)methane	1560	62.6	"	2500		62.3	10-129		9.91	30	
Bis(2-chloroethyl)ether	1380	62.6	"	2500		55.1	14-125		11.1	30	
Bis(2-chloroisopropyl)ether	2170	62.6	"	2500		87.0	14-122		8.50	30	
Bis(2-ethylhexyl)phthalate	1440	62.6	"	2500		57.6	10-141		17.9	30	
Caprolactam	2270	125	"	2500		90.6	10-123		7.82	30	



Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BL51222 - EPA 3545A											
LCS Dup (BL51222-BSD1)									Prepared: 12/22/2015 Analyzed: 12/23/2015		
Carbazole	1340	62.6	ug/kg wet	2500		53.7	31-120		11.1	30	
Chrysene	1340	62.6	"	2500		53.6	24-116		14.7	30	
Dibenzo(a,h)anthracene	1820	62.6	"	2500		72.8	17-147		16.0	30	
Dibenzofuran	1250	62.6	"	2500		50.0	23-123		11.3	30	
Diethyl phthalate	1180	62.6	"	2500		47.2	23-122		11.0	30	
Dimethyl phthalate	1210	62.6	"	2500		48.3	28-127		12.1	30	
Di-n-butyl phthalate	1210	62.6	"	2500		48.3	19-123		11.9	30	
Di-n-octyl phthalate	1450	62.6	"	2500		58.0	10-132		15.9	30	
Fluoranthene	1380	62.6	"	2500		55.2	36-125		11.6	30	
Fluorene	1290	62.6	"	2500		51.4	16-130		9.45	30	
Hexachlorobenzene	1050	62.6	"	2500		41.8	10-129		10.9	30	
Hexachlorobutadiene	1020	62.6	"	2500		40.6	22-153		7.21	30	
Hexachlorocyclopentadiene	992	62.6	"	2500		39.7	10-134		7.56	30	
Hexachloroethane	1090	62.6	"	2500		43.6	20-112		8.52	30	
Indeno(1,2,3-cd)pyrene	1730	62.6	"	2500		69.1	10-155		16.0	30	
Isophorone	1390	62.6	"	2500		55.8	14-131		9.79	30	
Naphthalene	1350	62.6	"	2500		54.1	20-121		9.38	30	
Nitrobenzene	1340	62.6	"	2500		53.6	20-121		9.15	30	
N-Nitrosodimethylamine	1200	62.6	"	2500		48.0	10-124		21.2	30	
N-nitroso-di-n-propylamine	1320	62.6	"	2500		52.9	21-119		10.7	30	
N-Nitrosodiphenylamine	1430	62.6	"	2500		57.2	10-163		10.6	30	
Pentachlorophenol	1050	62.6	"	2500		42.0	10-143		10.8	30	
Phenanthrene	1360	62.6	"	2500		54.4	24-123		10.5	30	
Phenol	1450	62.6	"	2500		58.0	15-123		8.87	30	
Pyrene	1390	62.6	"	2500		55.7	24-132		16.6	30	
Surrogate: 2-Fluorophenol	*2470*		"	*3760*		*65.7*	*20-108*				
Surrogate: Phenol-d5	*2610*		"	*3760*		*69.4*	*23-114*				
Surrogate: Nitrobenzene-d5	*1610*		"	*2500*		*64.4*	*22-108*				
Surrogate: 2-Fluorobiphenyl	*1400*		"	*2500*		*56.1*	*21-113*				
Surrogate: 2,4,6-Tribromophenol	*1830*		"	*3750*		*48.9*	*30-130*				
Surrogate: Terphenyl-d14	*1490*		"	*2500*		*59.4*	*24-116*				

Organochlorine Pesticides by GC/ECD - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BL51246 - EPA 3550C											
Blank (BL51246-BLK1)											Prepared: 12/23/2015 Analyzed: 12/24/2015
4,4'-DDD	ND	0.330	ug/kg wet								
4,4'-DDE	ND	0.330	"								
4,4'-DDT	ND	0.330	"								
Aldrin	ND	0.330	"								
alpha-BHC	ND	0.330	"								
alpha-Chlordane	ND	0.330	"								
beta-BHC	ND	0.330	"								
Chlordane, total	ND	13.2	"								
delta-BHC	ND	0.330	"								
Dieldrin	ND	0.330	"								
Endosulfan I	ND	0.330	"								
Endosulfan II	ND	0.330	"								
Endosulfan sulfate	ND	0.330	"								
Endrin	ND	0.330	"								
Endrin aldehyde	ND	0.330	"								
Endrin ketone	ND	0.330	"								
gamma-BHC (Lindane)	ND	0.330	"								
gamma-Chlordane	ND	0.330	"								
Heptachlor	ND	0.330	"								
Heptachlor epoxide	ND	0.330	"								
Methoxychlor	ND	1.65	"								
Toxaphene	ND	16.7	"								
Surrogate: Tetrachloro-m-xylene	*57.3*		*"*	*67.0*		*85.6*	*30-140*				
Surrogate: Decachlorobiphenyl	*48.8*		*"*	*69.0*		*70.7*	*30-140*				
LCS (BL51246-BS2)											Prepared: 12/23/2015 Analyzed: 12/24/2015
4,4'-DDD	23.0	0.330	ug/kg wet	33.3		68.9	40-140				
4,4'-DDE	18.2	0.330	"	33.3		54.5	40-140				
4,4'-DDT	21.8	0.330	"	33.3		65.4	40-140				
Aldrin	21.3	0.330	"	33.3		63.9	40-140				
alpha-BHC	21.8	0.330	"	33.3		65.5	40-140				
alpha-Chlordane	19.7	0.330	"	33.3		59.1	40-140				
beta-BHC	17.9	0.330	"	33.3		53.8	40-140				
delta-BHC	19.5	0.330	"	33.3		58.5	40-140				
Dieldrin	21.6	0.330	"	33.3		64.7	40-140				
Endosulfan I	20.9	0.330	"	33.3		62.6	40-140				
Endosulfan II	22.6	0.330	"	33.3		67.7	40-140				
Endosulfan sulfate	27.0	0.330	"	33.3		81.0	40-140				
Endrin	20.6	0.330	"	33.3		61.7	40-140				
Endrin aldehyde	21.3	0.330	"	33.3		63.9	40-140				
Endrin ketone	22.9	0.330	"	33.3		68.7	40-140				
gamma-BHC (Lindane)	20.7	0.330	"	33.3		62.1	40-140				
gamma-Chlordane	20.0	0.330	"	33.3		59.9	40-140				
Heptachlor	20.9	0.330	"	33.3		62.6	40-140				
Heptachlor epoxide	19.2	0.330	"	33.3		57.5	40-140				
Methoxychlor	22.7	1.65	"	33.3		68.2	40-140				
Surrogate: Tetrachloro-m-xylene	*50.1*		*"*	*67.0*		*74.8*	*30-140*				
Surrogate: Decachlorobiphenyl	*45.1*		*"*	*69.0*		*65.3*	*30-140*				

Organochlorine Pesticides by GC/ECD - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BL51246 - EPA 3550C											
LCS Dup (BL51246-BSD2)									Prepared: 12/23/2015 Analyzed: 12/24/2015		
4,4'-DDD	25.0	0.330	ug/kg wet	33.3		74.9	40-140		8.29	30	
4,4'-DDE	19.6	0.330	"	33.3		58.7	40-140		7.32	30	
4,4'-DDT	24.3	0.330	"	33.3		72.9	40-140		10.8	30	
Aldrin	22.8	0.330	"	33.3		68.5	40-140		7.01	30	
alpha-BHC	22.8	0.330	"	33.3		68.4	40-140		4.26	30	
alpha-Chlordane	21.0	0.330	"	33.3		62.9	40-140		6.24	30	
beta-BHC	20.0	0.330	"	33.3		60.0	40-140		11.0	30	
delta-BHC	21.7	0.330	"	33.3		65.0	40-140		10.4	30	
Dieldrin	23.7	0.330	"	33.3		71.1	40-140		9.51	30	
Endosulfan I	22.3	0.330	"	33.3		66.8	40-140		6.46	30	
Endosulfan II	24.1	0.330	"	33.3		72.4	40-140		6.67	30	
Endosulfan sulfate	28.5	0.330	"	33.3		85.6	40-140		5.51	30	
Endrin	22.0	0.330	"	33.3		66.1	40-140		6.97	30	
Endrin aldehyde	23.2	0.330	"	33.3		69.7	40-140		8.70	30	
Endrin ketone	24.2	0.330	"	33.3		72.5	40-140		5.47	30	
gamma-BHC (Lindane)	21.7	0.330	"	33.3		65.0	40-140		4.53	30	
gamma-Chlordane	21.7	0.330	"	33.3		65.0	40-140		8.22	30	
Heptachlor	22.6	0.330	"	33.3		67.7	40-140		7.77	30	
Heptachlor epoxide	20.9	0.330	"	33.3		62.8	40-140		8.87	30	
Methoxychlor	25.6	1.65	"	33.3		76.8	40-140		11.9	30	
Surrogate: Tetrachloro-m-xylene	*51.2*		*"*	*67.0*		*76.4*	*30-140*				
Surrogate: Decachlorobiphenyl	*47.9*		*"*	*69.0*		*69.5*	*30-140*				

Polychlorinated Biphenyls by GC/ECD - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BL51246 - EPA 3550C											
Blank (BL51246-BLK1)								Prepared & Analyzed: 12/23/2015			
Aroclor 1016	ND	0.0167	mg/kg wet								
Aroclor 1221	ND	0.0167	"								
Aroclor 1232	ND	0.0167	"								
Aroclor 1242	ND	0.0167	"								
Aroclor 1248	ND	0.0167	"								
Aroclor 1254	ND	0.0167	"								
Aroclor 1260	ND	0.0167	"								
Total PCBs	ND	0.0167	"								
Surrogate: Tetrachloro-m-xylene	*0.0760*		*"*	*0.0670*		*113*	*30-140*				
Surrogate: Decachlorobiphenyl	*0.0737*		*"*	*0.0690*		*107*	*30-140*				
LCS (BL51246-BS1)								Prepared & Analyzed: 12/23/2015			
Aroclor 1016	0.245	0.0167	mg/kg wet	0.333		73.6	40-130				
Aroclor 1260	0.228	0.0167	"	0.333		68.4	40-130				
Surrogate: Tetrachloro-m-xylene	*0.0497*		*"*	*0.0670*		*74.1*	*30-140*				
Surrogate: Decachlorobiphenyl	*0.0503*		*"*	*0.0690*		*72.9*	*30-140*				
LCS Dup (BL51246-BSD1)								Prepared & Analyzed: 12/23/2015			
Aroclor 1016	0.269	0.0167	mg/kg wet	0.333		80.6	40-130		9.00	25	
Aroclor 1260	0.251	0.0167	"	0.333		75.2	40-130		9.41	25	
Surrogate: Tetrachloro-m-xylene	*0.0617*		*"*	*0.0670*		*92.0*	*30-140*				
Surrogate: Decachlorobiphenyl	*0.0613*		*"*	*0.0690*		*88.9*	*30-140*				

Gas Chromatography/Flame Ionization Detector - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BL51179 - EPA 3545A											
Blank (BL51179-BLK1)								Prepared & Analyzed: 12/22/2015			
Total EPH	ND	50.0	mg/kg wet								
Surrogate: 1-Chlorooctadecane	*13.5*		*"*	*10.0*		*135*	*40-140*				
Surrogate: o-Terphenyl	*13.9*		*"*	*10.0*		*139*	*40-140*				
LCS (BL51179-BS1)								Prepared & Analyzed: 12/22/2015			
Total EPH	255	50.0	mg/kg wet	360		70.8	40-140				
Surrogate: 1-Chlorooctadecane	*10.3*		*"*	*10.0*		*103*	*40-140*				
Surrogate: o-Terphenyl	*10.0*		*"*	*10.0*		*100*	*40-140*				
LCS Dup (BL51179-BSD1)								Prepared & Analyzed: 12/22/2015			
Total EPH	262	50.0	mg/kg wet	360		72.7	40-140		2.62	30	
Surrogate: 1-Chlorooctadecane	*10.2*		*"*	*10.0*		*102*	*40-140*				
Surrogate: o-Terphenyl	*10.1*		*"*	*10.0*		*101*	*40-140*				
Duplicate (BL51179-DUP1)	*Source sample: 15L0719-02 (TWA-TP7-Comp)							Prepared & Analyzed: 12/22/2015			
Total EPH	ND	53.6	mg/kg dry		ND					200	
Surrogate: 1-Chlorooctadecane	*6.78*		*"*	*10.7*		*63.3*	*40-140*				
Surrogate: o-Terphenyl	*6.90*		*"*	*10.7*		*64.4*	*40-140*				
Matrix Spike (BL51179-MS1)	*Source sample: 15L0719-02 (TWA-TP7-Comp)							Prepared & Analyzed: 12/22/2015			
Total EPH	227	53.6	mg/kg dry	386	ND	58.8	40-140				
Surrogate: 1-Chlorooctadecane	*8.45*		*"*	*10.7*		*78.9*	*40-140*				
Surrogate: o-Terphenyl	*8.12*		*"*	*10.7*		*75.8*	*40-140*				

Metals by ICP - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BL51061 - EPA 3050B											
Blank (BL51061-BLK1)											Prepared: 12/18/2015 Analyzed: 12/20/2015
Aluminum	ND	5.00	mg/kg wet								
Antimony	ND	0.500	"								
Arsenic	ND	1.00	"								
Barium	ND	1.00	"								
Beryllium	ND	0.100	"								
Cadmium	ND	0.300	"								
Calcium	ND	5.00	"								
Chromium	ND	0.500	"								
Cobalt	ND	0.500	"								
Copper	0.924	0.500	"								
Iron	ND	2.00	"								
Lead	ND	0.300	"								
Magnesium	ND	5.00	"								
Manganese	ND	0.500	"								
Nickel	ND	0.500	"								
Potassium	ND	5.00	"								
Selenium	ND	1.00	"								
Silver	ND	0.500	"								
Sodium	ND	10.0	"								
Thallium	ND	1.00	"								
Vanadium	ND	1.00	"								
Zinc	ND	1.00	"								
Reference (BL51061-SRM1)											Prepared: 12/18/2015 Analyzed: 12/20/2015
Aluminum	8900	5.00	mg/kg wet	8100		110	39.6-160.5				
Antimony	105	0.500	"	116		90.6	55.7-252.6				
Arsenic	120	1.00	"	122		98.5	70-145.1				
Barium	171	1.00	"	167		102	73.1-126.9				
Beryllium	54.6	0.100	"	54.3		100	73.1-127.1				
Cadmium	83.3	0.300	"	88.0		94.6	73.3-127.3				
Calcium	5790	5.00	"	5920		97.8	73.6-126.4				
Chromium	106	0.500	"	102		104	69.4-130.4				
Cobalt	101	0.500	"	99.4		101	74.3-125.8				
Copper	85.7	0.500	"	78.0		110	73.7-132.1				
Iron	17500	2.00	"	15100		116	37.1-162.9				
Lead	92.2	0.300	"	94.5		97.6	70.5-129				
Magnesium	3030	5.00	"	3020		100	65.9-133.8				
Manganese	409	0.500	"	401		102	76.1-132.9				
Nickel	62.1	0.500	"	56.3		110	69.8-130				
Potassium	2490	5.00	"	2490		100	60.6-139.4				
Selenium	152	1.00	"	157		97.0	67.5-131.8				
Silver	9.03	0.500	"	34.2		26.4	65.5-134.2	Low Bias			
Sodium	231	10.0	"	246		94.1	32-170				
Thallium	109	1.00	"	116		93.8	67.4-132.7				
Vanadium	72.7	1.00	"	67.1		108	57.8-192.3				
Zinc	195	1.00	"	207		94.2	70-130.4				

