

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
EASTERN REGION**



**WRITTEN RE-EVALUATION AND RECORD OF DECISION
FOR THE ENVIRONMENTAL ASSESSMENT FOR THE
TERMINAL A REDEVELOPMENT PROGRAM AT NEWARK LIBERTY
INTERNATIONAL AIRPORT**

NEWARK, NEW JERSEY

DECEMBER 4, 2017

INTRODUCTION

In November 2017, the Port Authority of New York and New Jersey (PANYNJ) requested that the Federal Aviation Administration (FAA) approve three Proposed New Projects to facilitate tenant relocation as part of the Terminal A Redevelopment Program at Newark Liberty International Airport (EWR), located in Newark, New Jersey; the Federal Aviation Administration (FAA) had previously prepared and issued an Environmental Assessment (EA) and a Finding of No Significant Impact/Record of Decision (FONSI/ROD) approving the Terminal A Redevelopment Program on May 10, 2017. In response to the PANYNJ request, the FAA reviewed and analyzed the *November 2017 Technical Report: Tenant Relocations and the Terminal A Redevelopment Program Newark Liberty International Airport*, which analyzed and compared potential impacts associated with the three Proposed New Projects to facilitate tenant relocation, as compared to the potential impacts of the Terminal A Redevelopment Program approved in the May 2017 EA/FONSI/ROD. This Written Re-evaluation and Record of Decision (WR/ROD) of the May 2017 EA was prepared to evaluate the potential environmental impacts associated with the three Proposed New Projects. The analysis within this WR/ROD identifies FAA decisions and Federal Actions associated with the three Proposed New Projects and it ensures consistency with the individual and cumulative impacts discussed in the Terminal A EA/FONSI/ROD; the WR/ROD also confirms the on-going validity of the information contained in the May 2017 document. The Terminal EA/FONSI/ROD is incorporated by reference.

BACKGROUND

The FAA issued a FONSI/ROD on May 10, 2017, which approved the demolition of the existing Terminal A and construction of a new 33 gate terminal; reconfiguration of the airfield access to the new terminal; construction of a new vehicle parking garage, surface parking lot and enclosed pedestrian bridge between the new terminal and new parking garage; reconfiguration of the storm water collection system for the project area; installation of new aviation fuel hydrants to serve the new terminal gates; construction of access roadways, building demolition and reallocation of several airport leaseholds; and relocation of existing airport functions within the project area to other areas of the airport. The FONSI/ROD followed a May 2017 Environmental Assessment (EA). Copies of both documents are available on the PANYNJ website at <http://www.panynj.gov/about/studies-reports.html> and at the FAA Eastern Regional Office, 1 Aviation Plaza, Jamaica, New York (718-553-2511) and at the New York Airports District Office, 1 Aviation Plaza, Jamaica, New York (718-995-5777).

The project in the May 2017 EA involved the reallocation of several airport leaseholds, however, the details of the associated tenant relocations were not known at that time. At this point in time, the details are known and three Proposed New Projects to facilitate tenant relocation are proposed by the PANYNJ as changes from the project approved in the May 2017 FONSI/ROD. The basis for FAA's WR is the *November 2107 Technical Report: Tenant Relocations and the Terminal A Redevelopment Program Newark Liberty International Airport* prepared by the PANYNJ. The Technical Report analyzes and compares potential impacts associated with the three Proposed New Projects as compared to the potential impacts of the project approved in the

May 2017 FONSI ROD; a copy of the November 2017 Technical Report can be found in Appendix A of this WR/ROD.

FAA WRITTEN RE-EVALUATIONS

To ensure full compliance with the National Environmental Policy Act (NEPA) where there are proposed changes to approved projects, the FAA evaluates the potential change in environmental impacts, in order to determine if a supplemental Environmental Assessment is required. This WR/ROD is based on guidance provided by FAA Environmental Orders 1050.1F and 5050.4B. Both Orders reference re-evaluating NEPA documents when there are new circumstances or information relevant to environmental concerns that come to light after the FAA has issued an environmental assessment or an environmental impact statement.

FAA Orders 1050.1F and 5050.4B provide guidance as to the circumstances under which it is necessary to supplement an EA. FAA Order 1050.1F, paragraph 9-2 provides that where there are changes in the proposed action, or new information relevant to environmental concerns, the FAA may prepare a written re-evaluation that will either conclude the contents of previously prepared environmental documents remain valid or that significant changes require the preparation of a supplement or new EA.

FAA Order 1050.1F, paragraph 9-2(c) states “A new or supplemental EA or EIS need not be prepared if a written re-evaluation indicates that:

- (1) The proposed action conforms to plans or projects for which a prior EA and FONSI have been issued or a prior EIS has been filed and there are no substantial changes in the action that are relevant to environmental concerns;
- (2) Data and analyses contained in the previous EA and FONSI or EIS are still substantially valid and there are no significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts; and
- (3) Pertinent conditions and requirements of the prior approval have been, or will be, met in the current action.”

Per FAA Order 5050.4B, paragraph 1402 (b): A supplement to the Final EA for a project is required if:

- “(1) The airport sponsor or FAA makes substantial changes in the proposed action that could affect the action’s environmental effects; or
- (2) Significant new changes, circumstances or information relevant to the proposed action, its affected environment, or its environmental impacts becomes available.”

SUMMARY OF THE PROPOSED NEW PROJECTS

The Proposed New Projects involve demolition and construction of buildings to facilitate tenant relocation thereby making the necessary property available for the Terminal A construction. The Terminal A Redevelopment Program involved the reallocation of several airport leaseholds to make property available for the construction of the new Terminal A. To accomplish this, certain leases were not renewed and other leasehold activities were proposed for relocation.

DESCRIPTION OF THE PROPOSED NEW PROJECTS

Proposed New Project No. 1: The construction of a new Ground Service Equipment (GSE) facility by Federal Express (FedEx) to support its relocation from Building 342. FedEx contemplates construction of a new structure (155,000 sf footprint) for use as a parking garage with equipment storage and a security screening facility; the preferred location is in the area of, or within the footprint of Building 330. Construction of a 17-Lift Container Transport Vehicle (CTV) Interface with 200 container staging positions and a canopy in the vicinity of the new buildings.

Proposed New Project No. 2: The construction of a new 48,000 sf building and 400,000 sf aircraft apron by United Parcel Service (UPS) to support the relocation from its current operation in Building 350. The new UPS building is proposed to be constructed at the current location of a Remain Overnight (RON) parking area on the north side of the Airport.

Proposed New Project No. 3: The demolition of Building 151 and the construction of a new 200,000 sf facility by United Airlines for the relocation of Chelsea Kitchen from its current operation in Buildings 330 and 331.

PROPOSED AGENCY ACTIONS

The FAA actions involved in the implementation of the Proposed New Projects for the EWR Terminal A Redevelopment Program include the following:

- a. Unconditional Approval of a revised ALP at EWR, pursuant to 49 U.S.C. §40103(b) and §47107(a)(16) to include the three Proposed New Projects as described in the Technical Report; and determination and approval of the effects of this project upon the safe and efficient utilization of navigable airspace pursuant to 14 CFR Parts 77 and 157 and 49 U.S.C. §44718;
- b. Determination under 49 U.S.C. §40101(d)(1) and §47105(b)(3) as to whether the Proposed Design Changes meet applicable design and engineering standards set forth in FAA Advisory Circulars;

- c. Environmental determinations concerning potential funding through the Federal grant-in-aid program authorized by the Airport and Airway Improvement Act of 1982, as amended (recodified at 49 U.S.C. §47107) and/or approval of an application to use Passenger Facility Charges (PFCs) under 49 U.S.C. §40117 (neither the May 2017 FONSI/ROD nor this WR/ROD determines eligibility or availability of potential funds);
- d. Determination under 49 U.S.C. §44502 (b) concerning the acquisition, establishment, improvement, operations and maintenance of air navigation facilities and that the subject airport development is reasonably necessary for use in air commerce or in the interests of national defense;
- e. Continued close coordination with the PANYNJ and appropriate FAA program offices, as required, to maintain safe, efficient use of and preservation of the navigable airspace during all aspects of project construction and demolition, in accordance with 14 CFR Part 77; and
- f. Approval of appropriate amendments to the EWR Airport Certification Manual (ACM), as required, pursuant to 49 U.S.C. §44706.

SUMMARY OF CHANGES TO ENVIRONMENTAL IMPACTS AND MITIGATION

This section describes the affected environment and anticipated impacts associated with the Proposed New Projects.

Affected Environment

The May 2017 EA described the existing environment and conditions. The environmental setting has not changed since the May 2017 EA.

Environmental Consequences of the Proposed New Projects

The potential impacts associated with the Proposed New Projects are presented in Chapter 4.3 of the attached Technical Report. Impacts associated with the Proposed New Projects are similar in nature and lesser in scale than those impacts associated with the Terminal A Redevelopment Program. Accordingly, impacts to all resources will remain essentially the same as those that were presented in the May 2017 EA and FONSI/ROD.

Impacts resulting from implementation of the Proposed New Projects, when combined with the implementation of the Terminal A Redevelopment Program, may result in small increases in impacts to air quality, water resources, and construction related impacts, however, this incremental increase is not significant. The updated information in this WR/ROD does not present a dramatically different picture of the overall Terminal A Redevelopment Program.

MITIGATION MEASURES

As discussed above, the Proposed New Projects will have similar impacts to those described for the Terminal A Redevelopment Program. As such, no new mitigation measures are proposed and the mitigation measures identified in the 2017 EA and FONSI/ROD are unchanged.

PUBLIC INVOLVEMENT/AGENCY COORDINATION

A Notice of Public Availability of the Technical Report was made on October 20, 2017 in the *Star Ledger* and *The Record*. The document was made available to the public at Newark Liberty International Airport, the Port Authority's headquarters offices at 4 World Trade Center in Manhattan, New York, and was also made available to the public via the internet at <http://www.panynj.gov/about/studies-reports.html>. The Technical Report was made available to the public and agencies for review from October 20, 2017 through November 6, 2017. During this period no comments were received.

CONCLUSION

In response to the PANYNJ request, the FAA reviewed and analyzed the November 2017 "Tenant Relocations and the Terminal A Redevelopment Program Newark Liberty International Airport" (Technical Report), that analyzed and compared potential impacts associated with the Proposed New Projects as compared to the potential impacts of the Terminal A Redevelopment Program approved in the May 2017 EA/FONSI/ROD. Subsequent to this review and analysis, the FAA prepared this WR/ROD.

Based on FAA Order 1050.1F, paragraph 9-2(c), the FAA concludes that a new or supplemental EA need not be prepared; this WR/ROD indicates that:

- "(1) The proposed action conforms to plans or projects for which a prior EA and FONSI have been issued and there are no substantial changes in the action that are relevant to environmental concerns;
- (2) Data and analyses contained in the previous EA and FONSI are still substantially valid and there are no significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts; and
- (3) Pertinent conditions and requirements of the prior approval have been, or will be, met in the current action."

Based on FAA Order 5050.4B, paragraph 1402 b., FAA concludes that a supplement to the EA for this project is not required since the airport sponsor did not make substantial changes to the proposed action that could affect the action's environmental effects and there are no significant new changes, circumstances or information relevant to the proposed action, its affected environment, or its environmental impacts.

Therefore, as discussed above and in accordance with FAA Order 1050.1F, *Policies and Procedures for Assessing Environmental Impacts*, and FAA Order 5050.4B, *NEPA Implementing Instructions for Airport Actions*, preparation of a new or Supplemental EA is not required.

FEDERAL AGENCY FINDINGS

The May 2017 EA/FONSI/ROD contained six Federal Findings pertaining to the Terminal A Redevelopment Program that was approved. Those findings were:

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);

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);

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);

D: The Proposed Action will conform to the State Implementation Plan (SIP) in accordance with Section 176 of the Clean Air Act (CAA) and its amendments (42 U.S.C. §7506(c));

E: There are no disproportionately high and adverse environmental effects on minority and/or low-income populations that would result from the Proposed Action. (Executive Order 12989) (U.S. DOT Order 5610.2(a)); and

F: Executive Order 11988, that 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.

As this WR/ROD for the Proposed New Projects demonstrates, there are no substantial changes relevant to environmental concerns to the project that was the subject of the May 2017 EA. Additionally, the Proposed New Projects do not result in any significant new circumstances or information relevant to environmental concerns. Therefore, the six Findings (Findings A through F) of the May 2017 FONSI/ROD remain valid and no changes to any of the Findings are required.

DECISION AND ORDER

This WR/ROD was prepared pursuant to FAA Orders 1050.1F, *Environmental Impacts: Policies and Procedures*, and 5050.4B, *National Environmental Policy Act Implementing Instructions for Airport Actions*, Paragraph 1401. This WR/ROD along with the FAA's May 2017 FONSI/ROD constitute the FAA's decisions with regard to the Terminal A Redevelopment Program, including the three Proposed New Projects at EWR. The FAA has independently evaluated the information contained in the May 2017 EA and the November 2017 Technical Report and takes full responsibility for the scope and content that addresses the FAA actions.

I have carefully and thoroughly considered the facts contained in the May 2017 EA and FONSI/ROD, the November 2017 Technical Report, and this Written Re-evaluation of the May 2017 EA and FONSI/ROD. Based on that information, I find the proposed Federal Actions are consistent with existing national environmental policies and objectives of Section 101(a) of the *National Environmental Policy Act of 1969* (NEPA). I also find the proposed Federal Actions with the required mitigation as presented in the May 2017 EA/FONSI/ROD and the November 2017 Technical Report will not significantly affect the quality of the human environment or include any condition requiring any 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 WR/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, pursuant to 49 U.S.C. §40103(b) and §47107(a)(16) to include the three Proposed New Projects as described in the Technical Report; and determination and approval of the effects of this project upon the safe and efficient utilization of navigable airspace pursuant to 14 CFR Parts 77 and 157 and 49 U.S.C. §44718;
- b. Determination under 49 U.S.C. §40101(d)(1) and §47105(b)(3) that the Proposed New Projects meet applicable design and engineering standards set forth in FAA Advisory Circulars;
- c. Determination concerning funding through the Federal grant-in-aid program authorized by the Airport and Airway Improvement Act of 1982, as amended (recodified at 49 U.S.C. §47107) and/or approval of an application to use Passenger Facility Charges (PFCs) under 49 U.S.C. §40117 (neither the May 2017 FONSI/ROD nor this WR/ROD determines eligibility or availability of potential funds);
- d. Determination under 49 U.S.C. §44502 (b) concerning the acquisition, establishment, improvement, operations and maintenance of air navigation facilities and that the subject airport development is reasonably necessary for use in air commerce or in the interests of national defense, recognizing the need for incorporation of appropriate mitigation discussed above;

- e. Continued close coordination with the PANYNJ and appropriate FAA program offices, as required, to maintain safe, efficient use of and preservation of the navigable airspace during all aspects of project construction and demolition for the Proposed New Projects, in accordance with 14 CFR Part 77; and
- f. Approval of appropriate amendments to the EWR ACM to reflect the Proposed Design Changes, as required, pursuant to 49 U.S.C. §44706.