Metals by ICP - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BL51151 - EPA 3015A/1311											
Blank (BL51151-BLK1)											Prepared: 12/21/2015 Analyzed: 12/22/2015
Arsenic	ND	0.004	mg/L								
Barium	ND	0.010	"								
Cadmium	ND	0.003	"								
Chromium	ND	0.005	"								
Lead	ND	0.003	"								
Selenium	ND	0.010	"								
Silver	ND	0.005	"								
Blank (BL51151-BLK2)											Prepared: 12/21/2015 Analyzed: 12/22/2015
Arsenic	ND	0.004	mg/L								
Barium	ND	0.010	"								
Cadmium	ND	0.003	"								
Chromium	ND	0.005	"								
Lead	ND	0.003	"								
Selenium	0.012	0.010	"								
Silver	ND	0.005	"								
Reference (BL51151-SRM1)											Prepared: 12/21/2015 Analyzed: 12/22/2015
Arsenic	0.551		ug/mL	0.580		95.1	83.9-114.7				
Barium	0.498		"	0.480		104	85-115				
Cadmium	0.437		"	0.470		93.0	85.1-115.1				
Chromium	0.633		"	0.639		99.1	84.9-115				
Lead	0.452		"	0.490		92.2	85.1-115.1				
Selenium	0.769		"	0.839		91.6	84.9-115				
Silver	0.620		"	0.600		103	85-115				

Mercury by EPA 7000/200 Series Methods - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BL51132 - EPA 7473 water											
Blank (BL51132-BLK1)								Prepared & Analyzed: 12/21/2015			
Mercury	ND	0.0002000	mg/L								
Reference (BL51132-SRM1)								Prepared & Analyzed: 12/21/2015			
Mercury	0.0019113		mg/L	0.00230		83.1	61.3-135				
Batch BL51183 - EPA 7473 soil											
Blank (BL51183-BLK1)								Prepared & Analyzed: 12/22/2015			
Mercury	ND	0.0300	mg/kg wet								
Reference (BL51183-SRM1)								Prepared & Analyzed: 12/22/2015			
Mercury	5.9430		mg/kg	5.76		103	71.2-129				

Wet Chemistry Parameters - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BL51037 - EPA SW 846-1311 TCLP ext. for metals											
Blank (BL51037-BLK1)									Prepared: 12/17/2015 Analyzed: 12/18/2015		
TCLP Extraction	Completed	1.00	N/A								
Batch BL51095 - EPA SW846-3060											
Blank (BL51095-BLK1)									Prepared & Analyzed: 12/18/2015		
Chromium, Hexavalent	ND	0.500	mg/kg wet								
Reference (BL51095-SRM1)									Prepared & Analyzed: 12/18/2015		
Chromium, Hexavalent	81.8		mg/L	110		74.4	30.3-201				
Batch BL51332 - Analysis Preparation											
Blank (BL51332-BLK1)									Prepared & Analyzed: 12/24/2015		
Reactivity - Cyanide	ND	0.250	mg/kg								
Batch BL51333 - Analysis Preparation											
Blank (BL51333-BLK1)									Prepared & Analyzed: 12/24/2015		
Reactivity - Sulfide	ND	15.0	mg/kg								

Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
15L0719-01	TWA-TP7-Grab	4 oz. WM Clear Glass Cool to 4° C

Notes and Definitions

VOA-CONT NON-COMPLIANT- the container(s) provided by the client for soil volatiles do not meet the requirements of EPA SW846-5035A. Results reported below 200 ug/kg may be biased low due to samples not being collected according to EPA SW846 5035A requirements.

QL-02 This LCS analyte is outside Laboratory Recovery limits due the analyte behavior using the referenced method. The reference method has certain limitations with respect to analytes of this nature.

PF-01 No Free Liquid

M-SeTC It is noted that a known interference with selenium at the analytical line for analysis by ICP is caused by carbon emission from the TCLP or high organics matrix. The data user may subtract the matrix blank value from the data if needed.

M-DB Analyte in Method Blank >MDL. Sample conc. >10 X blank conc.

J Detected below the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated concentration.

IGN-01 Non-Ignit.

HT-pH HOLDING TIME EXCEEDED. Samples for pH must be measured in the field or within 15 minutes of sample collection.

EXT-COMP Completed

B Analyte is found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants. Data users should consider anything <10x the blank value as artifact.

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* Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.

ND NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)

RL REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.

LOQ LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.

LOD LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.

MDL METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.

Reported to This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.

NR Not reported

RPD Relative Percent Difference

Wet The data has been reported on an as-received (wet weight) basis

Low Bias Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.

High Bias High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.

Non-Dir. Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.

YORK ANALYTICAL LABORATORIES
120 RESEARCH DR.
STRATFORD, CT 06615
(203) 325-1371
FAX (203) 357-0166

Field Chain-of-Custody Record

NOTE: York's Std. Terms & Conditions are listed on the back side of this document. This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

York Project No. 15L0719

YOUR Information

Company:
Address: 703 LORIMAR ST BROOKLYN, NY 11211
Phone No. 718-782-0267
Contact Person: SCOTT SWANSON
E-Mail Address: SWANSONS@LIRO.COM

Report To:

Company: LIRO ENGINEERS
Address: 690 DELAWARE AVE BUFFALO, NY 14209
Phone No. 716-782-0267
Attention: STEVE FRANK
E-Mail Address: FRANKS@LIRO.COM

Invoice To:

Company:
Address: SAME
Phone No.
Attention:
E-Mail Address:

YOUR Project ID

TWA FLIGHT CTR HOTEL
15-111-0324

Purchase Order No.

Samples from: CT NY NJ

Turn-Around Time

- RUSH - Same Day ☐
- RUSH - Next Day ☐
- RUSH - Two Day ☐
- RUSH - Three Day ☐
- RUSH - Four Day ☐
- Standard(5-7 Days) ☒

Report Type

- Summary Report
- Summary w/ QA Summary
- CT RCP Package
- CTRCP DQA/DUE Pkg
- NY ASP A Package
- NY ASP B Package
- NJDEP Red. Deliv.

Electronic Data Deliverables (EDD)

- Simple Excel
- NYSDEC EQuIS
- EQuIS (std)
- EZ-EDD (EQuIS) NJ SOIL
- NJDEP SRP HazSite EDD
- GIS/KEY (NY Reg) STARTUP
- Other
- **York Regulatory Comparison**
- **Excel Spreadsheet**

Compare to the following Regs. (please fill in):

Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.

Samples Collected/Authorized By (Signature)

SCOTT SWANSON
Name (printed)

Matrix Codes
S - soil
Other - specify(oil, etc.)
WW - wastewater
GW - groundwater
DW - drinking water
Air-A - ambient air
Air-SV - soil vapor

Volatiles		Semi-Vols.	Pest/PCB/Herb	Metals	Misc. Org.	Full Lists	Misc.
8260 full	TICs	8270 or 625	8082PCB	RCRA8	TPH GRO	Pri.Poll.	Corrosivity
624	Site Spec.	STARS list	8081Pest	PP13 list	TPH DRO	TCL Organics	Reactivity
STARS list	Nassau Co.	BN Only	8151Herb	TAL	CT ETPH	TAL Met/CN	Ignitability
BTEX	Suffolk Co.	Acids Only	CT RCP	CT15 list	NY 310-13	Full TCLP	Flash Point
MTBE	Ketones	PAH list	App. IX	TAGM list	TPH 1664	Full App. IX	Sieve Anal.
TCL list	Oxygenates	TAGM list	Site Spec.	NJDEP list	Air TO14A	Part360-Routine	Heterotrophs
TAGM list	TCLP list	CT RCP list	SPLP or TCLP	Total	Air TO15	Part360-Baseline	TOX
CT RCP list	524.2	TCL list	TCLP Pest	Dissolved	Air STARS	Part 360-Expanded No Dioxins/Furans	BTU/lb.
Arom. only	502.2	NJDEP list	TCLP Herb	SPLP or TCLP	Air VPH	Part 360-Expanded Full List	Aquatic Tox.
Halog.only	NJDEP list	App. IX	Chlordane	Indiv. Metals	Air TICs	NYCDEP Sewer	TOC
App.IX list	SPLP or TCLP	TCLP BNA	608 Pest	LIST Below	Methane	NYSDEC Sewer	Asbestos
8021B list		SPLP or TCLP	608 PCB		Helium	TAGM	Silica

Sample Identification	Date/Time Sampled	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below	Container Description(s)
TWA-TP 7-GRAB	12/15/15 2:30pm	S	SEE ATTACHED ANALYSES	~~2~~ (1) 4oz GLASS
TWA-TP 7-COMP	12/15/15 3:00pm	S		(2) 8oz GLASS
				3 TOTAL JARS

Comments

Preservation Check those Applicable
Special Instructions
Field Filtered ☐
Lab to Filter ☐

4°C ___ Frozen ___ HCl ___ MeOH ___ HNO3 ___ H2SO4 ___ NaOH ___
ZnAc ___ Ascorbic Acid ___ Other ___

Samples Relinquished By — Date/Time: 12/15/15 18:00 (IN OFFICE)
Samples Received By — Date/Time: K Bader 12/17/15 830 AM
Samples Relinquished By — Date/Time: K Bader 12-17-15
Samples Received in LAB by — Date/Time: TC 12/17/15 1903

Temperature on Receipt 4.4 °C

Technical Report

prepared for:

LiRo Engineers
690 Delaware Ave.
Buffalo NY, 14209-2202
Attention: Steve Frank

Report Date: 12/23/2015
Client Project ID: TWA Flight Ctr Hotel 15-111-0324
York Project (SDG) No.: 15L0569

Report Date: 12/23/2015
Client Project ID: TWA Flight Ctr Hotel 15-111-0324
York Project (SDG) No.: 15L0569

LiRo Engineers
690 Delaware Ave.
Buffalo NY, 14209-2202
Attention: Steve Frank

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on December 15, 2015 and listed below. The project was identified as your project: **TWA Flight Ctr Hotel 15-111-0324**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the attachment to this report, and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

York Sample ID	Client Sample ID	Matrix	Date Collected	Date Received
15L0569-01	TWA-TP10	Soil	12/11/2015	12/15/2015
15L0569-02	TWA-TP10	Soil	12/11/2015	12/15/2015
15L0569-03	TWA-TP2	Soil	12/11/2015	12/15/2015
15L0569-04	TWA-TP2	Soil	12/11/2015	12/15/2015

General Notes for York Project (SDG) No.: 15L0569

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation, unless otherwise noted.
6. All analyses conducted met method or Laboratory SOP requirements. See the Qualifiers and/or Narrative sections for further information.
7. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
8. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.

Approved By: 

Date: 12/23/2015

Benjamin Gulizia
Laboratory Director

Sample Information

Client Sample ID: TWA-TP10 **York Sample ID:** 15L0569-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0569	TWA Flight Ctr Hotel 15-111-0324	Soil	December 11, 2015 12:00 pm	12/15/2015

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1'-Biphenyl	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP	12/20/2015 07:59	12/20/2015 14:40	KH
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		ug/kg dry	89.5	179	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP	12/20/2015 07:59	12/20/2015 14:40	KH
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/20/2015 07:59	12/20/2015 14:40	KH
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications: NELAC-NY10854	12/20/2015 07:59	12/20/2015 14:40	KH
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP	12/20/2015 07:59	12/20/2015 14:40	KH
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications: NELAC-NY10854	12/20/2015 07:59	12/20/2015 14:40	KH
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications: NELAC-NY10854	12/20/2015 07:59	12/20/2015 14:40	KH
58-90-2	2,3,4,6-Tetrachlorophenol	ND		ug/kg dry	89.5	179	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP	12/20/2015 07:59	12/20/2015 14:40	KH
95-95-4	2,4,5-Trichlorophenol	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP	12/20/2015 07:59	12/20/2015 14:40	KH
88-06-2	2,4,6-Trichlorophenol	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/20/2015 07:59	12/20/2015 14:40	KH
120-83-2	2,4-Dichlorophenol	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/20/2015 07:59	12/20/2015 14:40	KH
105-67-9	2,4-Dimethylphenol	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/20/2015 07:59	12/20/2015 14:40	KH
51-28-5	2,4-Dinitrophenol	ND		ug/kg dry	89.5	179	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/20/2015 07:59	12/20/2015 14:40	KH
121-14-2	2,4-Dinitrotoluene	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/20/2015 07:59	12/20/2015 14:40	KH
606-20-2	2,6-Dinitrotoluene	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/20/2015 07:59	12/20/2015 14:40	KH
91-58-7	2-Chloronaphthalene	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/20/2015 07:59	12/20/2015 14:40	KH
95-57-8	2-Chlorophenol	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/20/2015 07:59	12/20/2015 14:40	KH
91-57-6	2-Methylnaphthalene	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP	12/20/2015 07:59	12/20/2015 14:40	KH
95-48-7	2-Methylphenol	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/20/2015 07:59	12/20/2015 14:40	KH
88-74-4	2-Nitroaniline	ND		ug/kg dry	89.5	179	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/20/2015 07:59	12/20/2015 14:40	KH
88-75-5	2-Nitrophenol	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/20/2015 07:59	12/20/2015 14:40	KH

Sample Information

Client Sample ID: TWA-TP10 **York Sample ID:** 15L0569-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0569	TWA Flight Ctr Hotel 15-111-0324	Soil	December 11, 2015 12:00 pm	12/15/2015

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
65794-96-9	3- & 4-Methylphenols	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP	12/20/2015 07:59	12/20/2015 14:40	KH
91-94-1	3,3'-Dichlorobenzidine	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/20/2015 07:59	12/20/2015 14:40	KH
99-09-2	3-Nitroaniline	ND		ug/kg dry	89.5	179	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/20/2015 07:59	12/20/2015 14:40	KH
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/kg dry	89.5	179	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP	12/20/2015 07:59	12/20/2015 14:40	KH
101-55-3	4-Bromophenyl phenyl ether	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/20/2015 07:59	12/20/2015 14:40	KH
59-50-7	4-Chloro-3-methylphenol	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/20/2015 07:59	12/20/2015 14:40	KH
106-47-8	4-Chloroaniline	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/20/2015 07:59	12/20/2015 14:40	KH
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/20/2015 07:59	12/20/2015 14:40	KH
100-01-6	4-Nitroaniline	ND		ug/kg dry	89.5	179	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/20/2015 07:59	12/20/2015 14:40	KH
100-02-7	4-Nitrophenol	ND		ug/kg dry	89.5	179	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/20/2015 07:59	12/20/2015 14:40	KH
83-32-9	Acenaphthene	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/20/2015 07:59	12/20/2015 14:40	KH
208-96-8	Acenaphthylene	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/20/2015 07:59	12/20/2015 14:40	KH
98-86-2	Acetophenone	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP	12/20/2015 07:59	12/20/2015 14:40	KH
62-53-3	Aniline	ND		ug/kg dry	179	358	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/20/2015 07:59	12/20/2015 14:40	KH
120-12-7	Anthracene	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/20/2015 07:59	12/20/2015 14:40	KH
1912-24-9	Atrazine	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP	12/20/2015 07:59	12/20/2015 14:40	KH
100-52-7	Benzaldehyde	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP	12/20/2015 07:59	12/20/2015 14:40	KH
92-87-5	Benzidine	ND		ug/kg dry	179	358	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854	12/20/2015 07:59	12/20/2015 14:40	KH
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/20/2015 07:59	12/20/2015 14:40	KH
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/20/2015 07:59	12/20/2015 14:40	KH
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/20/2015 07:59	12/20/2015 14:40	KH
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/20/2015 07:59	12/20/2015 14:40	KH