APPROVED:



Steven M. Urlass
Airports Division Manager
Federal Aviation Administration
Eastern Region

12/4/17

Date

DISAPPROVED:

Steven M. Urlass
Airports Division Manager
Federal Aviation Administration
Eastern Region

Date

Right of Appeal

This Written Re-evaluation/Record of Decision (WR/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.

Technical Report: Tenant Relocations and the Terminal A Redevelopment Program Newark Liberty International Airport

**Prepared for
U.S. Department of Transportation
Federal Aviation Administration**

**Sponsored by
The Port Authority of NY & NJ**

November 2017

TABLE OF CONTENTS

Preface3

1.	Introduction and Background	1
1.1	Proposed New Projects	4
1.1.1	Proposed New Project No. 1 – FedEx.....	4
1.1.2	Proposed New Project No. 2 – UPS.....	7
1.1.3	Proposed New Project No. 3 – Chelsea Kitchen/United Airlines	10
2.	Purpose and Need	13
3.	Alternatives.....	14
4.	Affected Environment.....	15
4.1	Environmental Setting	15
4.2	Environmental Resources Not Affected by the Proposed New Projects	16
4.3	Environmental Resources Potentially Affected by the Proposed New Projects.....	16
4.3.1	Air Quality.....	16
4.3.2	Climate Change	19
4.3.3	Water Resources	20
4.3.4	Hazardous Materials, Pollution Prevention and Solid Waste	21
4.3.5	Traffic	24
4.3.6	Natural Resources and Energy Supply	24
4.3.7	Noise.....	25
4.3.8	Floodplains	25
4.3.9	Construction.....	26
4.3.10	Cumulative Impacts.....	31
5.	Mitigation	35
5.1	Floodplain Development.....	35
5.2	Noise	35
5.3	Water Quality	36
5.4	Roadway Use.....	37
5.5	Construction.....	37
6.	Required Permits and Notifications.....	38
7.	Public Involvement	39
8.	References	40

List of Figures

Figure 1	Existing Conditions.....	2
Figure 2	Proposed Project Locations	3
Figure 3a	FedEx Project Area (Proposed New Project No. 1) - Existing Conditions	5
Figure 3b	Proposed FedEx Project Area (Proposed New Project No. 1).....	6
Figure 4a	UPS Project Area (Proposed New Project No. 2) - Existing Conditions	8
Figure 4b	Proposed UPS Project Area (Proposed New Project No. 2).....	9
Figure 5a	Chelsea/United Project Area (Proposed New Project No. 3) - Existing Conditions.....	11
Figure 5b	Proposed Chelsea/United Project Area (Proposed New Project No. 3).....	12

List of Tables

Table 1-1	Inventory of Buildings Associated with the Proposed New Projects at Newark Liberty International Airport.....	4
Table 4-1	Regulatory Framework and Analysis Criteria	17
Table 4-2	Construction Equipment Emissions Associated with the Proposed New Projects.....	28
Table 4-3	On-Road Vehicle Emissions During Construction of the Proposed New Projects	29
Table 4-4	Total Construction Annual Emissions Associated with the Proposed New Projects.....	29
Table 4-5	Daily Construction Truck Trips Associated with the Proposed New Projects	30
Table 4-6	Peak Hour Construction Truck Trips Associated with the Proposed New Projects.....	30
Table 4-7	Preliminary Construction Schedules of the Proposed New Projects and other Projects at Newark Liberty International Airport	33
Table 4-8	Total Combined Annual Construction Emissions from the Proposed New Projects and Terminal A.....	34

Appendix

Appendix A	Public Notice Tear Sheets
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Preface

The Federal Aviation Administration (FAA) is considering the information in this Technical Report to determine if a Written Re-Evaluation of the *Terminal A Redevelopment Program Newark Liberty International Airport Final Environmental Assessment*, dated March 2017 (Terminal A EA), is appropriate. This Technical Report has been submitted to support FAA's determination.

The purpose of the re-evaluation, which is defined in FAA Order 1050.1F, Paragraph 9-2, is to determine whether the contents of a previously prepared environmental document (in this case, the Terminal A EA) remain valid or if a new or supplemental environmental document is required. A supplemental environmental document would not be required if:

- The proposed action conforms to plans or projects for which a prior Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) have been issued and there are no substantial changes in the action that are relevant to environmental concerns;
- Data and analyses contained in the previous EA and FONSI are still substantially valid and there are no significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts;
- Pertinent conditions and requirements of the prior approval have been, or will be, met in the current action.

The Terminal A EA was approved through issuance of a Finding of No Significant Impact/Record of Decision (FONSI/ROD) by the FAA on May 10, 2017.

1. Introduction and Background

This Technical Report examines three discrete projects (collectively, the “Proposed New Projects”) at Newark Liberty International Airport (the “Airport”) that are proposed to be implemented concurrently with the Terminal A Redevelopment Program. Although the proposed new Terminal A building will be known as “Terminal 1”, for clarity the term “Terminal A” will be used throughout this Technical Report.

The Proposed New Projects, shown in **Figures 1 and 2**, include the following:

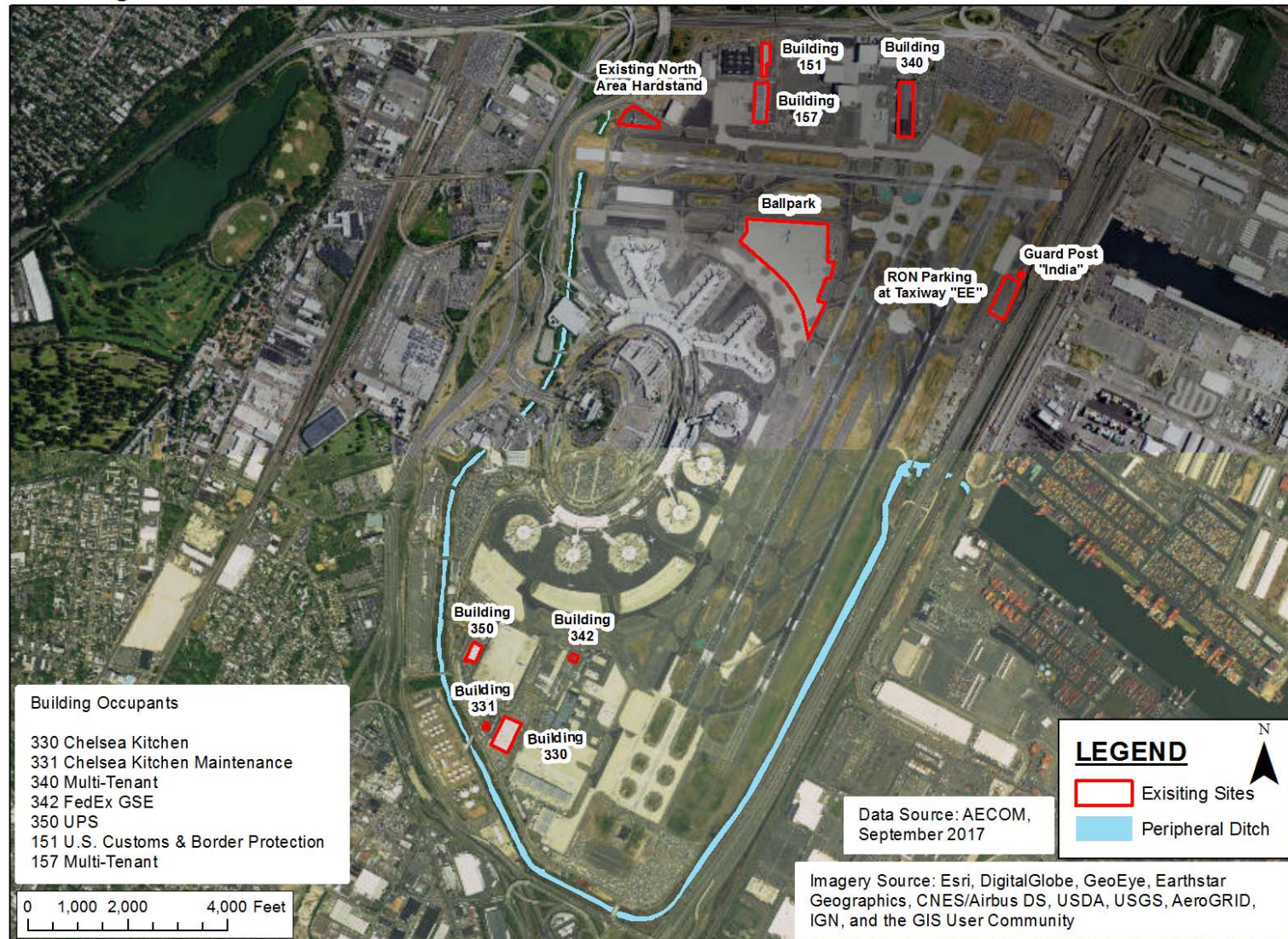
- Proposed New Project No. 1: The construction of a new Ground Service Equipment (GSE) facility by Federal Express (FedEx) to support their relocation from Building 342. FedEx contemplates construction of a new structure (155,000 sf footprint) for use as a parking garage with equipment storage and a security screening facility; the preferred location is in the area of, or within the footprint of Building 330. Construction of a 17-Lift Container Transport Vehicle (CTV) Interface with 200 container staging positions and a canopy in the vicinity of the new buildings.
- Proposed New Project No. 2: The construction of a new 48,000 sf building and 400,000 sf aircraft apron by United Parcel Service (UPS) to support the relocation from their current operation in Building 350. The new UPS building is proposed to be constructed at the current location of a Remain Overnight (RON) parking area on the north side of the Airport.
- Proposed New Project No. 3: The demolition of Building 151 and the construction of a new 200,000 sf facility by United Airlines for the relocation of Chelsea Kitchen from their current operation in Buildings 330 and 331.

The existing and proposed uses of each building mentioned above are summarized in **Table 1-1**. As set forth in the *Terminal A Redevelopment Program Newark Liberty International Airport Final Environmental Assessment*, dated March 2017 (Terminal A EA), the Terminal A Redevelopment Program contemplated relocation of UPS and Chelsea Kitchen, and the relocation of one building used by FedEx (Figure 1, also see Terminal A EA Tables 3-1 and 3-2; EA Figure 1-4 and EA Pages 1-4 and 1-5).

At the time the Terminal A EA was submitted, the aforementioned tenants had not made commitments to relocate their operations on the Airport and as such, their ultimate locations of operation were described as “potential” in the Terminal A EA (see Terminal A EA Table 3-2). Accordingly, the Terminal A EA evaluated impacts associated with the demolition of the existing tenant structures within the footprint of the new Terminal A project area, but did not address potential environmental impacts associated with the construction of replacement tenant facilities. The tenants’ future plans at the Airport are now sufficiently advanced to warrant consideration of the potential environmental impacts of these projects under NEPA.

Existing Conditions

Figure 1



Proposed New Project Locations

Figure 2

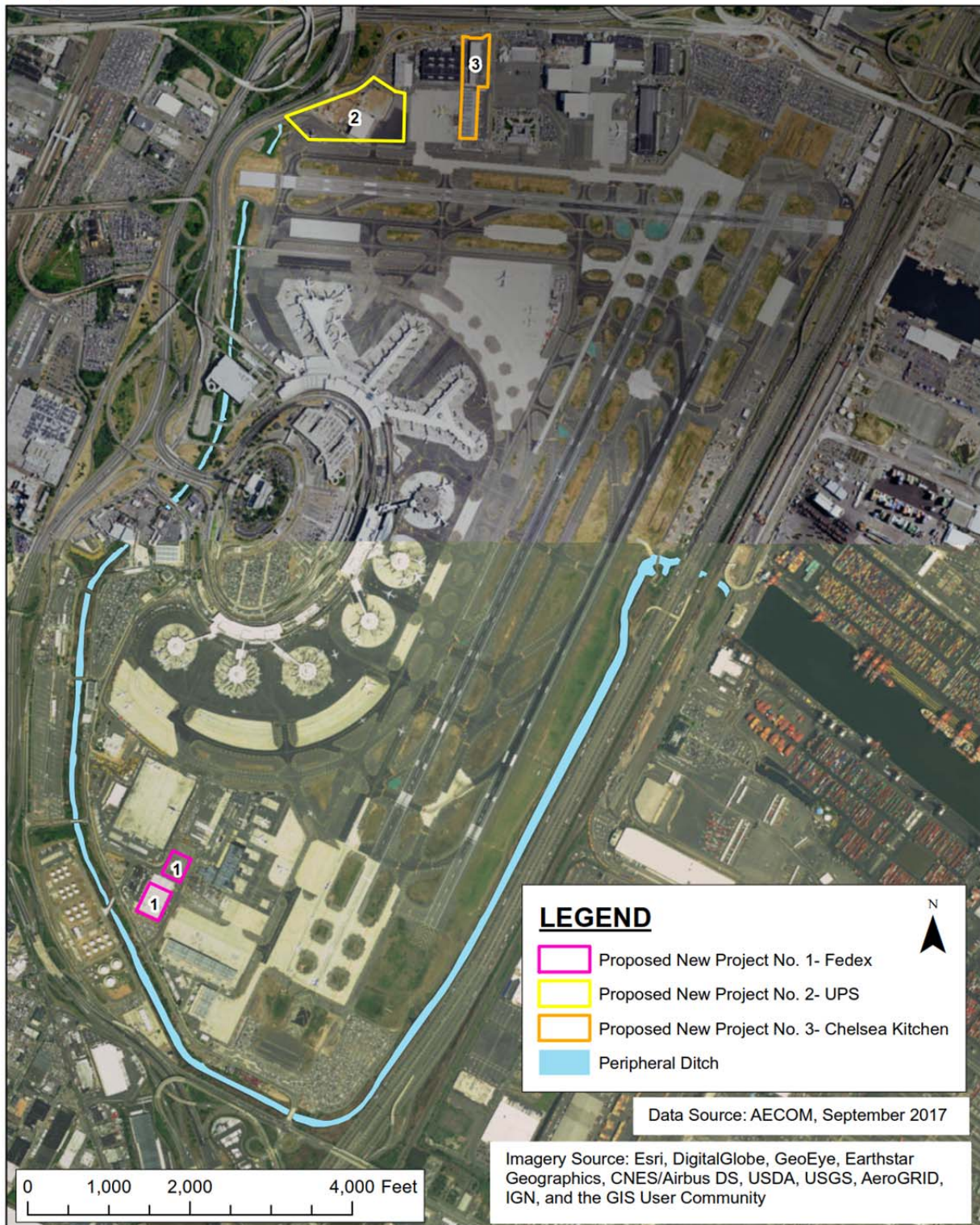


Table 1-1
Inventory of Buildings Associated with the Proposed New Projects at Newark Liberty International Airport

Building Number/Area	Current Use/Occupant	Future Use Under Proposed New Projects
Building 330	Chelsea Kitchen	To be Demolished. Future FedEx garage to be located in the vicinity of, or within the footprint of, Building 330.
Building 331	Chelsea Kitchen Maintenance	To be Demolished. Location of future FedEx garage
Building 342	FedEx Ground Support Equipment	To be Demolished. For Terminal A Development
Building 350	United Parcel Service (UPS)	To be Demolished. For Terminal A Development
Building 151	U.S. Customs & Border Protection	To be Demolished; Chelsea Kitchen will construct a new facility at the site
Building 157	Multiple Tenants	UPS proposes to renovate an area of Building 157 for a portion of their operations
North Area Hardstand (Formerly Buildings 14, 95 and 332)	Remain Overnight Aircraft Parking	Location of the proposed United Parcel Service facility

Source: AECOM, September 2017.