Sample Information

Client Sample ID: TWA-TP10 **York Sample ID:** 15L0569-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0569	TWA Flight Ctr Hotel 15-111-0324	Soil	December 11, 2015 12:00 pm	12/15/2015

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
207-08-9	**Benzo(k)fluoranthene**	**51.5**	J	ug/kg dry	44.9	89.5	2	EPA 8270D Certifications:	12/20/2015 07:59	12/20/2015 14:40 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
65-85-0	Benzoic acid	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications:	12/20/2015 07:59	12/20/2015 14:40 NELAC-NY10854,NJDEP	KH
100-51-6	Benzyl alcohol	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications:	12/20/2015 07:59	12/20/2015 14:40 NELAC-NY10854,NJDEP,PADEP	KH
85-68-7	Benzyl butyl phthalate	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications:	12/20/2015 07:59	12/20/2015 14:40 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications:	12/20/2015 07:59	12/20/2015 14:40 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
111-44-4	Bis(2-chloroethyl)ether	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications:	12/20/2015 07:59	12/20/2015 14:40 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications:	12/20/2015 07:59	12/20/2015 14:40 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
117-81-7	Bis(2-ethylhexyl)phthalate	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications:	12/20/2015 07:59	12/20/2015 14:40 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
105-60-2	Caprolactam	ND		ug/kg dry	89.5	179	2	EPA 8270D Certifications:	12/20/2015 07:59	12/20/2015 14:40 NELAC-NY10854,NJDEP	KH
86-74-8	Carbazole	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications:	12/20/2015 07:59	12/20/2015 14:40 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
218-01-9	**Chrysene**	**58.7**	J	ug/kg dry	44.9	89.5	2	EPA 8270D Certifications:	12/20/2015 07:59	12/20/2015 14:40 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications:	12/20/2015 07:59	12/20/2015 14:40 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
132-64-9	Dibenzofuran	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications:	12/20/2015 07:59	12/20/2015 14:40 CTDOH,NELAC-NY10854,NJDEP	KH
84-66-2	Diethyl phthalate	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications:	12/20/2015 07:59	12/20/2015 14:40 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
131-11-3	Dimethyl phthalate	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications:	12/20/2015 07:59	12/20/2015 14:40 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
84-74-2	Di-n-butyl phthalate	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications:	12/20/2015 07:59	12/20/2015 14:40 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
117-84-0	Di-n-octyl phthalate	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications:	12/20/2015 07:59	12/20/2015 14:40 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
206-44-0	**Fluoranthene**	**86.6**	J	ug/kg dry	44.9	89.5	2	EPA 8270D Certifications:	12/20/2015 07:59	12/20/2015 14:40 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
86-73-7	Fluorene	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications:	12/20/2015 07:59	12/20/2015 14:40 NELAC-NY10854,NJDEP,PADEP	KH
118-74-1	Hexachlorobenzene	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications:	12/20/2015 07:59	12/20/2015 14:40 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications:	12/20/2015 07:59	12/20/2015 14:40 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
77-47-4	Hexachlorocyclopentadiene	ND		ug/kg dry	44.9	89.5	2	EPA 8270D Certifications:	12/20/2015 07:59	12/20/2015 14:40 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH

Sample Information

Client Sample ID: TWA-TP10 **York Sample ID:** 15L0569-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0569	TWA Flight Ctr Hotel 15-111-0324	Soil	December 11, 2015 12:00 pm	12/15/2015

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
67-72-1	Hexachloroethane	ND		ug/kg dry	44.9	89.5	2	EPA 8270D	12/20/2015 07:59	12/20/2015 14:40	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	44.9	89.5	2	EPA 8270D	12/20/2015 07:59	12/20/2015 14:40	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
78-59-1	Isophorone	ND		ug/kg dry	44.9	89.5	2	EPA 8270D	12/20/2015 07:59	12/20/2015 14:40	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
91-20-3	Naphthalene	ND		ug/kg dry	44.9	89.5	2	EPA 8270D	12/20/2015 07:59	12/20/2015 14:40	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
98-95-3	Nitrobenzene	ND		ug/kg dry	44.9	89.5	2	EPA 8270D	12/20/2015 07:59	12/20/2015 14:40	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
62-75-9	N-Nitrosodimethylamine	ND		ug/kg dry	44.9	89.5	2	EPA 8270D	12/20/2015 07:59	12/20/2015 14:40	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
621-64-7	N-nitroso-di-n-propylamine	ND		ug/kg dry	44.9	89.5	2	EPA 8270D	12/20/2015 07:59	12/20/2015 14:40	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
86-30-6	N-Nitrosodiphenylamine	ND		ug/kg dry	44.9	89.5	2	EPA 8270D	12/20/2015 07:59	12/20/2015 14:40	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
87-86-5	Pentachlorophenol	ND		ug/kg dry	44.9	89.5	2	EPA 8270D	12/20/2015 07:59	12/20/2015 14:40	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
85-01-8	**Phenanthrene**	**53.0**	CCV-E, J	ug/kg dry	44.9	89.5	2	EPA 8270D	12/20/2015 07:59	12/20/2015 14:40	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
108-95-2	Phenol	ND		ug/kg dry	44.9	89.5	2	EPA 8270D	12/20/2015 07:59	12/20/2015 14:40	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
129-00-0	**Pyrene**	**87.3**	J	ug/kg dry	44.9	89.5	2	EPA 8270D	12/20/2015 07:59	12/20/2015 14:40	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

	Surrogate Recoveries	Result	Acceptance Range
367-12-4	*Surrogate: 2-Fluorophenol*	*41.8 %*	*20-108*
4165-62-2	*Surrogate: Phenol-d5*	*46.3 %*	*23-114*
4165-60-0	*Surrogate: Nitrobenzene-d5*	*41.4 %*	*22-108*
321-60-8	*Surrogate: 2-Fluorobiphenyl*	*27.4 %*	*21-113*
118-79-6	*Surrogate: 2,4,6-Tribromophenol*	*40.9 %*	*19-110*
1718-51-0	*Surrogate: Terphenyl-d14*	*39.2 %*	*24-116*

Pesticides, 8081 target list

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND		ug/kg dry	1.77	1.77	5	EPA 8081B	12/21/2015 05:48	12/21/2015 14:27	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
72-55-9	4,4'-DDE	ND		ug/kg dry	1.77	1.77	5	EPA 8081B	12/21/2015 05:48	12/21/2015 14:27	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
50-29-3	4,4'-DDT	ND		ug/kg dry	1.77	1.77	5	EPA 8081B	12/21/2015 05:48	12/21/2015 14:27	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Sample Information

Client Sample ID: TWA-TP10 **York Sample ID:** 15L0569-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0569	TWA Flight Ctr Hotel 15-111-0324	Soil	December 11, 2015 12:00 pm	12/15/2015

Pesticides, 8081 target list

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
309-00-2	Aldrin	ND		ug/kg dry	1.77	1.77	5	EPA 8081B	12/21/2015 05:48	12/21/2015 14:27	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
319-84-6	alpha-BHC	ND		ug/kg dry	1.77	1.77	5	EPA 8081B	12/21/2015 05:48	12/21/2015 14:27	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
5103-71-9	alpha-Chlordane	ND		ug/kg dry	1.77	1.77	5	EPA 8081B	12/21/2015 05:48	12/21/2015 14:27	AMC
								Certifications:	NELAC-NY10854,NJDEP		
319-85-7	beta-BHC	ND		ug/kg dry	1.77	1.77	5	EPA 8081B	12/21/2015 05:48	12/21/2015 14:27	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
57-74-9	Chlordane, total	ND		ug/kg dry	70.8	70.8	5	EPA 8081B	12/21/2015 05:48	12/21/2015 14:27	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
319-86-8	delta-BHC	ND		ug/kg dry	1.77	1.77	5	EPA 8081B	12/21/2015 05:48	12/21/2015 14:27	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
60-57-1	Dieldrin	ND		ug/kg dry	1.77	1.77	5	EPA 8081B	12/21/2015 05:48	12/21/2015 14:27	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
959-98-8	Endosulfan I	ND		ug/kg dry	1.77	1.77	5	EPA 8081B	12/21/2015 05:48	12/21/2015 14:27	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
33213-65-9	Endosulfan II	ND		ug/kg dry	1.77	1.77	5	EPA 8081B	12/21/2015 05:48	12/21/2015 14:27	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
1031-07-8	Endosulfan sulfate	ND		ug/kg dry	1.77	1.77	5	EPA 8081B	12/21/2015 05:48	12/21/2015 14:27	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
72-20-8	Endrin	ND		ug/kg dry	1.77	1.77	5	EPA 8081B	12/21/2015 05:48	12/21/2015 14:27	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7421-93-4	Endrin aldehyde	ND		ug/kg dry	1.77	1.77	5	EPA 8081B	12/21/2015 05:48	12/21/2015 14:27	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
53494-70-5	Endrin ketone	ND		ug/kg dry	1.77	1.77	5	EPA 8081B	12/21/2015 05:48	12/21/2015 14:27	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
58-89-9	gamma-BHC (Lindane)	ND		ug/kg dry	1.77	1.77	5	EPA 8081B	12/21/2015 05:48	12/21/2015 14:27	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
5566-34-7	gamma-Chlordane	ND		ug/kg dry	1.77	1.77	5	EPA 8081B	12/21/2015 05:48	12/21/2015 14:27	AMC
								Certifications:	NELAC-NY10854,NJDEP		
76-44-8	Heptachlor	ND		ug/kg dry	1.77	1.77	5	EPA 8081B	12/21/2015 05:48	12/21/2015 14:27	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
1024-57-3	Heptachlor epoxide	ND		ug/kg dry	1.77	1.77	5	EPA 8081B	12/21/2015 05:48	12/21/2015 14:27	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
72-43-5	Methoxychlor	ND		ug/kg dry	8.85	8.85	5	EPA 8081B	12/21/2015 05:48	12/21/2015 14:27	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
8001-35-2	Toxaphene	ND		ug/kg dry	89.6	89.6	5	EPA 8081B	12/21/2015 05:48	12/21/2015 14:27	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		

	Surrogate Recoveries	Result	Acceptance Range
877-09-8	*Surrogate: Tetrachloro-m-xylene*	*44.5 %*	*30-140*
2051-24-3	*Surrogate: Decachlorobiphenyl*	*37.8 %*	*30-140*

Polychlorinated Biphenyls (PCB)

Log-in Notes: **Sample Notes:**

Sample Information

Client Sample ID: TWA-TP10 **York Sample ID:** 15L0569-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0569	TWA Flight Ctr Hotel 15-111-0324	Soil	December 11, 2015 12:00 pm	12/15/2015

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		mg/kg dry	0.0179	0.0179	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	12/21/2015 05:48	12/21/2015 17:43	AMC
11104-28-2	Aroclor 1221	ND		mg/kg dry	0.0179	0.0179	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	12/21/2015 05:48	12/21/2015 17:43	AMC
11141-16-5	Aroclor 1232	ND		mg/kg dry	0.0179	0.0179	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	12/21/2015 05:48	12/21/2015 17:43	AMC
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0179	0.0179	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	12/21/2015 05:48	12/21/2015 17:43	AMC
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0179	0.0179	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	12/21/2015 05:48	12/21/2015 17:43	AMC
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0179	0.0179	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	12/21/2015 05:48	12/21/2015 17:43	AMC
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0179	0.0179	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	12/21/2015 05:48	12/21/2015 17:43	AMC
1336-36-3	* Total PCBs	ND		mg/kg dry	0.0179	0.0179	1	EPA 8082A Certifications:	12/21/2015 05:48	12/21/2015 17:43	AMC

	Surrogate Recoveries	Result	Acceptance Range
877-09-8	*Surrogate: Tetrachloro-m-xylene*	*53.2 %*	*30-140*
2051-24-3	*Surrogate: Decachlorobiphenyl*	*52.2 %*	*30-140*

NJDEP EPH (Cat. 2 Non-Fractionated)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	* Total EPH	ND		mg/kg dry	53.7	53.7	1	NJDEP EPH Rev 3.0 Certifications: NJDEP	12/20/2015 07:35	12/21/2015 13:25	AMC

	Surrogate Recoveries	Result	Acceptance Range
3386-33-2	*Surrogate: 1-Chlorooctadecane*	*78.4 %*	*40-140*
84-15-1	*Surrogate: o-Terphenyl*	*72.8 %*	*40-140*

Metals, Target Analyte

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	**Aluminum**	**2670**		mg/kg dry	5.37	5.37	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/17/2015 13:12	12/17/2015 16:48	ALD
7440-36-0	Antimony	ND		mg/kg dry	0.537	0.537	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 13:12	12/17/2015 16:48	ALD
7440-38-2	Arsenic	ND		mg/kg dry	1.07	1.07	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 13:12	12/17/2015 16:48	ALD
7440-39-3	**Barium**	**17.2**		mg/kg dry	1.07	1.07	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 13:12	12/17/2015 16:48	ALD

Sample Information

Client Sample ID: TWA-TP10 **York Sample ID:** 15L0569-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0569	TWA Flight Ctr Hotel 15-111-0324	Soil	December 11, 2015 12:00 pm	12/15/2015

Metals, Target Analyte

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-41-7	Beryllium	ND		mg/kg dry	0.107	0.107	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/17/2015 13:12	12/17/2015 16:48	ALD
7440-43-9	Cadmium	ND		mg/kg dry	0.322	0.322	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 13:12	12/17/2015 16:48	ALD
7440-70-2	**Calcium**	**3390**		mg/kg dry	0.537	5.37	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/17/2015 13:12	12/17/2015 16:48	ALD
7440-47-3	**Chromium**	**7.85**		mg/kg dry	0.537	0.537	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 13:12	12/17/2015 16:48	ALD
7440-48-4	**Cobalt**	**2.55**		mg/kg dry	0.537	0.537	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/17/2015 13:12	12/17/2015 16:48	ALD
7440-50-8	**Copper**	**5.43**		mg/kg dry	0.537	0.537	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/17/2015 13:12	12/17/2015 16:48	ALD
7439-89-6	**Iron**	**5210**		mg/kg dry	2.15	2.15	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/17/2015 13:12	12/17/2015 16:48	ALD
7439-92-1	**Lead**	**7.25**		mg/kg dry	0.322	0.322	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 13:12	12/17/2015 16:48	ALD
7439-95-4	**Magnesium**	**1170**		mg/kg dry	5.37	5.37	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/17/2015 13:12	12/17/2015 16:48	ALD
7439-96-5	**Manganese**	**55.0**		mg/kg dry	0.537	0.537	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/17/2015 13:12	12/17/2015 16:48	ALD
7440-02-0	**Nickel**	**5.75**		mg/kg dry	0.537	0.537	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 13:12	12/17/2015 16:48	ALD
7440-09-7	**Potassium**	**637**		mg/kg dry	5.37	5.37	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/17/2015 13:12	12/17/2015 16:48	ALD
7782-49-2	**Selenium**	**1.24**		mg/kg dry	1.07	1.07	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 13:12	12/17/2015 16:48	ALD
7440-22-4	Silver	ND		mg/kg dry	0.537	0.537	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 13:12	12/17/2015 16:48	ALD
7440-23-5	**Sodium**	**45.3**		mg/kg dry	10.7	10.7	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/17/2015 13:12	12/17/2015 16:48	ALD
7440-28-0	Thallium	ND		mg/kg dry	1.07	1.07	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/17/2015 13:12	12/17/2015 16:48	ALD
7440-62-2	**Vanadium**	**9.17**		mg/kg dry	1.07	1.07	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/17/2015 13:12	12/17/2015 16:48	ALD
7440-66-6	**Zinc**	**18.2**		mg/kg dry	1.07	1.07	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/17/2015 13:12	12/17/2015 16:48	ALD