The potential environmental impacts of the Proposed New Projects are being considered in the context of the Terminal A Redevelopment Program. Although each of the Proposed New Projects is a discrete project, this Technical Report will evaluate impacts of the Proposed New Projects collectively due to their similarity in location, timing of construction, and scope.

This Technical Report assesses the environmental impacts associated with the Proposed New Projects in relation to the environmental impacts considered in the Final EA and FONSI/ROD for the EWR Terminal A Redevelopment Program. Further, each of the Proposed New Projects will require changes to the Airport Layout Plan (ALP). A NEPA determination is needed because the Sponsor will seek FAA approval to amend the Newark Liberty International Airport ALP.

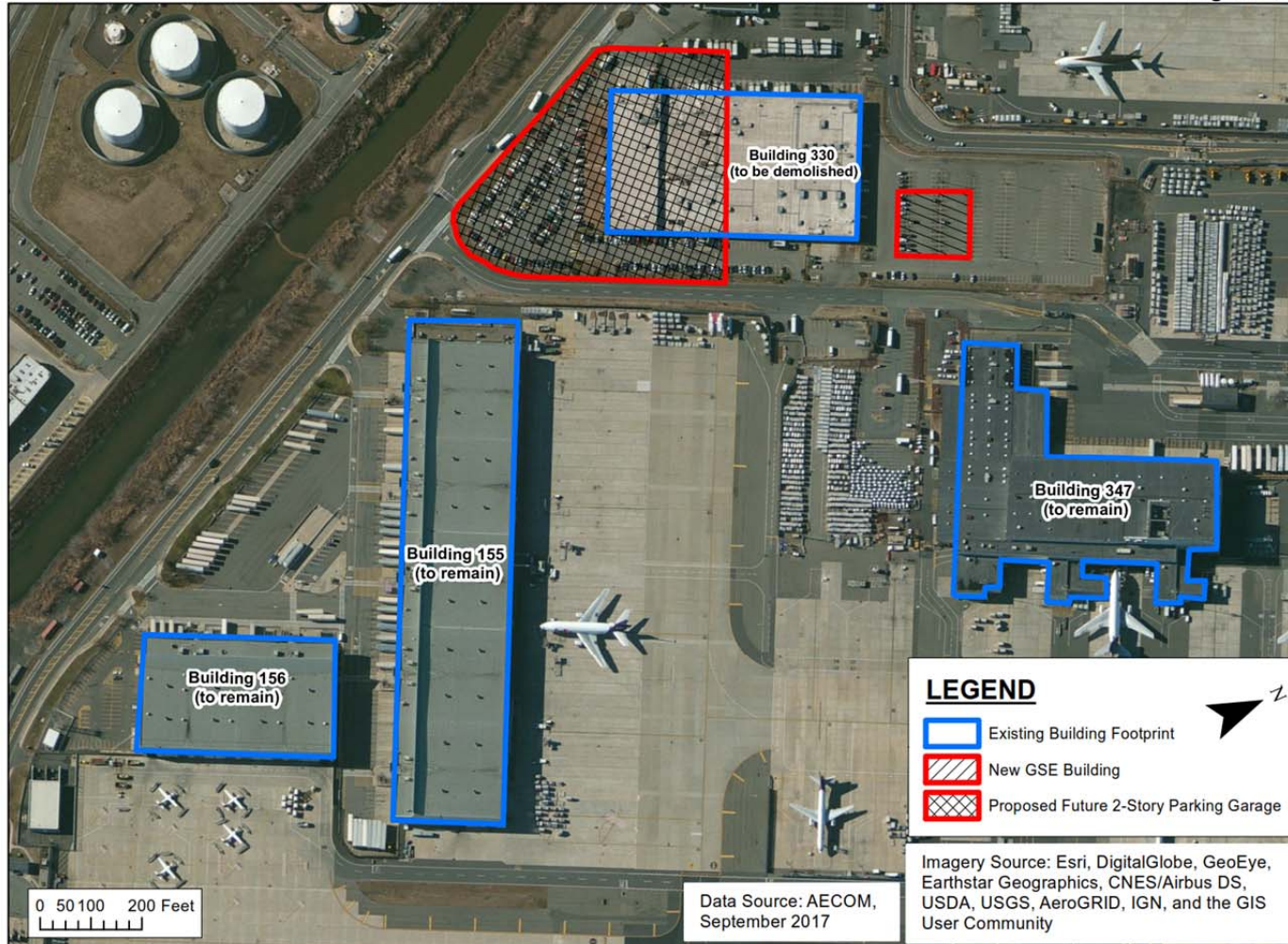
1.1 Proposed New Projects

1.1.1 Proposed New Project No. 1 – FedEx

FedEx currently houses its ground support equipment (GSE) maintenance operation in Building 342. FedEx is operating at the Airport under a lease that expires on August 31, 2030. An amended lease for additional property is currently being negotiated. FedEx proposes to construct a new GSE maintenance facility adjacent to Building 330 in the former Chelsea Kitchen parking area (**Figures 3a and 3b**). The new

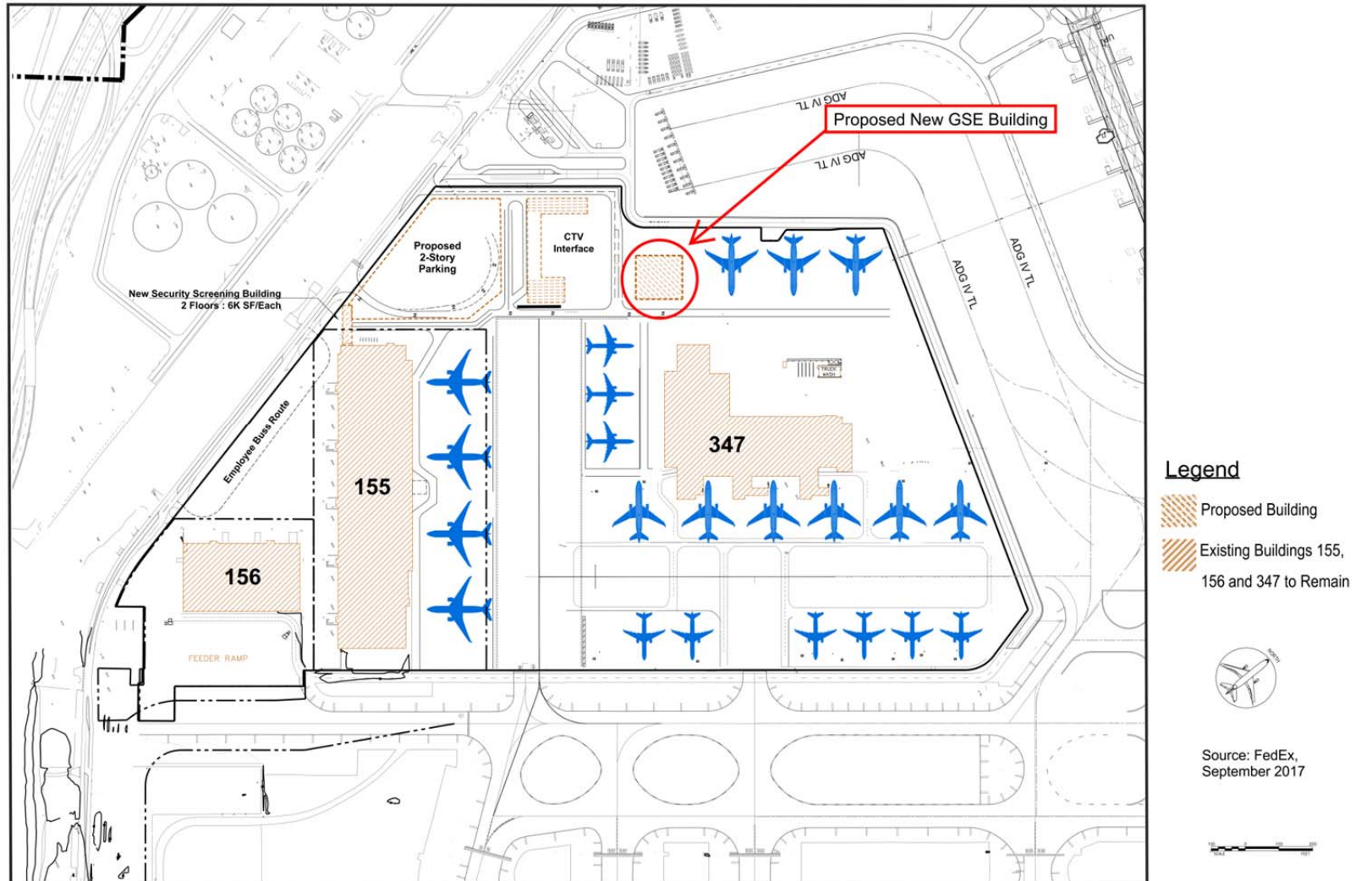
Proposed Fedex Project Area (Proposed New Project No. 1) - Existing Conditions

Figure 3a



Proposed FedEx Project Area (Proposed New Project No. 1)

Figure 3b



facility would be one bay larger in size than the current GSE facility. The estimated start date for construction of the new GSE maintenance facility is late 2018; construction is estimated to take 14 to 18 months.

FedEx contemplates constructing a new three-story building, with an approximately 155,000 sf footprint, to be used as a parking garage with equipment storage, and a security screening facility. At present, plans are very preliminary, but FedEx's preferred location for the structure is near, or within, the current footprint of Building 330 (existing Chelsea Kitchen). The proposed garage would have a capacity of approximately 400 vehicles, which would accommodate the approximately 130 spaces to be displaced by the construction of the new GSE maintenance facility, as well as other parking for FedEx employees. The estimated start date for construction of the garage is after 2021. Construction is estimated to take 15 to 20 months.

Additional environmental documentation would be prepared if the proposed scope of construction differs greatly from the plan presented herein.

1.1.2 Proposed New Project No. 2 – UPS

UPS operations currently are located in Building 350. The existing UPS lease at the airport was extended to April 2018. It is expected that UPS will vacate the premises at that time for Terminal A construction. A lease for a new location is currently being negotiated. The proposed site is located in the Airport's North Area and currently is used as a Remain Overnight (RON) parking area (see Table 1-1). Proposed New Project No. 2 will result in a loss of five RON parking spaces. To accommodate aircraft that need overnight parking, aircraft will be directed to (a) an existing, underutilized parking area located adjacent to Taxiway EE south of Guard Post India, (b) the existing RON parking area known as the Ballpark that is located just northeast of Terminal C, or (c) a single parking location in front of Building 340. The Taxiway EE parking area provides four parking positions that can accommodate all ADG III aircraft, except MD80 and MD90. The Ballpark parking area can accommodate larger aircraft, including Group V aircraft, as can the spot in front of Building 340. Based on the foregoing, the loss of RON parking at the location of Proposed New Project No. 2 would have minimal impacts on operations at the Airport.

Proposed New Project No. 2 is located approximately 25 feet from the Peripheral Ditch (Figures 1 and 2), which is classified as "State Open Water" by the New Jersey Department of Environmental Protection (NJDEP). The Peripheral Ditch extends for about 4.5 miles along the approximate eastern, southern, and western perimeter of the Airport, empties into the Elizabeth Channel through a tide gate located just west of the New Jersey Turnpike, and receives stormwater runoff from the Airport and from highways off-airport and land areas immediately north and west of the airport.

UPS proposes to construct a new 3-story; Leadership in Energy and Environmental Design (LEED) Silver Certified building of approximately 48,000 square feet (sf) with a canopy-covered caster deck of approximately 43,000 sf to serve as its Parcel Distribution Facility for unloading/loading cargo from aircraft to ground based transportation. UPS also proposes to construct (1) an approximately 1,000 sf, 1-story masonry guardhouse and an approximately 100 sf, 1-story prefabricated guardhouse to control the gates for vehicles entering and leaving the site, (2) a 226-space parking lot on the landside of the site accessed from Brewster Road for employees and visitors, (3) interior renovations of Building 157 (15 additional dock doors, offices, support rooms, LEED Silver Certification in this multi-tenant building), and (4) an apron of approximately 400,000 sf to accommodate seven aircraft (**Figures 4a and 4b**).