Metals, TCLP RCRA

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A/1311

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	ND		mg/L	0.004	0.004	1	EPA 6010C/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 13:20	12/18/2015 03:27	ALD
7440-39-3	**Barium**	**0.280**		mg/L	0.011	0.011	1	EPA 6010C/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 13:20	12/18/2015 03:27	ALD
7440-43-9	**Cadmium**	**0.008**		mg/L	0.003	0.003	1	EPA 6010C/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 13:20	12/18/2015 03:27	ALD

Sample Information

Client Sample ID: **TWA-TP10** **York Sample ID:** **15L0569-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0569	TWA Flight Ctr Hotel 15-111-0324	Soil	December 11, 2015 12:00 pm	12/15/2015

Metals, TCLP RCRA

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3015A/1311

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-47-3	**Chromium**	**0.009**		mg/L	0.006	0.006	1	EPA 6010C/1311	12/17/2015 13:20	12/18/2015 03:27	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7439-92-1	**Lead**	**0.009**	B	mg/L	0.003	0.003	1	EPA 6010C/1311	12/17/2015 13:20	12/18/2015 03:27	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7782-49-2	**Selenium**	**0.024**	M-SeT C, B	mg/L	0.011	0.011	1	EPA 6010C/1311	12/17/2015 13:20	12/18/2015 03:27	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-22-4	Silver	ND		mg/L	0.006	0.006	1	EPA 6010C/1311	12/17/2015 13:20	12/18/2015 03:27	ALD
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

Mercury by 7473

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/kg dry	0.0322	0.0322	1	EPA 7473	12/21/2015 06:27	12/21/2015 10:51	ALD
								Certifications: CTDOH,NJDEP,NELAC-NY10854,PADEP			

Mercury TCLP by 7473

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 7473 water

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.0000390	0.000200	1	EPA 7473/1311	12/16/2015 13:25	12/17/2015 13:52	ALD
								Certifications: CTDOH,NJDEP,PADEP,NELAC-NY10854			

Ignitability

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	* Ignitability	Non-Ignit.		-	1	1	1	EPA 1030P	12/17/2015 17:32	12/17/2015 20:22	AA
								Certifications: CTDOH,PADEP			

Paint Filter Test

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	* Paint Filter Test	No Free Liquid		-	0	0	1	EPA 9095A	12/17/2015 17:35	12/17/2015 20:21	AA
								Certifications:			

Total Solids

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**93.2**		%	0.100	0.100	1	SM 2540G	12/16/2015 12:16	12/16/2015 20:53	CLS
								Certifications: CTDOH			

Sample Information

Client Sample ID: TWA-TP10 **York Sample ID:** 15L0569-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0569	TWA Flight Ctr Hotel 15-111-0324	Soil	December 11, 2015 12:00 pm	12/15/2015

Chromium, Hexavalent

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA SW846-3060

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
18540-29-9	Chromium, Hexavalent	ND		mg/kg dry	0.376	0.537	1	EPA 7196A	12/18/2015 18:04	12/18/2015 23:21	KK
								Certifications: NJDEP,CTDOH,NELAC-NY10854			

Chromium, Trivalent

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16065-83-1	*** Chromium, Trivalent**	**7.85**		mg/kg	0.250	0.500	1	Calculation	12/21/2015 08:00	12/21/2015 15:17	SC
								Certifications:			

Corrosivity

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	pH	**9.38**	HT-pH	pH units		0.500	1	EPA 9045D	12/18/2015 12:00	12/18/2015 14:35	KK
								Certifications: NELAC-NY10854,CTDOH,PADEP			

Reactivity-Cyanide

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	* Reactivity - Cyanide	ND		mg/kg	0.250	0.250	1	EPA SW-846 Ch.7.3.3	12/22/2015 09:07	12/22/2015 11:50	AD
								Certifications: CTDOH,PADEP			

Reactivity-Sulfide

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	* Reactivity - Sulfide	ND		mg/kg	15.0	15.0	1	EPA SW-846 Ch.7.3.4	12/22/2015 09:08	12/22/2015 11:51	AD
								Certifications: CTDOH,PADEP			

TCLP Extraction for METALS EPA 1311

Log-in Notes: **Sample Notes:** **EXT-Temp**

Sample Prepared by Method: EPA SW 846-1311 TCLP ext. for metals

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	TCLP Extraction	Completed		N/A	1.00	1.00	1	EPA 1311	12/15/2015 19:28	12/16/2015 12:00	CLS
								Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP			

Sample Information

Client Sample ID: TWA-TP10 **York Sample ID:** 15L0569-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0569	TWA Flight Ctr Hotel 15-111-0324	Soil	December 11, 2015 12:00 pm	12/15/2015

Sample Information

Client Sample ID: **TWA-TP10** **York Sample ID:** **15L0569-02**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0569	TWA Flight Ctr Hotel 15-111-0324	Soil	December 11, 2015 12:00 pm	12/15/2015

Volatile Organics, 8260 - Comprehensive

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/21/2015 09:36	12/21/2015 15:47	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2015 09:36	12/21/2015 15:47	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2015 09:36	12/21/2015 15:47	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/21/2015 09:36	12/21/2015 15:47	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2015 09:36	12/21/2015 15:47	SS
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2015 09:36	12/21/2015 15:47	SS
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2015 09:36	12/21/2015 15:47	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	12/21/2015 09:36	12/21/2015 15:47	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	12/21/2015 09:36	12/21/2015 15:47	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	12/21/2015 09:36	12/21/2015 15:47	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/21/2015 09:36	12/21/2015 15:47	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/21/2015 09:36	12/21/2015 15:47	SS
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/21/2015 09:36	12/21/2015 15:47	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2015 09:36	12/21/2015 15:47	SS
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2015 09:36	12/21/2015 15:47	SS
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/21/2015 09:36	12/21/2015 15:47	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/21/2015 09:36	12/21/2015 15:47	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2015 09:36	12/21/2015 15:47	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2015 09:36	12/21/2015 15:47	SS
123-91-1	1,4-Dioxane	ND		ug/kg dry	52	100	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	12/21/2015 09:36	12/21/2015 15:47	SS
78-93-3	2-Butanone	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/21/2015 09:36	12/21/2015 15:47	SS

Sample Information

Client Sample ID: TWA-TP10 **York Sample ID:** 15L0569-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0569	TWA Flight Ctr Hotel 15-111-0324	Soil	December 11, 2015 12:00 pm	12/15/2015

Volatile Organics, 8260 - Comprehensive

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	2-Hexanone	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/21/2015 09:36	12/21/2015 15:47	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/21/2015 09:36	12/21/2015 15:47	SS
67-64-1	Acetone	ND		ug/kg dry	5.2	10	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/21/2015 09:36	12/21/2015 15:47	SS
107-02-8	Acrolein	ND		ug/kg dry	5.2	10	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/21/2015 09:36	12/21/2015 15:47	SS
107-13-1	Acrylonitrile	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/21/2015 09:36	12/21/2015 15:47	SS
71-43-2	Benzene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2015 09:36	12/21/2015 15:47	SS
74-97-5	Bromochloromethane	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	12/21/2015 09:36	12/21/2015 15:47	SS
75-27-4	Bromodichloromethane	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2015 09:36	12/21/2015 15:47	SS
75-25-2	Bromoform	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2015 09:36	12/21/2015 15:47	SS
74-83-9	Bromomethane	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2015 09:36	12/21/2015 15:47	SS
75-15-0	Carbon disulfide	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/21/2015 09:36	12/21/2015 15:47	SS
56-23-5	Carbon tetrachloride	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2015 09:36	12/21/2015 15:47	SS
108-90-7	Chlorobenzene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2015 09:36	12/21/2015 15:47	SS
75-00-3	Chloroethane	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2015 09:36	12/21/2015 15:47	SS
67-66-3	Chloroform	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2015 09:36	12/21/2015 15:47	SS
74-87-3	Chloromethane	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2015 09:36	12/21/2015 15:47	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/21/2015 09:36	12/21/2015 15:47	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2015 09:36	12/21/2015 15:47	SS
110-82-7	Cyclohexane	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	12/21/2015 09:36	12/21/2015 15:47	SS
124-48-1	Dibromochloromethane	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP,PADEP	12/21/2015 09:36	12/21/2015 15:47	SS
74-95-3	Dibromomethane	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	12/21/2015 09:36	12/21/2015 15:47	SS
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	12/21/2015 09:36	12/21/2015 15:47	SS

Sample Information

Client Sample ID: TWA-TP10 **York Sample ID:** 15L0569-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0569	TWA Flight Ctr Hotel 15-111-0324	Soil	December 11, 2015 12:00 pm	12/15/2015

Volatile Organics, 8260 - Comprehensive

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-41-4	Ethyl Benzene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications:	12/21/2015 09:36	12/21/2015 15:47 CTDOH,NELAC-NY10854,NJDEP,PADEP	SS
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications:	12/21/2015 09:36	12/21/2015 15:47 NELAC-NY10854,NJDEP	SS
98-82-8	Isopropylbenzene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications:	12/21/2015 09:36	12/21/2015 15:47 CTDOH,NELAC-NY10854,NJDEP	SS
79-20-9	Methyl acetate	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications:	12/21/2015 09:36	12/21/2015 15:47 NELAC-NY10854,NJDEP	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications:	12/21/2015 09:36	12/21/2015 15:47 CTDOH,NELAC-NY10854,NJDEP	SS
108-87-2	Methylcyclohexane	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications:	12/21/2015 09:36	12/21/2015 15:47 NELAC-NY10854,NJDEP	SS
75-09-2	Methylene chloride	ND		ug/kg dry	5.2	10	1	EPA 8260C Certifications:	12/21/2015 09:36	12/21/2015 15:47 CTDOH,NELAC-NY10854,NJDEP,PADEP	SS
104-51-8	n-Butylbenzene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications:	12/21/2015 09:36	12/21/2015 15:47 CTDOH,NELAC-NY10854,NJDEP	SS
103-65-1	n-Propylbenzene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications:	12/21/2015 09:36	12/21/2015 15:47 CTDOH,NELAC-NY10854,NJDEP	SS
95-47-6	o-Xylene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications:	12/21/2015 09:36	12/21/2015 15:47 CTDOH,NELAC-NY10854	SS
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	5.2	10	1	EPA 8260C Certifications:	12/21/2015 09:36	12/21/2015 15:47 CTDOH,NELAC-NY10854	SS
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications:	12/21/2015 09:36	12/21/2015 15:47 CTDOH,NELAC-NY10854,NJDEP	SS
135-98-8	sec-Butylbenzene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications:	12/21/2015 09:36	12/21/2015 15:47 CTDOH,NELAC-NY10854,NJDEP	SS
100-42-5	Styrene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications:	12/21/2015 09:36	12/21/2015 15:47 CTDOH,NELAC-NY10854,NJDEP	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications:	12/21/2015 09:36	12/21/2015 15:47 NELAC-NY10854,NJDEP	SS
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications:	12/21/2015 09:36	12/21/2015 15:47 CTDOH,NELAC-NY10854,NJDEP	SS
127-18-4	Tetrachloroethylene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications:	12/21/2015 09:36	12/21/2015 15:47 CTDOH,NELAC-NY10854,NJDEP,PADEP	SS
108-88-3	Toluene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications:	12/21/2015 09:36	12/21/2015 15:47 CTDOH,NELAC-NY10854,NJDEP,PADEP	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications:	12/21/2015 09:36	12/21/2015 15:47 CTDOH,NELAC-NY10854,NJDEP	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications:	12/21/2015 09:36	12/21/2015 15:47 CTDOH,NELAC-NY10854,NJDEP,PADEP	SS
79-01-6	Trichloroethylene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications:	12/21/2015 09:36	12/21/2015 15:47 CTDOH,NELAC-NY10854,NJDEP,PADEP	SS
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications:	12/21/2015 09:36	12/21/2015 15:47 CTDOH,NELAC-NY10854,NJDEP,PADEP	SS

Sample Information

Client Sample ID: TWA-TP10 **York Sample ID:** 15L0569-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0569	TWA Flight Ctr Hotel 15-111-0324	Soil	December 11, 2015 12:00 pm	12/15/2015

Volatile Organics, 8260 - Comprehensive

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/kg dry	2.6	5.2	1	EPA 8260C	12/21/2015 09:36	12/21/2015 15:47	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
1330-20-7	Xylenes, Total	ND		ug/kg dry	7.8	16	1	EPA 8260C	12/21/2015 09:36	12/21/2015 15:47	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: 1,2-Dichloroethane-d4*	*106 %*	*77-125*
2037-26-5	*Surrogate: Toluene-d8*	*105 %*	*85-120*
460-00-4	*Surrogate: p-Bromofluorobenzene*	*107 %*	*76-130*

Total Solids

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**96.1**		%	0.100	0.100	1	SM 2540G	12/16/2015 12:16	12/16/2015 20:53	CLS
								Certifications: CTDOH			

Sample Information

Client Sample ID: TWA-TP2 **York Sample ID:** 15L0569-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0569	TWA Flight Ctr Hotel 15-111-0324	Soil	December 11, 2015 2:00 pm	12/15/2015

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1'-Biphenyl	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications: NELAC-NY10854,NJDEP			
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		ug/kg dry	87.0	174	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications: NELAC-NY10854,NJDEP			
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications: NELAC-NY10854			
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications: NELAC-NY10854,NJDEP			
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications: NELAC-NY10854			
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications: NELAC-NY10854			

Sample Information

Client Sample ID: TWA-TP2 **York Sample ID:** 15L0569-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0569	TWA Flight Ctr Hotel 15-111-0324	Soil	December 11, 2015 2:00 pm	12/15/2015

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
58-90-2	2,3,4,6-Tetrachlorophenol	ND		ug/kg dry	87.0	174	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications: NELAC-NY10854,NJDEP			
95-95-4	2,4,5-Trichlorophenol	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
88-06-2	2,4,6-Trichlorophenol	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
120-83-2	2,4-Dichlorophenol	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
105-67-9	2,4-Dimethylphenol	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
51-28-5	2,4-Dinitrophenol	ND		ug/kg dry	87.0	174	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
121-14-2	2,4-Dinitrotoluene	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
606-20-2	2,6-Dinitrotoluene	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
91-58-7	2-Chloronaphthalene	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
95-57-8	2-Chlorophenol	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
91-57-6	2-Methylnaphthalene	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
95-48-7	2-Methylphenol	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
88-74-4	2-Nitroaniline	ND		ug/kg dry	87.0	174	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
88-75-5	2-Nitrophenol	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
65794-96-9	3- & 4-Methylphenols	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
91-94-1	3,3'-Dichlorobenzidine	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications: NELAC-NY10854,NJDEP,PADEP			
99-09-2	3-Nitroaniline	ND		ug/kg dry	87.0	174	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/kg dry	87.0	174	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
101-55-3	4-Bromophenyl phenyl ether	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
59-50-7	4-Chloro-3-methylphenol	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
106-47-8	4-Chloroaniline	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

Sample Information

Client Sample ID: TWA-TP2 **York Sample ID:** 15L0569-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0569	TWA Flight Ctr Hotel 15-111-0324	Soil	December 11, 2015 2:00 pm	12/15/2015