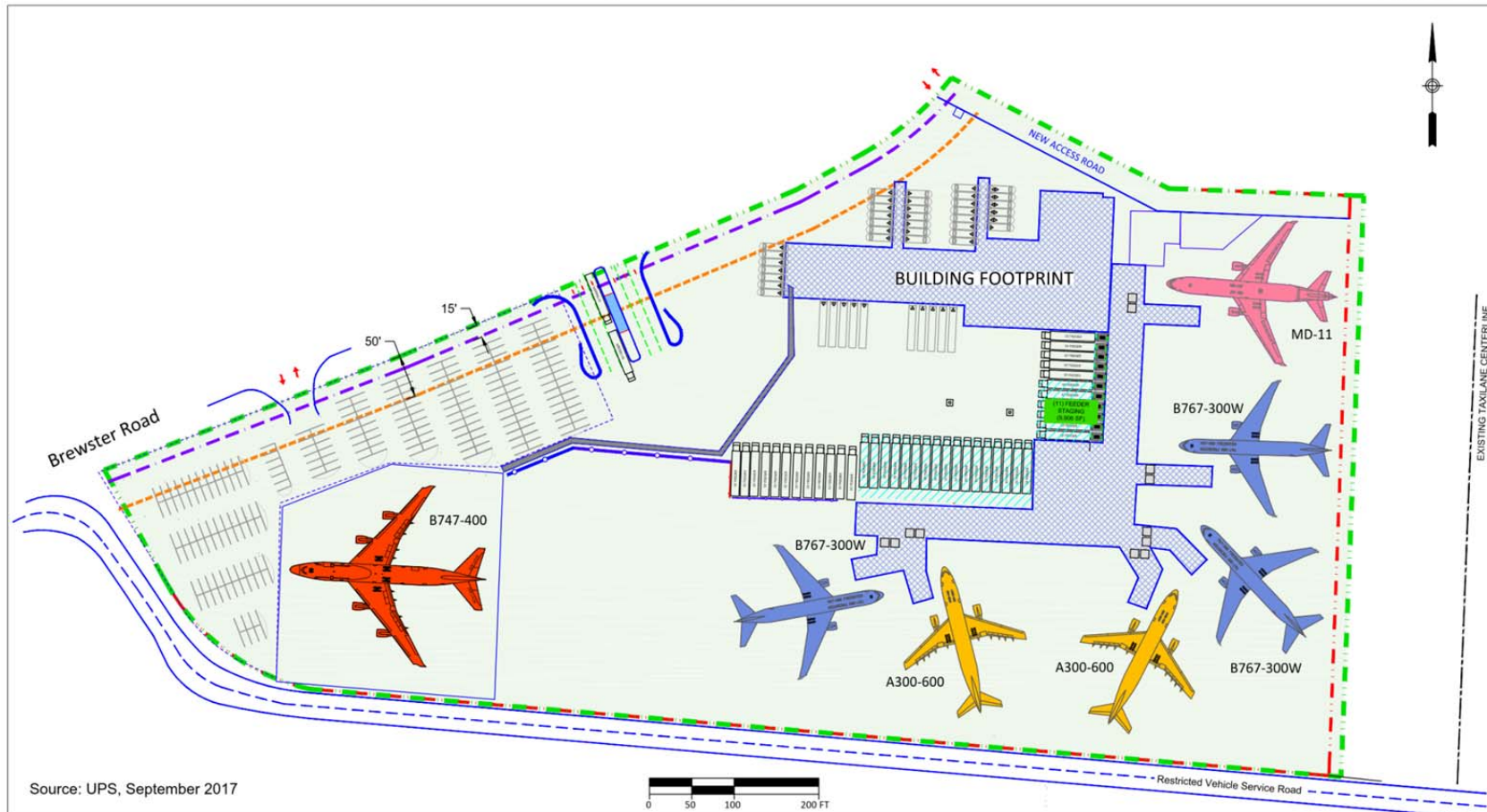
Proposed UPS Project Area (Proposed New Project No. 2) - Existing Conditions

Figure 4a



Proposed UPS Project Area (Proposed New Project No. 2)

Figure 4b



Construction is expected to commence in Fall 2017 and finish in May 2018. None of the existing tenants in Building 157 would be relocated by Proposed New Project No. 2.

1.1.3 Proposed New Project No. 3 – Chelsea Kitchen/United Airlines

Chelsea Kitchen currently provides catering operations for United Airlines in Buildings 330 and 331. The existing Chelsea Kitchen lease for Buildings 330 and 331 expires December 2019. A lease for the proposed relocation to the site of Building 151 is currently being negotiated (see Table 1-1).

Chelsea Kitchen/United Airlines proposes to demolish Building 151 and construct a new 2-story facility of approximately 200,000 sf located in the Airport's North Area (**Figures 5a and 5b**). The new building will be designed in accordance with LEED Silver standards.

The new building will have no employee parking. United will transport the employees (working in three shifts) between off-Airport employee parking areas and the new building via shuttle bus.

Catering truck maintenance will either be located at United Airlines' current GSE maintenance shop on the north side of the Airport (Building 154), in a portion of Building 157, or at a yet to be determined location off of Airport property. Demolition of the existing Building 151 is scheduled for the Fourth Quarter of 2017. Construction of the new building is expected to commence in January/February 2018 and finish by November 2019.

Proposed Chelsea/United Project Area (Proposed New Project No. 3) - Existing Conditions Figure 5a

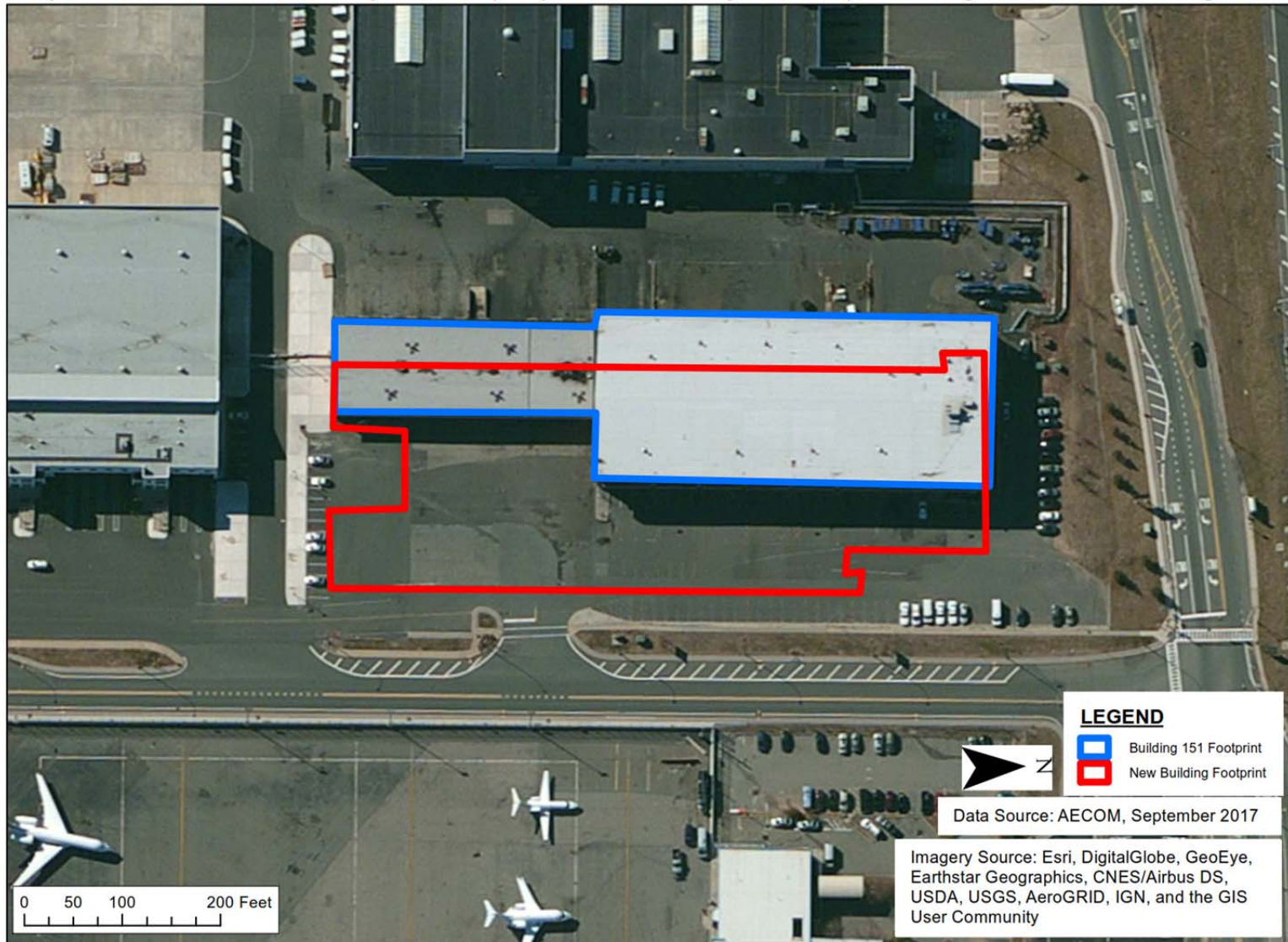
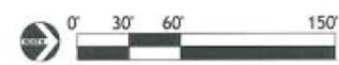


Figure 5b



2. Purpose and Need

The purpose and need for the Terminal A project is to “replace the existing Terminal A with a new terminal to accommodate current and 2027 forecast passenger and flight demand; address building, utility, airfield and road frontage deficiencies; provide long-term operational flexibility and accommodate a variety of aircraft; implement energy efficiencies; update safety and security features; and allow more efficient operations”. See FONSI/ROD at Page 2. The Port Authority has reviewed each of the Proposed New Projects and has concluded that there is no change in the Purpose and Need of the Terminal A Redevelopment Program as described in the *Terminal A Redevelopment Program Newark Liberty International Airport Final Environmental Assessment*, dated March 2017 (Terminal A EA).

Proposed New Project No’s 1, 2 and 3 (FedEx, UPS and Chelsea Kitchen/United Airlines, respectively) are needed to replace existing functions and services that will be displaced as discussed in the Terminal A EA. All of the Proposed New Projects will maintain continuity of existing functions and services at the Airport (i.e., commercial parcel distribution, catering services to airlines, and overnight aircraft parking) and none conflict with the originally stated purpose of the original Terminal A EA.

In addition, the existing Building 151 is proposed to be demolished to accommodate the construction of the proposed Chelsea Kitchen/United Airlines catering building on the same parcel (Proposed New Project No. 3). The existing building requires demolition because of its age and the fact that hazard abatement (e.g., asbestos, lead-based paint, et al), renovation and structural additions would be needed to accommodate the type and scale of modern catering activities necessary to service Chelsea/United’s customers. Building 151 is too small (approximately 58,200 sf) to meet Chelsea/United’s needs (the proposed new building would be 200,000 sf).

3. Alternatives

Distinct from the Alternatives Analysis for Terminal A, as set forth in Terminal A Redevelopment Program Newark Liberty International Airport Final Environmental Assessment, Section 3, dated March 2017 (Terminal A EA), alternatives to the Proposed New Projects outlined in this document were considered as noted below.

No alternative locations for FedEx were contemplated. In order to construct the south side taxiways required for Terminal A operations, it was necessary to acquire nine acres of FedEx's property along the north side of their leasehold. Under the terms of that lease, which extends to 2030, it is the responsibility of the Port Authority to provide FedEx with an equivalent amount of property to maintain FedEx's operations. The Port Authority provided FedEx with nine acres of property contiguous to the west side of FedEx's leasehold (Chelsea's Building 330 property).

UPS considered relocation of their operations off of the Airport. Alternatives to move part of their distribution operations to other New Jersey facilities located in Moonachie (17 miles from the Airport) and Carteret (14 miles from the Airport) were deemed undesirable due to operational deficiencies in meeting their delivery schedules. UPS also considered moving their operation out of Newark entirely and expanding their base at Philadelphia International Airport. Again, this was deemed undesirable due to operational deficiencies in meeting their delivery schedules for the NJ/NY region.

Chelsea Kitchen/United Airlines explored alternative sites for their new facility both on and off the Airport. Properties along the Frelinghuysen Avenue corridor in Newark, approximately two miles west of their current location, were considered for a potential new kitchen. The lessee determined that the negative impacts of moving the kitchen to an off-airport location would have exceeded any potential benefits. The roadway network access to the airport via the unfinished McClellan Street interchange was considered infeasible due to extended travel times. The trucks in the Chelsea Kitchen fleet are unrefrigerated, and the off-airport locations could not meet their operational needs for the "just in time" delivery to their gates at Terminals A and C. Off-site locations would have also required time consuming re-screening of the trucks to enter the aircraft operating area (AOA). This is not required with their current facility, or with the proposed facility at the Building 151 site, as they have direct access to the AOA.

4. Affected Environment

4.1 Environmental Setting

The environmental setting of the Terminal A project is described in detail in Section 4.1 of the *Terminal A Redevelopment Program Newark Liberty International Airport Final Environmental Assessment*, dated March 2017 (Terminal A EA, Pages 4-1 and 4-2), and is summarized in the Terminal A EA (Pages iii-iv) as follows:

"[T]he airport and the Project Area are located in a highly developed area with disturbed landscape that is primarily paved as runways, taxiways, parking areas or airport facilities and other buildings. The area within five miles of the airport consists of industrial, urban, and suburban environments. An open water ditch, identified as the Peripheral Ditch, is located within the Project Area. It is designated State Open Waters. There are freshwater wetlands along tributaries of the ditch along Carson Road, with a wetland fringe of palustrine emergent wetlands with patches of palustrine scrub-shrub wetlands, and along Basilone Road, which contains forested wetlands along its banks. A large portion of the Project Area is located in an area of marginal flood risk, Unshaded Zone X, or in an area mapped as a 500-year flood hazard risk. A smaller area, primarily in and adjacent to the Peripheral Ditch, is located in the 100-year floodplain (Zone AE). There are no defined Federal Emergency Management Agency (FEMA) floodway boundaries within the Project Area." (Terminal A EA, Pages iii-iv)

"The airport is encircled by major highways, commercial and light manufacturing facilities and the Port Newark/Elizabeth Marine Terminal complex. Commercial and light manufacturing dominate the land uses of the area, generally surrounding the airport. Industrial and commercial uses exist to the west of U.S. Routes 1&9, including a number of hotels, parking facilities, car rental facilities, and an Anheuser Busch brewery. A medium density residential area is located between North Avenue East and McClellan Street southwest of the airport. Land use is discussed in detail in Section 5.2 [of the Terminal A EA], Compatible Land Use." (Terminal A EA, Page 4-2).

"The airport is surrounded by a well-developed surface transportation system, which includes the Interstate Highway System, regional highways, major arterial roadways, and freight and passenger railroads. The airport is located west of the New Jersey Turnpike and is accessible from Interchanges 13A and 14. Direct access to and from the airport is also provided by U.S. Routes 1&9 and Route I- 78." (Terminal A EA, Page 4-2).

None of the Proposed New Projects intersect the Peripheral Ditch. A portion of Proposed New Project No. 2 (the relocated Restricted Vehicle Access Road) would be located approximately 25 feet from the Peripheral Ditch.