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-01-6	4-Nitroaniline	ND		ug/kg dry	87.0	174	2	EPA 8270D Certifications:	12/20/2015 07:59 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/22/2015 20:15	KH
100-02-7	4-Nitrophenol	ND		ug/kg dry	87.0	174	2	EPA 8270D Certifications:	12/20/2015 07:59 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/22/2015 20:15	KH
83-32-9	Acenaphthene	ND		ug/kg dry	43.6	87.0	2	EPA 8270D Certifications:	12/20/2015 07:59 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/22/2015 20:15	KH
208-96-8	Acenaphthylene	ND		ug/kg dry	43.6	87.0	2	EPA 8270D Certifications:	12/20/2015 07:59 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/22/2015 20:15	KH
98-86-2	Acetophenone	ND		ug/kg dry	43.6	87.0	2	EPA 8270D Certifications:	12/20/2015 07:59 NELAC-NY10854,NJDEP	12/22/2015 20:15	KH
62-53-3	Aniline	ND		ug/kg dry	174	348	2	EPA 8270D Certifications:	12/20/2015 07:59 NELAC-NY10854,NJDEP,PADEP	12/22/2015 20:15	KH
120-12-7	Anthracene	ND		ug/kg dry	43.6	87.0	2	EPA 8270D Certifications:	12/20/2015 07:59 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/22/2015 20:15	KH
1912-24-9	Atrazine	ND		ug/kg dry	43.6	87.0	2	EPA 8270D Certifications:	12/20/2015 07:59 NELAC-NY10854,NJDEP	12/22/2015 20:15	KH
100-52-7	Benzaldehyde	ND		ug/kg dry	43.6	87.0	2	EPA 8270D Certifications:	12/20/2015 07:59 NELAC-NY10854,NJDEP	12/22/2015 20:15	KH
92-87-5	Benzidine	ND		ug/kg dry	174	348	2	EPA 8270D Certifications:	12/20/2015 07:59 CTDOH,NELAC-NY10854	12/22/2015 20:15	KH
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	43.6	87.0	2	EPA 8270D Certifications:	12/20/2015 07:59 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/22/2015 20:15	KH
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	43.6	87.0	2	EPA 8270D Certifications:	12/20/2015 07:59 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/22/2015 20:15	KH
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	43.6	87.0	2	EPA 8270D Certifications:	12/20/2015 07:59 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/22/2015 20:15	KH
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	43.6	87.0	2	EPA 8270D Certifications:	12/20/2015 07:59 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/22/2015 20:15	KH
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	43.6	87.0	2	EPA 8270D Certifications:	12/20/2015 07:59 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/22/2015 20:15	KH
65-85-0	Benzoic acid	ND		ug/kg dry	43.6	87.0	2	EPA 8270D Certifications:	12/20/2015 07:59 NELAC-NY10854,NJDEP	12/22/2015 20:15	KH
100-51-6	Benzyl alcohol	ND		ug/kg dry	43.6	87.0	2	EPA 8270D Certifications:	12/20/2015 07:59 NELAC-NY10854,NJDEP,PADEP	12/22/2015 20:15	KH
85-68-7	Benzyl butyl phthalate	ND		ug/kg dry	43.6	87.0	2	EPA 8270D Certifications:	12/20/2015 07:59 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/22/2015 20:15	KH
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/kg dry	43.6	87.0	2	EPA 8270D Certifications:	12/20/2015 07:59 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/22/2015 20:15	KH
111-44-4	Bis(2-chloroethyl)ether	ND		ug/kg dry	43.6	87.0	2	EPA 8270D Certifications:	12/20/2015 07:59 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/22/2015 20:15	KH
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/kg dry	43.6	87.0	2	EPA 8270D Certifications:	12/20/2015 07:59 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/22/2015 20:15	KH
117-81-7	**Bis(2-ethylhexyl)phthalate**	**58.4**	J	ug/kg dry	43.6	87.0	2	EPA 8270D Certifications:	12/20/2015 07:59 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/22/2015 20:15	KH

Sample Information

Client Sample ID: TWA-TP2 **York Sample ID:** 15L0569-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0569	TWA Flight Ctr Hotel 15-111-0324	Soil	December 11, 2015 2:00 pm	12/15/2015

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
105-60-2	Caprolactam	ND		ug/kg dry	87.0	174	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications:	NELAC-NY10854,NJDEP		
86-74-8	Carbazole	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
218-01-9	Chrysene	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
132-64-9	Dibenzofuran	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
84-66-2	Diethyl phthalate	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
131-11-3	Dimethyl phthalate	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
84-74-2	Di-n-butyl phthalate	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
117-84-0	Di-n-octyl phthalate	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
206-44-0	Fluoranthene	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
86-73-7	Fluorene	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
118-74-1	Hexachlorobenzene	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
77-47-4	Hexachlorocyclopentadiene	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
67-72-1	Hexachloroethane	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
78-59-1	Isophorone	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
91-20-3	Naphthalene	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
98-95-3	Nitrobenzene	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
62-75-9	N-Nitrosodimethylamine	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
621-64-7	N-nitroso-di-n-propylamine	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
86-30-6	N-Nitrosodiphenylamine	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		

Sample Information

Client Sample ID: TWA-TP2 **York Sample ID:** 15L0569-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0569	TWA Flight Ctr Hotel 15-111-0324	Soil	December 11, 2015 2:00 pm	12/15/2015

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
87-86-5	Pentachlorophenol	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
85-01-8	Phenanthrene	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
108-95-2	Phenol	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
129-00-0	Pyrene	ND		ug/kg dry	43.6	87.0	2	EPA 8270D	12/20/2015 07:59	12/22/2015 20:15	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

	Surrogate Recoveries	Result	Acceptance Range
367-12-4	*Surrogate: 2-Fluorophenol*	*57.6 %*	*20-108*
4165-62-2	*Surrogate: Phenol-d5*	*66.1 %*	*23-114*
4165-60-0	*Surrogate: Nitrobenzene-d5*	*56.0 %*	*22-108*
321-60-8	*Surrogate: 2-Fluorobiphenyl*	*54.2 %*	*21-113*
118-79-6	*Surrogate: 2,4,6-Tribromophenol*	*48.8 %*	*19-110*
1718-51-0	*Surrogate: Terphenyl-d14*	*68.7 %*	*24-116*

Pesticides, 8081 target list

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND		ug/kg dry	1.72	1.72	5	EPA 8081B	12/21/2015 05:48	12/21/2015 14:58	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
72-55-9	4,4'-DDE	ND		ug/kg dry	1.72	1.72	5	EPA 8081B	12/21/2015 05:48	12/21/2015 14:58	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
50-29-3	4,4'-DDT	ND		ug/kg dry	1.72	1.72	5	EPA 8081B	12/21/2015 05:48	12/21/2015 14:58	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
309-00-2	Aldrin	ND		ug/kg dry	1.72	1.72	5	EPA 8081B	12/21/2015 05:48	12/21/2015 14:58	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
319-84-6	alpha-BHC	ND		ug/kg dry	1.72	1.72	5	EPA 8081B	12/21/2015 05:48	12/21/2015 14:58	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
5103-71-9	alpha-Chlordane	ND		ug/kg dry	1.72	1.72	5	EPA 8081B	12/21/2015 05:48	12/21/2015 14:58	AMC
								Certifications: NELAC-NY10854,NJDEP			
319-85-7	beta-BHC	ND		ug/kg dry	1.72	1.72	5	EPA 8081B	12/21/2015 05:48	12/21/2015 14:58	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
57-74-9	Chlordane, total	ND		ug/kg dry	68.8	68.8	5	EPA 8081B	12/21/2015 05:48	12/21/2015 14:58	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
319-86-8	delta-BHC	ND		ug/kg dry	1.72	1.72	5	EPA 8081B	12/21/2015 05:48	12/21/2015 14:58	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
60-57-1	Dieldrin	ND		ug/kg dry	1.72	1.72	5	EPA 8081B	12/21/2015 05:48	12/21/2015 14:58	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
959-98-8	Endosulfan I	ND		ug/kg dry	1.72	1.72	5	EPA 8081B	12/21/2015 05:48	12/21/2015 14:58	AMC
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

Sample Information

Client Sample ID: TWA-TP2 **York Sample ID:** 15L0569-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0569	TWA Flight Ctr Hotel 15-111-0324	Soil	December 11, 2015 2:00 pm	12/15/2015

Pesticides, 8081 target list

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
33213-65-9	Endosulfan II	ND		ug/kg dry	1.72	1.72	5	EPA 8081B	12/21/2015 05:48	12/21/2015 14:58	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
1031-07-8	Endosulfan sulfate	ND		ug/kg dry	1.72	1.72	5	EPA 8081B	12/21/2015 05:48	12/21/2015 14:58	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
72-20-8	Endrin	ND		ug/kg dry	1.72	1.72	5	EPA 8081B	12/21/2015 05:48	12/21/2015 14:58	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7421-93-4	Endrin aldehyde	ND		ug/kg dry	1.72	1.72	5	EPA 8081B	12/21/2015 05:48	12/21/2015 14:58	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
53494-70-5	Endrin ketone	ND		ug/kg dry	1.72	1.72	5	EPA 8081B	12/21/2015 05:48	12/21/2015 14:58	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
58-89-9	gamma-BHC (Lindane)	ND		ug/kg dry	1.72	1.72	5	EPA 8081B	12/21/2015 05:48	12/21/2015 14:58	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
5566-34-7	gamma-Chlordane	ND		ug/kg dry	1.72	1.72	5	EPA 8081B	12/21/2015 05:48	12/21/2015 14:58	AMC
								Certifications:	NELAC-NY10854,NJDEP		
76-44-8	Heptachlor	ND		ug/kg dry	1.72	1.72	5	EPA 8081B	12/21/2015 05:48	12/21/2015 14:58	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
1024-57-3	Heptachlor epoxide	ND		ug/kg dry	1.72	1.72	5	EPA 8081B	12/21/2015 05:48	12/21/2015 14:58	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
72-43-5	Methoxychlor	ND		ug/kg dry	8.60	8.60	5	EPA 8081B	12/21/2015 05:48	12/21/2015 14:58	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
8001-35-2	Toxaphene	ND		ug/kg dry	87.1	87.1	5	EPA 8081B	12/21/2015 05:48	12/21/2015 14:58	AMC
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		

	Surrogate Recoveries	Result	Acceptance Range
877-09-8	*Surrogate: Tetrachloro-m-xylene*	*51.5 %*	*30-140*
2051-24-3	*Surrogate: Decachlorobiphenyl*	*45.5 %*	*30-140*

Polychlorinated Biphenyls (PCB)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		mg/kg dry	0.0174	0.0174	1	EPA 8082A	12/21/2015 05:48	12/21/2015 18:02	AMC
								Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		
11104-28-2	Aroclor 1221	ND		mg/kg dry	0.0174	0.0174	1	EPA 8082A	12/21/2015 05:48	12/21/2015 18:02	AMC
								Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		
11141-16-5	Aroclor 1232	ND		mg/kg dry	0.0174	0.0174	1	EPA 8082A	12/21/2015 05:48	12/21/2015 18:02	AMC
								Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0174	0.0174	1	EPA 8082A	12/21/2015 05:48	12/21/2015 18:02	AMC
								Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0174	0.0174	1	EPA 8082A	12/21/2015 05:48	12/21/2015 18:02	AMC
								Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0174	0.0174	1	EPA 8082A	12/21/2015 05:48	12/21/2015 18:02	AMC
								Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		

Sample Information

Client Sample ID: TWA-TP2 **York Sample ID:** 15L0569-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0569	TWA Flight Ctr Hotel 15-111-0324	Soil	December 11, 2015 2:00 pm	12/15/2015

Polychlorinated Biphenyls (PCB)

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0174	0.0174	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	12/21/2015 05:48	12/21/2015 18:02	AMC
1336-36-3	* Total PCBs	ND		mg/kg dry	0.0174	0.0174	1	EPA 8082A Certifications:	12/21/2015 05:48	12/21/2015 18:02	AMC

	Surrogate Recoveries	Result	Acceptance Range
877-09-8	*Surrogate: Tetrachloro-m-xylene*	*68.7 %*	*30-140*
2051-24-3	*Surrogate: Decachlorobiphenyl*	*58.0 %*	*30-140*

NJDEP EPH (Cat. 2 Non-Fractionated)

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	* Total EPH	ND		mg/kg dry	52.1	52.1	1	NJDEP EPH Rev 3.0 Certifications: NJDEP	12/20/2015 07:35	12/21/2015 13:53	AMC

	Surrogate Recoveries	Result	Acceptance Range
3386-33-2	*Surrogate: 1-Chlorooctadecane*	*91.7 %*	*40-140*
84-15-1	*Surrogate: o-Terphenyl*	*91.3 %*	*40-140*

Metals, Target Analyte

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	**Aluminum**	**2210**		mg/kg dry	5.21	5.21	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/17/2015 13:12	12/17/2015 16:53	ALD
7440-36-0	Antimony	ND		mg/kg dry	0.521	0.521	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 13:12	12/17/2015 16:53	ALD
7440-38-2	**Arsenic**	**1.10**		mg/kg dry	1.04	1.04	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 13:12	12/17/2015 16:53	ALD
7440-39-3	**Barium**	**16.1**		mg/kg dry	1.04	1.04	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 13:12	12/17/2015 16:53	ALD
7440-41-7	Beryllium	ND		mg/kg dry	0.104	0.104	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/17/2015 13:12	12/17/2015 16:53	ALD
7440-43-9	Cadmium	ND		mg/kg dry	0.313	0.313	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 13:12	12/17/2015 16:53	ALD
7440-70-2	**Calcium**	**2730**		mg/kg dry	0.521	5.21	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/17/2015 13:12	12/17/2015 16:53	ALD
7440-47-3	**Chromium**	**6.35**		mg/kg dry	0.521	0.521	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 13:12	12/17/2015 16:53	ALD
7440-48-4	**Cobalt**	**1.96**		mg/kg dry	0.521	0.521	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/17/2015 13:12	12/17/2015 16:53	ALD
7440-50-8	**Copper**	**4.38**		mg/kg dry	0.521	0.521	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/17/2015 13:12	12/17/2015 16:53	ALD

Sample Information

Client Sample ID: TWA-TP2 **York Sample ID:** 15L0569-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0569	TWA Flight Ctr Hotel 15-111-0324	Soil	December 11, 2015 2:00 pm	12/15/2015

Metals, Target Analyte

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-89-6	**Iron**	**4620**		mg/kg dry	2.09	2.09	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/17/2015 13:12	12/17/2015 16:53	ALD
7439-92-1	**Lead**	**5.83**		mg/kg dry	0.313	0.313	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 13:12	12/17/2015 16:53	ALD
7439-95-4	**Magnesium**	**1310**		mg/kg dry	5.21	5.21	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/17/2015 13:12	12/17/2015 16:53	ALD
7439-96-5	**Manganese**	**34.9**		mg/kg dry	0.521	0.521	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/17/2015 13:12	12/17/2015 16:53	ALD
7440-02-0	**Nickel**	**4.45**		mg/kg dry	0.521	0.521	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 13:12	12/17/2015 16:53	ALD
7440-09-7	**Potassium**	**596**		mg/kg dry	5.21	5.21	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/17/2015 13:12	12/17/2015 16:53	ALD
7782-49-2	Selenium	ND		mg/kg dry	1.04	1.04	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 13:12	12/17/2015 16:53	ALD
7440-22-4	Silver	ND		mg/kg dry	0.521	0.521	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 13:12	12/17/2015 16:53	ALD
7440-23-5	Sodium	ND		mg/kg dry	10.4	10.4	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/17/2015 13:12	12/17/2015 16:53	ALD
7440-28-0	Thallium	ND		mg/kg dry	1.04	1.04	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/17/2015 13:12	12/17/2015 16:53	ALD
7440-62-2	**Vanadium**	**8.38**		mg/kg dry	1.04	1.04	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/17/2015 13:12	12/17/2015 16:53	ALD
7440-66-6	**Zinc**	**16.4**		mg/kg dry	1.04	1.04	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/17/2015 13:12	12/17/2015 16:53	ALD