4.2 Environmental Resources Not Affected by the Proposed New Projects

The Port Authority has determined that the following resource areas as evaluated in the Terminal A EA would not be affected by the implementation of the Proposed New Projects and therefore will not be evaluated in this Technical Report:

Compatible Land Use	Wetlands and State Open Water
Socioeconomics	Coastal Resources
Sections 4(f) and 6(f)	Wild and Scenic Rivers
Historic and Architectural Resources	Farmland
Biological Resources	Lighting and Visual Resources

4.3 Environmental Resources Potentially Affected by the Proposed New Projects

The Port Authority has determined that the following resource area evaluations contained in the Terminal A EA could potentially be affected by the implementation of the Proposed New Projects, and therefore, are further evaluated in this Technical Report:

Air Quality	Natural Resources and Energy Supply
Climate Change	Noise
Water Resources	Floodplains
Hazardous Materials	Construction
Traffic	

Table 4-1 sets out the regulatory framework and analysis criteria for each resource area.

4.3.1 Air Quality

The US Environmental Protection Agency (USEPA), under the authority of the 1970 Clean Air Act (CAA) as amended in 1977 and 1990, has established primary and secondary National Ambient Air Quality Standards (NAAQS) for the following six contaminants, referred to as criteria pollutants (40 C.F.R. § 50) to protect public health and welfare: carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), particulate matter 10 and 2.5 microns in size (PM₁₀ and PM_{2.5}), lead (Pb), and sulfur dioxide (SO₂). Areas where ambient concentrations of a criteria pollutant are below the corresponding NAAQS are designated as being in “attainment” for this pollutant. Areas where a criteria pollutant level exceeds the NAAQS are designated as being in “nonattainment.” O₃ nonattainment areas are categorized as marginal, moderate, serious, severe, or extreme. CO and PM₁₀ nonattainment areas are categorized as moderate or serious.

The Proposed Action would take place in Elizabeth and Newark, New Jersey, an area designated as:

- A moderate nonattainment area for O₃,

Table 4-1
Regulatory Framework and Analysis Criteria

Impact Category	Regulatory Framework	Analysis Criteria ¹
Air Quality	Under the Clean Air Act (CAA) the U.S. Environmental Protection Agency (EPA) developed the National Ambient Air Quality Standards (NAAQS) for six common air pollutants (carbon monoxide (CO), nitrogen dioxide (NO ₂), ozone (O ₃), particulate matter (PM), sulfur dioxide (SO ₂), and lead (Pb)). The EPA regulates these pollutants to permissible levels through human health-based (primary standards) and environmental-based (secondary standards) criteria.	The action would cause pollutant concentrations to exceed one or more of the NAAQS, as established by the EPA under the CAA, for any of the time periods analyzed, or to increase the frequency or severity of any such existing violations.
Climate Change	In response to Executive Order 13514, the Council on Environmental Quality developed <i>Federal Greenhouse Gas Accounting and Reporting Guidance</i> (October 6, 2010) (hereafter “Federal protocol”), which serves as the Federal government’s official GHG reporting protocol. In accordance with the Federal protocol, and to provide a single metric that embodies all GHGs, emissions should be discussed and reported in metric tonnes of CO ₂ equivalent (MT CO ₂ e). In December 2014, CEQ issued revised draft NEPA guidance for considering the effects of climate change and GHG emissions. The draft guidance recommended consideration of: (1) the potential effects of a proposed action or its alternatives on climate change as indicated by its GHG emissions; (2) the implications of climate change for the environmental effects of a proposed action or alternatives. ²	The FAA has not established a significance threshold for Climate ³ .

¹ See Exhibit 4-1 (Significance Determination for FAA Actions), FAA Order 1050.1F..

² In August 2016, CEQ released 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 the effects of climate change and GHG emissions as they relate to NEPA. However, CEQ subsequently withdrew this final guidance, effective April 5, 2017. However, CEQ’s withdrawal of the guidance does not alter NEPA responsibilities and environmental reviews should continue to consider GHG impacts as appropriate.

Impact Category	Regulatory Framework	Analysis Criteria ¹
Water Resources	Sections 401 and 404 of the Rivers and Harbors Act protect the navigability of waters used for commerce in the United States. The Safe Drinking Water Act prohibits Federal agencies from funding actions that would contaminate an EPA-designated sole source aquifer or its recharge area.	The action would: 1. Exceed water quality standards established by Federal, state, and local, regulatory agencies; or 2. Contaminate public drinking water supply such that public health may be adversely affected.
Hazardous Materials		The FAA has not established a significance threshold for hazardous materials.
Traffic		The FAA has not established a significance threshold for traffic.
Natural Resources and Energy Supply	<i>The Federal Energy Independence and Security Act</i> requires Federal agencies to take actions to move the United States toward greater energy independence and security, to increase the production of clean renewable fuels, to protect consumers, to increase the efficiency of products, buildings, and vehicles, to promote research on and deploy greenhouse gas (GHG) capture and storage options, and to improve the energy performance of the Federal government.	The FAA has not established a significance threshold for natural resources and energy supply.
Noise	<i>The Aviation Safety and Noise Abatement Act of 1979</i> directs the FAA to establish, by regulation, a single system for measuring noise and determining the exposure of people to noise which includes noise intensity, duration, frequency, and time of occurrence; and to identify land uses normally compatible with various noise exposures.	The action would increase noise by DNL 1.5 dB or more for a noise sensitive area that is exposed to noise at or above the DNL 65 dB noise exposure level, or that will be exposed at or above the DNL 65dB level due to a DNL 1.5dB or greater increase, when compared to the No-Action alternative for the same time frame.

³ Refer to the 1050.1F Desk reference for the most up-to-date methodology for examining impacts associated with climate change.

Impact Category	Regulatory Framework	Analysis Criteria ¹
Floodplains	Executive Order 11988, <i>Floodplain Management</i> , requires Federal agencies to avoid, to the extent possible, the long and short-term adverse impacts associated with the occupancy and modification of 100-year floodplains and to avoid direct or indirect support of floodplain development wherever there is a practicable alternative.	Floodplain impacts would be significant if: The action would cause notable adverse impacts on natural and beneficial floodplain values.
Construction		The FAA has not established a significance threshold for construction.

Source: AECOM, September 2017.

- A maintenance area for PM_{2.5} and CO, and
- An attainment area for all other criteria pollutants.

According to the most recent available data (for the year 2013) from the New Jersey Department of Environmental Protection's nearby air quality monitoring stations, the existing baseline ambient air quality at the airport is below ambient air quality standards, with the exception of O₃ since the region (within which the airport is located) has been designated an 8-hour O₃ nonattainment area.

The Proposed New Projects would not change aircraft operations at the Airport or aircraft fleet mix, and therefore, emissions from aircraft were not considered in this Technical Report. The Proposed New Projects would not result in any major roadway traffic re-assignments, and therefore would not cause a substantial change to the results of the carbon monoxide hot spot analysis presented in the Terminal A EA. Accordingly, the conclusion in the Terminal A EA that all hot spots are well below the NAAQS remains unchanged. The Proposed New Projects would not result in any major changes in overall traffic volume or in the percentage of diesel trucks on the local street network. Therefore, the conclusions of the qualitative assessment of potential PM_{2.5} hot spot impacts and mobile source air toxics (MSAT) emissions presented in the Terminal A EA would remain the same. These potential operational air quality impacts would remain minimal as a result of the Proposed New Projects. It is assumed that the modern, LEED-certified structures to be constructed by UPS and Chelsea/United would result in a decrease in energy usage, producing no additional building-related emissions. Potential air quality impacts related to construction activity are addressed in Section 4.3.9.2 below.

4.3.2 Climate Change

Climate change and the regional climate of the Newark, NJ area are described in Section 5.16 of the *Terminal A Redevelopment Program Newark Liberty International Airport Final Environmental Assessment*, dated March 2017 (Terminal A EA). As set forth in that section of the Terminal A EA, there are no federal standards for air pollutants that are associated with climate change (e.g., carbon dioxide) or climate change related to aviation projects, but EPA has the authority to regulate such air pollutants under the Clean Air Act. The Terminal A EA summarized FAA requirements for assessing climate change impacts associated with aviation projects as follows (p. 5-37):

“In 2012, the FAA issued its own guidance for assessing greenhouse gases and climate change (*Order 1050.1F, Guidance Memo #3: Considering Greenhouse Gases and Climate Change under the National Environmental Policy Act; Interim Guidance to FAA Order 1050.1F* [FAA 2012b]). This memo explicitly identifies climate change as a category of potential environmental effect to be considered in NEPA documents, and provides additional details on what data to collect and how to document the extent and context of greenhouse gas emissions for aviation projects. As with Council on Environmental Quality guidance, the FAA memo states that the climate change section should not attempt to determine the effects of greenhouse gas emissions on climate change.”

The impact of the Proposed New Projects on the global climate is not currently scientifically predictable. However, the Proposed New Projects will minimize their impact on climate through energy efficient building design, aircraft apron and taxiway design. In addition, the tenants are obligated to construct the Proposed New Projects in accordance with the Port Authority’s *Sustainable Building Guidelines*. Further, because the proposed new location of Chelsea Kitchen/United Airlines’ facility is closer to its major customers in Terminal C than the current location of the kitchen, it is expected that there will be a reduction in greenhouse gas emissions associated with Chelsea’s Kitchen’s delivery operations.

In light of the above, the Proposed New Projects are not expected to individually or cumulatively contribute to climate change.

4.3.3 Water Resources

Water resources at the Airport are described in Section 4.2.2 of the Terminal A EA (Pages 4-3 through 4-9) and are summarized below:

- **Surface Water:** The only water body located near the Project Area is the Peripheral Ditch. Classified as “State Open Water” by the New Jersey Department of Environmental Protection (NJDEP), the Peripheral Ditch extends for about 4.5 miles along the approximate eastern, southern, and western perimeter of the Airport, empties into the Elizabeth Channel through a tide gate located just west of the New Jersey Turnpike, and receives stormwater runoff from the Airport and from highways off-airport and land areas immediately north and west of the airport. Proposed New Project No. 2, the closest project to the Peripheral Ditch, is located approximately 25 feet from the Peripheral Ditch.
- **Groundwater:** The Airport is underlain by the Brunswick Aquifer, a bedrock aquifer in which groundwater moves through joints and fractures. Groundwater quality in the vicinity of the Terminal A Project Area is generally degraded due to the presence of fill material, soil contaminants from fill materials and various point and non-point sources of contamination. In addition, the presence of metals, petroleum-related compounds, and volatile organic compounds have been identified in localized, site-specific areas.
- **Wastewater:** The sanitary sewer system that collects wastewater from the locations of Proposed New Projects on the north side of the Airport (Proposed New Project Nos. 2 and 3) is comprised of lines within Brewster and Conrad Roads, which cross the airfield via a force main to Building 42. Wastewater from the airport, as well as from the larger

surrounding area, is treated at the Passaic Valley Sewerage Commission's (PVSC) nearby 550-million gallons a day wastewater treatment plant. Pursuant to EPA requirements for water quality, PVSC issued the airport a Sewer Use Permit that establishes discharge limitations for particular parameters and specifies monitoring and sampling requirements that the airport must abide by. Since 2005, the airport has been recognized annually by the PVSC for exceptional compliance.

- Wetlands: With the exception of some small landscaped areas, the north area of the Airport in the vicinity of Proposed New Project Nos. 2 and 3 is entirely paved.
- Floodplains: Portions of Proposed New Project No. 2 (UPS) and the entirety of Proposed New Project No. 3 (Chelsea Kitchen/United Airlines) are located within the FEMA 100-year floodplain.⁴

The Proposed New Projects would have no adverse impact to the surface water quality at the Airport. None of the Proposed New Projects would require any alteration to the Peripheral Ditch.

All construction activities associated with the Proposed New Projects would comply with applicable state and local water quality standards and permit requirements, including soil erosion control and best management practices to minimize runoff of sediment in stormwater. In addition, the final design of each of the Proposed New Projects would ensure compliance with NJDEP's Bureau of Floodplain Management's net fill requirements (N.J.A.C. 7:13-2.14) after construction is completed. With the Proposed New Projects, Port Authority would continue to comply with the requirements of its current NJPDES stormwater discharge permit. None of the Proposed New Projects will result in an increase in impervious surface area at the Airport.

The tenants associated with each of the Proposed New Projects would be responsible for acquiring all necessary permits and approvals, including NJDEP Flood Hazard Area Individual Permits, Stormwater Pollution Prevention Plans, and Soil Erosion and Sediment Control Plan Certifications prior to construction.

There are no water resources located near any of the Proposed New Project locations. As such, the Proposed New Projects are not expected to individually or cumulatively result in any adverse impact to water resources.

4.3.4 Hazardous Materials, Pollution Prevention and Solid Waste

As set forth in the *Terminal A Redevelopment Program Newark Liberty International Airport Final Environmental Assessment*, dated March 2017 (Terminal A EA) (Pages 4-16 through 4-18), no hazardous wastes⁵ are disposed of at the Airport, but the handling of hazardous materials is common. Hazardous

⁴ Floodplains are defined as "the lowland and relatively flat areas adjoining inland and coastal waters including flood prone areas of offshore islands, including at a minimum, that area subject to a one percent or greater chance of flooding in any given year" (i.e., the base floodplain or area inundated by a 100-year flood). See Executive Order 11988, *Floodplain Management* (May 24, 1977), as amended by Executive Order 13690 (January 30, 2015).

⁵ Waste that is listed in, or meets the characteristics described by the Resource Conservation and Recovery Act of 1990 (RCRA), 40 C.F.R. § 261, or is flammable, corrosive, explosive in reaction, or toxic to humans and animal life. See FAA Order 1050.1F.

materials⁶ are stored in aboveground storage tanks (ASTs), underground storage tanks (USTs), warehouses, and other buildings located on Airport property. Ground support for aircraft operations can create the potential for accidental releases of these substances, resulting in the potential for adverse environmental impacts.

General categories of hazardous materials that can be encountered on the Airport include fill materials; known releases of petroleum products; chemical waste generation; bulk storage; container storage; and buildings containing lead, asbestos, and PCB-containing materials.

As discussed in the Terminal A EA (Pages 4-16 through 4-17), the Airport area was originally an extensive tidal marsh, parts of which were used for municipal waste disposal from the mid-1920s through the 1970s. Historic fill often contains elevated concentrations of polycyclic aromatic hydrocarbons (PAHs), heavy metals, and petroleum constituents in excess of NJDEP reporting thresholds. As set forth in the Terminal A EA (Pages 4-16 through 4-17), contamination associated with historic fill at the airport is generally at low concentrations and is relatively uniform and not related to any identifiable release or spill.

There are no open hazardous site remediation cases or other known hazardous materials incidents at the location of the Proposed New Project No. 1 (the new FedEx GSE maintenance facility, the area of Building 330 that may be demolished, or the potential location of the new garage). However, there have been five incidents involving the release of petroleum products or hazardous materials within or adjacent to the Terminal A Project Area and near the Proposed New Project No. 1 area. These areas (described in the Terminal A EA at Page 4-17) have been remediated or have remediation programs in place or under development and are summarized as follows:

- Terminals A & B Hydrant Pits – In response to discharges from historic jet fuel handling operations in the subsurface area of existing Terminal A Satellites A1 and A2, 36,844 gallons of light non-aqueous phase liquid (LNAPL) were removed from the subsurface and 1.2 million gallons of groundwater were treated. Continued monitoring is recommended.
- Building 347 (FedEx Metroplex) – Groundwater was contaminated as a result of a leaking UST. As of December 2016, FedEx continues to remediate this location, which is located adjacent to, but outside of, the Terminal A project area.
- Building 331 (Chelsea Flight Kitchen) – Per a meeting with United Airlines in December 2016, United indicated they have remediated completely soil and groundwater contamination at Building 331 and is awaiting approval/concurrence from their Licensed Site Remediation Professional (LSRP). During the course of remediation, however, historic fill (i.e. non-native material that was used in the past to raise the elevation of the airport) was identified at the site. NJDEP requires that the deed of the site be revised to reflect the presence of historic fill and United has proposed implementing this remedial action. Revision of the deed, however, requires approval by the Port Authority. The Port Authority is currently in discussions with United Airlines to resolve this matter.

⁶ Hazardous substance is any element, compound, mixture, solution, or substance defined as a hazardous substance under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and listed in 40 C.F.R. § 302. If released into the environment, hazardous substances may pose substantial harm to human health or the environment. See FAA Order 1050.1F.

- Building 120 (Fuel Selection Station) – As of October 2016, Port Authority obtained approval from their LSRP to excavate all contaminated soil and to treat contaminated groundwater encountered during excavation activities at the Building 120 site. These remedial actions have been incorporated into the Terminal A contract and will occur in the last quarter of 2018.

Newark Liberty International Airport is not currently under any Administrative Consent Order or regulatory compliance action pertaining to hazardous materials.

At the location of Proposed New Project No. 2 (UPS), there is an open site remediation case involving soil contamination (PCBs and historic fill) associated with the former Hangar 14 (NJDEP Case No. 99-01-14-1252-18). Remediation has been completed and a Deed Notice documenting the engineering controls, and the monitoring and reporting requirements, has been incorporated into the UPS lease with the Port Authority.

There are no open hazardous site remediation cases or other known hazardous materials incidents at the location of the proposed new Chelsea Kitchen/United Airlines facility (Building 151). A Hazard Assessment Report was prepared for Building 151 by Cardno ATC in early 2013. The report identified approximately 15,500 sf of asbestos-containing material, 16,000 sf of lead-based paint, and quantities of universal waste (1,167 light bulbs and 429 ballasts). All material will be removed and disposed of according to applicable federal, state and local regulations. This abatement work is expected to begin in Fall 2017.

Tenants performing alterations on Airport property are required to comply with the health and safety requirements set forth in the Port Authority's *Tenant Construction and Alteration Manual* (March 2017), (including procedures to ensure compliance with asbestos abatement requirements), as well as all applicable health and safety laws.

In addition, any structure to be demolished as part of the Proposed New Projects will have all friable asbestos-containing materials (ACMs) abated before demolition activities begin. ACMs would be managed according to regulations promulgated by NJDEP and the New Jersey Department of Labor. Further, materials that may contain lead-based paint will be disposed of according to applicable regulations. PCB-containing ballasts encountered in project work would be incinerated, recycled, or disposed of in an approved landfill, subject to applicable regulations. Transformer oil containing PCBs would be incinerated or recycled at approved facilities, also subject to applicable regulations. Likewise, mercury-containing lamps would be removed prior to demolition in accordance with federal and state requirements. Mercury and lead in elemental form, such as thermostats, thermometers, switches, and solders would be removed and disposed of or recycled at approved facilities. CFC-containing appliances must be disposed of at an approved facility that employs refrigerant recovery equipment that has been certified for use by USEPA.

Construction and demolition (C&D) debris generated by demolition and construction activities associated with the Proposed New Projects will be recycled to the greatest extent possible. A Port Authority-wide policy requires that contractors recycle 75% of certain demolition debris items, which currently include steel, asphalt, Portland cement concrete (PCC) and clean soil.

The disposal of all C&D debris would be done in accordance with the Union County Solid Waste Management Plan, the Essex County Solid Waste Management Plan and with the regulations of the state's Solid Waste Management Act (N.J.S.A. 13:1 E-1).

In light of the above, the Proposed New Projects are not expected to individually or cumulatively result in any adverse impact with respect to hazardous materials, pollution prevention or solid waste.

4.3.5 Traffic

The Proposed New Projects are not expected to create substantial traffic impacts on the Airport roadway network compared to the existing traffic operations. Because none of the Proposed New Projects would involve increased operations over current levels, those Proposed New Projects are not expected to result in increased traffic volume.

The Proposed New Projects will not cause major traffic reassignments within the Airport roadway network. The proposed relocation of the Chelsea Kitchen operation (Proposed New Project No. 3) would have a beneficial traffic impact to the Airport roadway network because the proposed site is located closer to its major customers in Terminal C. The relocation of Chelsea Kitchen as part of Proposed New Project No. 3 would reduce the traffic volumes along Earhart Drive but would increase traffic volumes along Brewster Road by the same relative amount. However, because traffic along Brewster Road is less congested than traffic along Earhart Drive, the additional traffic volume introduced by the Chelsea Kitchen operation will not have a detrimental impact on this part of the Airport roadway network.

In their operational phase, the Proposed New Projects are not expected to individually or cumulatively result in any adverse impact to traffic on the Airport.

4.3.6 Natural Resources and Energy Supply

Executive Order 13123, *Greening the Government through Efficient Energy Management* (64 C.F.R. § 30851, June 8, 1999) requires each federal agency to reduce petroleum use, total energy use and associated air emissions, and water consumption in its facilities. Per FAA Order 1050.1F, it is also the policy of the FAA, consistent with NEPA and CEQ regulations, to encourage the development of facilities that exemplify the highest standards of design including principles of sustainability. As set forth in *Terminal A Redevelopment Program Newark Liberty International Airport Final Environmental Assessment*, dated March 2017 (Terminal A EA) (Page 5-27), the Airport relies on public utilities for electricity and natural gas.

Implementation of the Proposed New Projects would result in existing, older buildings being replaced with new, energy efficient construction. Each new building is proposed to be constructed in accordance with the Port Authority's *Sustainable Building Guidelines* (January 2017), which ensures that sustainable design practices are implemented during design and construction.

In terms of operations, Chelsea Kitchen would reduce vehicle fuel consumption as a result of the proposed location (former Building 151) being located approximately 0.5 miles closer to Terminal C, where most of its deliveries occur. In the case of UPS, the proposed facility is proposed to be located approximately 0.5 miles closer to the New Jersey Turnpike (Interchange 14) than is the current UPS facility (Interchange 13A), resulting in less truck traffic travelling on Airport roadways.

The Proposed New Projects are not expected to individually or cumulatively result in any adverse impact to natural resources and energy supply on the Airport.

4.3.7 Noise

As discussed in Section 5.1 of the *Terminal A Redevelopment Program Newark Liberty International Airport Final Environmental Assessment*, dated March 2017 (Terminal A EA) (Pages 5-2 through 5-3), the area around the Airport has an existing high background noise level due to highway traffic and aircraft operations. The information provided in Section 5.1 of the Terminal A EA concerning ambient noise at and in the vicinity of the Airport remains valid.

Implementation of the Proposed New Projects would not result in any change or increase in Airport operations (types and number of aircraft used, runway layout, and runway utilization). Therefore, the area in the vicinity of the Airport that is influenced by the Airport's existing noise would not be affected as a result of the Proposed New Projects. In addition, none of the Proposed New Projects would individually nor cumulatively introduce noise to a previously unaffected area, or substantially increase noise over a noise sensitive area. Therefore, no noise impacts are expected to occur as a direct result of the implementation of the Proposed New Projects.

4.3.8 Floodplains

Portions of Proposed New Project No. 2 (UPS) and the entirety of Proposed New Project No. 3 (Chelsea Kitchen/United Airlines) are located within the FEMA 100-year floodplain. UPS and Chelsea Kitchen/United Airlines examined alternatives that would locate the Proposed New Projects outside the floodplain and determined that no practicable alternative exists (See Section 3.0, Alternatives).

Executive Order 11988, *Floodplain Management*, requires "Federal agencies to avoid, to the extent possible, the long and short-term adverse impacts associated with the occupancy and modification of 100-year floodplains and to avoid direct or indirect support of floodplain development wherever there is a practicable alternative." Because it is not practical to locate the Proposed New Projects outside the floodplain, flood hazard mitigation strategies have been identified that will be incorporated into the design of the Proposed New Projects. These strategies focus on the use of specific design criteria to minimize impacts on human safety and minimize future damages or costs to equipment, facilities, and structures to the degree practicable. Using these design criteria, comprehensive flood hazard mitigation plans would be implemented to the degree practicable, with special emphasis on critical equipment associated each building. Each flood hazard mitigation plan would comply with applicable federal, state, and local laws and regulations for the protection of floodplains and with the referenced standards for flood resistant design and construction.

Probable impacts on the floodplain would be limited to built land; no secondary or induced development has been identified that would cause or contribute to indirect or cumulative effects on the floodplain. Because the locations of the Proposed New Projects currently are completely paved, there would be no increase in impervious surfaces as a result of the Proposed New Projects. Although it is inevitable that a minor loss of effective floodplain storage volume would occur due to the placement of new buildings within the 100-year floodplain, the 100-year floodplain on the airport is controlled by coastal storm surges and tidal flooding; therefore, it is not anticipated to create significant adverse impacts to the surrounding floodplain.

The final design of each of the Proposed New Projects would ensure compliance with NJDEP's Bureau of Floodplain Management's net fill requirements (N.J.A.C. 7:13-2.14) after construction is completed. Buildings located in FEMA designated floodplains must comply with the National Flood Insurance

Program, the International Building Code, the American Society of Civil Engineers national reference standards, and with New Jersey codes and standards.

4.3.9 Construction

In accordance with FAA Orders 1050.1F, *Environmental Impacts: Policies and Procedures*, and 5050.4B, *NEPA Implementing Instructions for Airport Actions*, the environmental impacts resulting from construction activities must be assessed when preparing an EA. While the long term impacts of a project are usually greater than construction impacts, construction can cause major short-term impacts. Construction impacts are commonly minor, short-term and temporary in nature. Impacts resulting from the construction of the Proposed New Projects would not be permanent, lasting only for the duration of construction activities. These impacts are also generally limited to the immediate vicinity of the construction and demolition sites. FAA Order 1050.1F requires, at a minimum, the incorporation of the construction guidance found within FAA Advisory Circular 150/5370-10F, *Standards for Specifying Construction of Airports* and FAA AC 150/5370-7, *Controls to Prevent Air and Water Pollution*.

4.3.9.1 Noise

Construction machinery and vehicles associated with the Proposed New Projects would create localized increases in noise levels. Noise from construction equipment would vary according to the type and model of equipment and would change according to the operation involved.

Distance from the construction site must be considered when evaluating potential noise impacts to land uses located near construction areas. A medium density residential neighborhood is located between North Avenue East and McClellan Street approximately 0.5 miles southwest of the airport and south of the McClellan Street Bridge, on the opposite side of U.S. Routes 1&9 from the airport. However, distance rapidly attenuates noise levels and this neighborhood is located far enough away (over one mile) so as not to be impacted by construction noise.

The information and analysis set forth in Section 5.17.2 of the *Terminal A Redevelopment Program Newark Liberty International Airport Final Environmental Assessment*, dated March 2017 (Terminal A EA) concerning construction noise remain valid. Construction activities would include existing pavement and building demolition; excavation and grading; building construction; paving (concrete and asphalt); installation of drainage and fuel system infrastructure; electrical work (buildings as well as airfield lighting and navigation systems); pavement markings; and on-airport access road construction. The closest noise receptors to the locations of the Proposed New Projects are three hotels (Courtyard by Marriott, Fairfield Suites and Springhill Suites) located on the north side of U.S. Routes 1&9, approximately 500 feet north of Proposed Project No. 3 (Chelsea Kitchen/United Airlines) and 1,600 feet northeast of Proposed Project No. 2 (UPS), and the Crowne Plaza Hotel, located on the east side of U.S. Routes 1&9, approximately 2,000 feet west of Proposed Project No. 1 (FedEx). In the case of the three hotels north of the Airport, it should be noted that they are separated from the Airport by 11 lanes of highway traffic and are bound on the north and east by major state and Interstate highways, as well as approaches to the New Jersey Turnpike, all of which contribute to the high ambient noise condition. The closest residential neighborhood is located along Van Buren Avenue in Elizabeth, over 3,000 feet west of Proposed New Project No. 1. As noted in the Terminal A EA (Section 5.17.2), distance rapidly attenuates noise levels and these receptors are located far enough away, across intervening buildings and major highways, so as not to be impacted by construction noise.

4.3.9.2 Air Quality

The Proposed New Projects would result in an increase in construction-related emissions. As explained in the *Terminal A Redevelopment Program Newark Liberty International Airport Final Environmental Assessment*, dated March 2017 (Terminal A EA), these emissions from operation of both on-road vehicles and/or on-site equipment would have potential adverse air quality impacts at local hot spots given the project location that is in a maintenance area for localized pollutants of carbon monoxide (CO) and fine particulate matter (PM_{2.5}). The federal General Conformity Rule⁷ also requires a federal action to demonstrate its compliance with the state implementation plan (SIP) to ensure the action-induced nonattainment or maintenance pollutant emissions would be *de minimis* as regulated under the federal General Conformity Rule (40 C.F.R. Parts 51 and 93). A *de minimis* level is defined as the minimum threshold for which a conformity determination must be performed.

Hot Spot Impact

In contrast to operational activities, construction activities are usually of short duration and produce temporary air quality effects. However, the impacts of construction vehicle and equipment emissions from large-scale construction activities occurring over many years (typically over five years) at a specific local site could cause adverse air quality effects and may need to be quantitatively addressed. According to C.F.R. 93.123(c)(5), “CO, PM₁₀, and PM_{2.5} hot spot analyses are not required to consider construction-related activities which cause temporary increases in emissions. Each site which is affected by construction-related activities shall be considered separately, using established ‘Guideline’ methods. Temporary increases are defined as those which occur only during the construction phase and last five years or less at any individual site.”