Metals, TCLP RCRA

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3015A/1311

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	ND		mg/L	0.004	0.004	1	EPA 6010C/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 13:20	12/18/2015 03:32	ALD
7440-39-3	**Barium**	**0.157**		mg/L	0.011	0.011	1	EPA 6010C/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 13:20	12/18/2015 03:32	ALD
7440-43-9	Cadmium	ND		mg/L	0.003	0.003	1	EPA 6010C/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 13:20	12/18/2015 03:32	ALD
7440-47-3	Chromium	ND		mg/L	0.006	0.006	1	EPA 6010C/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 13:20	12/18/2015 03:32	ALD
7439-92-1	**Lead**	**0.010**	B	mg/L	0.003	0.003	1	EPA 6010C/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 13:20	12/18/2015 03:32	ALD
7782-49-2	**Selenium**	**0.020**	M-SeT C, B	mg/L	0.011	0.011	1	EPA 6010C/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP	12/17/2015 13:20	12/18/2015 03:32	ALD
7440-22-4	Silver	ND		mg/L	0.006	0.006	1	EPA 6010C/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/17/2015 13:20	12/18/2015 03:32	ALD

Mercury by 7473

Log-in Notes: **Sample Notes:**

Sample Information

Client Sample ID: TWA-TP2 **York Sample ID:** 15L0569-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0569	TWA Flight Ctr Hotel 15-111-0324	Soil	December 11, 2015 2:00 pm	12/15/2015

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/kg dry	0.0313	0.0313	1	EPA 7473	12/21/2015 06:27	12/21/2015 11:00	ALD
								Certifications: CTDOH,NJDEP,NELAC-NY10854,PADEP			

Mercury TCLP by 7473

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 7473 water

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.0000390	0.000200	1	EPA 7473/1311	12/16/2015 13:25	12/17/2015 13:52	ALD
								Certifications: CTDOH,NJDEP,PADEP,NELAC-NY10854			

Ignitability

Log-in Notes:

Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	* Ignitability	Non-Ignit.		-	1	1	1	EPA 1030P	12/17/2015 17:32	12/17/2015 20:22	AA
								Certifications: CTDOH,PADEP			

Paint Filter Test

Log-in Notes:

Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	* Paint Filter Test	No Free Liquid		-	0	0	1	EPA 9095A	12/17/2015 17:35	12/17/2015 20:21	AA
								Certifications:			

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**95.9**		%	0.100	0.100	1	SM 2540G	12/16/2015 12:16	12/16/2015 20:53	CLS
								Certifications: CTDOH			

Chromium, Hexavalent

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA SW846-3060

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
18540-29-9	Chromium, Hexavalent	ND		mg/kg dry	0.365	0.521	1	EPA 7196A	12/18/2015 18:04	12/18/2015 23:21	KK
								Certifications: NJDEP,CTDOH,NELAC-NY10854			

Chromium, Trivalent

Log-in Notes:

Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16065-83-1	*** Chromium, Trivalent**	**6.35**		mg/kg	0.250	0.500	1	Calculation	12/21/2015 08:00	12/21/2015 15:17	SC
								Certifications:			

Corrosivity

Log-in Notes:

Sample Notes:

Sample Information

Client Sample ID: TWA-TP2 **York Sample ID:** 15L0569-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0569	TWA Flight Ctr Hotel 15-111-0324	Soil	December 11, 2015 2:00 pm	12/15/2015

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	pH	**9.55**	HT-pH	pH units		0.500	1	EPA 9045D	12/21/2015 11:20	12/21/2015 16:57	CLS
								Certifications: NELAC-NY10854,CTDOH,PADEP			

Reactivity-Cyanide **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	* Reactivity - Cyanide	ND		mg/kg	0.250	0.250	1	EPA SW-846 Ch.7.3.3	12/22/2015 09:07	12/22/2015 11:50	AD
								Certifications: CTDOH,PADEP			

Reactivity-Sulfide **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	* Reactivity - Sulfide	ND		mg/kg	15.0	15.0	1	EPA SW-846 Ch.7.3.4	12/22/2015 09:08	12/22/2015 11:51	AD
								Certifications: CTDOH,PADEP			

TCLP Extraction for METALS EPA 1311 **Log-in Notes:** **Sample Notes:** EXT-Temp

Sample Prepared by Method: EPA SW 846-1311 TCLP ext. for metals

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	TCLP Extraction	Completed		N/A	1.00	1.00	1	EPA 1311	12/15/2015 19:28	12/16/2015 12:00	CLS
								Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP			

Sample Information

Client Sample ID: TWA-TP2 **York Sample ID:** 15L0569-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0569	TWA Flight Ctr Hotel 15-111-0324	Soil	December 11, 2015 2:00 pm	12/15/2015

Volatile Organics, 8260 - Comprehensive **Log-in Notes:** VOA-CONT **Sample Notes:**

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/kg dry	2.6	5.2	1	EPA 8260C	12/21/2015 09:36	12/21/2015 18:41	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	2.6	5.2	1	EPA 8260C	12/21/2015 09:36	12/21/2015 18:41	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	2.6	5.2	1	EPA 8260C	12/21/2015 09:36	12/21/2015 18:41	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	2.6	5.2	1	EPA 8260C	12/21/2015 09:36	12/21/2015 18:41	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	2.6	5.2	1	EPA 8260C	12/21/2015 09:36	12/21/2015 18:41	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

Sample Information

Client Sample ID: TWA-TP2 **York Sample ID:** 15L0569-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0569	TWA Flight Ctr Hotel 15-111-0324	Soil	December 11, 2015 2:00 pm	12/15/2015

Volatile Organics, 8260 - Comprehensive

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications:	12/21/2015 09:36	12/21/2015 18:41	SS CTDOH,NELAC-NY10854,NJDEP,PADEP
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications:	12/21/2015 09:36	12/21/2015 18:41	SS CTDOH,NELAC-NY10854,NJDEP,PADEP
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications:	12/21/2015 09:36	12/21/2015 18:41	SS NELAC-NY10854,NJDEP
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications:	12/21/2015 09:36	12/21/2015 18:41	SS NELAC-NY10854,NJDEP
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications:	12/21/2015 09:36	12/21/2015 18:41	SS NELAC-NY10854,NJDEP
95-63-6	1,2,4-Trimethylbenzene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications:	12/21/2015 09:36	12/21/2015 18:41	SS CTDOH,NELAC-NY10854,NJDEP
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications:	12/21/2015 09:36	12/21/2015 18:41	SS CTDOH,NELAC-NY10854,NJDEP
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications:	12/21/2015 09:36	12/21/2015 18:41	SS CTDOH,NELAC-NY10854,NJDEP
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications:	12/21/2015 09:36	12/21/2015 18:41	SS CTDOH,NELAC-NY10854,NJDEP,PADEP
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications:	12/21/2015 09:36	12/21/2015 18:41	SS CTDOH,NELAC-NY10854,NJDEP,PADEP
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications:	12/21/2015 09:36	12/21/2015 18:41	SS CTDOH,NELAC-NY10854,NJDEP
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications:	12/21/2015 09:36	12/21/2015 18:41	SS CTDOH,NELAC-NY10854,NJDEP
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications:	12/21/2015 09:36	12/21/2015 18:41	SS CTDOH,NELAC-NY10854,NJDEP,PADEP
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications:	12/21/2015 09:36	12/21/2015 18:41	SS CTDOH,NELAC-NY10854,NJDEP,PADEP
123-91-1	1,4-Dioxane	ND		ug/kg dry	52	100	1	EPA 8260C Certifications:	12/21/2015 09:36	12/21/2015 18:41	SS NELAC-NY10854,NJDEP
78-93-3	2-Butanone	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications:	12/21/2015 09:36	12/21/2015 18:41	SS CTDOH,NELAC-NY10854,NJDEP
591-78-6	2-Hexanone	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications:	12/21/2015 09:36	12/21/2015 18:41	SS CTDOH,NELAC-NY10854,NJDEP
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications:	12/21/2015 09:36	12/21/2015 18:41	SS CTDOH,NELAC-NY10854,NJDEP
67-64-1	Acetone	ND	SCAL-E	ug/kg dry	5.2	10	1	EPA 8260C Certifications:	12/21/2015 09:36	12/21/2015 18:41	SS CTDOH,NELAC-NY10854,NJDEP
107-02-8	Acrolein	ND		ug/kg dry	5.2	10	1	EPA 8260C Certifications:	12/21/2015 09:36	12/21/2015 18:41	SS CTDOH,NELAC-NY10854,NJDEP
107-13-1	Acrylonitrile	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications:	12/21/2015 09:36	12/21/2015 18:41	SS CTDOH,NELAC-NY10854,NJDEP

Sample Information

Client Sample ID: TWA-TP2 **York Sample ID:** 15L0569-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0569	TWA Flight Ctr Hotel 15-111-0324	Soil	December 11, 2015 2:00 pm	12/15/2015

Volatile Organics, 8260 - Comprehensive

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
71-43-2	Benzene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2015 09:36	12/21/2015 18:41	SS
74-97-5	Bromochloromethane	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	12/21/2015 09:36	12/21/2015 18:41	SS
75-27-4	Bromodichloromethane	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2015 09:36	12/21/2015 18:41	SS
75-25-2	Bromoform	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2015 09:36	12/21/2015 18:41	SS
74-83-9	Bromomethane	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2015 09:36	12/21/2015 18:41	SS
75-15-0	Carbon disulfide	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/21/2015 09:36	12/21/2015 18:41	SS
56-23-5	Carbon tetrachloride	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2015 09:36	12/21/2015 18:41	SS
108-90-7	Chlorobenzene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2015 09:36	12/21/2015 18:41	SS
75-00-3	Chloroethane	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2015 09:36	12/21/2015 18:41	SS
67-66-3	Chloroform	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2015 09:36	12/21/2015 18:41	SS
74-87-3	Chloromethane	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2015 09:36	12/21/2015 18:41	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/21/2015 09:36	12/21/2015 18:41	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2015 09:36	12/21/2015 18:41	SS
110-82-7	Cyclohexane	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	12/21/2015 09:36	12/21/2015 18:41	SS
124-48-1	Dibromochloromethane	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP,PADEP	12/21/2015 09:36	12/21/2015 18:41	SS
74-95-3	Dibromomethane	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	12/21/2015 09:36	12/21/2015 18:41	SS
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	12/21/2015 09:36	12/21/2015 18:41	SS
100-41-4	Ethyl Benzene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2015 09:36	12/21/2015 18:41	SS
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	12/21/2015 09:36	12/21/2015 18:41	SS
98-82-8	Isopropylbenzene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/21/2015 09:36	12/21/2015 18:41	SS
79-20-9	Methyl acetate	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	12/21/2015 09:36	12/21/2015 18:41	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	2.6	5.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	12/21/2015 09:36	12/21/2015 18:41	SS

Sample Information

Client Sample ID: TWA-TP2 **York Sample ID:** 15L0569-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0569	TWA Flight Ctr Hotel 15-111-0324	Soil	December 11, 2015 2:00 pm	12/15/2015

Volatile Organics, 8260 - Comprehensive

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-87-2	Methylcyclohexane	ND		ug/kg dry	2.6	5.2	1	EPA 8260C	12/21/2015 09:36	12/21/2015 18:41	SS
								Certifications:	NELAC-NY10854,NJDEP		
75-09-2	Methylene chloride	ND		ug/kg dry	5.2	10	1	EPA 8260C	12/21/2015 09:36	12/21/2015 18:41	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
104-51-8	n-Butylbenzene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C	12/21/2015 09:36	12/21/2015 18:41	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
103-65-1	n-Propylbenzene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C	12/21/2015 09:36	12/21/2015 18:41	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
95-47-6	o-Xylene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C	12/21/2015 09:36	12/21/2015 18:41	SS
								Certifications:	CTDOH,NELAC-NY10854		
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	5.2	10	1	EPA 8260C	12/21/2015 09:36	12/21/2015 18:41	SS
								Certifications:	CTDOH,NELAC-NY10854		
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C	12/21/2015 09:36	12/21/2015 18:41	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
135-98-8	sec-Butylbenzene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C	12/21/2015 09:36	12/21/2015 18:41	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
100-42-5	Styrene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C	12/21/2015 09:36	12/21/2015 18:41	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/kg dry	2.6	5.2	1	EPA 8260C	12/21/2015 09:36	12/21/2015 18:41	SS
								Certifications:	NELAC-NY10854,NJDEP		
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C	12/21/2015 09:36	12/21/2015 18:41	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
127-18-4	Tetrachloroethylene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C	12/21/2015 09:36	12/21/2015 18:41	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
108-88-3	Toluene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C	12/21/2015 09:36	12/21/2015 18:41	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C	12/21/2015 09:36	12/21/2015 18:41	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C	12/21/2015 09:36	12/21/2015 18:41	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
79-01-6	Trichloroethylene	ND		ug/kg dry	2.6	5.2	1	EPA 8260C	12/21/2015 09:36	12/21/2015 18:41	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	2.6	5.2	1	EPA 8260C	12/21/2015 09:36	12/21/2015 18:41	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
75-01-4	Vinyl Chloride	ND		ug/kg dry	2.6	5.2	1	EPA 8260C	12/21/2015 09:36	12/21/2015 18:41	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
1330-20-7	Xylenes, Total	ND		ug/kg dry	7.8	16	1	EPA 8260C	12/21/2015 09:36	12/21/2015 18:41	SS
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: 1,2-Dichloroethane-d4*	*103 %*	*77-125*
2037-26-5	*Surrogate: Toluene-d8*	*106 %*	*85-120*
460-00-4	*Surrogate: p-Bromofluorobenzene*	*109 %*	*76-130*

Sample Information

Client Sample ID: **TWA-TP2** **York Sample ID:** **15L0569-04**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15L0569	TWA Flight Ctr Hotel 15-111-0324	Soil	December 11, 2015 2:00 pm	12/15/2015

Total Solids

Log-in Notes: VOA-CONT **Sample Notes:**

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	96.2		%	0.100	0.100	1	SM 2540G Certifications: CTDOH	12/16/2015 12:16	12/16/2015 20:53	CLS

Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
15L0569-02	TWA-TP10	4 oz. WM Clear Glass Cool to 4° C
15L0569-04	TWA-TP2	4 oz. WM Clear Glass Cool to 4° C

Notes and Definitions

VOA-CONT	NON-COMPLIANT- the container(s) provided by the client for soil volatiles do not meet the requirements of EPA SW846-5035A. Results reported below 200 ug/kg may be biased low due to samples not being collected according to EPA SW846 5035A requirements.
SCAL-E	The value reported is ESTIMATED. The value is estimated due to its behavior during initial calibration (average Rf>20%).
QL-03	This LCS analyte recovered outside of acceptance limits. The LCS contains approximately 70 compounds, a limited number of which may be outside acceptance windows.
QL-02	This LCS analyte is outside Laboratory Recovery limits due the analyte behavior using the referenced method. The reference method has certain limitations with respect to analytes of this nature.
PF-01	No Free Liquid
M-SeTC	It is noted that a known interference with selenium at the analytical line for analysis by ICP is caused by carbon emission from the TCLP or high organics matrix. The data user may subtract the matrix blank value from the data if needed.
M-DB	Analyte in Method Blank >MDL. Sample conc. >10 X blank conc.
J	Detected below the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated concentration.
IGN-01	Non-Ignit.
HT-pH	HOLDING TIME EXCEEDED. Samples for pH must be measured in the field or within 15 minutes of sample collection.
EXT-Temp	Extraction temperture slightly exceeded acceptance range.
EXT-COMP	Completed
CCV-E	The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>20% Difference for average Rf or >20% Drift for quadratic fit).
B	Analyte is found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants. Data users should consider anything <10x the blank value as artifact.

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*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.

High Bias — High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.

Non-Dir. — Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two.
For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.

YORK
ANALYTICAL LABORATORIES, INC.

120 RESEARCH DR. STRATFORD, CT 06615
(203) 325-1371 FAX (203) 357-0166

Field Chain-of-Custody Record

X

NOTE: York's Std. Terms & Conditions are listed on the back side of this document. This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions unless superseded by written contract.

York Project No. 15L0569

YOUR Information	**Report To:**	**Invoice To:**
Company: LiRo Engineers Inc	Company: LiRo Engineers, Inc.	Company: SAME
Address: 703 Lorimer St Brooklyn NY 11211	Address: 690 Delaware Ave Buffalo NY 14209	Address:
Phone No. 516-662-5149	Phone No. 718-321-3136	Phone No.
Contact Person: Mary Brzozowski	Attention Steve Frank	Attention:
E-Mail Address: brzozowskim@liro.com	E-Mail Address: franks@liro.com	E-Mail Address:

YOUR Project ID
TWA Flight Ctr Hotel
15-111-0324

Purchase Order No.

Samples from: CT___ NY___ NJ___

Turn-Around Time
- RUSH - Same Day ☐
- RUSH - Next Day ☐
- RUSH - Two Day ☐
- RUSH - Three Day ☐
- RUSH - Four Day ☐
- Standard(5-7 Days) X

Report Type/Deliverbles
- Summary Report X
- Summary w/ QA Summary ___
- CT RCP Package ___
- NY ASP A Package ___
- NY ASP B Package ___
- *Electronic Deliverables:*
- EDD (Specify Type) NJ Soil
- Excel CEQANLP NY REG

Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.

Samples Collected/Authorized By (Signature)

Mary Brzozowski
Name (printed)

Matrix Codes
S - soil
Other - specify(oil, etc.)
WW - wastewater
GW - groundwater
DW - drinking water
Air-A - ambient air
Air-SV - soil vapor

Volatiles		Semi-Vols.	Pest/PCB/Herb	Metals	Misc. Org.	Full Lists	Common Miscellaneous Parameters		
8260 full	TICs	8270 or 625	8082PCB	RCRA8	TPH GRO	Pri.Poll.	Corrosivity	Nitrate	Color
624	Site Spec.	STARS list	8081Pest	PP13 list	TPH DRO	TCL Organics	Reactivity	Nitrite	Phenols
STARS list	Nassau Co.	BN Only	8151Herb	TAL	CT ETPH	TAL Met/CN	Ignitability	TKN	Cyanide-T
BTEX	Suffolk Co.	Acids Only	CT RCP	CT15 list	NY 310-13	Full TCLP	Flash Point	Tot.Nitrogen	Cyanide-A
MTBE	Ketones	PAH list	App. IX	TAGM list	TPH 1664	Full App. IX	Sieve Anal.	Ammonia-N	BOD5
TCL list	Oxygenates	TAGM list	Site Spec.	NJDEP list	Air TO14A	Part 360-Routine	Heterotrophs	Chloride	CBOD5
TAGM list	TCLP list	CT RCP list	SPLP or TCLP	Total	Air TO15	Part 360-Baseline	TOX	Phosphate	BOD28
CT RCP list	524.2	TCL list	TCLP Pest	Dissolved	Air STARS	Part 360-Expanded No Dioxin-Furans	BTU/lb.	Tot. Phos.	COD
Arom. only	502.2	NJDEP list	TCLP Herb	SPLP or TCLP	Air VPH	Part 360-Expanded Full List	Aquatic Tox.	Oil&Grease	TSS
Halog.only	NJDEP list	App. IX	Chlordane	Indiv. Metals	Air TICs	NYCDEP Sewer	TOC	F.O.G.	Total Solids
App.IX list	SPLP or TCLP	TCLP BNA	608 Pest	LIST Below	Methane	NYSDEC Sewer	Asbestos	pH	TDS
8021B list		SPLP or TCLP	608 PCB		Helium	TAGM	Silica	MBAS	TPH-1664

Special Instructions
Field Filtered ☐
Lab to Filter ☐

Sample Identification	Date Sampled	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below	Container Description(s)
TWA - TP10	12-11-15 1200	S	SEE ATTACHED ANALYSES	(2)8oz (1)4oz
TWA - TP2	12-11-15 1405	S		(2)8oz (1)4oz

Comments VOC IS RANDOM GRAB; NO PID READINGS
REMAINING ANALYSIS IS 5:1 COMPOSITE

Preservation Check those Applicable

4°C___ Frozen___ HCl___ MeOH___ HNO_3___ H_2SO_4___ NaOH___
ZnAc___ Ascorbic Acid___ Other___

Samples Relinquished By	Date/Time	Samples Received By	Date/Time
MB	12-14-15 1500	RBath	12/15/15 740
Samples Relinquished By	Date/Time	Samples Received in LAB by	Date/Time
RBath	12-15-15	TCMahl	12/15/15 1855

Temperature on Receipt 4.0 °C

Appendix H: Public Involvement

Queens Borough Board Recommendation

APPLICATION: ULURP #160097 PPQ **COMMUNITY BOARDS: 10, 12 & 13**

DOCKET DESCRIPTION

IN THE MATTER OF an application submitted by the Department of Small Business Services, pursuant to Section 197-c of the NYC Charter, for the disposition of a lease to Flight Center Hotel, LLC located at Building 60 at JFK International Airport, in an M1-1 District, Block 14260 part of Lot 1, Zoning Map 18d, Jamaica, Borough of Queens

PUBLIC MEETING

A Public Meeting was held in the Borough President's Conference Room at 120-55 Queens Boulevard on February 8, 2016 at 5:30 P.M. pursuant to Section 82(5) of the New York City Charter and was duly advertised in the manner specified in Section 197-c (i) of the New York City Charter. The applicant made a presentation.

CONSIDERATION

Subsequent to a review of the application and consideration of testimony received at the public meeting, the following issues and impacts have been identified:

- **The Department of Small Business Services/NYC Economic Development Corporation has filed an application that would allow disposition of a lease to Flight Center Hotel, LLC for approximately 6 acres of land including Building 60 (the landmarked former TWA Terminal) located within John F Kennedy International Airport (JFK Airport). PANY & NJ currently has a lease to operate JFK Airport that expires in 2050.;**

- **Flight Center Hotel, LLC is preparing to enter into a 75 year sub-lease with the Port Authority of New York & New Jersey (PANY & NJ). Flight Center Hotel, LLC would redevelop the site with two new hotel buildings built on either side of the restored/rehabilitated former TWA Terminal Building. The 75-year term of the Flight Center pending sub-lease extends beyond the PANY & NJ airport lease with New York City that expires in 2050.;**

- **This application is necessary as a contingency in the event that PANY & NJ does not renew the lease for JFK Airport beyond 2050. Approval of this application would enable New York City to lease the property directly to Flight Center Hotel, LLC or through another successor operator of the airport property. Additionally, this application would allow the possibility to extend the lease of the 6 acre development parcel through 2119.;**

- **Flight Center Hotel, LLC is proposing to build 505 hotel guest rooms in two new buildings on either side of the landmarked building. The former TWA Terminal Building would be faithfully restored and updated for reuse as the hotel lobby, conference center and ballrooms, restaurants and retail space, museums commemorating midcentury modern design and TWA as a pioneering airline. It is anticipated that construction and reopening the building for public use will generate approximately 3700 jobs. Jobs and contracts will be secured through local hiring and outreach to MWBE firms. They have secured agreements with the building and operating trades assuring that the project will be built soundly and safely, and operated by skilled labor ;**

- **Community Board 10 – Public Hearing January 7, 2016 – Approved 31-0-1;**

- **Community Board 12 – Public Hearing January 20, 2016 – Approved 27-0-0**

- **Community Board 13 – Public Hearing December 21, 2015 - Approved 27-0-2**

RECOMMENDATION

Based on the above consideration, the Queens Borough Board with a quorum present voted 10-0-0 to approve this application

Melinda Katz

PRESIDENT, BOROUGH OF ~~QUEENS~~

2/10/16

DATE

Queens Borough President Recommendation

APPLICATION: ULURP #160097 PPQ **COMMUNITY BOARDS: 10, 12 & 13**

DOCKET DESCRIPTION

IN THE MATTER OF an application submitted by the Department of Small Business Services, pursuant to Section 197-c of the NYC Charter, for the disposition of a lease to Flight Center Hotel, LLC located at Building 60 at JFK International Airport, in an M1-1 District, Block 14260 part of Lot 1, Zoning Map 18d, Jamaica, Borough of Queens

PUBLIC HEARING

A Public Hearing was held in the Borough President's Conference Room at 120-55 Queens Boulevard on January 28, 2016 at 10:30 A.M. pursuant to Section 82(5) of the New York City Charter and was duly advertised in the manner specified in Section 197-c (i) of the New York City Charter. The applicant made a presentation. There were eleven (11) speakers in favor with none (0) opposed. The hearing was closed.

CONSIDERATION

Subsequent to a review of the application and consideration of testimony received at the public meeting, the following issues and impacts have been identified:

- **The Department of Small Business Services/NYC Economic Development Corporation has filed an application that would allow disposition of a lease to Flight Center Hotel, LLC for approximately 6 acres of land including Building 60 (the landmarked former TWA Terminal) located within John F Kennedy International Airport (JFK Airport). PANY & NJ currently has a lease to operate JFK Airport that expires in 2050;**

- **Flight Center Hotel, LLC is preparing to enter into a 75 year sub-lease with the Port Authority of New York & New Jersey (PANY & NJ). Flight Center Hotel, LLC would redevelop the site with two new hotel buildings built on either side of the restored/rehabilitated former TWA Terminal Building. The 75-year term of the Flight Center pending sub-lease extends beyond the PANY & NJ airport lease with New York City that expires in 2050;**

- **This application is necessary as a contingency in the event that PANY & NJ does not renew the lease for JFK Airport beyond 2050. Approval of this application would enable New York City to lease the property directly to Flight Center Hotel, LLC or through another successor operator of the airport property. Additionally, this application would allow the possibility to extend the lease of the 6 acre development parcel through 2119;**

- **Flight Center Hotel, LLC is proposing to build 505 hotel guest rooms in two new buildings on either side of the landmarked building. The former TWA Terminal Building would be faithfully restored and updated for reuse as the hotel lobby, conference center and ballrooms, restaurants and retail space, museums commemorating midcentury modern design and TWA as a pioneering airline. It is anticipated that construction and reopening the building for public use will generate approximately 3700 jobs. Jobs and contracts will be secured through local hiring and outreach to MWBE firms. They have secured agreements with the building and operating trades assuring that the project will be built soundly and safely, and operated by skilled labor ;**

- **Community Board 10 approved the application by a vote of 31-0-1 at a public hearing held on January 7, 2016;**

- **Community Board 12 approved the application by a vote of 27-0-0 at a public hearing held on January 20, 2016;**

- **Community Board 13 approved the application by a vote of 27-0-2 at a public hearing held on December 21, 2015;**

- **The speakers at the Borough President's public hearing included representatives from not for profit advocacy groups, trade and business associations, and a former TWA employee all spoke in favor of the application. Each speaker was highly supportive and remarked on the applicant's openness and attention to historic detail for the project. The project is expected to restore and reactivate an iconic landmarked building with a host of uses creating a destination that would economically benefit Queens and New York City.**

RECOMMENDATION

Based on the above consideration, I hereby recommend approval of this application.

Melinda Katz

PRESIDENT, BOROUGH OF QUEENS

2/10/16
DATE

NYCPLANNING
DEPARTMENT OF CITY PLANNING CITY OF NEW YORK

Community/Borough Board Recommendation

Pursuant to the Uniform Land Use Review Procedure

Application #: **C160097PPQ**	Project Name: **TWA Flight Center Hotel at JFK Airport**
CEQR Number: TYPE II	Borough(s): Queens Community District Number(s): 10, 12 & 13

Please use the above application number on all correspondence concerning this application

SUBMISSION INSTRUCTIONS

1. Complete this form and return to the Department of City Planning by one of the following options:
   - **EMAIL (recommended):** Send email to CalendarOffice@planning.nyc.gov and include the following subject line: (CB or BP) Recommendation + (6-digit application number), e.g., "CB Recommendation #C100000ZSQ"
   - **MAIL:** Calendar Information Office, City Planning Commission, Room 2E, 22 Reade Street, New York, NY 10007
   - **FAX:** (212) 720-3356 and note "Attention of the Calendar Office"
2. Send one copy of the completed form with any attachments to the applicant's representative at the address listed below, one copy to the Borough President, and one copy to the Borough Board, when applicable.

Docket Description:

IN THE MATTER OF an application submitted by the Department of Small Business Services, pursuant to Section 197-c of New York City Charter, for the disposition of a lease to Flight Center Hotel, LLC located at Building 60 at JFK International Airport, Block 14260, p/o Lot 1, pursuant to zoning.

Applicant(s):	Applicant's Representative:
NYC Dept. of Small Business Services 110 William Street New York, NY 10038	Hardy Adasko NYC Economic Development Corporation 110 William Street New York, NY 10038 212.312.3703

Recommendation submitted by: Queens Community Board 10

Date of public hearing: January 7, 2016 Location: 135-45 Lefferts Blvd., S. Ozone Park, NY11420

Was a quorum present? YES [x] NO [ ] *A public hearing requires a quorum of 20% of the appointed members of the board, but in no event fewer than seven such members.*

Date of Vote: January 7, 2016 Location: 135-45 Lefferts Blvd, S. Ozone Park, NY 11420

RECOMMENDATION

- [x] Approve
- [ ] Approve With Modifications/Conditions
- [ ] Disapprove
- [ ] Disapprove With Modifications/Conditions

Please attach any further explanation of the recommendation on additional sheets, as necessary.

Voting

In Favor: 31 # Against: 0 #Abstaining: Total members appointed to the board: 43

1-Not voted due to conflict of interest.

Name of CB/BB officer completing this form	Title	Date
Elizabeth Braton	Chairperson	1/14/16

NYCPLANNING
DEPARTMENT OF CITY PLANNING CITY OF NEW YORK

NOTIFICATION OF COMMUNITY/BOROUGH BOARD PUBLIC HEARING

Application #: **C160097PPQ** CEQR Number: TYPE II	Project Name: **TWA Flight Center Hotel at JFK Airport** Borough(s): Queens Community District Number(s): 10, 12 & 13

Please use the above application number on all correspondence concerning this application

SUBMISSION INSTRUCTIONS

1. Return this completed page at least fourteen (14) days before the scheduled hearing date by one of the following options:
   - **EMAIL (recommended):** Send email to **CalendarOffice@planning.nyc.gov** and include in the subject line: (CB or BB) Public Hearing Notice + (6-digit application number), e.g., "CB Public Hearing Notice #C100000ZSQ"
   - **MAIL:** Calendar Office, City Planning Commission, Room 2E, 22 Reade Street, New York, NY 10007
   - **FAX:** to (212) 720-3356 and note "Attention of the Calendar Office"
2. Send one copy to the applicant's representative at the address listed below at least (10) days before the scheduled hearing date.

Docket Description:

IN THE MATTER OF an application submitted by the Department of Small Business Services, pursuant to Section 197-c of New York City Charter, for the disposition of a lease to Flight Center Hotel, LLC located at Building 60 at JFK International Airport, Block 14260, p/o Lot 1, pursuant to zoning.