The proposed construction activities associated with the Proposed New Projects would not occur at an individual site over five years. Therefore potential air quality impacts from construction activities at a specific hot spot are considered temporary and a quantitative analysis is not warranted.

General Conformity Rule Applicability

Construction equipment emissions were estimated using EPA’s MOVES2014a model with the activity dates predicted based on RSMeans data in association with each construction schedule. RSMeans is a handbook containing a dataset of construction costs and methodologies that is updated periodically.

A construction estimate to identify equipment, material, and manpower requirements for the construction associated with the Proposed New Projects was performed. Estimates as to construction crew and equipment requirements and productivity are based on available data contained in:

- 2003 RSMeans Facilities Construction Cost Data, R.S. Means Co., Inc., 2002
- 2011 RSMeans Facilities Construction Cost Data, R.S. Means Co., Inc., 2010⁸

⁷ 40 C.F.R. Part 93. General Conformity ensures that the actions taken by federal agencies do not interfere with a state’s plans to attain and maintain national standards for air quality.

⁸ These books are used for productivity rates only and not for the cost data. For specialized construction techniques, productivity may improve as the technology improves. But for conventional (technologically-mature) construction methods such as those that would be used in the Proposed New Projects (e.g., demolition, excavation, fill placement, concrete forming and pouring, steel erection, etc.), productivity rates have not been changing over time. Both the 2003 and 2011 editions are used in this analysis because the 2011 edition has a more comprehensive list of items than does the 2003 edition. Accordingly, there are some instances where there is a

The assumptions and calculations are based on the various project summaries provided from each project owner, which include planning-level descriptions of the proposed work. The proposed work includes various demolition and construction projects taking place over the course of five years (2017 through 2022). The types of construction include demolition, new building construction, new pavement and site infrastructure.

The estimated equipment activity data were then combined with the MOVES2014a predicted emissions factors for each applicable equipment type to predict construction emissions for each project. The estimated emissions for each project are shown in **Table 4-2**.

Table 4-2
Construction Equipment Emissions Associated with the Proposed New Projects

Proposed New Project	Emissions (tons)				
	VOC ⁹	NO _x ¹⁰	CO ¹¹	PM _{2.5} ¹²	SO ₂ ¹³
No.1 (FedEx)	0.66	4.54	8.37	0.27	0.01
No. 2 (UPS)	1.48	6.04	34.30	0.37	0.01
No. 3 (Chelsea Kitchen/United Airlines)	0.48	3.38	5.48	0.20	0.00

Source: AECOM, September, 2017.

Various construction trucks (e.g., concrete and material delivery, and haul trucks) and workers' private vehicles would also result in indirect emissions during construction periods.

The same EPA MOVES2014a emissions factor model was used to predict on-road vehicle emission factors that were then applied to the cumulative vehicle miles traveled to determine vehicular emissions as summarized in **Table 4-3**.

Under the General Conformity Rule, total annual emissions resulting from proposed federal actions must be compared to the applicable *de minimis* levels on an annual basis. As defined by the rule, if the emissions of a nonattainment or maintenance pollutant (or its precursors) do not exceed the *de minimis* level, the federal action has minimal air quality impact and is determined to conform to the SIP for the criteria pollutant under consideration. No further analysis is necessary. Conversely, if the total direct and indirect emissions of a pollutant are above the *de minimis* level, a formal general conformity determination is required for that pollutant.

The total emissions from both construction equipment and on-road vehicles for each of the proposed New Projects were then divided over applicable calendar years based on the project demolition and construction schedule for each Proposed New Project and were combined on an annual basis as

specific size, type, etc. of a construction element that is not included in the 2003 edition, but the newer guide has a more directly-applicable construction item. The data are continually spot checked to verify that productivity rates for many of the routinely-used items have not changed.

⁹ Volatile organic compounds

¹⁰ Oxides of nitrogen

¹¹ Carbon monoxide

¹² Fine particulates

¹³ Sulfur dioxide

summarized in **Table 4-4**. As shown in the table, the expected annual increases in construction emissions from the Proposed New Projects would be below the applicable *de minimis* criteria.

Therefore, because the cumulative emissions predicted during construction are estimated to be well below the *de minimis* thresholds, a formal conformity determination is not required.

Table 4-3
On-Road Vehicle Emissions during Construction of the Proposed New Projects

Proposed New Project	Emissions (tons)				
	VOC	NO _x	CO	PM _{2.5}	SO ₂
No.1 (FedEx)	0.15	0.97	1.72	0.07	0.00
No. 2 (UPS)	0.11	0.69	1.10	0.05	0.00
No. 3 (Chelsea Kitchen/United Airlines)	0.11	0.67	1.42	0.05	0.00

Source: AECOM, September, 2017.

Table 4-4
Total Construction Annual Emissions

Year	Emissions (tons)				
	VOC	NO _x	CO	PM _{2.5}	SO ₂
2017	0.9	4.4	19.5	0.3	0.01
2018	1.1	5.4	21.2	0.3	0.01
2019	0.2	1.0	1.7	0.1	0.00
2020	0.4	2.8	5.0	0.2	0.01
2021	0.4	2.8	5.0	0.2	0.01
2022	Negligible	Negligible	Negligible	Negligible	Negligible
<i>de minimis Levels</i>	<i>50</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>

Source: AECOM, September, 2017.

4.3.9.3 Construction Traffic

The daily construction truck trips generated from construction activity associated with the Proposed New Projects were estimated using a typical trip rate based on the approximate size of construction. The daily truck trips to/from the three construction sites are depicted in **Table 4-5**.

Table 4-5
Daily Construction Truck Trips Associated with the Proposed New Projects

Proposed New Project	Estimated Daily Trips during Peak Construction		Roadway
	Trucks		
	Inbound	Outbound	
No.1 (FedEx)	68	68	Earhart Drive/Metroplex Road
No. 2 (UPS)	47	47	West of Brewster Road/Port Street
No. 3 (Chelsea Kitchen/United Airlines)	44	44	West of Brewster Road/Port Street

Source: AECOM, September, 2017.

It is assumed that there will only be a single day shift for construction of each of the Proposed New Projects. Therefore, the daily construction traffic will be distributed during an 8-hour work day. It is assumed that 20% of the daily truck traffic will occur during the peak hour, which is defined as between 7:30 am and 8:30 am. **Table 4-6** depicts the truck volumes during the peak hour to/from each of the three Proposed New Project locations.

Table 4-6
Peak Hour Construction Truck Trips Associated with the Proposed New Projects

Proposed New Project	Estimated AM Peak Hour Trips		Roadway
	Trucks		
	Inbound	Outbound	
No.1 (FedEx)	14	14	Earhart Drive/Metroplex Road
No. 2 (UPS)	10	10	West of Brewster Road/Port Street
No. 3 (Chelsea Kitchen/United Airlines)	9	9	West of Brewster Road/Port Street

Assume the peak hour equals to 20% of daily traffic.

Source: AECOM, September, 2017.

The potential truck routes for the three Proposed New Project locations during construction are as follows:

Proposed New Project No. 1 (FedEx)

- Travel along Earhart Drive to access U.S. Routes 1&9 and the New Jersey Turnpike via North Avenue.

Proposed New Project No. 2 (UPS)

- Travel along Brewster Road to access U.S. Routes 1&9 and Route I-78 via Port Street.

Proposed New Project No. 3 (Chelsea Kitchen/United Airlines)

- Travel along Brewster Road to access U.S. Routes 1&9 and Route I-78 via Port Street.

A detailed traffic analysis has been performed for the key intersections along Brewster Road and Earhart Road for Proposed New Project No. 2 (UPS) (*UPS Relocation Draft Traffic Study Report*, April 2017). Based on the abovementioned potential detour routes for the construction sites, listed below are the key intersections along Earhart Drive and Brewster Road that would be impacted by construction of the Proposed New Projects (these intersections were also included in the *UPS Relocation Draft Traffic Study Report*):

- UPS South Gate at Earhart Drive (Unsignalized)
- Brewster Road at Route I-78 Off-ramp (Unsignalized)
- Brewster Road at Conrad Road (Signalized)
- Brewster Road at Airis Road (Unsignalized)
- Brewster Road at Port Street Connector (Signalized)
- Brewster Road at Parking Lot/Port Street Connector (Signalized)

The *UPS Relocation Draft Traffic Study Report* indicated that the 2016 existing condition at the UPS South Gate/Earhart Drive intersection is at Level of Service (LOS)¹⁴ C and A (Adjacent Street peaks) for the AM and PM peak hours, respectively. For the five intersections along Brewster Road, they are operating at LOS B or better during the AM and PM peak hours.

Based on the above findings from the UPS traffic study, the preliminary traffic assessments of the traffic impacts under construction conditions of the Proposed New Projects are as follows:

Earhart Drive

The nearest intersection to the site of Proposed New Project No. 1 (FedEx) (UPS South Gate/Earhart Drive) is currently operating at LOS C and A during the AM and PM peak hours (429 vehicles northbound and 480 vehicles southbound). The volumes are relatively low compared to the capacity of a two-lane roadway. The intersection would continue to operate at LOS C and A with the additional 14 trucks in each direction during the peak hour.

Brewster Road

The five intersections along Brewster Road are currently operating at LOS B or better during the AM and PM peak hours. With the addition of construction traffic totaling 42 trucks (21 inbound and 21 outbound) during the peak hour, the intersections would remain at LOS B.

4.3.10 Cumulative Impacts

The CEQ regulations (40 C.F.R. §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

¹⁴ LOS is a qualitative measure used to relate the quality of traffic service by categorizing traffic flow and assigning quality levels based on performance measures such as speed, density, delay time, etc.

undertakes such other actions. Cumulative impacts can result from individually minor, but collectively significant, actions taking place over a period of time."

The *Terminal A Redevelopment Program Newark Liberty International Airport Final Environmental Assessment*, dated March 2017 (Terminal A EA), Section 5.20, examined the cumulative effects of past, present and reasonably foreseeable future actions. The Terminal A EA examined the possibility that the less than significant impacts of the Terminal A Redevelopment Program could contribute to significant impacts when considered with those of other past, present and reasonably foreseeable actions. The list of past, present and reasonably foreseeable actions at the Airport set forth in Section 5.20 of the Terminal A EA was evaluated.

The list in Section 5.20 of the Terminal A EA has not changed, however the Taxiway Z project is an additional project not contemplated in the Terminal A EA. The Taxiway Z Rehabilitation project includes the rehabilitation of a portion of Taxiway 'Z' between existing Taxiway 'UA' and the end of Runway 11, in order to extend the useful service life and to improve maneuverability of aircraft in the site adjacent to Taxiway 'Z'. The Taxiway 'Z' Rehabilitation project also includes the realignment of the Restricted Vehicle Service Road (RVSR) alongside Taxiway 'Z'.

Proposed work includes surface restoration to the taxiway and shoulder pavements, replacement of the existing taxiway signage with new Light Emitting Diode (LED) signage and foundations to meet current FAA standards, and new LED airfield ground taxiway lighting. The project also includes pavement rehabilitation, drainage improvements, shifting of existing Taxiway 'UB' slightly to the east, widening of the fillets of existing Taxiway 'UB', and the construction of a new taxiway (Taxiway 'Z2'). Proposed work also includes realigning the RVSR between Taxiways 'Z4' and 'Z2' to make it parallel to Taxiway 'Z'. The Taxiway Z Rehabilitation project was the subject of a NEPA Categorical Exclusion (approved by the FAA July 2017) and is scheduled to start construction in the 4th Quarter of 2017 and last for approximately one year.

Some portion of the construction of each of the Proposed New Projects is also expected to occur during the construction period of Terminal A. The proposed schedules for the Proposed New Projects are summarized in **Table 4-7**.

Table 4-7
Preliminary Construction Schedules

	Anticipated Start Date	Anticipated Completion Date
FedEx (GSE Building)	Late 2018	Early 2020
FedEx (Garage)	2021	November 2022/2023
UPS	Fall 2017	May 2018
Chelsea/United	January/February 2018	November 2019
Taxiway Z Rehabilitation Project	Late 2017	Late 2018
Terminal A Redevelopment Program	2017	2023

Source: AECOM, September, 2017.

Nonattainment or maintenance pollutant emissions related to the Proposed New Projects were quantified according the CAA General Conformity Rule (GCR) requirements. However, the GCR-established *de minimis* thresholds are applicable on a project-level evaluation as compared to a program level with projects combined. For NEPA disclosure purposes, the construction period overlapping emissions from the Proposed New Projects and the Terminal A project combined are summarized in **Table 4-8**.

Table 4-8
Total Combined Annual Construction Emissions from the Proposed New Projects and Terminal A

Year	Emissions (tons)				
	VOC	NO _x	CO	PM _{2.5}	SO ₂
2017	1.4	11.6	21.9	0.6	0.3
2018	1.7	14.2	24.0	0.6	0.3
2019	0.5	5.0	3.2	0.3	0.1
2020	0.7	7.3	6.5	0.4	0.2
2021	0.5	3.8	5.5	0.2	0.2
2022	Negligible	Negligible	Negligible	Negligible	Negligible
<i>de minimis Levels</i>	<i>50</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>

Source: AECOM, September 2015 and 2017.

Although there would be some overlap, the projects described above would occur at different locations throughout the 2,027-acre airport property and any impacts would be minor (i.e., below *de minimis* thresholds for air quality, would not create significant adverse impacts to the surrounding floodplain) and in the case of construction impacts, temporary. Therefore, cumulative impacts are not expected to be significant.

5. Mitigation

This chapter identifies the mitigation measures the Port Authority proposes to reduce or minimize the environmental impacts identified in this Technical Report. The following explanations describe each measure's benefits by noting how the measure would avoid or reduce the adverse environmental effects. As set forth below, the Port Authority has concluded that there is no change in the mitigation measures proposed in Section 6 of the *Terminal A Redevelopment Program Newark Liberty International Airport Final Environmental Assessment*, dated March 2017 (Terminal A EA), all of which would be applicable to the Proposed New Projects.

5.1 Floodplain Development

As is the case with the proposed Terminal A, the final design of each of the Proposed New Projects would ensure compliance with NJDEP's Bureau of Floodplain Management's net fill requirements and flood hazard area requirements after construction is completed. As such, the Port Authority has concluded that there is no change in the mitigation measures proposed in the *Terminal A Redevelopment Program Newark Liberty International Airport Final Environmental Assessment*, dated March 2017 (Terminal A EA) with respect to floodplain development, all of which measures would be applicable to the Proposed New Projects to the extent the project is located in a floodplain.