Applicant(s):	Applicant's Representative:
NYC Dept. of Small Business Services 110 William Street New York, NY 10038	Hardy Adasko NYC Economic Development Corporation 110 William Street New York, NY 10038 212.312.3703

Contact:
Address questions about this application to the following DCP office:
DEPARTMENT OF CITY PLANNING
Queens Office
Address: 120-55 Queens Blvd., Room 201, Kew Gardens NY 11424
Phone: 718-286-3170
Fax: 718-286-3183

Notification submitted by:
Queens Community Board 10

Date of Public Hearing: January 7, 2016 **Time:** 8:35 pm

Hearing Location: 135-45 Lefferts Blvd., S. Ozone Park, NY 11420

Name of CB/BB officer completing this form	*Title*	*Date*
Elizabeth Braton	Chairperson	1/14/16

NYCPLANNING
DEPARTMENT OF CITY PLANNING CITY OF NEW YORK

Community/Borough Board Recommendation

Pursuant to the Uniform Land Use Review Procedure

Application #: C160097PPQ	Project Name: **TWA Flight Center Hotel at JFK Airport**
CEQR Number: TYPE II	Borough(s): Queens Community District Number(s): 10, 12 & 13

Please use the above application number on all correspondence concerning this application

SUBMISSION INSTRUCTIONS

1. Complete this form and return to the Department of City Planning by one of the following options:
   - **EMAIL (recommended):** Send email to **CalendarOffice@planning.nyc.gov** and include the following subject line: (CB or BP) Recommendation + (6-digit application number), e.g., "CB Recommendation #C100000ZSQ"
   - **MAIL:** Calendar Information Office, City Planning Commission, Room 2E, 22 Reade Street, New York, NY 10007
   - **FAX:** (212) 720-3356 and note "Attention of the Calendar Office"
2. Send one copy of the completed form with any attachments to the applicant's representative at the address listed below, one copy to the Borough President, and one copy to the Borough Board, when applicable.

Docket Description:

IN THE MATTER OF an application submitted by the Department of Small Business Services, pursuant to Section 197-c of New York City Charter, for the disposition of a lease to Flight Center Hotel, LLC located at Building 60 at JFK International Airport, Block 14260, p/o Lot 1, pursuant to zoning.

Applicant(s):	Applicant's Representative:
NYC Dept. of Small Business Services 110 William Street New York, NY 10038	Hardy Adasko NYC Economic Development Corporation 110 William Street New York, NY 10038 212.312.3703

Recommendation submitted by:
Queens Community Board 12

Date of public hearing: January 20, 2016 Location: Robert Rose Johnson Family Life Center 172-17 Linden Blvd. St. Albans, NY 11434

Was a quorum present? YES ☒ NO ☐ *A public hearing requires a quorum of 20% of the appointed members of the board, but in no event fewer than seven such members.*

Date of Vote: January 20, 2016 Location: 172-17 Linden Blvd. St. Albans, NY 11434

RECOMMENDATION

☒ Approve
☐ Approve With Modifications/Conditions
☐ Disapprove
☐ Disapprove With Modifications/Conditions

Please attach any further explanation of the recommendation on additional sheets, as necessary.

Voting

In Favor: 27 # Against: 0 # Abstaining: 0 Total members appointed to the board: 42

Name of CB/BB officer completing this form	*Title*	*Date*
Yvonne Riddick	District Manager	2/4/2016

NYCPLANNING
DEPARTMENT OF CITY PLANNING CITY OF NEW YORK

Community/Borough Board Recommendation

Pursuant to the Uniform Land Use Review Procedure

Application #: **C160097PPQ**	Project Name: **TWA Flight Center Hotel at JFK Airport**
CEQR Number: TYPE II	Borough(s): Queens Community District Number(s): 10, 12 & 13

Please use the above application number on all correspondence concerning this application

SUBMISSION INSTRUCTIONS

1. Complete this form and return to the Department of City Planning by one of the following options:
   - **EMAIL (recommended):** Send email to CalendarOffice@planning.nyc.gov and include the following subject line: (CB or BP) Recommendation + (6-digit application number), e.g., "CB Recommendation #C100000ZSQ"
   - **MAIL:** Calendar Information Office, City Planning Commission, Room 2E, 22 Reade Street, New York, NY 10007
   - **FAX:** (212) 720-3356 and note "Attention of the Calendar Office"
2. Send one copy of the completed form with any attachments to the applicant's representative at the address listed below, one copy to the Borough President, and one copy to the Borough Board, when applicable.

Docket Description:

IN THE MATTER OF an application submitted by the Department of Small Business Services, pursuant to Section 197-c of New York City Charter, for the disposition of a lease to Flight Center Hotel, LLC located at Building 60 at JFK International Airport, Block 14260, p/o Lot 1, pursuant to zoning.

Applicant(s):	Applicant's Representative:
NYC Dept. of Small Business Services 110 William Street New York, NY 10038	Hardy Adasko NYC Economic Development Corporation 110 William Street New York, NY 10038 212.312.3703

Recommendation submitted by: Queens Community Board 13

Date of public hearing: 12.21.15 Location: Bellerose Assembly of God 240-15 Hillside Ave, Bellerose, NY

Was a quorum present? YES ☑ NO ☐ *A public hearing requires a quorum of 20% of the appointed members of the board, but in no event fewer than seven such members.*

Date of Vote: 12.21.15 Location: Bellerose Assembly of God 240-15 Hillside Ave., Bellerose, NY

RECOMMENDATION

- ☑ Approve
- ☐ Approve With Modifications/Conditions
- ☐ Disapprove
- ☐ Disapprove With Modifications/Conditions

Please attach any further explanation of the recommendation on additional sheets, as necessary.

Voting

In Favor: 28 # Against: ϕ # Abstaining: 2 Total members appointed to the board: 46

Name of CB/BB officer completing this form	Title	Date
Mark McMillan	District Manager	12.28.15

Job 57874
PAUTH
LI Herald
1/4 pg
5.04" x 6.3"
3.31.16

THE PORT AUTHORITY OF NY & NJ

NOTICE OF AVAILABILITY and REQUEST FOR COMMENT

Draft Environmental Assessment
Draft DOT Section 4(f) Evaluation
TWA Flight Center Hotel Project
John F. Kennedy International Airport, Queens, New York

In accordance with the National Environmental Policy Act of 1969 (NEPA), and the National Historic Preservation Act of 1966, notice is hereby given that copies of a Draft Environmental Assessment (EA), including a Draft Department of Transportation Section 4(f) Evaluation for the proposed TWA Flight Center Hotel Project at John F. Kennedy International Airport are available for public review and comment at the following locations:

The Port Authority of NY & NJ
John F. Kennedy International Airport
Building 14/PA Administration Building
3rd Floor
Queens, NY 11430
Attn: Jim Steven
Hours: 8:00 am to 4:00 pm

The Port Authority of NY & NJ
Aviation Department
4 World Trade Center/150 Greenwich Street
18th Floor
New York, NY 10006
Attn: Edward Knoesel
Hours: 9:00 am to 5:00 pm

The Draft EA document for this project will be available at these locations until the close of the comment period, which is 30 days after the publication date of April 7. In addition, a copy of this document may be viewed online at: http://www.panynj.gov/about/studies-reports.html

The Draft EA document responds to all of the requirements of the Federal Aviation Administration (FAA) for preparation of an Environmental Assessment (EA) pursuant to NEPA, and also documents compliance with Federal Executive Orders 11988 and 13690: Floodplain Management; Section 106 of the National Historic Preservation Act; and, the Department of Transportation Act of 1966, Section 4(f). The Port Authority of New York & New Jersey (Port Authority) is inviting the public to submit, in writing, comments on the Draft EA prepared for the TWA Flight Center Hotel Project. The Port Authority is accepting comments on this Draft EA document until the official comment period closes on May 7. Comments must be received by 5:00 PM on May 7 in order to be considered.

All comments on this Draft EA should be sent to: The Port Authority of NY & NJ, 4 World Trade Center/150 Greenwich Street, 18th Floor, New York, NY 10006, Attn: Edward Knoesel. In addition, comments may be emailed to TWAFlightCenterEA@panynj.gov with the subject heading "TWA Flight Center EA COMMENT." If you have any questions on this notice please contact Edward Knoesel at (212) 435-3747.

U. S. Department
of Transportation

**Federal Aviation
Administration**

New York Airports District Office
159-30 Rockaway Blvd, Suite 111
Jamaica, New York 11434

June 28, 2016

Re: TWA Flight Center Hotel
First Amendment to the 2004 Memorandum of Agreement for the Rehabilitation, Restoration, and Adaptive Reuse of TWA Terminal 5 at John. F. Kennedy International Airport, Jamaica, New York

Dear Consulting Party Member:

This letter serves to update you on the status of the First Amendment to the 2004 Memorandum of Agreement for the Rehabilitation, Restoration, and Adaptive Reuse of TWA Terminal 5 at John. F. Kennedy (JFK) International Airport, Jamaica, New York.

Prior to the December 1, 2015 meeting of the Redevelopment Advisory Committee (RAC) a draft First Amendment to the 2004 Memorandum of Agreement for the Rehabilitation, Restoration, and Adaptive Reuse of TWA Terminal 5 at John. F. Kennedy (JFK) International Airport, Jamaica, New York, was provided to you for review and comment. During the December 1, 2015 RAC meeting, the draft First Amendment to the 2004 MOA was presented and discussed.

Since our receipt of the comments from the RAC, the signatory agencies, (the Federal Aviation Administration [FAA], the Advisory Council on Historic Preservation [ACHP], the New York State Historic Preservation Office [SHPO], and the Port Authority of NY & NJ [PANYNJ]) have revised the draft First Amendment to the 2004 MOA in an effort to address comments and issues raised.

At this point in time, the signatory agencies have reviewed the revised draft First Amendment to the 2004 MOA (dated 6/20/16, copy enclosed) and have found it to be accurate and reflective of the extensive coordination that took place during its development. The consultation conducted pursuant to Section 106 of the National Historic Preservation Act has culminated in this First Amendment to the 2004 MOA. The signatory agencies believe that the provisions of the First Amendment to the 2004 MOA balance the interests of all involved.

As part of the National Environmental Policy Act (NEPA) Environmental Assessment (EA) process for the proposed TWA Flight Center Hotel, the PANYNJ solicited public comments on the Draft EA for the subject project from April 7-May 7, 2016. Of 12 total comments received, 11 comments were in support of the proposed project, and recommended that the FAA, serving as the lead federal agency for the NEPA review, approve the proposed project as described in the Draft EA. One comment, which was signed by preservation organizations, noted several concerns related to design issues, including the wings and north and south tubes, visual effects, soil borings, and the cogeneration facility. Also, concerns were raised about pedestrian access, hazardous materials, and air quality.

The comments and responses to those comments are enclosed with this letter. The FAA, as well as the other MOA signatory agencies, believe that information in the Draft EA, as well as additional information included in the comment responses, adequately respond to the historic preservation issues highlighted, and that the analysis in the Draft EA is thorough and it supports the conclusions in the document. The Draft EA, therefore, fulfills FAA's

requirements for preparation of an EA pursuant to NEPA, and it also documents compliance with Federal Executive Orders 11988 and 13690: Floodplain Management; Section 106 of the National Historic Preservation Act; and, the Department of Transportation Act of 1966, Section 4(f). With the conclusion of the public comment period and project concurrence received from the U.S. Department of Interior on May 31, 2016, the next step in the NEPA process is to finalize the EA.

In order to finalize the EA, the signatories to the First Amendment to the 2004 MOA must enter into the agreement by providing signature; this process is currently underway. The signed First Amendment to the 2004 MOA will be included in the final EA.

As consulting parties who provided substantial and valuable input in the Draft EA, Section 106 consultation, and redevelopment process for the TWA Flight Center, we will be inviting you to concur in the the First Amendment to the 2004 MOA after it has been signed by the signatory agencies. Please consider becoming a concurring party to show that you are familiar with the terms of the First Amendment to the 2004 MOA and do not object to it. We are hopeful that you will concur, given your involvement with this important project. As discussed in previous RAC meetings, your continued participation on the RAC is not dependent upon your concurring on the First Amendment to the 2004 MOA, and you may choose not to sign, as you find appropriate.

We will send you the signed the First Amendment to the 2004 MOA as soon as the signatory agencies have provided their signatures.

Should you have any questions, please call me at (718) 995-5777, or email me at marie.jenet@faa.gov.

Sincerely,

Marie C. Jenet
Environmental Specialist
New York Airports District Office

Enclosure

cc: J. Steven, PANYNJ
R. Pierpont, NYSHPO
B. Cummings, NYSHPO
C. Vaughn, ACHP

JFK TWA Flight Center Hotel
2016 Consulting Parties

The National Trust for Historic Preservation
Attn: Betsy Merritt
2600 Virginia Ave., NW
Suite 1100
Washington, DC 20037

The Municipal Art Society of New York
Attn: Gina Pollara
488 Madison Ave
Suite 1900
New York, NY 10022

The New York City Partnership
Attn: Merrill Pond
One Battery Park Plaza, 5th Floor
New York, NY 10004-1479

DOCOMOMO US/New York Tri-State
Attn: Nina Rappaport
Nina Rappaport
240 W. 102nd Street, #62
New York, NY 10025

The Consulate General of Finland, New York
Attn: Kati Laakso
866 United Nations Plaza, Suite 250
New York, NY 10017

New York Landmarks Conservancy
Attn: Alex Herrera
One Whitehall Street
New York, NY 10004

The New York Building Congress
Attn: Richard Anderson
44 West 28th St., 12th Floor
New York, NY 10001

Flight Center Hotel, LLC
c/o Tyler Morse, CEO MCR
152 West 57th St 46th Floor
New York, NY 10019

U. S. Department
of Transportation

**Federal Aviation
Administration**

New York Airports District Office
159-30 Rockaway Blvd, Suite 111
Jamaica, New York 11434

April 12, 2016

Mr. Willie R. Taylor
Director, Office of Environmental Policy and Compliance
U.S. Department of the Interior
1849 C. Street, NW (MS 2462)
Washington, DC 20240

Re: John F. Kennedy International Airport (JFK), Queens, NY
TWA Flight Center Hotel Project
Draft 4(f) Statement and Environmental Assessment

Dear Mr. Taylor:

Enclosed please find a Draft 4(f) Statement and Environmental Assessment (EA) for the proposed TWA Flight Center Hotel Project at John F. Kennedy International Airport, located in Queens, New York.

The proposed project involves the rehabilitation, restoration and reuse of the historic TWA Flight Center. The proposed project constitutes a physical use under Section 4(f). Accordingly, a Section 4(f) Statement has been prepared and is submitted for Department of the Interior review. The proposed project is also subject of an EA which is enclosed and can also be found at http://www.panynj.gov/about/studies-reports.html. The Section 4(f) Statement is also an appendix to the EA.

Thank you in advance for your comments and input. Should you have any questions, please contact Ms. Marie Jenet of my staff at (718) 995-5777 or at marie.jenet@faa.gov.

Sincerely,

Evelyn Martinez, Manager
New York Airports District Office

Cc: C. Vaughn, ACHP
R. Pierpont, NYSHPO, E. Cummings, NYSHPO
E. Knoesel, PANYNJ, N. Kimball, PANYNJ

JFK Airport
TWA Flight Center Final Environmental Assessment
Errata

1. Page 1-7, Accommodations for airline travelers would be provided by the hotel. The Lobby would include a minimum of two electronic ticketing kiosks for use by ~~jetBlue~~ airline passengers (as set forth in the 2004 MOA), as well as check-in counters for select customers.

2. Appendix E, Page 3.2 Accommodations for airline travelers would be provided by the hotel. The Lobby would include a minimum of two electronic ticketing kiosks for use by ~~jetBlue~~ airline passengers (as set forth in the 2004 MOA), as well as check-in counters for select customers.

3. Page 7-2, Section 7-2: "A public notice and comment period ~~will be part of the NEPA process~~ were held from April 7, 2016 to May 7, 2016 as part of the combined NEPA and Section 106 process."

4. Appendix E, Page 3-2, Section 3-3-2, Accommodations for airline travelers would be provided by the hotel. The Lobby would include a minimum of two electronic ticketing kiosks for use by ~~jetBlue~~ airline passengers (as set forth in the 2004 MOA), as well as check-in counters for select customers.