5.2 Noise

Construction noise levels associated with the Proposed New Projects are expected to be below applicable significance thresholds and not readily discernible from background levels. None of the Proposed New Projects is located near a sensitive noise receptor. Based on the foregoing, the Port Authority has concluded that there is no change in the mitigation measures proposed in the Terminal A EA with respect to noise, all of which measures would be applicable to the Proposed New Projects. As set forth in the Terminal A EA, the Port Authority would require the contractor to ensure that all construction vehicles and equipment meet the applicable standards contained in 40 C.F.R. § 204, Noise Emission Standards for Construction Equipment and N.J.A.C. 7:29, the New Jersey Noise Code. Further, additional strategies to reduce noise and vibration during construction are provided in the Port Authority's *Sustainable Infrastructure Guidelines*. They include:

- Require all debris conveyors and containers to be lined or covered with sound absorbing materials;
- Require all pneumatic support equipment to have intake and exhaust mufflers recommended by the manufacturer;
- Require all impact devices to be equipped with acoustically attenuating shields or shrouds recommended by the manufacturer;
- Require all internal combustion equipment to have mufflers and shield paneling recommended by the manufacturer;
- Require idling time for both on-road and off-road equipment and vehicles to be limited to three minutes;
- Minimize the use of equipment that generates more than 80 db(A) of noise, and use such equipment only during daylight hours (i.e. not at night in residential areas);
- Limit vibration resulting from construction equipment when work is close to tunnels, utilities or other sensitive structures and closely monitor peak particle velocity compliance through seismograph readings;

- Utilize an approved sound level meter for self-monitoring and proactively correct conditions where the noise generated by specific pieces of equipment exceeds allowable levels; and
- Utilize noise barriers to contain noise where practicable.

After construction, no additional noise mitigation measures are proposed.

5.3 Water Quality

All construction activities associated with each of the Proposed New Projects would comply with applicable state and local water quality standards and permit requirements. In accordance with the airport's State Pollutant Discharge Elimination System (SPDES) permit, the Port Authority would implement appropriate water quality measures to minimize erosion and sedimentation during construction. The Port Authority has concluded that there is no change in the mitigation measures proposed in the Terminal A EA with respect to water quality, all of which measures would be applicable to the Proposed New Projects. As set forth in the Terminal A EA (Section 6.3), the following BMPs would be written into the project's construction contract documents and become an obligation of the contractor:

- Use watering trucks to minimize fugitive dust
- Cover trucks when hauling dirt
- Prevent material leakage from truck bed, sideboard, tailgate, or bottom dump gate
- Use windbreaks to prevent accidental fugitive dust pollution
- Cover trucks when transferring materials
- Minimize unnecessary vehicular and machinery activities
- Clean up spillage as necessary to prevent particulates from being pulverized and released into the atmosphere
- Minimize dirt track-out by washing or cleaning trucks before leaving the construction site
- Use temporary sediment barriers such as silt fences, straw bale barriers, sand bag barriers, and gravel filter barriers for areas that produce sheet flow runoff
- Schedule regular inspections of storm water and sediment control devices
- Repair and/or replace storm water and sediment control devices as often as necessary to maintain their effectiveness

As further set forth in the Terminal A EA (Section 6.3), with regard to operations, the following would be part of the Proposed New Projects (to the extent applicable to a particular Proposed New Project):

- Subsurface oil/water separators would be installed to slow the rate of runoff from aircraft park aprons and to ensure that pollutants are captured and collected during and after rainfall events, and;
- A deicing containment system would be installed as part of apron storm drainage to allow spent aircraft deicing fluid to be isolated, pumped out, and properly disposed, preventing the discharge of contaminants to surrounding waters.

5.4 Roadway Use

The Port Authority has concluded that there is no change in the mitigation measures proposed in the Terminal A EA with respect to roadway use (see Section 6.4 of the Terminal A EA), all of which measures would be applicable to the Proposed New Projects. As set forth in the Terminal A EA:

- Each contractor associated with the Proposed New Projects would be required to follow an approved Maintenance and Protection of Traffic Plan.
- Delivery of construction materials and large or bulky construction equipment would be scheduled for non-peak hours to mitigate the impacts from an increase in traffic volume from construction activity
- Use of streets in residential neighborhoods and adjacent to noise-sensitive land uses is not anticipated.
- All construction vehicles would access the airport from U.S. Routes 1&9.
- Any construction-related vehicles working near the airfield would be required to follow specified traffic patterns in areas where aircraft operate, in order to avoid interrupting airfield operations.

5.5 Construction

Construction and demolition (C&D) debris generated by demolition and construction activities associated with all of the Proposed New Projects will be recycled to the greatest extent possible. A Port Authority-wide policy requires that contractors recycle 75% of certain demolition debris items, which currently include steel, asphalt, Portland cement concrete (PCC) and clean soil.

The disposal of C&D debris would be done in accordance with the Union County Solid Waste Management Plan, the Essex County Solid Waste Management Plan and with the regulations of the state's Solid Waste Management Act (N.J.S.A. 13:1 E-1).

6. Required Permits and Notifications

Various laws, policies and programs impose requirements with which the Proposed New Projects would need to demonstrate compliance. All permits or approvals would be obtained prior to construction. The following permits may be required for the Proposed New Projects:

UPS:

- NJDEP Flood Hazard Area Permit
- NJPDES Stormwater Construction General Permit
- Section 401 Water Quality Certification
- Hudson-Essex-Passaic Soil Conservation District SWPPP
- NJDEP Treatment Works Approval
- NJDEP Water Main Extension Permit
- NJDOT access approval
- PVSC Sewer Use Permit

Chelsea Kitchen /United Airlines:

- NJDEP Flood Hazard Area Permit
- NJPDES Stormwater Construction General Permit
- Section 401 Water Quality Certification
- NJDEP Treatment Works Approval
- NJDEP Water Main Extension Permit
- NJDEP existing air permit will be modified to reflect new equipment at the new kitchen
- USDA Animal Plant Health Inspection Service approvals
- Department of Defense Audit and approval
- FDA certifications
- Local health safety standards
- PVSC Sewer Use Permit

FedEx:

- NJDEP Flood Hazard Area Permit
- Section 401 Water Quality Certification
- NJPDES Stormwater Construction General Permit
- Somerset-Union Soil Conservation District SWPPP
- NJDEP Treatment Works Approval
- NJDEP Water Main Extension Permit
- PVSC Sewer Use Permit

7. Public Involvement

This Technical Report was made available for public comment for 15 days from October 20 to November 6, 2017. A Notice of Availability was published in the Star-Ledger and the Record (Appendix A), and the document was available for review at the Airport's Administration Building at 1 Conrad Road, Newark; and at the Port Authority's headquarters office at 4 World Trade Center in Manhattan. A copy of the document was also available for review on the Port Authority's website at <http://www.panynj.gov/about/studies-reports.html>.

This Technical Report's public review and comment period fulfills the public involvement requirements of Executive Order 11988, *Floodplain Management*.

8. References

Cardno ATC, *Hazard Assessment Report for United Airlines Building 151/151A, Newark International Airport, Newark, NJ*, May 2013.

Federal Aviation Administration (FAA), Order 1050.1F, *Environmental Impacts: Policies and Procedures*, July 16, 2015.

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Means, RS, Inc. (editors), *2003 Facilities Construction Cost Data*, 2002.

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PANYNJ, *Terminal A Redevelopment Program Newark Liberty International Airport Final Environmental Assessment*, March 2017.

Simco Engineering, P.C., *United Parcel Service Relocation Draft Traffic Study*, April 2017.

Appendix A

Public Notice Tear Sheets



President Barack Obama joined Democratic gubernatorial candidate Phil Murphy and Lt. Gov. candidate Shella Oliver at a rally in Newark's Robert Treat Hotel on Thursday. Aristide Economopoulos, for The Star-Ledger

When he came in and campaigned for a former Goldman Sachs governor by the name of Jon Corzine," she to become U.S. ambassador to Germany, a position Murphy held until 2013. Obama said Murphy told

ELECTION 2017

Murphy's coffers swell to \$8.3M as Guadagno hits \$2.3M

As the candidates for New Jersey governor head into the final leg of the campaign, Phil Murphy has a huge cash advantage.

The Democratic nominee received another \$871,000 in public matching funds Wednesday, while Republican Kim Guadagno received \$217,000. This brings Murphy to a total of \$8.3 million and Guadagno to \$2.3 million.

Murphy is within \$1 million of the \$9.3 million cap on funds general election candidates can receive from the public matching

NEW JERSEY TURNPIKE AUTHORITY ADVERTISEMENT FOR PROPOSALS NEW JERSEY TURNPIKE Contract No. P100.409 Bridge Deck Repairs and Resurfacing Milepost 126 to 172 (2018)

Proposals are invited for Contract No. P100.409, which involves replacing deteriorated concrete bridge deck slabs and sidewalks; repaving deck slabs; repairing and reconstructing deck joints; replacing headers; removing asphalt surfacing; placing new membrane waterproofing; resurfacing approach roadways and bridge decks; pavement striping; substructure repairs; structural steel repairs; prestressed beam repairs; temporary stringer and overhang support; pier cap reconstruction; erosion and drainage repairs; emergency and routine bridge repairs under cost plus compensation; all necessary traffic control, utility coordination, and local agency coordination; other incidental work on various structures; and all other work required in the successful prosecution of the work along the Garden State Parkway from Milepost 126 to Milepost 172 in Middlesex, Union, Essex, Passaic, and Bergen Counties, New Jersey.

The principal items of work include:

Hot Mix Asphalt (Surface Course).....	2,900 Tons
Removal of Existing Bridge Surfacing (Asphalt).....	8,200 Square Yards
Pavement Removal, Variable Depth.....	4,100 Square Yards
Membrane Waterproofing.....	8,200 Square Yards
Reinforcement Steel, Epoxy Coated.....	45,400 Pounds
Concrete Deck Replacement with Catches.....	534 Square Yards
Removal of Existing Concrete Deck.....	375 Square Yards
Spall Repair (All Types).....	12,910 Square Foot
Joint Reconstruction/Replacement (All Types).....	1,590 Linear Foot
Substructure Membrane Waterproofing.....	14,900 Square Foot
Structural Steel Repairs (All Types).....	68 Each
Concrete-Filled Steel Decking.....	220 Square Yards
Maintenance and Protection of Traffic.....	Various Units

Bidders must be prequalified under Contract Classification 4, Bridge Structures, Rating, up to \$10,000,000 Maximum prior to the receipt of bids. For proposals submitted by joint ventures, each member of the joint venture must be prequalified in the Contract Classification, and the sum of the ratings held by each member must be within 10 percent of the total price bid by the joint venture. In cases where the sum of the ratings exceeds \$10 million, the joint venture's rating will be Unlimited.

Receipt by the New Jersey Turnpike Authority (the "Authority") prequalification or renewal of prequalification must be in the hands of the Authority's Engineering Department no later than **October 24, 2017**. Prequalification documents are available on the Authority's website (<http://www.njta.com/doing-business/construction-and-maintenance-contracts>) under the location entitled "Contractor Prequalification Requirements". Prequalification documents may be obtained at the Contracts and Specifications Office or will be mailed to prospective bidders upon request.

PUBLIC WORKS CONTRACTOR REGISTRATION

Contractors shall comply with the Public Works Contractor Registration Act, as amended, N.J.S.A. 34:11-56.48 et seq. No contractor shall bid on any contract for public work, as defined in N.J.S.A. 34:11-56.26(5), unless the contractor is registered pursuant to this Act. No contractor or subcontractor, including lower tier subcontractors, shall engage in the performance of any public work subject to the contract, unless the contractor or subcontractor is registered pursuant to the Act.

BUSINESS REGISTRATION ACT

Proof of valid business registration with the State of New Jersey Department of Treasury, Division of Revenue, shall be submitted by the successful bidder in the form of a valid Business Registration Certificate in compliance with N.J.S.A. 52:32-44, as amended. No contract shall be awarded without proof of business registration with the Division of Revenue.

THE PORT AUTHORITY OF NY & NJ NOTICE OF AVAILABILITY

Draft Technical Report for Tenant Relocations and the Terminal A Redevelopment Program Newark Liberty International Airport, Newark, New Jersey

In accordance with the National Environmental Policy Act (NEPA) of 1969, and Floodplain Management Executive Orders 11988 and 13690, notice is hereby given that the Port Authority of New York & New Jersey has prepared a Draft Technical Report examining tenant relocation projects at Newark Liberty International Airport (EWR). The analysis contained in the Technical Report examines potential environmental impacts of the Tenant Relocation Projects in the context of the Federal Aviation Administration's May, 2017 Final Environmental Assessment (EA) and Finding of No Significant Impact/Record of Decision (FONSI/ROD) for the Port Authority's Terminal A Redevelopment Program project at EWR. The Terminal A project documentation demonstrated compliance with NEPA, the Federal Floodplain Management Executive Orders 11988 and 13690, as well as all other applicable laws, regulations and FAA Orders.

Copies of the Draft Technical Report are available for public review and comment at the following locations:

The Port Authority of NY & NJ
Newark Liberty International Airport
Terminal A General Managers Office
Administration Building
1 Conrad Road, Newark, NJ 07114
Attn: Dianne Papalanni
Hours: 8:00 am to 4:00 pm

The Port Authority of NY & NJ
Aviation Department
Aviation Technical Services
4 World Trade Center, 18th Floor
New York, NY 10007
Attn: Kathryn Lamond
Hours: 9:00 am to 5:00 pm

The Draft Technical Report will be available at these locations until the close of the comment period, which is 5:00 PM on November 6, 2017. In addition, a copy of this document may be viewed online at <http://www.panynj.gov/about/studies-reports.html>

The Port Authority is inviting the Public to submit, in writing, comments on the Draft Technical Report prepared for the Tenant Relocations and Terminal A Redevelopment Program. Comments must be received by 5:00 PM on November 6, 2017 in order to be considered.

Comments on this Draft Technical Report should be sent to: The Port Authority of NY & NJ, 4 World Trade Center, 18th Floor, New York, NY 10007. Attn: Kathryn Lamond

Additionally, comments or questions may be emailed to EWRTERRAA@panynj.gov with the subject heading "EWR TERMINAL A DRAFT TECHNICAL REPORT."



NOTICE TO BIDDERS
COUNTY OF ESSEX

